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MAN AND SOCIAL ACHIEVEMENT

"Herein lies the great problem set for the twentieth century to solve... to explore carefully the inner structure of the organic units through and in which world-history fulfills itself, to separate the morphologically necessary from the accidental, and by seizing the purport of events, to ascertain the languages in which they speak."—OSWALD SPENGLER: "The Decline of the West."

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Longmans' Social Science Series

MAN AND SOCIAL ACHIEVEMENT

AN INTRODUCTION TO SOCIAL EVOLUTION

BY

DONALD C. BABCOCK

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AT THE UNIVERSITY OF NEW HAMPSHIRE

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BABCOCK
MAN AND SOCIAL ACHIEVEMENT

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RIGHT TO REPRODUCE THIS BOOK, OR
ANY PORTION THEREOF, IN ANY FORM

FIRST EDITION

MADE IN THE UNITED STATES OF AMERICA

TO

MY FATHER AND MOTHER

AROUND WHOSE HEARTHSTONE, LONG AGO

WERE GARNERED THE FRUITS

OF SOCIAL EVOLUTION

No politics, art, religion, behavior, or what not, is of account unless it compares with the amplitude of the earth.

—Walt Whitman.

PREFACE

ONE of the many new aspects of our world today is the great surplus of time at the disposal of the populations of the temperate zones. This opportunity for leisure is, of course, the result of modern invention and applied science, and the end is not yet. This much may be predicted: the energies of our northern and western peoples will not quickly subside from lack of application. There will be some new channels for the pouring forth of vitality inherited from generations of pioneers. That the "dance of life" will be a merry one for a while is apparent enough already. Nor is there any reason why it should not be, provided that pleasure be conservative in the true sense of that word, and our social inheritance be not dissipated. To that end, education having as its goal the discernment of meanings and the appreciation of values offers its services. Leisure must be made safe for democracy.

In such a program, the study of social evolution has a distinct place. It constantly uncovers meanings unsuspected before, which in turn reveal whole systems of interrelationships in the human world. An understanding of such relationships not only makes life more interesting, but helps to hold the individual to his proper attachments within the body social. A very moderate degree of familiarity with the thoughtful younger people of today reveals the fact that a new set of sanctions for social conduct is actually being evolved. Into the making of the new code no authority is easily introduced that is not pragmatic rather than *ex cathedra*. If an understanding of historic and prehistoric roots, of long continuances based on constant factors, of ancient bonds that

may go on holding man for his good, or that may be sloughed off with new turns of environment—if such an understanding can help build wisdom into the code of conduct of the future, then the study of social evolution is worth while.

But with equal force it may be said that the study of our human past can reveal to the candid mind much racial experience that must now be relegated to the limbo of "old, unhappy, far-off things"—flabby beliefs, social ineptitudes, myths, circumlocutions of all sorts. With all sympathy for those who went before us, and with respect for those who built what now we use, the citizen of the world today must pass on to new concepts, while retaining the best of the old. In deciding what to discard and what to retain, the knowledge of how we came by our present ways of life, and why they were good ways once, if not now, will be of help, and it is with that hope that this book is written.

If the author may claim any consistency of treatment running through the work, it is that the interpreter's viewpoint has been maintained. We need to know more about human life, but even greater is our need of understanding what we already know. In the midst of the amazingly vast welter of things that have been found out, the immature mind may well give heed to the ancient query, "Understandest thou what thou readest?" Certainly an attempt at interpretation will be made by every student of life, whether deliberately or not, resulting in some deep faith or pervasive doubt. The conviction that some basic point of view is inevitable accounts for the repeated use of the word "emergent" throughout this book. Emergent evolution, as set forth by Morgan, Schiller, Jennings, and others, is believed to be the most serviceable concept we have as a liaison between the immovable body of mechanistic data and the irresistible force of the value-quest, now as always an utter necessity to the spirit of man. To hold that aggregates may have qualities which are foreign to their parts is to keep an open door in social evolution.

It will be found that no great amount of citation of cases from early cultures has been made. The limitations of space forbade such procedure, and the student may be presumed to have access to standard works in anthropology where such citation is the rule. Moreover, it has been the intention to emphasize recent and contemporary facts illustrative of social change, as well as primitive data. The purpose is not so much to make the student an expert in tribal cultures as to indicate the general progress made in each of the fields of human endeavor. Comparison of the primitive with the modern is often made, leaving the intervening development to be inferred.

No attempt has been made to draw a line between "social" and "cultural" evolution. Either term, as here used, refers both to material culture and to social forms and institutions.

The author confronts the usual embarrassment in trying to make acknowledgment of help received. But over and above all other factors converging upon him to bring the book into existence is the editor of this series, Professor Ernest R. Groves. To him I take this opportunity to acknowledge a debt of kindness on which I am in long arrears. Professor Esther L. Brown, of the University of New Hampshire, has given me much friendly aid, nicely compounded of practical help, generous encouragement, and discerning skepticism. Professor George P. Murdoch of Yale University very generously allowed me the use of his unpublished translation of Lippert's "Kulturgeschichte." And to the many others who through devious channels have contributed fact or suggestion, I offer sincere thanks. Pre-eminent among them all is my wife, whose help has ranged from the practical business of proof-reading to the intangible realm of inspiration.

DONALD C. BABCOCK

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MAN AND SOCIAL ACHIEVEMENT

MAN AND SOCIAL ACHIEVEMENT

CHAPTER I

INTRODUCTION

The proper study of mankind is man.—POPE.

Under the continued threat of impending catastrophe likely to involve the whole human world in desolating hostilities, every individual today should realize his responsibility for training the mind of the present generation to enable it to see all its important problems in the perspective of universal man.—RABINDRANATH TAGORE.

I. SOME POINTS OF VIEW

(*a*) *Social Evolution Defined*

Man's thought concerning himself.—Man is a self-conscious animal in a rather remarkable degree. He has been inclined to think about himself, and he has found the subject an interesting one. Literature bears witness to this for five thousand years and more. In some moods he has thought very well of himself; at other times he has been stirred to ironic mirth by the contemplation of his own pathetic figure, with his brave determination to be fine and respectable, and his little store of acquisitions and accomplishments. But man in his present stage of maturity takes a still more objective attitude toward himself, extending over his whole life the ægis of the scientific spirit, and making of his human ways of conduct an end

of knowledge, so that now it can be said that man is at last ceasing to keep records as a mere self-glorification, and is seeking the truth about himself.

The particular events of mankind's career, the actual individual occurrences, constitute history. But these same events, particularly the everyday happenings that are repeated again and again but which do not stand out as episodes and which are studied not as events in sequence but as facts, lead us on to the discovery of types of behavior and of organization. It is these behavior types and forms of organization that we are to study.

A thoughtful person's response to the human world of which he is a part and which touches him with such compulsion and insistence throughout his growing years is always tinged with the feeling of strangeness, as though he could not become quite naturalized in his mundane home. At certain rare moments this feeling almost sweeps us away into a realm of fancy; again, with startling precision, it discovers the world to us as something vivid that we never saw clearly before; still again—and this for the most part—it simply leaves us content to say "It's a queer world!" after which we turn back to our business and forget for the time our bafflement. This feeling, in the case of reflective-minded persons, recurs throughout life, and those who are also of a studious mind seek for light from such subjects as social evolution.

Social evolution.—The study of the evolution of society throws light upon the remoter but enduring meanings of the complicated human institutions and behavior that we see going on all about us. It is true that one may get to know his way about in the objective world of persons, houses, machines, or even books and pictures, without studying how human conduct has come to be what it is, but he can never become at home in the world of human thought in which lies the real citizenship of mature and intelligent minds, unless he knows something of the long human past over which his own

kind have traveled and along which the institutions of today have found their devious ways.

History is such a study, too, and indeed, in the broader meaning of the words, history and social evolution are the same thing. But history usually means only that part of human development which has taken place in the last five or ten thousand years since man has been recording his deeds. It is important to understand that history in this sense is a small part of the mighty epic of human unfolding connoted by the term "social evolution." Even though the events of more recent generations occur in such greatly accelerated succession as to lead to the oft-quoted saying "better fifty years of Europe than a cycle of Cathay," the point remains unchanged, for behind Cathay we see stretching away into the past and below the horizon of time so many more cycles than Cathay can boast as to make her seem a nation of recent times. Social evolution takes cognizance of that remoter and vaster past which lies beyond our oldest known nations.

The prehistoric, even the prehuman part of social evolution is needed for the understanding of our lives. Nor is it merely as a quarry of facts for the archæologist to exhume and set forth, as it were, in the dead sequence of a museum exhibit. The social evolution of the race lies not under but behind its historic development. It is the hinterland, "part of the same continent of truth without whose ampler areas and wider watersheds" the rivers of modern historic social life which have grown to their fullness in the last few thousand years, could never have gained their volume and influence and onward sweep.[1] The study of social evolution leads to the upland sources of our modern life.

These upland regions, once attained, permit of a very wide range of observation; in fact, one may be materially assisted in getting his bearings by viewing life from those heights.

[1] George Adam Smith, quoted in A. C. Knudson, "The Old Testament Problem," p. 38.

We hear much about social orientation. The meaning of orientation is literally the ascertaining of where the sun rises, the determining of the points of the compass. To the social evolutionist the "east" may represent the region or the time of social origins, the distant sunrise region of the ever broadening pathway of light along which man has traveled into the Here and Now.

What, then, is social evolution? *It is the process by which man, in living relations with his fellows, and through continuous response to his environment, has laid down the basic patterns of his conduct and the principal forms of his institutions.*

(*b*) *Values of the Study of Social Evolution*

Conforming life to modern conditions.—Courses of study which undertake to survey rather broad fields of interest, as this book does, are comparatively recent, in contrast with the more traditional method of blocking human knowledge off into more or less mutually exclusive "subjects." In educational work, criticisms and attempts to meet the criticisms are a constant feature, but in late years something more than the usual criticism has been going on. Human society has taken the plunge over a Niagara of catastrophe and readjustment foreseen by a few discerning men in the later decades of the nineteenth century. Education, being in large measure a conservative factor in society, does not find it easy to make the plunge too, but is honestly trying to do so. Among the tentative responses to the demand that education should be modernized is the so-called orientation course. In some respects this book is like an orientation course, though it limits its field somewhat more than such surveys are accustomed to do.

The reader can perhaps remember, or imagine, how a Freshman beginning his life on a college campus experiences a certain feeling of strangeness, a sense of being surrounded

by a new environment, into which, as yet, he fits, if at all, not by habit but by conscious effort. Although this feeling varies a great deal among individuals, the process of adjustment is about the same for all, and in its various external and internal phases it consumes a great deal of time for the first few weeks or months. Now, everyone, figuratively speaking, arrives on a new "campus" at that moment in his development when he becomes conscious of himself as a part of an aspiring, striving social environment. And before he goes further, he ought to know the broad outlines of the human world of which he is a part. Social Evolution is the study which attempts to show him what he and his kind have been doing during that long time before he became aware of it all, and why they have been doing it. It seeks to orientate a person, which means simply to show him how to find his way about.

One of the ways in which this process of orientation may take place is in helping the student of life to achieve a liberal form of education. A liberal education has often, though without right, been distinguished from a technical education, and has supposedly consisted principally of the study of the so-called "humanities," which, however defined, did not usually take in a broad, scientific, and appreciative knowledge of society. But liberal education as conceived today interlocks with a greatly broadened range of social sciences, as well as with the physical and technical sciences. It is, perhaps, impossible to be equally possessed of a liberal and a technical education, but it is quite possible to underlay a special training with a liberal culture, and ultimately the latter may prove to be as practical as the former.[2] And

2 "Specialization can be defined as adjustment to a part of the environment, while generalization is adjustment to the whole of environment. It is the lesson of the ages that specialization gives temporary advantage in a narrowing field, and when competition catches up the only way out is still further specialization. In the end a harsh change in the circumstances of life is sure to come and the attenuated specialists go down and out, while the sturdy generalists survive." (Herbert J. Spinden.)

These "changes in the circumstances of life" are only too common in modern economics, as well as in other departments of social life.

precisely because the average man finds the necessity for specialization laid so compellingly upon him today, the need for a conscious seeking after a liberal education—that is, a socially intelligent education—is greater than ever.

The liberalizing of life.—Consider, for illustration, the following facts. People once spent most of their time engaged in a manner of occupation that varied only a little from family to family, but which included a variety of tasks. In so living they had (1) a broad and varied outlook on life, *within certain limits,* (2) very little leisure time to escape from their limiting circumstances, and (3) a social consciousness based upon a common background of ideas and experiences. Today, on the other hand, a great many people spend, as compared with their ancestors, a short time at work each day, upon some specific task which may be quite different from that of their neighbors. This results in (1) a narrower outlook on life as far as routine personal experiences go, (2) more leisure, which may or may not be used to escape from the confinement of circumstances, and (3) a fragmentary social consciousness as regards some of the common ways of life—a threatened loss of our common traditions. Certain modern aspects of life, such as the printing press or the radio tend to build up common consciousness again. But there still remains a great need for thoughtful people—students—to think their way back into a better understanding of human life. The study of social evolution may help to that end.

The social evolutionist is stirred to an insatiable curiosity about man and the meaning of social phenomena. He says "Yes, to be sure, 'How wonderful a creature is man!' But whence came he, how has he developed, *what is he* that he commands the forces of the earth on the one hand, and soars the upper ranges of thought on the other? And why does he do things in certain ways, preserving specific features in the construction of things, or ways of carrying out social ideas, long after the circumstances accounting for them have

ceased to operate?" Lifting the curtain here and there, and revealing much of thrilling human interest, the social evolutionist asks, in modern parlance, how we got that way.

There is, in actual existence today, a growing social organization of world-wide scope.[3] It is sometimes pointed out that this organization has very deep historical roots. These roots are in reality even deeper than history; they are as deep as the social nature of man. Moreover many voluntary or semi-voluntary social movements have their *raison d'être* in their supposed relation to this growing world society, the ultimate success of which must depend largely upon a knowledge of the inner nature of the social organization of man. In other words, since the age of social planning has begun, social evolution must be a part of mankind's serious study.

Various meanings of "social."—It is the fate of all good words to be used in a variety of ways until presently they have suffered a veritable sea-change, and "social" is no exception. Let us illustrate by taking some of the various ways in which our word is used. If we say, "House parties imply a round of *social* activities," we refer to certain pleasurable, relatively purposeless, and somewhat superficial relationships for which the word *sociable* might be substituted. But when we use such a phrase as "not only economic and political, but *social* as well," we are evidently referring to a more ambitious flight of the word, and yet one that does not include all of man's relationships. It is difficult to substitute a kindred word in this case, but perhaps *associational* will serve, as bringing out the thought that there are relationships that have to do less with institutions or concrete realities and more with the primary contacts of person with person. Again, if we were to say (quite truly) that our present study deals with the whole range of man's *social* life, we should then be referring to man's whole life in his relations with

3 "The most outstanding fact of our age is that the drama of our destiny today has the whole world for its stage." Rabindranath Tagore, "East to West": Atlantic Monthly, June, 1927, p. 732.

his kind, in all their ramifications and consequences, and for this broadest sense we may use the word *"societal,"* which suggests society, a structure more imposing than any ephemeral sociable phenomenon.

In this book we shall recognize both the broader and the stricter meanings of the word, but unless statement to the contrary is made, the meaning of "social" will be "coöperative relationship."

II. Fundamental Attitudes of this Book

(*a*) *Evolution: A Modern Mode of Scientific Thought*

Evolutionary thought.—Evolution is the name given to that modern preferred way of regarding the phenomena of the universe, according to which things show a general tendency to develop in an orderly sequence of changes, unfolding from within outward in accordance with their own patterns, and also in response to and in accordance with their environment.

In one way or another the word evolution will be used and its implications taken for granted all the way through our study. We shall not go into an elaborate explanation of the doctrine of evolution; some appreciation of its tremendous importance and of its content is assumed. But a few remarks may be made to insure a common point of view.

Social Evolution, being the study of how man has come by his behavior-patterns, is a sort of historical study. History, as the term is usually employed, means the study of man's past. For the average person this means the events, such as battles, plagues, migrations, discoveries, founding of cities or states, births, deaths, and other interesting or important things that have happened to people, related in their proper order. Besides these things, history is also concerned with the way of life followed by groups of people at different periods and places. The first method of studying history

may be called the episodic; the second (with which social evolution is more concerned), culture history. Both of these kinds of history have very largely to do with concrete things and outward circumstances. Another kind of historical approach, however, has its chief interest in the realm of thought. It traces the ideas, mental attitudes toward the world, basic concepts and accepted processes of thought, and dominant interests of successive eras. This is known as intellectual history. All three types, of course, interlock and exert mutual influence upon each other. The discovery of a new continent, for example (an outward, definite event), makes people think differently about the world (an intellectual change) and leads to a different manner of life, perhaps in what we wear or eat (a cultural influence). The crossing of the Atlantic by airplane (an episode) opens the possibility of common intercontinental flying (which would be a cultural development) and draws the thought of nations more definitely to each other (an intellectual change).

Evolution is one of the greatest thoughtways ever appropriated by man in his intellectual career. Though innumerable events have occurred under its compulsion it is not thought of here as an event or a series of events. And though it has influenced our ways of life, it is not best accounted a description of the way men live. It is, we repeat, a way of thought, and not exactly a new way, either. We must not think that evolution is an intruder or a newcomer in the field of thought. It is old as Greek thought, but it did not dominate Greek thought. It has only been spread brilliantly on the consciousness of the race for about seventy-five years. One of the reasons for this is that the world has actually become less static for the average person in the last few generations. Evolutionary concepts and the facts of life seem to accord remarkably nowadays. Today it would be futile to leave it out of the reckoning if we attempt to see social life whole and steadily.

Evolution should not be thought of as an exactly determinable body of facts or as a particular scheme or theory as to details. There is, for example, no such thing as the "science of evolution," a phrase we sometimes hear used. Instead of being a science, evolution is rather a method used more and more in various sciences. It now seems that for a considerable time to come, as things are reckoned on this planet, the most effective thought will be organized on evolutionary hypotheses.[4]

Some precautions.—It should be noticed that evolution is "modal" (pertaining to modes) but not "causal," as far as original or real causation is concerned. Evolution, in other words, is not a thing-in-itself which does things; it is just a way in which things are done. It does not exclude personal causation as the ultimate fact. Whatever the forces or realities may be which in last analysis are the causes of natural phenomena and social development, evolution is not concerned with them. If one wishes, the real Cause may be called God. But what the evolutionist dislikes is to introduce adventitious or tangential forces into the natural world. The catastrophic or unrelated is not congenial to him. He does not pass upon such matters as the method of original creation, or whether the race is moving toward perfection or not, or the universe toward a determinate end. He does insist on a dynamic existence, and on the assumption that every step is based upon an orderly past. In maintaining this point of view he may easily go beyond the limits of demonstrability. Thus when he says, "We are the offspring of untold ages of development, the ancestors of untold ages to come,"[5] he is expressing his point of view about what he does not and cannot know, except by inference.

4 At the same time it must not be overlooked that the authority of the evolutionary concept has suffered a distinct loss in some authoritative quarters. This has come about as a reaction against a rigid, uncritical, mechanistic theory of evolution which tried to force all life into preconceived "unilinear" processes of development. See for example, A. Goldenweiser, in Ogburn and Goldenweiser: The Social Sciences, chap. VII.

5 G. Stanley Hall.

Evolution need not be an exclusive form of thought. Indeed there are indications that it has passed the peak of its dominance in social, historical, and philosophical thinking. In science it has been baffled on some points and has had to alter its hypothesis repeatedly, but it is unlikely that the scientific world will ever wholly discard the contribution that evolution has made to morphology, or reject entirely the formula of biological behavior that it has given.

The student should disabuse his mind of any possible thought that there is something sinister about evolution. The theory, if approached without suspicion or prejudice, is a very natural and congenial thought to most people. There is a certain personal satisfaction in holding to the evolutionary account of man's origin. One feels that he has acknowledged a very honorable genealogy when he accepts his kinship with the dust of the ground, the warm, wet earth, the molding leaves, the sprouting bulbs, the growing corn, the golden grain, and the cattle upon a thousand hills. He is to be pitied who shrinks from this relationship with Mother Nature's great brood, seeking to put himself and his ilk in another category, apart from "the great Tree of Life, which fills with its dead and broken branches the crust of the earth, and covers the surface with its ever branching and beautiful ramifications."[6] So far from there being anything repulsive or degrading about this kinship, there is something positively comforting and reassuring about it, not the least item of which is its revelation of the rationality and honesty of our desire to live out of doors, to work the soil, to smell pine trees, to get dirty, to hunt things, to sleep under the open sky, to wander unknown roads, and to listen to the forest at night, even as our fathers did.

[6] Darwin, "Origin of Species."

(*b*) *Other Fundamental Attitudes of this Book*

The scientific attitude.—The outstanding fact in human life in modern times is science. No thoughtful person today would care to place himself outside its influence, nor would any attempt, like ours, to explain great areas of fact such as social evolution be made without an attempt to be scientific in attitude. Science is both a body of knowledge and a method. As a body of knowledge it is distinguished by a broad substratum of facts, patiently and accurately accumulated, and a moderate superstructure of principles, "laws," or conclusions drawn from the classifying and synthesizing of the facts. By scientific method is implied the attitude that does not ask for the moon, but is willing to accept what it can get on honorable terms; that builds patiently and does not demand to see the completed structure before its time; that finds its satisfaction in the genuineness of the little that it may add to the work; that conceives of its own integrity in terms of loyalty to truth as thus far apprehended, and of the kingdom of heaven as the acceptance of truth as a little child. One caveat should be blazoned across the entrance of any undertaking that aspires to be in harmony with the spirit of science: No prejudices! A prejudice is a judgment in advance of the investigation; its effect is to insulate the mind from new currents of truth.

The foregoing remarks might be considered superfluous, were it not for a further matter to which they are introductory. No one can be perfectly without preference or passion, particularly in the study of society. In this case we are interested in the interpretation of the facts as well as in the facts themselves. It might be possible to hide all points of view under the mask of an announced scientific attitude, but the points of view would be at work in the writing of the book nevertheless and some of them we shall proceed to state.

Respect for the past.—In the pages that follow then, certain fundamental attitudes will appear. First, we shall endeavor to maintain a high respect for the past, which we consider an active and living thing, a creative force in society through custom, history, heredity, and environment. We have a certain concern for the continuance of the past in its fullest possible usefulness, which we believe is very great, and we shall refer, from time to time, to this problem of keeping touch with the past, which we shall call the Problem of Discontinuous Traditions.[7] At the same time we shall find that the future holds as great an interest as the past, or even greater; for it is the prospect of the indefinite continuance of social evolution that accounts for our serious attempt to coöperate with it by understanding it. Nothing could surpass the delicacy of adjustment that is constantly going on between the old and the new. In fact, we may think of the present as being simply the shifting, traveling conflict line between the infinite past, wise as the smile of Mona Lisa, brooding like a sphinx over its desert of forgotten days, relentless in its immutable pressure as Fate itself, and the future, unrealized yet real, not actual yet actuating us, unborn yet throbbing with life, evermore shaping life into a morphology terrible in its possibilities for weal or woe. Think, for example, of the conflict between the perfectly well known fact, coming down to us from a long past, that a boy needs a father around whom he may adjust some of his psychic growth, and the new fact of the future that many women can, economically speaking, get along without the aid of a husband. And this endless adjustment of past and future in the present is the reason for our third chosen attitude: scientific curiosity and caution about the present.

"What's the news of the day,
Good neighbor, I pray?"
"They say the balloon
Has gone up to the moon!"

[7] See p. 6, (3) above.

Well, *has* it? Is it about to? Perhaps, but let us investigate with scientific caution. "They" may be wrong. On the other hand, who today dares say that our balloon will not go up to the moon?

Emergent evolution.—Another deliberately chosen point of view requires some explanation. We shall take an attitude throughout of friendliness toward the conception of Social Evolution which views it as *Creative* or *Emergent*. By this is meant that evolution in the larger sense shows a series of successive levels on which new principles or patterns of life appear. The secret of the successive stages is found in organization. That is to say, new properties arise from organization of simpler forms—properties that could not be inferred or even imagined from the properties of the constituents. Hydrogen and oxygen have each their distinctive properties, but the union of these two elements to form water does not mean the addition of one set of properties to the other set. Instead, we have the *creative synthesis* of the two, and a new substance *emerges,* something utterly different. In precisely the same way, we need not think it devolves upon us to explain what mental phenomena are, in terms of the preceding physical data from which they have come. The Emergent Theory views Mind as coming into existence out of something lower than itself. Whether one prefers to think of Mind as an inspiration from above or as a *sortie* from within, in either case it is a fine synthesis of factors that arise on the organic level to create the psychic level. This light in the clearing, this mental-organic, carries on the cosmic process of realization or progressive achievement one stage farther. Again, just as philosophers have thought of the mind as a fruition or perfection of the body, so the *social-organic* is the outcome or emergence or creative synthesis of the psychic forces. Social evolution is as much a novelty as any of the earlier modes of creation. Inorganic, organic, mental-organic, and super-organic or social—none of these forecasts the out-

come. And the social has its own peculiar qualities, not to be deduced from the study of the individual's mental constitution, but discoverable by observation of his behavior. Who, for example, by studying the nervous or psychic organization of human beings as individuals, could foresee such diverse, erratic, conglomerate social phenomena as the World War, the Roman Catholic Church, the Mass Movement for Nationalism in India, Pan-Islam, the Rotary Clubs, the Socialist Party, a negro camp-meeting, an African war-dance, an Irish wake, a Spanish bull-fight, an Australian kinship group? The social traits that explain these things have emerged out of organic depths unfathomable by man. All we can say is that social traits, discoverable by observation of man's behavior, do appear in human life, and that a new kind of evolution—social evolution—results.[8]

Idealism.—The next position we assume is that of idealism. This means that although in our maturer thought there should be a supplementing of our youthful inclination to the acceptance of our visions by a strain of honest, forthright appreciation of and respect for matter, for earth, for things as they are rather than the stuff dreams are made of, yet at bottom one may remain a bit patronizing in his attitude toward material things. We are spirits (this is an intuition dating back to our earliest consciousness and too valid to be questioned successfully) and things are poor relations; we should never allow them to be seated above the salt. We need not be materialists. In fact, the day of materialism seems to be passing, for when deeply pondered it changes to something else. "Energetics" has been suggested as a name. The crux of the change is that energy rather than mass is becoming the primary assumption throughout science and philosophy. But mind, and the interactions of minds that constitute society, are energy-manifestations.

8 G. T. W. Patrick, "The World and Its Meaning," Houghton Mifflin, 1925. See various passages pertaining to evolution, creative evolution, etc. See also Patten, "The Grand Strategy of Evolution."

Personalism.—Finally, we take a personalistic position. This means that we favor that particular form of modern thought known as Personalism. Personality is both a stubborn phenomenon and a high value. The very thing that we are discussing throughout our book is taken for granted by personalism—namely, our existence as persons in a society of persons. What personalism leads to is a far-reaching matter, and the reader may go the whole distance or not as he pleases.

(c) *Categories vs. Patterns*

The fact of change.—In our study of social evolution we shall try to show how mankind has progressed from those manifestations of social life which we call primitive to the higher cultural levels of behavior. Our work is therefore a sort of history of mankind. But we shall not conceive of our history as a "history of civilization." Our interest carries us far beyond the center of gravity of what is ordinarily called civilization. It is true that civilization is sometimes used as a name for the entire process of man's development. We have misgivings, however, based upon the unavoidable connotation of the word "civilization" itself—the connotation, in turn, being based upon the history of the word. For in spite of all the broad experience through which the word "civilization" has passed, a certain ancient scent of urban life and politics clings to it—especially in view of the modern trend citywards, as though societal development must be toward the *agora* or market place. We are interested in the organic urges far back that brought the *agora* and the metropolis themselves into existence, and so we shall reject the suggestion that social evolution is equivalent to the history of civilization.

On the other hand we are not so taken up with the organic, the biological, the totality of man's behavior traits that link him to the animal past from which he has emerged, as to be

willing to call our study a "natural history of mankind." Of course there is a sense in which everything about man is "natural"; no matter how "artificial" his doings may be, one can always say that *that* is the peculiarity of man's nature. This is a fruitless quibble however, and in no wise changes the great importance of the fact that man has built such a superstructure of behavior upon his fundamental natural inheritance that the factors of his life must be thought of as Nature and Nature-plus. This plus quantity we might call the artificial as distinguished from the natural were it not for the fact that a suggestion of superficiality attaches to the word "artificial." What we are trying to track down is the history of those complex behavior patterns which are part and parcel of our group life, intermediate in status between nature and history, which we call *cultures.*

In this study we shall encounter all sorts of social phenomena, partly the result of external conditions of life, partly of man's own creative power. These social phenomena are the material from which cultural patterns are made. These cultural patterns have undergone great development. With the development in historic times we are of course much concerned, but even more are we interested in the long prehistoric chapters during which the outstanding and permanent modes of behavior in human communities first emerged. Our next consideration is, how shall we regard the great fact of change in human life?

In the first place, let us understand that there is no difference of opinion as to the fact of change. A thousand phenomena every day are encountered by every one of us, phenomena that bear witness to the unending process of social change. To adduce but a single example, what a story of vicissitude is suggested by an *Italian* festival on *Columbus Day* on *Endicott* and *Bradford* Streets in *Boston!* In spite of these easily observable things, the individual is prone to fall into the assumption that his world, the world especially

of his own boyhood, is a permanent arrangement, and one of the most elementary forms of melancholy that we experience is when we discover that there is a time element as well as space dimensions involved in any situation, and that a return is impossible. What we are experiencing we are also leaving. The next time we seem to be there, we shall find that a change has come over the spirit of our dream. Now, the recognition of this well known fact is as old as the memory of man, and yet there is a large part of humanity which persists in preferring to think of things as far as possible as if change were an intruding fact, not an inevitable factor. Perhaps it would be better to say that it is hard for people to recognize that the changing world is also a changing world-order, that not only do the factors of social life rearrange themselves, but that new factors emerge.

Patterns.—There are, in fact, two well-defined ways of viewing the world in which we find ourselves. One way is to think of things as static; the other is to think of them as changing, or dynamic. This last word is suggestive of inward power sufficient to bring about a pervasive change. Of course, as we have suggested, even the static view does not ignore the obvious fact that things change in the sense of succeeding one another. Nor can the static-minded person fail to see that individual objects are altered by the ordinary exigencies of time, as well as by frequent extraordinary happenings. But what he either does not see or does not wish to take into account is the introduction of new elements by a recombination of factors. The situation *as a whole,* for him, is not open to change except by cataclysm. It is not merely the people who are usually considered the conservative, reactionary, or literal-minded group who commit the practical fallacy of overlooking the creative power of a readjusting change. We expect this mistake from verbal inspirationists in religion, die-hards in politics, stand-patters in social ethics, etc. But on the other hand, nothing could be more essen-

tially static-minded, in the sense of refusing to admit the validity of a new situation that has stepped forth from the dissolution of the old, than the attitude of the so-called liberal or emancipated person who, by holding to a prejudice against some institution, shuts himself out from participation in the new movements that are sure to come in that field.

An expression of static-mindedness may be reeking with the thought of change.[9] But it is the theme of "change and decay in all around I see." Indeed, a partial explanation of the change in religious attitude today is to be found in the fact that change does not suggest finality and the end of temporal things as surely as it used to do. The dynamic-minded person has arrived in force. He tends to see all things as a process of becoming. In the old opposition between "being" and "becoming,"[10] (as old as Greek philosophy) he ranges himself on the latter side. He is a product of Western thought, and he has solved his time-sense problem by means of a developmental formula. He sees form succeeding form, not by any jerky process of substitution, but by growth. And he sees the present form from within itself bringing out new forms, so that by a gradual succession all things are bound together lineally in time and collaterally in space. He opposes to the word change, the word development; to routine, evolution; to events, growth; to static, dynamic; to being, becoming. And finally, perhaps most illuminating of all, he opposes the word *category* with the word *pattern*. Let us look at this antinomy a little more carefully.

Evolution is a thought-way, as we have just had occasion to explain. The factual value or outward validity of this thought-way is one question, and of course we shall need to find that evolutionary thought corresponds to reality, if we are to keep on using it. But quite apart from the objective

[9] See the Potter's Song in Longfellow, "Keramos." The student may profitably spend some time on the task of clearly distinguishing social change from social evolution.

[10] Cf. the German words "sein" and "werden."

verification of the theory of evolution, there is another consideration, based on the fact that man must have some preferred thought-way. Since one must understand evolution in order to understand human thought in recent times, we can not avoid the subject. Thought-ways that are evolutionary are also inclined to view life as following patterns. The word "pattern" has experienced a renaissance in recent years,[11] taking in part the place occupied formerly by "law" as a scientific term. Whereas categories suggest placement for finality, immobility, separation, lack of internal possibilities, and the innate witness to an idea as ultimate content or substance, patterns suggest development, behavior, interlocking, variety within units, and the innate witness to an idea as movement.

The events and changes of the world today encourage the dynamic, evolutionary, or pattern thought-way. Things used to seem permanent; now they seem shifting. In star-gazing, or horticulture, or transportation, or religion, or etiquette, or politics, or stock-breeding or anything else, the succession of developmental changes leads to habits of thought that favor the pattern type of explanation. The evolutionary way of thought is a sort of progenitor of much pattern thinking.[12]

11 See Amy Lowell's poem, "Patterns."
12 Patterns, as here used, must not suggest mere repetition.

CHAPTER II

MAN RECEIVES THE GREAT CHALLENGE

The whole evolution of man is a process of liberation in which his very awareness of his subjection becomes the condition of his mastery.—R. M. MacIver.

I. Environment Explained and Classified

(*a*) *The Importance of Environment*

How environment works.—Every living thing is surrounded by an illimitable changing universe. Just as every person stands at the center of his own visible world, with the horizon equally distant from him at all points, so every organism may be thought of as occupying the exact focus of creation, with all things in a kind of shifting equilibrium, converging upon it. It is the business of the living organism to maintain itself by continual adjustment to the objective changing system which impinges upon it. This extra-organic sum total of things constitutes the environment.

Of course, not all parts of the environment affect the organism to the same extent. The remoter fields of existence exercise a negligible influence, at least as far as we can tell, while contiguous objects produce ceaseless changes in the behavior of the living thing. These influences of environment are the source of all social action, as far as the individual is concerned, save only the influences originating within him (and how debatable such influences are we shall see). In very large measure, it is necessary to study the environment in order to see how social evolution "got going."

The influence of environment has always been a subject of general observation by historians, essayists, and philosophers, but in modern times the prestige of biological theories of evolution has given greater importance to the subject. The Lamarckian view made individual and racial change the result directly of the reaction of the organism to its physical environment. Characteristics acquired in and because of a given environment were thought to be transmitted through biological heredity. When this doctrine of the inheritance of acquired characters was almost, if not entirely, discarded in favor of Weismann's doctrine of the continuity of the germ-plasm, and of Mendel's laws of heredity, there still remained the indirect influence of environment under the Darwinian theory of natural selection, according to which variations, though not caused by the environment, must nevertheless be in harmony and adjusted to it or else disappear. Physically, therefore, the biologist is assured that the environment has a far-reaching effect upon social groups because it affects their individuals. Social behavior, it is also plain, is influenced by environment, partly because an individual who is physically affected by his environment will behave accordingly, and partly because customs that might ordinarily spread from one group to another will not take root in an unfit environment. There is a geographic limit for winter carnivals. This environmental influence may be very far-reaching "in some cases overpowering social initiative and in others, the majority of instances, conditioning and limiting social activities which are directed toward the conquest of the environment and its adaptation for the use of the group."[1]

Earlier ideas of the influence of environment included the thesis that the physical environment exerts a direct influence upon the psychic characteristics of the group.[2]

1 Franklin Thomas, "The Environmental Basis of Society" (Century, 1925), p. 6.
2 See Giddings, "A Theory of Social Causation."

If this meant the behavior of the group (whose psychic characteristics *as a group* are known to us only through the group behavior) and did not mean the minds of the individuals comprising the group, then, as we shall presently see, this earlier idea still holds good. A group thinks as its environment suggests, in large measure.

But if this former idea meant that a type of mind was somehow physically engendered, organically wrought out upon the individual by the environment, we should have to reject it.

For example: "It is no longer believed that there is . . . any such direct correlation between the climate and mental traits as Montesquieu believed to exist." [3] This means that we no longer believe that if we transplanted the babies of a given population that had lived for a long time in some specific climatic environment, and brought them up under very different circumstances, we should find them, as they approached maturity, evincing the inherited mental traits that would fit them for their natal habitat. On the other hand, if by mental traits we mean the characteristic psychic reactions to stimuli that are appropriate to the new region, rather than some inherited or induced mental entity that took up its abode in the individual's body, we shall find that there is a very important sense in which it is true that climate and mental traits are directly correlated. If the New England climate, for example, encourages thrift and conservatism, of course those individuals who react thriftily and conservatively will be rewarded by success and will survive in the group and give character to it. "Mental traits" have undoubtedly thus been made by New England climatic environment. Release the descendants of these individuals from the social and cultural media through which the climate worked upon them, and the trait will disappear. In concrete terms, the children of a New England millionaire, engaging in winter sports

[3] Thomas, "Environmental Basis of Society," *loc. cit.*

without responsibility of any kind, will not be made possessors of the mental trait of conservatism or any other specific trait whatsoever as a result of the direct influence of climate.

While environment may not affect the human mind in such a permanent way as to produce distinct psychic types, it is held that environmental conditions will effect temporary changes in the individual, and hence in the social-psychic relations. As the activities of daily life are influential in shaping man's moods and psychic reactions, and since in turn the environment influences the activities of daily life, it is clear that meteorological and seasonal factors will affect social behavior from day to day.[4] But aside from this, there is a generally observed indirect influence over our psychic life for temporary periods, for environment may force certain activities upon us and these in turn "get on our nerves" or by their monotony induce some erratic or abnormal mental response.

Different fields of influence of environment.—Considerable effort has been expended in the past to show an immediate influence of environment in different fields of social life. Though the direct nature of the influence is now denied, for the most part, the various aspects of environmental influence can still be traced. Take the political life of man, for example. It was formerly more or less the accepted thing to speak rhetorically and vaguely of the influence of mountain environments to plant the passion for freedom in the inhabitants. At the same time we used to hear of the same passion for freedom in the men of the desert, and, again, that "Britons never shall be slaves." Apparently mountains, islands, deserts, all exerted an influence very much alike. But since they are very different environments, the "influence" must lie somewhere else than in the natural features of the environment. Further reflection in the light of history leads us to change the thesis to some such statement as this: that

[4] See Ellsworth Huntington, "Civilization and Climate."

the geographical location and the character of the boundaries of a group affect its policy toward outside interference, and the general attitude of the individuals of the group toward social entanglements with others. And again, as the political or controlling powers within the group exist to restrain and regulate the ofttimes conflicting interests of its members, and as the nature of these interests will depend partly upon the habitat, so environment must affect policy internally. All analysis of historic development with the purpose of showing that political evolution is essentially a struggle of new against old group interests within the larger group, generally goes to show that social evolution comes to pass as a result of behavior in response to environmental stimuli producing new forms of culture and new modes of political expression.

It is perfectly obvious that environment affects man's economic life, for the economic life is nothing but man's struggle to wrest a living from his environment. There is much profundity in the Indian story of Hiawatha's wrestling with Mondamin, the spirit of the corn-culture, in order to give his people a more broadly based food-supply. But there are limits to the region where any amount of wrestling will avail to make corn grow, and here the environment has its final word.

Let us look a little more narrowly at this problem. Economic life is man's behavior in the course of his efforts to adjust his outward opportunities to his inward needs. The human organism, shaped by heredity, confronts its environment. Action and reaction take place between them. When the environment shapes the organism predominantly, we have organic evolution, and since an evolved organism will behave differently, we shall also have cultural evolution. On the other hand, if the human organism adjusts the environment, we have culture at once. Broadly speaking, man is the animal who has a culture, because he does so extensively adjust the environment to himself. Although we are not yet ready to

discuss culture to any great extent (see Chaps. XXII-XXIV) we may make this observation in passing: culture is a sort of externalized materialization, and a sublimation, in the realm of behavior, of the response to environment.

Anthropology, which deals with man as a product of nature and as distinguished from other animals, is always interested in the question of environmental influence. That part of anthropology specially concerned with racial and physical types has to meet the problem of environment exactly as biology in a general sense does. The phase of anthropology dealing with the cultural part of human life has also given considerable attention to environment, but here we discern two schools. The older or "classical" anthropologists [5] were inclined to make much of the doctrine of the Homogeneity of the Human Mind. Assuming the human mind to be by endowment the same the world over, they accounted for cultural dissimilarities by the influence of different environments. Recent or "critical" anthropologists hold a moderate view of environmental importance. Environment, they say, instead of determining the course of life, imposes limitations to its development. A *definite* correlation between cultural similarities and environment they do not hold.

In the field of morals, the influence of environment is more believed in than formerly. The time-honored view of morals derived the sanction of moral rule from some divine or metaphysical source. The more modern view looks for the relation between moral institutions and the environment in which they arose—and if *in*, why not *from*, the environment? The most thorough-going version of this way of regarding morals may be summarized as follows: [6]

(1) The customs and ideas of the group are the source and the determinants of moral judgment. That is, morality grows from the *mores* or highly valued customs.

5 Lubbock, Tylor, Spencer, Frazer, *et al.*
6 See W. G. Sumner, "Folkways."

(2) The development of the *mores* is a phase of the group's adaptation to its environment.
(3) Hence, environment influences morality.

With regard to ethics, which is a slightly different matter from morals (see chap. XVIII) there is rather less direct connection with environment and more individual initiative.

In the field of law, again, we find that there have been various stages of explanation—divine authority, "natural" law, etc., and that it is now considered that law is an outcome of the social experience, or in other words, law is the statement, in the light of social experience, of what social behavior is expected to be, by the group or part of the group in control. Environment determines experience, and thence come culture and law.

(*b*) *Environment Classified*

Main divisions of environment.—Environment is such a vast thing that it is almost hopeless to "survey" it; yet it is so omnipresent in social equations that it seems desirable to assume various viewpoints in order to appreciate as far as possible how great it is. We shall therefore try to classify environmental facts.

One way in which environment may be analyzed is to note that man is himself an environment to his fellow-man. We then see that every man is subjected environmentally to these forces:

1. Physical environment, unaltered by man.
2. Physical environment, altered by man.
3. Human, or social environment.
4. The total environment, acting as a whole, and largely psychological in effect.

The last two of these are constantly growing in relative importance, especially contacts with other people. "Culture contacts are the most pervasive influence in civilization."[7]

[7] Hobhouse, "Social Development," chap. V.

Nevertheless, such is the force of the old established factor of physical environment, that we may say that the geographic factor [8] is the outstanding one to account for differences between social groups of the same general mental, racial, or cultural origin.

A fuller classification of environment as a social influence is possible, as follows:

Physical Environment:

Sidereal
Planetary
Solar
Lunar
Meteorological
Geographical (divisible into many sub-heads)
Subterranean
Bacteriological
Botanical
Zoological
Inorganic

Social Environment:

(Animals)
Family
Community
Extra-Community Organizations
Nation
World-Organization
Intra-Community Coöperative Groups

8 "Man has been so noisy about the way he has 'conquered Nature,' and Nature has been so silent in her persistent influence over man, that the geographic factor in the equation of human development has been overlooked." (Semple: Influences of Geographic Environment, p. 2.) This is equally true of natural forces not strictly classifiable as geographic. The phenomenon of the "Northern Lights" has been interpreted by some peoples as a pathway by which the spirits of the dead visited the earth. We interpret it as an electrical discharge. The difference is one of intellectual culture. Our knowledge of electricity has given us, moreover, such items of material culture as the radio and the telephone, not possessed by those earlier societies—an advance in material culture. And yet Nature influences us quite as definitely as ever, for an auroral display sometimes affects both radio and telephone service seriously. The influence of natural environment persists, while man's cultural—in this case, scientific—response has changed.

Intellectual and Literary Companionship
Historical Consciousness
Religious Consciousness

II. Some Environmental Influences

(*a*) *The Cosmic Background*

Remote environment is socially effective.—The whole physical universe is crammed with facts which are social in their significance, when understood. The physical scientist may possibly disregard social facts; the social scientist may disregard nothing, for nothing lies outside the environment of social man. It is not our purpose to demonstrate this by pointing out the social influence of every form of environment. To do so would require a work of encyclopedic proportions. Instead, we have selected one phase of our cosmic background, namely, the heavenly bodies, and in the following questions we have really suggested the far-reaching effect of our astronomic environment upon our lives as social creatures.

Cosmic environment illustrated:

1. What social significance has the fact of sidereal steadiness and accuracy?
2. What social suggestiveness is to be found in the derivation of the words "consider" and "desire"?
3. What can be said pro and con of astrology, from a social point of view?
4. What Biblical quotations bring out the social-religious side of astrology?
5. What social questions are raised by the possibility of other planets being inhabited?
6. What social results have ever followed from the study of the chemical constitution of other heavenly bodies?
7. What is the psychological and religious effect of the demonstration of the vastness and complexity of the universe?

8. What intellectual results come from the observation of the stars by ancient man?
9. What are the social influences of the Pole Star?
10. What inferences, valid or invalid, have ever been drawn from an eclipse? Is an eclipse a social event?
11. Are sun-spots supposed to have any social consequences?
12. How did the discovery of the law of gravitation affect society?
13. What social difference does it make whether the cosmology of Dante or our own be held?
14. Have astronomical facts any bearing on density of population?
15. What social difference does it make whether the sun revolves around the earth or vice versa?
16. What proverbs, customs, superstitions, etc., indicate the feeling that human affairs are affected by the heavenly bodies?
17. Aside from sunrise and sunset, what daily observable phenomenon constantly bears witness that human affairs *are* so influenced?

(*b*) *Some Notable Cases of Geographic Influence*

Of all the forms of environment, the geographic is the outstanding one, and in this section the purpose is to show how picturesquely and ineluctably the geographic environment does its work upon us. Let us take three seats of earlier civilization, Egypt, Greece, and Rome, and see what correlation there is between history, or social evolution, and geography.

Egypt.—The Nile is perhaps the best illustration of the influence of "nature" on "human nature" to be found anywhere by the student of social origins. Its many social influences may be summarized as follows:

1. Its delta provided the "fen and water environment" which in various regions of the world has proved favorable as a habitat of peoples emerging from the stone age.
2. The narrow river valley massed the population, thus making for rapid social progress by increasing the amount of social friction and personal contacts.

3. The surrounding deserts were such as to give protection and seclusion, thus allowing continuity of cultural development, but not complete isolation, which would have meant stagnation.
4. Fertility of soil made possible a cultural development on the basis afforded by an economic surplus. This was due to
5. The periodic Nile overflow, efforts to control which, and to adapt life to it, gave a common social consciousness and a common everyday life and mental background for national feeling.
6. Knowledge of agriculture, of irrigation, of "Nilometry" (river engineering).
7. Keeping boundaries in fields annually inundated stimulated surveying, mathematics, record-keeping, literature, law-courts, making of papyrus, etc.
8. The remarkable regularity of the rise of the river fitted in with astronomical observations, thus encouraging intellectual life.
9. Navigation and commerce were stimulated by the river.
10. Religion, with peculiar emphasis on resurgence of life, was highly developed in Egypt.
11. The stone of the Nile Valley influenced the development of post-and-lintel architecture.

Greece and Rome.—The case with regard to Greek culture and environment has attracted much attention, too. Greek civilization brings to mind pre-eminently these things: (1) the first great European civilization succeeding that of the Orient; (2) the best known myths and legends of gods and heroes; (3) supreme achievements in the aesthetic and intellectual realms (art and philosophy); (4) the emergence of the individual; (5) the development of the city-state; particularism combined with cosmopolitanism. All this entirely accords with the geographical setting, which has been characterized as "the first notable hill and sea environment,"[9] offering a combination of isolation and protection along with opportunities for contact and expansion; a position at the

[9] H. E. Barnes, "Social History of the Western World," p. 43.

"threshold of the Orient" giving commercial opportunities, mental stimulation, cross-fertilization of intellectual currents, and diffusion of culture; a topography making regional isolation necessary, with small social and political groupings; an extremely long shore line, whose gulfs, bays and islands encouraged narrow-based but vivid types of life.

Yet again, certain facts about the geography of Italy are in remarkable accord with its history as the seat of a world empire, such as its commanding position in the Mediterranean, its propinquity to Greece, its facing of the west in harbors and orientation.

Grass-lands and hoe culture.—One more example may suffice to demonstrate the frequent close relationship between culture, environment, and history—the portentous difference between the grass-lands and the lands of the hoe-culture. On the grass-lands have been bred great tribes of men of a prevailingly nomadic type of culture, who throughout long ages, in times of drought or overpopulation, have descended on the richer lands as invaders or as immigrants. The concept of lean lands and fat lands thus emerges to view. The people of the lean lands debouch onto the fat lands, or else the people of the fat lands, going by or through the lean in trade, are pillaged or leave articles of material culture behind them in trade.

Main items of anthropogeography.—Anthropogeography is the science that deals with the influence of geographic environment on man. The overwhelming importance of geography among the environmental factors results in a science of great extensiveness and importance. The outline that follows is drawn from some of the standard sources.[10]

1. *Man's relation to the land,* the soil, in its substance and

10 Such are: Ratzel, "History of Mankind."
Semple, "Influences of Geographic Environment."
Semple, "American History and Its Geographic Conditions."
Febvre, "A Geographic Introduction to History."
Brigham, "Geographic Influences in American History."
Huntington, "Civilization and Climate."
Huntington, "The Red Man's Continent."

its configuration. "How much land there is to how many men is the fundamental consideration in the life of any society." [11]

2. *The influence of climate.* Direct influences, such as extreme cold or heat, and indirect, such as local flora and fauna, determine largely how man shall live.

3. *Geographic areas.* These influence the extent and the juxtaposition of peoples—i.e., *location.*

4. *Topography.* The "lay of the land" has a great influence on modes of social life:

(*a*) Mountains, barriers, and mountain passes
(*b*) Plains, steppes
(*c*) Plateaux
(*d*) Deserts
(*e*) River valleys
(*f*) Coastal regions
(*g*) Lakes, seas, oceans
(*h*) Islands, peninsulas

(*c*) *Cultural Aspects of Climate*

Annual cycles.—Among the many aspects of geographic environment, climate stands apart as a deeply influential, subtle, active and varying force. So profoundly is the make-up of our social mind woven upon the warp of climate that we are hardly aware of it until we have our attention called to it forcibly. Our very soul-stuff is made of it, with local variations. Time is known through periodic recurrences; without these we should not be able to measure or appreciate the flow of time, and in that case we should be without one of the principal cultural determinants. The patterns by which men ornament the passage of time bear witness to their inward cultural soul. But of all chronological cycles, that of the seasonal year is the most rich in content.

[11] Sumner and Keller, "Science of Society," I, 4.

Language, dance forms, music—all kinds of observances reveal this importance. The pathos and yearning for the irrecoverable; the propitiation of the gods of chance; the striving for order and regularity in the social body—these and many other things appear in the heritage of art and custom and folk-lore that enrich the calendar. Spring, with its basic theme of resurgence and vitality; summer, full of deep-flowing pageantry; autumn, with thrift and foresight blended with memory and the sobering of harvest-home; winter, shutting in the mind to hearthside and mental enrichment and the communal spirit of the igloo;—thus runs the yearly round for the majority of peoples of our civilization and this is made much of in the behavior pattern of the northern peoples.

Lunar cycles.—Then there is, besides the four-seasonal shift, the monthly or moon chronology, probably the earliest of all.[12] The importance of the moon's phases, especially full moon, as a festival time, can scarcely be ignored. There seems to be evidence that primitive man held all his festive assemblies at night;[13] what we know of animals and of primitive man today sustains this supposition, and in fact the whole assumption that night is a time for sleep, in the very nature of things, is only a part of our own learned behavior patterns. Hence the practical importance of the moon. But the succession of lunar months is a succession of so many seasons. Moonlight in the tropics, and springtime in the north country teach us of olden things: one harks back to pre-human ways and one calls forth our old adjustment to ancestral tropical life.[14]

Diurnal cycles.—This suggests another subject closely related to that of climate and season: the most primary of all time sequences, day and night. Animals (and primitive men

12 Klaatsch, "Origin and Development of Mankind," p. 163.
13 *Op. cit.*
14 Cf. the plaintive, sweet spring music of northern peoples—e.g. Grieg, "An den Frühling."

to some degree) rely on the sense of smell where we use sight in many instances. Therefore night did not mean so fully for them as for us a complete cessation of practical activities. And it was a safer time to hunt. Man has abandoned it as a working time, but keeps it for an emotional outlet. Night and day, depending for their content upon climate, thus become more sharply differentiated as culture grows.

(*d*) *Summary of the Social Influence of Environment*

Environmental influences.—The following paragraphs are a brief summary of the influences and the limitations of environmental influences on society.

Environment has an effect on physique, since it helps determine the distribution of peoples, and since it necessitates acquiring immunity to disease.

Environment has an effect on social intercourse. It may aid in security, or it may lead to communication, and no influence of geography upon society is more important than this.

Environment has an effect on the material arts of society. A region of medium richness, neither too barren nor too lavish, allowing a surplus over physical needs, allows society to support an advance column of progress through its arts and industries. The character of the environment conditions the industries. Proximity of pasture to plow-land has been an important factor.

Environment has an effect on the institutions by affecting thought-patterns.

Limitations of environmental influence.—Finally, environment is limited in its operation. Though it is true that every species must adapt itself to its environment or take the consequences, the consequences are not always death. A plant must perish if it cannot adapt itself, whereas the animal world is distinguished by its "space-binding" power. Ani-

mals may go to a new environment. Man, moreover, can do more than that, for he can react *upon,* not merely *to,* his environment. He actually changes it, though he himself is thereby changed. Hence "there is no fixity in the geographical factor, but its operation is a very complex function of its own structure and the development of the arts of man. . . . It (physical environment) begins to be in part an artifact. Nor is it at any stage proper to say that the physical environment of itself determines the social structure as though humanity were merely wax to its seal. It is man, with his desires, his knowledge, his powers of organization, habits of industry, and the like, to which the physical environment sets a problem, and it is in strictness the solution of this problem which *inter alia* conditions development. Biologically we know that it is an error to conceive the environment as directly stamping qualities on a race. What the environment does is partly to stimulate, but more particularly to determine success and failure, and it is through this indirect method of selection that the type accommodates itself to its habitat. In principle the sociological effect is not far different. The environment never makes arts or institutions; these proceed from the energy of human thought and will; but the environment does go to determine the lines on which human energy can succeed, and so to decide what experiments and tentative beginnings will ripen into institutions . . . In the lower cultures the limits set by the physical conditions are pretty rigid because human reaction is feeble. In the higher it is easy to exaggerate them. Reviewing the actual achievements of a people, we may too readily be led *ex post facto* to see the potentiality of them in the habitat." [15]

Technogeography.—That part of anthropogeography that emphasizes the effect of environment upon man's industries is technogeography. From this point of view the industries of man are behavior patterns woven of terrestrial forces and

[15] Hobhouse, "Social Development," p. 96, Holt, 1924.

materials. In some cases nature seems to have anticipated man's industry-patterns, as in the many varieties of storage of seasonal excess by animals. When man imitates these nature patterns, we see nature becoming art. Technogeography is thus a witness to the completion or fruition of the ways of nature through the ways of man, himself a product of nature.

Technogeography sees the earth as a great storehouse of mineral, vegetable, and animal substances, and at the same time a power-house of physical, chemical, and vital forces. These forces are tentatively at work previous to man's coming, preparing the way, it might almost seem. Rock forming, river wearing, wind work, volcano, earthquake, frost, fire, gravitation, life of all kinds—these carry on a ceaseless expression of natural "industry," and man, conforming himself to the geography of his locality, carries on coöperatively with nature. This is why we find such cultural phenomena as the Arctic hunting technique, the birch culture of the Algonquin and other northern Indians, the buffalo culture, the maize culture, and among civilized peoples such economic facts as peasant Russia, socialized Germany, industrialized England, pastoral Switzerland, and many other distinct areas of technique adapted to geography.

III. Some of the Principal Environmental Changes

(*a*) *Changes before the End of the Glacial Period*

Changes in tertiary times.—Perhaps half a million years ago the so-called tertiary period, one of the grand divisions of geological time, came to an end. Authorities are divided as to whether true man existed then, but even if he did not, his ancestors, representing the last stages of evolution from anthropoid stock to human, were subject to interesting environmental changes. Among these we may mention that in tertiary times a continental land mass existed where now the

East Indian archipelago is situated. The climate of the world was warmer, and Europe was inhabited by "tropical" animals in part. Central Asia, fertile then instead of desert or arid as now, was the possible starting point of the human race, after the submergence of the tertiary continent.

The ice ages.—The principal feature of the quaternary period—during which man in some form may be thought of as having been on the earth—is the succession of glacial periods, four in number, each lasting thousands of years, with warmer periods between. During these cold periods the environment changed very decidedly, driving man farther south, and affecting the flora and fauna of what are now the north temperate regions. Large parts of Europe and of the United States show clear indication of glaciation, and human remains are found for a very long period back into the age of the ice. The formative effect of tens or hundreds of thousands of years of skirmishing on the habitable edge of the world's ice-cap, both in racial characters and in social ways, must have been enormous. There are at least three different ways in which geographical and geological changes went on during the glacial periods,[16] changing man's habitats and forcing adaptations in after ages when he resumed life in the territory left vacant by their retreat: (1) direct erosion and depositing of pebbles and boulders (one of the surest indications that a country has once been glaciated), a very important factor in later soil working; (2) river drift, the alteration of river valleys, in which early man seems to have taken shelter so much; (3) the loess deposits, or widespread accumulations of fine yellowish earth, of great importance in some of the chief river valleys of Asia and Europe.

Though it is a highly speculative subject, the trend of investigation at present suggests that the greatest change of the ice-ages was the displacing in Europe of the type of man who had for ages been hunting the tertiary fauna, and the

16 See Quennell, "Everyday Life in The Old Stone Age."

coming in of higher types from the East. That earlier type was the so-called Neanderthal man, very possibly of African origin.

(*b*) *Changes since Glacial Times*

Climatic and other natural changes.—Since the close of the glacial period, and even during the last few thousand years of recorded history, many changes in the geography and climate of the earth have been going on by natural processes, affecting human life and social action in one way or another. Some of these changes are suggested here:

1. The desiccation of central and south-western Asia.[17] This progressive drying-up of regions that once supported agricultural populations, and the consequent increased area of herds-peoples, has been a cause of periodic pressure from Asia upon European civilization.
2. The rising or falling of coast lands, notably the forming of the English Channel.
3. The depositing of silt at river mouths.
4. The alternation of drouth and wet in cycles, causing population to advance and recede periodically—as in the arid belt of the western part of the United States.

Man-made changes in environment.—Man has not made environmental changes that bulk large, but in importance some of his alterations are gigantic. The following instances will illustrate the point:

1. Canals, especially the Suez, the Panama, and the Erie.
2. Artificial lakes, reservoirs, mill ponds.
3. Utilization of waterfalls and streams by direction of flow.
4. Embankments, "filled" or "made land."
5. Roads, tunnels.
6. Drainage of swamps.
7. Denudation of wood-lands.
8. Transplantation of vegetable life.
9. Transportation of animal and insect life.
10. Cultivation of large areas.
11. Exhaustion of mineral deposits.

[17] See Brooks Adams, "The New Empire."

IV. Human Environment: Conflict and Coöperation

(*a*) *Coöperation*

Man as mutual environment.—Man is affected by his environment; he affects his environment; and he *is* environment. That is to say, people as a group constitute a part of the environment of each member of the group. And like any other environment, they may either help or hinder him in his enterprises. We shall look first at the coöperative relationships.

In bringing about projects in the physical world, mankind finds himself in regard to his natural impulses, in a milieu of individuals like himself, who are an environment for him in that they surround him, stimulate him, and make him feel comfortable. In addition, they have similar impulses to his, and are bent on the same projects. And since their actions in carrying out these projects are so much the same, they come to act together, and then act deliberately together. Thus the great accomplishments of the race have grown out of the forming of institutional patterns of industry and the arts, worked out in common. Coöperation is thus a sort of outgrowth or fruition of adjustment to (human) environment.

Coöperation.—In the biological realm, man is taught cooperation with his human environment. One has only to put the question to himself: to what extent is the individual's group engaged in the biological struggle with him—the struggle, that is, of maintaining existence against the hostile part of the environment, and the other purpose of the species, perpetuation through properly nurtured offspring, and at once he sees his human environment and its institutions as a great network, a fabric of devices aiming at the orderly accomplishment of these fundamental biological purposes.

In a higher realm, the psychological, the story is the same.

Environment exists as a friendly ally, a fulcrum for the exertion of vital energy, an invitation to the expenditure of force, and mind acts upon mind in just that way. And finally, in the social realm (the working out of behavior patterns which in their very nature are social), it is obvious that the human environment mingles with the individual coöperatively.

(*b*) *Conflict*

Mutual check.—In human life, then (as in other species also), that part of the environment which is identical with the individual in specific character, one of his own kind, may be thought of as coöperative environment. But there is an opposite aspect. Environment is often hostile, and a species comes into conflict with it. Intra-specific conflict, that is, the turning of a part of a species into an environment hostile to the other part, is something that no species can stand indefinitely, and it is a strange phenomenon at best. In every one of the four regards pointed out above in which coöperation occurs, conflict also occurs.

"The more there is of yours, the less there is of mine," while not necessarily true, is often enough apparently true, say in such physical affairs as the exploitation of the best land. Biologically, the facts of hunger and of courtship are eloquent with examples of conflict with one's environment. In the psychological realm, minds clash as a necessary part of their growth. In social contacts the competitive element often seems to be the only form under which people can proceed, as when cliques rival one another for "standing."

Warfare.—In human life the conflict element within the species has taken on a particularly important form, and one which constitutes a major problem for mankind, namely, warfare, which we are to study in a later chapter.

CHAPTER III

MAN EMERGES FROM THE MIST

Man still bears in his bodily frame the indelible stamp of his lowly origin.—CHARLES DARWIN.

I. MAN'S PLACE IN NATURE

(*a*) *The Animal Heritage*

Man and the lower animals share the great life-tree.—Genealogies, for convenience pictorially, are often represented as trees branching out indefinitely. This fits in well with the legendary but beautiful idea of a "tree of life" of which man is a part figuratively, according to evolution, and with which, according to tradition, he was in close relation literally at the time of his origin. We are to think of man as not only a part of the tree of life, but as drawing his culture from roots that are of that same great Ygdrasil growth. We are studying man's culture or social behavior, and it might seem, perhaps, that we are therefore studying him in those respects in which he is something more than mere animal. But so deep are all man's roots fixed in nature that we shall not be surprised when we are told that he shares with other animals at least the roots of his culture. For if we attempt to define "culture" we find that we can trace its origins very deep and very far out toward a receding periphery of meaning. In the animal world habits and devices which "artificially" lessen the struggle for life exist to an astonishing extent. The way of the bee, the ant, the beaver, the storing of food by squirrels, the nesting ways of certain birds, regarded objectively, are

like the devices of man. It may be alleged that man raises his cultural structure by "intelligence," while the animals follow "instinct." This is as good a place as any to remark that one of the chief results of recent psychological investigation is a growing uncertainty as to the difference between, or the line between instinctive behavior and intelligent behavior, the great certainty being that both are *behavior*. Even if man has relatively little *instinctive* endowment, his behavior is a *learned* or *adaptive response* to stimulus. The lower animal adapts himself less in some instances. But as to sharply separating the two, the difficulty grows. Certain degrees of intelligence, reflection, and choice of means appear constantly in animal behavior, and in man there are shortcomings, stumblings, dependence upon trial and error for learning, incapacity for straight thinking, and uprushes of old organic behaviors that leave a question whether man has an inherent superiority over the brutes, or whether he is not as Tennyson says, merely a "finer brute." Man seems markedly inferior in many ways, and seems to have lost certain qualifications for fullness of living which primitive men and animals had or still have.

Man as a primitive type.—Man's general location in the tree of life is in the main line of vertebrate development. Here we might stop to trace those vertebrates known as mammalia, and those mammalia known as primates, of which man is a member.[1] But whatever similarities or other interesting facts such a procedure might disclose, there is one in particular which we shall notice because it substantiates our present point, that man's origin is remotely prehuman. This special subject is the teeth. We are told that "the mandibular (jaw) arch became effective . . . by association with a quite different instrument. This was the teeth, which we do not find in the lowest vertebrates or chordates. As we find them firmly fitted into the jaw at higher stages, they seem to be so

1 Consult the list of readings for Chap. III, at the end of this book.

well placed for their purpose that it must seem strange to say that originally they had nothing to do with it." [2] After going on to recount the extraordinary dental developments of some animals, the same author says "Human beings exhibit none of these special developments of the teeth. . . . On the whole . . . man's teeth are remarkable as a survival of the original condition which was the starting point of all the various types of mammal teeth. Thus man is extraordinarily 'primitive' in regard to his teeth.[3] They could not possibly have developed, for instance, from those of a lion or an ox; but it is certain that at some remote period the ancestors of the lion and the ox must have had teeth similar to those which man has today. . . . It follows that there can be no question whatever of the evolution of man from any existing type of mammal, and that he must have parted company from them at the very root of the family—like the other Primates, which have teeth similar to his. On the evidence of the teeth, therefore, man's ancestors must be described as *very ancient types* in the geological sense." [4]

Monogenesis of the human race.—The question of the whereabouts on the earth of man's origin as man has been much discussed. We shall refer to it in other connections. But still another question of origins is that of monogenesis vs. polygenesis. This really strikes deep into socio-racial problems, by forcing us to consider whether we shall think of human beings as one species or not. Evidently our behavior would be differently conceived toward certain races if we did not think of them as having a common origin with us. The question is somewhat academic, however. Community of origin is a relative term. All life has kinship in some sense. And even if the races of man had more than

2 Klaatsch, "Evolution and Progress of Mankind," T. Fisher Unwin, p. 48.
3 This is quite apart from man's recent demoralization of himself and his teeth, due to foolishly chosen diet. In fact, it offers all the more reason for man to look out for the future of his teeth. It is one of his few ways out of possible fixation of type.
4 *Op. cit.*, p. 53.

one origin, they have undergone sufficient convergence so that they behave biologically as one species—i.e. they interbreed fertilely. And therefore it is biologically a heavy task to show that there was *not* a common origin.

The theory of monogenesis has the weight of authority with it. Though held, of course, by those who believe in an original pair, it does not necessitate such a belief. It may imply that the race arose as a group or species, slowly, in a definite locus, under fairly stable conditions.

Man is a tropical animal in origin. This tropical animal, man, has been enabled to invade all the world by specialization outside his own body. At the end of the Old Stone Age he was ready to become an historic social character; he was at the threshold of history, where he has always been a cosmopolite.

(*b*) *Man's Distinguishing Feature*

Some possible distinguishing traits.—In spite of all his evolutionary ties, it is perfectly evident that man is different from all other creatures. What is *the* distinguishing mark, if there is any, of man?

The following list[5] of traits gives the principal ways in which, at one time or another, man has been thought to be unique physically. In almost every case it is found that there is some valid objection. Hardly one of these traits sharply distinguishes man from all other animals, though it is only fair to say that the combination of some of them is peculiar to man.

1. Pronounced doming of the skull, owing to the growth of the cerebrum.

   Many of the smaller American monkeys have as large a volume of brain, relatively, as man. The young of anthropoid apes have large heads and fine domed skulls, differing

[5] Adapted from Klaatsch.

little from human., *i.e.,* these apes *were* once as a race but *are not* now on the main track of cerebral development. The young apes recapitulate the racial development, and recall the period when their species might have developed large brain-cases.

2. Forward-looking eyes.

   But these are common to all the Primates.

3. Prominent nose.

   The lower human races have transitional nose forms in the direction of the ape-nose. Some apes have larger noses than Europeans.

4. The mucous membrane that serves as a lining of the human mouth.

   The Anthropoids have it, and other mammals have a corresponding structure.

5. Prominence of mouth parts.

   This trait is too variable to be called distinctive.

6. Teeth. "Man's teeth have a remarkable harmony, a regular distribution in a continuous series . . ." But on careful inquiry the supposed uniqueness disappears. Other animals have their own peculiar dentition formulæ.

7. "External muscular shell of the ear."

   The same form is found among the monkeys.

8. Hair on the head.

   It appears in the same form in young anthropoid apes.

9. Beards, both chin and side-whiskers.

   Found among other animals, including monkeys.

10. General hairlessness.

    More apparent than real. There is a great variety in this respect. The lanugo, or hairy covering of the human at birth shows man to be related to other animals in this respect.

11. Development of certain cutaneous glands on the breast into milk glands, with the enlargement of the part round the gland by the development of cushions of fat, resulting in "the large breast as a sexual ornament, found nowhere else in the animal world."

    But biologically this is only a detail, variable among human races. The milk glands are, of course, common to all mammals.

12. Lack of tail.

    But Man frequently has a tail. The human embryo has a vertebral tail, which degenerates into the coccyx. In man this is longer than in the Asiatic ape.

13. Upright posture.

This is not complete in man, and is approximate or approached in other animals. The human infant does not stand up for a considerable period, and when he does his posture and gait resemble those of the apes, at first. Adult man is rarely quite erect; he easily becomes stooped. Nevertheless the erect posture is very important, and ranks with the development of the hand, foot, and brain.

14. Speech.

A development on man's part of organs possessed by other animals.

15. Laughter.

A question of behavior, not of structure.

16. Prolonged infancy.

Only *relatively* long.

17. Reflective thought.

Man has more of it, but that is all. The beginnings of reflective thought are seen in other animals.

18. Time-binding; *i.e.*, the ability to carry the memory of a situation over into another time, and use the memory without its being called up by an outward stimulus. Important as this is, it is hardly to be thought of as a physical difference.

19. The human foot, with heel.

"It is quite clear that it is not until the time when our ancestors began to develop processes which led to phenomena that are found in *man alone* that we shall find any specifically human character in the bones. . . . It is simply a logical consequence that from this point of view the human story proper begins with the special development of the foot."[6]

20. Finally, counter-balancing the human foot, we must mention tool-using, tool-making, the opposable thumb, *i.e.*, the human hand. This we shall say more about presently; like the foot, it cannot be rejected as a distinctive trait. Other animals, monkeys, apes, have it, though not to the extent that man has. But the fact that man has carried it farther than the apes makes it practically unique, for it can function intensively, and carry over beyond the point where culture begins. For example, the great composer, Bach, is said to have "discovered the human hand" because he introduced the use of the thumb in the playing of the organ and piano. That is, he

[6] Klaatsch, "Evolution and Progress of Mankind," p. 43.

introduced the complete hand to produce a great cultural leap ahead. We shall now speak more fully of the human hand.

The sign manual.—In the solemn parlance of law, the signature of one's name in his own handwriting is called the sign manual. Nothing could better express the dignity and importance to which a person may momentarily arise in certain social situations, for the hand is the age-old symbol of personal character, integrity, and genuineness. We give our hands to others in the clasp of friendship; at the marriage altar the twain are declared man and wife by "the joining of hands"; the sacred writer says "the signature of me, Paul, with my own hand," and in assembling the crew of a ship or the workers in a mill, "all hands" are summoned. Countless other idioms in different languages seem to say that in the visible life of man, his hand is the great and distinctive feature. A research leading no farther than the dictionary will show the student something of the wonderful part played by the hand in the social evolution of man.

It has become clear in our study of man's development so far that he is the great artificer of the world. And therefore it gives us solemn pause, when we contemplate the hand, to reflect that without it we should have almost nothing artificial. If we observe how the hand does its work, we perceive that it is chiefly by utilizing the power of opposing the thumb to the fingers. Take away the opposability of the thumb, and man could never have been sure of his grasp of a stone or a stick. He could have clutched, but not grasped, and the hand used only for clutching would have developed, probably, into a claw.

How did man obtain his hand? We might suppose it to be the consummation of a special line of evolutionary development, but this is hardly the case. Rather we must think of the primates, that branch of the mammalia to which man belongs, as being quadrumanous. That is, they had their

four extremities shaped rather similarly and in the form of hands, not so good as man's, and with rather less thumb-power for they used them chiefly for climbing instead of for tool-handling. If the primates had all developed into quadrupeds, it would be correct to speak of them back in the climbing stage as quadrupedal, but they actually became bipeds or else remained climbers. The apes have lost some of their thumb-power, while man has developed his. At the same time man has lost most of the "manual" dexterity of his other "hands" by developing feet out of them. It is for this reason that the development of the human foot has been placed so high among the list of "distinctive" human features. The hind hands became feet, the fore hands became better hands. Man is thus seen to be not a quadruped that has changed two of his feet into hands. He never was a quadruped at all. He is a quadrumanous animal that has become a biped by giving up two of his hands and specializing on the other two. Thus he has become a terrestrial animal that can run on the ground, with all the dexterity at handling things, and much more, that he had before, and both abilities have been pressed into the coöperative service of his brain: herein lie the roots of man's greatness.

As between the hand and the foot, the latter is the more modified. Some human feet have remarkable hand-like qualities; it has been demonstrated even by a few rare individuals that it is possible to run up a perpendicular rope with the toes grasping and sustaining the entire weight and the hands not in use. In man's embryonic development the hand and foot are alike for quite a while; the human being at that stage is quadrumanous. The baby's hand, at birth, is remarkably strong, and a new-born child can support himself by hanging onto a stick. The body then takes a climbing position. In this behavior the baby is biologically more primitive than the adult, and nearer to his climbing ancestors. At the same time his feet are more primitive, too. He can

grasp with his toes better than his parents can; but—a very remarkable biological and social fact—he cannot walk at all, but learns to do that after a long social life of many months. *The process of making him into a human being, even in the physical sense, is completed under social auspices.*

The hand is an old, versatile organ, which can serve in almost any way, even as a foot if necessary, and which has retained and increased its versatility, while the other animals have forfeited the wide range of activities it offers by becoming specialized in other ways. Natural selection toward some particular type required sacrifice of other possibilities. But man, as far as his hand is concerned, has made no such sacrifice. In the language of craftsmanship, he has "kept his hand in."

(c) *Man and the Apes*

Failure of the apes to become men.—When we speak of an awkward person as one whose fingers are all thumbs, we do a great injustice to the thumb, the development of which we have found to be the most important item in the hand. The apes and monkeys show what was involved in the failure to become human: in every case the thumb has missed the human development. Some of the fossil apes show better skulls and better hands than their descendants of today. When we see the apes and monkeys and watch their behavior, or when we read Kipling's convincing story of the monkey-people who were always about to do something wonderful, in human fashion, but never could carry it through,[7] we see certain good qualities imperfectly developed and some mean qualities that still strike us as human. But there is no question of a direct descent of man from ape or monkey. As to the apelike ancestor of man and ape, it may well be that he was a man-like ancestor, from whom the apes have diverged.

[7] *See* "Kaa's Hunting" in the "Jungle Book."

Again, in the matter of length of limbs, we find that the anthropoid apes, especially the gibbon, have developed very long arms, while man has developed a long leg. This is the familiar fact of divergence from the ancestral primate stock, resulting in different animals. The ape has a climber's arms, and the man has a terrestrial animal's legs and a tool user's arms.

Still again, the ape, especially the gorilla, has developed tremendous strength of jaw, but the bony projections for attaching the jaw muscles to the skull have apparently precluded further cranial development, while man has evolved in just the reverse fashion and has lost jaw and tooth development while developing in brain power. Man and the apes have each developed a long way since they parted "at the foot of the tree."

Related groups of apes and men.—We have mentioned before the possibility that the human race is not one in origin. The comparative anatomy of apes and man is one of the reasons for the existence of this question. Eastern types of apes and men, taken together, have some skeletal and cerebral similarities, while western types show similarities likewise. If this should be proved to mean that the common origin of eastern and western men lies far back where the origin of the apes is found, it would mean, socially speaking, merely that we should have to enlarge our conception of consanguinity. Even if some races of man are of parallel development, rather than of identical stock with others, this does not keep them from being "human," for the common origin is still there, though farther back than before.

Man leaves the trees: The hunting-pack hypothesis.—The question as to what happened to bring about the divergence of part of the parent ape-stock to develop human characteristics has naturally been of great interest, though necessarily rather speculative. One of the most interesting is the hunting-pack hypothesis. This proposes that the turning point from

ape to man was the change, at some time in the Tertiary, of the habits of life of some higher ape, from exclusively vegetarian diet to flesh-eating. This not only brought about changes in physique (e.g. in the teeth, developing the canines); but had great potential social consequences, for it brought about *the hunting-pack.*

The causes of this change may be thought of as natural "variation," or more specifically, as a change of climate assisting those who varied in that direction. It is plain that man became a hunter at an early time; why not at the very beginning? "Nothing less than some great change of life, concentrating all his powers and straining every faculty, can possibly account for the enormous differentiation of man."[8] This supposed change to the hunting-pack life seems to account for many things: man's lengthening of leg, and development of foot towards an almost exclusively locomotory function; his development of brain; his development of hand, particularly the thumb, in the use of weapon and missile; his coöperative traits.

Ape-man as a hunter.—"Man is everywhere both social and coöperative, and the purpose of his coöperation at the level of the Australian or the Semang is instructive. It is not (as we might infer from our own life) in industry, but in hunting, war, or tribal ceremonies that tribesmen work together—the last no doubt of comparatively recent origin: so that not many thousand years ago there was no coöperation except in hunting and in war (which come to the same thing)."

"Spencer indeed says that a large carnivore, capable of killing its own prey, profits by being solitary; and this may be true where game is scarce: in the Oligocene and Miocene periods game was not scarce. Moreover, when our ape first pursued game, especially big game (not being by ancient adaptation and instinct a carnivore), he may have been, and probably was, incapable of killing enough prey single-handed; and if so, he will have profited by becoming

[8] Carveth Read, "The Origin of Man," p. 52 and *passim.* Macmillan, 1925.

both social and coöperative as a hunter, like the wolves and dogs. The pack was a means of increasing the supply of food per unit; and gregariousness increased by natural selection up to the limit set by utility. Hence . . . Man is in character more like a dog or wolf than he is like any other animal." [9]

II. Biological Conditions of Social Development

(*a*) *Biological Formulæ in Social Evolution*

The struggle for existence.—Why are we, as students of society, interested in biology? The first and most apparent reason is the fact that man is first of all an animal, and like any other animal must move within the limitations set by physical laws. Whatever the facts may be which encourage or restrict the growth of life, they must be taken into account as influencing social life also, since social or super-organic life rests upon an organic basis.

Now, in the several decades of study and controversy among evolutionists and biologists investigating the biological facts of the world, there have come into common use certain expressions or representative formulæ, not all of which seem as valid as at first, but which sum up so much of thought that they are almost of classical standing. Moreover, each contains permanent truth, and we must weave them into some sort of coherence if we are to acquire proper perspective on the whole subject.

One of the great factors emphasized by evolutionary teaching is Natural Selection, by which is meant that those individuals best adapted to their environment are most likely to survive and perpetuate their species. This is not a purposeful or conscious something in itself (though there may or may not be Purpose behind it), but it results in a balance or definite relation between a species and its food-supply, and between the species and its enemies or other environmental

[9] *Op Cit.*, p. 31.

discouragements. This natural selection (or natural elimination) results further in the production of species adapted to their environment. Evolution, so far as natural selection is concerned, is thus a process of forced adaptation to environment.

Certain disturbances of equilibrium are forces setting natural selection in operation. One of these is over-population or over-production. There is not room for the theoretical number of offspring of any species, unchecked, after a few generations, and this abundance of increase is the opportunity for nature to "select." Another opportunity for selection is offered by the fact of variation. Variations innumerable are constantly occurring in the individual offspring in any species, and they occur without regard to the need of the species in conforming to its environment. (Sometimes the variations are so abrupt, important, and permanent as to go by the name of Mutations.) In general, of course, heredity operates for the persistence of characters in the germplasm, and hence against variation.

The Struggle for Existence, of which so much is said, is thus an elimination process. It may or may not make for progress. If intraspecific (within the species) it eventually causes the species to deteriorate or else gives way to interspecific struggle (warfare, e.g.) though it may persist in simple forms within the species or group, as in mating contests or the economic struggle. The inter-specific struggle, formerly intense for man, is now confined chiefly to war against bacteria and insects, though this is no small matter. Man has seemed to gain immunity progressively from this struggle, though whether he can maintain it is an open question for anyone who has closely observed the capacity for a return attack by Nature. In any case, the struggle with environment in general goes on, and the outcome is known as the Survival of the Fittest.

Yet another factor in biological evolution is Isolation.

Though evolution can and does proceed without it, new species cannot be produced without it, because pure breeding cannot take place. Isolation may result, practically, from geographical circumstances, such as migration, geological change, or the intervention of a predatory species; from psychological causes, such as aversion to interbreeding; or from physiological inability of two groups to produce offspring.

An inclusive formula.—If now we were to sum up these biological classic formulæ in a sentence, it might be as follows: *In the struggle for existence, preferably between, not within the species, and under some degree of isolation, those individuals whose variations take the form of adaptation to environment undergo natural selection and demonstrate the survival of the fittest.*

(*b*) *Biological Theories of Society*

Modifications of Darwinian evolution.—After Darwin, evolutionary thought first affected biology and then produced biological theories of society. The course of this current of thought is interesting, and we devote this section to it.

One of the first reactions of evolutionary dogma made the struggle for existence the key of social development. But this idea immediately encountered the conflicting ones of humaneness, altruism, justice, which are checks upon the operation of natural selection. Malthus had taught that the checks upon increase were necessary for the sustenance and well-being of the species, and altruistic or sentimental considerations among mankind seemed to block the game. Exponents of this biological view of social evolution were therefore pushed toward the position that our higher developments in ethics were a blunder. But a biological blunder may not be a social blunder, and since for social purposes the altruistic factor is a stubborn one, second thought dictated the subject-

ing of the whole theory to criticism. Whereupon the following considerations, among others, appeared. "Survival of the fittest" does not make clear for what the survivor is fitted. Fitness is determined by what is going on in the environment. Fitness to survive means to survive for the activities of the species. If the activities are such as to give the weak a real function, then they are "fit." And they do have a function, for we find life more happy for their preservation, not to mention the positive contribution made by many "weak" individuals. Since justice and humanity, no matter how, obtain among us and have a use, they have a survival value. Social organization even this soon in the discussion leads on to something not so much opposed to, but *beyond* or *above* the purely biological. *Something new emerges.*

> The conception of the survival of the fittest gives no guarantee of progress in any sense which is of interest to man, or of development in the sense in which it has been defined above. On the contrary it must be maintained that all social organization is by its nature opposed to the struggle for existence. . . . The development of organization is . . . the progressive suspension of the struggle for existence. . . . In sum, the theory that human progress depends on natural selection must be met by a direct negative. Human progress, regarded as an advance in organization, involves the continual restriction of the sphere of the struggle for existence upon which natural selection depends.[10]

Another biological theory of society is that of the Struggle of Groups. It is conceded by this school that the unadulterated struggle for existence in human life would mean anarchy, not evolution or progress. But between groups the struggle is supposed to be waged all the more fiercely. Within the group there may be a practicing of the softer social ways, but the resulting accrual of strength is simply an aid in the inevitable struggle with other groups. This fatalism concerning inter-group relations reminds one of the astronomic

10 Hobhouse, "Social Development," p. 106, Holt, 1924.

theory of the growth of the earth by accretions from what it encountered; just so are empires built up by drawing in and absorbing smaller social groups. Here again, one has to cancel all the recent emergent internationalism as something doomed to failure, if this doctrine is accepted, and to do that would seem to fly in the face of the facts of current social evolution. As a matter of fact, the larger communities (not empires or other conquest states) have been brought about by coöperative and social tendencies. And biologically speaking, it cannot be said that group conflict makes for social progress, because it does not select the fittest individuals and never has done so.

Still another biological theory of social evolution relies for progress not upon natural, but upon artificial selection. Practically, this refers to Eugenics and for the present we shall take space for only the following quotation:

> The best environment is that which does not select some special quality for survival, but which makes room for the greatest wealth of diversity. Subject to the maintenance of good order, the institutions which admit the greatest freedom, the largest scope for initiative, the most complete equality of opportunity, and in particular the widest field for sexual selection, are likely to be the most eugenic. But all these are the characteristics of a developed community. It follows that social development is generally favorable to racial development.[11]

All in all, however, there is only a very limited amount of help in biology for the student of human culture. For cultural changes are taking place rapidly, and are not explainable in terms of biological mutation (which practically never occurs in human life) or by variation, which is something not dependable as a principle. Though the student of society must never fail to take biology into account, he must likewise never fail to keep cultural factors dominant over it.

11 Hobhouse, "Social Development," p. 118, Holt, 1924.

Psychological outcome of biological theories.—The drift of our discussion has been toward the understanding that the biological side of social evolution leads to something beyond biology. This eventuating into higher considerations is the presaging of the psychological basis of social life, and here we shall briefly notice a few items that will prepare us to find a whole field of psychological facts in our next chapter.

Take, first, the fact that biological and social factors are interdependent. In the operation of heredity, for example, we do not find that heredity is an entity, an inflexible force that always goes forward in accordance with its nature. Rather heredity is the operation of a group of factors, and the way in which they combine is partly dependent upon environment. But this environment is in part a human or social environment, and this in turn is shaped in part by the psychic forces of mankind. Thus in last analysis biological forces are not only at the base, but are responsive to what is a superstructure, too. Such psychological matters as the existence of voluntarily celibate groups has an effect upon the biological stock; it limits the scope of operation of natural selection. Many other social exigencies have biological results from psychological causes—war, high standards of living, low standards of living, social ambitions, etc.

Again: as human life proceeds it develops certain balanced proportions of needful activities—work and rest, work and play, solitude and society, village and country life, etc. However near to an ideal balance these may attain, the balance is always being disturbed because of psychological forces. Something in the realm of ideas, an invention perhaps, or a fad, or a new organization, makes a different proportion of factors operative. Man as an animal takes the consequences. He may undergo alterations of sense efficiency, or develop a new disease, or perhaps on the contrary he may attain better health, while following out some psychic bent toward sport, social contact, or intellectual satisfaction. Here again we see

psychology at the basis of social evolution, even though biology may be entwined with it.

III. Racial Characters in Social Development

(a) *The Study of Races*

The meaning of "race."—The word "race" is one that we can hardly avoid in social history, but as it has undergone many changes in the history of thought, we must be clear as to what we mean by it.[12] The ancient Greeks used the term "ethnos" for "race," and by race they meant a well defined population with its own physical, mental, and cultural character. Such physical differences as were obvious they took note of, but they were more intrigued by peculiarities of language and customs than they were by the fine points of bodily measurement and differences which a modern student of races notices. In fact their idea of race or "ethnos" was somewhat like the popular conception of our word "nation."

Now when the science of races or science of peoples needed a name, in the early modern stage before its subject matter had been well defined, it was almost a foregone conclusion that it would be called "ethnology." But presently a dilemma arose, growing out of the development of the science of anthropology. On the one hand, anthropology, "the science of man," had biological affinities and was concerned with man as a species, his likeness to other animals, his physical traits, and his varieties. This is physical anthropology. On the other hand it had sociological connections; it dealt with man's behavior and achievements. This is cultural anthropology. Either division may be a study of the different groups into

12 This caution may well be applied to every other subject. Much futile argument goes on due to lack of definition of terms—such as bolshevist, anarchist, socialist, communist, radical, progressive, conservative, capitalist, freedom, "100 per cent American," foreigner, laborer, Christian, religion, pacifist, militarist, fundamentalist, evolutionist.

which mankind is divided. Which is entitled to the name "ethnology"? The victory seems to have been gained by the students of comparative group cultures. This means that the study of physical types of man, the study of races, is not ethnology.[13]

There are, so say the cultural ethnologists, no pure races to be found, from a physical point of view, for the prehistoric interweaving of unnumbered and unrecoverable migrations, with their consequent racial admixture, added to what has taken place in historic times, has forever blurred the definition of the different races that may originally or at some time have existed. Take, for example, the French. Nothing is more easy than to ascribe the chronic strife between French and Germans to "racial" differences. Everyone knows the "typical" Frenchman and the "typical" German, and so physically different are these two types that it would seem inevitable for the two "races" to be at strife. The trouble with this line of argument, however, say the newer "ethnologists," is that our two racial types are caricatures. That is, they are largely fictitious. There is no "French race" in this sense at all, some Frenchmen being tall, heavy, and blonde, others short, slight, and dark. This disposes of the idea of physical races as subjects of study—so runs the implied argument. And yet, as they go on to say, it would be quite easy to distinguish a Frenchman from a German, even if they were of the same physical type. What would be the means of distinguishing them? Perhaps a "psychological" difference. But this, in turn, would have come from a difference in what happened to these two men when their minds were being developed—differences in language, laws, customs, institutions. So after all, it seems to this school,

13 Some sociologists go even farther, and make the term "race" itself of no significance physically. E.g.: ". . . it may be that the biologists will sometime find racial correlations that will be more valid than their early hypotheses; but at present race may be accepted as pre-eminently merely a culture concept." (H. A. Miller, "Changing Concepts of Race." In *Pub. of the Amer. Soc. Society*, XXI, 112.)

the subject matter of ethnology is simply the culture of various groups,[14] and a race is a group possessing a culture.

But though there be no one French racial type, there are nevertheless many racial (physical) types among the French, and the effort to learn something about them is a part of physical anthropology in the proper sense. And even though the strands of race have criss-crossed many times, so that nothing is entirely clear-cut and separate any longer, yet no vagueness of language can change the patent fact that a Chinaman, a Negro, an American Indian, and an Englishman are physically different from one another in a deep sense of the word; they are of different racial stocks.

Most students of race concede the word ethnology to the students of comparative cultures. The items in which the former are interested are (1) the somatological or bodily traits which characterize man in general, and (2) the combinations of somatological units or traits which constitute races in this more scientific use of the word. There is something almost awe-inspiring in the thought of these shadowy race-types persisting in the biological life of humanity. They are like ghosts, but in the reverse of the usual sense, for instead of being disembodied spirits, they are bodily forms without souls. The soul or mind or spirit is, as we just said, a matter of ethnos, of "folk," of culture, of behavior. Yet, like the original writing on a palimpsest, persist the old racial units of mankind. We must not think of them as "peoples," or "nations" or "tribes," nor is it to the point to think of them in connection with language, mode of life, or manners. What we are concerned with rather is the fact that in these very cultural groups we see various physical types appearing side by side. A social group, a people, is thus seen to be made up, quite often, of several different somatological units. These units we call races, but it might be better to call them survival forms of races that once had social reality instead of being

14 See Lowie, "Culture and Ethnology."

merely physical types. As Deniker says, a race in the physical anthropologists' sense is a "sum-total of somatological characteristics once met with in a real union of individuals, now scattered in fragments of varying proportions among several 'ethnic groups' from which it can no longer be differentiated except by a process of delicate analysis."[15] Such a conception of a race carries us back to remote times far behind the puny swarmings of history and its migrations—a time that the German language might describe as "ur-alt," aboriginally old. At the dawn of history we catch glimpses of long continuing population drifts in which racial character can be discerned, yet even those races may have been composite for aught that we know.

The students of race base their hypotheses upon established averages of trait—combinations in large numbers of human beings measured as to height, color, texture of hair, prognathism, nasal index, and various details or peculiarities, such as the "Mongolian" eye-lid. But most important of all anthropometric data is the cranial index, or percentage of the width of the head to its length. Having established these methods, and having applied them to peoples all over the globe, the anthropologists return with so little assurance as to the physical races of mankind and so much uncertainty as to what effect can be traced to any particular race, that the outcome for social evolution appears almost negligible.[16] However, something of value can be extracted from the situation, as the following suggestions may indicate.

Principal racial divisions.—Classification of data is the earliest of the chief phases of development through which sciences normally pass. Physical anthropology has found it difficult to get beyond that stage. Probably the first method, because the most obvious, of classifying races was on the

15 Deniker, "The Races of Man," (Introduction).

16 An example of the historian and sociologist electing to take an agnostic position on this subject is H. E. Barnes: "It is the opinion of the best informed specialists that the racial element in modern European history must be pretty generally ignored." ("The New History and the Social Sciences," p. 371.)

basis of color. Traditionally, five great races have been posited: (1) White or Caucasian; (2) Black or Negro; (3) Yellow or Mongolian; (4) Red or American Indian; (5) Brown or Malayan. Of these five, the last two have always appeared to have less separateness than the others, being particularly open to the suspicion of being in reality divisions of the Mongolian. This led to the method followed in the chart on page 67 in which the Red and Brown races are put under the head of "Mongoloid," and only three main races shown. But when this is done the scheme is already showing its inadequacy, since the three "colors" are all misnomers, anyway. Some "Negroid peoples," such as the Hottentot-Bushman peoples, are really of a kind of yellow hue. Moreover, to put the very light-skinned Scandinavian races under the same main heading as the Hamitic peoples, some of whom may be of a "brownish-reddish" complexion, and to call them all "white," is certainly a bit doctrinaire. Again, some of the very primitive dwarf negro races of Africa or the Philippines are racially so different from the fine Bantu stock as to be considered by the latter not entirely human, and yet both are black. This method of classification, in short, is unsatisfactory.

Meanwhile it served to bring out a geographical basis of classification which reflected the change in opinion concerning the races of the Pacific and Australasia. The Malayan or Brown race did not altogether succeed in establishing its separate identity, but instead the island races have claimed attention with ethnic problems of their own that set them apart, in a measure, from the peoples of the rest of the world. Geographically speaking, therefore, the ethnologist finds it convenient sometimes to divide the races of the world into those of (1) Europe, (2) Asia, (3) Africa, (4) North and South America, (5) Oceania.

The internal, structural, or skeletal characters naturally come the nearest to providing a scale of measurement by

which mankind can be classified. And of these, the most notable is the peculiarly tenacious character known as the cranial or cephalic index, with its familiar classification into dolichocephalic, brachycephalic, and mesocephalic.

Another controversy centering around race classification is that of the opposed views concerning the origin of the race, whether from one group of ancestors (monogenetic) or whether man originated independently in two or more different areas of the earth. Whereas the social implications of the idea of Nordic superiority raise the question of caste on a vast enough scale, the implications of polygenesis are utterly divisive. There is some interesting evidence on the side of the defenders of polygenesis, but the preponderance of opinion has always been against them.

One of the questions that ethnologists have had to give much attention to—especially if they are monogenesists—is that of the prehistoric racial migrations, resulting in the present distribution. And this, if pursued far enough back, brings the student to the question of the *place* of origin of the race. With regard to this question the most favored theory just now seems to be that man originated in the interior of Asia. The so-called "tertiary continent," of which pithecanthropus erectus was perhaps an inhabitant, has also figured largely among the possibilities, and a great many other places as well.

As regards prehistoric migrations, there is no thought of unraveling them to any extent, but the most heavily marked tracks of population movements, as revealed by present ethnographic maps, may sometimes be surmised. The causes of the great drifting of peoples are not known in detail, but very evidently, in addition to the historic catalogue of forces, or circumstances, impelling races to migrate—famine, disease, "wanderlust," etc.—we must posit two very great causes when we consider the earlier history of mankind: (1) the

long continued increasing aridity of central Asia, and (2) long before that, the great Ice Ages.

One weakness of most of the older schemes of classification was that too much reliance was usually placed upon some one character. The anthropometrical method avoids this by setting up race types combining several traits. Thus, Prof. Dixon, one of the latest authorities to write on the subject, considers the following six points in making his classification: (1) cephalic index for length, (2) cephalic index for height, (3) width of face, (4) nasal index, (5) prognathism, (6) brain capacity. On this basis he finds eight human types, such, for example, as the "proto-Negroid," with long high head, medium broad face, broad nose, moderate prognathism, small brain capacity, or, again, the "Caspian," with long high head, narrow face, narrow nose, no prognathism, large brain capacity.[17] Now, what value is there in such facts for the social evolutionist? Little, at the present time, can be claimed. But we must not rashly contemn such carefully observed data. The future may disclose socio-biological facts of great value based upon racial differences and affinities. Moreover, it is hard to escape the feeling that there is some subtle race quality at work in some of the great historical developments—for instance, in the Soviet Regime, especially in Nicolai Lenin, its greatest brain. Another instance is that of Italy. Three times in history have the Italian people, figuratively speaking, climbed up on the ridge-pole and shouted for the world to hear—once in the period of the Roman Empire, once in the days of the Renaissance, and again today. The same type of man came to the fore every time, embodying that untranslatable quality "virtu." A glance successively at a picture of Cæsar as represented by coin profiles or statues, at the "portrait of a member of the Gonzaga family" attributed to Mantegna, and at any of the cartoons representing "Il Duce," arouses the same suspicion

17 See R. B. Dixon, "The Racial History of Man."

of a racial factor that has thus far escaped analysis. The farther back one goes, the more certain he is of race as a social factor. Certainly it was both a racial and a social fact of the first magnitude that the Neanderthal race was made quite extinct by the incursion into Western Europe of the men of the Cro-Magnon and Grimaldi type, some fifty thousand years ago. And again, whatever uncertainty there may be about the bearing of the anthropologists' hypothetical races on social behavior, there is none with regard to the social reactions roused by the color of different races—that is, color and all the supposed racial connotations going with it. The "yellow peril" may be a delusion and nothing else, but the belief in it is a social fact based on race difference.

The conventional classification.—The ordinary classification of races, though somewhat superficial, is encountered in literature and elsewhere. It is a part of common culture to know this classification, though it illustrates the very inconsistencies that have degraded ethnology to a study of linguistic or social groups. In short, this classification is in itself a social-historic document. But it has no value in a really racial way, for race classification has to do with morphology or physical form. Race is a zoölogical fact—while language, culture, etc., are social facts.

(*b*) *Racial History of Mankind*

Areas of original dispersion.—The racial history of mankind is a very vast and very obscure story. All that we shall attempt here is to indicate some of the great topics that stand out from the rest. First, as to the origin and dispersion of the species "homo sapiens," we have already mentioned more than one region. Africa and central Asia advance rival claims, with the balance inclining toward the latter.[18] Perhaps there was more than one conditioning ground for the

[18] See Henry Fairfield Osborn, in China Journal of Science and Arts, Jan. 1924; also the final chapters in "Man Rises to Parnassus."

CLASSIFICATION OF MANKIND
(After Webster, "World History")

Racial Groups	"Peoples:" a Cultural Word	Languages, Cultures, and some Physical Characteristics: Really a Cultural Classification (Ethnological or Ethnographic)
Black or Negroid	1. Negroes proper 2. Bantu Negroes 3. Dwarf Negroes or Pygmies 4. Hottentots and Bushmen 5. Dravidians (India) and Veddas (Ceylon) 6. Papuans (New Guinea and Melanesia) 7. Australians	White or Caucasian: *A.* Hamitic: 1. Libyans 2. Egyptians 3. Eastern Hamites *B.* Semitic: 1. Babylonians 2. Assyrians 3. Phoenicians 4. Hebrews 5. Aramaeans 6. Arabs 7. Abyssinians *C.* Indo–European (or Aryan) (*a*) Asiatic: Eastern: 1. Hindus Western: 1. Medes 2. Persians 3. Hittites 4. Armenians 5. Scythians (*b*) Graeco–Latin: 1. Albanians 2. Greeks 3. Italians 4. Spaniards 5. Portuguese 6. French 7. Walloons 8. Rumanians (*c*) Celtic: 1. Bretons 2. Welsh 3. Irish 4. Highland Scots (*d*) Teutonic: 1. Germans 2. Dutch 3. Flemings 4. Danes 5. Norwegians 6. Swedes 7. English 8. Lowland Scots (*e*) Lettic: 1. Letts 2. Lithuanians (*f*) Slavic *A.* South Slavs: 1. Serbians 2. Croatians 3. Montenegrins 4. Slovenians *B.* West Slavs: 1. Czecks 2. Slovaks 3. Poles *C.* East Slavs: 1. Great Russians 2. White Russians 3. Little Russians or Ruthenians
Yellow or Mongoloid	1. Mongolians proper: *A.* In Asia: 1. Chinese 2. Japanese 3. Koreans 4. Siamese 5. Burmans 6. Manchus 7. Mongols 8. Tartars 9. Tibetans 10. Siberian tribes 11. Turks *B.* In Europe 1. Bulgarians 2. Magyars or Hungarians 3. Esthonians 4. Finns 5. Lapps 2. Malays (in Formosa, Philippines, Malay Archipelago, Nicobar Islands, Madagascar, etc.) 3. Polynesians (Maori of New Zealand, Tongans, Samoans, Hawaiians, etc.) 4. American Indians	

primal races, and perhaps they all hark back to the now submerged Malay archipelago or to central Asia. In any case the probability is that the races from which most of the human stock of today has had its historic connections, came from Asia, for the most acceptable theory of primitive racial migration holds that the westward waves of population were the gorilloid, primitive negroid, and Neanderthal race (the latter subsequently spreading from Africa into Europe and later being exterminated). To the east and north, meanwhile, had gone the Australoids and the primitive Asiatic peoples represented today by the Ainus of Japan, and later the great branches of "Europeans," Mongoloids, and Polynesians.

Early races of man in Europe.—Our knowledge of prehistoric races in Europe is far more complete than for any other part of the world. It is gained chiefly from a study of the implements in correspondence with the skeletal remains of the ice ages. It thus fits into the subject of tools, fire, and weapons, discussed in another chapter. Consultation of a chart [19] showing (1) geologic time, (2) races, (3) cultural remains, is necessary in order to gain a clear idea of this subject. Certain almost hypothetic races occupy prominent positions in any such scheme. The Neanderthal race was simian in appearance, backward in culture, and did not get far beyond pre-glacial attainments. It is responsible for the "Mousterian" culture of the archæologist, The "Aurignac" race was progressive during the ice-ages, and particularly attained considerable artistic skill. It is associated with the Aurignacian, and Solutrean cultures. The Cro-Magnon race, one of the latest and highest of the Old Stone races, was substantially like the men of today. It was succeeded by various immigrant races from Asia who brought on the neolithic cultural period.

19 Wilder, "Man's Prehistoric Past" has an excellent chart. See list of readings for Chap. III.

The three great European races.— Speaking for Europe throughout late prehistoric and all of historic times her history has to do with three great races, for the most part. They are:

1. The Nordic or Teutonic race: tall, dolichocephalic, light-haired, blue-eyed.

2. The Mediterranean race: dark, dolichocephalic, oval faced, aquiline nosed, slender, of middle height.

3. The Alpine race: thick-set and round-headed; an intrusive mountainous people. These three and some minor races have woven an inextricable pattern of migration and ethnic interfusion. In fact, since the arrival of the first known brachycephals in Europe, in mesolithic times, we cannot speak of any pure races on that continent.

This same brachycephalic or "Alpine" race has been the occasion of contrast with the "Nordic," usually to the supposed advantage of the latter. The controversy has brought out one of the most unpleasing of human attributes—the trait of race pride and its converse, race prejudice. Nor have the protagonists of the Nordic superiority made as much headway as seemed likely at first. In Europe, for instance, it appears likely that agriculture and zoöculture were both introduced through the agency of the Alpine race, and this is no sign, certainly, of inferiority.

As an illustration of the elusiveness of "race" and yet of its social importance the following quotation is added. Probably most people have a certain fixed type-picture of the English "race," with its social and historic character. How does it conform to an ethnographic sketch like the following? [20]

In parts of Essex and the South Midlands and Chilterns, on the hills to the W. of the Severn in Worcestershire, Shropshire, and

[20] From "The New Stone, Bronze, and Early Iron Ages," by Marjorie and C. H. B. Quennell. N. Y., G. P. Putnam's Sons. By permission of the publishers.

Herefordshire, in Romney Marsh, the Weald, and the Isle of Ely, we should find a large proportion of dark-haired people with long heads, and the explanation of this is that as these parts were off the main line of Saxon immigration, the old British blood has lingered on. The Saxons penetrated into the country on the line of the Thames, and this element is strong in Berkshire, Oxfordshire, Hampshire, Sussex, and up the Thames valley to the Cotswolds; here you will find fair people with blue eyes. In Leicestershire and Lincolnshire are Danish types with long faces and heads rather high behind, high cheek-bones and well-formed noses; they appear to have driven the Anglians to the Derbyshire hills in olden days. In Yorkshire we should find a typically English people, shrewd, vigorous, and obstinate, successful in business, hard-headed and practical, yet with a great love of music. In the Shetlands, Orkneys, Hebrides, and parts of Caithness are splendid men of Norwegian descent. In the Highlands a Gaelic stock, quick-tempered and emotional; in the Lowlands and the eastern coast-lands, a frugal, hard-working people, descended from Angles, Danes, and immigrants from the E.

The substitution of cultural for racial factors in social evolution.—It is not merely a blood transfusion that takes place in the interplay of racial movements. Cultural mingling occurs as well. As social evolution becomes more and more impressive, purely racial factors recede somewhat and cultural factors advance. There is *something* about an American, the world agrees, regardless of his immigrant origin, and that something is of course a psychic and cultural acquisition. The "fragments of forgotten peoples" that have peered around the corners of the mountain passes throughout history have been relatively pure ethnic stocks, but doomed for that very reason. Races, as such, become less and less important, because more mingled, but culture types grow all the more varied as time goes on. Cranial measurement may suggest certain physical race types, but the contents of the mind may have no relation to the supposed racial background.

In order to result in real change in the ethnic character of an area, conquest and migration must be on a very large

scale. This means that a long period must elapse during which infiltration of new race elements must go on, for invading or migrating groups are not large enough to move in by conquest and at one stroke change the racial complexion of the conquered region. All the marching and countermarching of armies and of invading barbarians of which we read so much in history have counted for less in a physical or racial sense than we should suppose if we read only the imaginative accounts of old histories. But on the contrary, the marching and invasion of cultures and social patterns have counted tremendously. It is the latter that we are particularly following in this book.

Population problems in society.—Sociologists and other students of human affairs have found it necessary to give much weight to certain biological or racial facts as they effect social development. These facts are sometimes given the general name of "population" data or problems. Some of the chief of these are the following:

Numerical greatness.—As long as social life involves the factor of competition and struggle for power, the numerical greatness of a population is important. If a population is increasing and pushing against the limits of the food supply, we know that adjustment will be made either inwardly or outwardly. If outwardly, by war or by migration, the numerical greatness will be an advantage. If the adjustment is inward, then cannibalism, infanticide, killing of the aged, birth control, maintenance of high standards of living or some other important cultural evolution is certain to take place.

Population admixture.—An important population problem exists in the fact that new types of people sometimes come in and carry on the cultural machinery of an old and settled group. This may be done by violence, as when the Manchus took over northern China. Such population changes are apt to be superficial, because the conquered population may be strong enough to win culturally in time. But the silent force

of immigration produces deeper changes. The high school basketball team of a small New England city had these names: Adams, Bondonis, Davis, Gauthier, Krush, Norkunas, Stylianos, Sullivan, Tamelevitch. It is plain that the population factor and the cultural factor are at work on some readjustment there.

CHAPTER IV

MAN STARTS WITH AN ENDOWMENT

So little is known about the mind—whether social, racial, sexual, or heritable; whether material or spiritual; whether animal, vegetable, or mineral;—that history is inclined to avoid it altogether; but nothing forbids one to admit, for convenience, that it may assimilate food like the body, storing new force and growing, like a forest, with the storage.—EDUCATION OF HENRY ADAMS, p. 481.

I. BRIDGING THE DISTANCE FROM BIOLOGICAL TO PSYCHOLOGICAL

(*a*) *Man's Equipment for Behavior Responses*

Similarities to the lower animals.—In our previous discussion of the evolution of man, we saw him coming up through prehuman development. Let us now inspect this product of evolution as to his endowment, his capacity for playing a part in the world. To do this it will be necessary to think from a psychological viewpoint, for "human beliefs and institutions . . . as well as all products of art and modes of labor, of food-getting, of marriage, of warfare, etc.—in short, all elements of human culture—even though subject to natural conditions of various sorts, are essentially mental processes or the expression of psychical activities."[1]

Physically, man is not endowed so as to make it at once apparent that he would dominate as he has done. He has certain advantages, such as his erect posture, which has released his hands and increased his vision and enlarged his cranial capacity; his hands as tool users, concerning which

[1] Wundt, "Elements of Folk Psychology," Translator's Preface.

we have already spoken; his organs of speech; his large central brain and nervous system, with its intellectual capacity and powers; his long period of infancy and immaturity, viewed as a possible educative time. But he has disadvantages, too: As a physical worker or fighter he is not well equipped; as a runner, jumper, climber, etc., his physical characteristics are not impressive. He is not well protected. His food-getting is a strenuous task compared to the task of most animals. His slow breeding and maturing are a liability in many ways. In the face of all this man has become dominant as an animal because of his great adaptability in behavior responses to his environment. What sort of responses he is qualified to make to his environment we shall now notice.

First, of course, man responds reflexively, like other animals. Reflexes are built-in behavior mechanisms. They are practically fixed responses. When a sneeze has actually started, the cosmos ceases to exist for the individual, and his entire being is concentrated in the tiny but tremendous explosive runway or release of a behavior pattern inborn and not to be denied. An inborn neural pathway traveled by an impulse is a reflex.

When reflexive action is more complex—more like a chain or series of reflexes—and when the chain of reflexes is carried through seemingly as for a purpose, then this specific unlearned response to a specific stimulus is called an instinct. Marvelous instincts exist among insects and animals. How is man equipped in this respect? The answer to be given by psychologists is in dispute. One school holds to the existence of more than a dozen instincts in man.[2] The opposed school believes there are very few, and that man on the contrary has been set free from their domination by Nature in order that range, elasticity, and variety of response as determined by reflective thought may play a larger part in

2 MacDougall, *et al.*

his conduct—which of course it does, anyway, but with more hope for the future educability of man if this school is correct.[3]

An acquired mode of response to a stimulus is a habit. It may resemble an instinct so much as to deceive the very elect. Those who believe man has few instincts naturally hold strongly to the importance of habits. The value of habit response for man is obvious. It is a short-cut to accomplishment in a million situations. It may also be a terrible drag.

Dissimilarities from the animals.—In learning to react to his environment, man uses the trial and error method of other animals. But he has also a way little known to them—reflective thinking. This is a sort of invisible rehearsal, a *trial* trial-and-error, or a carrying out of a fictitious trial-and-error-or-success process in the interval between stimulus and overt response. It is the delaying of the response and the experimenting with the delayed impulse in the meshes of the cortical center until a suitable response has been determined. When done very rapidly it tends to become sub-cortical. Thus a circus clown, balancing a paper "cornucopia" on his chin, would not do nearly so well if he stopped to "think" about it.[4] He seems to have a thinking body as well as a brain. Chiefly, however, reflection occurs with deliberation. Through it most of man's higher life has come to its present form, though the roots thereof may be lower. The roots, in fact, are in the emotional life to a large extent, and that is partly in the realm of physiology.

3 Watson, Bernard, *et al.*

4 Of course he *is* thinking about it. But he is not making particular use of those parts of the brain usually given over to reflective thinking. But his perceptive centers are in fine correspondence with his body: he "senses" the situation. In ordinary affairs there is a type of person who, though not at all remarkable as a reflective thinker, is so seemingly clairvoyant or uncanny in drawing conclusions from situations, that we call him or her (usually the latter) "clever"—a word signifying, in its origin, quickness of apprehension. In former times such persons were sometimes said to have "second sight" or were suspected of being witches. Meanwhile we must remember that a seal can surpass a man at this sub-cortical quickness of thought, as anyone knows who has watched one balance a ball on his nose. Question: does the seal "think"? Is he more clever than the man?

The endocrine glands.—Before leaving the subject of the physiological side of man's behavior equipment, we must briefly refer to an important fact which has only recently become known with any accuracy. This is the influence of the so-called ductless or endocrine glands upon the emotional life, and therefore upon behavior. These glands pour secretions into the blood-stream, and respond to the action of the nervous system, in response to the need of the body. They also contribute certain substances thereby which bring about normal and balanced growth. They may, for reasons not well known to us, function too actively or too little, with resultant changes in physical growth, in mental development, in emotional life, in behavior. Moreover, they are susceptible to suggestion and to habit; and hence may function without exact correspondence to the outward need. The possibility of balanced emotional life, self control, and efficient habits in social relations depends very much upon normal growth and activity in the endocrine glands. Probably no more startling demonstration of the dependence of social life upon physical facts has ever come to light than this discovery of the functions of the glands in behavior.

To what end?—Now, until we get on to something more significant we have all this activity behaving just for behavior's sake. If life is best summed up, as we are told by some writers it can be, as the unintermittent process of outer and inner adjustment, it is only logical that the next question should be: what is the adjustment for?

Behaviorists do not go into that question, nor into some others. But we shall, for the reason that there are two great fields of reality, emergent from biological roots, much more elusive than the physiological psychology spoken of above, but distinctly psychological in character;—one is the truly psychological plus quantity, *consciousness,* and the other is the truly social plus quantity of *culture,* social contact with the past and present. This plus quantity is avoided and

doubted, but we shall see that it has reality, for the social thinker. It is the something that advances us out of one realm to another, and justifies our conception of social evolution as an emerging life.

(*b*) *The Plus Quantity in Man's Endowment*

Consciousness.—All this activity, sensibility, response to stimulus, adaptation to environment, etc., exists, biologically speaking, so that continuous life, reproduction, may take place. "From the biological point of view, it is often profitable to look on the body as merely the carrier of the germ-plasm." [5] But there is something grimly comical to one who has even glimpsed the endless vistas of culture, which rest upon psychological bases, in the spectacle of psychologists sometimes finding nothing but an extension of the food and reproduction quests in the subject matter of their own science. In solemn truth, until we get off from the biological plane, we have not reached anything significant. What the body can do and feel and know, aside from stoking its engine and producing its egg, is the value side of life. Irrelevant as this may be to mere biology, psychology must take notice of it. The whole behaviorist position sometimes gets down to this: that there are some things that they prefer not to discuss. But the student of society does discuss them. The vast world of patterns, personal and inanimate, reaches out to future combinations, and back into biological depths, and meanings appear. A meaning is a traversing of the distance from one fact to another, creating itself as a new thing, a synthesis, a synergy. The reality of the culture world lies in part in the mind of man, the experiencer and re-creator, and the passage from biology to psychology means the observing of the take-off of organic into mental-organic.

Psychologically, the plus-quantity in man's make-up is

5 Storck, "Man and Civilization," p. 1 ff.

centered in the fact of consciousness. This is a term from which many psychologists have vecred away. But it comes back through the window when put out at the door. It is not something that can be willfully ignored, for it has content, and is the root of important facts. The social investigator and historian cannot ignore the existence of consciousness as a simultaneous or parallel datum with the physiological.[6] The neural organization carries on a continual moving of the cells of the cortex of the brain, but people do not *experience* movements of brain-cells. They experience sensations, concepts, surges of feeling, resolutions of will. Such is the stuff of which our conscious social life is made. And we can neither ignore it, nor merge it in the organic phase of existence. Stimulus is received as neural excitation, and after some reorganization in the brain it goes forth again as muscular response. We cannot conceive of this physiological series as having become immaterial, giving rise to consciousness, and then being retransformed into physical response. "A caravan in the desert might just as well enter the oasis of a mirage, to return thence after a refreshing rest into the actual desert."[7]

Nevertheless, the conscious experience takes place. And since the net result of human life seems to be the production of personalities through social experience, the occurrences in consciousness are of interest to us. The physicist or the physiologist observing psychological data may be likened to a man watching a moving picture with his interest entirely confined to the mechanism and its smooth performance. The social scientist, on the other hand, adds an interest in the play itself. He it is who finds meaning in the play, and he finds it only in the conscious life interests of mankind. Tennyson writes:

[6] The discussion is, of course, older than behaviorism or any particular form of sensationalism. See, for example, Dr. Ewald Hering, in an address before the Imperial Academy of Sciences at Vienna (1870) on "Memory as a General Function of Organized Matter." (Chicago: Open Court Publishing Company, 1897.)

[7] *Op cit.*

'Act first, this Earth, a stage so gloom'd with woe
You all but sicken at the shifting scenes.
And yet be patient. Our Playwright may show
In some fifth Act what this wild Drama means.

But of course without man's conscious life there is not only no meaning, but no drama at all.

Values.—As a motivating fact in his social behavior, we must take notice of man's responsiveness to values. When an idea or a behavior pattern or an institution has impressed itself with sufficient force and incisiveness, or for a sufficient time, upon man's mind, he is apt to make an ideal or value out of it. He does this by investing it with such a degree of significance, relating it to his thought of other things so intimately, that the idea becomes necessary for the continuance of his scheme of the world and of life. The psychic accompaniment of this procedure is an emotional response to the idea. It is not our business to demonstrate the truth or falsity of values. It may be that some of man's values are perceptions of something real and metaphysically true, while others may be mere chimeras. The important thing for us is that man's tendency to exalt some of his ideas into the rank of values has social consequences.[8]

In the light of the foregoing paragraph, let us define a value as a focus of experiences and a resulting interpenetration of ideas, based on memory and social experience, brought to consciousness through emotional channels, and normally projected into some social application. Some of the values that have greatly affected the social ways of men are reverence for ancestors ("filial piety"), chastity, chivalry, fair play, courtesy, hospitality, honesty, loyalty, dignity, and

8 "The special significance of man rests in his valuational halo. When with all due modesty born of scientific insight, we have laid aside the infantile vanities of primitiveness, and have learned to see man's place in nature in its true perspective, there remains a residual anthropocentrism which will not be gainsaid or argued away. A warmth, an intimacy, an interest attaches to all that concerns man, and the universe has no say in the matter." E. Goldenweiser, in Ogburn and Goldenweiser, "The Social Sciences," p. 70.

many others, including particular combinations of the great values, and specific adaptations to local or temporary conditions. Ideals may change, but while they last, social evolution is affected by them. For example, the value that men have commonly attached to group solidarity is so great that the word "traitor" is one of the most opprobrious in any language. The outcome of patriotism has usually been the unquestioned offering of life for the community in war time. A certain small minority, however, refuse to sanction or participate in war in any way. Evidently their scale of values has undergone revision, and evidently if this minority grows larger it will vastly affect the future expenditure of social energy. Let us emphasize again, that in this study we are not directly concerned with the demonstrability of values, the truth or falsity of ideals, but with their unquestionable efficacy. As long as any considerable part of humanity keeps on translating some of its folk-ways into sacred values, so long must all humanity reckon with the values as social facts.

II. The Psychological Basis of Social Evolution

(*a*) *The Root-Interest*

Individual aspect of the root-interest.—It is one of the fundamental viewpoints of this book that the social relations which we are studying are mental reactions and interactions. The institutions of society, such as state, church, family, school, and many others, might by the same token be called the prevailing states of mind of society, and that means the prevailing states of mind of the individuals who compose society. When Jesus said, "The Sabbath was made for man, and not man for the Sabbath," he was stating a special case to illustrate the great social truth that all institutions, in last analysis, are of, by, and for the mind of the people, the outcome of innumerable mental and personal reactions.

These reactions of the mind of the individual in his social environment must, of course, be seeking the satisfactions needed by the individual in accordance with his physical and psychic nature. The drive for satisfaction of organic needs along specific lines is the expression of an *interest.* The interests when classified are reducible to various forms of great major interests, of which we may discern the food interest, the sex interest, and the self-enlarging or self-liberating interest[9] as the great ones. But behind and below all this classification is the inclusive root-interest, from which all interests are derived, and this parent-or-root-interest is simply the reaching out to establish relationships between self and universe. The finest expression ever given to this fact is possibly that by Walt Whitman:

A noiseless, patient spider
I mark'd where, on a little promontory, it stood isolated;
Mark'd how to explore the vacant, vast surrounding,
It launched forth filament, filament, filament, out of itself,
Ever unreeling them, ever tirelessly speeding them.
And you, oh, my soul, where you stand,
Surrounded, detached, in measureless oceans of space,
Ceaselessly musing, venturing, throwing, seeking the spheres to connect them,
Till the bridge you will need be formed, till the ductile anchor hold,
Till the gossamer thread you fling catch somewhere, oh my soul.

Whatever we may have noted about the organic basis of mind, in the physiological sense, we may also conceive of it as on the higher plane of the mental-organic, unfolding from within outward according to laws of its being, though conditioned, of course, by environment, and limited by the physiological background. This reaching out in growth to establish the self by relationships is the ultimate or root-interest of the social life of man. For although the tendency to ceaseless "musing, venturing, throwing" does manifest itself

[9] Including art, religion, play, intellectual life.

toward things and toward abstract thoughts, it is person seeking person that shows us the social mind. In other words, man's mind is, in its deepest nature, social.

Development of the root-interest along individual lines.—The social evolutionist stands midway in his interests between psychology and sociology; he is therefore forced to the notice of social psychology, which is the subject dealing with such questions as the parts played in social life by impulses, emotions, intelligence, or other personal forces. The short but suggestive statements that follow are observations designed to get us started on the story of social development with due regard to the mental life of the individual.

Every animal must follow out a kind of elementary scheme of behavior, which lets him fit into his habitat and function according to his specific endowments. Lower grades of animals do not "fit into" their environment with any great adjustive skill, however. They simply accord with it far enough to enable them to subsist at all, and the numerous exigencies arising find them unprepared to do anything minutely adaptive in order to save themselves. Hence the lower forms of animals must rely on their immense fecundity to offset their high mortality and permit the survival of the species.

Higher animals, particularly man, have lower fertility, and their behavior becomes of greater importance. Not only does their behavior enable them to survive dangers, but it accumulates in a surplus of action-patterns, and in man's case these become his culture. When a young man craves adventure and knows not why, he is simply carrying out his heritage and right, as a higher animal, to experience life through personal adjustment to personal emergencies, rather than vegetating. For, in general, man's life is directed by mind.

The root-interest—i.e. the establishment of self-maintenance by relationship and response to environment—may work it-

self out, and sometimes does, through the low forms of reflex and instinct. But the important cases for social evolution are those in which mind plays a large part. This is another way of stating the controversy between the instinctivists and the behaviorists, and it is the latter who give more play to acquired responses from which culture is built. It would seem that in man's responses to stimuli, the feelings that have resulted from previous successful thought-responses more and more overlie the hereditary feelings. Thus man is constantly building up experience-based conduct-patterns.

In following out its root-interest an animal may be so gripped by its instinctive response mechanism as to preclude the possibility of experimental response; again, it may try one way and then another, forming a habit-response-mechanism after it has found one and eliminated the other ways; and (in man's case) there may be delayed response in view of the whole situation—reflective conduct.

The ability of man to delay response while he "thinks," (i.e. balances the factors confronting him) has long been commonly known to have its dangers. For while one ponders, he may lose the impulse to respond at all, and nature either destroys or makes miserable him who does not respond to stimulus and find his environment "interesting." Man ought to, and for the most part does, halt or delay the sequence of feelings and actions in the cortical centers without destroying interest or lessening the tenseness and readiness for action of the lower centers. Nature has usually seen to it that the urge to immediate response, for self-preservation's sake, is sharp enough so that the individual, even "the thinker" of the famous Rodin statue, will not lose interest. But highly cultured man, in some instances, has so little direct contact with the fundamental aspects of the root-interest—such as anxiety about food, shelter, safety, off-spring—that he becomes blasé and bored with life.

Emotion and will.—Two other forms of mental develop-

ment characteristic of man in his development of the root-interest must be mentioned briefly. Without attempting a psychologically precise definition, we may call an emotion a feeling toward a given situation illuminated by thought and the understanding of relationships involved. An emotion is like a feeling that has worked up through consciousness into the reflective centers, leaving the impulse to action off to one side, and taking on specific character and intensity.

> It is not, of course, suggested that emotions are reflective in their origin. They arise in the passing situation as part of the instinctive response. But . . . there is in function a certain well-known opposition between emotion and action. In the heat of action we do not feel much emotion. . . . Conversely, if emotion gets the upper hand it defeats action. . . . While action is in process, the proper place for emotion is . . . in the background, ready to reinforce at the pause. . . . Feeling has an optimum point of intensity at which it gives the greatest reinforcement to action, and emotion, which is the heightened feeling directly representative in consciousness of the interest involved, has the function of imparting energy to initiative, and perseverance in check, while it falls into abeyance as long as execution is in progress.[10]

Man is strongly equipped emotionally, and much of his cultural activity is carried on because of emotional push. Sentiments are bundles of emotions centered around some object or person, and the sentiments connected with a relic, a memento, home, wife, child, parent, native land, college, landscapes, and many other emotional centers are too well known to need description.

Again, the centering of thought and feeling around large, inclusive aims—organization for action—though hard to understand, is well known and is called will. The emergence of will in social evolution is self-evidently important. For the individual it may be a sifting of the better from the less useful impulses; for society, a conscious direction of controlled forces toward an end.

10 Hobhouse, "Social Development." p. 139, Holt, 1924.

Social aspect of the root-interest.—The mind of the individual is the starting point in social life, but nevertheless it is modified by society. Social relations react selectively upon the mind; they reveal some impulses as being disadvantageous, and others as fit to be encouraged. For example, the social environment has doubtless given judgment that the particular expression of combativeness known as the duel should be forsworn by gentlemen.

The generality of mankind are under the necessity of establishing harmonious relations with others. In seeking satisfaction for their own interests, therefore, they will frequently deviate from the path that plain self-interest suggests, in order to obtain this social satisfaction. In other words, the root-interest itself must have a fulfillment that is partly social. If it cannot, it may find in daydream or other devious way what real life denies it and thus a problem in morbid psychology is precipitated.

The motive of social approbation may have the most contrary effects, depending upon the social character of the surroundings of the individual and the consequent meaning of the impulse. Thus a gang leader destroying property may be seeking the approbation of his fellows, while the respecter of property may similarly be seeking the good-will of the community. Many religious practices, especially of more primitive groups, while shocking to us, are really attempts to get the approval of the gods.

The general trend in the evolution of the root-interests into forms of social life is from selfish to social. What are the limits to this tendency? There are signs that the limit is periodically reached. The present day determination to organize life on a pleasure basis is the chief symptom just now.

The root-interest, considered as self-expression, is a cause of many social problems, because the drive of each individual to achieve or get for himself produces great inequalities of

social status. And the evolution of material culture has made this problem much greater for us than for early man, for a highly developed and abundant possession of things makes the competition for them more exhausting.

(*b*) *Human Traits*

Individualistic traits.—Summing up man and his traits, and taking first those that center in individual life, we outline the following as having an important bearing upon social evolution:

1. Prolonged period of infancy and immaturity.
2. A great capacity for learning.
3. A reduced equipment of instincts.
4. A well differentiated emotional life, capable of discipline; capacity for inhibition.
5. A remarkable eye-hand-brain coördination.
6. Much sub-conscious life, with all degrees of mental complexes in great numbers.
7. Reflective thought.
8. Volition and purpose thinking.

Social traits.—A similar summary of the traits that have to do more fully with social life, would include the following points:

1. Man's tendency to form communities.
2. The great variety of associational forms to which he can lend himself.
3. The refinement of practice and conduct, due to group pressure.
4. The organic character of society—a higher form than physical organic.
5. Institutions.
6. Susceptibility to social stimulus and guidance.

There is an interesting parallelism between the "individual" and the "social" traits of man. It is shown quite clearly if we consider the institutions of society along with

the instincts of man. Whatever we may think about the number of instincts possessed by man we can hardly avoid the recognition of three major ones: satisfaction of hunger, satisfaction of sex needs, and satisfaction of the herd or gregarious desires. In correspondence with these there are a few great "major institutions": the economic organization for food-getting and other forms of self-maintenance; the family, including marriage and home life, centering around the sexual needs; the state, which heads up and controls the associational life of mankind. To these three may be added religion, which issues from all three of the major impulses.

Why human beings are discontented.—In view of what we have just said about the native equipment of mankind, we can now see a little way, at least, into the question why the race is so restless and discontented, always being pushed on to new efforts at attaining happiness. A satisfied life would have to be one in which the emotional side was fully and freely functioning, in accordance with a normal state of activity of the nervous system and the ductless glands—that is, of the instinctive-emotional life. But man's reflective intelligence has apparently seriously upset the possibility of such a harmonious life. By means of his intelligence he has made a material culture which goes on changing ever more rapidly, forcing him to try to keep up with it by adjusting his institutions to it, and his personal life to his institutions. Thus far he has succeeded very indifferently. The very greatness of his material culture is the measure of his unsolved social problem. Man in simpler societies did not have such an acute problem as modern man. His material culture was not changing rapidly. To hit with a club was not very different from using one's fist, and the most complicated tool he possessed was not sufficient to cause a readjustment of his life. Nowadays a man may become emotionally very unhappy over trying to decide whether to acquire some complex tool or piece of material culture, such as an automobile or a radio,

knowing that he will have to readjust his scale of living for a while. Moreover, changes in the life ways may prevent some parts of a man's emotional life from being satisfied at all or in normal ways, as when men are deprived of normal family life by economic disturbances.

Cultural traits distinguished from psychological traits.—It is in primitive society that we find those factors in man's nature which are purely psychological or pre-cultural merging into cultural behavior. We must be on our guard against confusing the two, since our attitude toward human conduct may be different, if we realize that it is in accordance with human nature, from what it would be if we considered it acquired. It is the constant cry of people in certain quarters "You can't change human nature!" This may or may not be true—probably not—but even so it is certain that much that has been called natural is acquired culture, and vice versa. Perhaps the most notable instance of confusion of cultural with natural traits is the insistence that warfare is inevitable in human society.

Summary of the background of social evolution.—In the preceding four chapters we have traversed the background of social evolution. From a biological background we saw man *emerge* as a unique animal. From his distinctive organic equipment we saw next the *emergence* of a mental life so great and complicated, and subject to environmental influences in so many ways, that the balance and adjustment of his primary impulsive life is frequently disturbed, and he is led into new ways of response. Viewed psychologically, these ways may be complexes, or they may be less emotional, more activistic neuro-muscular arrangements. In either case, they *emerge* into behavior-patterns. It is these behavior-patterns, socially conditioned, that we are to study farther as *Emergent Society.*

CHAPTER V

MAN RECEIVES THE GIFT OF TONGUES

Thy speech shall whisper out of the dust.—ISAIAH.

I. GENERAL BACKGROUND OF SPEECH

(*a*) *What is Speech?*

Some observations on man as a talking animal.—Man is so used to hearing himself talk that he usually forgets what a marvelous gift it is, and in practice he degrades it into something far below its possibilities. "Mere talk" contrasted with poetry, oratory, or even a statistical description of a life insurance policy, reveals that it is by no means certain that all people can really talk, in the same sense of the word. The truth is, language is a tool, the use of which is learned by most of mankind only in halting and elementary fashion, but which occasionally is used with a skill that seems to lift speaker and auditor out of themselves onto a higher plane of existence. It varies from the merest reflex of expression,

> . . . an infant crying in the night,
> An infant crying for the light,
> And with no language but a cry,

to such consummate use as is suggested by the Gettysburg Address, or Webster's Reply to Hayne, or William Jennings Bryan's famous "Cross of Gold" speech.[1]

1 See Victor Hugo's novel, "Ninety-three," Book III, chap. I, "The Persuasive Power of Human Speech"; also Mark Antony's Oration over the Body of Caesar, in Shakespeare's "Julius Caesar."

The functions of language.—The common off-hand definition of language would be that it is a means of communication or interchange of ideas. As a matter of fact, the actual content of speech, measured in ideas, may be almost negligible. People do not chatter at social gatherings or as neighbors over the back-fence because they feel the need of exchanging ideas or facts—at least, not primarily or exclusively for that reason. There are two other needs: one is to relieve oneself by self-expression, the other to be stimulated. Consider the case of the preacher. He is supposedly preaching because his urge to utterance is so insistent that he feels "called" to the profession. On the other hand, there is the congregation, many of whom believe him to be delivering a very creditable discourse, and enjoy it very much. But, thirdly, what did the preacher really say? Few can remember, nor do they care very much. There were evidently three motives at play here, and the only one which fared badly was that of transference of ideas.

The following list is perhaps fairly inclusive of the functions of speech:[2] (1) Response to stimulus, with no object in view, (2) self-relief emotionally—a "taking up of the slack" and releasing the surplus, organically or emotionally, (3) aimless social intercourse, (4) stimulation through listening, (5) reproduction and sharing of experiences, (6) gaining and giving information, (7) clearing the situation for the speaker or for another, (8) persuasion to action, (9) expression and communication of emotion, (10) ritual and social symbolism, (11) labeling things, (12) abbreviation of thinking processes, (13) storage of the social heritage of ideas; tradition.

Classification of speech.—Speech is an acquired conduct-pattern for maintaining one's position in a social environment. It invariably implies communication, even if that is not the purpose in view at the particular moment. There

2 Adapted from Storck, "Man and Civilization," p. 183.

is no way of communication with another person except by entrance to him through one of his five senses. There is no *a priori* reason why speech could not be carried on through each or all of the three senses that require, generally speaking, closeness, if not contiguity. And in a way a certain amount of speech is thus carried on. The "language of flowers" is partly perfume, and it is well known that remembered smells can present vivid accompanying pictures of great meaning. As for touch, a blow, a hand-clasp, and a kiss each can communicate a great deal, yet they are not precise, and are better fitted for emotional than for intellectual exchanges. Of course it might be possible to have a system of touch-speech fully worked out, but only those both blind and deaf have to rely on such a method. Man, instead, has devised speech systems that appeal to eye or to ear. The point we are making is that no way of speech is inherently necessary to man; various ways have been learned after invention or growth. A classification follows:

A. Appeal to touch or smell. A very vague and emotional form of speech.

B. Appeal to the eye.

I. Gesture-language. Meaning is conveyed by a neuro-muscular pattern directed to the eye.

1. The original gesture-language root has persisted in the form of some very widely diffused gestures common to all mankind.
2. Some elaborate and deliberately invented gesture-languages have occurred, as among the Plains Indians.
3. A side development as far as speech is concerned, but a main item in the field of æsthetics, is the drama, a form of speech in last analysis.

II. Picture-language. A visual but not a moving pattern, directed to the eye. (The development of picture and written language is analyzed in Chap. XXI.)

C. Appeal to the ear. Meaning conveyed by a specialized neuro-muscular pattern, the vocal, directed to the ear. This ap-

paratus has been symbolized by one part of it, the tongue, and thus "language" or tongue-speech really means audible speech for most occasions the world over. It has come to have the ascendancy over other forms of speech, because of the availability and flexibility of the vocal apparatus, and because of the speed with which it can function—though it is slow compared to thought, nor can it express the nuances of higher minglings of thought and feeling. The most skillful talkers (not necessarily the most fluent) are most appreciative of the clumsiness of speech compared to what telepathy would afford, if it were possible.

(Since the bulk of this chapter keeps spoken language in mind throughout, no further analysis is here offered.)

The behaviorist theory of speech.—The behavioristic theory of speech is that it is a response to a stimulus along an easy but acquired neural pathway. Certain stimuli bring forth certain vocal responses. The process of learning these vocal responses has fixed certain conscious and sub-conscious neural connections in the brain, and this is what we call thought. Without words we could not think, and moreover our thought, which we imagine to be so independent and elevated above the physical world, is really a function of our speech. We do not think and then speak; we think by speaking, for thought is sub-vocal speech. That is, when we think, we are going farther even than to speak "under the breath"; we speak under the vocal organs, literally "sub-voce," and the same little nerve ganglia are aquiver making and unmaking their connections that do so when we speak the same thing we are thinking. Speech may therefore represent almost zero in thought, for it may be a mere parrot-like repetition. People who tell the same story whenever the occasion presents itself as a stimulus, or who "talk too much" because all situations act as stimuli to them, are doing their bit to verify the behaviorists' theory of speech, and if it be a true theory, we can readily see that speech is, even more than

we commonly conceive it, a social conduct pattern. As for the importance of it, that has always been recognized.[3]

Even if we do not go so far in this interpretation of speech as the behaviorists, we must concede much importance, from the point of view of social evolution, to this whole conception. Though speech perhaps does not create thought, it is the instrument of thought, and thought, practically, is limited, in its social functions, by its medium. Thought, potential or real, may die away and never be of social importance because it cannot get uttered. A society may be helped in some ways and hindered in others by the possibilities and peculiarities of its language medium. But some thinking probably goes on in the form of adjustments below the language level, where facts that are influential have never received recognition in any language.

(*b*) *Organic Preparation for Speech*

Structural development.—In a sense it is doubtful if man is a talking animal. He does not talk at all, as a rule, for about a year, and he may never learn to talk well. He has taken advantage of such imperfect organs as he has and managed to get along with them. On the other hand, how well he has done with his equipment! There is hardly a part of it which does not serve some other purpose than that of speech, which thus appears as a secondary function. The lips are the entrance to the alimentary canal; their first use is for sucking, and the expulsion of sound in particular shapes

3 The proverbs of mankind universally reveal two contrasted attitudes regarding speech. One is a recognition of the seriousness and power of words; the other is a half amused, half contemptuous point of view, as if in discernment of the continual self-deception which we practice upon ourselves in our speech. Thus from the Arabian we get, "The tongue of the wise is in his heart, the heart of the fool is in his mouth"; from the Irish, "A sweet tongue is seldom without a sting at its root," and "You've kissed the Blarney Stone"; from China, "Talk does not cook rice"; from the Hebrew, "A wholesome tongue is a tree of life; but perverseness therein is a breach in the spirit"; and in America, the land of "pep-talks for salesmen," we find a widespread suspicion that the other man's utterance is only a "line."

is a later business. The teeth, even as aids in eating, are a biological adaptation of older organs, and as parts of the talking apparatus they are a makeshift. The tongue, palate, and larynx are parts of the eating or breathing mechanism, and the lungs, which furnish the air for the whole performance of speaking, are of course primarily to furnish oxygen to the body, not to sing or talk with.

Yet in one of the organs mentioned above, we perhaps have a case of development toward the end of vocal utterance. This is the voice-box, or larynx, which man shares with some other creatures, but in which he excels them.

One more feature must be mentioned: the jaw must be developed in such a way as to give freedom to the tongue for speech. Fossil man in some instances hardly shows enough.[4] But by the middle of the Old Stone Age, or before, we know that it had been acquired, by some races at least.

Cortical development and associational centers.—When all is said, however, man cannot be considered to have a particularly well designed and specialized equipment for speech. As in the case of the foot, he has gone a long way on an adaptive basis, and an astounding proportion of his culture today centers around his speaking. But this is because man has a remarkable brain coöperating with his power of making various sounds. In no other connection is it so much to the point for the student of man's social development to ponder the cortical development of man as in this of speech, for, as we have seen, the development of associational centers of speech is also a development of thinking power.

What we are especially interested in, first, is the acquiring by man of a larger cortical area or cranial space, for it is there, within the roomy part of the skull that the nervous system centers or heads up, and the possibility of its serving as a clearing-house or intelligence center for neural excita-

[4] Cf. Osborn, "Men of the Old Stone Age," p. 60; McCurdy, "Human Origins," I, 325; Keith, "Antiquity of Man," p. 641.

tions is determined in part by its size, relatively to the rest of the organism.

There are various brain centers for different functions. In the "pre-central" convolution of the cortex are the centers of control for those parts of the body that were evolved from the gill-arches of very remote ancestral forms, and these bodily parts include the speech mechanisms of larynx and tongue. The ancient gill center of the brain has been converted into a speech center, and, linked up by means of association paths with other centers, such as hearing and sight, is controlled by the will. Since it is in the frontal region of the brain that the speech center largely is found, and since speech is essentially a series of infinitely varied actions, this part of the brain is the region of advancing intelligence. Probably new associational centers are formed in modern man that primitive life allowed to lie dormant, such as the reading center. As new combinations are made between different parts of the brain, the mind can better enter the service of social evolution by being always ready to function as an exchange agent in the interplay of ideas. And speech remains the principal means by which it carries out this function.

II. Social Origins of Speech

(*a*) *Emotional Expressions of the Self in Society*

Speech as an overflow of feeling-energy.—In a social sense, language may be thought of as a device for communicating thought and feeling by using symbols for ideas. Language is not wholly natural nor is it wholly artificial. It originates in the border land between the impulsive and the deliberative. Ideas, that is, mental images, tend to carry themselves over into action. But this action is not always muscular or bodily action in the usual sense of the word. It may be an expression of feeling, and in a social medium these expressions will come to have meaning. Reflective thought, possessed by man,

organizes these expressions into language. Speech, then, however intellectual it may be at times, has one side in which it appears as an overflow of feeling-energy. In this sense, of all the "parts of speech" known to the grammarian, the humble and uninflected interjection or exclamation may be as important as any and older than all the others.

The expression of gregariousness.—Some development of the rudiments of speech may be confidently traced to social coöperation. The gibbon, most social, is also the most vocal of anthropoids; but having no common task in which united action is necessary, he uses his remarkable power of voice (apparently) merely to express his feelings and to keep the troop together. The chimpanzee and the gorilla enjoy probably a close and affectionate family life, but one that makes little or no demand for concerted effort. Hence their vocalization is very rudimentary. According to R. L. Garner, it is true speech: "a chimpanzee (he says) knows the meaning of the sounds he makes, and intends to convey it to some definite individual at whom he looks. But he has at command very few sounds, and those mainly expressive of natural wants."[5]

If it be argued that it was not absence of coöperation that kept the anthropoids from acquiring speech, but rather "because their lower jaw and tongue have not the special adaptation to speech that is found in Man, it should be considered (a) that such structure, if useful to them, would have been acquired, as it sometime was by man, and (b) even without any change they might have jabbered well enough to convey a good many discriminated, objective meanings if they had needed to do so."[6]

(*b*) *Utilitarian Expressions of the Self in Society*

The accomplishment of purpose.—The practical use of the power of self-expression is seen in the daily life of primitive

[5] Carveth Read, "Origin of Man," p. 32.
[6] *Op. cit.*, p. 33.

man, and perhaps earliest of all in the incidents of the hunting life. This sort of life was one to call forth mimicry, and hunting man does imitate animal sounds very well. When he used these imitations to convey the idea of the thing imitated, and thus fastened permanent meanings to repeated sounds, he had tapped one of the sources of language—onomatopœia, the fitting of words to sounds in nature. Besides onomatopœia and gestures, the hunting life encouraged coöperation. In general, the development of speech rests partly upon useful expressions of the self, as well as upon emotional outlet.

Speech and reflective thought.—Language reaches its highest expression in the realm of the intellectual. The world of humanity faces two alternatives in the carrying on of its social relations and its endeavor to secure coöperation: force and reason. The method of reason implies discussion, talking things over. How did language become such a fine-edged tool as to permit the involved thoughts of diplomats, debaters, and speech-makers in general to ride on it to safe lodgment in the minds of their listeners? This we are now to attempt to trace.

The first element in talking is the self-expressive, and this alone could not develop into anything more than miscellaneous babbling—perhaps significant to the babbler, but not definitely meaningful to anyone else, except as the child's unorganized noises may indicate general conditions of comfort, hunger,,etc., to the parent. This primitive element of speech is uninflected and disconnected. It is strongly subjective, consciousness of one's own bodily states being prominent.

A second element is necessary, in order to put meaning into speech, and this is the attainment of correspondence with the outer world. It is prominent in childhood, when the magic and efficacy of a name is so great. It begins with the stage, about the third year of life, when everything is being learned by name, and curiosity goes little if any farther. The objectively valid universe swings into full view, and the child

asks, "What is this?" "What is that?" for a long time. He is establishing the innumerable necessary points of contact with his world; he is learning the vocabulary of life. Often enough his "why?" means merely "what?" and a name suffices. Thus, if he says, "What makes the sun go down?" he is satisfied with the answer, "The sun goes around to China," for the new substantive is an enlargement of his stock in trade. Grown people retain the same easy-going way, often, as when some unexplained ache or pain is attributed almost at random to "indigestion" or "a cold," without any clear idea of what is meant. The great point is to externalize or objectify the fact encountered. The supposed potency of a name may even lead to religious belief in the bare name of a deity, or taboo against the utterance of his name, or it may cause superstitious fear about the loss of identity with the loss of name. A little child can be seriously discomfited mentally if told by an authoritative person that he is somebody else, and called a few times in apparent seriousness by the new name. The egotistic pride of "hoboes" in their "monickers," the mania at a certain stage for autograph albums, the defacing of public places by names and initials, is all a part of the naming stage of language and thought; it is an attempt to make oneself imperishable through a name, to become a part of the Objective Totality. The spell of Names is supreme.[7]

The third element in the complete growth of speech[8] is the correspondence between persons; in this element we find imitation of others and response to their modes of expression. In a way, the person learns to listen as well as to talk. With the addition of this correspondence element directed to the minds of other people, we have the possibility of real speech, for we then have self-expression, correspondence with reality,

[7] See N. Miller, "Some Aspects of the Name in Culture-History." *American Journal of Sociology*, vol. XXXII, p. 585.

[8] It is understood, of course, that the three elements do not come one after the other, but more or less simultaneously.

and interplay of minds. The mind is thereby greatly enlarged in its operations, for it now has a very large set of categories under which it may organize experience, and at the same time it has a means of getting still more data.

(It is always possible that we may have lost some other ways of thinking by getting ourselves so used to thinking by means of words.)

We are now in a position to reconsider what is meant by reflective thought, keeping in mind that the development of speech is what has made it possible in its higher reaches. We quote in part from Lippert:[9]

In the lower animals every stimulation of the sensory nerves is immediately followed by a "reflex-response" by motor nerves, without intervention. Response is usually "adequate" on the basis of long-time race experience, or selection. "In the higher animals the proceeding is complicated by the interpolation of complicated intermediary organs," especially the brain. "But never does the higher stage entirely displace the lower. On the contrary each higher creation includes the entire story of the vital activity of all the lower stages." Man still has pure reflexes. Some are very simple and recognizable. "Others are more or less carried out under the mysterious influence of a conscious mental activity which has intervened between the sensory impression and the motor reaction. This vacillating war-council probably conquered its field outpost by outpost, and gradually reserved for its examination and decision activities which previously had been carried out unconsciously. . . . Reason in its earliest sense is the conscious subjection of an instinctive response, which is no longer thoroughly satisfactory, to confirmation or modification by the elements of experience, or which determines behavior in new situations in the same manner by the correlation of new elements of experience. . . . There seems to be no better hypothesis for the origin of rational thought than the development of a language, which makes sharp distinctions between ideas and restricts their associations.

9 "Culture History," Murdock's Translation.

III. Evolution of Language

(*a*) *Language Patterns*

Types of speech as behavior patterns.—Every language has a pattern, or rather, it is a behavior pattern. The drama, for instance, is always a pattern-action, having a plot or a narrative core. But drama is language, for whether it is done before an audience or for self-satisfaction, the idea of the audience or *alter ego* is always present; there is an attempt at conveyance of ideas, and hence it is a kind of language. But the drama is an art of motion, and its linguistic connections go back to that early form of language, gesture. Sign language as developed on the plains is an elaborate social pattern, and within its proper area was a kind of Esperanto. Signal speech among animals—a sort of prototype of sign language among humans—includes many kinds of bodily movements. In man's case, signal speech, as distinct from the sign or gesture language, has taken some forms involving the use of tools or auxiliaries to the hands and arms, as for example signaling by smoke, by drums, by whistling, etc.

Language patterns and history.—Languages in the proper sense of the word, that is, articulate word systems, as culture patterns, have been very influential in social relationships. It is a historic fact that the views of large groups of people as to their racial relationship have been influenced by their sharing a language pattern. At the same time the traditions and modes of thought of a language-family are shaped similarly, hence their social relations are closer.

The Aryan (Indo-European, Indo-Iranian, or Indo-Germanic) "stock" is a case in point. It was formerly believed to be a race-group, but is now held to be of doubtful racial make-up, but linguistically one growth. It is a wonderful thing that a language-complex could spread as this has done. It includes most of the European languages

and some of the languages of Indian peoples. This means that we are culturally related to the high caste Hindus and other peoples seemingly remote, for language is a culture pattern. The "Aryan race" is probably only a myth. Of course there was some original Aryan people: they may have lived in Lithuania or Transylvania or South Russia or the Iranian plateau. But the peoples who speak Aryan tongues have them as modified culture patterns by culture diffusion, not by racial inheritance. If we try to reconstruct the events during the spread of the Aryan language pattern, we see how much language has to do at times with social change, for the diffusion of this language probably coincided with widespread migrations of hitherto unrelated peoples.

Though there are hundreds of language families, a few of them—eight or ten—account for over nine-tenths of the world's population. Within a group it often seems that it is best for minority language patterns to give way, yet impoverishment of total culture may be the price of attempted uniformity. Americans of the older stock are notoriously monolingual, to the impoverishment of their social appreciations. Better than uniformity of language would be widespread knowledge of various languages, with one dominant tongue as the carrier of the group culture.

(*b*) *The Natural History of Languages*

Language growth.—The study of the evolution of languages (philology), tends to connect morphology with linguistics, at least at the beginning. This means that the natural form of some action pattern determined the word that stood for it, e.g., "ma" represents, perhaps, the opening of the mouth for the breast. But such surmises cannot take us very far. Sensations, imitations, and herd-noises account for part of primitive speech.

Inflections come later, yet they tend to disappear at a still

later time. Language learning seems to be connected with the childhood both of the individual and of the race.

Adaptation of languages.—Words are often richer in meaning by being cross-bred. By this we mean that words are made up of parts from different languages—though not in the majority of instances. We have, it is true, an occasional compound word, perhaps a place name, in which language roots are strangely but successfully entwined. "Minneapolis" is a combination of North American Indian and Greek. "Automobile" is part Greek and part Latin, as well as altogether French, and now a part of the English language. And this particular term well illustrates how words have social histories and function as nicely adjusted social tools. In the first place, it might be asked why the whole word was not drawn from the Greek, to which the answer is that in that case it would have been "automaton," a word which had already been made and set aside with a definite and different, though similar, meaning. In the second place, if we follow the social experience of this new-old word, we find that in America it gets abbreviated to "auto," so that what was once a Greek word meaning "self" has now become, after long pilgrimage, an American word meaning self-propelled-highway-vehicle-usually-driven-by-a-gasoline-engine. Our social heritage from the "dead" [10] language of the Greeks provided us with the short and useful term we needed. Somewhat previous to all this we had another word launched into the sea of common usage—"locomotive." This was of honest enough Latin parentage, and signified "moving from place to place," but the popular conception of its meaning was that of "automotive," self-moving. This erroneous meaning of "loco" appeared in the "locofoco" or "self-lighting" cigar of the '40's, and finally became the name of a wing of the Democratic party, the Locofocos, from a meeting at which

10 Greek and Latin are probably the two most fully living languages in the world today, viewed from the social evolutionists' standpoint.

these cigars figured prominently. In all of this we note that a word may flit from social form to social form, spirit-like, binding old and new together. But especially should this be observed: that primitive peoples, and in fact all social groups previous to the era of trade and of history, lacked this tremendous advantage of being able to levy toll on the speech-patterns of other peoples. This then is one of the great facts of social evolution: words come to port like argosies, offering richness of content because of past experience.

Decay of languages.—Some words are dying, while others are dead. Some are dead in part, while others are coming into existence by the death of their co-units of speech. The dictionary is fairly sown with obsolete or obsolescent words, reminding one of leaf-mold in a forest, from which new forms spring forth. There are words that are not used any longer because there are no social facts to correspond, such as "pursuivant." There are others that have lost an old meaning but gained a broader one, such as "herald." There are some that have died and been revived under new social forms, such as "marathon," "stadium," "forum."

Most interesting of all are the words that have become fixed in some historical and social meaning, full of rich social content, and at the same time have managed to send on a part of themselves to function anew in different meanings. Such words are "knickerbocker" and "knickers," for example.

IV. Language and Social Development

(*a*) *Language and Thought*

Words and meanings.—In ninety-nine out of a hundred cases the social intercourse of mankind has, for thousands of years, traveled by the medium of words, sometimes leaping, sometimes limping. The difference between the speed and clarity of communication in different cases is more than any-

thing else a matter of meanings possessed by words. "Meaning" signifies that a thing is in recognized relation to another thing. This correspondence in thought has two sides, a personal and an inter-personal or social. In the personal sense, a meaning is a recalling of one thing by the awareness of another. This means, psychologically, that two experiences are in mutual vibration—one experience being in the present, and serving as stimulus, the other being reawakened from the past. In physiological terms, one neural response-mechanism is in action with another. It is evident that meanings are not confined to words. A situation may have a meaning. An approaching thunder-shower means shutting the windows, to the housewife: i.e., the present stimulus, an experience in itself, has called up a former one. When an instinct operates, we may say that there is meaning to the stimulus because the experience of the race or species in the past has provided the response-mechanism. Thus a kitten arching its back at its first experience of seeing a dog does not know consciously what the meaning of the dog is, but the meaning is there, and has been impressed upon the nervous mechanism of the kitten before birth, due to experiences of ancestral cats. The second phase of meaningfulness is in the fact that in a social situation, that is, where two or more persons are involved, the stimulus and response must exist independently for each person and yet must correspond. That they *do* correspond we can never prove, but we have to go on living on the assumption that they do; otherwise we should have to abandon all social intercourse.

As nearly as we can get at it, the truth seems to be that different people do hold approximately the same meaning for most things, but never exactly the same. Not unless two persons had had exactly the same experiences could their meanings for anything be the same. The range of variation between one person's meaning or interpretation and another's for the same fact is the field within which misunderstanding,

lack of harmony, and failure to coördinate socially may occur. And the extent to which correspondence of meaning does occur measures the potential sociability of the persons involved.

Let us imagine two persons, A and B, fully intelligent and aware of the desirability of social relations, but without any experiential knowledge of society in any sense. How can they establish social sympathy and intelligent relations? In other words, how can they establish correspondence of meanings? There are three ways, not all of equal value. First, they may simply go on meeting situations as they arise, and, reacting to them similarly, find social satisfaction in each other's company. This would be a gregarious life, but aside from the sharing of feeling, would not bring much social progress, being similar to the shared "meaning" of daybreak to a flock of birds, or the "meaning" of some awe-inspiring phenomenon of nature to a primitive group of men.

Second, A and B, instead of merely sharing emotions, might convey ideas to each other, by acting out the meaning in each other's presence. This is actually done, and has always been done. But consider two things: first, there must be plenty of time at the disposal of both parties. Second, not only the meaning, but the thing that possesses the meaning, must be enacted, if there is to be correspondence of response in an intelligent way. And the practical difficulty is that there is not enough time to portray by imitative action a hundredth part of what human beings have to communicate to each other. When this method is used, we have the drama.

The third way by which A and B may establish correspondence of meaning and so open to each other a vista of social life, is by symbols of ideas. This might be by the use of any part of the body, each action standing for some thing or for its meaning. But as there is an almost unlimited number of meanings to convey in such a world as this, that bodily mechanism which is capable of the most variations will be

the best adapted for this work, and beyond question the throat and mouth secured the job by "survival of the fittest." If the rest of the body, even the hands and fingers, attempted the hundreds of thousands of shades of meaning conveyed by vocal speech, the motion and energy consumed would be appalling. In general practice, therefore, meaning is conveyed by sound symbols called words. A word *has* meaning because it *suggests* to another person a situation-response for which this other person has a functioning neuro-mechanism ready. Thus people really go about making use of each other's experience mechanisms and living not only by their own bodies and minds, but by the bodies and minds of others who *must* respond in some way to the meaningful word-stimuli released so profusely. This is what we ordinarily mean by social life. It explains why the over-talkative person becomes a pest—he is like someone who will not stop making music at all hours; what he says we cannot ignore, because we are bound to him by mutual consciousness of meaning. As Hamlet says, "You would play upon me." On the other hand, the shambling, beetle-browed fellows who were our ancestors somewhere in the tertiary period have this word-meaning invention to thank for getting them out of the rut. Social life can exist without articulate speech, but it cannot get out of the primary grade. Our fullness of life is related to our stock of meanings, and these in turn to our stock of words. Whenever we find a situation that has no meaning for us, and to which we cannot relate ourselves, our speech fails us in some measure, and we become again clods and yokels, shuffling and embarrassed. But with words we have the *Open Sesame* to other people's minds. Society, floating on a sea of words since the days of primitive man, has ridden on to every imaginable experience. And like a trumpet blast across the clamor of words is the solemn saying of the greatest religious teacher: "For every idle word that men say, they shall give account thereof in the day of judgment."

Multiplication of words.—The number of words used by people in various stages of mental and social development is closely connected with the culture which they shadow forth in speech. In general, peoples of restricted culture areas and patterns have fewer words; so likewise have peoples of less experience in any way, particularly in the intellectual life. It is nevertheless true that some comparatively simple peoples have a richer vocabulary for some subjects than has civilized man, and this for the very reason that their lives may be so taken up with the establishment and maintenance of nicely adjusted activities in some particular field of interest that more words are necessary. For example, in an urban society where the horse is known, if at all, only as an animal for performing work, the one word "horse" is generally used. By a real horse-lover, or to any one more familiar with the breeding and rearing of stock, the words "horse," "stallion," and "mare" would never be confused in meaning. But there are nomad peoples of Asia who have twenty or thirty nouns in constant use relating to horses where we have two or three, because their central culture is built around the horse. On the other hand, we have at least seventy-five figurative, colloquial, derivative, or compound words built on the original meaning of "horse" but not referring directly to horses.[11] The inference from the two cases is that cultural evolution in a restricted field increases the number of different words, while general and intellectual evolution of social life enriches a given word with derived and symbolic forms.

11 There is a story that Lincoln and another man agreed to swap horses "sight unseen." The game, of course, was for each to try to find a more worthless horse than the other one. Lincoln appeared at the appointed rendezvous carrying a wooden saw-horse. Consider (1) the social situation thus precipitated by the joke, and (2) the cultural background producing the term "saw-horse." Remember also that Lincoln once characterized the sophistry of Judge Douglas, his opponent in debate, as a "specious and fantastic arrangement of words, by which a man can prove a horse-chestnut to be a chestnut-horse"; and again, that he attributed his re-election to the presidency in 1864 to the reluctance of the country to "swap horses in the middle of the stream." All in all, the word "horse" appears to have been a considerable item of Lincoln's mental furnishing and social background for self-expression —a social action-pattern.

Collective words.—Man in his social activities finds so many things to discuss that he has to resort to shortcuts across the corners of well-traveled thought ways. When primitive man began to have a great many meanings available for use in the form of word-symbols, he resorted, not deliberately but of necessity, to the device of collective words. An illustration of a highly developed stage of collective words will show how closely connected are thought, word-meanings, and social advance. To a mathematician, the term "Desargues's Theorem" is a meaning-symbol. What complex games of hide-and-seek, what stretching of neural fibers and establishments of tensions and cross-tensions in the pathways of the brain goes on in accompaniment to the word, no man knoweth nor probably ever will. But in the social history of the mathematician, there has also been an establishment of meaning-stresses built up. Ask him what the term "means" and he will say that "if the junction lines of corresponding vertices of two triangles are copunctal, then the junction points of the corresponding sides are collinear, and conversely." This means little or nothing to the layman, because each of the terms used is itself a complexity, and has never been mentally experienced. But the mathematician holds them all in order in his mind, as a pianist holds a chord of many tones with his fingers. He has a relativity-feeling for each of the component terms entering into the larger term, *but he does not have to be conscious of them separately.* His collective word saves him that.

Primitive man also had collective words before very long. "Family," "ghosts," "forest," were such words. To him there were separate meanings packed away in orderly fashion within those terms which are as unknown to us, perhaps, as the component concepts entering into the comprehension of Desargues's Theorem.

Collective words, in any case, usually have a crowd of satellites about them, and thus the classification of words

takes place. Abstract words are the final stage in the social evolution of devising thought-tools.

Polarization of words.—Another thing that happens to words in a social and intellectual environment is the forming of opposite paired concepts into opposing but mutually complementary centers of energy and of thought. In imitation of the terminology descriptive of the forming of electrical poles in a magnetized field, we may call this process the polarizing of words. Such, for example, are "Oriental" and "Occidental," "capital" and "labor," "liberal" and "conservative." This is not at all the same thing as consciousness of opposites like hot and cold, wet and dry, etc. It is the verbal equivalent of great groupings of ideas, which have come about through large scale social experiences. In primitive man's experience the polarization of concepts was illustrated by such terms as day and night, male and female, edible and poisonous, victor and vanquished—all of them crammed full of social experiences.

(*b*) *Language and Culture*

Connotation of words.—The connotation of a word is the extra meaning, a sort of luminous area of suggestion surrounding it, in addition to the specific meaning assigned it. The social pattern, it is plain, may be entwined with the language quite as much in the area of the connotation of a word as in its literal meaning, for it is social usage that has given the word the connotation. The penumbra of meaning, the indefinable but well understood plus quantity, of such words as *home, school, church, club, football game, Christmas, camping, twilight, attic,* and hundreds of others, shows the necessity of knowing a people's life in order to know their language, and vice versa. Areas of meaning of words never correspond exactly in languages. There must be a literary background for a social appreciation of words, for words have

cultural, historical, and ethnographic limits. Ignorance of these surrounding limits of meaning means inability to participate in the social meanings from which they have sprung. It is here that highly composite languages have a social advantage: by drawing on other languages they can add to their connotative possibilities.

Words as completed symbols.—Man is a hopeless symbolizer. Some values he regards as permanent, and these he enshrines in symbolic words. Such words carry tremendous freightage of social meaning down the years. In Christian thought, such a word as "cross" is almost a cosmos of meaning in itself. Other examples of words that carry a heavy lading of social meaning are "heart," "spring," "autumn," "grave," "flag," "evening," "youth," "crown," "cradle," "sword," "harvest," and many more.

Æsthetic values in language.—There is always a satisfaction attendant upon speech, because self-expression is thereby attained. But beyond that, there is the pleasure that can come from the building up of a verbal structure that has power to call forth the appreciation of one's fellow men. This is art, the art of oratory, or of lyric song, or of narrative poetry, or of dramatic speech, besides many other lesser forms of verbal art. They are the highest verbal expressions of social life. The following anonymous poem suggests beautifully the unnamable *social* value in beautiful language.

At the Poetasters' Sign,
Some poor squires of the Nine
Met to sound the mighty poets
With a plummet and a line.

Hidden in a neighboring tree,
All their council I could see,
And their thin and piping voices
Clearly floated out to me.

First Poetaster

"Melody's the primal thing.
Falling waters—gales of spring—
Dorian flutes—were less melodious
Than the silver strains they sing."

Second Poetaster

"Pictures in those strains appear,
Bright as sands in rivers clear,—
Oceans, mountains, chariots, horsemen,—
Isles of Ariel, storms of Lear."

Third Poetaster

"Thought and passion, tamed by art,
Body to the whole impart,
More than melodies or pictures
Pleasing deep the listening heart."

All

"There's a fourth dimension, though,
Hiding in the forms we know,
Like the subtle airs of greatness
Of a king incognito.

Yes, in spite of all our care,
Something unexplained is there,
Like a lost love in the doorway
Or the answer to a prayer."

CHAPTER VI

MAN SEPARATES HIMSELF FROM THE BEASTS

"While I was musing, the fire burned."

I. The Origin of Tools

(*a*) *Significance of Tools*

The implications of tool-using.—Tool-using is self-fulfillment. It is also self-extension or enlargement. Again, it is a rendering of oneself more complex in function, and still again it is a delimitation or definition of function by specialization. Finally, it is an intense focusing of force at a point of application, to accomplish an end foreseen. Tool-using is, for man, a very large part of life, for even in his spiritual experiences he seeks expression through art by the use of tools and technique, and in his most abstract intellectual life he encounters problems which need solution or verification by tools and apparatus, as when Einstein's theory of relativity is handed over to the astronomer and the physicist.

A tool [1] is a device for the application of power to produce change of form or of motion. There is no exact logical line to be drawn between a tool and a natural apparatus for power application. The structure of animals of one sort or another gives a hint at almost all the simpler types of tools. In particular, all swimming equipment, and all crushing of food with jaws and teeth, are like tool-using. A blow with a fist is an application of the principle of the lever, but it is natural, and so hardly a use of a tool. Brass knuckles as used by thugs

[1] Tools, as the term is used in this chapter, include weapons.

are a modest "device," yet they surely constitute a tool, and so is a stone held in the hand of a primitive man, or a stone with a handle, used by a somewhat more advanced man.

The chief implication concerning tools in social evolution is that man's energy, not particularly great in the physical way, can be so concentrated and directed as to enlarge greatly the quantity of it that can be applied, and thus power commensurate with his thought processes is obtained. A man chiseling his way into a stone is not necessarily a very muscular man, but he can apply power in such a way as to make himself potentially greater than a giant. A tool is a focus of human thought and mechanical power. Man the thinker is called *Homo Sapiens;* man the tool-maker, *Homo Faber.* The two work side by side throughout social evolution.[2] We shall refer to them later, when we find them merging into one.

A philosophical view of tool-using.—In order to conceive of the great evolutionary distance between man the tool-user and the lower forms of life, let us make use of that rather over-worked but patient creature, the amœba. In this little jelly-like animal we find a nucleus and a surrounding tiny mass of protoplasm, but no differentiated organs. It has just two pieces of business to attend to—eating and reproduction. The latter will take care of itself by internal processes if the former is carried on. In order to get food, the amœba must, in last analysis, do just what all other animals must do; he must get into position, that is, he must move to where his food is, and he must get outside of it, that is, absorb a part of his environment into himself. He executes the first task by extending a part of himself toward his objective (aimlessly, it may be), and flowing into the extended part with the rest of his body.[3] Having arrived in contact with the bit of matter

2 See F. S. Marvin, "The Living Past," chap. 9.

3 The invention of the White Knight for getting over a gate is a philosopher's reductio ad absurdum of this method. See Lewis Carroll, "Through the Looking Glass."

that can serve as food, he either flows around it (a sort of grasping procedure) or over it (which amounts to beating it down by force) and then absorbs it. Man does essentially the same thing in the little warfare for self-preservation which he also carries on in his own corner of the universal environment, but he does it in rather more specialized fashion. For getting into contiguity with his prey he has "extensions" of himself, his legs, but they are permanent, and are not good for very much besides locomotion. For grasping and actually doing away with the food, he has two other extensions, his arms. At the ends of these are his hands, a still finer specialization, with which he is forever at things, handling, testing, arranging, sorting, appropriating, repelling, and, in effect, directly and indirectly, conveying things to his mouth—the first things his hands do when he is a baby, and a trick which in essential meaning he never unlearns. But this is not the end of the process. He still farther supplements his extended parts by making the very environment become a part of himself for use against the rest. With one stick he breaks another, with one stone he dislodges a second, and in a million ways he supplements the power of his arm and the craft of his hand by multiplying his tool-extensions of himself.

Classification of tools.—While we are surveying the significance of these tool-using phenomena, it may be well to glance at them as they look when classified.

I. Tools employing *force* chiefly (typically by arm action).

1. Strengthening by

(*a*) leverage,
(*b*) weight,
(*c*) hardness,

and working by impact, either

(*a*) slowly—by weight or push,
(*b*) swiftly—by momentum or stroke.

2. Lengthening by
   (*a*) extension: tools for reaching,
   (*b*) projection: missiles and projectiles.

II. Tools relying chiefly upon *skill* (typically by use of hand and fingers).

1. Intensity of force at a point or small area.
   (*a*) Cutting implements: knives, saws.
   (*b*) Boring implements: awls, needles, augers.
   (*c*) Grasping implements: pincers, tongs, hooks, vices, clamps, wedges.
   (*d*) Joining implements: thongs, glues, nails, screws.

III. Combination of force and skill: axes, swords, spears, plows, screws, nails, planes, scrapers, etc.

(*b*) *Tool Using*

First use of tools.—Every cultural group has arrived at some sort of balance of forces, in accordance with which it can be said to have its particular culture, but this balance of forces is subject to rearrangement at intervals, and a new "convention" or alliance of forces appears. This makes social change, and, perhaps, social progress. In the new alignment of factors, one may stand out as the cause of the change. In the case of man's first great step upward in culture, it was very likely the first use of tools, a phase of man's great adaptability, and the finding of new foods, with release of energy, that accounts for it.

Man's surplus energy, in primitive times, went back very largely into the food-quest. The lower animal is unable to rise above this plane of energy expenditure and accumulate culture. How did man? By tool-using and invention.

The first real tools were simply natural unshaped objects which supplemented crudely the muscular force of man. It is futile to speculate about the first tool, but among the very first was the pulverizing stone, and it was certainly used for

crushing and extracting foods. (If we regard fire as a tool —and it is hard to classify at best—it may be that we should give to it the precedence in time, but probably not, for we know positively of the use of tools of stone farther back than we have evidence of fire-using.) The grinding stone, old as it is, has become one of man's most familiar patterns of conduct. It has increased the food supply, lightened the labor of chewing, and rendered food more palatable and more easily cooked. Nothing is older among the impedimenta of man's pilgrimage than the stone,[4] unless it be his stick, and it is a very appropriate symbol of his progress: it is a reinforcement of his physique. A stone in the hand is a solider fist. . . . And it is also a supplement to the teeth, both for incision and for grinding. The molar or mill teeth and the mill stone go together from the first. As for the stick, or staff, to this day men like to carry canes for no particular purpose except self-completion, for that was what the staff long ago came to be for man. It has been held in high esteem, and because it was so close to the hand, it became one of the earliest instances of personal property. The club is a sort of union of stick and stone, similar to the "arm and hammer" symbol of industry that we often see pictured. Although tools can be used by the legs, toes, teeth, etc., to some extent, the arms and hands do most of the tool-using, and this fact is what brought about the final differentiation between hands and feet, and the development of upright posture.

The wooden age.—We hear a good deal about the Stone Ages in the history of man and his tools, but in spite of archæological reconstruction of periods, the earliest culture must have depended as much upon wood as upon stone. It was abundant for primitive man, is easy to manipulate, and can be obtained in usable form. Wood has remained with man as an inseparable part of his equipment until now its

[4] Cf. the folk tale of Simple Hans (Grimm's Tales) whose last step before acquiring his original empty-handedness again, was the acquisition of two stones, one to rub upon the other.

relative scarcity instigates man to use new substitutes. The perishable nature of wood and the permanence of stone implements have conspired to create a false impression as to the early absence of wooden tools. The argument that a previous development of stone implements was necessary in order to work the wood is met by the reflection that wood can be worked by fire, bone, shell, rubbing, splitting, breaking, and sometimes does not need working up at all.

Tool-making and invention.—Man not only uses, but makes tools; he not only makes them, but invents them. Thus he develops a material culture of which technology is a main part. No tool is ever more than an adaptation of an already existing device. This is true even of the first artificial tools, for they were improvements upon the hands and arms. Thus technology has an evolution as surely as biology.

The tool-invention of primitive people follows the lines indicated by pressure of needs not otherwise met. For instance, savage peoples in general have no pottery; their needs are met by natural devices, such as cocoanut shells, bamboo, etc. But the offerings of nature are not great enough to equip them for the food-quest with all its intensity; consequently they have exerted themselves to make the bow, or the boomerang, or some equally difficult affair. This they accomplish by constant thought, induced by hunger, plus observation of nature and long trial and error. The bow and arrow mechanism is a matter of simple tension, frequently observable by anyone going through brushwood and letting the branches snap back after him.

II. Simpler Types of Tools

(*a*) *Palæolithic Stages of Tool-Making*

The cruder stages.—The study of the tools of mankind of very remote times brings us into the field of archæology. Somewhat as history is a basis for social science, so archæology

is a basis for history. Or we might say that archæology is the inarticulate, history the articulate background of the study of social evolution.

The scrutiny of tools and weapons is the principal method by which any sort of serial arrangement of development from remote ages could be made. By "age" an archæologist usually means "stage," that is, not any certain chronological period, but a degree of culture attained. Specifically he refers to the prevailing material from which tools are made (not taking into account wood, bone or horn). On this basis the accepted division is Stone Age, Bronze Age, Iron Age. The Stone Age has several divisions, but the chief are the Old Stone (Palæolithic) and the New Stone (Neolithic). The Palæolithic is sometimes considered as introduced by the Eolithic (the "dawn" stone), and a Mesolithic (middle stone) is sometimes put between the Palæolithic and the Neolithic. But the more significant subdividing is by cultures named after some impressive deposit of remains at some particular spot. Thus the Solutrean period means the stage of culture (and perhaps the period in time) when any people had advanced as far in tool making as those, whoever they were, who made the tools discovered near Solutré. Sometimes the skeletal remains found enable us to name the race that lived then and there.

Hunting methods and eating were simple at first, and simple stone implements were all that man had or needed. Stones shaped by nature, suitable for some particular purpose, generally fracturing or scraping, and not shaped by man to any appreciable extent, were used. These earliest stone artifacts are called eoliths, and so great is the uncertainty in distinguishing between them and natural or unused stones that for a long time there was general reluctance to admit them as being used by prehistoric man at all.

When we get farther along—and this step in advance really represents scores of thousands of years, in all probability—

we come to the palæolithic implement which is probably better known to the average person than any other, the "coup de poing" or fist-hatchet. It is nearly man's first known stone implement, though a great advance over the eolith. Its sides are convex, and are chipped to shape them. It is mostly the degree of skill shown in chipping and shaping the sides that enables us to arrange such elaborate series as we find on exhibition. The typical form of this first great class of flints after the eoliths is called Chellean, from the village of Chelles, near Paris, where large deposits were found.

Similar to the Chellean implements are the Acheulean type, found in the Somme valley in northern France. It was in this region that some of the earliest prolonged discoveries of stone-age implements were made in the nineteenth century, establishing the great fact that man had inhabited Europe through the glacial period. Acheulean finds include, besides the usual coup-de-poing, knife-like flat implements with a smooth surface on one side, such as one gets by striking a segment off a block of flint, while the other side is chipped. This leads to the subject of the flaking and working of flint as the most wide-spread technical industry of very early human times that we know about. The flint pebbles so abundant in certain parts of the world, and particularly so in France, have a certain formation, and the knowledge of how to strike large chips from the core, how to work into shape by pressure rather than by striking, and how to polish the shaped tool, has been a great art in remote ages, continued by some savage peoples in historic times, and lost entirely over large areas, or regained in a few instances by scientific experiment. The whole subject affords an excellent illustration of how cultures, like species of animals, must be adapted to changing conditions, and may perish if they cannot conform.

The development of the stone arts has probably been somewhat as follows:

I. Fracturing: first method to develop, reaching its most important period among peoples of savage culture, and declining since then in relative importance. (Of course, the breaking of stone, for one purpose or another, is a permanent activity. But it does not pertain nowadays to tool-making.)
II. Grinding or bruising: similar in the course of its development to fracturing.
III. Incision } Later in appearance and of increased importance
IV. Abrasion } in later cultures.

The refinement of handiwork.—The upper (i.e., later) palæolithic is a succession of types of stone toolmaking, getting finer and finer up to a certain period and then declining in excellence as we approach the neolithic, when other mental patterns seem to have crowded out the further development of stone, making way for the coming of the metals later. We cannot go into detail in this work concerning the various stone cultures, but can merely indicate the principal stages.

Mousterian.—Named from the grotto of Le Moustier, in southern France, where immense finds of stone implements have been made. The typical instruments of this period are small, long, and almost triangular.

Aurignacian.—Characterized by long, flat, small instruments, very carefully worked at the edge on one side, and often run to a point, very sharp, at one end.

Solutrean.—At this stage we find spear-points, of the laurel-leaf shape—a pattern very persistent in prehistoric art—elaborately worked on both sides.

Magdalenian.—Characterized by small fine knives of very careful and delicate workmanship. (With these implements are associated the earliest known drawings, the figures of mammoths and other animals on bone.)

Palæolithic culture.—The successive types of stone tools that we have mentioned are indicative of improvement in the arts of life. In the relics of bone, ivory, and horn we also see advance, in spite of occasional deteriorations. There was

certainly a growing appreciation and practice of art as the Old Stone Age matured, and from this point of view we might judge that the æsthetic and the tool-using sides of social life are closely related, for there was neither agriculture, pottery, nor domestic animals, and yet art was flourishing in its own way in the caverns and on the tool-handles of these old races of men.

III. Fire-Making

(*a*) *Discovery of Fire-Making*

Early use of fire.—When we spoke of man as the tool-using animal we had to admit that other animals, notably the apes, occasionally use tools. But when we consider fire, we confront man's greatest monopoly. The whole attitude of man, in legend and in history, with regard to fire, is that of conscious bravado and precocity, with a touch of lingering surprise that the race should have secured this gift. The Prometheus myth—paralleled in some measure by myths here and there throughout the world[5]—indicates that fire has been looked upon as a special, divine thing, stolen from or given by the gods. Surely nothing could surpass in human interest the thought of the long succession of gleaming fires at camp, hearth, or forge, that man has kindled along his march from the darkness of the remote past into the waiting darkness of the future.

But although fire is such a characteristic part of man's possessions, it is not, like tools, a *sine qua non* of culture. Even in food-preparation in which fire is constantly used by us, it does not invariably appear even now. Raw food has been very widely used and some groups are almost confined to it in usage. The diet of man could be varied quite extensively without fire. Yet fire is a great releaser of energies,

[5] Among totemic peoples it takes the form of ancestral animals bringing the gift to man.

for it made more nourishment possible from a given amount of food. This is one of the most primitive, if not the primal, fire-use in human life, and it is interesting to see how, at the same moment that man's energies are directed to other activities by the aid of his fire, he is also restrained by it and has to take up the endless burden of caring for it. Tending the fire is one of life's permanent facts.

Certain fanciful stories of modern manufacture connect the discovery of fire with the struggle against the bitter cold of the Ice Ages. But warmth was probably not the great objective for man in getting acquainted with fire. It was a beneficent thing in other respects. It kept away animals, and, since it gave light, it brought cheer, practical help, and release from fear of "the dark" and its evil spirits. It formed for every group a sort of center of social life.

The earliest traces of fire in France, where Old Stone Age finds have been so numerous, is of Acheulean date, or possibly Moustierian. The fireplace, in which charred bison bones have been found, was at the entrance to the cave, and this is the case throughout the period of the Neanderthal race. In the Aurignacian we find flint stones used, the fireplace being round. In the Solutrean the fireplace is quite evidently a place of cooking.

Fire culture.—It would be logical to keep separate the three phases of (1) discovery of fire and its properties, (2) knowledge of maintaining fire, (3) knowledge of making a fire. But in the actual course of events they were not successive steps. To discover fire, accidentally, and to observe its effects, was to use it then and there, in many instances. Nevertheless we may start by asking how fire came to the attention of man, and as soon as we begin to collect the possible answers we see that there are so many ways by which this cultural fact of fire could have entered his life that it is not so surprising after all that mankind everywhere knows about it. We must remember that any instance of fire produc-

tion, however isolated and accidental, would make a very great impression on primitive people and would be remembered and imitated if possible. We should also bear in mind that there is no one way that will explain the knowledge of fire.

There are natural events that, though occurring rarely, may have introduced fire-knowledge. Volcanoes, by flame and lava, and lightning in forests, are the two most likely to have occurred often enough to teach man anything about fire. Friction of dry branches in forests rubbing against each other has been said to be sufficient to produce fire. Whether this is true or not, friction produced by man in his tool-using activities would undoubtedly produce it, sometime or other. This happened both in the case of stone and of wood. Bamboo, for example, is a very widely known and used wood in the eastern hemisphere, capable of a thousand uses, and when sawed or drilled may result in fire being kindled. In the use of stones as weapons, and the attempt to break stones to get convenient shapes and sizes, some sparks now and then might fly, and if they went into dry grass or leaves, fire might result. (Fire from polishing stones could hardly have occurred till the late palæolithic, and we know that fire was known to the Mousterian culture, or before—far back of the age of high stone-polishing.) Flint and iron pyrites were used together as a strike-a-light in the New Stone Age, and this method may have been in use indefinitely far back.

The preservation of fire is easily learned. Due to the difficulties of kindling, it was a very important part of the culture of fire.

Meanwhile, various devices were invented, chiefly of the friction type, in different parts of the world, including the plowing method of rubbing one stick in a groove of another, twirling a stick in a hole or socket, the fire-bow, and the fire-saw.

(*b*) *Uses of Fire*

Simpler uses of fire.—Leaving out of consideration for the present the subjective or intellectual and spiritual ways in which fire has ministered to man, and thinking only of its physical uses, we see four principal ways in which it has served. These are the furnishing of heat, light, power, and chemical change. All four have their simpler forms, known to man from the beginning, and their more intricate modes of action that have emerged with science. It is the simpler uses that have influenced social life longest, and hence most profoundly as a part of our social heritage.

The simpler use of fire as a heat-producer is merely to get near to it and feel it, or let it warm and dry some object on which work is being done. As to light, long before the invention of the humblest form of candle or lamp, the first step toward the cultural altering of night into a prolonged day was done by the fire-light itself, or the detached part of the fire known as a torch. Perhaps the first difference between a beast's den and a man's house came with the seeking of illumination for the interior, for the den is a place in which to recede from life, whereas the house is a center of activity. With regard to power, a fire could do for man what much muscular labor could not. The scooping out of a log to make a boat, or the hardening of wood by charring it, is a means of getting work done, a utilization of power. And in the use of fire for cooking, we have chemical change brought about by heat.

Later uses of fire.—In every one of the four ways of using fire, the more advanced stages of social life have been helped. Chemical changes are now brought about in the laboratory in a great variety of ways, but running through all the technique of the chemist is the frequent resort to the blow-pipe or the Bunsen burner, while a part of his work is by an extension of the hearth and furnace idea. The arts of pottery and

metallurgy, old as they are, represent developed forms of the use of fire to make chemical change. Through inventions for the conveyance of power and its transformation, heat, light, and mechanical power derived from fire are applied in prodigal amount, far from the fire itself often enough.

IV. Consequences of Fire-Making

(*a*) *Material Consequences*

The history of the hearth.—Probably nothing could gather up into itself so much of social meaning, connected with man's use of fire, as the hearth, which is the place of the fire and the open space just before it where social life concentrates. The hearth has been the visible central institution of the home, and the home has been the nucleus for other institutions in social evolution. It may almost be said that human society has emerged from the hearth-fire.

The hearth has had a fascinating history, during which it has relinquished one function after another to some new form of itself that appears away from the central fire. First of all, the providing of light was taken over by the torch, lamp, and candle, which have gone through an evolution of their own. Secondly, the business of food preparation has left the old hearth, little by little, and established its own important branch in the kitchen. Along with that movement went other industries which either removed to the kitchen or left the home altogether, which meant that the home was less and less supplying power for the industries of life. And then the function of providing warmth was taken over by stoves and furnaces, so that the hearth-fire in the older sense was almost abandoned. The walling up of old fireplaces, or the obstruction of them with Franklin stoves, was a nineteenth century climax to the movement. But the pure social appeal of the hearth as a center of group life is asserting itself again,

and the hearth as a culture center is continuing. This is because the consequences of fire in human life are far more extensive than the mere material advantages it has brought.

Consequences beyond the hearth.—There are other consequences of the use of fire, material in their nature, and not so necessarily connected with the hearth. Some of these consequences are conjectural, as for example the degree of connection between man's relative hairlessness and the life by the fire. Others have more to do with psychic and symbolic things. As a light-giver, fire enabled man to invade the province of the night. As a heat-giver it helped him to stay active in all seasons without retreat or hibernation. As a source of power, it has helped him attack his environment[6] and rise above it. As a chemical condition it has revealed ways of altering the atomic structure of a part of his world. It has given him a background of social cheer against which he has silhouetted himself in many a drama, song, and dance. It has been a means of cleanliness and disposal of waste matter, even to the disposal of the bodies of his dead, thus being one of his first hygienic aids.

In the various myths that man has made about his own origin, we gather vaguely time and again that culture is felt as having begun with the acquaintance with fire. The creation myth of the Bulu people of the Kameroon[7] sets forth that the god gave three gifts to all his creatures—fire, tools, and seed. The lower animals threw them all away, and remained in their original state. The pigmy peoples (neighbors of the Bulu) kept hardly anything but their fire. Thus they are higher than the apes, though hardly on a plane with the Bulu (the name itself means "people") who are truly human in their own estimate, having kept all three gifts. The

6 One of man's major social problems is still that of controlling the fire that he has learned to kindle. The social waste, danger, and loss of life are so great that it is clear that fire must be regarded still as a part of the environment itself against which he wages battle with frequent reverses.

7 For this myth the author is indebted to Mr. Frank Guthrie, formerly of the German Kameroon, West Africa.

sophisticated interpretation of this myth would be to the effect that when man parted company with the apes it was by virtue of fire that he became a cultured animal.

Again, in the semi-religious myths of the fall of man, we find scattered about the world two types of ideas as to what constituted the fall: either (1) getting possession of some forbidden thing, or (2) becoming reflective-minded and too knowing for the gods to suffer without rebuff.[8] The gaining of fire is compatible with both ideas, for it was a daring beyond what any other animal had dared, and it requires, more than any other thing primitive man touched, a use of foresight instead of impulse.

So it came about that early peoples behaved as though fire were the great indispensable. They slept by it, and carried it with them even when they knew how to rekindle it. As it was clearly related to the sun, it received symbolic reverence, even being regarded as a life-giver. Being associated with the welfare of the group, keeping it alive became a social duty, and from this develops ritual, on the one hand, as in the case of the Vestal Virgins in Rome, and on the other hand there comes one of the lines of development of the state. The sharing of the common fire with a group was with primitive man equivalent to the hospitality of the hearthstone and table in later times, and admittance to the family by marriage came to be symbolized by elaborate hearth ceremonies.

(*b*) *Consequences in Social Organization*

The conquest of cold.—The discovery of the use of fire was a great step in the mastery of external conditions and forces of nature, for it enabled man to pass with greater freedom from one part of the world to another, or to stay longer in a colder region. That is, it made man even more of a conqueror of space than he was by biological inheritance. By

8 Both these ideas are contained in the account in the book of Genesis.

means of fires planted here and there as social centers, man had bases of operation for forays into a cold environment. As he overcame the handicap of temperature, he advanced to more northerly latitudes, where a large proportion of the land surface of the world is found, with its resources and opportunities for those who can remain there. Again, man circumvents the cold by being able to carry over from a warmer time food preserved till winter, and although scientific canning and preserving is rather recent, yet the general idea of keeping food by cooking, smoking, etc., is very old. Decomposition is checked either by extreme heat or extreme cold, and man can utilize both.

Stabilization of mankind.—Fire has enabled man to stay around a more or less permanent center, and thus has aided him to accumulate wealth and paraphernalia of living in definite localities. Thus the central fire becomes a nucleus eventually for the sedentary society of city and nation. It helps to establish social continuity.

(c) *Subjective Consequences of Fire*

The expansive effect of warmth on the mind.—Discomfort or danger produces the kind of thinking that eventuates in action. But social life requires for its highest enjoyment a goodly degree of comfort, and the give and take of social leisure results in a great deal of rather mellow thinking. Moreover, the sustained and concentrated flights of the mind into abstract or mathematical or mechanical subjects must have a basis of comfort. Yet a too assured basis of comfort is deadening to mental effort, too. Escape from the cold to a warm social environment for a temporary period is stimulating to social thought. The possession of fire gives man this opportunity, as any one may observe around a campfire, a stove in a village grocery store, an open fireplace on a winter's evening, or a club-house or hotel lobby during a blizzard.

The emphasis on the shelter motive.—The establishment of a place for a fire means that the dwelling place will be there. At once the property of the group gets distributed about that immediate locus. As man thinks of a place, a definite place, as somewhere to return to, he makes it worth while—in this case it is probably the woman who is most interested—and the fireplace becomes a center of shelter, the beginning of the better shelter that will at length be worthy of the name of house.

V. Complex Tools

(*a*) *The Neolithic, Bronze, and Iron Ages*

Tools of late prehistoric and early historic times.—Returning to the development of tools, and taking up the New Stone or Neolithic Age, we are in a stage of progress that extends back to, say, 10,000 B.C. In the latter part of this age, at least, man was in possession of agriculture, domestic animals, and pottery. We should therefore expect rather pronounced improvement in the technique of tools, and there is enough advance so that we can speak of the neolithic as the polished stone.

After the cave-dwelling period of the Old Stone, and at about the beginning of the New Stone, man seems to have taken to lake and littoral dwellings. Many of the New Stone finds are of the culture called Azilian, and the people of that day frequently lived on pile-villages, on rafts anchored in lakes, or in caves opening out onto sea beaches. Migrations were taking place on a new scale in the world, judging from European evidence; the Old Stone races seem to have died out or reached their cultural limits, and to be yielding to new stocks from the East. The "Mediterranean" race of long heads had arrived, and the "round-barrow" men came a little later.

The characteristic remains of this age are the kitchen-middens, or heaps of shells and other refuse, and these were being laid down through the successive ages (all telescoped into eight or ten thousand years) of neolithic, bronze, and iron ages. The middens tell us a story of progress, which we infer to have been partly at least from the stimulation or amalgamation of newly arrived races. A midden, as a rubbish heap, tells of the food and the life ways connected with food, of late prehistoric man along the water's edge, to which he may have been forced by the encroaching forests that followed the last retreat of the ice. We can tell that he was still a hunter and fisher, but he was more. The following is an attempt at a sketch of the life of neolithic man in Britain, as reconstructed from remains: "The 'Men of the Rolling Downs' made their appearance as herdsmen, finding pasturage on the Downs and flint in the chalk-measures for their tools. They probably moved along the line of the old road later called the Pilgrims' Way, on the escarpment of the North Downs. They had sheep, goats, pigs, cattle (*bos longifrons*), like the small black Welsh cattle. These necessitated enclosures; we find along the trackways on the Downs a regular system of earthworks where cattle and men could be secure against attack. Pasturage was better above the densely wooded parts. Below the 500-foot contour was clay and undrained country, with dense forests and wild animals —Irish elk, aurochs, bear, beaver, red deer, wild cats, bears, wolves. The herdsman's life of the downs developed trackways that followed watersheds, to avoid crossing streams. The stockade and earthwork settlements of the trackways developed into the hill forts found in ruins today. These are of sufficient pretentiousness to indicate a greater degree of control and a more ordered system of government."[9]

Not all the implements of these men were polished. At first

[9] Quennell, "The New Stone, Bronze, and Early Iron Ages."

chipped tools were still made, as in the Old Stone Age.[10] The neolithic period shows advance over the old stone hand-axe in the celt or axe with a haft. Trees could be cut down with these stone axes, as has been proved by modern experiment. Adzes and hoes were also made. In the bronze age a perfect succession and development of celts can be traced. Among the smaller tools in neolithic times are found a variety of scrapers, chisels, and the like. Also the little stone implements superstitiously called "elf-darts" by the people of historic times, were made in great numbers. Some well curved and handled flint knives were probably the first sickles —first of the long succession of reaping tools for the endless succession of man's harvests—and along with those go the first hand-mills (querns or mortars) made of stone.

Tools in recent periods.—During historic times so many tools have been invented that it would be impossible to know them all. In sum, it may be said that man makes a tool for every different thing he has to work on and every kind of motion he has to make in his work.

Despite the fact that innumerable forms of tools have been made throughout the recorded history of man, it is only within the last few generations that the great mass of them has been made. This sudden efflorescence of invention and manufacture is a part of the Industrial Revolution, which is mentioned a little later in this chapter.

(*b*) *Some Historic Aspects of Tool-using*

Caste and tool-using.—The members of any large social body tend to fall into groups, brought about by various considerations—sex, age, race, language, wealth, mutual interests, etc. One of the most constant tendencies in social history is the tendency of these groups to go so far that they become

[10] The whole subject of flint-working is worthy of inquiry by the student. See Quennell, "The New Stone, Bronze, and Early Iron Ages," pp. 34 ff.

isolated from each other, and if, as is almost inevitable, there is a difference in the desirability of the life led by the several groups, an evaluation takes place, which means that grades or ranks are recognized. Finally, if passage from one grade or class to another is stopped, we have caste, one of the most divisive things that can befall a society. A caste system—that is, an exaggerated importance attached to class distinctions—may grow up on the basis of race or of wealth or of some other classification. The question of what a man does for a living permits of endless class distinctions, for one occupation is inevitably more desirable than another. The different trades and crafts have long been accustomed to organize and fraternize each by itself, but not necessarily with any impassable gulfs between them. There is always present, however, a possibility, sometimes actualized, of forming castes. If the owners of the tools do not do the work, but employ others, there is this danger. The great complication in the using of tools in recent times has emphasized this.

Tools and leisure.—Tools, by doing work, have given leisure to man. First, and most obvious, they have set any man and all men together free from a certain amount of drudgery. This has enabled mankind to put the time thus saved into pleasure or into other kinds of work, and both ways have been tried. The leisure class that comes into existence, in part, because of tools, is of no constructive social significance unless it has numerous members who choose to go on working in some manner. These, not being pushed to extreme effort to sustain life, occasionally produce the new idea or perform the social service needed for the continuous adjustment of society. There can be little question that the surplus time possessed by a large part of society, and used partly for social amelioration, rests upon man's tools.

VI. Machines

(*a*) *Early Machines*

The convergence of homo faber and homo sapiens.—*Homo faber,* the maker of things, and *homo sapiens,* the thinker, have always, of course, been one and the same person. But they have not always seemed to be. A good deal of thinking is done in the way of action, and the use of tools is that kind of thinking. Man is capable of thinking things out in advance, and applying his thought later. When he goes very far along this route in his dealings with natural forces, and attempts to think them into coöperation with his toolways, he effects a close union of *homo faber* and *homo sapiens,* and the result is a machine. The difference between a tool and a machine is this: a tool is a device for the application of energy at a point, while a machine is a transforming or balancing or redistribution of energies of mutually resistant bodies in order to affect the distribution or amount of energy finally applied to the point of work. A machine is thus seen to be a tool, but more. And a man and a tool constitute, logically speaking, a machine, though we do not usually speak of them as such. A machine is a cleverer tool, and the cleverness may result in (1) greater power, (2) uniformity of action, (3) accuracy, (4) speed. The line between a tool and a machine is hard to draw, but it is most nearly reached by saying that if a tool is of such a kind that it approaches the application point by indirection, gathering allied power by combination along the way, it is a machine. A crow-bar is a tool, but with a rock under it for a fulcrum it becomes (with the rock) a machine. A spear is a tool (weapon) but a shorter spear (arrow) propelled by a bow is (with the bow) a machine. A pair of scissors is really a machine, though it would be pedantic to call it so commonly. The significance of machines is that they tap and canalize the greater stores of

energy of the natural world, and man the thinker, rather than man the doer, is responsible for them.

Machines before the Industrial Revolution.—Though machines are methods of power appropriation, those used before the Industrial Revolution were so modest that it seems as though the machine age had not begun till the eighteenth century. To understand this fully we must keep two related things separate in our minds: one is the machine as a device for applying whatever power is already available in a more intelligent way; the other is the machine as an appropriation of power not otherwise available at all. Thus, a bow and arrow merely applies, by the principle of the spring, the power of the arm and shoulder; the windmill, by offering surface with little weight, applies the power of the wind; the water-wheel is a means for getting in front of the push of the water; the cart is a transference of the pulling power of the oxen from the drag of the ground to the revolving axle and wheel; the potter's wheel uses the speed of a revolving mass to produce symmetry in the shaping of the vessel; the lathe (a very ancient machine) does the same trick. But none of these brings into play new or greater sources of power.

It is true that some of the machines that are recent and very wonderful seem to belong to this class. The bicycle, the typewriter, etc., employ muscular power on a small scale, as did the machines of our ancestors. The social significance of some of these things coming so late is that not until man had tapped the great modern sources of power did he have the leisure or the surplus wealth, to assure a market for such things; nor did he have the tools to make such machines with.[11]

11 Our ancestors of four or five generations ago were obviously quite as capable of inventing the bicycle as we are, as far as intellectual capacity is concerned. Yet gentlemen went about, in a limited way, on the absurd "hobby-horse" bicycle, which, like the "scooters" and "kiddy-cars" of today, were propelled by pushing on the ground with the feet. Social patterns had to wait on economic surplus, till the time when exuberance of freed energy *demanded* a bicycle with pedals.

(*b*) *The Machine Age*

The Industrial Revolution analyzed.—The really great step in machine using came, as we have said, when new power reservoirs were tapped. This was the Industrial Revolution. On this topic a great deal of time might be spent, but lack of space forbids us to go into it adequately. The Industrial Revolution was probably the greatest change that social history has ever experienced, at least in anything like so brief a time. We attempt here only a brief analysis of it:

I. The Industrial Revolution may be summarized as

1. A mechanical revolution, substituting
   (*a*) Machines for fingers and hands, with regard to skill,
   (*b*) Steam (later, electricity, gasoline, etc.) for muscle, with regard to power.
2. A social revolution, substituting
   (*a*) Factory for home, with regard to industrial organization.

II. The Industrial Revolution may be viewed as

1. An historical event, chiefly manifested in England, approximately 1730 to 1830.
2. A continuing process, developing new aspects as science makes greater gains.
3. A stage in economic evolution, appearing in different parts of the world (in the Orient now) as they become successively ready for it.

III. The consequences of the Industrial Revolution:

1. The appearance of the factory chimney on the landscape.
2. Development of hitherto unexploited areas.
3. Increase in proportion of urban population.
4. Increase in rate of population growth.
5. Supplanting of the domestic by the factory industrial system.
6. Labor aggregates and becomes self-conscious.
7. Subdivision and specialization of labor.
8. Release of labor from necessities to luxuries.

9. Increased quantity of production.
10. In some instances, better quality of work.
11. Commercial expansion and organization; seeking of markets.
12. Revolution in transportation.
13. Communication facilitated.
14. Agricultural methods changed.
15. Safety devices and social insurance.
16. The era of the Middle Class.
17. Impersonality of life; the individual submerged in machines, organization, and cities.
18. Extremes of wealth and poverty.
19. Labor-saving devices and changes in the details of everyday life.
20. Unemployment.
21. Conquest of nature.
22. Political democracy.
23. The *laissez-faire* type of individualism.
24. National trade and industrial rivalry.
25. International consciousness.
26. Acceleration of rate of social change.

The Industrial Revolution as an emergent social fact.—The ultimate outcome of the tool-using genius of our race no one would dare prophesy now, but we can at least evaluate it with due seriousness, and look ahead with mingled complacency and concern. A fundamental life-way seems to be emerging as the machines, the scientific knowledge, and the energy of man keep recombining. A vast technique has come into being, of which no human being living knows more than a small part, and which can only be preserved by the maintenance of a well distributed social efficiency and intelligence. If the Industrial Revolution reduces the intelligent tool-user of the past to a mere machine tender, concentrating the inventive genius and organizing power of the tool-using world in a few hands and brains, will society remain progressive?

Material well-being.—It is a commonplace nowadays for the humbler citizens of a community to have material advan-

tages unknown to kings of olden times. This is understood somewhat when we realize that a man is worth productively ten men of a century or two ago, and so he can have, on the average, a great deal more of this world's products.

A foundation for intellectual and social advancement.—Tools and machines are liberators of energy, personality, and social life. They change the world for us by increasing the range of our interests, thoughts, and deeds. The social significance of Charles Lindbergh is that he has become a sort of symbol of what humanity may do in self-enlargement with the resources of the inventive mind behind them. Picture him, for example, flying low over the forests of Costa Rica, in a tropical rain, observing the orchids in the trees—an utterly new conception to him. Thus changes are effected in our behavior patterns. Energies, moreover, that man used to have drained away in drudgery, are now economized, and cherished purposes can be realized.

Moreover, though a new kind of drudgery may accompany machine labor, new kinds of skill are being developed, too.

The iron man.—The tinker, the jack-of-all-trades, the handy man, the putterer—these men once had a real place in society. Have they still? It may be, for the lure of the odd job still holds thousands of householders from church on Sunday mornings. But in the larger world of tools and trade, the "iron man," that is, the machine, has driven them into lanes and by-ways. What will the iron man do to us all before he is through?

There are three ways in which machines are driving men nowadays. They drive him to the improvident use of raw material, as when the printing presses call for more and more wood pulp from the forests. They drive him to extravagance in the consumption of finished goods, because it is hard to resist the temptation to buy cheap trifles. But chiefly, they drive him to new behavior patterns.

The tending of a machine is itself a new and exacting

behavior pattern for mankind. After the men and women who tend the machines have been pushed to prodigies of production, fatigue follows, taking the form of a desire for simple and older conduct patterns, which perhaps cannot be conveniently or safely followed in an industrial environment. Man may not possess the instinct to fish, but he does have an organic ground plan calling for simple behavior in response to environmental stimulus, and fishing is a good example of such behavior. Golf, hunting, gardening, wood-splitting, repairing the car, walking, setting a bonfire, climbing a mountain [12]—all these are what he really was shaped to do long before there were machines at high speed to watch. But the opportunity to do these things is limited, and meanwhile some men are being pushed by the machine to behavior adjustments far beyond their organic accommodation powers. The question is whether we can cut down the hours of labor and at the same time provide a natural program of opportunities for natural adjustment, or whether the machine will by natural selection produce a new type of man. The ideal machine-operative will slowly develop certain qualities. Will he, in his leisure, backed by a normal and protected home life, develop the necessary virtues to keep his humanity unimpaired? At present it seems that a high price in nervous strain is being paid by the world for its machines. Perhaps they are selecting a type of man for the future, of whose character we little dream.

12 Other pursuits than machine-operating call forth primitive counter activities, too. The mayor of a large city was recently said by the newspapers to have spent much spare time salvaging orange-crates from the city dump to make bird-houses—to give away as souvenirs to his friends.

CHAPTER VII

MAN LEARNS FROM THE GNOMES

If by fire
Of sooty coal th' empiric alchemist
Can turn, or holds it possible to turn
Metals of drossiest ore to perfect gold.
—MILTON.

I. THE AGE OF COPPER AND BRONZE

(a) *The Transition from Stone to Metal Culture*

Chthonian background of metallurgy.—As long as man confined himself chiefly to stone tools, he could not advance far in the direction of precision with speed. If he wished to accomplish much at a blow, he was likely to shatter the object of his effort, while if he used great care, his work was of necessity very slow. His emergence from this restricted field of effort was accomplished by a change of material for his tools, and it was a change involving a forward step in knowledge. The term "invention" has the double meaning of "coming into" some already existent principle or system and of devising ways and means for putting it into operation. This twofold meaning is perfectly exemplified in the transition from stone to metals. A certain element of earthiness, of the mystery of caves and depths of the earth, of strange doings with ores and near approaches to alchemy, of crucibles, forges, fires and swarthy men moving in strong light and shadow, is inseparable in the tradition of man's development of metals, and it has been embodied in the legends of the gnomes, preëminently wise in respect of what the chemist

and metallurgist to-day would call the rare earths. This subterranean atmosphere we may call the chthonian or tellurian background. It suggests that man learned something from the wise older children of Mother Earth, back in the ages when man himself had not altogether lost kinship with the earth-spirits—if indeed he ever has. Let us see, then, what it was that he learned from the gnomes.

The first metallifacture.—It is possible that the first working of metals came about by the accidental hammering of fragments of surface-ore, in the belief that they were simply rocks. Copper or some form of copper alloy, of which there are several, and which occur in nature, would be discovered first, and some form of natural bronze (copper and tin) may have been found. Copper and bronze have the quality of becoming harder by beating; in hammering them down into an edge they become more keenly tempered. Thus man was helped to make use of them by following natural lines. As long as he used copper or any other metal as if it were a kind of stone, he was in the so-called cyprolithic stage of culture—that is, the copper-stone culture.

The hearth and metal culture.—But it was in connection with fire and the hearth that the transition from stone to metal culture was effected most clearly. (The cooking hearth, in the Neolithic, was a small pit outside the hut, and in it a large fire was made, with stones in it.) The carcass of the animal was placed in the pit after the hot coals were scraped aside, and the heat of the stones cooked it. The accidental introduction of ore with fuel into one of these hearths was probably the step that resulted in metal smelting. The cooking hearth thus became a metallurgical hearth.

(*b*) *Bronze Culture*

The art of bronze-working.—Iron ore, unlike copper and bronze, cannot be worked up cold, and moreover it is usually

found in a form not so recognizable as metallic. Hence it had to wait till some accumulation of experience in other smelting suggested trying it here also. Thus, though iron is so abundant and so useful, the order of metal cultures is (1) copper (probably a short period), (2) bronze, (3) iron. And even the suggestion from smelting was not very urgent, because the effect of heat upon bronze is to make it crumbly and soft; in other words, contrary to the case with iron, it made it less useful, and would not be applied, as a likely method, to other metals. The original suggestion for smelting perhaps came from pottery, which was well known in the bronze age. If ore got into the fire pit, it might be smelted and found afterwards, perhaps shaped like the curved side of the pit itself. This would suggest a mold into which the molten metal could be poured. Flat or open molds of the bronze period are found, and later ones of the same general period with clay or sand cores, which means that hollow objects were being made, probably dishes. Some of the articles found among bronze age remains are parts of harnesses for horses, parts of chariots, razors, pins, brooches, spindle whorls, and many other things.

The transition from copper to bronze is an interesting step in the history of culture because it was probably the first alloy used by man. Tin had been used, side by side with copper. It was harder than copper, but more brittle. The accidental inclusion of tin with copper was probably the origin of bronze. All this came before the smelting of ore, described above.

Social character of the bronze age.—The bronze age was a social and cultural change from the crude organization and behavior-patterns of the stone age. Cultural transfusion seems to be illustrated in the way in which the arts of this early metal age worked into Europe from the East, and finally into Britain. There is ethnic history to be read in the mounds and their remains, also. The predominant long-headed races

of western Europe in neolithic times were invaded by the round-barrow builders (who were also a round-headed race). In Egypt and other parts of the East the bronze age culture dates back to perhaps 4000 B.C., while in Britain it is two thousand years later. In various parts of the world we find megalithic building operations carried on (as they had also been in the neolithic age). Some of these cultures went on till almost historic times, as in the case of the stone-henge structure in England. In general it would appear that conditions of life were working toward an approximation to modern life; at least the skeletal remains show longer lives, larger frames, and less difference in size between men and women. The bronze celts and other implements meant larger clearings, more grain, and the possibility of carrying cattle through the winter. In Bronze times, plows were known, and domesticated cattle were used for food. In other words, hunting man had begun his recessional. Precision and time-saving were possible for men equipped with the metal tools. The accumulation of property is more noticeable, too. This helped the prominent man to expand into a clan leader. And organized warfare seems to have begun under the regime of metallic weapons.

The Bronze Age is the beginning of history in the stricter sense of the word. The records are largely those of the earliest epic poems, but from such backgrounds as the Iliad, the Odyssey, and the earliest Norse sagas, we see the social life of the Bronze Age as one of mingled simplicity and rudeness coupled with some barbaric magnificence. The trappings, the golden ornaments, the tribal character of the war before the gates of Troy, and the "one horse" scale on which kings' palaces were conducted, seem to show us convincingly the transit of civilization from the Stone Age to the richly diversified culture of history. The shield of the great Ajax was of six layers of toughest bulls' hide, with a seventh of bronze—a picture that suggests almost a rustic simplicity. Yet of the

shield of Achilles we read in the words of Homer a picture that suggests a high art and a high appreciation of it, as well as a literary culture to depict it:

> Now the broad shield complete, the artist crowned
> With his last hand, and poured the ocean round;
> In living silver seemed the waves to roll,
> And beat the buckler's verge and bound the whole.

II. The Iron Age

(*a*) *The Early Iron Age*

The discovery of ferroculture.—The Stone Age cultures lasted untold thousands of years, and the Age of Iron gives promise of lasting as many more. Intervening for a short time between them was the Age of Copper and Bronze, which was after all but a transition to the Iron Age. Copper, and even bronze, which can be made very hard, cannot replace stone as completely as iron can, and so the dependence upon stone as a basic material for toolmaking was not wholly left behind until iron replaced bronze.

Iron came into Europe after a great system of trade routes had been developed in the Bronze Age. It is first heard of in Greek regions as "the Chalybian stranger." Phœnician and Hittite influences were at work. Assyrian armies were the first, in all probability, to be equipped with iron extensively, but they derived it from Hittite sources. The Homeric Greeks regarded iron as one of the precious metals, holding about the same relation to bronze that gold does to iron with us.

Successive periods of iron culture.—Bronze and iron cultures overlapped for quite a while. In general the Early Iron Age remains are divided into the Halstatt, an older period, and La Tene, a more recent though still prehistoric period. Yet such a scheme only applies to Europe, and not

accurately even there. For example, the Romans had been so long accustomed to the use of iron swords that, as pointed out by Lord Avebury, one of their names for a sword was *ferrum* (iron). On the other hand, Tacitus states that their fellow-Europeans, the Fenni, tipped their arrows with bone points because they did not possess iron.

The Hallstatt iron culture, however, does definitely show us that in central Europe, at the close of the Bronze Age, there was a well established civilization, using both bronze and iron, and having furniture, ceremonies, games, agriculture, and zoöculture of a degree of complexity comparable to that of early Egyptian pictured remains. We have no historic knowledge of this civilization, aside from these archæological relics.

Social changes following iron culture.—The idea of building dwellings over water, which came down from the neolithic and bronze ages, continued in the iron age. The "crannog" style of dwelling, built in swamps on suspensions or islets of soil, was especially well known. There was movement out into river-valleys from the crowded lake regions, also. The "wattle and daub" style of building was characteristic. This was made of withes for a frame-work, filled in with clay. Iron currency was probably used; coracles (wattle boats) were known; fire-clay crucibles, devices for turning in machine work, bolts, nails, rivets, keys, bits, saws, etc., were used; and in Britain at least, we know that it was in the Iron Age that Druidism prevailed—that moon and nature worship of the Iberians grafted on to the sun and hero worship of the Bronze Age.

(*b*) *Historical and Cultural Background provided by the Later Iron Age*

Iron in history.—The actual use of iron has brought to pass a whole chapter of cultural history. Around each of the main forms in which it has been used—wrought iron, cast

iron, steel—a series of inventions has taken place. The three lines of development altogether constitute a struggle to obtain control over the form in which the metal was used. There was the problem of developing the ore, to get a purer form of iron, and the problem of accurately gauging the amount of carbon which went in to form the alloy which was the form in which the iron was actually used. Different degrees of softness, of toughness, and of brittleness, made a wide range of forms which could be used, so that "iron" really means, socially speaking, a whole cultural complex, dominant in the industrial life of the historical period.

Steel.—Wrought iron is comparatively soft and malleable. Cast iron is hard and brittle. Steel is a way out of the dilemma, since it is a form of iron which is extremely hard, but with the brittleness removed by "tempering." It thus becomes the most generally useful tool-material, and the most favored weapon-material, and has held that position for ages. One of our most common sayings is the reference to the far-off time when men "shall beat their swords into plow-shares and their spears into pruning-hooks," and the inference therein is that the selfsame material will be carried over from one social form to another. In the using of steel, man has had two very different needs to meet: on the one hand, strength, massiveness, and on the other, fineness, keenness. The story of Richard Cœur de Lion, with his fabled battle-axe with "twenty English pounds of English steel" in its head, hewing a steel mace-handle in two, and of Saladin, who, not to be outdone, divided a gauzy scarf by letting it fall through the air and across the edge of his Damascus blade,[1] shows the meeting of two cultural lines of achievement, each having its long history of experiment and adaptation behind it.

1 Scott, "The Talisman."

III. Other Metal Cultures

(*a*) *Metal Culture and Science*

Metallurgy and Alchemy.—It must be apparent to anyone who has even glanced at the cultural evolution of the race that the enlargement of achievement and the broadening of conceptual sweep which more and more characterizes the civilization of historic societies, comes about by the emergence of new possibilities attendant upon new combinations of factors. Every basic material has its range of concrete tool-and-product-forming possibilities, after which progress waits upon the introduction of some new element. Change of methods usually involves the use of new material, at least in a subsidiary way. When iron-culture, in its higher historic form of steel-culture, reached its limit under the simple way of varying the amount of carbon in the iron, it had to turn to other chemical elements in order to be stepped up into some higher social efficiency. In so doing, it was really calling upon the chemist, who had himself only recently emerged from a most interesting and ancient career of following the proto-science of alchemy. The alchemist and the smith had long been in a tentative sort of alliance. The alchemist was a combination of chemist, metallurgist, and magician, with the last fading away and the first growing ever stronger. He was also a product of the deep lying economic motive, for during a large part of his career he was seeking the solution of the great type-problem of wealth-seeking man—how to acquire gold. It is a fine piece of cosmic comedy that we see in the social career of the alchemist: seeking to transmute baser metals into gold, he failed, but in trying made the acquaintance of so many of nature's secrets that he was metamorphosed into the chemist. As a scientist, the chemist does not care especially whether he can make gold or not. He has contributed far more greatly to the wealth of the

world by discovering other substances than he would have done by the manufacture of gold. And, to come back to the former subject of steel, we now find that the mechanic and structural arts are greatly advanced by the knowledge of how to combine iron with less common elements, such as chromium and vanadium, to make steel of desired qualities.

The rare earths.—Today the mysterious figure of the alchemist of old is overlaid by the garish and more skeptical atmosphere of the experiment station and the laboratory. But occasionally we catch a glimpse of him, working mysteriously in the recesses of his intellectual retreat. When we inquire what he is doing, we are likely to find him experimenting with the "rare earths." From a social evolutionist's point of view, the study of the rare earths is significant because it suggests new cycles of material culture ahead. All of the metallic ores were once rare earths, and have been drawn into the vortex of man's ceaseless social life. In the unlocking of the new series of secrets, new social adjustments are inevitably forecast. The chemist has to consider more and more the problem of bringing metals to their fusing temperatures in order to produce the forms which he feels are possible. This is quite symbolic of what society is going through in parallel development, for social ideas also attain certain intensities in practice and are transmuted into new elements of future behavior.

(*b*) *The Place of Various Metals in Social Evolution*

The precious metals.—There is no definite line between the precious metals and the baser ones. Iron and many other things have been used for money; gold, silver, and other highly prized metals have been used for practical arts. But in the realm of social psychology the "noble metals" have played a large part. The reasons are not hard to discern. Gold and silver (and we may add precious stones) attract

physically by their luster, and appeal to the economic motive at the same time, in their character of wealth. They gradually won their way to supremacy as symbols of whatever is desirable. To this day, though other metals may surpass gold and silver in market value, our social appraisals are made in terms of these glorified substances. "As good as gold," "of sterling character," etc., speak volumes. Moreover, we are intrigued, by the mental appeal that they make to us, into playing fast and loose upon their qualities, to provide ourselves with similes. "As red as gold," "as yellow as gold," "golden sunlight," "silvery moonbeams," "golden-haired"—not one of these expressions is accurate, yet all are expressive. Nor is this all. In the social history of these precious things, man has lavished all the skill he could acquire into the beautiful treatment of them, and they have become long since the instigators of high artistry.

Modern science and the metals.—The transformation of life in modern times has been due to the knowledge and control of the metals, it is safe to say, quite as much as any other factor. One phase of the mastery of metals is the purifying of them, and, in the case of iron, hardening it. Again, in the constructive use of iron, there has been incessant change of method. For instance, two pieces of iron could be welded by a smith long ago. Riveting was a later method of fastening them. It was used where welding seemed impracticable, as in great steel buildings, but it became a slow and awkward way again compared with the recent method of electric welding, whereby even large railway bridges can be constructed without the riveting process.

IV. Social Significance of Mining and Metallurgy

(*a*) *The Smith in Human History*

The social position of the Smiths.—The surname of Smith is so common that it is a by-word among many peoples. Yet

its frequency attests its onetime distinction. In a sense the smith was the first type, in a numerous way, of the distinguished man in the material cultures. Of course there had been distinguished men in war and in tribal leadership, but the distinction based upon the control of fire and metals was a different kind. To this day there is a mingling of awe, admiration, delight, and respect in the attitude of the casual public pausing at the smithy door, and a certain poise and assurance, a taciturnity as impregnable as it is appropriate in the gesture of the blacksmith bending over his forge or his anvil.[2] The archetypal smith has always carried a reminiscence of the wise, and perhaps a little awesome earth-dwarf, and it has gained him social prestige. Besides which, of course, there is a more practical reason. The smith has rendered great services. As armor-maker or manufacturer of plow-shares, as maker of swords or of the mightier pen, he has been indispensable. Metallurgy is, with fire and a very few other discoveries, one of the broad bases for man's material culture as we have known it in historic times. A great space seems to separate historic man, who has always had the metals, from the stone age man who hardly knew them and who somehow seems unutterably remote in time and in character too. When the man of the stone culture became a smith, extracting metal from ore and shaping it to his needs, he revolutionized human culture and brought about results more momentous than can well be compared with anything but the Industrial Revolution of recent times. Truly is the smith a "cunning workman," held in esteem from of old.

The contribution of the smith.—The genus smith is here thought of as including men concerned in all stages of work with the metals. In point of fact, the genus split into several well known and important species. There are the miners who procure the metal in the ore, and who tend to become classed

2 The importance of the smith among the common folk of a medieval town is strikingly set forth in Scott's "Fair Maid of Perth," in the character of "Harry Smith."

as laborers; the metallurgists, who refine it, and who evolve toward a place in the scientific world; the smiths proper, with many sub-divisions, as blacksmiths, goldsmiths, etc., who become craftsmen; and finally various others who in the arts or professions have occasion to handle the metals. The great steel-plants of modern industry gather these all up into very impressive organized forms.

(*b*) *Enlargement of Social Scale by Metal Cultures*

The constructive arts.—Social evolution being so often a matter of new behavior made possible by the release of new forces or materials, it follows that civilization is closely dependent upon its supply of tool-materials. The metal cultures, particularly iron and steel, illustrate this. The Industrial Revolution was a remarkable expansion of tool or machine using, combined with mechanical power of a new kind. It transformed the human world in a perfectly astounding degree, yet it could not have proceeded far without the immediately preceding discovery of how to use coke in the production of iron, and the application of the melting process in the making of steel of a new high grade.

Culture dissemination.—The metals have played an important part in enlarging the scale of human operations through the successive population shifts that accompany the opening of mining regions. Sometimes a whole nation is changed in its relations with the world because of new centers of metal-working. For example we may cite the drift of iron culture from the Hittite Empire into Assyria and toward Greece, in the period around 1000 B.C., the knowledge of the tin mines of Cornwall visited by Phœnicians, the discovery of metals in the mountains of Germany in the tenth century, the exploitation of Central and South American mines by the Spanish, the settlement of California after 1848, the Cripple Creek and Klondike episodes. All such developments enlarge

the social consciousness of places and life-ways, and serve to connect, even though by a very thin thread of cultural correspondence, places that would be virtually unknown otherwise. South Africa, for instance, chiefly because of gold and diamonds, called into existence some of the greatest cultural interplay ever known—the Cape-to-Cairo Railroad and the Rhodes scholarships.

(c) *Intensity of Culture through the Metals*

The meaning of cultural intensity.—Primitive man's culture was not intense; that is to say, he did not, through the application of his tools and his behavior-ways, concentrate a great deal of force upon a given point or limited area to produce great results. This was not always because he could not, but because he had no incentive. For instance, primitive man could have deforested large areas, but to do so would have been directly contrary to his welfare. But in historic times, before the use of coke in reducing iron ore, the need for charcoal became so great that serious deforestation resulted. This is cultural intensity. It may be constructive, and usually is, rather than destructive. The Panama Canal, the transcontinental railroads, Brooklyn Bridge, mountain tunnels, skyscrapers—all are examples of cultural intensity, and every one depends specifically upon the metal cultures. As we look ahead it seems reasonably certain that man will yet call upon the metals to support him in even more intensive achievements. The steel frame of a dirigible, the bore of a great gun, the crucible in a steel-mill, all suggest such a possibility. The partially projected span of a great steel bridge, reaching tentatively from the bank of a river toward the center, and ending in sheer space, while a workman balances there upon a girder and consults a blue print, is a representation of how man has drawn from the earth the tenuous but strong support of his most ingenious devices for

advancing his social purposes. And surely the history of bridges shows that man has points of great social and cultural intensity.

Examples of cultural intensity produced by metal culture. —An analysis of a few situations will make clearer the sustaining influence of metalliculture in cases where much social experience is packed into a short time and small space. A family drives fifty miles after supper, attends a notable operatic performance, and drives home in time to get a reasonable night's rest. The social gamut of experiences encountered during the evening are more intense and varied than their ancestors might have had in a year. The automobile is the efficient cause. There is more than the knowledge of the metals in the possibility of an automobile, of course, but whether we substitute steam train or trolley, we still have the strength of steel making it possible. Even the family whose intensive participation in the culture of the race takes the form of listening to the opera by radio, is dependent upon the culture of the metals. For little practical advance in electricity took place until a great deal of *wire* existed in the world. And when we see the miles of wire that girdle the earth, we may well cast our thoughts back some five thousand years or more and watch our ancestors make the momentous discovery that copper could be hammered out thin into plates and wires.

CHAPTER VIII

MAN LEVIES TOLL ON CREATION

Learn from the birds what food the thickets yield,
Learn from the beasts the physic of the field.

—POPE.

I. PRIMITIVE ACTIVITIES OF MAN IN GETTING FOOD

(a) *Food-getting a Part of the Struggle for Existence*

The food-quest as an adaptive process.—Nothing is more elementary than food-getting. It is interesting to find, therefore, that man has adapted his manner of living to his diet, and his diet to his environment, and all three to his inventive genius. He has, in fact, experienced social metamorphoses based upon successive ways of getting food. Perhaps the best known scheme of cultural grades is that in which economic stages are the grand divisions, and the divisions, it turns out, are simply methods of food-getting, for the satisfaction of hunger is the dominant economic urge. Pausing for a moment, then, to view the social history of mankind as an evolution of the food-quest, we see first the collecting stage, or casual picking-up of whatever presented itself as edible. This is really the lower end of the hunting stage, which develops step by step into the complex and exceedingly intelligent ways of the higher hunter. There is no end to the possible changes in hunting methods, but there is a distinct limit to the extent to which hunting can go, the limits being set by the number and character of the animals offered to man to hunt. Some peoples have remained in the hunting stage; others have diverged along a new and higher

level, that of pastoral life. The higher pastoral peoples, again, may develop very rich cultural ways, or may even by sudden leaps, approximate higher civilization. But to find the path leading to the most highly developed civilization, we must go back to the hunters, and note that some of them did not become predominantly pastoralists, but agriculturalists, and agricultural civilization at length reaches the place where food-getting recedes somewhat in importance and industrial enterprise looms larger. All this development is expressible in terms of adaptation to environment. Man's food-quest, then, is a struggle for existence in which adaptation has constantly taken place.

The mental activity of man in food-getting.—It is often remarked that man labors under various handicaps, from the point of view of defense, as compared with other animals. But we may with equal point regard them as handicaps in competition for food. The lack of specialized physical equipment for fighting, such as horns, claws, tough hide, or the like, has another aspect; man was not made to attack some specific prey for food, which prey would be inevitably encountered and successfully disposed of in some normal environment. Rather he had to rely upon his brain to help him find food in any circumstances calling for special effort, and the peculiarity of the brain is, so to speak, its lack of peculiarity, its general adaptability. As far back as we can trace man, we see him using his mental powers to eke out his scanty physical powers in the food-quest, so making for himself whole culture patterns conforming to the conditions of the food supply, and requiring advanced intellectual powers to carry them on. Thus, not only do we have complicated devices for capturing animals for food, but complicated dramatic and religious ceremonies intended to conserve food supplies, as in the case of the Australian "witchetty-grub" ceremony.[1] Great cultural advances have

[1] Havemeyer, "The Drama of Savage Peoples."

been associated with changes in diet, and with shiftings from animal to vegetable food, or vice versa. The central fact to be kept in mind is man's capacity for all sorts of life-ways—his adaptability depending mainly on his mental powers.

(*b*) *Dietetic Evolution of Man*

The astonishing variety of man's diet, as witnessed by a modern food show, was not possible until recent times, when commerce and science united to overcome the hindrances of distance and of time in the keeping and assembling of food. But in the course of his former evolution man touched, though not at one time, upon most of the items which a complete food fair would now offer, nor was any group of men without a certain variety. For one thing, man has always been able to adapt himself either to a vegetarian diet or a flesh diet, and this meant variety.

The primates, of which man is one, coming as they did from a common ancestral stock with the carnivores, presumably had the equipment, in dentition and otherwise, to become flesh-eaters. But the primates were climbers, and veered off toward vegetable food. The anthropoid apes are chiefly vegetarian in diet, although they have the large canine teeth that go with flesheaters; they occasionally eat eggs and small birds, but not to any great extent. Man's teeth suggest that he is omnivorous, with the tendency, if anything, toward vegetable food. His life just previous to acquiring full human traits was probably a climbing one, and hence vegetarian, on the whole. But, however we may explain it, early man developed a decided predilection for animal food; according to the "hunting pack hypothesis," it was the getting out of the trees and taking to hunting that made him human. But just what the cause of this change was, resulting in the concentration of his physical and his peculiar mental powers on the exploitation of other animals, is not clear.

Primitive food-getting activities.—We must not assume, too early in man's development, a high technique of hunting, or a society specifically organized around the hunting life. Instead we must conceive of genuinely primitive human life as containing much in embyro and little in developed form. The earliest group that we can be certain of and that cohered with tenacity, is that of the mother and children. This is a genetic group in the reproductive sense, but it is also genetic in that it shows the earliest and most natural forms of food-getting.[2] On the outskirts of the mother-children group are the older males, ranging a little farther, relatively independent, but never entirely disconnected. Here we have primitive society, at once a kinship group, a food-getting group, and in a very small way a political group, with other institutional germs within it. It was not far differentiated in any direction, and with regard to the food-quest, it was not far enough specialized to permit us to say that hunting was more than simply one of the customary means of getting food. Primitive man was a gatherer rather than a hunter in the elaborate historic connotation of that word. He took what he found. He was more opportunist than predatory. Though the beginnings of hunting, zoöculture, and agriculture may all be found in his way of living, he was not yet either agriculturist, zoöculturist, nor very fully a hunter. To the extent to which the food-quest progressed a little beyond chance findings into some sort of purposive and directed choice and rejection, an early form of class differentiation appeared. This was simply a matter of guidance in choice of foods, exercised by the older members of the group ("elders"), but since at first food-getting was such a large part of life, this amounted to a form of domination and subordination in social life as a whole, and it is easy to see the

2 There is no sharp line between conception, pre-natal nourishment, nourishment at the breast, and nourishment after weaning with the mother providing the food. This is simply one of the innumerable illustrations of the central position of the mother in social history. In this case we see how she unites in her person the two basic physical facts of food-getting and reproduction.

beginning of the factor of social control, coinciding at first with age groupings.[3]

Some few more items may be added to our picture of primitive man as a center of food-questing.[4] He had no fixed times for eating, but gorged when he could and then went till opportunity afforded another feast. He supplemented animal with plant food. Herein another division of labor appears, based on sex, for the women gather more of the plant food—roots, bulbs, berries, seeds, nuts—while man hunted larger game. Plant food being capable of longer preservation, we may suppose that it was among the women that economy and provision for the future first appeared. Primitive people had to have an accurate experiential knowledge of the properties of the plants and animals that they sought as food, and they actually modified some of them, if we may judge from the knowledge primitive peoples to-day have of soaking and cooking foods to alter their fitness and palatability. Moreover, among primitive peoples arose one of the most archetypal of all tools, especially of agricultural tools, the digging-stick, which long antedates agriculture, but still functions in the evolved forms of spade, hoe, trowel, plow, harrow, and many other tools.

Diet of historic man.—In historic times, the food-quest has become at once more highly developed and vaster in scope and quantity, and yet relatively less important. Though man as a whole is never far removed from the possibility of food shortage, still he maintains a far greater margin of safety than his primitive forbears. If one part of a group, large or small, faces famine, there is usually some sort of alleviation possible.

In some parts of the earth man has become almost exclusively vegetarian. Western peoples have a mixed cereal and flesh basis for an exceedingly rich and varied diet. Still

3 The concept of age distinction is the origin of many titles of authority, such as senator, alderman, etc.

4 See Wundt, "Elements of Folk Psychology," p. 24, ff.

other peoples live very largely upon dairy products and flesh. But the trend of development has been toward variety, and the preparation and serving of food has become at once a science and an art. It is almost a complete cycle that the word "chef" (chief) indicates, for to thousands now it signifies the one in charge of the food of a great social establishment, much as it once did.

Historic man has gone through another cycle regarding food. Primitive man ate what he could get, and so perhaps has the larger part of humanity ever since. But in modern times, a considerable part of the race found itself in a position to eat what it wanted. This has been harmful in various ways, as physicians and dentists can testify. People in the front rank of social development are learning now that they must eat what they ought to eat.

II. Hunting and Fishing

(*a*) *Technique of Early Hunting and Fishing*

Early forms of hunting weapons.—Aside from actually grappling with his prey, or seizing it after pursuit, there are two natural ways of bringing down his game which a primitive hunter would resort to: striking and throwing. It is clear that the former offers comparatively little outlet for intellectual play. The efficacy of a blow is always chiefly in its force. But when one throws something, one invokes the laws of physics, the mathematics of curve and velocity, the finesse of physical judgment, a fine appreciation of balance of forces and resultants. The savage may not know this abstractly, but he acts upon that sort of judgment, nevertheless, and the increased chances of missing his mark result in greater thought on his part. Ways and means of insuring accuracy mean improved forms of weapons. In fact, the improvement in throwing weapons reacted upon the striking weapons.

Throwing and striking go together. The earliest form of weapon of the chase in which the two could alternate is the club. One end being fitted to the hand in some fashion, the other begins to be differentiated after a variety of fashions: flattened, it makes a sort of wooden sword; made specially heavy, it is a club par excellence; pointed, it becomes a spear or a throwing-stick (lance).

Having once come to the definite recognition of the throwing-stick, primitive or savage man made two different but remarkable inventions. One was the spear-thrower, which, by fitting the spear into a detachable second stick, lengthens the arm and consequently the range of the spear. The spear-thrower must not be confused with the throwing-stick, which is the weapon itself, while the thrower is an attachment or accessory.

The second of the great inventions connected with the throwing-stick is that form of it known as the boomerang. This is a throwing-stick so bent "out of true" that it goes in a spiral, some forms even returning to the thrower if they do not hit some mark. Contrary to the usual belief, the boomerang is not peculiar to Australia, having been known in primitive times in many places. It has great striking force, and is a difficult thing to dodge, because of its curved path.

The boomerang has been a subject of great interest to students of anthropology. Another very important step in throwing weapons, involving the principle of the spring, is the bow. This is a substitute for the spear-thrower, and it has had a wonderful history of its own, entering into Western man's warfare and hunting from very early times till as late as the fifteenth century. Yet it is very much later than the boomerang, and not universally known. The cross-bow is a late development.

The blow-pipe is a specialty in projecting arrows (little throwing-sticks).

Stages of hunting.—The development of hunting may be shown by positing successive "stages" through which it passed, provided it be remembered that such "stages" are never expressive of the actual route traversed by any particular social group, but rather of the ideal development of groups in general. With this understanding, the following hunting stages may be discerned:

I. *The unconscious zoömimic stage.*—In this stage, man did just what any other hunting animal did; he caught such things as he was able to by such natural means as he had. Hunting might be pursuit and capture, or open attack, or stalking, or searching for stationary objects of food, or accidental encountering of dead animals. Getting vegetable food is hunting, in this sense. All sorts of small game are sometimes eaten by primitive man: snakes, lizards, ants, insects. Sometimes the women play the greater part in collecting these lesser kinds of food, including honey, larvæ, fungi. Of the food supply in the waters it is likewise difficult to say just where "fishing" in our deliberate sense begins. There was certainly the same first unconscious way of simply taking off after the desired food. Man, unlike the apes, has retained the ability to swim, and some of the so-called "nature peoples" of island and coast habits show this primitive side highly developed by their environment, so that they are almost amphibious, staying under water an extraordinary time, and diving in pursuit of large turtles, or even more formidable creatures. Add to this the quantities of shellfish and other shore line food, and feasting occasionally on cast-ups, and it is evident that the possibilities for man in casual collecting or direct pursuit are very great.

II. *The conscious zoömimic state.*—Nevertheless, man makes his great step, once and forever distinguishing himself from all other animals when he goes forward into conscious or premeditated scheming in his pursuit of prey. One phase of this is his conscious imitation either of some hunting animal

or of the hunted one—in either case, of course, to facilitate approach without arousing suspicion. Some of these devices are very simple, such as the practice of imitating the call of the animal's mate; others are so complicated as to amount to a sort of drama, as in the Sioux buffalo hunt or the Eskimo caribou hunt. Mimicry is a field of vast possibilities, in which intellectual growth, art, economic life, and instinct all converge.

III. *Hunting with weapons.*—This is simultaneous in development with the zoömimic method. It implies a relatively high order of mind. We have already mentioned the development of the stick and club into boomerang, bow and arrow, blow-gun, etc. The development of objective means, like these is accompanied by the setting up of mind patterns, which are more important than the weapons themselves. Indeed we feel inclined to regard the mental pattern itself, the idea, as the real weapon.

IV. *Self-operative mechanical aids.*—Pitfalls and traps, of countless descriptions, and extending back to the men of the Old Stone Age, reveal the importance of this line of development in hunting. That it was a means of education in physics and mechanics is plain enough, and it well illustrates the distinguishing mark of man in hunting and in all life—the use of ideas.

V. *Hunting with animals.*—This means of hunting, including the use of dogs, horses, ferrets, cheetahs, and other animals, and the whole of the fascinating art of falconry, is a highly specialized form of elaborated ideas in food-getting.

(*b*) *Limitations of the Hunting Life*

Instability of food supply.—The hunting life has limitations that are reached very early. It is essentially a dependence for existence by one animal upon others, some of them not greatly different from himself in the precarious

hold they keep on life. Nature, relied upon without coöperation, shows great capriciousness in the quantity of life she offers. It appears that there are cycles of prolificness through which species pass,[5] and man, depending upon these species for food, may find himself in a sort of period of neap tides, when weather cycles and biological cycles coincide in such a way as to threaten starvation for him. The certainty that life, for man, "is bound in shallows and in miseries" as long as he restricts his forethought to that required in the hunting and gathering mode of food-getting, has been beautifully expressed in Longfellow's version of the Hiawatha legend.[6] The lack of a stable food supply is not a problem in some tropical regions, to be sure, but here man makes little progress because he does not need to exert himself. But in climates where exertion must be made, progress waited upon the entrance by man into some mode of food-getting that would give him relative stability of life conditions. Dependable food supply also makes possible a denser population, which, by increasing the number of inter-actions between persons, is a stimulant to higher social forms, and this was another lack of the hunting life.

Lack of a surplus.—It was not merely a dependable food supply that was a conspicuous lack in the hunting life, but also a *surplus* of food upon which rest two great facts in higher forms of society: first, a maintenance of regularity, an ability to "carry on" over an emergency, and second, the ability to detach a part of the group from the two basic functions of food-getting and reproduction, releasing this part for the building up of elaborated culture forms. To illustrate, it has not been necessary for Henry Ford to produce anything to eat; instead, he has produced a certain article which has become a universally known pattern and center of human reactions—the "model T" Ford car.

[5] See Julian Huxley, "Mice and Men," *Harper's Magazine*, Dec., 1927.
[6] "The Song of Hiawatha." (V, Hiawatha's Fasting.)

An economic surplus, since it must inevitably gravitate to the use of the most able members of a group, makes for class distinctions. To this extent, hunting society lacked class distinctions (though other forces tended to give them to it), and this fact is the slender and inadequate basis for the once accepted idea of the former "idyllic" life of primitive man.

Civilization could not develop far except where population could mass at first where abundant food supplies could be found. Hence the fertile river valleys, where game had not entirely disappeared but where pasturage could take the place of woodlands, and agriculture supplant hunting, were the scenes of the first great civilized centers.

III. Social Evolution as Affected by Hunting

(a) *Totemism*

Survey of totemism.—We take up totemism at this point, because it is so palpably derived in form, if not in spirit, from the hunting economy. A totem is a sort of collective and symbolic idea of some beast or bird, whose nature is somehow spiritually shared by the clan that belongs to it, and who is a presiding genius or tutelary deity for the group. That such a system of social and religious recognition of the very animals that were hunted and eaten by primitive man (though a totemistic group did not ordinarily eat its own totem animal) should have grown up is not so strange as appears at first. The key to the secret is probably suggested by the fact that any man who has much to do with animals grows more and more respectful of them, and less assertive of his own superiority. In primitive times man's margin of safety and dominance over the beasts was much less than now. He felt that they possessed physical and mental powers not shared by him (as, indeed, they did), and to that extent

they were entitled to respect.[7] In setting up the presiding genius of a species and making of it a Great Original, primitive man was doing something very similar to what the great Plato did in his philosophy of the Idea as the Reality.

There was, moreover, a camaraderie felt by hunting man toward the hunted animals. Hunters who spend a long time trying to kill or capture a particularly wary or dangerous beast, or fishermen who are long baffled by some especially cunning trout, often come to feel on speaking terms, without in any way abating their purpose to kill it. Emotionally they are drawn to their prey.

Totemism, then, is the socially and intellectually elaborated setting forth of the clan or tribal interest in some animal around which, for reasons not known, their emotional life was partly centered. In all probability the tendency of man to wonder about himself is concerned in it all; the animals are hypotheses for man's origin which have been accepted easily and uncritically.

The forms of totemism.—The outcome of totemism is a general coloring of life in all its aspects, social, kinship, religious, economic, political. It colors the tribal organization. It is bound up with exogamy. It is a step forward from ghost-fear toward a real worship. And it provides the concrete, ritualistic basis which a social group needs. Every step of a people's daily life is touched by their totem. In sex totemism each sex has a totem animal, and marriage ceremonies have to do with the woman's taking her husband's totem, or vice versa. In conception totemism it is believed that the eating of the flesh of the totem ancestor (usually forbidden) brings about conception through his mediation. Plant totemism sometimes prevails instead of animal totemism, and sometimes inanimate objects are totems. This leads directly to fetishism.

[7] The spirit of totemism is well caught in Kipling's creation of Baviaan, the dog-headed Baboon in the High and Far-off Times. ("Just-so Stories.")

Totemism is a sort of stage in the spiritual history of the race. Animism is at a highly developed stage wherever totemism prevails, for totemism holds to the existence of kindred souls in animal forms.

(*b*) *Tabu*

Some items about tabu.—Like totemism, tabu is a subject that we shall mention elsewhere in this book, but we take it up here because of its connection with totemism, and because it is such a commonly diffused thing in the lower forms of society. Anything is tabu when it may not be touched or associated with. It may be that the thing which is tabu is harmful, or it may be sacred, but in the totemic philosophy, from which we suspect the tabu idea to have developed, the two motives are both present. The reason why the totem animal inspired fear was because it was sacred in the sense of being potent. But the very nature of tabu permits it to be carried on after the totemic system is outgrown. And what happens is that man and the gods become tabu under certain circumstances. Priests, chiefs, property, lands, may be tabu because of their association with the gods. ". . . There are three sets of ideas which, in part, form the bases of totemism, and, in part, reach out beyond it, constituting integral factors of further developments of the most diverse character. These ideas may be briefly designated as animism, fetishism, and ancestor worship." [8]

In each of these three the idea of tabu continues very strong, regardless of totemism. Its general tendency is to emerge as the sanctioning force behind worship and reverence in higher cultures.

The outcome of tabu.—Tabu points toward many social forms, and is a contributing factor in them. Among these forms may be mentioned:

[8] Wundt, "Elements of Folk Psychology," p. 204.

1. The laws of trespass.
2. Private property.
3. The sacredness of the priesthood.
4. The sanctity of the king.
5. The abstention from certain animal foods.
6. Fast periods.
7. The mother-in-law complex.
8. Propitiation ideas in religion.
9. Marriage restrictions.

IV. Modern Survivals of the Hunting Stage

(*a*) *Individual Aspects*

Hunting and fishing as a social outlet for energy.—In some ways the men of the hunting days were very fortunate. They lived a life of action, of sense stimulation, and of intermittent concentration followed by relaxation. The burden of continuation, under which civilized man has brought himself, had not settled over them. The endless routine of civic minutiæ, the inescapable duty of looking forward for days, months, and years, the hounding of life by committees, the book-keeping, the strange passion for statistics and curve-plotting, the call of the factory whistle and the tyranny of the time-clock, were all unknown. In many respects the civilized man has a far better lot, but it is still a common thing for him to try to get back to the simpler organization of the food-quest. Therefore the hunter and the fisherman, as sportsmen, are likely to be permanent social figures. The social evolution, in this case, appears in the process by which man has so institutionalized and formalized his life on one side as to lose certain values on another side. And the social self-guidance by which man may finally restore the balance is seen in such things as the public stocking of fish streams, and the enactment of protective game laws. On the other hand, there is something absurd in the spectacle of a multi-

millionaire, himself a product of one line of social evolution, careering about in Africa with a great retinue, engaged in bringing more perilously close to extinction the finest game left in the world.

Hunting and fishing as a transfer of the predatory impulse.—The generally accepted idea that going a-fishing is a very sane and wholesome pastime for a civilized man, when analyzed, is rather instructive, revealing how intimately the social evolution of the race keeps us company in daily life. A modern man is not merely modern and civilized; he is also just a man, which means that he is like the men of distant ages. If he develops what people are pretty sure to call an "instinct" to fish, it means simply that some combination of circumstances has called forth responses in him identical with those of primitive predatory food-seeking man. These response patterns of physical and mental first-hand grappling with nature for a living are overlaid in civilized life with response patterns of a highly sedentary, nervous, and brainy character, which approach exhaustion after a few hours. Thus we see the clergyman in his off hours is frequently a passionate fisherman. He is getting, in catching a fish, some of the simple, concrete, definite satisfactions which are denied him in his professional social relations, and fishing is for him a compensation behavior pattern. He is predatory man while he fishes, and gains thereby health to keep him from being predatory toward men.

(*b*) *Group Aspects*

Impulses of the pack.—Man's crowd or herd psychology is very apt to take the form of behavior like sheep in a flock, and this, though often bad enough, is comparatively innocuous. But every little while we have a demonstration of crowd psychology known as a mob, and the mob is always a possible hunting pack. A man hunt is the pack in full cry. The

pack not only hunts to a finish, but is likely to snarl at outsiders or newcomers. Some of the friendly rivalry of human groups in competitive sports has been known to turn suddenly into rival hordes or packs. It is under such circumstances that we hear of umpires being mobbed, of colleges severing athletic relations, etc. As a matter of social evolution, it seems that we have overlaid a number of psychic characteristics gained in pack life, with newer behavior patterns that are able to dominate only if emotion has been educated.

Totem-consciousness in modern life.—Man spent a very long time on this earth as a hunter, and since totemism is a hunting-life system of thought and behavior, it is not surprising that a totem-consciousness, or something very much like it, has cropped out time and again. But quite apart from its significance for a hunting mode of life, totemistic forms seem to be congenial to people under a great many conditions. A great deal of the voluntary associations (lodges, etc.) have found a wide response when they have taken names reminiscent of totems. The idea of a patron saint over a community, or over the individuals who are named after him, is in all psychological essentials totemism.[9] The mascot, usually an animal, is another recrudescence from the old root.

[9] See J. Lemaître: *Les Deux Saints.* In Aldrich and Foster, "French Reader" (Ginn & Co.).

CHAPTER IX

MAN CLAIMS HIS DOMINION

Into the competition with fellow creatures . . . man turned his powers of mental adjustment; and the dominance which he has attained is a measure of the effectiveness of intellectual adaptation over physical.—SUMNER and KELLER, "The Science of Society."

I. EARLY DOMESTICATION OF ANIMALS

(*a*) *How Domestication Came About*[1]

Undirected domestication.—The environment of primitive man, the hunter, was in great part an animal environment. Until there were dwellings, man was in no position to play the permanent host to other animals. As the institutions of hearth-fire and roof-tree developed, certain animals were drawn into the circle of man's domestic life. How this was done is the question now under discussion, but the process is closely connected with the character of man's life in caves —a somewhat casual life, to which animals might become attached without having to lose at once all their wild traits.

Primitive man has never had, there is good reason to believe, any domestic animal but the dog, and this is one of the reasons for the sincere sentimental regard in which the dog is held as "man's oldest friend." There is indeed an almost pathetic interest in the thought of these two animals becoming "pals" and binding themselves in an eternal comradeship beneath the stars. It is a long cry from the life of the dog

[1] There is much literature on this subject, but perhaps the very finest imaginative reconstruction of the process of domestication is Rudyard Kipling's "The Cat That Walked by Himself," in the "Just So Stories."

when he first joined the hunt with man to his present life under apartment-house conditions, but man still clings to his friend. This is a very important point to understand: man evidently has had a deep need supplied in his dealing with domesticated animals. One writer[2] on primitive man considers the theory that man felt the need of the dog and so domesticated him, as "rationalistic but mistaken," and asks "would a pre-domestic dog be desirable?" To which the answer, not on rationalistic but on empirical grounds, is simply that man, himself almost "pre-domestic," at that time, most certainly derived pleasure from association with some animals, and that the basis of domestication is not usefulness, but the inclination to have the animal around. Domestication was certainly undirected to any end at first; it was spontaneous.

The first domestication, in short, was a matter of animal inclination, of feeling, and of accidental habit-formation, but not of forethought. To suppose, for instance, that man previsualized the usefulness of the dog as a helper in the chase is to give him credit for what he could hardly have foreseen, because the valuable traits of the dog were hardly noticeable till after his taming. No dogs ever went out hunting with man unless there had been some previous entente established in the environs of the campfire, probably an assumption on both sides that the dog got the scraps left after man's feasting. The training of the dog is another matter, and comes later; a domesticated dog may be quite untrained. Here we see that the chances of man's tolerating and liking such a camp-follower as the half wild dog were greater in the days when house-keeping was sketchy and the cave or camp-shelter was less definitely "home." What modern man could hardly tolerate, primitive man enjoyed.

How did the dog and the man first get together? We must assume psychic traits in some animals leading to domes-

2 Wundt, "Elements of Folk Psychology," p. 22.

tication, while others lack them. Thus, although the Australian dingo is closely related to the dog, he cannot be domesticated. The old adage that it takes two to make a bargain is perfectly illustrated by the necessity of mutual advances by man and beast. In this connection a further remark about the dingo throws light upon one of the ways in which advances were made on the human side: "Just as female apes extend their maternal feelings to other animals, so do some primitive women.[3] The Australian dingo is the chief pet of the women. Being the only placental mammal besides man in Australia, it was naturally a sort of companion, but not on the basis of mutual practical advantage, as in hunting. But it has never been domesticated. The pups are taken as pets and suckled by native women, but invariably revert to wildness.[4] The European dog is at a premium as a pet, because the natives can keep him."[5]

From the point of view of the animal, we may suppose him to have been attracted by the shelter, by the warmth, by the opportunity to play scavenger, and even by a vague sociability—a trait that reaches an intensity only understood fully by owners and lovers of animals. Even the cat, noted for going his own way, shows this. But it takes something of a habit-background, an environment, to bring this trait out into reality as behavior. We may suppose that the young of half-wild dogs, born so near to human camps and so used to seeing primitive man, would have such an environment and so would become more and more fully domesticated.

Deliberate domestication.—Sometime in the New Stone Age we find sufficiently abundant traces of domestication of

3 Civilized women also, to some extent.

4 "Wildness" seems to be a mingled psycho-physical sum of various traits. Some of man's various breeds of dogs are more precariously balanced on the line between wildness and domestication than others. The German police dog is an example. Shepherd dogs occasionally revert and become "killers," or even lead a double life, quite like many human criminals.

5 Klaatsch, "The Evolution and Progress of Mankind," T. Fisher Unwin, p. 151. The whole subject is richly suggestive of the purely behavioristic character of man's earliest relations, with animals, and the closeness of his relations with them, as well as of the later mental elaboration of these relations, leading in a few cases even to unnatural vices.

animals to permit of saying that the age of zoöculture had fully arrived. Man was consciously making other animals a part of his life-ways. The principal way in which he got his start was probably by capturing and raising the young of animals that he killed in hunting. We must bear in mind that this was not so easy as might appear, and that even if he succeeded in keeping and making pets of various kinds of animals he had not "domesticated" them until he had succeeded in perpetuating the species in captivity. This has proved impossible in many cases. The elephant, for example, though he can be made into a most docile and serviceable friend, is still replenished chiefly from wild herds. Having pets is not domestication necessarily. Captivity seems to have a pronounced effect upon the reproductive capacities of some animals, which fail to maintain their numbers. The reasons are not known. The most careful efforts by scientists to domesticate certain animals, such as the zebra, have failed in modern times. It would appear, then, that deliberate domestication of animals has been a sort of natural selective process after all—those animals which could survive under domestic conditions being "selected."

(*b*) *Principal Domesticated Animals*

The dog.—As the oldest comrade of man, the dog enjoys a certain prestige possessed by no other animal. He has become a part of a great many social life-ways of mankind. The dog is somehow always a dog, though the various types range all the way from about six inches in length to nearly six feet when standing up on the hind legs. With such a variety of forms it is no wonder that he has been able to push his way into some part of almost every one of the series of tableaux that might be presented as a pageant of man's history.

We may divide the career of the dog in human society

into two parts: (1) practical service, and (2) sociability. With regard to service rendered, it is probable that the dog's record would appear greater if he had not been somewhat overshadowed by larger animals like the ox and the ass. Another general remark is that the dog's most remarkable trait, that of faithfulness or willingness to submerge himself in the affairs of his master, gives a certain character to a large part of the work he has done in and about the human establishment from time immemorial. Thus the dog has done a great deal of sentinel duty at home and in the field. Older than that is his service as a hunting companion, where his sense of smell and his willingness to retrieve have been combined nicely with powers in the chase. He has even hunted men to quite an extent. Another interesting and dignified item in the dog's career is his ability to be man's lieutenant in his dealings with other domestic animals, particularly sheep. The dog as a draft animal is indispensable to some of the northern cultures.

But all these forms of service pale into insignificance compared with the dog's contribution to man's life as a social being and friend. One might almost say that the history of man's dogs proves the saying that man shall not live by bread alone. The deep devotion, attaining the intensity of a passion in many instances, between man and dog has been celebrated in song and story, but has probably never been studied carefully. The explanation of man's part in it is a revelation in social psychology. Man is a creature of very sensitive egoism, craving praise or appreciation in large measure and never getting as much from his fellows as he secretly longs for. His fellow man, in fact, knows him too well—"sees through him." His children believe in him as he would like to be believed in—then they, too, grow wise enough to discern his foibles, and they normally transfer their affections to their own mates. The dog never transfers his. Though the man knows it is lack of discernment on the dog's

part that keeps him so blindly faithful, he nevertheless rationalizes it into a belief that the dog really understands him as he is. There is no doubt that in his canine relationships man has built a social structure of great psychological value and maintained it for thousands of years, and the point to it is found in the remark of the cynic, "The more I see of some people, the better I like my dog."

Cattle.—The bovine family has provided us with several cultural patterns and picturesque backgrounds. Compare, for illustration, the different pictures called to mind—every one of them a detail in our collective social evolution—by these allusions:

(1) "the lowing herd winds slowly o'er the lea,"
(2) "like a red rag to a bull,"
(3) "roping a steer,"
(4) "The moo-cow-moo's got a tail like a rope,
And it's all ravelled out where it grows;
And it's just like feeling a piece of soap
All over the moo-cow's nose."
(5) "as strong as an ox,"
(6) "chewing the cud of fancy,"
(7) "the great eyes of cattle,"
(8) "thou shalt not muzzle the ox when he treadeth out the corn."

Nevertheless, man has never been very chummy with his cattle. The dairy culture complex has been one of the greatest facts in social evolution (see Sec. 3 of this chapter) but after all it is simply one of the ways in which man has developed a vast system of exploitation of his cattle. The other two principal ways are the use of the cow and the ox as draft animals, and the consumption of the carcass as food, the hide as leather, and almost every other part of the animal in some form of manufactured article.

There is some speculative ground for supposing that the domestication of cattle was first brought about by the hoe-culture or early sedentary agricultural tribes, who, for re-

ligious purposes, enclosed wild oxen to reserve for sacrifice to the agricultural divinities, and gradually made other use of them. The cattle of south-eastern Asia are of the carabao or water-buffalo type. Some remarkable dairy cultures have been built up with these cattle as a basis, of which the life of the Todas, in the Nilghiri hill country of southern India, is the chief example. This people's daily life, religion, and all phases of society are related in some way to their herds.

The sheep.—Aside from the fact that the evidence of the domestication of the dog is the oldest—going back to the earlier shell heap remains of the Neolithic—it is impossible to give the order, much less the exact period, when the principal domestic animals were acquired. At a later Neolithic period, characterized by the full arrival of the polished stone implements, appear traces of the goat, the sheep, the pig, and the ox. Still later comes the horse. This group forms a sort of central phalanx in the array of domestic animals characteristic of western cultures. Their origin, however, seems to have been with eastern races who migrated or whose culture was diffused into the west from Central Eurasia at the close of the Palæolithic.

It is interesting to observe how every one of the domestic animals is conspicuous for some trait which man recognizes as one of his own traits. This fact has much to do with the forming of mental and cultural behavior patterns by man. In fact, the group of domestic animals form a perfectly fascinating background against which man has drawn his own caricature and educated his own moral character for ages.

The sheep is a good illustration of this. One of the most hopelessly unintellectual creatures, it has nevertheless succeeded in imprinting itself upon human thought as a social symbol, simply because man recognizes that he too is a sheep in much of his social relationships, particularly in his propensity for going through any gate where the rest of the flock

are apparently going. Three thousand years ago was written the piece of literature probably best known now, in its translated form, of all examples of English literature—the twenty-third psalm, a socio-religious metaphor built upon the sheep-herding complex. Two thousand years ago appeared the greatest religious and social pattern-maker in history, and forthwith became known as the Good Shepherd. Today the central religious office in communities in the western world is that of the pastor, the "shepherd."

In more practical connections, the history of man's dealing with the sheep shows how social adaptation takes place, building up cultural combinations around some available concrete resource, and especially fashioning the economic life in accordance therewith. The two principal uses made of the sheep are eating its flesh, and taking its fleece for clothing, and of these the second has been by far the more important. The principal textile materials in the world's history are wool, cotton, silk, and linen. Until comparatively recent times the last three were either unknown in large culture areas, or else were relatively costly. The European world organized so much of its life around the wool culture that it has repeatedly been swung into important social changes by it. Sheep-raising, on the whole, has been an old world culture. American life, combining the homestead motive with the mechanical and industrial revolutions, has crowded the sheep out of the picture to a great extent.

The pig.—The swineherd has never been the dignified figure in the history of culture that the shepherd has been. His intelligence quotient has probably been less, since pigs require less technique in their care than sheep, and the ancient German village or later manorial estate would usually have some humble churl holding the office. We catch glimpses of the swineherd in Biblical narratives, as well as in classical, but never with any prestige attached. The character of the pig is largely responsible for this. His

reputation for being ready to eat greedily from the world's garbage can or kitchen middens, his laziness, and his fondness for lying in the mud have been reflected back in the social symbols of speech in such expressions as "Road hog." Yet the expression, "Root-hog, or die," is a testimonial to another side of his character. The peasant background—as in Ireland—of most of the story of the domesticated pig gives it a rather dingy character. In the United States, however, the pig is one of our symbols of national wealth. "Porkopolis" (Cincinnati) a hundred years ago, and Chicago with its packing plants in which efficiency and thoroughness and thrift reach such a high degree, rest in turn upon the "hog belt," and this is supported by the corn belt. A widely ramifying social structure has thus been built upon a coincidence of agricultural and zoöcultural factors. On the other hand, some societies, from very ancient times, have rejected pork from their whole culture. The reason for this is probably a matter of hygiene in warm climates, but here we have an illustration of the social function of religion in taking up and sanctioning what society desires to adopt into its *mores*.

The goat.—Symbol of undaunted and headlong attack on obstacles and of a certain ruminating dignity, the goat evokes a smile from that part of the world that does not know him well. But in reality there is nothing ludicrous about his position in cultural evolution, as an investigation of old world history reveals. Goats have occupied a position midway, in many respects, between cattle and sheep. They have been the basis of distinctive culture patterns, particularly in mountainous and rocky regions. The goat-herd (German *geiszbub*) is a more responsible village character than the swineherd, though he will never take so large a place as is held by the group that manage the cattle industry. The goat can live where cattle cannot, in upland regions, and is celebrated for a somewhat omniverous indifference in his diet, though of

course he is not a flesh-eater. This means that man can be maintained by the goat culture where he could not otherwise live so well. Thus a considerable area of the earth is acquainted with goats' milk, cheese, flesh, etc., notably Switzerland. From the social evolutionists' standpoint, as illustrating the way in which cultural factors reappear under quite new environmental circumstances, it is interesting to note that the goat shows some tendency to reappear in the megalopolitan life of today. The sight of a goat assigned to quarters on a landing part way up a tenement-house fire-escape in New York is a far cry from the Alps, yet it has certain points of similarity. The cow could not do so well in either environment.

Another illustration of metamorphosis in a cultural symbol, an illustration of the persistence of old factors in human thought, when thought itself has forgotten their origin, is afforded by the history of the modern expression "to be the goat," that is, to bear the brunt of the blame. For the history of the scapegoat carries us much farther back than Old Testament times: it leads us into ethnic religious practices, and reminds us that even the solemn conception of propitiatory sacrifice has its cycle of superstition, faith, and even flippancy.

The ass.—The ass, like the goat, has been somewhat maligned, and in particular has become a symbol of stupidity. This is undeserved, and is largely because the ass does not appear brilliant beside the more spectacular horse, which is not, for that matter, especially brainy. The onagra, or wild ass of Asia, is swifter than the horse, and very beautiful. The original species of the domesticated ass is not known, but domestication took place a very long time ago, and before the horse was known in Southwestern Asia and Egypt the ass was in use. Western social history is accompanied all the way down from ancient times by the figure of the donkey, in desert, city, or plowland, harnessed or with paniers

strapped to its back, performing a great deal of work. Meanwhile, by crossing the horse and the ass, man may be said to have invented the mule, that symbol of perverse obstinacy which nevertheless combines the strength of one parent with the wiriness of the other.

Other domestic animals.—Lack of space forbids our attempting a social portrait of the other domestic animals. Some of those omitted are as important as those discussed, especially the horse, the camel, and the domestic fowl. In the "topics for investigation" for this chapter a list of socially important animals will be found.

II. Zoöculture and Nomadism

(*a*) *Nomadism as an Accompaniment of Zoöculture*

The grasslands.—We have previously referred to the loess, a sandy, chalky loam, blown by blizzards from the glaciers of the Ice Ages, and deposited in a great zone of dust over wide and long stretches of the north temperate zone in Europe and Asia. Where this soil predominates very decidedly, its fine grain has prevented the spread of forests, and the grasslands have resulted. The grasslands have been very important in history and in social evolution. Not only have they provided a background for their own special type of society, the nomadic, but they have been a hinterland to the forest and hill and river-valley societies, always ready to debouch upon them on slight provocation. The desert regions of the world, lying farther south, have also their grasslands in the form of oases and of fertile borders to the deserts, and these southern grasslands have played the same role of migratory eruption. Great hordes of men, in time of drouth, or of over-population, have always descended on older sedentary civilizations and caused racial and social readjustment.

Pastoral life as an adaptation to grassland environment.—It is easily seen that of the animals domesticated by man, by far the larger group are herbivorous, and not only so, but they are predominantly ruminants. In other words, they are animals of the grasslands. That animals of this type should be conformable to domestic life has thus undoubtedly had a great deal to do with making the grasslands so prominent in human history.

(*b*) *Nomadism as a Culture Type*

Pastoral nomadism as an interrupted culture pattern.—Although nomadism is not necessarily pastoral in character, it has been that in its most influential periods in social change. The llanos and pampas of South America, the steppes and plateaux of Asia, Arabia, and Africa, while not always productive of a nomadic way of life, have been generally conducive to it if man tried life with domestic animals on them. For one reason, ruminating animals quickly exhaust the grass unless they are moved on, or until man establishes meadowlands or reserve forage grasslands on a smaller scale but more intensive than the wild. Nomadism is thus closely allied historically to herdsmen's life. But for that reason it is an interrupted type of life. Unlike agriculture, it could not support a dense enough population and develop enough economic surplus to pass on into urban civilization. This is not a question of "high" or "low" civilization in the sense of human worth, however. Nomads may have a "high" or at least a rather complex and interesting civilization, while agricultural peoples may be "low" in the finer phases of culture.

Pastoral nomadism reminds us how man's seeming dependence as a shepherd upon animals is really a dependence upon the vegetation, for either the lichen of the tundras, or the grasses of the plains support the animals. The buffalo

culture of the western plains Indians was in reality a culture depending on the buffalo-grass—a plant now practically extinct. Moreover, nomadic life forbids "excess baggage," which the nomad, like the modern railroad traveler, finds so costly that he adopts a simple life instead, while "on the road." For the same reason, a deeply institutionalized house and home cannot grow up under the auspices of the nomad, who in inclement weather can only huddle, instead of gathering, like the farmer, around the fires that "light up the hearths and hearts of men." At the same time, the trade life of the nomads feeds those "outposts on the infinite," those trade cities whose names have power to call men away from their homes, much as the sea calls its own—such cities as Bagdad, Damascus, Samarkand, Tashkent, Timbuktu.

Cultural contributions of nomadism.—Nomadism has certain tendencies to characteristic institutions. The patriarchate, though by no means inevitable, flourishes well, since the control of animal wealth is best accomplished by men. Warfare is natural, and tribal jealousies, for nomads are always in need of raiding the neighbors to better their circumstances, and the impingement of flocks upon each other, mobile yet generally isolated, makes for jealousies. This is true even of those shepherds who are not exactly nomads.[6] Intellectually nomads are apt to be intense and narrow because deprived of the vegetative sort of mental growth that other peoples sometimes enjoy.

(c) *Nomadism as a Persistent Social Force*

Impact of nomadism on civilization.—There is no more continuous major fact in universal history than that of the steady pressure and intermittent sorties of pastoral and nomadic tribes upon sedentary ones. No better way to

6 See "St. Ives" by Robert Louis Stevenson, chap. X.

establish this point is apparent than to recite some of the cases that illustrate it:

(1) Raids of Saharan and Sudanese pastoral tribes against African hoe-cultures.
(2) The invasions of the Hyksos or Shepherd Kings in ancient Egypt.
(3) Semitic incursions against Sumeria in the third and fourth milleniums, B.C.
(4) Raids of surrounding, more or less nomadic, tribes against the American cliff-dwellers.
(5) Tartar pressure on China, resulting in the Great Wall.
(6) Germanic invasions of the Roman Empire.
(7) Arabian (Mohammedan) invasions of Africa, Asia, Europe.
(8) Turkish invasions of Arabic culture areas.
(9) Mongol cavalry empires of the Middle Ages.

The effect of all this has been to inject a hardy element into mellow older cultures from time to time, as well as to do considerable material damage.

At present nomadism as a major type of economic life seems doomed more and more to decline, but its spirit finds other social expressions, as we shall see in the next paragraph.

Survivals of nomadism.—The nomadic life pattern, however closely related to economic and geographic circumstances, feeds upon a strain of "Wanderlust" that is part of our very natures. In many societies it has been crowded out by more stationary ways, but it is proverbial that springtime, youth, and an open road revive it perennially. This old trait, suppressed in many people's lives, but always likely to break out, has been liberated by the automobile in very striking ways. It has given many people a greater chance than their ancestors enjoyed for thousands of years, to go where the fancy seizes, and yet to be with others. The public roadside auto camp is a social document, a study in the psychology of nomadism escaping from civilization.

IV. Social Values of Zoöculture

(*a*) *Effects on Social Patterns*

The dairy complex in human history.—Anyone can see that the dairy industry is of first rate importance, the world over. There is, for one thing, the existence of whole populations that depend very heavily for food upon milk, cheese, butter, etc. Cheese is one of the world's great foods, being a substitute for meat, the great protcid or muscle-building food to which the race long ago turned so heartily. Then there is the still greater fact of the dependence of babies and little children upon the smooth operation of the dairy business in the thousands of cities and towns of civilization. But there are more subtle and far-reaching considerations. One of these is the influence of the use of animal milk upon our family and social organization. To see this, we must begin with the point that animals in general have a mating and reproductive season, in which the principal business of the species is the production and initial care of the young. It is a foregone conclusion that at some time in his biological past man or his ancestors had a mating season; in fact there are cultural and natural fragments of evidence still remaining that this was true.[7] In any case, it is not true now. Mankind maintains a continuous adjustment of the reproductive functions, without regard to seasons. And a little reflection shows that this is better. A general shift of emphasis by society at large, at some special time annually, to the production of offspring, would disrupt the economic machinery very badly. It does just that with the animals and birds. The herd, flock, or what not—the normal organization for the

7 It is impossible to know how much weight to give to the traditional association of springtime with lovemaking. Man has undoubtedly gone on suggesting the connection to himself until he has built up a strong assumption in its favor. But there is probably a natural basis for it. The time of marriage, of course, with man, is determined by economic or other factors, and has no necessary relation to the time of falling in love. The whole subject illustrates how man covers over natural with acquired conduct-patterns.

food-quest—breaks up more or less into mating pairs. Man's much more delicate economic, political, educational, and other machinery needs to be carried along on an even keel. Besides all this, it is apparent that a mating season would not help man in the process of refining his sexual life and making it, as he has, a continual but not an exclusive phenomenon. Now, how did man become non-seasonal? The answer is not simple, but includes among many factors the progress in diet, whereby man was relieved from the tyranny of alternating plenty and scarcity, and so could give his attention to all of his interests, including sex, in more evenly distributed fashion. And it also includes the shortened period of suckling for the human infant, for this has decreased the period of time when woman is withdrawn from the sexual life, and thus the seasonal character of the latter has been altered. But it is the reliance upon animal milk that has made this change possible. The dairy herd is a sort of symbol of man's transference of ways of living from natural to cultural. Well may the child say, in Stevenson's words:

> The friendly cow, so red and white,
> I love with all my heart;
> She gives me cream with all her might
> To eat with apple tart.[8]

Animal husbandry.—Besides the dairy complex, animal husbandry includes a great many other features which have been of social importance over a long period. Animal husbandry is really an adaptation of the domestic animal culture to sedentary life, as an accompaniment to agriculture. Domestic animals in rural life have been natural centers of social activity, and in urban life they operated for a long time to keep town and country from becoming too widely separated in common life. Another important side of animal

[8] "Child's Garden of Verse."

husbandry has been the economic and dietetic phase. The meat-eating complex, very thoroughly ingrained in western life, has been part and parcel of the mixture of agriculture and zoöculture under which westerners have lived. Finally, animals as sources of raw materials for industry constitute a gigantic part of our economic life, and animal husbandry is the sustaining culture habit beneath it.

The picturesque side of zoöculture.—The beginning of the dairy complex may not have been connected with the feeding of infants. It may be that the milk of the captured wild cattle, sacrificed for religious reasons, was also offered to the deities, and later used by priests, kings, and finally by common people. If so, this was an example of the picturesque side of zoöculture. Now the picturesque is very important in the forming of loyalties and the maintaining of social organizations. If we let the mind wander rapidly over the world we shall encounter zoöcultural scenes that leave us little room for wonder that nations and regional groups love their old homes passionately and carry their loyalties to the ends of the earth. Some of the pictures that come to mind are these:

1. The Lapland reindeer and sledge.
2. The saeter establishments of the Norwegian uplands.
3. The yodeling of Swiss herdsmen across a valley.
4. The camel-caravan at an oasis.
5. The round-up of the western cattle-ranch.
6. The goat-boy and the goose-girl.
7. The dog caring for a flock of sheep.
8. The animals in their stalls, crunching contentedly, while a storm rages outside in winter.

Influence of zoöculture upon modern economic types.—It is worthy of our careful notice that the introduction of domestic animals, especially cattle, into the agricultural ways of the world brought vastly farther-reaching results than merely the change of farming methods. It is in a word the

development of the class of free laborers as a dominant type that makes the union of agriculture and zoöculture so momentous for the world. The argument on this point runs something like this: A civilization, if it is to be carried on continuously, must draw its cultural life from as near its own center of gravity as possible. In other words, it must not concentrate its distinctive culture traits in its upper social stratum and degrade its masses to the rank of peonage. A free laboring class is therefore a great asset to a civilization, and from it the "upper" or governing class can be recruited. Such is the origin of the great democratic aristocracy of England. The most pronounced strain of all the cultural units entering into English life is the Saxon way of life—that is, the way of an agricultural people of peasant origins, independent farmers, freemen on the soil, yeomen. The great English Parliament is simply a selected body of the best or wisest or most leisurely persons of the land, but resting upon the habits of this law-abiding people who desire chiefly to be let alone on their own estates. Even the House of Lords is a democratic aristocracy, lately numbering among its members a peer who was the grandson of a famous maker of ribbed stockings, the son of a small farmer. All this sounds more like history than social evolution, but it is both. The free peasantry of the world is one of the historic sources of the free labor of the world. And the free peasantry, though not everywhere so conspicuous as in England, is a factor in all Western civilization, emerging now more and now less clearly. In it is represented a social step forward from the older agricultural life of "matriarchal" times. The free peasantry is a combination of cattle-raising with agriculture, and means the performance of the labor of the homestead by the man and wife together instead of by the woman alone as in primitive agriculture. When we see pictures of European peasant women at work in the fields with the men, as in the famous picture "The Angelus," we

ought not to contrast their lot unfavorably with some of the more fortunate situations in American farm life, but favorably as compared with the earlier agricultural life of the race. An hereditary plowing peasantry, engaged in live-stock agriculture, has brought forth such social values as inhere in the acquired traits of economy, industry, and a sense of permanence in property holding. "It was the creation of a true peasant class that gave Europe and the Indo-Germans their first start in the world. The formation of that class . . . probably dates back to the later Stone Age."

(*b*) *Effects on Psychic Life*

Animals in child nurture.—All animals are interesting to children, and some sort of companionship with them is needful. The child comes easily to know all the animals of which he has heard, for he accepts them with sincerity and simplicity. In turn, animals naturally get along well with babies and small children. Few things are more touching than the devotion of a big dog to a small child, or the willingness of a cat to be mauled about by a baby, without showing resentment. In the long history of civilization, we must count this as one of the steady cultural influences. Friendship, fair play, consideration for others, and many other things, have been the more easily taught because of our elementary relations with animals.

Adult companionship with animals.—In the case of adults, companionship with animals has been more in the nature of a relaxation from the unaccustomed heights to which man drives himself in his daily rounds of human intercourse. The complexity of social patterns is a nervous strain from which domestic animals have the power to give us rest—hence the famous words of Whitman:

I think I could turn and live with animals, they are so placid and self-contain'd,

I stand and look at them long and long.
They do not sweat and whine about their condition,
They do not lie awake in the dark and weep for their sins,
They do not make me sick discussing their duty to God,
Not one is dissatisfied, not one is demented with the mania of owning things,
Not one kneels to another, nor to his kind that lived thousands of years ago,
Not one is respectable or unhappy over the whole earth.
So they show their relations to me and I accept them,
They bring me tokens of myself, they evince them plainly in their possession.
I wonder where they get those tokens,
Did I pass that way huge times ago and negligently drop them?

CHAPTER X

MAN PLANTS A GARDEN

Over the fields, the quiet fields of cattle,
Grave fields of home, exhaling a mist-like incense,
Forgiving fields that suffer the keen ploughshare.
How gratefully, over these fields, night gathers!
And over the lone spaces of the spirit,
The plains of mystery and pale adventure,
The fields, the sorrowful acres of man's striving,
How tenderly over these fields night falls.

—L. B. Lyon.

I. Origins of Agriculture

(*a*) *Agriculture as an Outgrowth of the Food-Quest*

The collecting state: agriculture in the germ.—That agriculture is the way by which most of mankind find a living, taking it all in all, is clear enough. It is a way of getting food, and it is a guarantee of varied and balanced food supply. Variation in diet is one of the half dozen greatest steps the race has taken, comparable to the discovery of fire and the first tools. It does not necessarily pertain to the vegetable realm, still less the tillage of fields, but it leads there.

Man was impelled toward a varied diet by more than one force. Occasional famine forced him to take up new ways. Imitation of other animals was the outcome of his keen observation of them. And his native inquisitiveness drove him along the same line. This earliest state of mere roving about collecting or gathering whatever was to be found—

nuts, berries, roots, sap, grains, greens, etc.—was the first state in the process of agriculture.

Steps in agriculture.—The steps through which agriculture passed after aimless collecting or Natural Exploitation are as follows:

I. Unconscious modification or improvement.
   1. By early harvesting, resulting in the improvement of the seed remaining on the stalk.
   2. Replanting and gradual turning of the soil, as in certain ceremonies.

II. Conscious domestication; *e.g.*, of maize, in Mexico; of wild rice, in the Upper Great Lakes; of millet, in neolithic Western Asia; of the potato, sweet potato, etc.

III. Conscious selection and conservation of best seed.

IV. Scientific experiment.

(*b*) *Agriculture under Woman's Control*

Agriculture as a cultural stimulus.—Under woman's control, the more ambitious acreages of agriculture were not attempted, but centered around the house, and supplemented food preparation. Many simple household arts were called into being or were elaborated by this reinforcement of materials and interest by casual agriculture. Cooking was one of these. The baking of bread, for instance, widely known as it is, is nevertheless a part of man's "newer" ways. And in the long experimentation in methods, what chapters of development! Somewhere in the casual messes of the ancient kitchen-hearth, yeast made its appearance, and leavened bread succeeded unleavened. But even then, an almost endless variety of bread, biscuits, cakes, buns, cookies, and other concoctions, were still to be discovered. The motto of a certain modern baking establishment might apply to every kitchen in the world: "A hundred thousand housewives showed us how to bake this bread."

Hoe culture.—When we get away from the direct influence of the house or camp in agriculture, named by us, in the last paragraph, casual agriculture, and when we ask ourselves what great phases agriculture passed through in its larger social ministration, we at once encounter "hoe-culture." The best comprehension of this simple field-culture is to remember exactly what the hoe is—its limitations, its hacking, laborious, back-bending way of use. In fact, up to a certain level of accomplishment, the hoe is the inclusive agricultural instrument even to-day, and can be used to break sod, plow furrows, plant and cultivate. It is because we wish to introduce refinements of method or enlargements of scale, that we have increased the variety and size of our tools. The hoe is sufficient for most of what is done in hoe-culture. It is a form of the "pick," a tool that appears, like agriculture itself, in neolithic times, and which is connected with early mining (flint working), as well as with agriculture. The hoe in its early form was made of deer horn or from a branch of a tree that had a sharp angle or a hook left on the branch where it was torn from the tree. This fang-shaped tool became a plow, as well as a hoe, and the ancient Sumerian and Akkadian pictures show plows shaped like this being dragged by oxen. But for the hoe-culture people the plow did not develop, because they did not develop the use of domestic animals. The hoe eventually developed into an iron head—among the Africans, who work iron—and a wooden handle. The iron head is used as money in the Sudan, so important and standardized as a value has it become.

Hoe culture is deficient in deep plowing, in animal manure, and in degree of sedentary organization. The last item means that there was resort to burning-over of ground instead of fertilizing with manure, and frequent moves of a short distance to begin over again. Hoe culture peoples have not usually made much advance in choice of grains. Their village life is nearer to the status of horde-family grouping,

and their religious and mental life is rather low. They are often the cultural inferiors of the pastoralists who raid them, though they are on the lower rungs of a ladder that ascends farther than does the pastoral series. As Febvre says, "There is a moral precariousness about the sedentary life in its early stages."

II. Development of Agriculture

(*a*) *Man's Conversion to Agriculture*

Why the man took over agriculture.—If we could go back and look in at human populations at the critical moment in the evolution of each district or large culture area where agriculture and zoöculture developed—that moment, in other words, when the men gave over their hunting ways and took charge of the agriculture which the women had originated, we should probably find the following motives operative:

(*a*) Man was attracted by the steadiness of food store which agriculture insured.
(*b*) He found that animal culture and plant culture went well together.
(*c*) He had the necessary strength to manage an agricultural life in which animals were used.
(*d*) As warrior, he had a means of utilizing slave-captives in agriculture.

Of course there never was any such "moment" when this happened all at once. On the contrary, we find many transitional types of agricultural life of which we can hardly say whether they are moving toward agriculture from hunting or from zoöculture, or vice versa.

History of agriculture up to modern times.—The history of agriculture up to the revolution in method and outlook that occurred at the close of the Middle Ages, resolves itself into the following phases, which are only in part a chronological series:

(*a*) The primitive era of gathering, or hand-to-mouth exploitation, and of tentative planting.

(*b*) The very early period when women conducted what might almost be called a dooryard agriculture.

(*c*) The hoe-culture stage, carried on by unstable settled tribes.

(*d*) The development of the "garden culture," most notable in China and Japan. In this type we see a development out of hoe-culture into intensive agriculture without much use of animals. Human instead of animal manure is used, and great expenditure of time, energy, and manual skill takes the place of large acreage and better tools. Irrigation is an accompaniment of garden agriculture, and is itself a great intellectual stimulus. In Indonesia, Malaysia, and elsewhere it sometimes takes the form of reservoirs in hillside terrace agriculture. Usually, however, it is done by canalization. Then there is a western type of garden or intensive agriculture, centering around metropolitan markets in the industrial areas, and concerned mostly with vegetables, in which animal labor is not so applicable as in field culture. The same thing is true of orcharding and viticulture.

(*e*) The development of agriculture mixed with zoöculture. This means chiefly the use of animal labor. It implies deeper plowing, larger acreage, use of manure, transportation to markets. It is sometimes difficult to say whether the agriculture exists for the animals, as when hay crops prevail, or animals for the agriculture, but the latter is the normal form, and it is this that leads to the wide spread and dominant farm life of the western world.

(*b*) *The Agricultural Revolution*

Changes in agricultural methods.—The Agricultural Revolution is one of the events, or rather, series of events, or better still, continuing processes, which serve as outstanding illustrations of outward change in social forms and the accompaniment of cultural change in other phases of society. Let us take four separate times of change and see how this agricultural evolution or revolution affected society in general.

1. *Before the Industrial Revolution.*—Here we see the

gradual but accelerated decay of the manorial system and the introduction of freeholding; the beginning of scientific methods of tillage and breeding, particularly the end of the three-field system.

II. *The Agricultural Revolution as a phase of the Industrial Revolution.*—This was a matter of introducing labor-saving machinery on farms. But more than that, there were indirect phases of it; for example, the shift of population from some rural regions to urban centers.

III. *As a phase of the Scientific Revolution.*—This has been going on all through the agricultural revolution, but especially after the Civil War in the United States, a new impetus was given to scientific and experimental work in agriculture. The work of scientists and governments together with gentlemen farmers and agricultural societies, has been very fruitful.

IV. *As a phase of the Capitalistic Movement.*—This meant not only the larger scale of farming, and the development of coöperative and agricultural credit institutions, but a recent movement toward the industrializing of farming, with the possible disappearance of the rural homestead.

Social changes accompanying the agricultural revolution.—It is hard to place any limits on the social changes brought about by the use of machinery, and this is as true in agriculture as anywhere. Sometimes the effects claimed seem a little far-fetched, yet there is always something to suggest them. Thus it is claimed by one authority that the more widespread use of agricultural machinery in America, with the consequent relief from early manual labor in the form of carrying burdens on the back or head or in wheelbarrows, accounts for the increase in height of Americans over the Europeans from whom they came.[1] But without making any such claims, we can be assured of these great changes in social life accompanying the agricultural revolution: (1) the abolition of serfdom, (2) the breakdown of the manorial

[1] Pittard, "Race and History," p. 14.

system, with increase of peasant-proprietorship on the continent of Europe, and the opposite effect in England, where the great landlord and the enclosure system increased.

III. Agriculture as a Basic Social Pattern

The pageant of seasons.—The three great food-quest patterns, hunting, herding, and agriculture, have different ways of response to the seasonal cycle. In the first, which is widely distributed in accordance with the wide distribution of animal life over the earth, there is some adaptation to winter, but it is not very definite. The animals that inhabit a northerly latitude throughout the year are rendered more difficult to hunt by the rigors of the winter, and life for the hunter is more restricted and carried on nearer to the marginal line of existence than in the summer. A herdsman's life is not usually possible in a region of severe winters: he must oscillate with the ebb and flow of vegetation, since the animals on which he depends must do so. But when we come to the stage of field-culture we tap new cultural possibilities. Though the vegetation is seasonal, man is stable, because he can carry the food-crop through the winter. Man thus turns one of the important corners of his history, and new things swing into view.

For one thing, he makes the acquaintance of the great four seasons. More than that, he becomes a participant in them with Nature. Springtime now means not only the old primal joy of life, but the precious opportunity to sow seed. For this reason we can trace back an unbroken succession of field-fertility rites from the modern peasant to the early tribal forms of agriculture. In the older ones the principle of sympathetic magic accounts for the performance of sexual rites and acts to insure fruitfulness in the fields to which man has wedded himself. Survivals of this method are seen in various European country-folk festivities of springtime, in

which the sex element has been refined but is still recognizable if the clue is known. Then there is the new conception of summer that accompanied the agricultural complex. It is set forth for us in that very wonderful collection of old culture-pattern inheritances known as Æsop's Fables, in the story of the grasshopper that danced all summer and then came to grief in winter, while the ant prepared industriously for the time to come. There is something almost pathetic in the thought of man giving up his summers to toil for thousands of years, yet from it have come some of our most beautiful remembrances—for example, the hay-fields—and some of our most expressive sayings, such as "a hard row to hoe." Man did his work in summer in order that he might live well in winter, and his reward was well worth the bargain. It was a hard fight, but man has so far won it that he is now returning and claiming his summers again: witness the summer camps and the expectation of the average man that he will have a considerable vacation each summer. As to autumn, we have the varied idea of the great in-gathering. Few words mean more to mankind than "harvest," nor can one surpass the pictorial quality and social suggestion of the words "vineyard," "orchard," "sheaves," "barns," "bins," and "granaries." A social and economic struggle, a grapple with elemental hunger, lies back of every one of those good, gray, homespun words.

The economic surplus.—It is strange but true that the winter is the most significant thing about the agricultural life-way. In the first place, there is the necessity of keeping the homestead going. It is only comparatively recently that it has been possible to carry great numbers of cattle over the winter, inasmuch as forage crops and vegetables were much more limited in medieval times than now. But today there is such large-scale storage that the routine of winter, incidental to consuming it, is by no means inconsiderable. With his animal stock thus provided for, as a basis, the agriculturist

carries on quite a number of other pursuits, such as woodcutting, and markets a good deal of his main crops. This in turn helps make the town a place of commercial and social life even in the winter. Finally, the great city, which in the last analysis rests upon the same original basis of an agriculturally produced food surplus, expands in the winter into a bewildering burst of social color and activity. The season of opera, symphony concerts, lecture courses, schools, church life of all sorts, clubs and social life, conventions, shopping and bargain attractions, and much more, are possible because the farmer sowed, reaped, and gathered into barns.[2] Moreover, the agricultural life is responsible for greater populations, and hence for more intense social interplay. Sparse populations make for loose connection between land and people, and lower types of social organization. Sedentary agriculture, on the other hand, brings industrialism and commerce.[3] For all these reasons we see that agriculture is the great modern basic social pattern.

Slavery and agriculture.—Although agriculture did not necessarily follow pastoral life, it seems clear that the interrelations of these two ways of living had much to do with the development of slavery, which is one of the greatest facts of culture history. The way in which it came about was this: Pastoral peoples need relatively large areas for self support. When they had to seek more land by reason of population increase, they might fight with other pastoral people, but if hoeculture tribes lived near, they found them easier prey. The victors might take some of the agriculturists home with them as prisoners and put them to work as slaves, or they might settle as overlords on the agricultural territory and enslave

2 The farmer used to reap some cultural profit in his home in the winter. See Whittier's "Snowbound" for the finest description of how this was done. But as culture centered more in the city, the farmer was left socially stranded. It is one of the major social problems today to keep him happily on the land, an economically free man, yet a participant in the best cultural offerings of his group. See also, for an older picture of culture maintenance in winter, in manorial times, Shakespeare's song, "When Icicles Hang on the Wall."

3 Semple, "Influences of Geographic Environment," p. 58.

the population where it was. In any case slavery developed under agricultural auspices, and soon came to include war prisoners, weaker individuals, criminals, etc. Thus hoe culture became really agriculture, while slavery became more common. Whatever cultural retardation slavery offered in later times, it was a great discipline and a means by which in earlier times humanity learned agriculture and thus increased its food supply and gathered a surplus on which to base an extended culture.

(*b*) *Agriculture as a Social Development*

Position of woman as affected by agriculture.—The social status of woman in connection with agriculture has been subject to great change from time to time, as agriculture itself has entered one stage or another. Three great periods may be discerned. First, there was the very early state of agriculture in which woman had a relative monopoly in agricultural practice, and in the knowledge that went with it. This state of things is indicated in our chapter on Marriage. Second, there was a very long stage of agriculture in which woman lost her social advantage. This period began before historic times and lasted until the Agricultural Revolution and beyond. In some situations, woman lost standing not only relatively but actually. Under "hoe culture" she was likely to be at a premium as a laborer. In historic Europe she has remained for centuries an agricultural field laborer. Third, during modern times her social status has tended to rise, particularly where machinery relieves the members of the farming community of drudgery.

Other social adjustments due to agriculture.—Agriculture affected social ways very widely. It was the making over of many large societies from hunters to tillers. Natural selection was turned to the development of the yeoman rather than the nimrod type. The operation of the selective factor is not

hard to understand. As gardening became field-tillage by passing from the house-centered control of women to the wider ranging life of the men, advantage came to the tribes that showed industry, steadiness, and prudence. The roughness of life was changed to a less aggressive way, and there was more respect for the sick, aged or infirm, because they could be taken care of better. Occasionally some type seems to have been thrown off in a sort of fixation, a perpetual revolt or refusal to lose the old wild ways, as in the appealingly romantic case of the gipsies. Some very aggressive types faded out in mutual combat. Much of our so-called "crime" is simply the individual's retarded development, progress in social recapitulation stopping before the fixed, neighborly, and coöperative ways of the agricultural peoples have been acquired. Certain opportunities exist today for this more primitive type to run wild in an urban culture, which is even harder for them to accept, but which offers them facility of motion and escape from personal responsibility. The coöperative ways of an agriculturally founded society are partly to be analyzed as ways by which the self-seeking "hunter" may express himself and yet remain social. Our whole system of games and sports is partly an accomplishment of that aim. "But individual expressions of the primitive jealousy and grudging are not extinguished, and on the skirts of society prowl the more originally pack-minded and maladjusted, watching and interfering."

(c) *Extensiveness of the Agricultural Life*

Western social patterns in agricultural life.—There are two chief modes of agricultural life in the world, after the early hoe-cultures of savage peoples have been left behind. One is the individual farmer, the yeoman, the homesteader, the freeholder, the rancher, the planter. He belongs to the new world preëminently, though his origins are English. The

more or less isolated farm-house is the symbol of this man's life. In America the chance for large holdings of fertile land have made this type prevalent, and the red barn and windmill and silo of the farmer of the Middle West have come to have a fullness of significance rather quickly in our history. Back of this prairie land farmer stretches a century or so of old Middle Atlantic and New England farm life, with a wealth of social history clinging to it. Perhaps no better short-cut to an appreciation of this cherished old rural life can be found than the pictorial description contained in the poem "The Old Oaken Bucket," with its orchard, meadow, wildwood, field, pond, cottage, dairy house, and well. Much of the spirit of this central agricultural pattern reappears between the Alleghenies and the Mississippi, north of the Ohio. West of the states bordering the Mississippi various regional farm types appear, none of which have gone through the aging process and all of which carry suggestions of the freer life of the now vanished cattle ranges: the plains farms of the Dakotas and the western extension of the corn belt; the Southwest, glossed over with a suggestion of the Spanish; the mountain plateau dry-farming region; and the semi-exotic agriculture, floriculture, and viticulture of the Pacific coast. South of the Ohio, history gives us another old type of agriculture, the plantation form, whose life and literature, somewhat caricatured, are familiar to everyone. Both the plantation type and the old-fashioned northern type of rural life carry straight back to the colonial life of North America. Colonial life in Latin America, on the other hand, eventuated in the hacienda type of agricultural life, underlying which was a good deal of semi-civilized small land-holding by Indians of the advanced Mexican type. It should be remembered that not many years ago almost all the people of the western hemisphere (and even today the majority of them), lived in rather close connection with some form of these agricultural life-ways. The rapid urbanization of a large part

of the population has become a great social problem. The combined agricultural and industrial revolutions are responsible for this problem, and it threatens the recession of the great western homestead pattern of life in the country. This is the real farm problem of the Middle West, of which we hear so much in American history for the last sixty years.

Old world agriculture patterns.—Let us now see how the dominance of agriculture has affected life-ways in the eastern hemisphere. The first thing to get clearly in mind is that we are in the presence of older social patterns, and the great central one is not individualistic, but is the village community. If we were to say nothing at all of Western Europe, we should still have the right to say that the greater part of the world's population was related to the old village life of agricultural groups, living close together and tilling the land from the village as a social center. In China some four hundred millions of villagers, and in India three hundred million more are found. And over the agricultural stretches of Russia we find that fascinating old form, the mir or village communal agricultural unit. In Western Europe the peasantry largely live in the villages surrounded by the farm land to which they go forth and return again each day. Back of this is the old manorial life, in which the castle or manor house was the most picturesque feature, but in which the village played a populous part. Behind the manor and the feudal agricultural life we can journey in either of two ways. One leads back to the ancient German village, with its "high street," its houses and separate buildings on each side, its common land beyond where might be found some of the characters familiar to folk lore, such as the goose-girl and the swineherd. The other direction carries back to the Roman villa, and thence to the village life of ancient Rome and Greece. In fine, there is no danger of over-emphasizing the importance of the agricultural patterns of life in social evolution, for the countryman has always been present in the historic life of the race.

CHAPTER XI

MAN ORGANIZES THE GREAT HOUSEHOLD

It is evident that a household is a mean between the individual and the city or kingdom, since just as the individual is part of the household, so is the household part of the city or kingdom.

—THOMAS AQUINAS.

I. THE GENETIC APPROACH TO ECONOMICS

(*a*) *Types of Economic Life*

Significance of economics.—The household is the family organized about the house with the object of efficiently acquiring, distributing, and using the material things needed in the struggle for life and happiness. The word household suggests such related words as furniture, cupboards, shelves, closets, store-rooms, attics, supplies, fuel, utensils, clothes—in short, objects desirable, but of sufficient difficulty in getting to necessitate some routine and arrangement for conserving them. These things are the beginning of wealth. The household, if it has arrived at any pronounced stage of development, will have "premises" around it. To the Greek the household meant this larger sort of establishment—house, land, family, slaves, property—something comparable to our "homestead" or "plantation" or the Mexican "hacienda"—and the word economics is a borrowing from the Greek "oikonomia." It is the science of the household, or of wealth-arrangements, the science of man's patterns of conduct when dealing with desirable things in the concrete environment. And since the

concept of family has been enlarged so that we talk, at least, of a brotherhood of man, it is not inappropriate to give the household name to the whole human struggle for a livelihood. Economics, then, is that side of social science which deals with man's attempt to set up and manage the Great Household of human affairs.

Economic "stages."—Economists have often set forth a series of so-called stages of economic development, and these are so widely referred to that it seems necessary to mention them briefly here, but it must be remembered that there is no necessary objective or historical validity to them. That is, no social group can be predicated, *a priori*, as having followed this order of development, for evolution is not the following of predetermined logical schemes, but adjustment to environment, and the adjustment often has to cut the corners of the theoretical scheme. In particular, the second great state, the pastoral, is not always evident, for agricultural life may dominate instead. It would be better to call these divisions, instead of stages, *types*. With this understanding, the student may profitably study them, as follows:[1]

I. *Direct appropriation.*—Sometimes referred to as the collecting stage, since finding things rather than making them was the procedure. This type or stage can be divided into various steps, though to no great profit. For instance, there are the *mere* or accidental collectors, and then those who plan and follow a developed technique of hunting, and then those who, though chiefly hunters, combine a little agriculture with the hunting. Private property in land does not go with the hunting type of economic life; though it has sometimes been found even among hunting tribes. Division of labor, though occurring in certain phases of life, has not gone far.

1 After Ely, "Outlines of Economics." It must also be remembered that there are many other ways of dividing human progress into periods or stages, depending upon what activity the attention is centered upon—political life, tool-making, or what not. Various schemes are mentioned here and there in our present book.

II. *Pastoral.*—Seasonal migration [2] and intra-seasonal wandering for pasturage for flocks is the keynote of pastoral life. The negative side of this fact of flock-basis for wealth is, of course, absence of cities. Ownership of land is still a minor necessity, though it has appeared. The whole tribe is likely to "hold the range," [3] i.e., acquire tutelage over a not very definite territory. Commerce is not highly developed.

III. *Agricultural.*—Besides the raising of vegetable food, this stage is characterized by private property in land. Possession of great flocks changes to animal husbandry as a complement to agriculture and for industrial purposes. Permanent abodes and city life, slavery, trade (with barter still common) are features of this type of life, and the manor is the center of economic activity.

IV. *Handicraft.*—This type is an outgrowth or continuation of the agricultural, and agriculture still continues to be the dominant way of life. But the dominant way is not always the significant one. In the handicraft stage, the town becomes the center of economic activity. Merchant and craft guilds, changing to the domestic system, in manufacturing, and the mercantile system of socially controlled trade, characterized this period, in European history.

V. *Industrial.*—The type of economic life dominated by the Industrial Revolution, described in Chapter VI.

Other schemes of economic development.—A different way to approach the task of laying down the stages of economic development is to consider only the methods by which food —the basic economic need—is obtained. In that case, the agricultural state must be the concluding one (unless we take account of a possible future period of synthetic food production by chemical processes). The following [4] is an example of such a system:

2 For a very striking portrayal of seasonal migration, see the account of the Baktyari tribe, in "Grass" by Merian C. Cooper, Putnam's, 1925.

3 See Genesis 12:1–13:12.

4 After Steinmetz. From Febvre, "A Geographical Introduction to History," p. 242.

I. The Gleaners: living on plant produce and small animals met with by the way, but not using tools or weapons.
II. Hunters.
    1. Hunters pure and simple.
    2. Hunters who also fish.
    3. Hunters who also raise cattle.
    4. Hunters who carry on some agriculture.
III. Fishers (same sub-heads).
IV. Agricultural nomads or hunter-agriculturists.
V. Settled agriculturists of a lower grade who also hunt or tend cattle.
VI. Superior farmers who have complex implements and methods.
VII. Nomad shepherds.

Still another attempt at classification is the following,[5] in which there is recognition of the mingling of psychological factors with the economic:

I. The organic economy (exclusively animal).
II. The instinctive economy (animal and primordial human).
III. The apprehensive or ceremonial economy.
    1. Luck.
    2. Magic.
    3. Sacrifice.
IV. The ascertaining or business economy.
    1. Slave labor.
    2. Trade.
    3. Capitalism.

The virtue of this scheme itself shows the fault underlying most such attempts. Just as there is no "economic man," but rather men who are partly economic in their interests and partly otherwise, so there is no evolution of economics without much intermingling of the psychic, the domestic, the political, the religious, and other factors.

Some valid points in economic classification.—After making due allowance for the theoretical quality of economic

5 Franklin H. Giddings, "Studies in the Theory of Human Society," chap. III.

schemes, there are some points that must be seriously considered. First, it is clear that there are at least two historic ways of economic organization of food-getting activities, one before zoöculture and agriculture, and one after either or both had appeared. The first we may call the hunting stage, but we should make the word include fishing. Peoples exclusively hunters are rare, though they may have been more frequent in remote ages. They form today a clearly differentiated type, suggesting that hunting is perhaps a specialization, rather than the primitive way of life, which was probably an opportunist life, with more than one kind of behavior-pattern. Likewise, fishing may be an exclusive occupation, but probably was not so in many cases in primitive life. Sometimes hunting and fishing alternate. Or sometimes the men hunt and the women fish.

In the next place, we may say that after agriculture and zoöculture began, life economically assumed various combinations of the two, but that no fixed order of development can be discerned. If nomadic life was followed agriculture was of course almost lacking and animal culture was dominant. If sedentary life was the order of things, zoöculture took the form of animal husbandry, alongside of agriculture.

When we come to agriculture as a dominant mode of economic organization, we find three great stages, hoe-culture, garden culture, plow-culture. The first implies the use of hand tools over which the worker must bend. Hoe-culture peoples are the carriers-on of a precarious form of the sedentary life. They do not represent advance, necessarily, but may be in a back-eddy of progress, scratching a life from the soil after having partly relinquished their hunting ways, but without the energy to become nomads, though hoe-culture villages may be transplanted, seeking new soil.

Garden culture is the type of agriculture used by dense populations—e.g., Chinese, Japanese, Belgians, et al.—in which manual dexterity plays a large part, and cultivation is in-

tense, while plow-culture is the more mechanically inclined type that western civilization knows best, using animal and mechanical labor and science.

(b) *Inter-Relations of Primitive Production and Other Aspects of Life*

Importance of production in primitive life.—The conventional division of economic activities is into production, exchange, distribution, and consumption. The relative importance of these is, for primitive life, in the order named. Consumption of wealth takes care of itself, since production has not become sufficiently developed to occasion over-production. Distribution of wealth shows some inequalities, but they are generally traceable to personal differences in skill and character, rather than to the mal-functioning of the economic system. Exchange is casual and simple: the middle-man and all the complex machinery of the modern commercial world are lacking. Hence primitive man is not aware of great problems in these fields. But production, that is, sustenance or self-maintenance, is a tremendous problem. The savage has little margin of safety. To the extent to which he is a hunter, he is handicapped in the taking of hostages from time in the form of accumulated food, for he cannot preserve it long. He is subject to the frequent cycles of game scarcity and climatic variance. His weapons are not such as to enable him to kill game wholesale, nor would it be expedient for him to do so. He must, therefore, live continually in the presence of his production problem, and his surplus energy, economically speaking, does not go to other lines of activity. Even where he has an easy time, as in the tropics, his economic life is chiefly that of production, for it requires the various stimuli of the all-round social progress to awaken great interest in thrift, exchange, and other high types of economy.

The pressure toward organization.—The more things

people found they could produce, the more differentiated life became, and the more differentiated, the more organized it had to be. It is, therefore, the increased productive life of man that has brought about the remarkable economic organization of the world. More things, more places to put them, more ways of treating them, more technical tricks to be learned—all this began when cumulative production took place. The famous characterization by Herbert Spencer of evolution as involving progress from unorganized homogeneity to organized heterogeneity, is well illustrated by economic evolution. This pressure toward organization in the task of wresting a livelihood from the earth has brought about a significant change in personal types, which we may sum up under the career of that interesting figure, the Jack-at-all-trades. In the beginning of wealth production, everyone was a potential Jack-at-all-trades;[6] he could probably make anything that anyone else could, the whole repertory of articles that could be made by the group being a very modest list. But it was not till a good deal of specialization had occurred—in historic times, in fact—that the Jack-at-all-trades became remarkable enough to receive that name. He held his own in society for a good many centuries, being a rather enviable and admirable fellow, but slowly he came under the shadow of defeat. He could not make his energy and time go around to include the multifarious crafts and wealth-seeking of his fellows, and he became known by a proverb of opprobrium: "Jack of all trades and master of none." Nowadays he is all but extinct in highly industrial societies, though he reappears in the new type of man who seems to know all machines at a glance. The all-round man has had a hard time, and is fighting to maintain his happy existence. The race for mass production in economics makes it ever harder for him.

[6] Though not actually one in all cases. In the degree in which trade existed among early societies, specialization existed also. In fact, as soon as there was any institutional organization, such as religious, political, or domestic, there was division of labor.

Relations between economic and family interests.—The family's first interest is reproductive. But reproduction includes the nurture as well as the birth of children; hence the economic interest in its primal aspect of food-getting, is early entwined with the family life. The greatest thing that ever happened in this line of development was without doubt the attracting of the man to the woman-centered household. Its comfort and dependability and the prospect of sharing what socio-economic charms the woman can throw about the household made a domestic being of him by slow degrees. At the same time that he came into the house, however, woman lost some of the dominance that she had enjoyed within her own sphere during the earlier period. Until such comparatively recent times as have seen the idea of partnership marriage carried into effect, woman lost somewhat in social authority. Her social history is thus an economic cycle: first she was the dominant food-bringer within the home; then man displaced her in that capacity and incidentally in social and domestic ways; finally she resumes, tentatively as yet, an equal position.

II. Social Significance of Property

(*a*) *Psychological and Social Roots of the Property Idea*

Personality and property.—Property signifies control over anything in some degree of permanence and in such wise as to exclude others from control. It is one of our most cherished ideas, and we think it is a perfectly natural one. As a matter of fact, it seems that most savages conceive readily the idea of ownership of things. We sedulously teach it to children, but it takes some effort. It is, of course, clear that until personalities and inanimate objects can be assigned to each other in some workable and permanent fashion, there will be little of thrift, foresight, and continuity in the world,

and the easy give and take of very low grade cultures will continue. Accumulation, conservation, and the inhibition from immediate use or disposal of objects, are necessary before culture can go far. When property is valued as a possession, improvidence is looked upon as a social lack. The regard for property is, therefore, another of the emergent factors which have been builded into the Emergent Society. It may be true, in some exalted sense, that communism has values to challenge humanity in the future, but the fact of social history remains: Property privately held has been culturally stimulative.

The regard for property is a step in the development of self-preservation. Self-preservation presents a curious history. It selects at first those who are best at getting—the Takers. Then it inhibits the taking of things by others under certain circumstances, in order that the Takers may be *Holders*. On a low plane it encouraged the satisfaction of desire immediately, and on a higher plane it gives the preference to those who can hold goods and wait, planning the larger use later. This came about by the simple incorporation of instances of property holding into the store of social experience. Begging, stealing, wanton destruction, trespass, considered as evils, are all the result of a slow realization that the social consequences are bad.

Early appearance of property concepts.—In spite of our precautions against reading the modern idea of property into primitive arrangements, we must be prepared to find the hints of it at any early stage of development. Most animals have the nest- or lair-possession pattern. Territory and certain objects of value are jealously guarded by whole groups. Tabu is a recognition of exclusiveness, which is a property idea. Customs about dividing the hunt and apportioning the spoils of war also led to property patterns in men's minds. The storing of herbs and vegetables by women, and the accumulation of utensils around the fire did the same

service. There was certainly a period in the development of most peoples when there was no exact definition of property rights, though those rights were more or less understood. Communism ran parallel as a possibility; e.g., the idea that the game killed by the hunter is the property, at least some part of it, of the whole group. Hospitality and kinship claims sometimes make the customs of primitive people seem communistic when they are really only good-natured.

(*b*) *Social Patterns Resulting from Property Concepts*

Land ownership.—We carry on daily in accordance with certain suppositions about the economic arrangements of life, some of which are quite extraordinary from an older human point of view. One of these, growing out of the property concept, is the ownership of land. Whatever we may say as to private property in removable objects, the owning of a piece of the earth itself is a startling thing, and some rather recent actions serve to remind us that it may not always be taken for granted.[7] Early dispositions of the land problem usually indicate common property. Tribes wandered about over defined hunting areas from which other tribes were excluded, while within the tribe there was common privilege. Pastoral peoples of course could and did hold land in similar fashion. When cultivation of land arises, it may also be conducted communally, by families or by larger groups, but a very ancient, well established, and oft recurring plan was to apportion fields for use (not ownership), on a rotating plan, while woodland and pasture rights remained common. Of course, as life becomes more settled, there is more of a desire to retain holdings permanently. The conflict between the two principles of universal access to the land and exclusive possession of some part of it has resulted in a great deal of

[7] See the clauses in the Mexican Constitution concerning sub-soil rights.

the most interesting social and class distinctions and conflicts in history.

The leisure class.—Property has almost always the social exchange value which enables the holder to live without labor until he has dissipated it. Few persons in primitive times could accumulate property enough to enable them to stop working, though "work" might not always be very strenuous; at least most persons in a group had about the same lot in life as the others. The governing and military classes early attained an exemption from wealth-producing, but not exemption from rendering their services to society. But with economic accumulation has come the class that can live on the income of their property without reducing the principal. The leisure class is a social problem of great importance. It has produced a great deal of culture, but also much waste and degeneration. Its slow rise to prominence through social history has forced us at last to take measures to make it more intelligently chosen.

Slavery.—No one should consider it strange that property ideas expanded to take in human beings. Man had long hunted and exterminated other animals as well as his enemies. When he began to herd animals or plow fields, he naturally thought of the possibility of using the conquered enemy in the same way. By the time of the development of field agriculture and weaving, the necessity of manual labor established slavery on a rather broad basis. Societies with an economic surplus and predatory traditions sanctioned slavery easily.

The acquisitive society.—Society had to be acquisitive at the beginning in order to survive and grow. There is good reason now to question whether the acquisitive motive will carry the race much farther. Some form of organization and some conscious purpose other than "getting and spending" seems necessary in order to give scope for action to the powers of the human personality. Meanwhile the acquisitive society of the past has succeeded admirably in its getting, but not so

well in the matter of distributing what it has got. If we take the United States as an example of what economic evolution of society has arrived at to date, and contrast it with one of the early forms of society, we see that the primitive group has relatively little, but that the extremes of possession do not lie very far apart. In this country, on the other hand, our getting of wealth has reached simply unheard of proportions, and we have a numerous group where holdings are so great that each one receives a million dollars a year and still sees his wealth grow, whether he works or not, while at the same time whole cities are in distress because of unemployment, and many individuals are constrained to seek charitable aid. Caste and economic life have flourished together. The historic orders of clergy, nobility, bourgeoisie, peasantry—the "estates"—have changed to leisure class, acquisitive class, middle class, wage class—an economic classification.

III. Trade as a Social Influence

(*a*) *Barter*

Methods of bartering.—Primitive man lives in close association with the members of his own group, but in very aloof relations with other tribes, even those near his own. But as it is probably the other tribe that has the goods which he wants and cannot get for himself, rather than someone in his own group, he has to find a way to engage in trade. Among really primitive people this was done often by secret or unseen barter, and this is still the only way in which higher types of traders can do business with some of the little people of the jungle. It amounts to scarcely more than an exchange of gifts without actual parley, at first, but develops a technique of its own before long. A higher stage develops when mutual confidence and hospitality allows open trade to be carried on upon some tacit understanding, and

this in turn becomes barter between individuals. In the agricultural and higher pastoral types of life specialized industries promote the importance of barter. But even among savages there was a really imposing list of articles that were traded at one place and time or another, such as different woods, stones, particularly flint and jade, clay, coloring matter, plants, shells, and furs. The advantage of certain locations was always apparent.

The agora.—Although the Greek word "agora" appears in the dictionary as a naturalized English word, it is seldom used. Recently, however, a new compound has appeared in the psychiatrist's vocabulary, "agoraphobia," the morbid fear of open spaces. The abnormality of agoraphobia is better appreciated if one has a culture-history background. The agora was the assembly place, particularly the market place, of the old Greek city. Hence one who has agoraphobia is one who shrinks from "going to market," and that was exactly what almost all people did not shrink from. The market place had to be an "open space" because at the day or hour of trafficking, great numbers wished to be there. It was the economic interest that gave the name to the assembly.

The agora, duly considered, is a symbol of the city, the development of which is not only a period in social history, but gives some evidence of going on to such further development as to leave the countryside a partially deserted area.[8] Commerce gave us the city, and with the agora came all the tensions and overflowings of fine-spun energy, all the give and take of the forum, all the shouting of the arena, all the tragedy and comedy that spring from human contact "where cross the crowded ways of life." The barter of primitive times made little centers, but the city grew up because of productive centers or good stopping-places between them, or intersecting points on such routes. What constituted a good

8 E.g., The National Grange in 1928 appealed to the American Medical Association for action in view of the large and increasing number of places of 1000 inhabitants or less that had no physician.

location was a question not always answered the same way. It might be river mouths, junctions, or heads of navigation; entrances to mountain passes; defensible positions; etc. All kinds of human life were drawn there. The producer could find his market; the pleasure seeker his enjoyment; the ruler his human contacts; the philosopher his opponent. There has been striking unanimity among citizens of all great cities, from Athens to New York, that theirs is the best city. From the Elizabethan age comes the jubilant cry, "Oh, London is a fine town and a gallant city!"[9] All this sort of cultural exuberance comes from the trade motive more than from anything else.

(*b*) *The Tradesman*

The tradesman as a type.—As a human type, the tradesman is an indispensable part of the picture. His standing in society is hard to determine. As he first appears, far back, he represents a good deal of the adventurous. He was the man who broke bounds and stimulated intercourse with other groups. He encountered much and absorbed a part of what he encountered, and yet there was about him always the ultra-receptive attitude which made him seem less admirable. The shopkeeper type differs from the merchant adventurer only in the degree in which the active side of trade, the social service side, compares with the passive, the mere filching of a percentage from the passing by of activities that the trader did not originate. The tradesman has foregone a great part of life: he does not produce wealth. Therein lies his peril, he may become a parasite. On the other hand, he has undertaken to render service. Therein lies his opportunity; he may create values. The tradesman is one of the outstanding social products of the ages. He is undergoing rapid transformation at present, in the direction of integration.

[9] Old song.

The tradesman as a cultural agent.—The actual history of the tradesman shows him to be a cultural agent of the first rank, carrying on the function of cultural diffusion much as a bee carries pollen from plant to plant. When we read that the Lord blessed Job with three daughters, of whom the youngest was named Keren-happuch ("box of ointment"), we may suppose the term to indicate something highly prized. When, furthermore, we find Egyptian inscriptions far older than the book of Job, representing a Semitic trading caravan bringing boxes of ointment to Egypt, we realize that the trader was a value distributer long ago. The dawn of history reveals the merchant with old and established overland trade routes into Asia and northward toward the Baltic and the North Sea. Tentative voyages skirting the African periphery and into the Red Sea and beyond took place under the Egyptians in the second millenium B.C.—the original type of Sindbad the Sailor appears in Egyptian literature. The pictured return of the expedition under Queen Hatshepsut almost utters the romantic phrase "ivory, apes, and peacocks." The Aramaeans or Syrians built a whole culture on a trade basis between the Tigris-Euphrates, Egypt, and the Mediterranean. Caesar reports of the Gauls in the first century B.C. that the Belgae were the ruggedest "because merchants penetrate least often to them, bringing those things that tend to soften the character." Such names as Samarkand, Cathay, and the Spice Islands have had the power to set men's minds aflame from the days of Haroun al Raschid to Vasco da Gama. And in the cultural sense, there is more truth than fiction in the story of the magic carpet, for every Persian rug has transportation power for the person with imagination. On almost every page of history the trader makes his appearance, not usually with much noise, and frequently eclipsed by the military and political leaders, yet frequently setting the stage for the very wars which the latter are to carry on later: witness the search for the Golden Fleece, the pre-Homeric rivalry for

trade around Gallipoli, the early merchants of Venice, the Hansa traders of North Europe, the tea trade of the eighteenth century, the fur traders of Oregon in the nineteenth, the oil prospectors of the twentieth.

The modern tradesman has his own methods of cultural diffusion, called advertising, and very efficacious they are. In fact, trade and art are nearer together, due to advertising, then they have ever been. The subject of advertising is discussed in the following section of this chapter.

Commerce and nationalism.—One of the results of commerce between tribes is to accentuate their separate characters, giving each the greater incentive to play up its specialty, at the same time that its horizon is widened by the knowledge of what the other is doing. Differentiation of interests gave each tribe more of a center of interest in its own existence; and tribal customs having to do with their economic life-ways, which in turn rest upon the opportunity to exploit them in commerce, are held to tenaciously. In like manner the commerce of the western European states with the Orient and the Americas has had much to do with the great modern emphasis on nationalism.

IV. Consumption of Wealth

(*a*) *Necessary Relation between Wealth Consumption and Social Forms*

Wealth as environment.—The social evolutionist approaches the subject of wealth somewhat differently from the economist. He thinks of the human race as reacting in behavior patterns to the stimuli of the environment. Wealth is that part of the environment which men can draft into the service of themselves as social beings, and which they can give exchange value to in its passage from one person's behavior constructs to another's. The consumption of wealth is perhaps the most important social side of economics. It signifies

that the environment has been turned into super-organic form—socialized. The primitive man is rather deficient as a transformer of his surroundings into social wealth. There are fewer ways in which he can consume. He can eat up his wealth, and he can burn it, or build, or weave, or make tools, or propagate it as herdsman or farmer. In contrast, the modern man has evolved so far in his knowledge of absorbing his environment advantageously that he can turn lumber into paper, paper into newspaper, newspaper into knowledge and pleasure—a comparatively intricate process of consuming.

Consumption of wealth in relation to social vitality.—The consuming of wealth when society was simpler was not fraught with great danger. The things that were necessary were won easily but not too easily. When man's wants expanded they ran beyond his ability to meet them. A certain frustration of desire in material things has always been the lot of human beings. What was secured was consumed without delay or debate. As economic wealth and power have increased, however, peoples of civilized regions have secured the power to consume wealth in very wise or very foolish ways. If they follow the latter path, social vitality is put in jeopardy. In general, the trend of socio-economic evolution has been to meet the basic needs of man adequately, and to supply him with such a surplus as to leave a problem of wise consumption.

(*b*) *Consumptionism*

The problem of consumptionism.—There is still another phase of the social problems arising out of economic advance. It has been called "consumptionism," and it is the problem whether man can keep up with his own productive powers. This is an aspect of the problem of the "iron man" referred to in Chapter VI. It is a strange fact that today a large amount of human energy in industrial societies is expended in inducing people to consume what has been produced. Primi-

tive man, of course, had no such problem. If "consumers goods" were not taken up, it made no great difference—there was no market to disturb. A market, as it has developed in social history, is the area within which the producer and the consumer overlap, balance each other, and, if trade is brisk, constantly achieve equilibrium and go on to a new producer-consumer exchange. But always there is a part of the market that is not perfectly balanced. Under modern world-market conditions this has become a great problem: the producer, with his machine, cannot stop producing, or does not know what to produce with the best chance of selling, and so he tries to stimulate the consumer.

Advertising.—The stimulation of the consumer—consumptionism—is well shown in the magnitude of modern advertising. This business or profession or art or science—for it savors of all four—is a complex social phenomenon. One cannot imagine the need of much advertising in the beginnings of social exchange. Yet as soon as anyone had anything to offer to the world, it was right that he should announce it. This primary right to announce one's intentions cannot be denied the producer and trader. But it has become much more than a matter of putting out a sign, or displaying one's wares, or hiring the bellman or town-crier to give every one a fair chance to buy. Modern advertising seeks to create a want, and to persuade to action. This makes trading a socio-ethical problem. That trade has always been an ethical problem is shown in the very ancient saying *caveat emptor*. But now, instead of the buyer's being ware of the seller when he goes to market, he must beware of him all of the time.

CHAPTER XII

MAN SHOWS HIS HAND

'Tis more by art than force of numerous strokes.—ILIAD.

I. POTTERY

(*a*) *Evolution of Pottery*

Multiplication of the arts of life.—There is almost endless variety to the elaborated constructive behavior patterns to which we find man applying the overflow of his energy. These are the practical arts, and among them a group of ten or a dozen stand out as the constant homely accompaniments of his life. The so-called fine arts we are not now considering.

Pottery as a practical convenience.—The inevitable requirements for an animal that had begun, as man had begun, to use things and consequently to have things, was a place to put things. No great problem was presented by the need of laying things down until they were wanted again: all humanity knows how easy it is to leave one's things lying around, and the word "ship-shape" is a reminder that orderliness was the outcome of limitation of quarters. Primitive man did not lack room, and he did not live as large a share of his life within his house as does civilized man. But a place to put things is only half the story; a place to put things *in transit* is also needed, that is, receptacles or containers. This old need is still absorbing a considerable share of man's attention, as witnessed by the enormous accumulations of barrels, packing boxes, cartons, and tin-cans of the modern kitchen-middens known as dump piles. One of the simplest ways of keeping

things in place while transporting them is simply to tie them together. Wrapping and tying is the next natural step. But some things are too small to be carried in that way. Small articles of food-stuff, like berries, seeds, shell-fish, roots and bulbs, etc., demand a container that is a receptacle. This means that instead of wrapping a skin or bark covering around the objects to be carried, they were put into a covering or container already existing—in other words, the container as an after-thought gives way to the container as a forethought. The container, as a thing planned to meet a foreseen need, may be some object naturally hollowed out, but such objects would seldom be found in practical form. If made by man, it might be fashioned out of a single solid piece of continuous substance, as wood, stone, clay. Stone was heavy and hard to work; clay was crumbly; wood was more practicable, but its tendency to split and crack was a drawback. Man's fingers and mind were well suited to attack the insistent and not too difficult problem of putting things together to form a carrier, and there was an abundance of slender, supple green things to be found. One of the most simple and congenial mental-manual patterns is the alternation of "over and under," and as soon as man stumbled upon this little trick, weaving had begun. The weaving complex, in turn, develops in two ways: as a finer form, it becomes the textile art (discussed later), and in the coarser form it is basketry.

Basketry is a sort of patriarchal art. The sight of a roadside gypsy community with baskets hung out for sale is a reminder of the way in which this pleasant, easy-going form of manufacture has followed man in all his comings and goings, and has even a suggestion about it of birds weaving nests. If it were not for the finer industry of spinning and textile-weaving, basket-making would seem more important to us. However, it is of special interest because it was one of the starting points of another art. We are familiar with

the fact that it is often advisable to line a basket with paper to prevent fine parts of whatever is being carried from sifting through the interstices. Primitive man did not have paper, but there was another reason why he tried other substances for filling the gaps in a basket. The whole problem of carrying and keeping water depended upon a container without cracks. As soon as man discovered any efficacy, whether for cooking or what not, in hot water, he would also want a container that would not only hold water but which would not char over a fire. So sooner or later he smeared his basket inside or out, or both, with clay, and thus presently discovered that clay when hardened by fire is a very dependable and durable substance. He undoubtedly arrived at this general knowledge by other routes, too. Sun-baked clay is relatively hard. Clay beds hold water. Pieces of clay in his fire-bed became hard like crockery. In short, pottery came in as a practical convenience, and it was certainly one of the great achievements of the Neolithic period.

The ceramic art.—After sun-baked and the first rather lightly baked fire pottery, came glazed pieces, resulting from the melting of a coat of silicate onto the clay, or some similar process. From this point on pottery has the ever present possibility of being a fine art, a possibility frequently reached by many ancient peoples, and sometimes by culturally isolated ones. We confidently associate the ceramic art with the Neolithic Age. There is much interesting speculation on the origin of some of the conventionalized and oft-recurring decorative patterns of early pottery.

(*b*) *The Potter in Human History*

The potter as a traditional type.—The potter is one of the well-known figures in the world community of social and historic life. As a practical man, he has not only made the various beautiful and useful vessels pertaining to his art,

but he is one of the first, if not quite the first, exponent of the mechanical possibilities of the wheel. The wheel is an object applying the mathematical qualities of the circle—a figure whose properties are full of unsolved charm and mystery even to the present day. The fact that all points in the circumference are equidistant from the center, when applied in transportation, insures smoothness of progress on level ground. When revolving on a fixed axis, it insures symmetry of motion and shape. These two working aspects of the wheel are omnipresent in the widespread mechanical organization of the world. The second of them is evident in two ways: first it permits accurate inter-gearing and dependable periodic contacts and motions in machines; the evenness of the wheel in revolution means perfect timing of relations of parts. Secondly, anything so arranged as to be *shaped* by contact with the revolving wheel or disk will have symmetry. This is even more fundamental than the other, for it produces the very circularity or symmetry which the machine needs. It was the potter who first made us acquainted with the principle. Any early molder of clay, exactly like any modern child, found that the one thing that patience could not solve was the achievement of symmetry in the vessel's form. But a lump of clay stuck on top of a revolving shaft which was spun with one hand, might be shaped symmetrically by the other hand because the evenness and speed of the outer edge where the clay was being trimmed down tended to minimize and distribute circularly the irregularity of movement of the hand. This is the first form of the famous potter's wheel, which, with the hand, is nothing other than that infinitely useful thing, the lathe or turning-mill. The potter's wheel can be traced through an interesting development of its own. It has a certain form in ancient Egypt. In its Hindu form and in other places at other times, it is a revolving table balanced on top of an upright pivot stuck in the ground. In this can be seen the future development of the fly-wheel; while in the

older form of the revolving shaft we get the pattern for the spindle and whorl of primitive spinning. Another important use of the revolving shaft is as a drill, and in this we sometimes find in primitive devices a suggestion of the well-known method of fixing the ends of the shafts in journals as bearings, in distinction from the usual wheel and axle. Crank motion applied to the potter's wheel is a late variant, involving the use of two mechanical principles together—the wheel and the lever.

It is not possible to say that the potter was the one and only user of continuous rotary motion. The fire-drill and the mill-stone would have something to offer on that point. But of all the early users of the wheel, he went farthest.

The potter in literature.—As a symbolic character the potter has stood for the shaping of destiny by creative or supernatural powers. In tradition and literature he has held a large place. Some of the interesting references are the following:

Biblical:

See "potter," "pot," and "clay" in a concordance.

Extra-Biblical:

The Rubaiyat of Omar Khayyam.
"Keramos," by Henry Wadsworth Longfellow.

II. Clothing

(*a*) *Evolution of Clothing*

How clothing originated.—The institution or custom of clothing, which has become one of the arts of life by virtue of the great accumulation of technique about it, is an illustration of the fact that there is diversity of origin to all of the common features of our social life. Objectively, clothing is for warmth and for protection. Subjectively there are two

great motives. One is ornamentation. This was done for various reasons—to identify or classify oneself, to exalt the ego by display of trophy, to indicate possession and ownership, to get magic power or to take precautions against magic, and to please the æsthetic sense. The other great psychic motive centers around sex consciousness. It emerges either as the advertising and emphasizing of sex features, or the hiding of them called modesty.

We shall get nearer to the heart of the matter if we approach from the psychological side than if we take a utilitarian point of view. At the same time we can hardly distinguish the two, for though ornamentation is the older side of clothing, it did not originally signify so much an æsthetic purpose as a practical one of magic, camouflage, self-enlargement, social standing, proof of prowess, or what not. Moreover, it is hard to say where clothing as an art begins and where as a utility it ends, but if we regard the whole matter as a form of self-expression, we shall see how nature merges into art and inextricably combines and ignores the distinction between selfish and social, useful and æsthetic, natural and conventional. For instance, the hair of the head is a natural ornament and a protection at the same time. It is both natural and otherwise, for it is partly the outcome of sexual selection. Various forms of head-dress take up the theme as a mingling of the decorative and the useful. Other bodily parts are dealt with in the same double way especially in the wide-spread customs of scarifying and tattooing.

The more we observe human behavior, civilized and primitive, the more influence we are inclined to assign to the motive of ornamentation in dress. Of course it would be foolish to deny the operation of the protection motive, but some races have continued in severe climates without clothes—e.g., the Fuegians and the Tasmanians. We may suppose that an intelligent response to a very cold climate would be clothing, but we do not know that the historic event was like that. What

we do find is the persistent and elaborate treatment of various parts of the body, partly by natural selection, partly by artificial treatment, and the reason for this is partly non-sexual, and partly sexual advertisement or, in other words, to attract the opposite sex. Thus the sex motive and ornamentation are a double root for the clothing complex. The negative sexual motive, modesty, which we make so much of, is of the most slender importance viewed analytically. There are times when the human being, especially the female, is of a retiring disposition sexually, depending on the phase of sex life of the particular moment. But the tradition of inherent modesty is the merest fiction. For generations the flirtation motive persisted alongside of the frantic protestations of modesty, but all to no avail. Modesty is something to be learned, and it can be unlearned. The standards of one year are abandoned in another. Embarrassment at being different from the rest of the group has been seen to prevail over modesty. An examination of primitive manners, of child psychology, and of modern styles in dress all go to show that modesty was not a part of man's mental outfit at the beginning, and hence could not have originated clothes. All this is not to say that modesty is not a wise and meaningful social trait, but merely that it is a recent and tentative acquisition.

The development of costume.—Costume history from a technical or an artistic point of view is not what we are concerned with in any detail; but the development of costume as a pageant of human history and a revelation of social growth and adaptation is something not to be overlooked by a student of society. The earliest costumes were hardly enough to signify by that name—a cord about the loins, with twigs or leaves attached. The starting point of costume seems to be right here: the cord, skin, or whatever was used to hang things ornamental on, settles into place, as it were, in the form of loin- or breech-cloth with more or less transformation of the attachments into a covering or partial conceal-

ment of the genital organs. Thereafter clothing developed along with two arts which it fostered: the dressing of skins of animals, and their use for clothes, on the one hand; weaving on the other hand, with its inevitable accompaniment of spinning; and along with both, the use of pins, needles, and thread. Flint thumb-scrapers found in Stone Age remains suggest clothing of skins. Weaving is known to have been done in the Swiss lake-dwellings of the New Stone Age. Skin clothing does not exclude fine needlework. Good bone needles were used by the Old Stone Age woman, and the Eskimo women of today make marvelously sewed suits of clothes. By the time of the Bronze Age, weaving of cloth was beginning a new cycle of clothing evolution among southern peoples. The woven stuff was wrapped around the body, and was the beginning of the tunic and of the skirt or kilt. The tunic is the primeval pattern, as far as woven clothing goes, and is found far and wide. The trouser idea seems to have come in with the Iron Age barbarians of the north.

(*b*) *Social Types Derived from Clothing*

The tailor.—In social history the tailor stands for the great business of cutting material for clothing and clothing the masculine half of humanity. He with the draper and the clothier, are a group dealing in cloth. The word "tailor" means "cutter," and the modern idea of him as a man who sews is just a little aside from the main point. It is true that tailors do sew, but they are the clothing-cutters in their origin, nevertheless. Symbolically, tailoring means the dressing up of anything, even ideas, as the famous *Sartor Resartus* (Tailor Retailored), of Carlyle was intended to show.

Other social types.—Besides the tailor, whose social function centered in cutting the cloth, the seamstress became long ago a great social type. In spite of the fact that the sewing is done by the men in some primitive tribes, and that men

have continued to do some of it, yet from some period too far back to estimate, the art of needlework has gravitated toward the women, whose occupation in the home was well suited to take on this work. Sewing, knitting, embroidering, lace-making, etc., are forms of industry that can be taken up and laid aside as occasion demands, and thus can be fitted into the routine of household life. On the whole, moreover, women have been more interested in the refinement and variation of costume, and men in the practical or ceremonial side of the question—being clothed adequately for the occasion, but without so much concern for the individual niceties. Thus we finally get "tailor"—the cutter, the designer, the builder of costumes, as a masculine type, and "seamstress," the thread-and-needle craft artist, as the feminine type.

As we travel back into social origins, however, we do not find this arrangement so apparent. There has been, as a matter of fact, an evolution of social forms having to do with clothing, which, if viewed over a long enough period of time, seems to be a complete revolution or cycle. Among savage peoples we find the modesty motive far less operative, and the protection motive rather less than with modern man. The personal dignifying motive was relatively larger. Under these circumstances man had the best of it. The warrior and the tribesman had to be properly furnished forth. The tradition long held in historic times that the clothing art was to be lavished on the males. The toga virilis of the Romans was a cumbersome affair, surpassing the garments of the women in voluminousness. The Hebrew scripture praises the excellent woman because of her care for the clothing of the man: "Her husband is known in the gates when he sitteth among the elders of the land." But slowly a change took place. As the agricultural-homestead pattern of life more and more prevailed, man contented himself with being warmly and serviceably clothed. The care of the children's clothing, especially in northern climates, the greater centering of woman's activi-

ties in the house, the vast extent of the spinning-weaving complex in historic times, the emphasis upon feminine modesty, all caused the woman to become more and more the seamstress and the dressmaker, expending her energy upon the beautifying of her dress.

The present situation in western countries is unique, for woman is apparently striving for freedom and simplicity of costume, at the same time retaining her interest in the elaborate and fastiduous world of the fashion-plate.

Finally, among the social types which have contributed to the making of our human world with regard to clothing, we must mention the cobbler, the hatter and the tanner.

III. Textiles

(*a*) *Spinning and Weaving*

Spinning.—The spinning wheel and the loom have played such a great part in social history as to make any explanation almost superfluous, and any omission of them unthinkable. Both spinning and weaving were practiced in the Neolithic period, for spindle-whorls from that age have been found. The spindle of the Bronze Age in Britain was a piece of wood about a foot long and half an inch in diameter, with a "whorl" on the end acting as a fly-wheel and a nick at the other end to fasten the yarn. Along with spinning and weaving, in the Neolithic, came sheep-raising, to supply the wool for yarn. The preparation of fleece into yarn ready for weaving called for other subsidiary arts needed by the various steps in the process—cleansing, dyeing, "teasing" (pulling the wool out into a fluffy state), oiling, carding.

But though in our thought spinning comes before weaving, it is not the older art. Weaving, as we have seen, appeared in the form of basket-making, independently of the making of thread. Not only weaving, but sewing with fiber or thongs,

and braiding or knotting had been done before spinning gave the finer thread and the large quantity needed to carry on weaving on a large scale.

Weaving.—Whereas the caveman of the Palæolithic went about in skins, sewed after a fashion that might be called fastening or tying, in some cases, rather than sewing, the Neolithic peoples come on the stage with a penchant for weaving. The textile art was a feminine art from a very ancient day. In house construction, basketry, and pottery, the weaving of pliant twigs had a part. The desirability of couch coverings, to lie on and to cover oneself, led to experiments in mattings, and flax fibers were discovered to lend themselves to weaving. But most important was the discovery of how the wool from the sheepskins could be twisted into thread. This material rapidly became the basis of a great industry, which has persisted practically unchanged among some of the peasant populations to this day, and which at the same time has been so modernized in other parts of the world as to be the supporting basis of great industrial cities. There were great possibilities of new forms of stitches, of patterns, and of dyeing, and the palæolithic type of art and ornamentation with ochre, shells, and tooth and claw necklaces, gave way somewhat to finer costume decoration.

(*b*) *Social Types Derived from Textile Arts*

The spinster.—The spinning of thread and yarn to supply the looms of mankind from Neolithic times until the Industrial Revolution was such an important one that nothing outside the original function of wifehood and motherhood, made such an impression on the popular mind. The evidence for this is that the time-honored name for the unmarried woman is "spinster." Even though she does not spin, in most cases, she used to spin, and the name still clings to her. It is as though the great industrial population of the world of women had

drawn every individual into its ranks as a spinster, releasing from that designation only those who entered the marriage state. The spinster as a social type today has undergone quite a change. So many occupations are open to her that the word has long become a misnomer.

Social types in literature.—The spinster, webster, fuller, dyer, and others connected with textiles have figured largely in social life. In particular, the weaver and the loom have been taken into the poetic imagination of the races as a symbol of life, drawn into some pattern by an inscrutable fate, and cut off at last when the pattern is complete.

IV. Navigation

(*a*) *Development of Navigation*

Potamic and thalassic navigation.—In making his journeys, man was confronted in most parts of the world by bodies of water of various size. Brooks and ponds can be forded or gone around, and present no problem. Rivers and large lakes intervene between him and his goal, challenging him to effort. Sea-coast life offers him a definite lure to discover what lies beyond, especially if islands are off the coast. Man's response to the water has been twofold, and beautifully illustrates the difference between natural and cultural evolution, and the superiority of the latter. In the first place, man, though hardly a water animal in any sense, retained the ancient ability to swim, though many people never become adapted to the water. The swimming talent was a possible way of adaptation to the water, and man made as much of it as he could, acquiring aquatic habits truly astonishing in some localities. But he had gone too far as a terrestrial animal to reverse the current of evolution and become physically adapted to the water. The cultural way, instead, was open

to him by virtue of his intellect and powers of adaptation, and along this line there was almost no limit to possible development. Navigation was the result.

Some of the early developments of man's efforts to travel by water were the skin-coracle, the bark canoe, the dug-out, the kayak, the out-rigger, etc. Previous to all this had been the simple use of logs and rafts. The sail and the keeled vessel represent a long, rich line of development, and all this came in some degree before man had dared the great oceans. He was still in the thalassic stage.

Oceanic navigation.—The ocean has been the great limit for man over a very large part of his career. The early Greeks, at home as they were in the Mediterranean, still thought of the ocean as an unknown, unlimited circumventing body of water around the habitable earth. The Phœnicians skirted the African and European coasts, but did not put out across the ocean. The Arab trading civilization of the Middle Ages went from East Indian island to island, but succeeded in building up hardly more of a body of knowledge than is represented by Sindbad's stories. The last great thalassic stage of navigation was the Mediterranean, and this was followed by the oceanic, when oceans were first crossed. The importance of Columbus in social history is not that he discovered America, but that he stands for the inter-hemispheric or trans-oceanic stage of human life. Since he sailed, man has made three great steps in his dealing with the ocean: (1) he has increased the speed and the carrying capacity of his ships very greatly by the use of steam; (2) he has flown across it; (3) he has learned to navigate under its surface. The social results of the second are in the future, but are apparent to all. As to submarine navigation, it is possible that it is the beginning of man's closer acquaintance with the submerged part of the lithosphere, of which he knows as yet so little.

(*b*) *The Seaman as a Social Type*

The seaman as trader.—"They that go down to the sea in ships, that do business in great waters" have long been the extenders of man's thought boundaries, and in time of his social boundaries as well. The chief way in which this comes about is through the extension of trade relations. The sea-farers touch upon a new region hesitantly, inquiringly, and either by trade or by raid they open a line along which economic values may flow toward the home land. But at once there begins to gather around these men and their trade an atmosphere of glamor and mystery. The effect of this as a social stimulus is almost incalculable. It has spurred on innumerable men to enlarge the horizons of humanity by pushing farther into the dark. The Golden Fleece is a fine symbol of this social stimulus, for the origins of that beautiful legend are to be found in early Greek trading with the Black Sea. An "argosy" is another symbol of romantic commerce: its origin is Ragusa, an Adriatic trade center of the Middle Ages.

Extractive industries of the sea.—The sea has given man much wealth, and man in getting it has been shaped by the element in which he has sought life. The fishermen of the streams and land-locked waters have not figured largely in the food-getting activity of mankind since historic times opened, but whole populations have long counted the off shore and deep sea fisheries as a large factor in the food market. The murex of the Phœnicians yielded the dye which has remained a symbol of royalty long after the industry passed away. The pearl is one of our oldest social synonyms of rare value, and the sea oyster, for the most part, gave us that. The sponge and coral, kelp and other mineral salts, and many other products have entered into the common patterns of social life.

Primitive elements in the sea-faring life.—In spite of all the modernization due to steam and mechanical invention, the sailor is, as he has always been, apart from the rest of his

race. Sea-faring life retains a savor of strange things and ways. Its effect upon us is comparable to that made by gypsies. The best known simile for an endless linear production is the expression "spinning a yarn"; by general understanding a "yarn" is half-way between a truth and a falsehood, something not verifiable, and by general understanding it is sailors who spin yarns. The accepted situation is that of the mariner returned from under strange skies, expected to thrill the home folks with his tales, and with no one to check him if his imagination runs away. He is a law unto himself as he talks. The effect upon mankind socially has been stimulating. What the farther depths, the ultra-tribal regions of the forest were to savage man, who peopled them with mysteries and marvels, the lands beyond the sea have long been for civilized man. The painting by Sir John Millais, "The Boyhood of Raleigh," shows a sailor spinning a yarn, and in the face of the youthful Sir Walter is dawning the promise of a transplanted civilization, a social and cultural migration.

V. Transportation

(*a*) *Evolution of Transportation*

Social significance of transportation.—Of the millions of persons engaged in "gainful" occupations in the United States today, a very great number are concerned with railroads, and with automobiles, besides which there are all those who follow the sea, those who drive horses, those engaged in river transportation, and all other types of travel. But besides those whose business it is to carry on the facilities of transportation, there are all those people who make use of them. There are the millions of privately owned and operated cars, and the millions of people who each day ride on trains, subways, taxis, trolley-cars, ferry-boats, and in other ways. There are millions transported up and down in elevators. There are

letters, packages, and heavy freight consignments running into astonishing totals. There are pneumatic tubes carrying money and papers in stores; there are little trains scuttling about in mines and quarries; there are farmers working with wagons and all sorts of wheeled vehicles in the fields; there are children playing with toy wagons, while airplanes fly over their heads. All in all, the business of transporting things comes much nearer to being the whole of life than most of us imagine. Behind all these phenomena lie some imposing principles which have been at work always to make society what it is. Let us look at these principles as though we had never seen them before, and perhaps we shall discover a new respect for what has seemed obvious.

The world as discovered to man's inquiring gaze is made up in a moderate degree of things in motion—clouds, wind-borne objects, falling bodies, animals—and in much larger measure of things not in motion. Of the latter, some things can be moved. This seems an unnecessary fact to record, much less to stop over. Yet it is fraught with destiny. It would be a conceivable state of things if nothing could be removed, and man had to be content with tearing his food away from whatever position he found it in, but beyond that could not alter the position of things. This is nearly what does obtain in the case of animals. Though they may drag a few things about a little, or carry them in their jaws, the great mass of objects making up their world remain in situ. If man found himself in a world of non-portable objects, he would develop practically no culture and probably little brain-capacity. The mysterious union of hand and brain which has carried man to his dominant position in the world begins with the baby's discovery that he can pick things up and put them down again—usually somewhere else. And the fact that things are put down in a new place or position means that the beginnings of an infinite variety have occurred. Man is forever rearranging the objective facts of his life. In this

he reminds us of the ants running into and out of a large ant-hill, carrying and re-distributing their little accumulation of things. The difference between men and ants is probably in the added fact that man is re-distributing and developing his mental life at the same time. But if man could not transport things freely he would be less than the ants. He would be less than the dog, whose delight at fetching and carrying makes him amenable to a varied discipline. The importance of fetching and carrying is illustrated at about the puppy's level by very little children at play out of doors, after they have passed beyond the mere ability to grasp objects and turn them over and over. Their play often consists of an apparently aimless trotting back and forth carrying this, that, and the other, and forgetting it as fast as they drop it, so that the net result of the morning's play is that nothing is where it belongs. This, however, is but an introduction; later on the play of the same children, still fetching and carrying, becomes constructive and social. Transportation, broadly defined, is the life blood of social behavior in relation to physical environment. Man needs to assemble and get things set for his fertile projects, and so he must spend a good part of his life in the business of carrying.

Man as a carrier.—Carrying things can be accomplished either by man's taking the burden on himself, or shifting it according to some plan of his devising. Man as a carrier appears in many picturesque ways, but, after all, his behavior patterns in this direction are quite limited; he may carry things in his hands, in his arms, on his shoulders, from his waist or hips, on his back, or on his head. With regard to the first, it is a quaint conceit, but a suggestive one, to picture the innumerable inanimate objects standing quietly about the world at this moment, to which man has applied a *handle*—that eloquent witness to the connection long ago affected between man and things. But after all, carrying things in the hand is a *handicap* for man, and serves best for short shifts,

since man needs his hands for the finer business of manipulation. The same objection, even more pronounced, applies to carrying things in the arms. There is only one burden that the human race can carry in the arms for a long time without resentment—the child, whose presence there is not a usurpation or an interruption of any important human business. The world has found no finer symbol of its social, altruistic, and religious ideal than that of the Good Shepherd who "shall gather the lambs with his arms and carry them in his bosom," for one who thus carries another is for the moment at least completely socialized. Unfortunately, in one sense, even the child must give way under certain conditions of human life, yielding his claim upon his mother's arms to the imperious necessity of the food-quest and going to the fields slung upon his mother's back. Though such a mother would call it an advantage to have her arms and hands thus freed for work, yet we may say that whenever the baby becomes a burden to be borne on the back, childhood and the home have not come into their own. The baby's place is at the breast and in the arms, first, and then in the home. Man and woman alike aspire to be free from burdens upon the back. Nevertheless, some burdens must be borne. "Man goeth forth to his work, and to his labor until the evening," and since so much of that labor is carrying, he invented various ways to take the place of the load piled sheer upon his bent back. One of the two that stands out clearest is the balancing of the burden upon the head, a method which has been brought to an unbelievable degree of skill combined with strength among many peoples, and which incidentally has developed a marvelous poise and erect carriage for those who practice the custom. The other device—very ancient and very wide-spread—is the yoke. The yoke is a contrivance for making the best of a bad situation. It seeks to enable man to hang as much weight as possible from his shoulders and yet be as comfortable as possible. It

is a symbol of bondage and labor, from one point of view, and Rome, in the ceremony of sending its captives beneath the yoke, gave them the social status of servility. From another point of view it is the promise of man's ability to escape from the hard side of labor, and it was this benignant aspect of the yoke as a symbol of human life that was in mind when the same teacher of social behavior patterns who gave us the symbol of the lamb in the shepherd's arms, said also "Take *my* yoke upon you and learn of me, . . . for *my* yoke is easy."

Mechanical means of transportation.—If man does not carry the burden himself, he must either give it to some animal to carry for him, or else find some mechanical way of transporting it. The use of animals has been described in Chapter IX. We now take up the question of how man advanced his social life by mechanical means of transportation.

Transportation and the air.—Let us first look at the problem involved in the phenomenon of any object—man, animal, or mechanical object—carrying itself or being carried through and on any substance, air, water, or land. Three points must be kept in mind: (1) it must be upheld so that it can travel along on some general level; (2) it must be able to exert propulsive power against the surface or place on which it travels—i.e., it must have "traction"; (3) there will of necessity be friction and resisting power exerted by the traversed surface, tending to stop the motion. The atmosphere as a medium through which to move offers so little support as to be practically negligible for stationary bodies in this respect; it will not hold them up. It also offers little resistance to a moving body, and little opportunity for traction and propulsion because of its tenuousness. Nevertheless, far back in the evolutionary process, long before man's appearance, one great division of living things "solved" the problem of air-travel. The birds, by dint of muscular adaptation in the direction of rapidity of motion, achieved enough

tractive power to develop great speed in the air; at the same time, by virtue of the speed itself, they found support, yet without great resistance or friction. Man has always envied the birds their power to fly—religion, myth, and dream-phenomena all bear witness to that—but he had developed too far as a terrestrial animal, and had to forego the life of the bird—for the nonce. But observe the sequel. The birds too had to forego something. Having made their characteristic activity flight, they had entered a form of life where not much else could happen to them. Using two of its limbs for flight, the bird tucks its legs up out of the way—there is no use to which he can put them en route, and the air is empty of things on which to use them—and thus the equipment for getting in touch with the world which as a four-limbed vertebrate it was endowed with is reduced by a half. The poetic conception of the joyous freedom of the bird on the wing is a reading in of human ideas and appreciations where there is little but monotonous movement to and fro, in reality. Birds are great travelers, covering distances from the arctic to the tropics in some cases, and travel is one of the great socializing and educative modes of life, but not for the birds, who go and come unchanged.[1] In all their millions of years of travel, the air has provided them nothing except a way to get somewhere. The stork comes and goes between the roofs of German houses and the marshes of Egypt, but the only social pattern resulting is the man-made one of the stork and the babies; in other words, man staying home can get more experience (fictitious, to be sure) out of the stork's journey than the stork can. The substance of the whole matter is that the air was no place to develop a richly socialized mind. The bird found out how to carry himself, but not how to carry things. Travel, not transportation, was his form of growth. And social development must originate down on the ground where

1 Some of the human migrants to Florida or other resorts also go and come without having *experienced* anything whatsoever—a mere seasonal flight.

there are things to be moved around. Such comparatively social birds as the magpie, who is a thief but a pleasant companion, or the parrot, who talks much but flies badly, bear out the point. And birds in general are, of course, most in the way of social development when they come to earth for breeding, nest-building, and transporting of worms to feed their fledglings. The early taking to the air by the young bird nips the greatest potential social pattern in the bud.[2] The mammals, remaining on the ground and carrying on richly varied relations with each other, were actually on the way to family, house and home.[3]

But one could hardly ask flying creatures to be mammals. The laying of eggs by the female bird is testimony to the permanent necessity for traveling light. But no group advances socially unless it carries weight. In human life the nomad, who travels, does not go so far as the man of sedentary life who transports things. As for the air, man may use it, but only because aviation has terrestrial transportation and social life to support it.

Water and transportation.—Water as a medium of transportation presents characteristics midway between those of air and earth. It will support some stationary or floating bodies, though not all. But here enters a possibility that does not exist in the air: whereas nothing can be made to float in the air except by making it lighter than the air itself, objects that would ordinarily sink in water can be made to float by making them of proper shape—in other words, by hollowing them out. With regard to the opportunity for using the surrounding medium itself as a means of progressing by pushing against it, water is again a half-way element: a paddle-stroke need not be nearly so rapid as a wing-stroke,

2 Hence the Spanish proverb, matched in other tongues, "There are no birds in last year's nests."

3 Contrast puppies, kittens, or children at play with swallows at play in the air. The latter never get beyond a mere receding and advancing—*nothing comes of it.*

but it must be moderately quick or there will be no propulsion—the water will yield place to the oar-blade, without supplying any force that can be transformed into motion, whereas a man poling a boat can take as long as he likes in applying the force, since the ground against which he pushes will not move. And with regard to the third item, friction and resistance, water traffic can always overcome it, though never attain the greatest speed. How man has solved his transportation problem on the water has been discussed in the previous section of this chapter.

Transportation on land.—Man is a land animal, and his transportation is inevitably on the land for the most part. Hence it is of most importance to see what the characteristics of *terra firma* are when it comes to trying to transport things on it. And first we notice that it gives full support; objects do not sink into the ground except a little in sand or mud. If the earth were ordinarily like ice or snow, smooth as well as hard, the moving of bodies across it could be accomplished easily, for while the support is complete, the friction and resistance to the motion of the object is almost nothing, and yet there is resistance offered to sharp objects which can generate the propulsive power. A sled or sledge is a simple but ancient and dignified way of pulling things across the earth's surface, just as a boat is for water or a bird for the air. But unfortunately (or seemingly so at first) the ground is not usually like ice. It is rough and holds objects back from motion. As it surpasses air and water as a support, so it does in frictional resistance, and the propulsive power cannot well go into speed, but has to be expended in strength resulting in slow motion. A "stone-boat," i.e., some planks on which stones are dragged by horse power, is an illustration of what nature seems to have doomed us to in moving things about on land—dragging, scraping, striking obstructions, wearing out the object itself or the carrier on which it is placed, and never getting very far in a given time.

Man solves the problem of transportation by mind.—There has never been a more revolutionary event in the world's history than that by which man solved his problem of land transportation, nor has there been a clearer illustration of the triumph of mind over matter in social evolution. Doomed apparently to go slowly on land, man found a way to turn nature and the land itself in his favor. His capacity for comprehending the principles of the universe saved him. He took one of the profoundest of mathematical principles—not abstractly, but by observation and application—and applied it so that he could overcome friction and get speed with no increased expenditure of power. More than that, he actually used the resistance that the earth offers when an object is dragged over it, to get his speed.

How did he do it? To appreciate the greatness of the step, we must stop long enough to realize the profundity, the mystery, the unfathomableness of that simple figure, the circle. Simplest of all plane figures, it has never been measured exactly, yet it has been the intimate accompaniment of man's thought for thousands of years. Its peculiar qualities emerge from its very simplicity. It has two familiar forms of motion. When it revolves on its own center it can be in rapid motion and yet practically at rest, since its own figure does not change in relation to things about it. In practical application this is what we seem to see when a top spins without traveling. Applied in the mechanical world, this gives us the "stationary" wheel, which enters in a thousand varied forms into the machines of mankind, and contributes so much of accuracy, smoothness, and economy of motion. But this is not the circular motion that gave us transportation on land. There is another motion, more complex, which a wheel can undergo. This occurs whenever a wheel *rolls,* and we usually think nothing of the phenomenon. Yet consider: when a wheel rolls, it not only turns on its center but at every successive instant it begins to revolve as a whole about

its point of contact with the ground as a new center. It does not revolve so, because the plane surface of the earth on which it rests prevents it, and instead it *moves forward*—miraculous fact!—ever substituting a new point as a possible center, and ever being deflected into horizontal instead of circular progress. In so doing, it has utilized the resistant power of the ground to give it motion along the ground! The circle is assuredly one of the most sparkling parts of truth that man has captured, but capture it he did, in the form of the wheel.

We are not to suppose that man applied the wheel at one step. The process was more probably like this: First man dragged things that he could not carry. Then he put them on carriers—land rafts, as it were, and dragged them so, transferring the wear and tear to the carrier. Then he observed that a round object under the carrier—a log, perhaps—enabled him to drag it along without friction. This is the great social step in transportation. Great things could be done from that moment. A modern house moved on rollers is a primitive application of the same old captured principle of the rolling wheel. Great blocks of stone, such as were used in those great coöperative social achievements, the pyramids, were moved in the same way. Then came the step of keeping the roller under the carrier instead of having it roll out from behind and having to be put down in front again. How this was done may be seen by examining as simple an implement as a rolling pin. The weight was put down and around the center of the primitive wheel, which meant that the friction was all concentrated there—in a modern railroad car wheel it is called the *journal* or turning point where the wear comes. The wheelbarrow represents the simple vehicle applying the revolving traveling wheel with the carrier held in place at the hub. If side-wise balance is sought by the use of two wheels, we have that ancient thing, the chariot or cart. If full balance is sought by a pair of wheels fore and another aft,

we have the wain or wagon, and the social transportation pattern is about complete. Various contrivances for guiding the front wheels, and variation as to fixed or revolving axles give variety but no essential change.

It only remains to say a word or two about the power used. Man, in seeking release from the pulling of his wagons, has sought both power and speed. The wind did excellently well on the water, but not on land for two reasons: first, sails cannot be manipulated so as to steer in and out on a small scale among obstructions, of which there are a great many on land; second, inequalities of grade and of stickiness on land call for continual variation in the propulsive power. The really great social career of the horse as a drawer of wheeled-vehicles is due to the fact that he can exert either great strength or great speed as occasion may demand. But the mechanical application of steam, electricity, and gasoline has surpassed him in both regards. A speed of a mile in two minutes and sixteen seconds is considered very good for a horse to accomplish; an automobile has been driven a mile in sixteen seconds. A horse can drag a single plow, laboring hard; a tractor can draw eight or ten plows at once. Whether in speed or in power, man seems to have approximately solved his transportation problem on land. More, he has gone back to the water and developed both speed and power there, as well as under water transit. And he has taken up the long postponed enterprise of lifting himself into the air, forcing the air to uphold him by the very momentum with which he hurls himself against it.

(*b*) *Social Types in Transportation-Travel*

The social types of the porter, the carter, the traveler, and "mine host" at the inn are left to the student to reconstruct. They will be found exceedingly suggestive subjects.

CHAPTER XIII

MAN TAKES THE SWORD

There's but the twinkling of a star
Between a man of peace and war.
—BUTLER, "Hudibras."

I. WARFARE AS A RESPONSE TO ENVIRONMENT

(*a*) *Expansion to a More Favorable Environment*

Unpremeditated expansion.—With its glamor and noise, warfare is one of the life-ways of the race that has a strange power to move us into sympathetic participation. It sweeps irresistibly across the stage of history, and though not so irresistible and devastating, it would seem, among prehistoric men, yet even there we plainly discern the lurid moments of conflict. Yet no form of behavior has been more regretted, and none of the accepted social patterns is more rigorously denounced and repudiated in certain quarters than is warfare. We shall consider it from three points of view: as a response to environment, as a psychic need or expression, and as a social function. In so dividing the subject we are simply following the analysis that can be made of all historic action: (1) man with a certain psychic endowment, living in (2) an active environment, organized (3) in social ways, does what he does and makes history and social evolution.

If we look critically at early man, regarding him simply as an organism reacting to his environment, we perceive that the latter moves against him, even in its impersonal and inorganic aspects such as wind and weather, much as if the purpose behind it all were to goad man into overt acts in

response. This is more true of that part of his environment which is organic and fighting, like man himself, for existence. When man's environment is hostile in any way, he may make a deliberate stroke at it, by way of altering it. This is analogous to seeking a new environment, except that it is done by making the present one over. Viewing warfare as one of the ways of altering the environment, we see that the starting point of our discussion is very nearly the same as for the chapter on tools. Weapons are special tools for breaking resistance—that is, at the beginning, before defensive weapons were invented. The weapon of offense came logically and chronologically first, and was essentially an obstacle remover, just as a fist-hatchet was. From this point of view, a movement toward another environment or toward alteration of environment, which encounters resistant phenomena of a human character, resulting in group conflict, is only incidentally warfare. The expansion of the people of the United States as a social group illustrates this. War with the Indians was not particularly desired, neither was it shunned. The Indian and the bison-herds alike were obstructive features of the environment, to be removed by force. So also with any group migrating, probably for good reasons. The migration would naturally be toward an unoccupied region, but sometimes only relatively unoccupied areas could be found, and the more densely occupied they were the more sure was war. Warfare for primitive man was thus an indirect result of environment, though a later one, and not a part necessarily of man's earliest social patterns.

Deliberate aggression.—The question of hunting grounds was probably what first drove tribes to war. There are said to be indications of hunting ground rivalry at times even among the apes. But after conflict-relations had once been acquired there were other motives. Aggressiveness and greed and revenge and exploitation of personal relations enter in. War itself suggests war.

Primitive and savage men were not greatly inclined to deliberately aggressive war for the sake of obtaining a better habitat. The famous "dark and bloody ground" into which Daniel Boone led the Kentucky pioneers—a region permanently claimed by neither Northern nor Southern Indians, but in which spasmodic warfare occurred—is more typical of early tribal relations.

(*b*) *Reaction to Human Environment*

The overcoming of human environment.—When the higher stages of economic and social life have been attained, each large group (national in extent, or at least a large tribe) impinges upon its neighbors so definitely that each regards the other as a possibly hostile environment. Now, the members of a social group never think of their own fellow-members as environment. Environment is always that which is outside and beyond. When a population regards its neighbors as an obstruction to be removed, it is evident that consciousness of kind has not gone far enough to permit recognition of human values at their proper worth. Warfare for land conquest, then, must be thought of as the expression by a vigorous society of its half-developed social consciousness. Its own needs are understood, but those of the neighbors are not. The desire of a land-hungry population for the territory of others is almost always rationalized into a belief in the superiority of the aggressive race. Such were the pre-war expressions by some of Germany's educated minds —"the chosen people of these centuries is the German people"—and the expression current in the United States in the '40's—"manifest destiny," in reference to our absorption of Mexican lands.

The exploitation of human environment.—The aggressiveness of a well-organized society against its neighbors has often reached the point of wolfishness, as opposed to the bee-hive

type of life.[1] The exploitation of hoe-cultures and caravans by nomads, the expansion of ancient oriental empires, particularly the Assyrian, the attacks of Asiatic hordes upon China and Europe, are instances of the "lupine" or wolf-pack societies. The more we survey such human behavior the more we see that war as a method of environmental conquest is anti-social and reversive.

II. Warfare as an Inner Urge

(*a*) *The Soldier of Fortune*

The knight errant.—From mediæval times has come down to us the type of the knight errant or wandering man of rank living by arms, and seeking adventure alone. He has been glorified, as in Sir Galahad, and caricatured, as in Don Quixote. In more organized historic settings he appears somewhat less lonely, but questing for high adventure still, as in the person of Sir Philip Sidney: "If there are any good wars, I mean to attend them." Young men have always been prone to conceive of battle as a gallant, pleasant, natural, established thing, in which we all fare reasonably well, even if conquered. It is a game, and the danger was formerly to the individual participating, though as time went on it became a danger to society. Nowadays there is little chance for the soldier of fortune playing the lone hand. But in the days long gone he has contributed his share to social history by providing material for song and story, and by distributing some of the superficial attributes of the social life among other groups than his own.

The fact is, however, that the knight errant never had any very long chance to flower forth in fullness. He belongs to transition or imperfectly organized periods. But he does represent what might have happened in any generation, had

[1] Trotter, "Instincts of the Herd," *passim*.

it not been for social bonds. Our admiration for the knight errant is vicarious enjoyment of what we have been denied the chance to do in a world of group dominance. To ride forth and battle down opposition on one's own initiative and yet know that such behavior is right and worthy of social approval—that appeals to us all, and compared with it, the self-discipline of finding one's self-realization within the orbit of adventure set by one's group sometimes seems a dull task. There is a certain satisfaction in demolishing things, when demolition seems to be in order. It is a lower stage than the constructive, but it gives satisfaction. Knocking a packing box to pieces is something like fighting. There is a certain kind of "fun" in it, and man has remained in that stage of development for a long time. Cycles of craving for destructive fun may be one of the reasons why, now that the knight errant is crowded off the road, mankind still lapses occasionally into collective destruction of itself.

The gefolge.—The individual member of society has rarely found things in such a state that he could do well as a "lone wolf," but he has often found his potential qualities as leader of a little following of warriors or adventurers who felt the urge to roam and to fight. This phenomenon is a very consistent one in social history. It appears in modern society as the gang and the gang-leader, a trait normally appearing in boys, and abnormally in the "gangsters" of our cities. In more outwardly civilized semblance it is the political boss and his organization, of which Tammany Hall is the type. Idealized, we see it in the great benevolent outlaws of semi-history, such as Robin Hood. In old Teutonic life it was the "gefolge" or following of an assertive war leader on his own responsibility. In civilized warfare the guerrilla bands are the same kind of thing. In the Latin language we find the gefolge called the *comitatus*—suggesting comradeship. The explorer, who often had to advance in hostile country, and the "conquistador" into whom the explorer often was

transformed, are still gang leaders in predatory operations. The greatest of them seem trivial at times.

There has been some division of opinion on the subject of warfare as an emotional urge in the life of peoples. It is claimed that the hunting mode of life is so old, and provides such full and elemental satisfaction for the body and mind that in the higher forms of economic life, after the arrival of agriculture, the equivalent is sought under the guise of war. Others disagree, saying that too much is made of warfare as a social occupation of simple peoples.[2]

Again, we are cautioned against making too much of the gang motive. In civilized communities, it is held, the gang is a misfit group when it persists among adults, and normal social life does not take that form. However that may be, there is always a large number of relatively immature people with whom the gang and the adventure motive play a large part, especially among barbarians.

(*b*) *The Captains and the Kings*

Imperialism.—The gang-leader was not suppressed even when a population was organized on a sedentary basis. Societies on a large scale still thought it a fine thing to throw themselves into action behind a glorified chief-adventurer who might gratify more than one desire—fighting, wealth, and luxury. Sargon, Cyrus, Alexander, Cæsar, Ghengis Khan, Napoleon—these are the great historic names entwined in the story of super-raids, scattering, wasting, glory and insanity which we call imperialism. Historically they may differ from each other; to the student of social evolution they are the *reductio ad absurdum* of the primitive gefolge.

The military conquerer as a type.—Under analysis, the military conquerer does not show up well as a social type. He has organizing ability, and personal prowess, but he is

[2] See Tozzer, "Social Origins and Social Continuities," p. 87.

imperfectly committed to the social welfare, and he cannot submerge himself in the larger life of the group. He tends to swing all social patterns into the payment of tribute to his purposes. It is doubtless true that the Alexanders, Cæsars, and Napoleons of the past have performed great feats of social readjustment, and have been instrumental in the carrying of cultural ideas to new groups. Alexander was instrumental in broadcasting Hellenistic culture. Cæsar was the occasion of Mediterranean culture passing over into the Atlantic basin. Napoleon carried the germinating principles of the French Revolution with him, in spite of his personal autocracy. In China today great areal leaders of the military type seem called for momentarily. Yet none of them seems more than a passing phenomenon on the surface of cultural movements. Human society may well take high counsel whether the whole breed may not well be dispensed with.

III. Warfare as a Social Function

(*a*) *War as an Intra-Group Evolution*

The War-chief.—Primitive warfare, or group conflict, is to be sharply distinguished from modern *war*, just as the "scraps" of children are different from a prize-fight. The more tremendous type of human conflict seems to have come from the plains peoples. But all men went through some course of development within their groups, evolving some normal and less formidable war-patterns. Most of those early war-patterns gave an abundance of opportunity for individual expression. Military drill, tactics, and phalanx formations were unknown. The bow and arrow were the weapons most widely in use, and these call for individual skirmishing methods of fighting. In the *Iliad* and in much other old war literature, there is a roominess and conversational character about a battle-field unknown today; duels take place

here and there, with parleys and commotion: ("Another part of the field. Alarums. Enter Macbeth," or Brutus or Richard). Such a type of social conflict would lead to formations around war leaders whose characteristics were of the rampant and heroic sort. The war-chief as a leader of the tribe in conflict, alongside the peace-chief or headman (of kinship origin), and the medicine man—the three fore-shadowing king, judge, and priest—was the social figure most endowed with significance for the future. Through him warfare became a socially evolving function. Under his leadership appeared the world's first earthworks and fortifications, which in, say, the Neolithic period, must be conceded to have a social value as a form of shelter against a dangerous environment. Garrison life and corrals for cattle and beginnings of town life were more or less undifferentiated, e.g. "the preëminently peaceful thing known as a hedge was probably suggested by the sprouting of palisade posts."[3]

Under its war-leaders, society learns certain temporary forms of organization, analogous to the horde's defensive organization on the primitive plane.

"The man on horseback."—This is a phrase reminiscent of the masterful politico-military hero who (whether literally on horseback or not) appears in a time of national crisis and danger and rallies the latent forces of patriotism about himself in some audacious, swift campaign. The world is watching, at the present time, an almost perfect example of the man on horseback—Mussolini. This and other instances show that the benefits to the nation are greater than those to the world at large. The man on horseback, whatever his ability as a statesman, is melodramatic, opinionated, and of the motor rather than the sensory type. Roosevelt and Jackson had some of the qualities of the man on horseback, Lincoln and Washington almost none. The first type are often rep-

[3] Quennell, "Everyday Life in the New Stone, Bronze, and Early Iron Ages," T. Fisher Unwin, p. 58.

resentative of social waves at the crest; the latter of deep currents. The man on horseback is an outcropping of the tribal war-band leader.

(*b*) *War and a Place in the Sun*

Social selection and war.—If conflict is a basis of social development within the group, does it likewise operate between groups? The answer is that it has selected entire populations at times for dominance, but that social selection has never been carried on through war alone. There is always a reason why a nation has lost in war, and that reason goes far deeper than the war itself. War provides the occasion for the weakness of one group and the strength of another to reap their natural consequences. If we accept the necessity of dominant races wearing down or assimilating lesser ones, we must applaud the process by which social selection has been carried on through warfare. As a matter of policy we do not have to accept it, but as a matter of historic fact, social selection involving biological selection has been going on for thousands of years. The conquering party has imposed its will on the conquered, either by slaughter or by slavery or by tribute, but always the outcome has been that the two parties arrive at a new state of equilibrium. If the conquered people are vigorous, the two amalgamate. This is held by many to be worth the price paid in warfare, since it gives a renewal of life from union of the most vigorous stocks. All the important racial stocks of today have gone through the process of cross-breeding. But whether this must always be done by warfare is another question.

Economics and war.—Among the factors that have worked through war, but which are far more important than the wars through which they happened to work, economic relationships are doubtless the greatest in their influence. The relations between people in different economic stages of development

are fruitful of wars, because the urgency of the economic interest is so great as to lead to one group's preferring its economic needs over another group's rights. War is a social situation in which human beings treat each other as means to an end or as obstacles to the achievement of the end, and not as fellow human beings. Probably the economic motive more than any other leads to this behavior as far as groups are concerned.

The point is well illustrated by the way in which the great socio-economic types have got in each other's way and adjusted themselves by conflict. A few thousand years ago the world was far more evenly divided than now between the three great types—hunting people (totemic cultures), primitive agriculturists, and nomadic pastoralists. The general trend of history from then on, during the late prehistoric and the "ancient" times, was to crowd out the totemists, while the agriculturists produced the first notable city and river-valley civilizations, and the nomads, on the northern plains especially, though also in the southern arid belt, developed a more mobile, warlike, enterprising life, though dependent upon momentum rather than mass in their contacts with civilized peoples. The plainsmen have at various times shown that they can master and direct themselves much as they can handle flocks and herds, and that they can round up other populations in conquest. Some peoples that we have come to regard as typically city-state or agricultural populations were originally plainsmen who thrust themselves into some hill-and-valley environment by conquest. The first wave of Hellenic migration from the north, breaking over the Ægean city and island culture, was a case of herdsmen robbing settled land-tillers. The fighter and hero-king thus became an exalted character. The predatory virtues were highly prized. The "sword nobles" rode in upon the forced labor of lower castes, who did the field work. Thus the earlier contact of nomadic and tillage peoples was an economic

victory for the latter but a social and political victory for the former. In later times the scientific and mechanical knowledge accumulated by the agricultural-industrial states makes them safe from nomadic attacks. But now they, in turn, press for economic reasons upon those parts of the world where the lower social and economic life prevails, and wars of conquest and rivalry still occur.

IV. Consequences of Warfare

(*a*) *Biological Consequences*

Earlier forms of warfare.—In the preceding paragraph it was remarked that economic interests led in exerting influence upon groups to go to war. But the economic motive in itself is complex, and includes, practically, the supplying of the needs of the family. Underneath that motive lies the old one of getting a mate to provide for. The farther back we go toward the individual, as well as the farther back in time, the more important is the sex rivalry element in human conflict, and the more it appears that early war was bound up with the biological fact of sexual selection by rivalry and contest. Perhaps the most celebrated war in all history is the Trojan War. And if we try to get at the obscure causes of that far-off drama, we are told that it was a manifestation of the trade struggle between the Greeks and the older coast peoples of Asia Minor. But the Greeks themselves handed down another version: it was a war of rivalry for possession of Helen, the most beautiful woman in the world—"the face that launched a thousand ships." The object of human fighting remained the same for a long time after the animal level had been passed.

The primitive sexual struggle is an older thing than any group conflict. It is naturally a duello. Duels in historic times have been for women or concerned with them to a very

great extent, while collective struggles have been oftener for land. But primitive groups of the same culture level do not need to fight about land so much, for there is enough and to spare for their purposes. Women and revenge for injuries are the oldest social causes of fighting. As a result, men have developed more of the fighting character than women, and women have in fact preferred and thus selected the fighting types. Soldiers have usually appealed to women's imagination. The ruggedness of the male sex is thus a result of sexual and of social selection in the economic sense.

Later forms of warfare.—War formerly had a social function, though perhaps never enough to outweigh its dis-service to man. However that may be, the later forms of warfare, from a biological standpoint, contribute nothing to social welfare. Primitive warfare was, comparatively speaking, only a game, in which, as in a sort of tacit organization, the bare struggle for existence was ignored. Even amenities might flourish. But civilized war is a stark question of struggle for existence. This is particularly absurd because man has really learned how to suspend the biological struggle for existence, so far as group struggles are concerned. Biologically, war does not select intelligently on any basis whatsoever. Moreover, modern war, instead of being a selective struggle between groups within the species, is on so vast a scale as to imperil the species as a whole.

(*b*) *Cultural Consequences*

War and the arts.—Warfare is a certain way of carrying on the struggle of life. When the struggle is chiefly against the natural environment we call it peace; when against the human environment, it is war. The latter, being a concentration of human resources for the accomplishment of a purpose, can and does advance the arts, though along different lines from those of peace. War music and war drama

and dancing, being arts of motion, were very congenial media for a war-minded group to express themselves through. Ways and means for carrying on the struggle against the enemy suggested—on the principle of the wish being father to the thought—the use of sympathetic magic. This procedure is not so common among savages as might be supposed, but it was used widely by individuals. But for group action the war dance is the great method, common the world over. Its purposes are (1) to arouse the emotions to efficient fighting pitch, (2) to get the gods, or powers that be on "our" side, (3) to give pleasure. In form it may be a mock fight, a plain rhythmic dance, a story of an expedition re-enacted, or even with variations introduced to heighten the verisimilitude.

War and cannibalism.—Cannibalism is a little understood practice. So averse are most of mankind to it, at least at present, that it is hard to conceive of it as having a reasonable basis. But it is related to hunting, to war, and to magic, in its forms. That is, it has a magical or animistic side, the transference of the spirit of the slain to the victor; a revenge motive, or method of making triumph emphatic; and a dietetic side. Split human bones found in palæolithic remains point to cannibalism. It was simply the eating of the slain members of a hostile pack, perhaps. Eating members of one's own pack would have been too destructive, but even that has developed in some places hedged about by restrictions and ceremonies. In general, cannibalism belongs to the experimental stage in our history. In that stage, human groups lived merely or quite without connection with each other, and upon a perpetual footing of possible war. Cannibalism was a kind of reprisal-hunting. The point to establish, if we would see how cannibalism could exist in human warfare, is that human beings could regard each other simply as environment, as hostile beasts, to be eaten if caught. It was comparable to our own slowness about "outlanders" and "outlandish" people, our prejudice against immigrants, our

gang wars and rivalries, the attitude of the Greeks toward "barbarians," that of the Chinese toward "foreign devils," and the fashion of each people calling itself by a tribal name meaning "men." Primitive man was a little worse than we, that is all. Lacking brotherhood on an inter-group scale, the more he knew, the more he despised others, and eating them was a way of despising them.

War and slavery.—The land-hunger of mobile nomadic races taught them to use their captives on the land. This contributed to the death of cannibalism, as did the eating of other animal food which could be had in plenty, whereas human flesh could never be so. War became profitable under these conditions. A social scheme based upon the sacrifice of the many to the few who had the dominant position, blossomed eventually into brilliant cultures. But slave labor, maintained by war, paid for it. Their toil still remains visible in such structures as the Roman roads or the Pyramids.

War and science.—The "art of war" is a phrase that is rapidly giving way to the expression "military science." Thereby hangs a tale, eloquent to the student of human culture. The extension of the tool idea to war, plus a knowledge of physics and mechanics, plus chemistry, took war into the realm of science. But this was a very serious thing. It will spell the doom either of war or of human culture. For scientific warfare means that the human mind is applying itself to the destruction of its own being. Explosives, ferments, drugs, poisons, etc., are too much for us when we liberate them upon the social world.

V. "A More Excellent Way"

(*a*) *Militarism and Pacifism*

Warfare, ethics, and religion.—It was once quite the thing to assume that the struggle for existence was a competitive affair to so great an extent as to rule out practical ethical

relationships except as an ornamental fringe to human behavior patterns. This idea tended to glorify war, for war was supposed to eliminate the unfit. Aside from the pertinent social query "unfit for what?" with its answer "for war"—an answer that gets us nowhere—there is a new point of view that reëstablishes the validity of ethical conduct and depreciates the value of war. It is that natural selection occurs through the success of coöperative groups, and that intra-specific struggle does not lead to survival in nature. If religious teaching can cause the ideal of the brotherhood of man to prevail, then intra-specific coöperation would mean that no wars could ethically or scientifically be supported. Accelerated rate of change, and social control in evolution may hasten this desired end. It is fundamentally important that altruism should not be longer hampered by the anachronism of war.

Warfare as a passing phase of life.—Although it cannot be said that the original state of mankind was exactly one of peace, neither can we say that primitive man—in other words, human nature—is warlike. But on the whole man seems to have passed through a great cycle of war development, followed, it now appears probable, by an era of social disapproval of the practice. Feuds of individuals passed gradually into tribal conflicts, with retention of much of the individual character. In more highly developed societies, power, tribute, and territory are insisted upon, and warfare becomes a terrific agency of the state. Internal feuds are suppressed, but the state absorbs the belligerent spirit of its parts. It also makes religion, group loyalty, and economics support its program. Meanwhile various phases arise that more or less quench belligerency—religions of pacifism, pacifistic peoples, law and arbitration, etc. The growth of internationalism points to the coming stage of the world commonwealth.

(*b*) *The Socialization of the Soldier*

"The moral equivalent of war."—The business of fighting, in earlier stages of the organization of society, was every man's business on occasion. But time and specialization of function have given us the professional soldier. With the long history of human warfare behind him, with the limelight of the spectacular playing upon him, it is not strange that he should take himself for granted. He thinks he is the social type of the intelligent, orderly, disciplined use of force. Some —a minority at present—think he is essentially a force element and only incidentally an exhibit of social intelligence. Still others regard him as the negation of social intelligence, holding that impatience and lack of mental discipline lie at the root of our preference for death and glory rather than labor and permanent satisfactions.

Social evolution as the emergence of substitutes for war. —There are two ways of disposing of an obstructive feature in the environment: one can combat it, or use it. War treats men as environment to combat. Using men after they have been defeated and made powerless is to make them non-human. Peace, civilization, culture, tries the other way of using men, namely, the coöperative.

Through all of recorded human history the soldier has been marching away into the murk and limbo of battle, leaving behind him, perhaps forever, the truly social patterns of life to make as good shift for themselves as they can after he has passed by:

"Soldier, soldier come from the wars,
Why don't you march with my true love?"

"The dead they can not rise, an' you'd better dry your eyes,
An' you'd best go look for a new love."

Today there are two men who stand in the limelight of the

American public attention, each preëminent in his own way, each a soldier in the best sense, and each bent on adventure. Col. Lindbergh is the "lone eagle." Commander Byrd looks to the leading of a group "over the top" of the Great Ice Barrier. In these men the moral equivalent of war, plus knight errantry and the *comitatus*, are all converged in the service of the Emergent Society.

CHAPTER XIV

MAN SEEKS A CENTER

A house of dreams untold.
—EDWARD MACDOWELL, Heading to "From a Log Cabin."

I. THE SHELTER MOTIVE

(*a*) *The Shelter as a Focal Point in Man's Life*

The den.—In this chapter we are to conclude our study of the concrete objects and the more active ways of life acquired by man, and turn to subjects that emphasize forms of organization and institutional life. This is therefore a transition chapter, and the topic which best serves as a link between the two sets of activities is the dwelling, the place to and from which man moved in his social experiences. On the side of concrete culture, the dwelling or shelter developed into housing and architecture, while on its institutional side it is bound up with the family, the oldest of all the major institutions.

The most primitive shelter that we can visualize for early man is best called the den. The word suggests a mere *place,* a shelter from the roughest phases of the environment, with no light, no furniture, no social or active life,[1] a place reserved for the purpose of withdrawal and refuge. Though mobile in nature, like animals in general, man seems to hark back to inanimate origins and selects a spot which shall be his own.

[1] But even the den has the social life that inheres in the care of the young by the mother. So difficult is it to find an instance of family without social accompaniments.

If we followed him back to prehuman days we might find that chosen spot in a tree. But as man, he seeks in the protection of his mother earth some angle, nook, corner, or hollow. The den of primitive man might not have developed far if it had not been for man's becoming involved with a new force, the proper management of which depended on certain alterations of the shelter-place.

The camp.—The new force was fire. A fire immediately puts a new aspect on the shelter-problem. It is the essential center of a camp, and it instantly creates a gulf between man and beast. Fire demands space, circulation, outlet, head-room, and as soon as man makes an alliance with it he has either forsaken the cramped and eventless quarters of the cave and den, or else he has started to unite the shelter with the fire in some new kind of shelter. A den is a recuperative spot; a fire is a center of social life; if man combines them he has both values in the objective form of the *house,* and the institution of the *home.* A home is a shelter raised to the dignity of cultural life—thanks chiefly to the fire on the hearth. The camp alone is too spacious; it has the beginnings of community life, such as religious center or political control, but not of the home. The den alone is too narrow; it is negative in its appeal. The shelter plus the fire is the genesis of home, and perhaps this is why the most intense home life is found where the climate forces man to draw the walls of a shelter around his fire, and transfer a part of his outdoors fireside freedom to the more ordered freedom of house, hearth, and home. Thus there are two modes of organization or grouping that carry us back very far: the camp as a grouping together, and the camp narrowed down to the home. In one we eventually find the altar-fire of the temple; in the other, the hearth-fire of the home.

(*b*) *The House*

The house as a continuation of natural shelter.—Putting ourselves in the place of primitive man, we see that the natural thing to do in meeting the need for shelter was to interpose something between the person and the elements. Animals that had need of adjustment to cold or other forms of inclemency had grown fur or other organic protection. Man found a quicker method, because he had reflective imagination. He took the fur away from other animals who had specialized, as he had not, in fur-bearing. There is a grim and tragic side to this business, reaching down even to the lullaby with which countless babies of our race have been rocked to sleep:

> Bye, baby bunting,
> Father's gone a-hunting,
> Gone to get a rabbit-skin
> To wrap my baby bunting in.

The tragedy depends upon the point of view. But in any case the toll of lives exacted by our species from others to make up for its own lack of hairy covering is a continuing social fact of considerable magnitude. Some very large areas of the earth's surface are organized and inhabited solely around the fur-trade needs. As we pointed out in the chapter on the arts, however, man clothed himself in various things besides furs and hides, chiefly because of the textile arts. But in spite of the splendors of sartorial history, there are definite limits to the art of clothing, soon reached, and largely determined by the limited extent of man's willingness to be clothed. Just now he is showing a desire to be less clothed. He did not originally care much for clothing at all, at least for the purpose of shelter. The exigencies of primitive daily life were not conducive to it. There are ineradicable difficulties about all clothing, inherent in the anatomy of *homo*

sapiens, who is forever adjusting his dress to his varied behavior, or discarding it in emergencies. Development too far in the clothing line would be an impediment to getting things done. Yet at this very moment when man is simplifying his clothing, when a nineteenth-century woman seems grotesque in retrospect and an eighteenth-century courtier foolishly swathed in coats and waist-coats—at this moment architecture is producing something different for the first time in many generations—the zoned or super-skyscraper. This comes about because of advance in structural technique, and mechanical possibilities, but that in turn is an aspect of the old tool-using and tool-making ability. And it is in this structural art that man was offered a better way than clothing with vaster possibilities of sheltering himself, namely, housing.

Housing is shelter secured by interposing something not directly connected with the body against wind and weather. For the present we shall separate housing from architecture in our thought; that is, we leave the æsthetic out of consideration, and think only of the housing or shelter interest. In sheltering himself, man used his hands, of course, to arrange the materials, but earlier than that he had used his feet to betake himself to natural shelter. He had no dwellings, but he had "stopping places," as the villager still calls the semi-permanent abode of the sojourner in the neighborhood. The camp might be in the unbroken openness of the out-of-doors, or, more likely, it might make use of whatever natural windbreak there was—shrub, tree, rock. People on the move did not always find in one place what they had fortunately found in another, but they could make substitute shelters. Widespread among lowest peoples we find the "windshield," a hurdle-work of twigs, or woven of stalks. There is an unconscious competition between the cave or the hole in the ground and the shelter made above ground. Sometimes the same people use both modes of shelter. Others become troglodytes quite definitely. It was because man was so

skillful with his hands that the windshield-tree-umbrella-roof-tree line of development prevailed over the cave-hole-vault-rock hollow-castle line. But what really gave us the greatness of architecture was the convergence of the two. When that happened, as in tomb, temple, and later in dwelling, the substantial character of the earth habitations was joined to the aspiration and structural complexity of the surface shelters.

How man left the cave.—If we suppose man to have become accustomed to the wind-break, it is of course an easy step to curve the ends around into a circle. This is an original hut, and it gets a roof very soon, just as children surrounding themselves with chairs, when playing "house," want a shawl or blanket to put across the top. This gives the tent, which is an arrested kind of dwelling. The tent-dweller has always envied his brother-man who by another line of evolution has really come to "house" himself. The symbolism of this social cleavage has carried over into the religious life. "We'll dwell in tents," says the old hymn, likening human life to a nomad's; yes, "but we look for a city that hath foundations" is the answer of humanity. So we must go back to the beginning of our thought again and ask: How came the house-dweller by his house?

Man did not always wander like a nomad. And he did not always find it convenient to make a cave. A cave is less desirable in some ways than a half-cave or overhanging rock-shelter. The fireplace under a rocky overhang has some of the qualities of a house, but it lacks definiteness. The constructive or joining impulse had to come into alliance with the hearth.

It may, indeed, go a long way without the help of the fire and hearth. Even the apes show a good deal of skill in making sleeping places with a sort of roof, plaited of the twigs and leaves directly over the nest, and concealing it. Tasmanians did little better than this: they either lived in hollow trees or else had very rude huts made of twigs covered with bark.

But the desire to get a fire and a hut together brings the house into existence. The chimney is the token of the union of the wall (screen or wind-break) with the fire. In the chimney the tool-using gift of man is fused with the fire-gift. Great things were to come of that—the forge and the shop. And at every chimney where a stocking is hung at Christmas we can read the abiding symbol of man's striving and finding the gift he craves at the resting place where he sleeps about his fire.

After a fire and a shelter for it, the next line of development is a floor, which first makes itself felt as the need of an artificial foundation for the fireplace, especially so that water shall be kept from it. The primitive idea for the floor seems to be a raised stone or earth platform. The platform, supported by pieces of wood stuck in the ground, is connected in development with the pile villages made long ago by the Swiss lake-dwellers, and still made by peoples in South America, India, and the Pacific Islands. It is an example of the way in which a pattern gets fastened upon widely distributed parts of mankind. In the Malay forest-dwellings further stages of the process by which man built his house on a raised support can be seen. It is interesting to reflect that the square pile house actually connects Europe and the Pacific Island world culturally.

The house as an independent structure.—From this point on, the housing question yields for a long time to the less individualistic interests of architecture, a subject taken up elsewhere. At the same time it forms an alliance with some of the principal arts of life to which Chapter XII was devoted. Carpentry and masonry, furniture-making and joining, are the principal outgrowths of this development of the house.

II. The Homing Impulse

(*a*) *The Homing Impulse as a Psychic Factor*

Homing impulse in animals.—The first instance of any kind of experience has a quality, an incisiveness, a distinctness all its own, and not to be confused with any subsequent experience—in short, a *firstness*. And since the circumstances entering into the making of that occasion are so much concerned with the place where it happened, that place becomes a center of psychic life. The early habit-forming sequences of experiences all have a place in relation to that first place, which is a cosmic center to the immature individual. And as the psychic life of many animals, particularly birds, is a matter of locomotion around a central location in search of food, with no further stimulus, the habits that were strongly ingrained at the beginning of their life lead them back to the nest or den.

Homing impulse in man.—There is evidence that man began his career with a greater endowment of the homing sense than he now has, though there is a great difference between individuals in this regard. In general we may say that man's experiences and psychic life are so varied and so internal compared with those of the other animals, that his homing impulse becomes one of thought rather than of travel.

The house, as we have seen, is one of the chief things the development of which marks man's advance over savagery. Yet at first the house was not home in our full-packed meaning of that word, but simply a common center at which the members of the genetic group, the primitive community, foregathered seeking common shelter from the hardships of the struggle of life. The function of the house as a storm-break for infancy makes the child develop a very exalted sense of the beauty, dignity, entire sufficiency, and normality or

standard character of the first one that he knows. His "homing" takes the form of a journey in thought to the oldest place he knows. Herein lies the secret of much of the charm that the old story of Eden holds for mankind. Everyone has to learn at some time that he cannot go back to the first home except in thought; the way is barred otherwise.

The biological and psychological tap-root of the home is this place-attachment, for it is the place of birth or the first place remembered. The attachment to the "original" place and the desire to return to it explain a great deal of human life, literature, and song. The first behavior-patterns learned have the local color of the home and are geared into conformation with those old doors, windows, walls, pictures, furniture. It is the first space-continuum experience. To run back upon that pathway is easy. The child does so in his play continually.

In the physical life, while the savage retains the direction and homing sense wonderfully, the more reflective-minded man finds it becoming "sicklied o'er with the pale cast of thought." It may be at bottom simply some form of an acute power of observation. "Home is the sailor, home from sea, and the hunter home from the hill," is an expression summing up the simplest and oldest of our life-ways.

Transition to Part III

A discussion of Social Evolution, such as this book purports to be, must necessarily establish first the fact of the social nature of man. This we have done in the opening chapters, but not at any great length, because the fact and the explanation of the social nature of man belong properly to the field of Social Psychology.

Our own subject is the social nature of man in action along evolutionary pathways. This may be viewed from two standpoints. If we think of social evolution as a process of change

and development of man himself, we should undoubtedly find much to discuss. Whether human nature changes or not, and how, is a subject of great fascination. Though this again would not be far from the subject matter of social psychology, we shall touch upon it more or less.

However, the process of change in the social nature of man is brought about because he reacts to the outward forms and structure of society. And these outward social forms have themselves been in evolution. It is these with which we are conspicuously concerned.

The table of contents, then, shows that we have been studying a series of phenomena that are quite concrete: tools, agriculture, etc. Now we shall take up social manifestations in which the material side is not quite so evident: namely the various institutions.

CHAPTER XV

MAN SUBLIMATES THE SEX MOTIVE

"God setteth the solitary in families."

I. The Family as a Social Core

(*a*) *The Sex Motive*

The merging of individual and society.—Our preceding study of the psychic nature of man must have left at least the abiding sense of man's differentness from other animals, even from those physically most like him. If we sum up those numerous characteristics that set man off, we may say that man has gone a great deal farther along the way of a clear-cut individual self-conscious life than other creatures.

This means, to push the inquiry still farther, that the human being has achieved the most intense and definitive solitariness conceivable. Having emerged from the adumbrations of organic evolution into a self-perceptive, reflective[1] ego, he enters at that very instant and *ipso facto* into an infinite yet self-contained existence, a cosmos defined in last analysis forever and only by the limitations of his own self. Now appears the marvel: man does not abide in utter loneliness. Having achieved a self, he also achieves a society. Indeed it is only through his social environment that he can possibly come into what we term self-possession. The mutuality of society induces that highest appreciation and enjoyment of oneself which is known as self-control.

[1] See Tennyson, "In Memoriam," LXV.

Social evolution reveals the vital spot where Nature effected a liaison between the two principles. At this spot she evolved a primal form or pattern of life, a sort of social matrix, from which the individual and society have gone on fused but pliant, turning out the derivative forms of social organization. This original plasmic cell of social organization, at once so expressive of self, and so creative of self in society, is the primary group of all groups. It is the Family, the fusing spot of individual and societal life.

The word suggests beginnings, birth, reproduction, various aspects of sex life. Nor is the connection thus suggested between sex, individualism, and society a merely fortuitous one. Sex is the impulse which is at once most self-seeking and most altruistic in its eventuality. It is in the very well-springs of personal, conscious existence that man encounters the values, the fulfillments, which are also the fountain-head of social existence. This region of sources, of origins, where the intensely personal by the very process of self-realization reveals itself as the equally intensely social, viewed from the social standpoint as not only a biological but a psychic and social series of phenomena, is best suggested by the common word *family*.

The individual and sex.—Inasmuch as the study of the genetic factors in society brings us repeatedly face to face with the fact of sex, a word or two may be inserted here regarding society's attitude toward this whole subject. As has been said, no fact of life is so persistently social and at the same time so intensely personal. It is directly concerned with a very large part of public welfare and community affairs, but at the same time it constitutes an ineluctable running accompaniment, sometimes louder, sometimes lower, to the individual's inmost thought and feeling. It is a channel for the expression of life's very highest and very lowest. This assertion of the sex instinct as one of the dominant interests has been met by mankind in a bewildering variety of

ways, the very great and complex mass of sex *mores* encountered by the anthropologist, historian, sociologist, and psychologist.

Complex and various as the sex *mores* may seem, however, a certain similarity, a basic point of view, may be discerned in all the traditional attempts to settle the attitude toward sex. It may be called the note of apology, evasion, or secrecy. The control which among the lower animals is successfully left to instinct is in man's case achieved (in a tentative, experimental manner thus far) by social devices of a regulative nature. There has been a certain degree of acceptance of the idea of secrecy and tabu, mingled with the suspicion that secrecy was both absurd and impossible. How to keep a fact as "common" as sex, in the sense that it is an integral part of every normal person's nature and experience, from becoming "common" in the sense of "vulgar," has been the task of society.

It is occasionally asked, why must this eternal pother over sex be always going on? Why cannot man accept frankly his sex nature and refrain from interference? The answer is that he cannot help interfering; his very nature impels him to take himself seriously. Man has always seen in the sex life something that belongs to the physical roots of his nature, but which must be educated to have a place in his social and mental constructs. We sometimes say of a person of rather low attainments that he desires to "improve himself"—a very startling thing for any creature to take it into his head to do. Jeffery Farnol has a romance dealing with the attempt of an English boy of yeoman stock to establish himself in polite society, and has called the book "The Amateur Gentleman." Now for whatever reason one may choose to assign (and it is certain that the reason runs far back into the lineage of the race) that member of Mother Nature's brood known as *homo sapiens* (knowing little upstart!) has long since served notice on creation that he is going to improve

himself. He proposes to be a gentleman, and though no one realizes better than he does that he is only an amateur in this line, he has at least achieved the distinction of being the only beast on record who has even *attempted* to lift himself by his bootstraps.

The old primary pattern of sex regulation tends to degenerate, however, into some form of prudery. Three other attitudes have been tried. First, there is the humanistic attitude which seeks personal freedom but is weak in restraint; second, the ascetic attitude, which is a social safeguard up to a certain point but beyond that loses its hold on the facts of life, and consequently on people; third, there is a scientific attitude which has a certain robustness and straightforwardness but which runs the risk of overlooking the charm of social sex relations. A new synthesis of these three is needed. No clean-minded, forward-looking, truth-seeking student of life will linger in the out-grown region of the mind into which all too many people have been allowed to spend part or all of their immature lives, where sex is a symbol of something furtive. He can be counted on as having gone far beyond the plane of thought where the unnatural shyness or the concealed snicker is the response to the facts of sex life.

Two things must be kept in mind in trying to make new standards. One is that man will not relinquish his sex-mores, his conduct-patterns, into which he has built romanticism and beauty, along with awkwardness and falsity, in any case where his idealism bids him cling to them. Man has long since become an idealist: he sees what might be and adopts it as the goal of what is. He has taken himself seriously, having glimpsed just around the corner, as it were, a better man whom he may become. The other point to be kept in mind is that even the futile and outworn among the old sex ways rests upon a rather overwhelming past of experience and adjustment. It is that social past that we are going to study in this chapter, and it will help us to see how deep-rooted

are sex, family, and marriage in the ages that have transpired but are still operative. It will add to the interest of this subject to remember that just now there is going on a very serious and widespread attempt at readjustment of behavior-patterns, causing some speculation as to how the ideals are holding.

One of the reasons why sex leads us such a merry chase, (and a reason why we must take thorough account of its place in the life of the individual) is that it means so much more than physical passion. By devious ways sex enters into the other manifestations of love: "spiritual tonic; intellectual yearning; subterranean stimulant of wit, courage, discernment, refinement of sensibility, loyalty; social bond; bond of human friendliness; platonic sentiment; religious symbol; value in itself without satisfaction of desire." [2]

Society and sex.—Not only in the life of the individual, but in the forms by which society lives and moves and has its being is sex a controlling force. This would be easy enough to show by superficial instances, such as the numerous cases of segregation of the sexes in the routine of living, but there are deeper aspects of the subject. It would be possible to show with regard to every one of the major institutions of society that sex considerations have shaped its patterns in one way or another. It seems to have had much to do, for example, with the origin of political forms, whether in the contest for possession of the women by the males of the group, or in the protection of the family by male organization. In art, ornamentation for sexual attraction is one of the sources of the decorative side of æsthetics. In economics (which primarily has to do with sustenance rather than sex and reproduction) sexual division of labor appears even in the care of the young and the ways of getting food. Out of some form of struggle or adjustment in which sex is concerned arose institutions of social control, and the story of social

[2] Storck, "Man and Civilization," p. 86.

evolution begins very close to the functioning of the sex interest. Many very interesting culture traits are sexual in their origin.[3]

(*b*) *The Importance of the Family*

Central position of the family in society.—Sex, society, and the individual come together in the institution called the family. The following exercises have as their purpose to show how secure is the standing of the family in society, and to bring it out into a central position in the picture:

I. Make a list of all the different social groups in your home community.

1. Classify these groups under the two headings:
   (*a*) Larger than the family.
   (*b*) Smaller than the family.
   What is the inference?

2. Arrange this list of social groups in their proper order as to:
   (*a*) Number of people affected by each group.
   (*b*) Intensity of influence exerted by each group.
   Where does the family come in each list?

II. Make a fairly inclusive list of social groups of all kinds in society at large.

(*a*) Classify as
   (1) Groups having a predominantly physical basis.
   (2) Groups with a predominantly psychic basis.
   In which list is the family?

(*b*) Classify as
   (1) Primary (i.e., face to face or direct personal contact) groups.
   (2) Secondary groups.
   In which classification is the family?

[3] E.g., the couvade. See Wissler, "Man and Culture," p. 94.

(*c*) Classify as
(1) Institutional (recognized or accepted by society).
(2) Non-institutional.
In which are the more influential groups? the more dynamic? In which is the family?

(*d*) Classify as
(1) Old in the social life of the world.
(2) New or comparatively recent.
In which list is the family?

(*e*) Classify as
(1) Natural (genetic, involuntary) groups. (Associations of necessity.)
(2) Artificial (voluntary, invented) groups. (Associations of utility.) In which list is the family? [4]

The strategic function of the family.—The foregoing analysis should show that the family is the ranking institution in human life. It should also show that from whatever angle we approach the subject, social groups will fall into two classes, and to designate the two types we may choose the terms "associations of nature" and "associations of utility." Now it is noticeable that the family tends to show up in every instance as belonging both to the utility and the nature associations. As a mating association it is a natural group; but the family is much more than a mating organization. It may, for instance, be a voluntary center of artistic appreciation and productive activity. The family is, in fact, a connecting link between primary and secondary patterns in society. For this reason both primary and secondary groups may branch out from it, as likewise may both natural and utility associations. The two kinds seem to exclude or submerge each other in turn. Animals and birds, in herds and flocks, are introduced into a larger society by parents and live in this way till the

[4] See "Primary groups the nursery of human nature" in Case, "Outlines of Introductory Sociology."

natural instinct draws them off again into matings, at which time the utility organization is temporarily or partially dissolved. The mating association takes its place in a smaller way. It is a fountain head of organization, an all-inclusive primitive form to which the more developed and specialized utility forms must hark back for renewal at the sources. The family plays a social role, then, in a very pervasive way. It appears as *marriage* in carrying out the *mating* instinct, and as *home* in a more developed form, contributing through the latter a very important educational and organizational function. The family, out of the circumstantial material of the social environment, builds up the primary association and helps create the secondary. Thus we see that self-perpetuation leads to forms of association which are not directly based on marriage, and these social forms may, as it were, double back into a new relation to the family and the home. For example, the state grew up in part as a development of the clan or family organization, then became an independent institution, and later still entered into important new relationships with the family by means of legislative control.

II. The Biological Basis of Marriage

(*a*) *The Significance of Sex*

Sex as a biological device.—In seeking the origin of the family we early encounter the pervasive biological fact of sex. So inseparable is the thought of family from that of sex, courtship, marriage, parenthood, that one may easily go astray as to the causal relationship between them. Nine persons out of ten would agree to the statement that the "purpose" of nature in the development of sex is the propagation of the race, the producing of offspring. But when it is pointed out that some low forms of life reproduce without the device

of sex, it appears that sex is only one method of reproduction, and not the simplest form.

What, then, is the real value, biologically, of sex? Biologists tell us that it is variation. If offspring were produced by one parent, there would be little or no opportunity for any variation or improvement to occur in a "family" (a genetic series), since each individual must have received his inheritance en bloc from one other individual, who in turn received it unbroken from another.[5] But if each individual receives his inheritance from two unrelated parents, it follows that his joint inheritance from them will be different from that of any of his ancestors, since each half of his inheritance is unshared by one or the other of his parents. Thus variation without limit goes on, generation after generation.

Sex is therefore a guarantee of progress, since progress must come from change or variation, and not merely biological but social progress as well. Among isolated groups deterioration is an observed fact in human life, and so is the appearance of new combinations of qualities when groups begin to intermarry.

Sex as an enrichment of social life.—The difference between the sexes affords a large measure of variety to ordinary social life. The daily round of social contacts is shot through and through with little customs, courtesies, detours and circumlocutions by which either sex recognizes the existence of the other. Life is, so far as these ways are concerned, a continuous flirtation, not necessarily amorous in intent at all. Now, through the whole of this procedure there operates—indeed, the procedure is the necessary ground upon which it can operate—a variant volume of preferential and deliberated sex relationships called sexual selection. That is to say, even though one does not necessarily have courtship or marriage

5 This assumes the validity of Weismann's Law of the non-inheritability of acquired traits. It also ignores or minimizes the possibilities of variation and mutation in the germ plasm. Investigate both of these subjects, and deduct accordingly from the force of the argument. But at best variation would be tremendously hampered if propagation occurred with only one parent.

in view, yet some degree of selection by one sex, and of survival (socially) by the other, continually takes place. When the matter of mating is concerned, the correlation of choice and survival is much greater.

"When the males and the females of any animal have the same general habits of mind, but differ in structure, color, or ornament, such differences have been mainly caused by sexual selection."[6] Sexual selection is the selection by each sex of those individuals in the opposite sex who are most representative of the type toward which the species is unconsciously moving. Where sexual selection has occurred, each sex is responsible for the traits of the other; it has put the eventually permanent traits at a premium. The social enrichment of life arising from this comes in the fact that the sexes have become more different from each other because more complementary, and thus, for any given situation or function there are two types with their infinite interplay. In regard to beauty, for example, the sexual selection process has unquestionably brought out in prominent accent the physical differences of the sexes, so that the figure of the beautiful woman is markedly of a different æsthetic type from that of the most admirable masculine figure.

Quite apart from the definite attraction of individuals leading to marriage (yet springing from the same root impulse), there is a well-recognized, diffusive sort of attractiveness of each sex for the other that permeates society, a kind of quickening of pulse or heightening of enjoyment that does not ordinarily rise to the intensity of what we call "romance," though it is the background out of which romance arises. Each sex acts as a foil to bring out the possibilities of the other. Society values all this highly and has been at some pains to guard it from deterioration. In fact, one of the ways in which the word "society" is used is to mean a gathering of men and women in a more or less conventional way; thus, we could

[6] Darwin, "Origin of Species," Chap. IV.

hardly conceive of a person getting, as we say, "into society" unless we had in mind social affairs inclusive of both sexes. A highly developed social movement, such as a well-danced minuet, exemplifies how the two sexes in coöperation can create a more varied and beautiful life than would be possible otherwise.

Complete self-realization is a high value. Social relationships are another. Sex assures us of both. By it nature insures that we shall never achieve a self-isolated completeness. Only in the deep mutuality of sex can personality achieve completion. The ends of sex are thus seen to be unselfish both as regards the needs of the race and the welfare of the individual. Whatever one sex lost by becoming a sex, it regains in the other, with the accumulated interest of a million years.

Parenthood as an outcome of sex.—From a biological viewpoint, the basis of the family is sex. From a sociological viewpoint, the end of sex is the family. Prominent in the idea of the family is parenthood. Parenthood consists of the physical phenomena culminating in birth, and the physical care and mental solicitude of the parent for the child, which we may call nurture. Nurture, parenthood in its higher manifestations, also serves a very important purpose in the economy of things: it is an alternative to the necessity of reproduction in very large numbers. The Mother Goose rhyme of the old woman who lived in a shoe is a parable of family and genetic evolution. In nature, the mother who has a thousand children cannot be a mother at all in the finer sense of the word. Hence no real family life can exist until the number of offspring is limited to a point where individual interest can be shown toward each one. Another process of development went parallel with the reduction in the number of young: the period of infancy was lengthened, and the child became more helpless at birth, so that parental care was a matter of survival value, and inevitably came into existence.

The earlier form of parental care is, of course, that of the mother. But another factor must be added before we have laid the foundations for the family as a social institution, for without the continuing interest and parental care of the father the human family is thrown back upon the cultural margin of safety, if not the economic margin. The three factors of (1) personal care of an exceptionally helpless and slowly maturing offspring, (2) protection from outside dangers, (3) the food-quest, become too heavy for the human mother to sustain alone. The keystone, though not the foundation, of the family structure, comes at the point where the father shows a concern for the young. In some species, notably among the birds, we find this concern quite conspicuously developed. On the other hand, the male of many species of mammals assumes no responsibility for the young. The explanation for this difference can probably be found in a general way in the principle of natural selection. In those species which were really helped to survive by the growth of bi-parental care, it became a specific characteristic. Those animals which, by reason of special cunning on the part of the mother, rapid development of the young after birth, or some other device, could survive without it, did not evolve bi-parental care.

An interesting question naturally arises; among human beings is bi-parental care established by nature, or is it a social growth by convention? Some moral considerations inhere in the question. For if the former is the case, if the father, ever since man became man, comes of a race that adhere to their mates and "see it through," if, in other words, what we may call paternal responsibility is a genetic fact in human life, we may perhaps say that a man who deserts his family, or who becomes a father without a thought of avowing responsibility for his children, whether in or out of the marriage relation, is profoundly traitorous to the general welfare and has revealed a yellow streak. But if paternal

responsibility is only a socially acquired trait, we might pass the gentler judgment that he is merely a case of retarded development.

(*b*) *The Emergence of Marriage in Human Society*

The mother-child group.—Whatever may be the truth as to the very early forms of the family, or as to the manner in which the institution of marriage came to bind together the mating instinct and the business of caring for the young, there is no escaping the conclusion that the ultimate analysis and the most remote of genetic social associations to which more than the merest casual character can be ascribed, is the mother-and-child group. Even if—and concerning this very point there is great argument—we hold that the marriage union is as old as humanity, still the mother-child group would win on the score of being at least as old as marriage, and having more social constancy besides. The mother-child group is a sort of germ-plasm of the associational life of mankind.

The problem stated.—There are two principal ways of viewing the question of the probable origin of the family. One view is that the family, including the father, had definite form from the beginning of human history. The other is that primitive man was promiscuous in his sex relations, and that everything in the line of the definite family organization has grown up out of that early promiscuity. The storm center of the debate about the beginning of the family is thus the father: was he a charter member of the family or a later increment? This is, of course, a social and not a biological question. No one would waste time over the obvious fact that father and child are equally original in human biology, just as are the hen and the egg in the conundrum. The question is: was the father present as early as the child in the *cultural* group or social organization known as the family. If he was, we may say that the institution of *marriage* is as old as

humanity, for marriage is the union of the sexes for the propagation of the species, continuing at least long enough for the father to have a definite relationship to the mother after the birth of the child. In other words, is the human male a "marrying man" by nature? Does the pattern, so central and familiar to our life, of father-mother-child as a permanent group, lie at the heart of society, built into the very nature of humanity by the age-old processes of creative evolution, or is it a comparatively recent superstructure? It is clear that if the answer is in the affirmative we must revise our conception of the social germ from mother-child to father-mother-child.

Theory of marriage as a pre-human form of behavior.—If by marriage we mean any formal agreement, of course the mother-child grouping far antedates it. But the possibility advanced by the opposers of the promiscuity theory is that the father adhered to the family at the beginning, not by formal arrangement, but naturally. One of the ways to approach the question is to compare man's sex life with that of other animals, especially those nearest him in the evolutionary series. Certain similarities are at once apparent: (1) courtship, or the special behavior of the male in seeking the favor of the female; (2) jealousy, particularly on the part of the male; (3) aversion to the crossing of species. Certain differences also appear: (1) Man has no mating season; (2) smaller number of young born; (3) prolonged period of infancy; (4) antipathy to incest; (5) artificial adornment; (6) social endorsement usually sought; (7) the conception of chastity; (8) modesty; (9) higher forms of affection or love, besides the physical. Some of these differences evidently have little or nothing to do with the primitive life of man, and have no bearing one way or the other on the argument. Still, it appears that man's family life has gone through some additional stages beyond that of the animals, and the question is: must we think of this development as launched from the be-

ginning in certain natural forms, biological in origin, or is it entirely a social superstructure on a promiscuity foundation?

The animals nearest to man are the anthropoid apes. In the light of their family behavior, the promiscuity theory does not fare very well. "All of these apes . . . live in relatively permanent family groups, usually monogamous. These family groups are quite human in many of their characteristics, such as the care which the male parent gives to the mother and her offspring, and the seeming affection which exists between all members of the group. Such a group of parents and offspring among the higher apes is, moreover, a relatively permanent affair, children of different ages being frequently found along with their parents in such groups." [7]

The arguments against primitive promiscuity have been summarized as follows: [8]

1. It does not appear among the anthropoid apes.
2. It does not clearly obtain among the most primitive existing peoples.
3. Primitive economic conditions probably favored small groups.
4. Male jealousy would have prevented promiscuity.
5. Promiscuity would have resulted in neglect of children.

Theory of original promiscuity.—The significance of the promiscuity theory is in the consequent theory of the dominance of the mother-family, which we take up a little later. The theory begins in the fact that mother and child are naturally bound together without need of deliberate agreement. Under these conditions mother-love develops as the earliest social emotion, and the "mother-right" or maternal authority, is the earliest social order. In primitive times there was much less of an interval between weaning and mature independence than now. Man's reflective memory enabled him to retain his sense of dependence upon his mother, even

7 Ellwood, "Sociology and Modern Social Problems," p. 100.
8 Some of these arguments are of much less force than others.

after it was no longer a physical fact, as a sort of potential raw material for social complexes which no other animal could have.[9] It has to be confessed that the father in our modern sense was slower in becoming a part of the picture, and never has been so near the center as the mother.[10] Add to this the fact that the physiological relation of the father to his child was not known, or, if known, not considered important, for a long time, and we can see that the relation of man to the family was very loose. Advocates of the promiscuity theory see man's relations with the women of his group as promiscuous, under such circumstances, but it should be noticed that this is an inference only.

(The following quotation attempts a picture of group life in the supposed days of promiscuity . . . "around the mother as a center there naturally formed a small human group united by living together from earliest childhood on. Not a decade elapsed between the weaning of a female child and the birth of her first child. Through her, her children were also associated with her mother's group. No division of labor had yet appeared to tear them away. Girls and boys, the latter not yet possessing more developed weapons, roamed together in search of fruits, seeds, larvae, and mussels. The young, without special motive, would no more have rejected the experience of the older in searching out the places richest in booty, than young birds would have sought migratory routes far from their elders. So with man as with the birds of passage there developed of necessity a group in which the younger were chained to the older by custom and the youngest by natural dependence, from which they could only gradually escape. The girls of the group in their time aided in holding the young men fast to it. They belonged to the whole group

9 Consider the innumerable instances of this universal esteem for the mother. E.g., the poetry of motherhood, the Madonna paintings, the status of the mother even where slavery prevailed, the "Dowager," "Mother's Day," etc.

10 Note the connotations of "father," "sire," "papa," "pa," "daddy," "dad," "governor," "old man," "pop," etc. How many of them could obtain under primitive conditions?

. . . until maternity put an end to this life for years. Blood relationship as yet formed no obstacle . . ." [11]

One of the subjects which we shall take up in the next section of this chapter and in the following chapter is that of the matriarchate or mother-dominated family. We notice it here briefly because one of the arguments for promiscuity centers around it, for it is urged that the reason women were once dominant in the family is that relationships were traced through mothers only, and that this custom, in turn, indicates that the paternity of the child was either unknown or disregarded. The weakness of the argument is in the fact that even if all this were true, it does not logically necessitate promiscuity, for there could have been a form of marriage and family relation in which the father, was, indeed, loosely attached to the dominantly mother-centered group, but from which other males were excluded. In other words, the picture of the promiscuous roving kinship group quoted above does not, perhaps, sufficiently take into account the constantly operative social mating tendency.

Another argument in favor of original promiscuity is that man had no reason for being attached to the mother-child group at the beginning, because he had nothing to offer to the "household" which woman herself could not provide, and that this remained true as long as man had no advantage over woman in the food-quest, that is, until man became possessed of superior weapons. The answer to this is that it overlooks, first, that even primitive woman might well have availed herself of the protection of the man, especially when she was encumbered with her children, and second, that there is such a thing as a psychic bond in addition to the food-quest and other economic exigencies.

Some of the survivals from primitive customs indicate former promiscuity, in the view of some scholars, but there is usually the possibility of another explanation, involving

11 Lippert, "Culture History," Ch. 2. Murdock's Translation.

the growth of tabus, religious ideas, kinship and totem practices, etc. Among these survivals are certain practices relating to girls among Australian and West African tribes at puberty, sacred harlotry and historic wedding customs.

Even the most pronounced advocates of the promiscuity theory reject the idea that it ever meant absolutely unrestrained reproduction. The supposed seasonal ebb of the sex impulse, the relentless grip of the food-quest, the natural selection favoring those groups that practiced the withdrawal of the mother during the nursing period—all these things were the natural setting for some limitation on promiscuity.

The loss of seasonal marriage is a subject of related interest to that of origins. According to Westermarck, traces of seasonal marriage may still be found in a few tribes. It is retained by the anthropoids and other animals. The reasons for the loss of it are: (1) steadier food-supply, producing physiological effects; (2) wandering in quest of game from climate to climate in which the seasons varied, thus throwing out any correspondence between seasons and mating; (3) imaginative powers of self-stimulation, increasing with the advance in culture. "The change certainly disturbs us with an incessant urge of sexual proclivities that adds greatly to the pathology of human life; and yet it is difficult to see how without it the more romantic or the nobler characters of affection could ever have been manifested." [12] The drift of this is that it is more recent man who has found himself less securely bound to monogamy, and not necessarily primitive man.

It is not so very important to ascertain whether promiscuity, polygamy, or monogamy was "original." [13] It may be

12 Carveth Read, "Origin of Man," p. 38.

13 Even the advocates of original monogamy feel obliged to qualify their rather sure statements. Thus R. H. Lowie (in Ogburn and Goldenweiser, "The Social Sciences," p. 52): "It may be regarded as a firmly established fact that in the earliest period *which we can reconstruct* by comparative researches mankind did not live in the promiscuous hordes envisaged by earlier theorists but in *mainly* monogamous family groups." (Italics ours.) See Briffault, "The Mothers."

quite a misconception to suppose that any one state of affairs was universal. Probably a complex mingling of sex motives and some leanings toward each of the three forms was present from the start.

III. Forms of Marriage

(*a*) *Matricentral Forms*

Terminology.—There are, just as one would expect, various ways of classifying the different forms which the family assumes under varying circumstances and times. These classifications strike across each other's lines of cleavage; thus they are not mutually exclusive, nor are they reducible to one system of classifying. Monogamy may be connected with exogamy, or it may not be; polygamy may appear with either the matrilineal family or the patriarchate. But after due thought, the classification which appears to coincide most nearly with actual evolutionary development is that of matricentral and patricentral. Of these the former is the older. This method of classifying goes according to the location, as it were, of the center of gravity of the family, or center of influence. "Center of authority" is what is meant for most purposes, but that phrase does not accurately express the idea at all times. An intra-family group, for example, may hold the authority, and the central personality of the group may be the oldest female, or the oldest male, as the case may be, without that person's being able to command the others individually.[14]

The words *matriarchate* (mother-rule) and *matrilocal* (situated where the mother is) are used frequently for the form of family which we are about to discuss. But we prefer *matricentral* as avoiding the question of rule or authority, and yet as referring to the social center of the family group.

[14] Compare the grandmother of the Whiteoak family, in the novel, "Jalna," by Mazo de la Roche.

From this point of view we can discern three great stages through which the family has passed: (1) the maternal or matricentral, (2) the paternal, (3) the modern partnership or equality of husband and wife. The word "metronymic" (named after the mother) is also used in connection with descent in the maternal family.

Early maternal relationship systems.—We may surely think that among the first instances of speculative thought, ideas concerning kinship, as conceived within the mother-children group, had a place. Here we may disregard the former question of whether there was a fixed status, as distinct from promiscuity, for the men of the group, and may safely start with the assumption that the man's relation to the children, and to the whole family viewed as an intimate group, was much more tentative and wavering at first than it is, for instance, with us. Whether the important feature in the minds of the people of those times was kinship as a group of descendants of a common mother, or whether it was individual kinship looking only to the mother and without much group consciousness mixed with it, the main thought was the same: it was maternally centered. Such a state of affairs was based upon feeling rather than upon rational thought. When the latter developed, a formal or ceremonial conception of relationship appeared. The actual physical paternity of the child was not the point of chief importance, and legally was of little consequence, but the husband of the mother, or the man with whom she has been formally associated and to whom she has looked for protection is the "father" of the child. In peoples of a little higher social development, though still comparatively low in the scale, the "father" is sometimes the one who performs certain rites after the birth of the child.

It is therefore impossible to say that early human family life was either matrilineal or patrilineal. It was sometimes one and sometimes the other, or a mixture of the two.

But to this day we can discern in any average family the old tendency to think in two ways and to establish two lines of descent, one an emotional and matricentral form, the other legal and paternal. Thus there is a traditional way of speaking to the effect that a woman "presents" her husband with a son and heir. This is the formalistic note. But in an emotional crisis we get such things as this:

> I wrapped him in a winding sheet
> And laid him at his mother's feet,

for emotionally human descent is matrilineal.

Primitive relationship systems were not complicated, judging by remnants of them still operative in primitive groups. They did not need to be, where maternal descent alone was taken into account. People were either entirely descended from a given ancestress, or not at all; there were no degrees of kinship.[15] Hence arose a kinship nomenclature that seems confusing at times, such as the widespread primitive custom of calling all maternal uncles "father."[16] The first distinctions in names to indicate degree and character of relationship were thus not based on degree of common blood (for, as we have said, originally *all* members of the group shared the maternal descent fully and equally) but upon age group. We still tend to do this same thing, calling priests, old men, and other honored persons "father" or "sire." But more intimate names, then and now, had to come into use for reference to real mothers: hence "mama," "papa," etc.) But,

15 As we shall see (Chap. XVII) this had much to do with the initial stage of political life, among some tribes, for people either were or were not members of the group, and the group was the tribe.

16 These older kinship designations were retained long after we must suppose that the share of the real father in actual blood relationship was well recognized. This ability of the mind to hold on to irreconcilable premises and yet reason logically from both has been called the "Law of Compatibility." It is a logical stultification whereby man has intuitively given preference to some other values than intellectual satisfaction—the preferred values usually going back to his early affective and social experiences. It is a human trait that explains a great deal of cultural-intellectual interplay which at first glance is very mystifying. It is sometimes called "the irrational in culture history." Anything that still functions in culture history after the premises on which it rested have been outworn is called a survival. (See Lippert, "Culture History," chap. 2.)

we repeat, this form of descent through the maternal line alone was not universal.

Exogamy.—The evolution of discrimination and complexity of kinship is connected with a special form-development which we must bring into the picture. It is that of exogamy, or marriage with those from outside one's own group. Exogamy is not by any means a universal development through which social groups must pass; some peoples apparently did not go that way. But it is common enough to be an important feature of the evolution of marriage. It was not, in the nature of the case, an original mode of behavior. Groups were too mutually exclusive, if not actually hostile, and within the group there was too near an approach to regulated communism, to permit of or to necessitate seeking a mate from beyond. Certain survivals in folkways seem to indicate that groups that were either of diverse origin, or had come to believe that they were, eventually drew near together, partly by geographical contiguity, and interest in the same natural advantages, partly by curiosity. Marriage by capture then took place at intervals, and this led to reprisals and warfare, which in turn led to reconciliation, exchange of women in marriage, purchase of brides, and at length a recognized system whereby a man could win a wife only from a strange group. The connection of all this with the previous subject of advance in kinship nomenclature is this: even though the husband as father of the children might be included in the general term "fathers," his brothers could not come into the kinship group of the mother. The new and distinctive name of uncle had to be applied to them.

The mention of wife-stealing just made must not lead to the supposition that it developed very far under the old matricentral régime. On the contrary, many cases where the husband must join the mother-and-daughter group into which he marries show that the mother-household type of family forced exogamy to apply to the man rather than to the

woman. He was, in that far-off time, a bringer of fire-wood, animal food, and perhaps protection, in return for warmth, vegetable food, shelter, and domestic relationships. Even where the brother of the bride assumed an authoritative relationship to the whole transaction, and received the purchase price, or the greater part of it, from the bridegroom (so that it was largely a man-managed business), still the bridegroom frequently lived in the mother-group into which he was marrying.

Monogamy and polygamy in the matricentral family.—Monogamy and polygamy are separated very sharply in most persons' minds, particularly because of the legal, moral, and religious sanctions favoring monogamy to which we are accustomed. As a matter of fact, there is no such sharp distinction in history and practice. Instead, society has followed a great variety of practices, and approved of them all in some place, time, or circumstances. There is communal or group marriage; polygyny (plurality of wives); polyandry (plurality of husbands); concubinage, or secondary wives; successive monogamy, or serial marriage; trial marriage; the hetairate (a sort of institutionalized extra-conjugal relation); pre-marital license followed by conjugal restriction; monogamy, and other forms of sex relationship. In the comparatively early days of the matricentral family, these forms were pretty much still in the germ, existing and manifesting themselves to some extent side by side. Marriage of a group of brothers to a group of sisters might occur under some circumstances: again, one man might enter the dwelling of a ruling mother as husband to all the sisters. But of course there would be preference shown on either side, breaking up the equality of marital status. And as the economic burden of providing his part in the joint household would be less if a man had responsibility for only one wife, the tendency was toward a tentative monogamy. In fact, marriage always has an unstable equilibrium, just as other social in-

stitutions have; its general tendency in the era of the maternal family was from inchoate and experimental conditions into more clear-cut forms, with the preference for monogamy. Somewhat later, under patriarchal and allied forms of social development, polygyny reappeared.

Totemism.—An observer of boys' camps, and of men's clubs, and similar groups, will notice that frequent appeal is made to a form of organization and an idea that goes far back in human history, namely, the totem idea. We have noticed this interesting system in Chapter VIII, and at this point we refer to it only in a brief way, because of its connection with exogamy. A totem is something that carries so many meanings, and is so foreign, in general, to our western (European) civilization, that it is difficult to define, except by designating one after another its various connotations. The chief of these may be listed as follows:

1. An attachment symbol, signifying that to which a person or place belongs; thus
2. A sort of "heraldic" device, indicating group origin of the individual. In form it is usually
3. A symbolic picture, carved and painted on a post, of some bird, beast, or the like, standing for
4. A division of family or clan into which the tribe was divided. It harked back to
5. A supposed animal ancestor of the group, which therefore in its totem rites included
6. A particular cult, a part of the tribal religion. Closely allied to the totem cult were
7. Special group economic tabus or prohibitions on the totem ancestor, and
8. Special marriage tabus on certain other totem groups.

Totemism has more than one originating cause. It appeals to the concrete, to the liking and interest in animals, to the desire to form groups and cliques, etc. But it goes deeper than that. It is related to the general cult idea of trans-

migration of souls, and in some of its phases it is supported by the idea that the souls of animals enter the mother before the birth of her child, who is thus spiritually of the stock of his totem animal, which he must not eat (except ceremonially).

The way in which this works out as far as exogamy is concerned is that it divides a larger tribal group into exogamous totem groups; the tribe is then exogamous within itself, but endogamous relative to other tribes.

Economic and other factors leading to extension of the mother-right.—At a remote period, when the right of all the male members of the group to share the bride was an ever-present possibility, the man of the tribe gave presents to the woman or the group of women among whom he was marrying, in order to gain the full favor for himself. The gift to the bride was early distinguished from the gift to the group, and the distinction has never been lost. In particular would the woman endeavor to extend the man's contributions so that a union with him would be worthwhile for her. This was a kind of beginning of marriage in the stricter, more formal sense of a social contract, with foreseen consequences and responsibilities. It was at the same time a beginning of recognized division of labor in the economic life of the sexes. The natural difference between their economic activities thus enriched social life by adding to its complexity. Man had a certain freedom and irresponsibility as compared with the woman, who was bound closer by maternal cares, but he had some economic abilities not shared by her, particularly those of hunting on a large scale. He could provide at least temporary abundance of food of high quality and pleasing taste; she could provide various dried fruits, roots, etc., for times of game scarcity. Thus we see the trend of development under the matricentral family, at this period, to be actually toward a separation of the sexes into two economic and social spheres, offset by such propor-

tion of his time as man spent under his wife's roof in marital life. He was not strongly led to make it his permanent abode because she was dominant there and he was free when away from her. A series of economic developments later brought him into the house to stay, thus dissolving what we may call the dual form of family arrangement. The history of the family is largely the history of the permanent inclusion of the man, by means of refined family interests, in the family as a primary sexual and child-rearing organization, with economic and other activities more and more put into the background.

The dual household.—The twofold form of family life referred to above demands a little more extended description. The primitive era had been one of mere collecting or casual exploitation, economically, and the simple, more or less communal, family life had been casual too, without need of division of functions. The advance in tools and weapons, in hunting and warfare, left woman behind, hampered as she was by her young. She gathered vegetable foods, tended the fire, maintained the household, and practiced the beginnings of agriculture. The men were largely away from home. In the symphony of the family, man was carrying on an obligato to the woman's solo; a running accompaniment, a life centering in part around the camp rather than the household. Under such circumstances mother-right flourished. Women's physical lot made it inevitable that she should evolve a quietistic, established way of life; thus her conservatism was enhanced by tradition. Her need of immobility and protection, while man continued to rove, made her the first home-keeper.[17] Possession of a fire in early times depended much upon its constant care; hence woman became

[17] A great number of manners and customs among most peoples bear witness to the assent of man to woman's dominant place as housekeeper (which is quite another thing from dominance in the family). A traveler in the western farm regions of the United States, requesting shelter for the night would be met, not infrequently, by these words from the man: "We'll have to ask the woman; it's her house."

the first vestal divinity, and established a social center at the hearth which eventually became a civic center as well.

Oscillation of the pendulum between mother-right and forms of man-right went on. On the one hand were such considerations as this: woman's more highly developed camp or home made it attractive to the man, and she could therefore stipulate the permanent coöperation of the husband instead of mere gifts at the time of wooing. Yet at any time some economic change, such as man's economic invasion of the field of agriculture or his successful cattle-raising, might make him more independent and hence more dominant again.

(*b*) *The Patricentral Forms*

How the mother-right family disintegrated.—Just as it had served to supplant the earliest natural form of primitive mating, so the matricentral family was supplanted by the patricentral,[18] or, as we may say with entire propriety, the patriarchal. Exogamy was the means of its decline. Exogamy tended to make the father economically important; moreover, it allowed greater chance for natural selection to operate. That is to say, exogamous tribes became superior tribes, and in the superior tribes the patriarchal family appeared. This is because the superiority of the exogamous tribes was manifested in economic activities which made the men independent of women for support without having to leave the vicinity of the household.

As the mother lost her position of general and economic importance in the family, she retained a traditional position which, as time went on, became almost a part of the religious cult. It is an example of the willingness shown by historic

18 Folkways having to do with the naming of children, and the interesting custom of teknonymy or the naming of parents after the child, are interpreted as evidence of the manner in which the patrilineal system supplanted the matrilineal. See N. Miller, "Aspects of the Name in Culture History," *American Journal of Sociology*, XXXII, 585.

man to exalt woman religiously, ethically, aesthetically, and still keep economic and practical supremacy. As the original person in charge of the domestic objects of importance, she became enshrined in the reminiscent thought of the tribes as a sort of family priestess. This position of woman appears in such widely different phases as that of the heathen ancestral mother goddesses; divinities of love, fertility, etc., or, following other lines of thought, divinities of chastity; the Teutonic and mediæval chivalric woman worship and general idealization of the sex along with practical inequality of social position; the cult of the virgin in the Church; the occasional willingness among historic peoples to exalt the type of woman who in sex relations stood outside the *mores* of the family and marriage (a sort of idealized reversion to the type of the matriarch), and many more instances. Another and similar form in which the ancient central woman had reappeared in man's thought as a very important figure, is that of the witch, sorceress, or seeress.[19]

The rise of the patriarchs.—A patricentral family is not necessarily patriarchal or father-ruled, any more than a matricentral family is mother-ruled. But as a matter of fact, the father-centered family did appear under the form of what we have come to know as the patriarchal organization. The conception of patriarch is a somewhat stereotyped one, suggesting an old man with a long white beard, a tent-dweller, with herds or flocks nearby. This picture is derived from Bible sources, which in turn are drawn from Semitic culture in which the patriarchal life was and is widespread. The accepted accompaniments of patriarchal family life are the pastoral nomadic life and a high degree of paternal authority.

The reasons why the matricentral family gave way to the patriarchal include the following:

19 See Langdon-Davies, "A Short History of Women," chaps. II and V.

(1) War, which had the effect of
   (*a*) making captured women and children property,
   (*b*) removing women from their native tribes to new kinship groups where they were aliens at first,
   (*c*) giving women a more pronounced commercial value as slave property.
(2) Wife purchase, which tended to put women into a property status.
(3) Development of the pastoral industry, which necessitated
   (*a*) small, separated groups,
   (*b*) manual labor and control of wealth by men.
(4) Ancestor worship, emphasizing some impressive male ancestor, of the war leader type.

The patriarchate is not merely an eastern mode of marriage and family life, however, but a rather general stage through which a great deal of our present historically developed society has come. We shall follow it into the beginnings of western civilization where it takes on the character of the third great type, as yet unstabilized, the partnership of the sexes.

The transition to monogamy.—Under patriarchal forms, the family has usually been polygamous. Yet at the same time there have been forces at work to bring about monogamy, and this undermined the father-right itself. In general we may say that an advance from the pastoral nomadic stage to the agricultural form was a help to monogamy. For agriculture, under female guidance at first, and never very far removed from woman's sphere of interest, allowed woman to be a partner with man more nearly on an equality. Even after man took over the active management of agriculture, woman remained the gardener, and the peasant life of unnumbered generations, both in Asia and Europe, has seen the woman at work in the fields.[20] This active share

20 Compare such famous paintings as Millet's "Angelus" or "the Gleaners" with Rosa Bonheur's "Horse-Fair," and observe the difference betwen zoöculture and agriculture as to woman's share.

meant an opportunity to share also in management and general status.

Besides the economic stage of agriculture, the social stage in which marriage agreements or "leagues" existed between different tribes (an agreement reaching back in origin to the maternal family period) helped eventually to give the wife an approximate position of equality—i.e., monogamy. In these old exogamous marriage leagues of tribes or clans, two opposing forces were at work. One, tending to reduce the status of woman, and hence to encourage polygamy, was the property concept of the patriarchate, under which wives as well as cattle were likely to be regarded as purchasable property. On the other hand, the wife brought part of the maternal household belongings with her, in the days of the mother-right, and when the father was the head of the household, she continued to do so: this was a beginning of the idea of dowry (cf. French "dot"), under which the wife comes into the family of her husband with at least a semblance of independence. Besides this, the increasing custom of stipulating an honorable position for the bride, suitable to the dignity of the family from which she came,[21] kept raising the position of the wife, or, at least, of the "first" wife, (first in rank as well as in time). Fear of childlessness was detrimental to monogamic development, especially when ancestor worship or other socio-religious ideas made the carrying on of the family and the continued honoring of its *manes* an absolute duty, and to meet this duty the Levirate arose, according to which the widow of a man who died childless was married to his brother, and any children of this union were counted as children of the deceased. But the belief that a *lineal* descendant (real or ceremonial) was necessary gave way in many quarters to the idea of a *legal* heir, particularly as the state concerned itself more with domestic matters, and

21 Cf. the stereotyped question of modern fathers when approached by a prospective son-in-law: "Can you support my daughter, sir, in the style to which she is accustomed?"

with this change of emphasis the premium on polygyny was lessened.

The change from polygyny to monogamy was not made at a single stride. Intermediate forms appeared such as concubinage, or some other arrangement by which secondary wives were maintained. But such a position made a man's children, as well as his wives, of unequal rank. Any position, finally, except that of the only spouse became socially undesirable and even disgraceful to a woman in our western culture. To man, also, it became less a distinction and more of a moral obliquity. In this evolution the masses of the common people led the way, because poverty necessitated monogamy, and what began with necessity became a part of the *mores* and finally had moral standing. Among them the school of domesticity had an opportunity to demonstrate the "helpmeet" pattern of marriage, with its sharing of concrete burdens, and its consequent development of mental and emotional intimacy and comradeship. As the power of the state grew even greater, the parental rights over the bride became ever less, and finally we have the emotional and companionship basis of marriage, the love motive, so far recognized that it has become traditional that the girl's consent must be obtained by due process of courtship and that her decision is practically final.

We have now come to the end of our discussion of the family as a marriage union primarily. In the next chapter we shall follow the patriarchal forms farther, but our interest will be shifted to that phase of the family that we call the home, and which is so definitely an enlargement of the mating pattern as to merit separate treatment.

CHAPTER XVI

MAN PLANTS THE HEARTHSTONE

The poorest man may in his cottage bid defiance to all the force of the Crown.—WILLIAM PITT.

I. SIGNIFICANCE OF THE HEARTHSTONE

(*a*) *Psychic Influence of Hearth and Home*

The meaning of "home."—Home is a value; its essence is not in the realm of mere fact. It is spiritual,[1] implying personalities, organization, mutual recognition, nurture of parts by the whole and loyalty to the whole by the parts, a centering and original point of experience, a terminal point for memories, and a gathering together of the essentials of life, "the things men live by."[2] The very fact that in addition to "house," "family," or "marriage," we have the expression "home," is itself a considerable reassurance against the pessimism that pitches the tune very low and finds the ultimates in life to be not values at all.[3]

As we have remarked repeatedly, the absolute necessities of the race are reducible to two—eating and reproduction. In one the individual is assured, barring accidents, of living out his span of life. There is a deep elemental comfort and satisfaction to the individual in the process of eating, and a sort of intuition seems to keep the race convinced that the best

1 "Spiritual" is another difficult word to define. But it does not imply anything "other worldly" except, perhaps, permanent independence of temporal vicissitudes.

2 Richard Cabot, "What Men Live By."

3 See "The Cult of the Seamy Side," by Charles A. Bennett in *Harper's Magazine*, December, 1927.

way of establishing smooth-working social relations in the ordinary give-and-take of living is to "serve refreshments," or in more dignified parlance "to break bread together." But the race gets nowhere by this business of nourishing the body; it simply holds what ground it has won; eating and waxing fat, on the part of the individual, advances the species not one step in the pilgrimage it is making through Time. Nature cares little or nothing for the growth of the individual after the reproductive period is past.[4] And it is the reproductive function that alone ranks with nourishment. Moreover, as with the food-quest, so with reproduction, a system of social pleasures and satisfactions has been built around the elementary aspects, quite transcending the physiological functions involved. This social structure includes the home, the visible matrix of the family organization. It is instinct with meanings and vitalities that touch our conscious and subconscious existence at the very roots, tenderly, irresistibly, constructively, till our whole psychic being is fed at these wellsprings of social life. A psychic influence like the home demands and has received man's great loyalty.

Man's loyalty to home.—The variety of forms assumed by man's loyalty to his home has been a really important fact in culture history, and the manner in which this root-interest has appeared and written, so to speak, little cross reference footnotes to thousands of historic episodes has really shaped social evolution at many a turning point, and lent color to it at many more. Some of these forms of home loyalty are set forth in the following list:

1. *Patriotism.*—The word itself is, of course, derived from family associations. From the ancient world comes the classic "Dulce et decorum est pro patria mori," and the father-lands or the mother-lands still call confidently for the lives of their children. Patriotism is not, at its most intense point, a

[4] This is not by any means to say that *society* may not find the individual valuable in old age, which presents the first opportunity for a person to be valued for his own merits solely.

diffused love for a large territory and a great population over which one flag waves. It is rather the realization that the country one inhabits is the country of his *home,* probably of his birth, his native or birth land. Hence when it seems necessary to arouse a warring population more fully, no propaganda is more effective than to set forth that the enemy is, as a nation, outraging the home ideals of the race, and committing crimes against the family life. Or again, when certain interests try to discredit any socialistic movement, it is frequently claimed that the family life is being belittled and hence that socialism is a menace. We should be on our guard against allowing anyone to use our deeply implanted home-complex as a vantage point for any particular purpose of his own.

2. *Music.*—The songs that are actually sung by the people, and that live on, are in very large part songs of home and of love, which come to much the same thing. The songs of patriotism are often on the home theme, as already indicated. Religious songs in great numbers make the final consummation of religious experience the attainment of the "home-land."[5] Such songs as "Home, Sweet Home," "The Old Oaken Bucket," "Ben Bolt," and scores more of that ilk, hold an unrivaled position.

3. *Painting.*—It is a very suggestive fact that while sculpture does not lend itself to the elaboration of the theme of home,[6] painting boasts a whole genre of this description. Some of the most persistently popular pictures—such as the internationally loved painting "The Doctor"—are really appeals to the home feeling.

4. *Religion.*—The connection between the home and religion is taken up elsewhere in this volume. Here we need only mention that the festival that far outranks in social im-

[5] See D. C. Babcock, "Beautiful Isle of Somewhere," Zion's Herald, October 19, 1927.

[6] Why not?

portance any others with which Christianity is allied is Christmas, essentially a home festival.

5. *Morality.*—Loyalty to the home is often the last form of morality to break down, as it is the first to be built up again in cases of moral reform. Back of this, of course, is the fact that it was the home that first suggested the primary patterns of morality, and now we associate the two so closely that for one person to break up another's home is considered a worse offense than the simple violation of the sex *mores.*

The reader will be able to extend this list of examples of loyalty to the home indefinitely.

(*b*) *The Home as a Genesis of Other Institutions*

The home as a nursery of immature types.—The home has been the place where almost every form of human endeavor beyond the primitive hunting stage has been essayed and nurtured into sufficient ruggedness to go forth on its own account. Mention may be made of the following as examples of this service of the home:

1. *Education.*—The home once constituted the greater part of the school system. It retains this function through the earliest years of life, and supplements the schools for some time after the child enters them. The very important handing on of tradition is still done under family auspices, supplemented by the elders of the community, either informally[7] or with due ceremony as by the official teller of stories.[8] But the stories first told to children of parents in the home are the prime factors in education and sink into the mind along with the first perceptions of nature.[9]

2. *The state.*—The art of governing and of being governed begins in the home. All the stock phrases that men have be-

7 Cf. "The Raggedy Man" in James Whitcomb Riley's "Songs of Childhood."
8 See Loomis: "Tee-wahnee Folk Lore," St. Nicholas Magazine, Jan., 1892 and elsewhere.
9 See "The Song of Hiawatha," III, Hiawatha's Childhood.

come aroused over, like "Liberty, Equality, Fraternity," are uttered there in simple syllables. Tyranny and democracy, the right of petition, the dignity of law, the right to defend the common weal, all function from time to time.

3. *The church.*—In most homes religion appears at least sporadically. The old form of ancestral cult and father-priesthood [10] of Indo-European cultures long survived in the traditions centering around the family Bible of American homes. Organized churches have repeatedly sprung from home origins.[11]

The home encloses the smallest distinct social unit, the family. But the family has two phases. First it is a biological starting point for society. Beyond that it has a tendency not only to multiply by fission, but also to hold its parts together in an organization of relatives, servants, thralls, and ceremonial kin, all sharing a pattern culture, and seething with the possibilities of human achievements in all the arts and forms of organization. Thus a great number of social types are found in immature form within the home.

The home as a shop.—Besides the social organizations or institutions, the home fosters the elementary forms of industry and economic life. Thus have been encouraged:

1. *Woodworking.*—Chopping, sawing, splitting wood; little jobs of carpentry and of repairs; furniture-making; whittling in all its thousand and one forms, including the more ambitious carving—these are present-day activities reaching back into antiquity.

2. *Metal-working.*—The hearth, as we have seen, first revealed the possibilities of the metals.

3. *Cookery.*—This is almost a fine art in modern times. It began when the home gave a chance to experiment more ambitiously in combining ingredients over the fire, supplanting the rude culinary methods of the hunting camp.

10 See Jane Andrews, "Ten Boys," Chapter I.
11 Cf. The boyhood of John Wesley.

4. *The art of dress.*—Costume history is wonderfully complex, considering that we have always the same limited human figure to drape. In its more refined forms it is closely associated with sewing, and thus with the home. Spinning and weaving likewise contribute, as home industries, and also tanning, to the costumer's art.

5. *Pottery.*—It was the home activity that first showed the need of water-tight containers, especially over the fire.

6. *Mechanical appliances.*—The home is forever in need of some device for doing work. A very large part of the inventive genius of the race is expended in meeting this need. The advertising sections of the modern magazine show that this effort to improve housekeeping still goes on.

7. *Laboratory research.*—Ancient housewives brewing herbs are a long cry, but not out of hearing, from the industrial research chemists of today.

8. *Social insurance.*—The homestead or the home life of the more vitally knit clan days gave assurance that widows, orphans, cripples, aged, sick, or other handicapped members of the group would be maintained as a matter of course. The home gave that idea to modern society, and insurance as we know it today is the result.

9. *The shop.*—A "shop" is either a place where things are made, or where they are sold—besides which it has many interesting modern meanings. The home has an honorable history as a shop, particularly in the Middle Ages, when it was both a place of manufacture and of sale. Our "stores" where we go "shopping" were once all within the home, where even yet, except under the regrettable cramped conditions and hand-to-mouth buying of the modern city, the housewife still keeps her store of provisions for the winter.

II. Types of Home in Social Evolution

(*a*) *The Primitive Home*

Home as an historical term.—Home has certain connotations that relate it to the relatively high cultures in a special way, and, therefore, it has historical meanings rather more thickly gathered about it than it has prehistoric culture associations. Home, of course, existed in its essentials, ages ago, but it did not emerge until marriage and the family had become old and established. Since the home has a history, that history must at least be briefly surveyed.

We have noted the various (though not always successive) family forms of primitive, maternal, paternal, modern. These divisions correspond roughly to prehistoric, early historic, oriental, and western, but it is necessary to qualify this carefully.

Beginning with the home in the days of the primitive family, we note the slight participation of the father. This is not a statement about the membership of the father in the family, be it observed; that question we saw in the previous chapter is not one to be dogmatic about. But man has not been the home-maker in the world's history; his was the outer orbit of the chase, the war-path, political organization, and trade, until the time when he recognized sufficient values to lead him into the home—and to this day the woman has trouble inducing him to wipe the mud from his boots as he enters.

Another difference we should notice in the primitive home would be the lack of definition, a sharing of its fire rights with the camp, a comparative encroachment of the horde upon each or any of the little natural mother-groups. The desire for privacy in the home has reached the stage among some modern peoples where violation of it results in bloodshed and political revolution. The Anglo-Saxon world holds to the maxim that

"every man's house is his castle" i.e., impregnable and inviolate. A search warrant is the generally accepted minimum by which entry is made to the hearth-fire without invitation. But all this is because home has emerged from the primitive inchoate state to represent almost the highest value man can defend.

There was a good deal of what we should call communalism about the primitive family, though of a sort more taken for granted than really thought out. There was much community of property, and a kind of community or family or tribal responsibility (the three words meant nearly the same thing then) in the bringing up of the children. After being weaned and thus ceasing to be an attachment to his mother, the child belonged to the group as a whole. This tended to foster the home, as long as the group was a small kinship aggregation.

Elements of the home in primitive life.—To come at the matter a little differently, what did primitive human family life possess that we should recognize as pertaining to the home? First of all, there was the mother, whose location is the determinant factor: wherever a mother cuddles her children, those children, for the instant, have a home. But even primitive mothers needed more than the shelter of their own arms in order to carry on as home-organizers: hence, we add the shelter, however rude it may have been, of some artificial structure or of the cave. The fire must be counted as early as the shelter, or nearly so. But the fire is something more than a mere fire when mankind takes it over for home-making purposes. It is no longer a camp-fire, but a hearth-fire. The hearth is the floor or cleared space on which a fire is built, according to strict definition, but in the social evolutionary sense, the sense in which it is a vital part of the home, it is really the cleared space from which the fire is approached, plus the immediate coals and embers with which contact is made in using the fire. It is the business side of the fire.[12]

12 See Chapter VII, 1, a.

This is practically all that we can confidently picture to ourselves for the home of primitive man. The uses to which it was put were, as now, shelter, warmth, social cheer, cooking and eating, sleeping, work. But every one of these uses was limited to the most rudimentary expressions. Home was hardly more than a rallying point for further dispersal in the struggle with the environment. The stereotyped form of fairy-tale hints at the continuance even in historic times, of the primitive limitations of the home: "There was once a poor couple who had three sons, and as there was not enough to support them at home they resolved to set forth into the world and seek their fortunes." In the beginning, at least, home was a place to go out from, not a place of fulfillment. That it became this last, in the rich cultural sense as well as in the concrete meaning implied by the phrase "all the comforts of home" is due to the intensity and the faithfulness with which the mothers of the race, making a virtue of necessity, wrought out around the hearth a world in miniature—the home.

(*b*) *The Matriarchal Home*

The attraction of the man to the matricentral home.—How, then, did the woman make a home-lover out of man? First, by making it comfortable. In the period of the mother-home occurred, so far as our western civilization is concerned, those Neolithic advances in tools and weapons and material culture that were followed by the early metal cultures, and at the same time flourished that old set of ideas and mental patterns sometimes called Heliolithic. The culture, widely distributed over the earth, and full of behavior complexes that seem alien to us, has always had a way of erupting here and there into the level of more recent cultures. When it does, we are frequently reminded that in the Babylonian civilization, the pre-Hebraic Palestinian, the older North African, the pre-Hellenic Ægean, and many other cultures that barely

faded from the historic film screen before our own cycle began, the mother was still an influence in the cult, though no longer supreme in the sphere of daily life. What man appears to have done is to have taken over the active management of the home to a great extent, enshrining the ruling woman of the former day as a mysterious figure of the background, and finally deifying her. What she had done for him was to organize his life as an individual. She had needed better houses, and stimulated the building of them. She gathered specialized utensils around her hearth. Her industry in ordinary things far surpassed his, and by her industry she made herself socially a leader. She is still the social leader, but it is because under modern western conditions man does not insist that economic dominance shall mean social dominance by him. In other words, man prefers a woman as the center of his home, and in the matriarchal period he became so accustomed to her in that position that he has never forgotten about that scheme of things, although in the patriarchal home, as we shall see, he temporarily eclipsed her.

The weakness of the matriarchal home.—The matriarchal home, wherever and whenever it may have tentatively existed, was dependent for its strength upon the female organization, and its weakness was in the fact that man was destined more and more to form connections and alliances with the outer world, which woman could not then do as she can now. In fact, man's acquiescence in the matriarchal household was due largely to the fact that by running off into some of the more extended activities such as hunting, fishing, war, trade, or community social life with the males of the pack, he could terminate or set aside the matriarchal authority at any time. Hunting trips among some savage tribes may last for months, during which time, of course, the men live an extra-domestic life. Exactly the same reason accounts for the willingness of western village-life men to concede feminine control of the "parlor" and the kitchen and the house in general while they

have the store, the square, the market-place for their own realm. All this seems at first to strengthen the matriarchal home. It did indeed strengthen the matriarchate *in* the home, but the home itself was a weaker institution in proportion as it was set off by itself. It needed the father bringing intimate contacts with society at large. When the father's interests led him back to the home—as when he took over agriculture from the woman's direction—he brought a variety of factors of strength to balance the maternal ways. It was a help to the home as an institution, though it was not a gain just then in status for woman. When the home lately cut connection with the other factors of community life and tried (at least under apartment house conditions) to make itself a place where the father's activities had no share, from day to day, it faced the old problem: can woman's freedom be made compatible with a strong home life?

(c) *The Patriarchal Home*

The strength of the patriarchal home.—In the matricentral household, the woman possesses authority and property to a remarkable degree. She has the property rights in everything except the personal weapons, tools, and ornaments of the man, and the authority except in the man's field of hunting and war. But the authority of the woman declines if the man becomes active economically in her field. This is exactly what happened, and the nurture of the child was one of the things that helped it along. The mother needed the reinforcement of her mate, and got it, but he assumed control of the family. Societies that remained matriarchal were the ones that remained roving and warlike on the male side, and hence arose the myth that in certain lands there were warrior-women, Amazons. Instead of men-warriors and Amazons, we should think of conflicts between agricultural or pastoral

peoples ruled by men and other peoples who retained the home "rule" of the women, though the men did the fighting.

The points in which the man made relative advancement compared to the woman when he was becoming patriarchal in family matters were these: (1) Fire-making. To this day the woman keeps the fire that the man lays and lights each morning in thousands of homes. The man lays no flattering unction of pride to his soul on account of his privilege in this regard, but there was a time when the art of preserving the fire was all important, since fire could hardly be started afresh without great ceremony and effort. Preserving fire means staying by it—a woman's task. Making a fire when it was wanted put the roving man in a position of partial independence of woman. (2) Improvement in artifacts. With improved weapons and tools, man's economic position advanced faster than woman's. She had the handicap of children; her technique was there. His was without. More and more she prepared what he provided, and hence her position became one of dependence. (3) Advancement of agriculture. This has been discussed before. (4) Domestication of animals. "The men of the Old World, leaving the red race far behind in this respect, surpassed the woman by new advances in the food-quest. With the domestication of animals . . . even the advanced economic activity of the women receded so far into the background that it even fell into contempt among most cattle-raising peoples. The obligations of the mother were considerably lightened when a cow's horn filled with animal milk became a nursing bottle, but the fact that the woman received this horn of plenty from the hands of the man depressed her position."[13] (5) The development of house-building by man. This made it *his* in a new sense. (6) Doing work with domestic animals. To illustrate what happened, compare the farming tradition that the man buys and sells the larger stock, and thus has financial control, while the

[13] Lippert, "Culture History," Murdoch's Translation, Chapter V.

woman has the "egg-money," and the care of the poultry as a part of the household and near-by affairs.

The result of all these things was that the woman herself followed, along with her properties and privileges, into a property status, and so did her children. From the older matriarchal system, the name "father" to refer to the supreme male arbiter of the group now came to apply to the head of the family. This is what is meant by "patriarch." All people in the group who are his property are his children, in a sense.

There is a great difference between the idea of the patriarch and of the father in our modern sense, wherein the term denotes biological and psychic relationship, but not economic and political. But the patriarchate helped bring the modern idea in some ways. It established the principle that the woman should leave her parental home for the man's.

Along with the patriarchate, particularly in the lands near the Eastern Mediterranean, is associated a certain outcropping of the older forms of exogamy, namely, predatory marriage. The patriarchate, resting on the property idea, has not been able to exclude a low status for women, unless it has been sublimated by modern western ideas. In the Near East today there is an atmosphere of slavery and capture still hovering about the life of many tribes in their marriage and trade relations. To be sure, even predatory marriage was a step in freeing the woman from tribal rights over her at home, but the predatory method had to be overcome. Patriarchal or family pride helped do the trick. It was preferable to the man to have a purchased bride, with honorable relations established between him and his relations-in-law. The male relatives of the bride come to an agreement with the groom's party, and in some cases it is the traditional and ceremonial part of the mother to appear irreconciled. In this way the family slowly becomes a *gens*. No alien men marry into it, and the men of the clan, being related, con-

stantly receive women from without. But the woman's relations, as a clan, exerted silent pressure upon the husband to give her a fitting position in the household.

(*d*) *The Home in Western Civilization*

An analysis of the western concept of home.—Through no inherent superiority, but because of the confluence of circumstances over long periods of time, those nations which have contributed most actively to world history, during the modern era of occidental progress and dominance, have developed a certain ideal of home, measurably realized in places, which has some claim to high consideration. We are all familiar with instances in which a family seems to have succeeded beyond the usual in making its home life a happy, harmonious, friendly institution. We speak of some people as having a *beautiful* home life. Let us see, if we can, what combined factors have emerged to form this idea.

At the base of the western home, as with every home, there are, of course, the items of (1) fixed location, with its consequence of accumulated "things"; (2) shelter, including (*a*) safety and (*b*) comfort; (3) the fire, with its ministry of (*a*) warmth, (*b*) food preparation, (*c*) socialized activities of other sorts; (4) the gregarious element. It is this last which has the expansive force sufficient to bring a higher home into existence, though it will have to use all the other elements as tributaries to its aim. Let us, therefore, analyze farther the social side of the home.

It begins, clearly, with the mutual attraction of the married pair who unite to found the home. The feeling shared by them is capable of appearing in various forms and its elements are variously proportioned. The world commonly assumes of the husband and wife—unless there is evidence to the contrary—that the basis of their continuance together is love for each other. But what does "love" mean? It

may be physical attraction, or personal passion with mental character to it, or chivalric and romantic affection, or a form of philoprogenitiveness, or some sort of simple, platonic friendliness, all mixed in various proportions. All this is very good in its way, and the student of social history must admit that, with the help of custom and social pressure and suggestion, it has often been sufficient to hold two persons in an established routine of "home." But it would never have brought the home into existence. No two persons, even in love with each other, can go on indefinitely finding in their companionship the whole of human social life. The rest of the world draws them off, separately or together, into other social relationships—neighborhood, political, economic, or simply crowd-companionship. It is the presence of children that makes the family so worthwhile that the home is built. The urgency of feeding a hungry child does not permit one to stop to ask, "What's the use of it all? What does life amount to?" And the whole performance of rearing a family through the maintenance of a home means that years of following necessary, variegated, complicated behavior patterns, each self-demonstrated as to its worthwhileness by the immediate need within the group, will be woven into a mental construct that we call the home. Its elements are in part concrete activities connected with the maintenance of life; partly the inter-play of thought, particularly in the education of the children; partly an expression of personal affection and loyalty. In short, the home, in its higher developments, plays up to the emotional, the intellectual, and the physical sides of personality, and, through the motive of nurture and education, makes it worth while to cultivate life's values intensively, even enduring the humdrum and the obvious, rather than to diffuse human energy in the shifting camp of the outer world.

The western home in history.—The western home has been able to function only by virtue of a helpful coincidence

of circumstances. Some of these have been partially lacking from this or that historic situation. In Greece, which in some ways is taken as the beginning of western history, women did not have the position that we might expect in such a brilliant civilization; hence the home in Greek society was not the home in the full sense of the word. There was a suggestion of the market-place and the Acropolis about Athenian life—debate and municipal matters, war and athletics, art and philosophy, but with the home pushed into the background and women in a very restricted sphere. In Roman family life things were much the same, with the older patriarchal tradition changing slowly to a semi-patriarchal one, mingled with a temporary and not highly moralized appearance of feminine freedom, outside the family. Then came Christianity, under which some developments were in the direction of home life, as for instance the making of marriage a sacrament. Nevertheless the ascetic ideal which stood so high in general esteem in the Middle Ages was not one that helped the home to take and maintain a position of dignity. There was a denial of domestic values. The lot of the common woman, of the serf class, was too squalid a one to expect the home to develop beauty and social order very far. In the lady of the castle, the gentlewoman, we have the only one of her sex who was even partially in an advantageous position to develop home traditions. Handicapped as she was by the military nature of the feudal life, she nevertheless encouraged, within the general type of chivalry, some manners which, when they could be diffused downward through the life of the people, were to be helpful in the home life of modern times. It is in the better class of commoner—the yeoman and country-gentleman, the townsman, and other types, that we get the modern home at its best. Some excellent examples of it are portrayed in such pieces of literature as "The Cotter's Saturday Night," "Snowbound," "Little Women," and in much of the German folk-lore, home-festivals,

children's literature and songs, and in the literature and life of all the peoples of Western Europe and America to some extent. It seems to thrive best in an atmosphere not too far removed from rural life, middle class status, and a climate necessitating a considerable amount of life within the house.

III. Influence of the Home on Other Institutions

(*a*) *On Economic Life*

The home as an economic organization.—We need not labor the point of showing that the home is, among other things, an economic organization. As such, it has influence upon economic life in general. The farmer's life, for example, is an economic organization mingled with the home. It has a land tenure basis of some sort, and the less secure that tenure is, the less tenaciously are family traditions and home customs held. Take such a situation as is represented in the familiar song, "Over the river and through the woods to grandmother's house we go." The background is one of families living a few miles from the ancestral homestead, reunited at holiday times, and keeping up a miniature clan-like organization of good-will and common memories shared. What happens if the land basis becomes so precarious that farmsteads cannot be maintained? The deserted farm-houses of New England give an answer to the economist, and the scattered location of many a former rural family now in the industrial centers or in the Middle West answers for the student of family life. Again, labor is an item of the highest importance in the home. If labor is cheap, there is a different household organization from that of the home where household servants are a luxury beyond the average reach. The difference may be seen in the relative amount of home labor employed in the northern and southern parts of the United States.

The home as an economic stimulus.—The home has always needed more and more of the economic wealth of the world. Even disregarding the type of home in which display is the dominant motive, there remains the home of the family whose aspirations for sharing in the cultural heritage of their time make them strive for the economic goods wherewith they may so largely be enjoyed. It is a strange social history which the home shows in this respect. In the beginning it was its own purveyor of economic productions for its needs, whether food or manufactures. Now it has the world at its door soliciting it for patronage. This is figurative to some degree, but if we substitute the advertisements for the doorway, we see that it is no exaggeration. The home has rejected from its walls the industries one by one, and they have returned a thousandfold enriched in content, asking to serve the home. Fabrics and furniture, foods and fuel, labor-saving machinery in a hundred forms, are all seeking through economic channels to make the home something else than a place of labor or of unfulfilled desires.

(*b*) *On the State*

The home as a center of social control.—The state is the social group organized for control. The home is always that, in some measure, and is an incipient state. In the early stages of social development the home fulfilled more of the functions of control, and gradually, just as in the case of economic functions, it passed them on to the extra-domestic organization, the state. The point to notice is that the type of home organization was apt to reappear somehow in the form of the state. During the period when, if ever, we may conceive of the family as more or less promiscuous, the state was foreshadowed by the loosely organized horde control. Wherever the matricentral family held on long enough to come in contact with historic peoples, we find that the consequent division of control between the female at the head of the enlarged

family and the male at the head of the fighting forces has kept them from establishing a strong and undistracted state. Nomadic home life has eventuated in scattered loosely bound states. The patriarchal family in sedentary societies has made the kingship idea more acceptable. The democratic family and the democratic state have come with about the same degree of fullness. It is not by any means a cause and effect relation in all these cases, but at least the home has been an experimental center of social control upon which men have drawn in their political experience.

The continued influence of the home in political life.—The home is served, we saw, by the economic world which it once fostered, and in like manner it is served by the political institution. It must pay, of course, in both cases. What it pays the state is called a tax. In return it gets not only protection —that has always been taken for granted—but also new and and special forms of service which from time to time it calls for. Some of the things that it has influenced the governmental forces of the town, state, or nation to take on as responsibilities in its behalf are—education, child-welfare, and a varying list of experimental acts. Much of the pressure toward an international controlling organization, with avoidance of war as a particular aim, comes from the home.

(c) *On Religion*

The home as a formative factor in religion.—The home has been the source of the greatest amount of religious development in the past. The following items will illustrate the point:

1. Ancestral worship and household gods.
2. The emergence of the idea of the fatherhood of God.
3. The brotherhood of man.
4. The maternal influence over the child and in the direction of conservative ideas, of which religion is usually one.

Continued influence of the home in religion.—The home is a continuous influence in religion. The point of origin of this fact is the solicitude of the parents, particularly the mother, about introducing the children to the *mores* of the group so that they shall be under no handicap when they take their places in it later. Religion retains a great deal of respect in the estimation of the average parent even if he has not been able to live up to it himself. He vaguely realizes that there are situations in the social life where his children will appear to better advantage if they have had the older and customary religious training. As for those situations in which he thinks he has found no application for religion, he hopes that his children will not encounter so many of them as he did. Thus the home maintains the traditions of religion, as it has always done.

(*d*) *On Ethics*

The home as a school of ethics.—Ethical conduct is response to a given situation in such a way that success shall be compatible with the welfare of all concerned. It is intelligent social behavior. The home has ever been the greatest of ethical disciplines, and the most ambitious of ethical schemes can go no farther than to apply the principles of home life on a wider scale. Respect for the personality of others; the distinction between self-seeking and coöperation; regard for property; appreciation of mutual aid; solidarity and loyalty; the necessity of work; fair play; orderliness; waiting one's turn; patience in trouble; restraint upon self-esteem; respect for privacy and modesty; keeping one's word —these and many other ethical principles emerge from home life under the suggestion of parental leadership.

The home as an ethical stabilizer.—The old story of the man who prayed for a blessing upon "me and my wife, my son John and his wife, us four and no more" is striking prin-

cipally because it is exceptional. What the home really has done, quietly but persistently, is to call man's attention to the fact that blessedness or happiness comes with inclusiveness. It is the person living without home and family responsibility who is most apt to dash his head vainly against the unchanging principle that he that saveth his life shall lose it, and that happiness is somehow proportioned to the ethical inclusiveness of the individual. The home throws the thinking person back upon this realization again and again, and even if he fails to understand the lesson, he will often practice it by advocating as a neighbor and citizen the altruism that he has sensed in his home relationships.

(*e*) *On the Arts*

The home as an educator in the arts.—One of the most common occurrences in a home, yet an occurrence that is truly a sacrament when seen with the eyes of understanding, is when the child, tired of active bodily play, seeks self-expression and reaches trustfully toward the Infinite by saying to his mother, "I want something to do," and receives through her resourcefulness some pictures to cut out, or a book to color with crayons, or some buttons to sort out in piles, or anything whatever in which the doing will lead to an observable achievement. For this is art, and the mother is truly breaking the bread of life to her children when she provides them thus with paste-pot and fashion-catalogues, with building blocks and scrap-books, with beads or silk rags.

It is a rare home that has no object of art upon its walls, even though the connoisseur might smile at it. The things that are done in household routine or the industries of the home are also likely to blossom out here and there into an artistic gesture or flourish, and then go down the years as a possession of the hereditary group. This is as true of the mother who, when perforating her pie-crust just before putting the pie

in the oven, invariably marks a conventional stem-and-blossom design upon it, as of the neolithic Woman who scratched some peculiar zig-zag upon her clay jar before baking it

The home as inspirer of the arts.—A little boy was once playing with his blocks on the floor, absorbed in the building of a peculiarly shaped structure which caught the attention of his mother, so that she asked him what it was. Without the slightest hesitation he answered, "A living-sitting-dam." After a few ineffectual inquiries as to the authenticity and nature of a living-sitting-dam, the family gave it up and accepted the name as a sort of family stage-property to represent the inexplicable and dogmatic; it became a family classic. But it was no vagary of the child's. It was simply his attempt at a creative variation upon what he had seen when on a visit: a mill, in which the miller's family lived upstairs while the machinery and the rushing water were close by below. This somewhat confused concept of things, which reversed his usual ideas about the separation of home and industry, he had carried back into his own home and had incubated it in the shelter of that place which existed, as far as he was concerned, for the nurture of his mind and the purveyance of material for him to work into something of his own. Alfred Tennyson, it is said, shortly after finishing college, outraged the feelings of some of his relatives by "loafing" deliberately at home for a year—after which he published certain poems. Not every idler in the home, nor every child, will become an artist, but it is certain that the home gives that meeting-ground of outward impression and inward response which may become art. Perhaps that is why it is in the first great age of cave-dwelling man that we find the first painting, sculpture, and etching, for the semi-darkness of the cavern helped the visual memory to reproduce its stimuli on the walls. So likewise, in whatever form of house primitive man found himself, there came from time to time a throwing back from the very walls into his mind again the possi-

bility of further elaboration of some action into a beautiful as well as a useful form. How long, long ago did some woman for the first time place something upon the shelf over the fire-place because it looked pretty there!

IV. Woman's Part in the Arts

(*a*) *Woman as a Progressive*

Why the arts were invented.—In the sequal to one of Sir James Barrie's plays—a sequel not yet written but obviously to be entitled "What Every Man Knows"—there will surely appear a disclosure of woman's inventive methods. The casual appropriation of fortunate but unpremeditated combinations (as when one half-emptied vessel is poured into another in order to wash the dish, and lo! a new sauce has come into being!), and the effect of simplicity and shrewdness which she conveys as she serenely transforms an accident into a method, and a method into an art, are vastly impressive. Man is just as amusing, of course, but he has a way of throwing dust in the eyes and producing an illusion of grandeur when he invents anything. Take for illustration two devices which seem very different but are really quite similar, since both depend upon the principle of tension—the bow, and the safety-pin. (The latter is called a *fibula* when found archæologically, and is sometimes simply a brooch, clasp, or buckle, but sometimes again it evidently was made to have strength as a spring has.) We cannot prove it, but we associate the invention of the first with man, and the second with woman. In any case, we know that the man was the one who used the bow, and that it was a tool, a weapon, a means of executing an action. The pin and needle complex, however, associated chiefly with women, is a means of holding things in place, an expedient for the maintaining of order,

and this is the secret of the invention of the arts, in which woman's hand played so great a part. She wished to keep food, and pottery and baskets resulted. She wished to conserve the skins of the beasts hunted down by the man in a burst of activity, and tanning and sewing appeared. When at length man discovered that the arts were a field for the ample expression of his energy, he too became a patron of more of the arts and crafts. But before he entered with full strength, woman was an old hand at establishing the arts. An Irish stew is a work of art at one end of the culinary spectrum, and a scramble to meet an emergency at the beginning of its history.[14] From the point of view of the woman who prepared it or the man who erstwhile came slinking in from indifferent luck in the field to eat pottage[15] and become tamed, the motto of mankind has been, "I'll try anything once." And that is exactly how culture and the arts of life came to exist: the ability to see what ways there were to try, and the patience to utilize the trial-and-error method of learning. It was woman, at home with her babies, who first had to learn the lesson of *progress by constructive economy*, that is, the arts of life.

Specific arts influenced by primitive woman.—Once a year, according to a rather recent addition to our festival folkways, Americans and some others indulge in a flare-up of sentiment called Mother's Day. Although the occasion already shows symptoms of being touched by the dreaded miasma of our national life, commercialization, and has lost much of its freshness and spontaneity, it is essentially sound. But instead of pretending that everyone's mother was a semi-sainted creature, the cultural anthropologist finds more satisfaction in reviewing the very substantial claims to honor of the col-

14 The student will find some entertainment and considerable enlightment if he will reconstruct imaginatively the history, as revealed by the dictionary, of such words as potpourri, ollapodrida, mess, etc.

15 The story of Jacob and Esau is a parable of culture-history. He who stayed closer to the home inherited the cultural blessing. But a closer reading of the text shows that its efficacy came from the distaff side of the house—the inventive shrewdness of his mother.

lective motherhood of the race over its long career. What are some of these claims?

The members of the family are a hearth-centered group. There the figure of the mother dominates. Home is the place where the mother is busy at the hearth. As we watch civilization emerging from the cradle-like environment of the house, and expanding in scope and variety and complexity into ethnic cultures, we can see the ancient mothers coming forth from the dim haze of the ancestral hearth-fire of humanity to show man how to do many of the first simple but highly potential acts that were to lead to a later civilization dominated by the male. Some of the ways in which women have taken a large share in primitive arts are these:

1. *Fire-making.*—"Division of labor began with the invention of fire-making, and it was a division of labor based upon sex. The woman stayed by the fire to keep it alive while the man went to the field or the forest for game. The world's industrialism and militancy began then and there." [16]

2. *Care of the fire.*—This, logically developed, means "housekeeping," a great mother-art for innumerable lesser ones.[17]

3. *Food-bringing.*—Taking of foods ready for consumption; cooking; gathering staple foods in quantity; carrying on occupations grouped around vegetable industries; garnering and protecting food; discovery of beverages; changing raw food to elaborated products—mills, mortars, bake-ovens, winnowing, driving off undesirable components by heating; curing meat and fish; leaven.

4. *Agriculture.*—Seeking grain and vegetables; weeding, sowing, hand cultivation, etc.

5. *Presiding at the spring.*—Ways of carrying water, various strange pumping devices.

6. *Utensils.*

7. *Weaving, spinning, basketry, tailoring, pottery.*

8. *Medicinal knowledge.*

9. *Domestication of animals.*

10. *Illumination.*

16 Editor's preface, Mason, "Woman's Share in Primitive Culture."
17 See the ritual of the Campfire Girls, especially for the Woodbringer.

(*b*) *Woman as a Conservative*

Why many of the arts emigrated from the home.—Just as woman's part in the reproductive cycle has been to shelter, feed, and care for the germ of life, before and after birth, so her home has been a place for the arts when they were tender and feeble. The fire was the home, at first, but the forge had to go out to leave room for the main business of the home, namely, child nurture. Chemistry was a domestic art, but when it became an industrial science it had, perforce, to find other quarters. Spinning and weaving and sewing were at home with the woman until they became economically ambitious and went to the factory building.

Conservation of arts in the home.—Nevertheless, woman has acted as a conserver of the arts to this day. She is forever trying her hand at certain methods which are not adapted to extra-domestic development, but which are an important part of life—tatting, embroidery, rag rugs, "home cooking," preserving small fruits, dyeing, cleansing, decorating, repairing. In the end she succeeds in keeping alive, through a succession of revivals of interest, many life-ways that might otherwise be crowded out of the world.

Continual invention of arts in the home.—More is required than necessity for the mothering of invention. There must be, in some form or other, a withdrawal for thinking, a mental experimentation, trial and error, incubation. This may take place on the spot, at the very moment of confronting the difficulty. But the more complex problems need a place and an arrangement of experimental factors—a laboratory, in modern parlance. Woman has been in possession of a laboratory of sorts from the beginning, and that is why she made so many early inventions. There are no inherent differences, probably, between the sexes, in inventive capacity. Man as a hunter and herdsman was carrying on a kind of life that called for motion; woman, as primitive agriculturalist and

home-keeper confronted situations in which inventive methods for conservational ends could be worked out in relative quiet and seclusion.

V. Influence of Other Institutions on the Home

(a) *The Economic World*

The economic world as a menace to the home.—The home has given away a good many of its former prerogatives, among which the duty of looking after the major industries was one of the greatest. In this respect the history of the man's relation to the home had been somewhat different from that of the woman and the child. It was the man who was more naturally up and away from the primitive home, and who, as we have seen, was gradually domesticated and drawn in by advantages which he could not offset in the mere camp. But he has never settled into a home routine as the whole of life. He has continued his more aggressive contacts with the outside world. Hunting and fishing he never gave up. Pastoral life has given him unnumbered days in the open. Agriculture has been a daily cycle of field and home—"the ploughman homeward plods his weary way." Commerce has made him a man without a home for long periods when the "marchaunt adventurers" in caravan or caravel sought foreign marts. And manufacturing, even when, as in the craft guild days, it took him no farther than the shop at the front of his dwelling, at least left the line between dwelling and workplace a clear one. In fact, until the recent advent of the Industrial Revolution, the man has presented a normal and healthy spectacle of being drawn in two ways, by the home and by the outer world, while the home itself remained largely untouched by time and circumstance.

But with the industrial age that came with the great invention of power-driven machinery, the economic world which

had grown up a little bit removed from the home showed a new possibility, that of reaching back and drawing also the woman and the child out of the home. We are not now speaking of the "emancipation" of woman, whether from domestic labor to leisure, or from the narrowness of home to the broad life of professional opportunity. What we mean by the menace of the economic life was the transfer of women and children to the industrial world so as actually to cripple or destroy homes. The barest outline of what happened in England in the early days of factory life is enough to prove the point. Women had always worked, of course. But the peasant woman who took her baby to the fields while she raked hay had not ceased to be a home-maker. Nor had the over-worked farmer's wife who stayed in the home. But here for the first time was the chance that the home might not be able to withstand the tide of social change. That it did withstand it was because man has reached, in a feeble way, the ability to direct his own progress.

The economic world as an ally of the home.—A quarter of a century ago a sociologist of recognized standing said to a class of students: "Nothing militates so much against marriage as the economic capacity of woman. The more the earning capacity of woman, the fewer marriages of any kind there will be." But more than a quarter of a century before that, a much greater sociologist had spoken to this effect: "Whenever woman is or must be content with sexual charm alone, her status sinks." [18] The two remarks, which are not so irreconcilable as they appear at first, serve to bring out the question whether the development of the economic life has affected the home life for good or for evil. A way out of the dilemma, in agreement with social development in history, is possibly this: No home life can attain its highest social possibilities unless it is entered freely. An expanding economics in the past gave man freedom to go out of the home. Woman is

18 Lippert.

acquiring the same freedom, because of still greater economic advance. Unless she freely devotes part of her energy to home-making, she cannot be made to give society good homes at all. If she chooses to desert the home, her place will be taken by other women. But it would be better if the woman of proved economic ability were the one to make the home her choice. This is not too much for society to ask of the superior women, provided she is allowed to make an ally of the economic world, so that she can still have leisure for self-development after she has made her contribution to the home life of the race. The woman who elects to be a home-maker will find that there is almost no limit to the alliance she can form with the industrial and economic world. It will be always present with a suggestion at least in the old tasks of food-preparation, clothing, and cleaning.

(*b*) *The State*

How the state helps the home.—It has been evident, as the various major institutions have been mentioned in connection with the family, that they are extensions of the latter in many of their functions. The state is no exception. Whatever validity of its own it may have as an organ of control for the horde or tribe, it is also originally a channel of expression of the kinship group. The situation with which the relations between state and home open are not unlike that in a family, when the mother, representing home control, calls upon the father to administer discipline in some case of special unruliness on the part of her growing family who are participating in neighborhood embroglios and getting gradually out of her control. The father represents the family in part, and also the larger community point of view: in serious matters the family must be responsible to its neighborhood. So likewise in the early stages of social life, the family centered in mother-control found itself in the presence

of problems calling for quick, authoritative, united action on a scale surpassing that in which it could operate. The able-bodied males, headed by the elders (who might include, in some organizations, the older women of the family groups), took charge of these matters, probably involving force, like war or internal discipline, or ceremonials having to do with tribal welfare as a whole, like fertility rites. The state helps the home, in other words, by supplementing it at the point where its powers begin to be dilute, and in so doing it protects it. In return it expects conformity and obedience from the home. And it is not until much later times that the state takes on the added role of ministering to the needs of the home, as it does when, for example, it distributes free printed matter on how to control household insects.

Possible encroachments of the state on the home.—The home has experienced so many losses of function due to the growth of other institutions which have come up alongside and relieved it of part of its task, that it is sometimes difficult to say when the home is in danger and when it is being reinforced. A recent movement in favor of the home was the attempt at a constitutional amendment prohibiting child labor, but it was defeated largely because it seemed to a certain section that the home would be interfered with if it should be passed. Sparta took children from the home and made them into soldiers. Modern homes are entered by the state for sanitation or other purposes. There has always been a reluctance, however, to let the state dictate to the home, unless we go back to the period when the state had the patriarchal or implied standing of kinship authority back of it.

(*c*) *Religion*

Religion as a conserving home influence.—As far back as we can trace the home, we find religion not only present

but an integral and vital part of it. Marriage among the Greeks and Romans was the acknowledgment of the same kindred gods by the contracting parties; that is, the bride became a part of her husband's clan or *gens* by the act of taking his ancestral and household gods. "The ceremony did not take place in a temple; it was performed in a house, and the domestic god presided. When the religion of the gods of the sky became preponderant, men could not help invoking them also in the prayers of marriage, it is true; it even became habitual to go to the temple before the marriage, and offer sacrifices to these gods. These sacrifices were called the preludes of marriage; but the principal and essential part of the ceremony always took place before the domestic hearth."[19] Perhaps no better evidence of the essential nature of religion in the old Aryan-descended home can be found than the fact that under the older Roman law a natural son could not carry on the family religion, because he did not belong to the kinship group of his father—his mother not having been adopted by them in marriage ceremony.

Religion as a dynamic in the home.—Culture history shows religion as a driving force in the home. There are two great chapters to the story. The earlier and by far the longer of the two covers the period before religion was institutionalized outside the home to such an extent as to impose behavior patterns upon the family. The driving power of religion was then in the fear of the dead and the reverence for ancestors. The "cult" was filial piety and family safety in one; religion was prudential. It held the head of the household to the due observance of the customary rites, which faded into one another to form a series of prophylactic social measures, from the every-day worship of the spirits to the proper funeral ceremonies and the honors to the "gods" on greater occasions. It constituted a sort of routine, and the primitive family needed a routine with a very strong sanc-

[19] Fustel de Coulanges, "The Ancient City," p. 55.

tion, to keep it on the road to the larger community loyalty. Service of the gods led directly to that.

In much later times, as in our own day, institutionalized religion, through the state or through the church, reaches far enough into the home to provide the still needed stimulus to united effort toward the accepted decencies of the community. The respect for priest or minister which pervades even homes outside any church; the influence of the Sunday School; the saying of grace before meals; the inscribing of names in the family Bible; the taboo against profanity; the clustering of routine events around the Sabbath—these and many more are illustrations of religion as a motive power in the home. Such a good old custom as the Saturday night bath is, after all, a religiously inspired home routine, a part of the Sabbath.

VI. Problems of the Home

(*a*) *Convergence of Social Problems Upon the Home*

What are the problems of the home?—As a central institution in society, the home has to stand a good deal of strain and stress due to general social change as well as to its own character. At the present time the rapidity of change has put the home under unusual tension. Some of the problems of "the drifting home" [20] are these:

1. Adjustment to the industrialization of society outside the home: the problem of compensating within the home for loss of former functions of an economic character.
2. Adjustment to city life: the problem of maintaining a broadly conceived cultural home life in a restricted area with many distractions.
3. Adjustment to high material standards of living: the problem of balance between the satisfaction of individual economic

20 See E. R. Groves, "The Drifting Home."

wants and the dedication of resources to the support of the family.

4. Adjustment to the economic freedom of women: the problem of having a "career" and also a family.
5. Adjustment to the higher age of marriage: the problem of psychic adjustment to home life after an individualistic period.
6. Adjustment to changed ideals of freedom: the problem of liberty in sex life versus restraint for the sake of the home.
7. Adjustment to religious change: the problem of finding a substitute for the old household gods.
8. Adjustment to democracy: the problem of substituting self-control for social restraint in holding the family together.
9. Adjustment to the decline of the patriarchal family: the problem of finding a new social sanction for family solidarity.
10. Adjustment to the community's care of the child: the problem of finding what the family can still do better than the state, the school, or the church.

CHAPTER XVII

MAN REGULATES HIS CONDUCT

Salus populi suprema lex.—JUSTINIAN: Twelve Tables.

I. FORMS OF SOCIAL CONTROL AMONG EARLY SOCIETIES

(*a*) *The Idea of the State*

Older theories of the state.—The state is the social body organized around a recognized group of individuals under whom it is regulated in its conduct, individually and collectively. The group possessing the authority is called the government. Its personnel may change, but the state continues. It is evident that the state is either a somewhat abstract presentation of the social body, or else it *is* the social body. But the state is not the only authoritative aspect of society. Customs, folkways, *mores,* morals, and religion—all of which are discussed elsewhere in this book—are ways by which the greater inclusive group enforces its will upon its parts. Yet the state or political aspect of social life has such a way of getting in the limelight of history that it has unduly crowded other social aspects out of the attention even of students of society in some cases. This is because the state can assert itself with such visible force as to make the spectator forget the social life that really upholds it. We may define the state as a population organized for enforcing its will as a whole.

The state was formerly conceived of as more of a voluntary affair than it is now believed to be, so far as its origin is

concerned. There are two of these older ways of explaining the beginning of political life which have been especially alluring in the past. One was the idea that a divinity, or a law-giver commissioned by the divinity, first constituted a ready-made system of law and order, the carrying out of which is the function of the state. The other idea was the famous "social contract" theory, according to which men had come together deliberately at some time and agreed to forego certain rights or privileges in order to get collective enforcement of the rest of their rights.

"If we analyze the idea of a social compact to its lowest terms it seems to mean that the formation of a community is of the nature of a bargain, in that each party gives something for something. He gives up his unchartered freedom and he receives security, or, as Paine says, he gives up certain natural rights and receives civil rights in exchange. He is the gainer because his natural rights he has no power to enforce. His civil rights are more restricted but they are solid value . . . But it is a mistake to conceive the admission to social life as essentially a giving up. On the contrary, as Rousseau really saw . . . it is essentially an enlargement and a gain. Men need society . . . as the field of their own lives. . . . It is in this sense that society (and the state) grows out of human nature." [1]

Newer theories of the state.—The reason for the general abandonment of the compact theory, suggested by the foregoing quotation, may be variously stated. From the historical point of view, things never happened so. From the evolutionary point of view, the state must be thought of as an adaptive growth, not a made thing. In short, the only approach conformable to other social thought today is the genetic, which conceives of social forms as coming into being from relatively undifferentiated parent forms, as a response to environment and in conformity with inner nature. Accord-

1 Hobhouse, "Social Development," p. 60, Holt, 1924.

ing to this view, it is not invariably true that a community is a state in the developed sense. The State is not an inevitable appearance; it is not *the State* but *states*. Likewise, looking forward, some people (philosophical anarchists) see no need for a state, which they think results from the will to group action rising to such definiteness as to lead to constraint over the individual members. Whether this be a correct judgment or not (and few people believe it is) it serves to emphasize that the state is a sort of necessary evil. It represents the group in dead earnest overcoming resistance, inward or outward, actual or potential. It makes everyone play up to everyone else.

Our first, and most important, endeavor is to see what the germinal form of the community control was. To do this we must recall the primitive group again—partly a kinship group, partly a hunting pack. Control is suggested by either phase, but as we have previously discussed the family, we shall begin with the horde or pack in our search for the genesis of the state.

(*b*) *The Natural Community*

Horde control.—One of the world's most famous utterances has been Aristotle's dictum that man is a political animal. In the sense in which Aristotle meant it, nothing could be more true, but "political" has somehow come to suggest the city-dominated type of life in which politics and politicians have been so prominent.[2] Instead of beginning with any such concept, let us think of such a very different word as "horde." A horde and a herd are similar; so are horde and pack, or horde and crowd. An exact idea of horde in the sense in which we are speaking is a small, primitive group, ranging, without definite territorial control, for food, and very loosely organized. This group has a kinship

[2] Greek "polis," a city.

side, a genetic or family coherence, but with that we are not now concerned. It has also a horde aspect. Like an animal herd, its coherence is based largely upon the inherited trait of gregariousness—acquired because it has proved useful to the group in the struggle for existence. Like an animal herd, it can under the stress of danger from without, develop a defense organization that has no counterpart in the kinship organization—which, whether in primitive or civilized groups, has to give way in favor of the more rigorous economies of war or other social peril—and, in this horde organization, control, as a general thing, is taken quickly and easily by the more vigorous of the males. Again, like an animal herd, the horde, even in times of peace, has particularly to do with the maintenance side of life, rather than the reproductive, and to some extent is always by way of forming a hunting or other kind of social organization, interlocking at points, naturally, with its kinship organization, but tending to describe its own circle. When it becomes well enough defined, we shall recognize the political or state aspect of society. In fine, a primitive human group may be a kinship group from one viewpoint, and a horde or embryo political group from another.

The horde and parallel aspects of group control.—But it must be kept in mind that the family and other activities of the group life are tributary influences to the forming of the state. In fact, the family alone, being a sort of recurrent and inclusive germ of all groups, can, if dominant, evolve a kind of political life, but it will be far too much devoted to clan loyalties, an abortive type of state, unless it has merged itself with the other stream of development which proceeds from the horde.

We may think of the community as a primitive kinship group—but as such it has certain needs of control; again we may think of it as an economic group—but here again a certain amount of control is called for; or we may think of

it as aroused to assert itself, either in defense or offense, and here we have the matter of control and authority not only a factor, but everything. It is thus, we perceive, social control *per se* that calls the state into existence, but the family and the economic life add tributary streams of social control on their own account.

The family, in its own development, really needs the overhead control of the state which has in part sprung from it and in part from the horde. Thus, when the opposed tendencies of endogamy and exogamy come into conflict, we begin to find kinship groups crystallizing into larger and larger communities, including many who can hardly be called "related" to others in the group. Under such conditions, the survival value of an organization of control for practical matters and for defense, such as the political organization affords, is obvious. The state has survival value for the group.

The state as an outcome of group conflict.—The phrase "survival value" suggests the struggle for existence. It is this feature of social evolution, namely the conflict between groups, which has attracted the attention of some scholars so persistently. The background of this presentation of the state is the older view of social struggle which (erroneously) was taken up seriously in some quarters in the latter part of the nineteenth century as an application of "Darwinism" to social problems. In this view, the inner evolution of political life as a means of peacable, orderly control of individuals by the group is not stressed. It is not exactly denied, but it is not held to be very relevant. The state is not really conceived of as having come into existence until the stage of group collision and elimination, absorption and expansion, is reached. This theory of the state when it is allowed to obscure the whole historic firmament, leads out to a rather pessimistic view of the future.[3] In fact, it is right at this point that we come

[3] Cf. Ludwig Gumplowicz, "Der Rassenkampf."

to a parting of the ways of thought. To those who incline toward the conflict basis of the state, the necessity of international wars for an indefinite time ahead seems natural and probable. Those who put more stress on the kinship and coöperative phases of political evolution are likewise prone to take up with plans for social control for peace.

A particular form of the conflict view of the state is that which makes it "the summation of privileges and dominating positions which are brought into being by extra economic power."[4] "The State completely in its genesis, essentially and almost completely during the first stages of its existence, is a social institution, forced by a victorious group of men on a defeated group, with the sole purpose of regulating the dominion of the victorious group over the vanquished, and securing itself against revolt from within and attacks from abroad. Teleologically, this dominion had no other purpose than the economic exploitation of the vanquished by the victors."[5] Though there is much in this theory that is worthy of acceptance, it is nevertheless a partial view. The same author who has just been quoted says: "It is self-evident, that in any group of human beings, be it ever so small, there must exist an authority which determines conflicts and, in extraordinary situations, assumes the leadership."[6] The intra-group evolution of that authority, regardless of whether one class is exploiting another or not, gives us a broader conception of the state. For, as a matter of fact, there were many things within the primitive horde that had nothing to do with class or group exploitation, things that nevertheless called for the joint control of the *elders,* and it is to these elders that we must go back for politico-social origins. We shall find the element of social control in festival, food-getting, family life, and religion, and internal peace maintained in matters of

4 From "The State," by Franz Oppenheimer, p. XIV, 2nd American Edit., N. Y.: The Viking Press, Inc. Copyright, 1922, by B. W. Huebsch, Inc.
5 *Op. cit.*, p. 15.
6 *Op. cit.*, p. III.

property, crime, and all sorts of personal conflict and jealousies. Instead of saying, then, that "the state stands forth as fundamentally a war-band charged with the duty (1) of preserving group safety and (2) of guaranteeing domestic peace by using threat and force so as to render submissive recalcitrant subjects." [7] we may put it thus: the State is the organized phase of social life that emerges from the need of control, having the duty (1) of behaving as a war-band on occasion, and (2) of guaranteeing domestic peace and rendering such forms of service as can best be managed by the collective authority.

(c) *Origins of Governmental Functions*

The internal functions of government.—The primitive group, viewed politically, may be said to have form but little structure. That is, instead of having special organs that exercise the functions of control, as do the governments of higher societies, the whole group turns into a regulatory body when occasion calls for it. But very soon differentiation of function makes its appearance, and this is because there are many different departments of life in which control must be exercised over the group as a whole. Within the group the individual, or little aggregates of individuals, proceed to carry out their plans regarding economic, family, or other interests, subject to traditional limitations of rights and privileges. Tribal custom or the traditional will of the group is enforced by the persuasive or influential power of certain other individuals. And as the activities of the little sub-groups or the enterprising persons increases, the functions of government appear.

The functions of government are both internal and external. The internal, from the maturer standpoint of the political scientist, include:

[7] Dealey, "The State and Government," p. 5.

(1) Keeping order and protecting persons and property.
(2) Maintaining the established domestic relations.
(3) Establishing limitations and rights in property.
(4) Holding persons to their moral and contractual obligations toward others.
(5) The administration of "justice," (a difficult word to define, but a universal desideratum).
(6) An indefinite number of further optional responsibilities for public service.

Primitive government was no such self-conscious thing as the foregoing list might imply. Yet all those functions were there in the germ. For every one of them traces back to this: the collective overhead control by the whole group over its parts, in order to maintain its integrity.

Beginnings of authority.—Nevertheless, we must not think that the actual form of group control, usually called the state, arose in the beginning out of forethought to that end. Rather do we find some group within the community, very likely a self-appointed group, possibly representing an economic interest or a sex-exclusive interest, simply assuming an authority over the whole, and while the community goes on its various ways of life accepting the control of this partial, overhead group, the latter evolves through form after form. Thus the state is at once an extension of the whole social body and the self-expression of a group or an interest within it.

How did any part of society come to hold the helm? Probably the clearest demonstration of the process that can now be made for us is the behavior of a group of children of from five to twelve years of age, brought together by neighborhood location, and forming a play-group. What happens is normally that a part of the group, drawn by common superiority in initiative, wealth of interests, possession of a background of ideas, and physical force, hand down a play pattern for the whole group, and while allowing participation, retain control, even holding whispered consultations as to policy, and then turning back to the rest with assignments of parts to

be played or degree of participation to be allowed. If, for example, they are playing school—"*I'm* going to be a teacher! *He's* going to be superintendent and come to visit! All you kids must be the children." And in this program the younger or less forceful acquiesce—with little or no resentment. This case is not quite parallel to early society, for a real human community always "plays" at several games at once—family, food-gathering, worship, war, etc.—but in many respects the emergence of authority is similar to our illustration. A sort of primitive oligarchy of dominant older men, handing down, at first, not so much specific commands for particular situations as traditions and precepts, exercised control over the younger men and the women. In the establishing of such a dominance, wide-spread use of devices for mystifying and awing the rest of the community seems to have prevailed. The "bull-roarer" is the most commonly mentioned instance. In fact, there is always a certain tendency for government to become merged in secret societies, but the more democratic protest is always at work to counteract it. In other words, the ablest are always impelled to take the reins of social control, and not always in any consciously unfair way, but often in a spirit of faith in their ability, inspiration, or powers. The "call" or "commission" felt by priests, medicine men, kings, prophets, and even military leaders, is one of the familiar expressions of this feeling.

The external functions of government.—The external functions of government are reducible to the formula of control of relationships with other communities. These relationships take the form, for the most part, of war and diplomacy. The first has received separate treatment in Chapter XIII, and the second is comparatively uninforming as to the development of society in its vital processes. It rests upon the previous attainment of some degree of self-regulated independence (eventually "sovereignty"). But it is just that growth that we are chiefly interested in.

II. Emergence of Main Types of Government

(*a*) *The Stage of Small Group Affinity*

Growth of the kinsfolk type of government.—The philosopher Hėgel taught that history unfolds in cycles, each of which is composed of three successive manifestations: first, the *thesis* or setting forth of an idea to be developed; second, the *antithesis,* or appearance of an opposed or contrasted idea; third, the *synthesis,* or reappearance of the first raised into something new and higher by combination with the second. Without regarding this formula as being true in any invariable way, we may yet find it suggestive in reviewing the development of governmental forms. In that development there seem to be three great stages. The first is that of government depending upon the cohesive power of small groups, in which kinship is the most powerful factor at first, though it more and more gives way to control by an inner sub-group that acquires authority as stated in the foregoing section. The second stage is that of expansion and more or less forcible subordination of group to group, and class to class, during which large political aggregates—empires, monarchies, etc.—are developed, and the concept of large-scale political bodies becomes common. Then there is the return of the kinship idea in the form of brotherhood, democracy, toleration, wide participation, coöperation of interests, and internationalism, all on a larger scale than the clan system of exclusive kinship loyalty, yet carrying that spirit along with it.

Let us look first at the small group or kinsfolk type of political life. To see how it arose we must remember that among very primitive peoples the community as a kinship group and as a hunting horde could hardly be distinguished, one phase from another. Thus the primary group is either a kindred or a neighborhood, depending on the point of view. When it becomes somewhat larger it is either a clan or a popu-

lation, depending again on one's point of view. The point is that an individual's protection and the authority to which he bows are resident in his kin-group. The larger developed group (clan) may acquire governmental ways which reduce the primary group or small family to a place outside the developing "state," yet the genius of the government of the clan is that always of kinship emphasis. The kinship idea, with its emphasis on sib, clan, totem-group, gens, etc., cannot develop very great breadth; its dominating idea is exclusive. If it acquires too great a formative influence in the growth of the state, there is a retarded or arrested development, as in the case of the Scottish clans, which, picturesque as they were, interfered with national growth and wider governmental authority.[8]

Appraisal of the kinsfolk type.—The early form of social control that made affinity of kinspeople the dominant motive gave the world the great idea which appears again and again in modern forms of fraternal organizations, and which may be the carrier of very high social purpose or very low. It was also closely connected with the great system of totemic organization, and concerning totemism there is a great deal to be said.

Retarded political life under the metronymic family.—As we have seen, the patriarchal family, under which political advance was very great, was preceded in some places by the matricentral or metronymic family. This form of the family did not go far politically, for the reason that its organization did not lead toward the formation of the nation. And the reason it did not lead to the nation was that the maternal family was inextricably involved with the totemic system. In that scheme of relationship the actual father was not "related" to his children in our sense of the word, but the maternal uncles and the uterine brothers of the mother held

[8] For a vivid idea of the hold of the clan spirit, see Scott's "Lady of the Lake," particularly Canto III, "The Gathering."

the position of grandfathers and fathers, respectively, to her children. The totem or symbolic kinship group to which a member of the horde belonged was determined by various methods having to do with the mother-right, but the totemic group did not coincide with the horde, which might have members of various totems in it. The metronymic family, in other words, could not draw the kinship parts together so as to strengthen the horde.

How the patronymic family developed toward national political life.—Population increase, domestication of animals, agriculture, and warfare, working together, brought about a premium on labor. Marriage by purchase, plus the knowledge of the natural father's relationship to his children, gave the father a position he had not had before in the family, which now became patronymic. Every father was now a potential patriarch, heading his family as the originating point of their kinship, and as the director of their economic activities. But, unlike the mother in the earlier type of family, the paterfamilias was a member of the horde-in-action, and perhaps also of the council of elders. Under him and others of his ilk the horde became a composite horde, a tribe, while at the same time the familial pattern under which each was living gave any one of them who was dominant in the tribe a chance to fashion tribal government according to the patriarchal plan. The patriarch grown great enough almost to call his family a state is shown us in the account of Abraham when he chastised the four "kings."[9] It should be noticed, moreover, that the occasion of that campaign was the necessity of Abraham's aiding his kinsman, Lot, from whom he had previously marked off a line of territorial and economic separation. That is to say, the patriarchal concept continued to sway the political and military life of tribes that were dividing into smaller economic units. Even while they divided, they formed larger wholes. The tribe became a tribal-

[9] Gen. 14.

nation—the word *nation* indicating a preference for regarding themselves as of common origin or *birth*. Whenever the characters of war chief and patriarch were combined in a kingly personality, the state came a little more definitely into existence. The *pater* in the family and the *dominus* over his slaves, he became *seigneur* (elder, lord) over a feudal holding, or "*little father*" (czar) over a nation of millions, or a *senator* (elder in council), or what not, all founded on the expanded paternal function in league with the horde-community. The authority of the father thus tended to become the authority of "the government" in our modern sense. Yet at the same time that the tribe was becoming the kingdom by extension of paternal authority, it was also in many places, as in ancient Rome, becoming more definitely clan-like in its social and family organization. This is why we hear so much about the *gens* as well as the *king* in early Roman times.

(*b*) *The Stage of Expansion and Accretion*

Growth of the subordination type of government.—At the same time that kinship ideas were producing clannish forms of the early political life of society, other forces were at work, and these bring to our attention such terms as tribe, tribal kingdom, state, etc. They are a development from the original group viewed not as a family, but as a horde, and they lead to the modern idea of a state more apparently than do the terms clan, gens, etc., which, as we have said, were arrested in their growth. One of the ways in which this larger growth came to pass was the coalition of smaller communities into distinct tribal communities. This came about because small groups living as close neighbors visited, traded, and very likely intermarried, and found that they had identity of interests outside the range of family life. Hence the occasional and eventually regular gatherings of elders constituted a tribal council, that is, one not cohering by virtue of kinship but by

extension of the horde interest. And the absence of the kinship motive, the thinness, comparatively, of the personal bond, made it easier for this organization to extend itself by making use of caste, or economic group interests, or conquest, or other means. The idea of kinship remained strong, of course, but not so dominant in politics. Sometimes the two ideas of kinship and community were united in a tribal council formed by the heads of the clans. Again, one clan emerged predominant, and its headman was tribal chief. The very existence of this expanding community type of government, with its correspondence to the various interests of the people and its division of labor into the office of war chief and peace chief, or perhaps chief and medicine man, depended upon the successful competition with the old clan motive. It won, in most cases, because clannish life is weakening, making for internal feuds and a weak front presented to outsiders. For peace and safety, the clans are apt to welcome any person or little group of persons that can maintain discipline. The ever present possibility of war helps the war-chief to become a petty king. Neighboring peoples, attacked for tribute, may be enslaved, but the slave population accrues more rapidly around the fighting part of the tribe, which becomes an aristocratic hierarchy. Restless tribes, especially nomadic or migratory ones, may superimpose themselves upon other tribes. A warrior endowed with unusual confidence, with a group of followers, establishes a little kingdom, and lo! he is taken so seriously that he is soon a demi-god, endorsed by the priesthood. And so, after one fashion or another, government becomes an expansive agent, subordinating part to part in the social whole.

Estimate of government of the subordination type.—Civilization is such a complicated thing that man must have learned to control his social organization in large and orderly units. This he learned to do in the vast pageant of imperial duels and succession of kingdoms with which early civilization

was engaged. Class distinctions have come to be taken for granted, especially in the economic world, carried over from the patterns of political life.

Intermingling of tribe and clan elements.—To recapitulate, the horde became the tribe, and the family became the clan. Then during the growth of agriculture and slavery the clan reacted in two ways. It pushed its patriarchal idea over onto the tribe in the form of incipient kingship. On the other hand, it settled down into stationary clan life which, except in mountainous or desert environment where agriculture could not flourish, developed in the direction of the village community. The latter became the conservative masses of civilization, who, however they might be goaded into motion by the political powers over them, have always preferred to return from war and market-place and resume the sowing and reaping, the quiet ways and loyalties, and the simple pleasures. In times of overturn these slow-moving masses have little chance to do themselves justice: an instance is furnished by the soviet revolution in Russia.

Meanwhile the original force of the horde, always drawing together and integrating, and by this time operating through the tribe, brought about confederations and then tribal monarchies. These, as we remarked above, became "Oriental" monarchies or empires in some cases. But another line of development also took place out of confederations of clans and out of tribal kingdoms. The consideration of these will bring us to the next stage of government, that of large-scale participation.

(c) *The Stage of Large-Scale Participation*

Growth of the coöperative type of government.—The idea of government based on participation by all or a very large proportion of the people, allowing equality and freedom to become at least partially realized, is a very much older one

than modern people usually suppose. Though later than the other two kinds already discussed, it appeared long enough ago to overlap with them during some historic periods. This principle of extensive participation in government has various roots. One of them is the religious principle of the possibility of the attainment of values by man as a spiritual being. Though it took a long time, yet the ultimate effect was to encourage government by the mass.

The ancient form in which the participating form of government made its contribution was the city-state. Though full human democracy was not reached in ancient times even under the auspices of the city-republics, yet the idea of mutual civic obligation and privilege, shared by freemen or "citizens," was brilliantly demonstrated. The origin of a typical city-state was probably somewhat as follows: A union of tribes having taken place because of location around some spot of exceptional interest, such as a good place of defense, or a sacred place, or a trading spot, the population gravitates toward that place. In other words, an adjustment of rights occurs because the garrison, the trading population, and the priesthood have all come together there. The adjustment is the primitive constitution of the city-state. The various clans maintain their rights and dignities, and through them the establishment of direct government by the "assembly." The harmonious, politically organic life of the Greek city-states is one of the bright spots in history. Nevertheless, it seemed to be incapable of outgrowing the environmental limitations of the Greek world of islands and peninsulas. Nor did the vastly larger political life of the Roman Empire ever outgrow the city-state pattern upon which it was based.

Free or coöperative government in Western Europe.—In Western Europe, after the receding of the Roman Empire, there was a period of feudalism (a combination of emergency land-tenure and tribal chieftain ideas) followed by a re-enacting of the subordination type of government in the form

of the monarchies and benevolent despotisms of the early modern period. Then came the great modern constitutional state, either democratic in form or with great limitation upon the monarch's power. The largeness of scale of the modern state gives an organized basis for the expanded ambition which manifests itself in all the doings of western modern peoples. Yet we must see, in the present state of armed preparedness throughout the world, the need for still greater application of the participating brotherhood idea in government. To stop where we now are in political evolution would be to record the most colossal failure of all. And there is the more reason to expect success because mankind has a tried and trustworthy political pattern in its possession—representative government.

III. The Genesis of Law

(*a*) *Custom, the Social Basis of Law*

The nature of custom.—Every community has to do things, and since the individuals are all habit-forming creatures, the community as a whole acquires its habits. The best habits, i.e., the seemingly most serviceable, are agreed upon by the greatest number, and are thenceforward the ones most commonly observed. The ways of doing things which the community expects to see carried on and which it "believes in" are its "customs." To the group, particularly in early times, the accustomed way was the "natural" one. Custom has very great authority, and this is probably a good thing, on the whole, for it enables life to go on without constant pause as to method. There are so many new situations at best that social pressure, cutting off debate and insuring some of our responses when the situation happens to be old, renders a real service. Psychologically speaking, custom is a conditioned reaction to a community stimulus. It takes a

place rather far back in the consciousness of the community, and is not subject to reflective thought to any great extent. Festivals and holidays are often approached without deliberation and yet may not fail in any detail of complete observance, —Fourth of July, for example, or Hallowe'en.

The guarding of custom.—Communities think so highly of their customs, which seem to them the normal way to behave, that they guard them in various ways. Religious feeling is very likely to range itself on the side of the established life-ways, because religion is a value-conserving factor in society, and prefers what has been tried and found serviceable. "Morality" (a thing hard to define, and which we discuss in our next chapter) is a rather set way of behavior and favors the customary. Another way of maintaining custom, and of protecting it from being raveled out at the edge by individual variances, is law. Not that law is merely a holding to custom. It may be a departure from it. But in its older and more general character it is a definite expression of the will of the community regarding its customs. When the community makes a law, it has become reflective-minded regarding a custom.

In his relation to the customs of his group, the group expects the individual to "play the game," that is, to conform. Although a good deal of the custom fabric may seem to be shabby and motheaten with age,[10] yet social control and insistence upon custom are necessary, if there is to be any game at all. Without raising the question yet whether society ever goes too far in its demand for conformity, we find that through the successive grades of good taste, expected usage, folkways, *mores* and morals, society does make such demands, and when at any point in the series it makes its demand categorical, it has made a law. Society sometimes halts a long time on the verge of turning a custom into a law. "Common law" is an instance of this: as used in England

10 See *Atlantic Monthly*, June, 1913, Arturo Giovannitti, "The Cage."

the term means custom recognized as law by the courts, but receiving its sanction from long usage by the people rather than by formal legislative bodies. In a marriage ceremony, to illustrate, there are several sorts of social control jointly at work. The minister represents ecclesiastical or religious sanction; the license to be filled out stands for statute law; the wedding gifts and other items of behavior connected with the guests are the evidence of the custom-basis on which the whole procedure rests; and finally the chosen friends who "stand up with" the couple are a reminiscence of common law, when the binding force of marriage depended upon the fact of neighborhood witness.

Law as a form of self-preservation.—Mankind having tried different procedures in its daily life, learns what ones are best by the success that attends them, just as the body forms habits quickly when efforts are successful. This selection on the basis of success is not deliberate among primitive peoples, but it is none the less an intelligent selection. Civilization, however, needs to act more quickly in the face of innumerable new situations, and, with the aid of records and accumulated information, it can make a law, thus selecting, for self-preservation, from among the possible ways of behavior, without having to go through so much experience.

(*b*) *Justice, the Social Function of Law*

Justice as a restraint.—People get in each other's way, and life is a resolution of conflicting forces. The stronger force prevails in a given situation, and one person stands aside while the other goes through to the completion of his purposed action. It might seem that perfect adjustment would result from this operation of natural selection, for the rewards of life would accrue to the most able applicants. The fatal difficulty, however, is that the perfect operation of natural law on the physical plane does not always coincide

with its operation on the psychic and the social planes. The physical weakling may be, for example, an Emmanuel Kant, who was a frail little body housing a giant mind. An advantageous adjustment of forces, for his good and that of society, required that he be protected from molestation all his days, though that implied the restraining of any who might have plundered him under a free-for-all regime. Justice, in such cases, means restraint and a redisposing of forces in accordance with the highest considerations.

Justice as a fulfillment.—Justice is more than a restraint. It is the enforcement of obligations, and the maintaining of opportunities. Justice completely administered would be an ideal society, for everyone would be fulfilling all obligations to others and have freedom to use all the opportunities he was capable of. A comparatively static social group tends to establish an approximate justice, through the trial and error method referred to above, and the elders of the family or of the tribe are sufficient to administer it. But the majority of peoples do not stand still; they are constantly being rearranged and combined. When groups are brought into combination, customs conflict, and an authority must decide between them. Thus arise the royal courts which evolve, perforce, so much new law.

IV. The Problem of Law and Society

(*a*) *Static Character of Law*

Law as an attempt at finality.—Every law is an attempt to hold something steady which is essentially in a state of flux. Social behavior is always changing. Within the limits of any situation justice requires that approximate uniformity of behavior be imposed upon all the members of the group. This is an attempt to eliminate the unforeseen throughout some area of social action. But *time* brings the unforeseen,

nevertheless, and custom is free to make its adjustments, while law lags behind. Law cannot change as a living thing, but must be taken up and shaped by thought. Thus the very purpose of law, the definition of conduct, is always putting law out of date. On the other hand, law may run a little ahead or at an angle from custom, due to the desire of the legislators that custom shall bring itself into conformity with the law. Sometimes the unforeseen intervenes here and custom goes a different route from law. Thus law and custom are always somewhat divergent. Custom has a sentimental hold which law does not, and law has the state behind it, or sometimes the priesthood.

Among simpler peoples the divergence between law and custom is not very great because deliberate and constructive legislation is rare. The civilized state has a great deal of legislation before it constantly, and since the humanitarian or common welfare point of view has come to prevail comparatively widely, there is much voluntary reforming and addition to law being advocated.[11]

The requirements of social justice.—There are certain obligations that the legislative or justice-dispensing activity must take into account. One is the maintaining of the status or position of the individual in the group—rank, race, nationality, sex, family, totem, inheritance, property, etc. Primitive types of society do not have many of these distinctions. Group-membership covers the whole case, or nearly so. But growth of communities means subordination of part to part, and as states grow, status becomes more complicated. Besides the status of the individual within his group, his acquired or transitory rights must be protected, such as his property acquisition, his contract obligations, his marriage rights, etc. Thus the evolution of society, throwing up kings, nobles, peasants, slaves, priests, warriors, and merchants, all

[11] See Bertrand Rusell, "The Harm that Good Men Do," *Harper's*, October, 1926.

makes for a complexity of status, and therefore a complexity of laws. Later civilization reveals a movement for equality of formal status—universalism or democracy—but at the same time the concrete and mechanical features of life become so much more complex than before that laws are necessarily multiplied. The outcome is a kind of basic recognition of universal community of status, such as we find in constitutional law, along with the recognition of specific inequalities. We cannot hope to return to the primitive condition where membership in the group meant approximate similarity of life. But we can seek to maintain a basic equality, with differences due to function.

(*b*) *Conflict of Law and Personal Impulse*

The elasticity of law.—Law is a rule of conduct imposed by an authority representing the community. To disobey the law is to rebel, for the moment at least, against one's community. The motive can only be some form of personal conflict with the community will. There are three main classes of situations which may give rise to such a failure to obey law. One is conscientious objection to the law itself. In such a case the individual is really obeying what is for him a higher law, and cannot be blamed for doing so. At the same time, since he may be mistaken, he does so at his own risk and must take the consequences, not blaming society if it punishes him—though he may blame it for not changing the law. The second case is quite the opposite: the individual out of pure indifference to the social will may follow his personal desire. This is anti-social and naturally is resisted by society. The third possibility is that the situation of the moment is such as to make a technical violation seem the most reasonable course to follow—as when a momentary traffic congestion can best be solved by someone's driving to the wrong side. A variation on this theme is the fact that on some subjects no

law can be worded so as to cover all cases and leave no necessity for private judgment. Now, social evolution seems to be in the direction of an increased number of cases in all three classes, but particularly the third. The reason, in brief, is that complex life makes complex rules, and complex rules cannot cover all the situations arising.

The sacredness of law.—In the earlier days of law, there was a great deal of reverence for it, flowing from the idea of its divine origin, or its beginnings in immemorial mystery, or perhaps also its inherent naturalness and reasonableness. The advantage to the community as such, at least as far as orderliness is concerned, if its individual members hold its laws in reverence, is apparent. It is a very common thing for the older men of a savage tribe to carry out some hoax upon the young men, with the idea of impressing upon them that they, the elders, are in direct touch with the tribal deity and have his authority behind their ordinances. The mingled concept of law and religion thus engendered is sustained throughout the Old Testament in the Hebrew insistence upon "the Law." Kings in modern times have been glad to have the support of the priesthood, as when the great French preacher Bossuet upheld the monarchy. And the same care for the sacredness of law, even without the appeal to divine authority, is found in Lincoln's words: "Let every American, every lover of liberty, every well-wisher to his posterity, swear by the blood of the revolution never to violate in the least particular the laws of the country, and never to tolerate their violation by others."

V. Relations Between the State and Other Social Istitutions

(*a*) *State and Religion*

Totemism and the state.—The modern world is familiar with the question whether church and state should be sepa-

rated or not. But in very early times there was not such a sharp line drawn between the religious and the political organizations. The older men of the horde-tribe constituted the germinating political authority. The same men, belonging to different totems and hence, to be sure, not exactly identical with the state though nearly so, constituted the religious authority. From one point of view there are several religious institutions in the larger group, each totem being one of them. From another, the totems collectively may be thought of as the institutionalized religion of the social body. The older men of each totem are then engaged in upholding the religious traditions of the community, just as they like to do in any society and in any age. There are even certain resemblances, if we do not push the comparison too far, between the various totems with their special group ways for social welfare, taught by their respective elders, and modern religious denominations and fraternal orders, each having its own approach to the sacred mysteries of life, each teaching its proselytes by means of its ordained men or its holders of higher "degrees," and collectively standing for community welfare and morality.

Church and state.—The question of an adjustment between the religious and the political institutions arose during the period after animism, the metronymic family, and totemism had yielded place to hero and ancestor worship, the patriarchal family, and the beginning of a cult of gods. The patriarchate, as we have said, was always ready to expand into statehood, and since the patriarch was the religious head of the enlarged family, he was always likely to constitute himself a sort of "established church" or priest for the larger political unit that he might come to dominate. In this way the state, through the patriarch-king, acquired religious power. But side by side with this development, there was another and distinctly religious one, consisting of popular superstition, held over from the animistic period, and con-

cerned more with nature worship than, as in the patriarchal worship, with the ancestry cult. Now this common possession of religion tended to build up a group of priests, supplemented by all sorts of free lances in the line of medicine men. The life of the community was held somewhat in awe of these knowing and powerful ones. The priesthood from that day on has been the rival of the king or other political power.

During some long periods, it is true, the king and the priest have joined forces very successfully. The whole period of the ancient orient has been called the age of joint military-religious domination. But even then there was apt to be a religious movement in revolt, outside the state-dominated organization. The prophets of the Old Testament are such a revolt. But besides this prophetic or mystic movement against the hide-bound state and priesthood, the whole religious organization, including both priesthood and prophet, have often fought the state for supremacy in social control. The historic duel between Church and Empire in the mediæval age is the great example of this. The upshot of the whole matter has been to have the state take and keep many functions which the church once had, while the church keeps its purely religious functions, though never ready to admit once and for all that there is any line to be drawn separating what is religious and what is not.

(*b*) *Miscellaneous Relationships*

State and family.—The family, despite its authority in human affairs, is yet a tiny aggregation, and must be looked out for and managed by society as a whole. The church has sometimes done this almost alone, but the state has taken the task over in modern times to a great extent. Perhaps the greatest instance of the state's taking away from the church a function which by origin belongs to the home is that of public

secular education. Not all religious organizations concede the right of the state to manage education, but the tendency has long been that way.[12]

The state and economic life.—The state was not concerned with regulating economic life until it had emerged far enough to have an overhead expense and enterprises of its own to carry on. Then it began to tax the economic life in different ways. The building of the pyramids by slave labor was an early case. Serfdom in various forms is another. Pecuniary taxation, and taxation in kind, are ways of getting at the same thing.

12 See "The Heresy of the Parochial School," *Atlantic Monthly*, February, 1928.

CHAPTER XVIII

MAN PASSES JUDGMENT ON HIMSELF

No one can be perfectly moral till all are moral.
—HERBERT SPENCER.

I. GROUP SANCTION IN SOCIAL BEHAVIOR

(*a*) *Morality Distinguished from Law*

Supposed difference in the sanctions of law and morals.—From time immemorial men have been aware of different sorts of compulsions over them. There is fear of physical danger. There is the sense of logic. There is the dislike of being different from one's group. There is habit. And, along with others that might be mentioned, there are law and morality.

These last two have a weightier authority than some of the others, but, as mankind commonly reckons, they are not on a par with each other. Law is usually regarded as having a force that gives a note of finality in moments of undetermined action. Yet respect for law has very decided ups and downs. But even if law is flouted, the average person maintains his belief in and allegiance to "right" as distinguished from "wrong." The sanction, i.e., the authorizing power, for "rightness" he regards as either synonymous with God or as residing in the very "nature of things." This whole matter of good and bad the average person may think of under the head of religion, but when pressed he usually is careful to differentiate between morality and religion. Obeying the moral or ethical "law" and obeying the man-made

law are two things which are somewhat similar in his mind, though not quite the same. One of our first questions will be: is it true that the "moral law" is not man-made?

The real difference between law and morals.—When one is challenged by the claim that after all morals and laws are of about the same validity, being simply the conviction of the group, at a given moment in its development, as to what is right conduct, he feels that some part of the foundation of his thinking has been suddenly taken away. In response to his possible protest, two things may be said. First, it is true that our notions of right and wrong are social judgments born of experience,[1] and not valid outside their accompanying circumstances. Second, it is also true, nevertheless, that morality has a different basis from law. A statement of what that basis is will show the real difference between law and morality.

(*b*) *Morality an Outgrowth from the Custom Basis*

Morality as custom fixation.—All social animals have their ways of behaving in herds or groups, and primitive man had his, established from pre-human times. Now, to simple minds the established way of doing things is so overwhelmingly the only way seriously to be considered that it acquires a dignity and authority that renders any variation from it somewhat of a mental strain. The dislike of getting outside the realm of comfort, socially and personally, that comes from habit and conformity—that is, the avoidance of conflict with the established ways of the group—is the root of the moral sense. Morality is thus an outgrowth from the custom basis. But as an outgrowth it goes a good deal farther than custom. It reaches down into the soil of the social life from which

[1] The student must not lose sight of the distinction between (1) the question of right and wrong in any given situation, and (2) the necessity of loyalty to right *as it is understood*. This latter is called "The Categorical Imperative." It lies otuside the field of our discussion, and is not to be considered as challenged by anything in this chapter.

it came, and gathers up so much reiterated experience, all tending to show that some conduct patterns are infinitely preferable to others, that an abstraction, a general moral precept emerges, and, thereafter, holds its place as though it had original force of its own, and had not been derived from experience. Customs are thus fixed, so far as their essential forms are concerned, by becoming morals. But now an interesting thing happens: the fixed "moral" precept collides with new custom or with some exigency of the moment, and a decision in its favor may even mean collision of the individual with his group—a real moral decision. It is as though the ancestral group, or *some moral focus of ideas that has the equivalent of social authority*, outweighed the actual and contemporary group. The man with "principle," standing against the crowd, is the type of this sort of thing.

In the earlier stages of individual and social evolution it is not this aspect of struggle against pressure, and loyalty to a socialized abstraction, that is most frequent, but rather a conformity to the behavior patterns of the group. There is a stage of development before truly moral life is lived, in our sense, when the customs of the group, simply because they *are* the group's customs, exert compelling force. Customs which have the judgment of the group that they are necessary to common welfare, and which, therefore, coerce the individual (even though they are not arranged in any code) and which the group will enforce, are called *mores* (singular, *mos*), the Latin word for customs. On the other hand, according to terminology familiar since it was introduced by William Graham Sumner, the customs which are accepted but not necessarily enforced,[2] are *folkways*. We can now see more clearly, perhaps, the difference between morals and laws. Morals are *mores* raised to greater dignity and standing by

2 The point of non-enforcement of folkways must not be taken to mean that the group is indifferent in the matter. Public opinion may enforce the folkways, without any concerted group action. But, in general, the more certain a folkway is of being enforced, the nearer it is to the status of the *mores*.

abstraction; laws are means of enforcing *mores* in actual practice.

By this time, too, we can establish a series of terms having to do with behavior, the arrangement of which in order may help us to see how conduct patterns evolve:

Individual	Reflexes: Inborn specific responses to stimuli. Instincts: More elaborate and apparently teleological patterns of unlearned responses. Habits: Learned or acquired action patterns.
Social	Customs: Ways of response that are analogous in the group to habits in the individual. Folkways: Customs accepted or taken for granted by the group. Mores: Folkways insisted upon by the group. Morals: *Mores* that are accepted as having some higher sanction than the human group. Laws: Specific statement of rules that the group will enforce—usually, but not necessarily, an outgrowth of the *mores*.
Either individual or social	Ethical ideals: Refined and philosophical principles of conduct based on appreciation of personality values. Religious sanctions: Immergence of all conduct patterns in the infinite.

Morality as group defense.—It is very important to realize that the insistence of the social group upon its morality concepts is very natural and, on the whole, justifiable, being a form of self-defense. It is not always wisely carried out, but it is rational at bottom. The *mores* are not always observed by every individual in the group, but the morals are those *mores* which the individual himself feels cannot be slighted without offense to something higher than his own authority or that of the group. In spite of individual innovations, adjustments due to new inventions, anti-social individualism, or what not, the *mores* remain for the most part

in control. The social body has a great variety of ways by which the individual may be coerced. These ways include the pressure of the individual's own "conscience," (that is, the disturbance of mental balance and serenity due to the pressure of the social conduct pattern seeking expression which has been denied it), expressed grief, displeasure, shame and praise, concrete rewards, ostracism, economic pressure, excommunication, ridicule, fines, imprisonment, bodily pain, and even death.

The group feels the need of defending itself, because experience has taught it that race-continuance depends upon it. Every family has its rules of welfare: the members of the family, especially the children, are taught to leave certain things alone and to observe certain practices. The elders (parents) know that this is toward the general end of family survival. In this type of behavior we can discern a "sub-human basis of morals," a carrying out of the unified group action and coöperation of lower animals.[3] Generally in the children too there grows "a sense of continuity, or enlarged identity, which takes shape in consciousness as family pride and solidarity, and which is the simplest and most natural way whereby the ordinary man feels himself rooted in the past, and reaching out towards the future."[4] Such an attitude is really one of loyalty to the family, and to the idea of its permanence. Moral evolution brings about the extension of this to include the tribe, the nation, and even humanity. Society relies for its safety, though in the main unwittingly, upon a shifting, spontaneous building up of personal relationships outside of law, and these in turn depend upon the morals of society. If we take a very long backward look at this point, we can see that the prolonged period of human infancy is the social matrix of moral relationships.

3 See Kropotkin, "Mutual Aid."
4 Hobhouse, "Social Development."

II. Psychological and Social Antecedents of Morality

(*a*) *Stages in the Maturing in Morality of the Individual*

Moral evolution viewed as personal attitude.—Although it may seem, at first thought, to be stepping aside from the consideration of the development of society, it is imperative that we try to get an inside view of the mind of the individual during the normal growth of moral ideas. The reasons are two: first, morality is a very directly personal thing, striking straight at the thought and behavior life of man; second, we cannot understand what social groups were aiming at in morals unless we see what were the experiences of the individuals composing the groups. Social progress depends upon the social conduct of individuals, each of whom goes through some highly interesting inner development. This development takes place, to be sure, under the stress of environment, but the environment—i.e., the social group—responds to the reflex of the developing individual. Some one whose experiences as a member of society have not been even approximately matched by any other person may in his maturity hurl himself upon his own social environment and remake the moral structure. Such was William Lloyd Garrison: "I shall contend for the immediate enfranchisement of our slave population. I will be as harsh as truth and as uncompromising as justice on this subject—I do not wish to think, or speak, or write with moderation—I am in earnest—I will not equivocate—I will not retreat a single inch, and *I will be heard!*"[5] Of course, we should not find such a case as that except over long intervals of time, and decidedly less often among primitive peoples than among civilized. Nevertheless the doctrine sometimes heard that the individual cannot rise out of his group is true only in the sense that his group sets

[5] It will be profitable for the student to add to this list of instances, from history, and especially from contemporary affairs. Some very intense movements are now being carried on by individuals whose social experiences have led them to revolt against the established *mores* and to attempt to substitute others.

limits which can only be outgrown through some recombination of social experiences and the emergence of a higher product of morality. All the way along, of course, men have overleaped the limit of the moral patterns which they have been taught, and have built new ones. However, we are not now thinking primarily of such possibilities, but of the more significant fact that every individual, whether he conforms to his group or not, is in his moral education analogous to the atom which may become one element or another and behave according as its constituent particles are combined. If the influences of his group lead him to be unrestrained, passionate, or impulsive, his moral conduct will be "low." If the group influences make him self-controlled and mindful of others, it will be "high" or "good."

The social basis of moral standards.—Just what do these words "high," "low," "good," "bad," and others like them, mean? They imply ethical judgments and standards, but what is the *sanction* for such things? If we take a number of words having to do with the rank or esteem placed upon the actions of the individual in society, and arrange them in an ascending series, we should get some such list as this: resultful, coördinative, accurate, successful, recognized, fitting, acceptable, correct, approved, desired, expected, demanded, right, good, sacred. Another list of words, paralleling the first, would be these: habit, custom, tradition, folkway, *mos,* morals, ethics, religion. Our answer to the question "What basis of evaluation is there for arranging the first set in a series?" is that social experience has brought it about, and arranged the types of behavior in groups indicated by the second set, and *this social experience is the only sanction we have for our moral judgments.* Difficult as it is to explain, we see through it all the growing socialization of the individual, and this process itself is what has earned the connotations of "moral." Man has found, in morality, a way to be loyal to his own discipline.

The moralization of the individual.—The child recapitulates the experience of the race in a large measure. Let us see how he achieves a realization of the categorical demands of the "right" and the "good": in other words, how the elements of moral society *emerge* from experience. It is a common enough observation that the child learns by experiment that some actions bring pain or displeasure. It is not so commonly noted that the child is making his experiments with a double apparatus leading to two kinds of conclusions. One is that some things he does, such as pinching his fingers in a doorway, are displeasing to him. The other is that some things pleasing to him, such as tearing up pictures, are displeasing to others, and indirectly for him. This double experience of the child is an illustration of what the whole race of mankind has encountered from the beginning. And from time immemorial the words "right" and "wrong" have been used in two ways, sometimes implying "good" and "bad," sometimes "correct" and "incorrect" or even "successful" and "unsuccessful."

A little further thought shows that these two meanings are not unrelated. One leads to the other by easy gradations in experience. Some of the steps in the educational process are the following:

(1) *Adjustment of conduct toward inanimate environment.*—This comes about in the seeking for more comfortable or successful ("right") relations. For example the "right" way to step from a moving vehicle is to face in the direction in which it is moving. If one wishes to reverse the method and do it the "wrong" way he will probably not be considered morally culpable, yet after he has picked himself up he will "blame" himself, if he is fair-minded, for he has certainly been "in the wrong."

(2) *Adjustment of conduct toward animals.*—To pick up a rabbit by the ears is "right"; to pick up a cat by the ears is "wrong." The child and the animal usually come to a

settlement on these points by themselves; it is not a question of righteousness or wickedness, but simply of adjustment. Yet a faint suggestion of something higher frequently intrudes upon the child's consciousness: we say to him, "Don't pull *poor kitty's tail!*" Such a suggestion means that he and the cat are in some sort of social relations, and that he must recognize the fact. He has, in truth, sighted the coasts of a vast continent of experience. And he has entered the shadow of the responsibility to others from which he will never quite be free again, but which, paradoxically, will at last teach him the truest freedom.

(3) *Adjustment to other persons viewed simply as part of the environment.*—In this phase of development the child learns the difference between "mine" and "thine." Other people's property and personal prerogatives must be respected, simply (at first) because other people are so made that if handled inconsiderately they are apt to cause more inconvenience than if handled "right." Grown-ups, in some cases, have not advanced beyond this stage of moral conduct. People who, in public places, carefully observe the rights of others who are big enough or mature enough to take care of themselves, but who brush aside the less vigorous and the children who lack sufficient assurance to assert themselves, reveal the fact that they do not respect the personalities of other people, but regard them simply as objects, parts of the environment, pieces of scenery, to be given consideration or not, as may seem expedient.

(4) *Adjustment to other persons, viewed as such.*—When one attains to this stage of conduct he has become definitely moral in his behavior. Right now means righteous or just. Meanwhile there is a certain submergence of self-interest. In the nature of things, contact with others, who exercise restraint or exert opposition, makes necessary some adjustment of the individual's desires to those of others. In the family and in the play-group, especially, is this experience likely to

occur. If he finds that the adjustment can be made in some way that allows expression of his own desires to be carried out too, or if he learns to substitute a reasonable desire for one that cannot be harmonized with the will of the group, a healthy and normal morality begins to develop. But if because of any one of a thousand accidental circumstances the desire is suppressed when he encounters his group, and no substitute is found, the eventual expression of it may take "immoral" forms. A modern branch of psychology, operating largely in the field of social conduct, and attempting to restore to healthy modes of self-expression those individuals who are troubled by suppressed desires, is known as psychoanalysis.

Coincident with the development of this elemental morality, and acting both as cause and result, is sympathy, through which the individual feels with others, acquires their point of view, and stores up habits of coöperation and social relationships of a high order. Meanwhile, too, family life is continually setting its object lessons of practical morality before him, making life a little more serious at times, but submerging his cruder selfishness and substituting patterns of conduct in which he must have regard to others, and showing him how work must be done for the common good. Moral conduct, in short, is reasonable conduct. And again, the work that he learns to do, or the play that he carries on, trains him to know that coöperative arrangements must underlie achievements in the social realm.

The reflective stage of morality.—The individual, passing through these educative experiences receives most of his morality as custom, and accepts it simply "because"—that is, until he becomes reflective-minded. He may then do either of two things: (1) He may subject his custom morality to his thought of his own interests, or (2) he may review it in the light of the widest group relationships he knows, and become altruistic or socio-reflective in morality.

(*b*) *The Moralizing of Primitive Men*

The custom and traditional stage.—All moral beginnings are lost in the mist. Primitive man's little groups imposed very different duties upon him from those of higher groups. Earliest man could hardly be described as good or bad, but some of his conduct was "good for" the group, and this was the preferred conduct. Prominent among the preferred ways of behaving was amenability to suggestion in the business of getting food. As the life of the family in the food-quest was so nearly all the social life there was at the beginning, this meant that a sort of filial piety was the earliest form of morality. Habit, safety, and regard for blood ties constrained the young to be "moral." Coöperative or group loyalty, rather than spontaneous friendliness, was at the bottom of early morality. And this hunting-pack morality explains why man can combine high regard for others (who are within his group) with a highly developed cruelty toward those outside. The central moral battle of history is the long struggle to persuade all men that they are one group, and hence that *there are none outside.* Though the hunting stage could teach a great deal about the effective working of morality, it could only present its object lessons on a small scale.

The parental group, broadened to include all the "elders" of the clan or tribe are the guardians of the *mores.* This still remains a familiar trait of society. The older people, especially those in the thoughtful, dignified, and authoritative positions and professions, are the upholders of the approved ways of acting. But the real authority in support of the *mores* is the whole group, and this includes, with most peoples, the ancestral and departed members. Even in a civilized community such as the United States, a departure from the supposed time-honored policy of the nation may be met with the exclamation, "Shades of George Washington!"

The emphasis with regard to responsibility for moral behavior in early groups is not on the individual so much as it is on the kinship or other small group to which the individual belongs. A village community (which may be not very different from a family) sometimes pays a fine collectively in behalf of an individual member. Everywhere among primitive peoples we find the principle cropping out that the community is responsible for the conduct of its members. This means that morality is not yet truly ethical; that moral conduct is a matter of successful group functioning. The ethical evolution of society is an advance toward the locating of responsibility upon the individual, within whose mind alone can spring the continually adjusted sanctions of conduct that human society needs to help it through its infinitely varied situations. Instead of the group's being responsible for the individual (a stage in which the importance and the disciplinary side of morality are taught) there has to come the individual's responsibility *for himself as a member of the group.* It is this stage of conduct that most people stop at. Beyond it is the stage in which the individual feels responsibility *for his group.* Outside of kinship groups, it has always required a very high dynamic, usually religion, to hold a man to this attitude. And yet strangely enough we find the beginnings even of this point of view among less developed peoples. It comes out in the form of holding the individual responsible for whatever happens in his immediate group, harmful to the larger community, without regard to the culpability of the person. The course of evolution, then, seems to be from community responsibility down to personal responsibility, and then a reverse movement in which the individual's responsibility for himself is widened to include his responsibility for his group.

At one end of the process we find a village paying a fine for a delinquent member, and at the other we find an ethical individual sacrificing himself in voluntary obligation for his

group. The principle of vicarious sacrifice, like several other expansions of ethical ideas, has been caught up and made much of by religious thought. Another example of the same process of thought is the ethical evolution of the blood-atonement idea. A murder, among many primitive or savage tribes, must be paid for by the kinship group, who may designate someone other than the actual murderer to suffer the penalty. In the stage of barbarism we should more likely find that the responsibility rests upon the offender to find those who will pay his fine or procure his release by oath-taking. In a later stage, of course, he must pay his own penalty if it be death or imprisonment. But still farther arises the ethical ideal of an individual assuming even the extreme penalty of death for the sake of the group, large or small, in which he is interested. This is a powerful motive, in whatever sized group it may operate. In the family it insures parental care to the limit, and the moral effect is loyalty on the part of the children. In the national group the readiness of the individual to rise to the need of his country and offer his life is what confuses the issue of war vs. peace, for it injects a moral element. In social welfare and religion, a Francis of Assisi or a Father Damien is an example of the humanizing of the same moral motive. In the custom and tradition stage of morality, these high peaks are only occasionally sighted, but the general direction is discernible, whether it be expansion in honest dealing with those outside one's group, or hospitality, or abstention from wife-stealing—the onward course of social evolution leaves man little choice but to revise his definition of group responsibility by enlarging the circle of the group.

The *mores* in human life.—There is no difficulty in observing how less advanced peoples (like the more advanced) are guided and controlled by the established *mores*. We have spoken on a previous page of the ways by which society may enforce group standards upon the individual, but we shall

now speak more particularly of three topics connected with group authority.

(1) *Public opinion.*—Public approval or disapproval, called public opinion, is a force which includes the whole of the social pressure exerted upon the individual by the community. Other and specific forms of pressure are really devices by which public opinion acts. In our own society we meet it constantly in the form of songs, fads, elections, successful sales campaigns. Public ridicule or public disapproval is too much for most people to endure, and most people live on some other plane, either higher or lower, than they would frequent if it were not for public opinion. Back of public opinion there is a good deal of discussion, past and present, based upon group experiences, the sense of logic or justice, and expediency (that is, predicted experience). In the discussion of moral conduct, savages have sometimes shown greater appreciation than civilized people of the principle that the rightness or wrongness of conduct is relative, and that what is moral conduct in their own group may be immoral in that of a European or American. In short, morality, group opinion, and group welfare as determined by experience, go closely together. And group opinion is about as efficacious as any other force to maintain morality, because in simple societies the connections of individuals with each other are direct and strong. Shame is a great deterrent, and approval a great spur. There is another deterrent that helps preserve morality, and that is fear of the unknown or supernatural. This we mention next, under the head of "tabu."

(2) *Tabu.*—The negative or repressive method by which social groups have enforced their will upon individuals is the tabu. This custom, more or less frayed out but still operative, especially in jesting-wise, among civilized people, is possessed of peculiar and terrible strength among peoples of lower culture. It is the general belief that certain objects or persons may become invested with a supernatural peril,

prohibiting them from being used or touched. Thus it is a guardian, at times, of custom, and it restrains the individual from many enterprises which he might undertake. Tabu is discussed under the head of magic (Chapter XXI), but it has its application to morality as well. The essential point is that since the consequences of social ill-fortune are so great when a tabu is broken, every individual willingly undergoes a severe discipline and self-restraint, and this, irrespective of the specific value of the abstention, is schooling in morality. Thus, the world-wide tabu against pronouncing the name of the dead, carried up through ancestor-worship and the belief in gods, and eventuating in the prohibition of profanity, is a moral discipline regardless of the religious propriety involved, for any restraint upon speech, maintained over a considerable length of time, has moral and psychological consequences.

(3) *Ritual.*—There is great custom-forming strength in doing meaningful things. Primitive and civilized men quite agree about this. Ritual is the doing or saying of things in common with others and letting the performance stand for a social meaning. It is the greatest positive agent for preserving custom-morality. It operates by forming habits or pleasing recurrences of movement and speech patterns, from which at length emerges some synthesis of higher meaning in poetic, solemn, or mysterious language, processional, choral, or dance movements in music, and the interpolated symbolic act. The effect upon the individual is threefold: (1) It minimizes his importance, (2) it magnifies the group and its customs in his eyes, (3) it exalts the importance of the individual as a conformable member of the group.

Ritual in tribal life is largely expended in initiation ceremonies, whereby the youths are inducted into the mysteries of the tribal culture, and become responsible members. The ritual is really a focusing of public opinion upon the young man. He feels that what the whole group stands for has been

directed to his attention in such a way that he cannot escape it. The initiation ceremony contains a great many moral precepts, favoring honesty, industry, generosity, etc.

III. The Sublimation of Morals into Ethics

(*a*) *Ethical Evolution out of Moral Sanction*

Meaning of ethics.—The words "moral" and "ethical" are often used interchangeably, and if one prefers to do so there is little to forbid the usage. Yet if one would get the most out of the two words and thus enrich his vocabulary and his thought at the same time, he can find in the history and derivation of the terms a wealth of suggestion. The dictionary makes clear that, however near they may have come to being synonyms during the history of our language, they sprang from different sources in thought. It is true that both come from words meaning "custom"—"ethical" from the Greek, and "moral" from the Latin—but the Greek root takes us back to a remote Indo-European word referring to personal character and initiative, while the Latin stresses law and social custom. The distinction is, in a sense, historically accurate, for the Greeks stand in history for the expression of personality, and the Romans for law and social solidarity. The difference in meaning that may be put into the two words is easily shown by an example. We should say that for a gentleman to break his word to another is unethical, and for that reason *ethical* standards are necessary in the business world. On the other hand, we say that it is *immoral* for the two gentlemen to fight a duel over their grievance, for the *mores* of our group are against the duel. When the emphasis is on the group and its interests, the question is one of morals; when the emphasis is on the personal relationships of individuals, it is ethical. This distinction is only approximate, and the two overlap a great deal, but it must be evident that a certain evolution of fineness and a certain direct spiritual

quality has been evolved out of custom and conformity to the *mores*. To be ethical implies an added quality in social contacts.

Some consequences of the ethical idea.—As a result of the slight but definite taking on of a distinctive character by "ethics," certain consequences followed. For one thing, since morals had to do with social acts that could be catalogued, morality became a practical, even scientific, thing, sustaining close relations to law. Ethics, on the other hand, dealing with values in personal relationships, which were rather more elusive, became at length a philosophical subject in some quarters. As to which is the more truly "practical," it is hard to say. The keynote of morality seems to be conformity to the accepted standard; of ethics, successful dealing with a fellowman. Of course, the acceptability of a moral standard is, after all, its practical workableness. But we may say this with confidence: the ultimate facts in society are the individuals who compose it, and the emergence of ethical responsibility placed moral conduct on a deep personal foundation as well as giving it an extended upper range of social operation. Ethical conduct is always moral, and more besides; moral conduct is not always ethical.

Again (and this is profoundly important), morality implies conformity; ethics stresses freedom, though, of course, freedom that chooses the welfare of the group. This means that under an ethical regime the wealth of freely shifting and pleasure-giving personal relationships that modern peoples enjoy could be developed, supplanting the hard and fast rules of *mere* moral conformity. There is a danger in this supplanting of morals by ethics, as there is in all freedom, but it is a risk which social growth demands. The supplanting of rules of thumb and the substitution of principles intelligently applied has long been sighted as one of the peaks of attainment for the future.[6]

[6] Cf. the apocryphal words of Jesus to the man laboring on the Sabbath:

The shift from morality to ethics.—Since moral action derives its power from the influence of the community, while ethical behavior implies an added degree of freedom, we must inquire what the mental set is within the individual's mind which inclines him to "play up" in accordance with ethical principles. What we find is this: *conscience* has emerged. But what is conscience? Has it no social roots? It has, indeed. It is itself a social product, even though it may defy the *mores* of the very human society whence it came.

All persons feel themselves to be only small parts of the greater whole which is the body social. To accept the existence of this enveloping whole as a compelling fact leads to moral conduct. To accept it further as a rightfully compelling fact insures an ethical attitude. And at this point ethics is very likely to pass over into religion, for religion accepts the enveloping whole as an infinite or at least a transhuman reality, to which allegiance is due. If one does not go that far, he probably rests, in his craving for authority, upon the sense of logic or justice which suggests to him the superior claim of the social whole over its individual parts. But in whatever way he may fix upon an authority, his acceptance of it as overlord of his personal desires gives him a conscience. Now, conscience results not suddenly or by act of will, but by social growth and experience. The social inclinations lead the person to take pleasure in social intercourse, and, in the mind developed to the point that the human mind has attained, images of past actions haunt the memory, recalling and reinforcing the approval and the pleasure that attended the former action in which loyalty to the underlying group interest prevailed. A temporary lapse into selfish conduct was probably due to the insistence of some bodily appetite, of which the mental image quickly faded after it was gratified, while the counter-claims of the rejected social

"O man, if thou knowest what thou doest, thou art blessed, but if thou knowest not then art thou accursed and are become a transgressor of the law."

group crowded in again. The sense of not having met those claims, the lack of a pleasurable reaction, is one of the roots of remorse and conscience.

(*b*) *Ethical Possibilities in Will*

The emergence of will.—Moral conduct is conduct which the social group, on the whole, believes to be good for it. But there are many forces at work leading to conduct which is not good for the group, but apparently or temporarily good for the individual. The individual must organize or balance these forces before he can act intelligently. A personality so balanced and adjusted that it can respond to a situation in the light of all its implications, and can pursue a line of conduct taking into account all the consequences, possesses will. In other words, will is an intellectual summons, a focusing to action. In an act of will, the clamorous instincts may be relegated to the rear as irrelevant to the total situation. Will-power is action in accordance with an organized inventory of possibilities. It cannot exist without intellectual discernment. The emergence of will is one of the greatest social steps in the development of man. When we "sin" or are "immoral" we have probably come under the dominance of a single impulse—in other words, we have become disorganized and anarchistic inwardly. Social development outwardly has made such complicated situations that men must learn volitional and rational control. The following quotation makes plain the relation between impulse, conscience, and will: "In our moral judgments 'evil' means the disregard of the social instinct and the infraction of the social order from selfish motives, in short, the dominance of the primary instinct. It is thus in a certain measure correct to say that man is by nature more inclined to evil than to good. Since the relative strength of the two instincts is either innate in man or imparted by his environment without his subjective

coöperation, his will seems to be bound. But . . . there is a third force, that of rational thought, which throws on the scales the weight of recognized causes and effects. Thus through our reason we seem to exercise a certain amount of free will. A subjective responsibility appears when social self-preservation imposes upon every individual within the society the duty of sharing to the limit of his ability in the progress from instinct to reason."[7]

Will as a social force.—Will power is not a mysterious energy with which men become endowed by virtue of some divine favor or hereditary allotment of traits. It is rather the harmonious carrying out of a clearly envisaged plan, in which what is best is so clearly seen that nothing can change the intention of the person. Clearly, will has had tremendous social effects.

When the ordered and efficient functioning of personality which we see in will power is united to a clear sense of the social environment—its importance and the individual's relation to it—there is pretty sure to be ethical conduct of some significance. It is at this point of convergence of personal, ethical, and social ideas that we find emerging the great concept of the "social rebirth." This is a phase of initiation which so realistically brings home the idea of the young man's beginning a new career that it is dramatically portrayed as a new birth. The utilization of this same concept in the personal aspect of religion, especially in Christianity, is well known, and is as efficacious among civilized as among primitive people.

IV. Ethical Consequences of Social Evolution

(*a*) *The Problem of Social Trespass*

Physical trespass.—The whole of the problem of ethics is contained in the formula of going about one's business and

[7] Lippert, "Culture History," Introduction. (Translation by Murdoch.)

fulfilling one's social obligations without getting in the way of others. Getting in someone's way is trespassing upon his rights. The farther back we go into human history the more exclusively physical and external do we find the ways in which one person could get in another's way. Since man lacked the complex social relationships which were to come, he lacked also many of the chances he now has to offend others in matters of personal contact. The supposed high morality of the savage is chiefly a matter of simple life. As society became more crowded and activities more complex, *mores* or customary life-ways that had been designed to ward off outside dangers, like other tribes or even evil spirits, more and more have given way in emphasis to internal adjustments. It is much as if, international conflict having ceased at some time, the traffic problem should take its place. Morality and ethics have come to be the problem of maintaining a just social order at points where the paths of individuals intersect. To maintain individuality in spite of social relationships, and social organization in spite of individual drive—this is the ethical problem. Society has always been in unstable equilibrium between private and public forces. When a savage tribe decrees death to any of its members who deviate in the least detail from the accepted performance of the tribal ceremony, we see the group trespassing on the personality of the individual. When a German barbarian of the time of Tacitus would purposely come late to the assembly of freemen, rattling his armor ostentatiously to show his importance, we have the individual trespassing on his neighbors. In general, the problem has become more and more difficult for the individual, even when he is not inclined to encroach on others. The earthworm when it strikes an obstacle can deviate without any inconvenience, but since the days of the thinly populated hunting lands it has become ever more difficult for man to carry on his coöperative culture without trespassing on his neighbor.

Mental trespass.—Another way in which the evolution of

society has brought ethical considerations to the fore is by producing situations where people react closely and personally upon each other, with possibilities of mental irritation and collisions in matters of taste. This is not because people did not live in close contact in primitive times, for families and hordes have always done that. But the more complex the material culture, the more human minds seek each its own channel of expression and its own ways of thinking and doing. With this efflorescence of personality, the chances of getting in each other's way increase geometrically. The whole field of trespass against the mind and spirit of another person thus emerges to view. The familiar words of the Lord's Prayer show how the subject of trespass in personal relationships is lifted onto an ethico-religious plane, in the light of family and other human experience, for there the sin against God is dealt with as a trespass or social overstepping against another person.

(*b*) *The Problem of Rational Social Progress*

Social amelioration.—Since ethics can no longer be considered something absolute in its historical development, and since the social relationships of mankind are the real basis of ethical theory, and since we know that the sanction for ethical judgments is in society, it follows that social and ethical progress are nearly the same thing. The *good* is that which brings about a self-consistent social organization in which the individual has free development. To realize the good is to achieve social development.

The golden rule.—In the long development of ethics there is a grand strategy which seems to have been patiently and persistently working itself into the consciousness of the race. What was once obedience to herd compulsion has become the realizing sense of a great law. There has been a steady extension of the limits of the social group, but that is rather the

external manifestation than the real and inner principle at work. The principle itself is well known to us under the name of the Golden Rule. There is a strange idea current that Jesus originated the Golden Rule. Nothing could be more out of harmony with his own declaration that he was a fulfiller of old things. The Golden Rule as he stated it is the clear envisagement of what all ethical history apprehended. Various other approximations of it were stated in historic times, but even in the traditions of man's older struggles for an ethical society it is this same goal toward which we move. To act as an individual merely, at a point where social considerations should govern, has always been felt to be an error, though how and why may not have been clearly stated. The social experience of the race makes the reason clear, by pointing to an emergent society in which compulsion and institutional bonds play a smaller part, and true freedom is achieved in the ethical life—"the institution of the dear love of comrades."

CHAPTER XIX

MAN SEEKS SOMETHING BEYOND

God is best known in not knowing him.—ST. AUGUSTINE.

I. THE NATURE OF RELIGION

(*a*) *The Psychic Roots of Religion*

What is religion?—Every human being, by virtue of what is called his "personality" or "individuality" is a self-contained unit.[1] In the last analysis, for every individual, the sum total of reality is subsumed under two headings: the thinking individual himself, on the one hand, and, on the other hand, everything else in the universe—the self and the not-self, the subjective reality and the objective reality, the microcosm and the macrocosm, the "mind of man"[2] and "the starry universe,"[2] the dimensionless point at the center of all, and the immeasurable spaces around it. What relationship exists between the self and the world? Whatever the answer may be, it is evident that there must be mutuality of influence. There is the impingement of the environment upon the mind or self, through the five senses if in no other way. And in return, the person reacts toward his environment. The mental aspect of his reactions has led some philosophers to say that thought is organic, unfolding from within outward, that is, seeking satisfaction by

1 The question as to the sources and development of the self, whether it arises from sensational beginnings, etc., has no bearing here. The fact is that what we call the "self" exists. Cf. Pascal (Pensées)—"All matter: firmament, stars, Earth with its kingdoms—all that is not worth the meanest mind, which knows what it beholds, while that remains unconscious."

2 Emmanuel Kant.

reaching out to realize itself in the surrounding infinitude of creation.

The bearing of the Self toward his not-self world may take any of three forms: (1) *aspiration* or contemplation of the universe as something beyond the range of the Self; (2) a mingling with the world in some mode of *doing* or *achieving;* (3) a mastery of the universe or grasping of it by *comprehension* (knowing). Now, one of the most pregnant truths of human life is this: no matter how far or fast *doing* and *knowing* may go, *aspiration,* or, in plain language, reaching on for what is farther, always outdoes them. Seeking the Beyond, (taking the words in their simplest but profoundest sense, and without any especial religious connotation) is the oldest, the most constant, the simplest and yet the deepest, the first and the last of all human activities. It is a sort of primal stuff of all behavior. From the amœba stretching forth to surround the food particle that has stimulated it, to Queen Guinevere saying, "We needs must love the highest when we see it,"[3] the principle holds.

Knowing seems to be the logical last of the trio, the fulfillment of the process that began with the outward-bound response to stimulus, followed by some sort of mental struggle, and ending with comprehension or grasp of the object. But since our environment is infinite, every one of us, after going through the indicated threefold cycle, always finds himself at the end exactly where he began, namely, in the midst of a little island-area of knowledge, which, compared to the infinite unknown, is a mere point—the point from which he started. *The realization that we are thus always and under any circumstances crossing the threshold of infinity but destined never to get beyond it, is religion.* Of course, not everyone will put the matter to himself in precisely these words. He may simply feel in a certain way about things in general, and never arrive at the stage of

[3] Tennyson, "Idylls of the King."

critical definition. Much depends upon the total social environment, as well as the degree of mental maturity. The savage, for example, may simply know that he sustains some relation "to the element of the inexplicable and fortuitous, the element of chance or luck, of the aleatory element."[4] But more is going on than the savage knows.

Religion, then, is the conscious facing of the Something Beyond. It is a bearing or attempted bearing over against the total Unattained. Yet it is essentially active—it always carries man out to the edge of the clearing. One of the most perfect expressions of the religious attitude for life as a whole is in the words that Tennyson puts into the mouth of Ulysses:

> I am a part of all that I have met,
> Yet all experience is an arch wherethrough
> Gleams that untravelled world whose margin fades
> Forever and forever as I move.[5]

The figure of religion as an attempted relationship with what lies outside the circumference of knowledge is a very common one.[6]

It cannot be too much emphasized that the mind is, in the strictest sense, an *apprehensive*—one might almost say, prehensile—organism, whose inquisitiveness leads it out to seek an understanding of its environment just as inevitably as a child peers through a hedge fence or scrambles up to see over a garden wall.[7] As it grows up it constantly comes upon the limitations of knowledge and is handed some traditional teachings to cover the point. These dogmas may or may not be "religious": but the point we are now intent upon is that when the mind takes a certain attitude, it becomes religious. And that attitude is one of acceptance of the repeated limita-

4 Sumner and Keller, "The Science of Society," Chap. XXI.

5 Tennyson, "Ulysses."

6 See Bowne, "Theory of Thought and Knowledge," p. 185; Sumner and Keller, "Science of Society," p. 742; Hobhouse, "Social Development," p. 226.

7 For another illustration of an essentially religious situation in daily life, see Stevenson, "Child's Garden of Verse," various poems, especially "Foreign Lands."

tions of knowledge as an ever-receding but never-to-be-penetrated boundary, beyond which lies the Infinite. *Religion is the normal reaction of the mind to the realization that it has come to the limits of cognitive experience.* This does not mean that experience of the Infinite is precluded. There is such a thing, certainly, as "religious experience." But it is fundamentally emotional, not cognitive, and the religious attitude is prevailingly an emotional one. If a person takes the attitude that beyond the limit of present knowledge is nothing but what will eventually be laid hold of by the mind, his is a scientific attitude. Most individuals on the other hand, especially among early peoples, frankly take up some special set of emotional responses and behavior patterns toward the great Beyond. It is possible to do this and at the same time to continue pushing back the boundaries of the Known; in other words, it is possible to be both religious and scientific. Indeed, it is the scientific investigator who stands the best chance of having a religious experience.

Religion variously explained.—So important and yet so elusive is religion that it seems well to mention some other ways of defining it. It is not always thought of with emphasis on the Beyond; rather it is defined by many as the awareness of the bond or interdependence of every element in the life of the individual mind to the whole of creation.[8] The central thought in this case is that of universality and oneness. Such a definition throws light upon the social aspect of religion, in which we shall be particularly interested. Another way in which religion is sometimes represented is that in contrast with science which desires knowledge for its own sake, and with philosophy, which seeks ultimate meanings, principles, and explanations, religion enters with a mood of doubt, depression, or even despair. This is a caricature of religion, unless we add that normally religion eventuates in some form of faith which resolves the felt difficulty. But

8 Hobhouse, "Social Development," p. 226.

there is enough of truth in the caricature to explain a great deal of social history with regard to religious things. Religion is concerned with the Ultimate, and, by implication, with values. These are serious things, and religion is always serious. Primitive man, it must be remembered, lived much closer to the margin of annihilation physically than modern man, and it has been characteristic of religion throughout history to insist that every individual in the group play his part punctiliously and seriously so far as the group's relation to the gods was concerned. Only modern man has dared to be individually indifferent, flippant, or skeptic, at will, and man today becomes instantly more religious when he suddenly faces ultimates like death, war, ghosts, or miracles.

Considerable discussion has taken place over the question whether religion is more a social or an individual phenomenon. To the student of social evolution no such controversy is of great importance, since the individual and social phases of all aspects of life are inextricable. But this much may be said in passing: the true order of growth in social genetics (contrary to the popular impression), is from the social to the individual. Distinct and full-powered personalities are the flower of social evolution, the emergent result, rather than the material units from which society is made. And religion, in its concrete manifestations, is no exception. It is social, chiefly, among simpler peoples, and dynamically personal in higher civilizations. But the fact that it follows social channels in its earlier stages does not prevent us from holding that the distinctive genius of religion is individualistic, volitional, and emotional.

A striking and consistent presentation of the nature and place of religion in human life, and of its origin among primitive peoples, is that which makes it the response to the chance element in the world, the aleatory factor.[9] The unpredictable,

[9] For the authoritative presentation of this view, see Sumner and Keller, "The Science of Society," Chap. XXI, Yale University Press.

the unsuspected, the apparently fortuitous and illogical and arbitrary, the purely adventitious—all these things were left for the primitive man to deal with as best he could after he had exhausted the resources of his bodily and intellectual powers, and religion is his device for getting along with the aleatory side of life, the luck element. Of this view of religion we may say, first, that it is necessary not to make the mistake of personifying or otherwise objectifying the Luck element. (The conception of Fate does this, but even that conception never was meant to cover all the forces of which religion was cognizant.) There is, of course, no *thing* that is luck, no specific being, benevolent or malevolent; there is the Something More, beyond knowledge, of which we have spoken. From this point of view, the conception of the aleatory element is a partial view of religion as the response to the Beyond. If the Beyond made itself a factor chiefly by the operations of luck, then the theory is as good as any. It would seem possible, however, that man's attention was caught by the universe in other ways, such as, fully developed, we would call mystical. In short, the question is whether the word "luck" adequately represents the primitive human attitude toward the Beyond.

Early forms of religious experience.—We shall have occasion presently to observe that primitive religion was principally under social auspices and social forms. Nevertheless, let us waive that consideration for a little, and take up the equally indubitable fact that religion, like any other social process, had to be experienced by individuals, and let us try to gain an insight into what religious experience is. It is in its very nature such a subjective thing that it is constantly judged in sweeping fashion by each person in terms of his own experience. This is a mistake, because if anything is clear about religion, it is that it expresses itself in different ways to various men.[10] In these few paragraphs we shall

10 See Wm. James, "Varieties of Religious Experience."

try to get at what happened within men's minds when they had religious experiences, and what the origin of some of these experiences was. In this inquiry we shall have to pass frankly on beyond the point of view that makes religion a mere attempt to elicit a favorable response from the aleatory powers.

First, it may be asked, are the origins of religious experience in any degree to be associated with the sub-cortical regions of man's own body? In support of such a possibility it may be said that the emotional life, on the one hand, roots deep in the visceral and autonomic nervous system, and on the other hand, with its proclivity for tuning in with cosmic and æsthetic phenomena in a large way, the emotional life leads to the heart of religion. The key to religion, from a certain point of view, is to be found in the uprush of the subliminal sea of pattern-formations, of responses that carry reminiscences of organic and environmental experiences in the past. As we have indicated in a previous chapter,[11] this in no sense depreciates the value or dignity of religion, but helps to explain its particular phenomena. The organic life of man has certain emotional overtones, which flood upward at times, like the tide into a cavern, with great insistence. They carry suggestions—whether truthfully or not is not our present question—of meanings not quite grasped, and we sometimes speak of such impressions as intuitions. All this explains in a measure those two characteristics of religion everywhere—the sense of authority and of mystery. Moreover, certain occurrences in human and animal life lend color to this interpretation, among which occurrences are the organically soothing rhythmic dances of animals and men. "There is a strong probability that the prehuman ancestors of man had in their mental life processes that fall within the limits of . . . religion." [12] that is, emotional behavior evidently aiming at

11 Chap. I, I, *e*.
12 Klaatsch, "Origin and Development of Man," T. Fisher Unwin, p. 210.

expression of feeling aroused by nature. Various impressions and ideas not strictly religious but of a serious or deep-seated or long-standing nature are encountered when one probes for the roots of religion. It is a part of the biological inheritance of the race. E.g.—"All mammals have an extraordinary instinctive dread of all reptiles—not merely poisonous reptiles. . . . There can be no doubt that in the pre-human stage our ancestors shared this fear. This . . . is explained by the history of these two great branches of the land vertebrates and their relation to each other: the reptile as opposed to the mammal. The latter was weak when the former ruled the earth."[13] Rightly does religious myth suggest that the abandonment of the possibility of divineness is in being a serpent —crafty, but lacking the frontal brain development that means the higher virtues.

But whether we believe that religious experience is organic at base or not, we must approach it from some empirical basis, not rationalizing about it in advance. Stimulus and the appropriate response, in all social behavior, must be observed well in advance of theorizing.

Before leaving the consideration of the psychic roots of religion, a few more elements that go to the making of religious experience may be mentioned. For instance, the elements of wonder, of fear, of self-depreciation, and of self-realization, different and even contradictory as they may seem, all enter into it. The social consciousness of the individual is so important in this connection that we have reserved it for a following section. Kinship especially colors religious experience. The emotions and experiences of the sex life are one of the great tap roots that contribute to it. The intellectual element is relatively unimportant, except in special cases. Communion with nature may induce it. Beauty is a road to it. The need of companionship sometimes calls it

[13] *Op. cit.*, p. 228.

forth. Sorrow, either objectively experienced or self-induced, has close connection with it.

When any or all of these factors gain such compulsion over the mind as to push it beyond the limits of verification and toward union with what lies beyond, we have mysticism. Much might be said about this almost universal type of religious experience—for it comes to most of mankind in some degree at some time—but it is not one of the things that can be very well explained. It is a part of the data of religious evolution, however, and may not be ignored. It is possible to inform oneself in a measure on this subject by reading from the great literature of mysticism.[14]

(*b*) *The Social Roots of Religion*

Animism.—Whatever may be the individual and psychic attitude toward the unknown Beyond, man's specific forms of behavior in response to it are determined by the character of the occurrences that he interprets as coming from that farther reach of existence. Such occurrences as are inexplicable in terms of ordinary cause and effect he associates with the mysterious Hinterland of existence. But such occurrences, also, are matters of concern to the whole group, as extraordinary things generally are for modern groups as well. For the social background of religion we have then a social awareness of certain mysterious phenomena for which an explanation is posited (we can hardly say that primitive man *thought it out*).

If we inquire what these extraordinary phenomena were, we shall find a rather imposing list. First comes the fact of death, the contemplation of which has mysterious issues for any of us. It is really a difficult thing to conceive of. All human beings live perpetually under what might be considered the blighting shadow of certain death to come, yet

14 For a modern expression of it, see "A Prelude" by Lawrence Binyon. For more primitive expressions, see Andrew Lang, "The Making of Religion," p. 81.

hardly anyone can really conceive of his own death, and unless the subject be insistently kept before him, it gives him no real concern under normal circumstances. This is all the more remarkable when we remember that the *objective fact* of death is common enough. Primitive man saw death and inflicted death, but death was just a part of daily life to him—until it came home to some one in his group, when at once it became a mystery demanding an answer.[15] Another strange fact, very similar to death, and more so to the savage than to us with our devices for detecting respiration, was unconsciousness, which, due to accident or sickness, might be so prolonged as to be mistaken for death, and yet end in recovery. Of similar import was the daily recurrence of sleeping and waking. All these were observable phenomena happening to persons. Another set of facts, equally objective, served to strengthen the total impression of a need for an extraordinary explanation: shadows, reflections, echoes, and optical illusions. Still another group consisted of happenings within the mind: dreams, imaginings, vivid memories, mental illusions, recognition of coincidences, misinterpretations of phenomena in the darkness, and sometimes hypnotic or clairvoyant states. To these might be added other phenomena tending toward a similar explanation, such as the coming and going of the breath.

Now when the interpretation of such phenomena began, man was strongly set in the direction of a certain explanation, namely, animism. We may consider animistic tendencies as one of the psychic roots of religion discussed in the previous section. It is that way of regarding the objects, human, or inanimate, or animate, that are met with, as though they were other selves. Animism is simply the naïve projection of the mode of existence in which the individual discovers himself

15 Children illustrate this reaction toward death. They may see death come to animals; they may play at being killed in warfare, in a dozen ways they may accept death naïvely. But let a death occur in the near neighborhood—i.e., in their primary group—and their curiosity and speculativeness are stirred to almost excessive degrees.

to be existing—a conscious *anima* within a vital body—to all other things. It is the only natural response to the world that is possible for a child-like, a primitive, or an uncritical mind, for such a mind is self-centered by virtue of its limited experiences, and conceives only of its own type of existence. Animism, then, is "the belief that inanimate objects and the phenomena of nature are endowed with personal life or a living soul." [16]

Putting together the facts that (1) man has animistic inclinations, (2) that life provides him with a wide range of phenomena unexplained by ordinary means but easily lending themselves to animistic explanations, and (3) that he is prone to uncritical confusing of reality and imagination, we see that the social background of mankind, religiously speaking, is a world peopled with unseen powers, who, as individuals, are like himself, and as a group, hardly more than an extension of his own group into the Unknown. But this last point requires further explanation.

The ghost belief.—A ghost is an *anima* of an individual formerly living in the natural world but reappearing as a disembodied or pseudo-material form. The extent to which man has cluttered up his past with ghosts and ghost-lore is common knowledge, as is the fascination of a well-told ghost story even to civilized minds. Why is this so? The reasons are complex, but some of them are suggested by the fact that man saw at first no reason why the death of a member of his group should be regarded as the end of that person's existence. Through the medium of some of the extraordinary phenomena already mentioned, deceased members of the group were continually being, as was supposed, met with again or detected as a presence in some form. Moreover, since men would of course think most easily of their own kinsmen or group members, it was precisely these who would appear in

[16] Webster's Dictionary, after Tylor. For further information on animism, see Sumner and Keller, "Science of Society," Chap. XXIII.

dreams or other experiences. This laid the foundation for the wide-spread understanding that a ghost haunts its old dwelling place. The truth of the matter is, of course, that the living have haunted the dead, "called them up," by refusing to stop thinking of them. "Gone, but not forgotten," our modern phrase, could better have been expressed by primitive man, to suit his view of things, as "Dead but not done for." Many things have kept happening after the death of a member of the group which were most easily explained on the supposition—an easy and natural supposition—of the continued activity of the dead person.

The character of these activities, and the character of the ghost, is a matter of some interest. We must not read too much of our traditional lore about the weird and horror-inspiring nature of ghostly apparitions into these early animistic appearances. The unearthly and weird has largely grown up as an incrustation, a literary or imaginative addition. Primitive man did not make the qualitative division of phenomena into natural and supernatural which later came to be made. Nevertheless, his ghosts were malevolent, and hence inspired fear. The reason for their acquiring a malevolent character was that they were the convenient agents to whom to ascribe the inexplicable, and to the uncritical mind, as to the mind of the child, only the untoward event stands in need of explanation.[17] Moreover, the ghost was in possession of his well-known earthly character, and this character,

17 "With primitive man as we know him only his own dependence can possibly become an object of attention and reflection, not the dependence of phenomena upon each other . . . If he knows of any power which according to his experience seems capable of ill-will toward him and at the same time of operating invisibly, he will necessarily regard it as the motivating cause of the unpleasant phenomenon . . . The man who considers himself the center of things is inclined at all times to regard the advantageous and the pleasurable as the normal and expected course of things and the unpleasant as a disturbance and interruption of it. Primitive man does not reflect about the reasons for the normal course of events; only a derangement of it can bring him to the point of investigating the reason and thereby finding methods of putting an end to it. To think about methods of maintaining the normal course seems unnecessary to his foresight." (Lippert, "Primitive Culture," translated by Murdoch, chap. 2.) Cf. the attitude expressed in the childhood rhyme: "Rain, rain, go away; come again some other day; little Johnny wants to play."

on the average, was self-seeking, capable of tyranny when opportunity offered, and vain—attributes likely to bring about fear on the part of the living. It was just such individuals who would be remembered best, and whose ghosts therefore would give character to the ghost-realm.

II. Successive Forms of Socio-Religious Behavior

(*a*) *Avoidance*

The rise of the cult.—Having seen how the belief in ghosts arose from man's psychic and social background, our next step is to see how he reacted to the belief. It is quite obvious that such a belief would call for some pronounced behavior in response, but particularly is it clear when we notice that one element of the belief was the "haunt" feature, that is, the continued association of the spirit with his former modes of life and places. This included both the lingering near the body, and the visitation of the dwelling. Of the first of these is constructed a very large part of all that man fears. "The idea of the presence of the dead in the vicinity of the body has taken such a hold upon mankind that it is only with the greatest difficulty shaken off. It persists, even in enlightened minds, in the form of vague fears, uneasiness, and distress; few persons, however emancipated, would care to pass a dark and stormy night in the receiving vault of a cemetery. There exists in nearly all of us the fear that has remained a tradition through the successive stages of societal evolution. It cannot be explained or rationalized away; at a pinch it springs to life; for it is fairly rooted in the deepest-lying strata of the *mores*. The conception of the ghost, or disembodied soul, is one of the basic notions—best illustrated, perhaps, in actual mortuary practices—in the mental outfit of the race."[18] The point to be insisted upon is that whatever was done about

[18] Sumner and Keller, "Science of Society," II, 839.

such a situation as confronted man in the supposed reality of spiritual visitations, would be done with emphasis, with exactness, with great care. The last word, *care*, gives the key to the character of the institution that arose. We call it the cult, by which word is meant a system of social behavior having to do with religion, particularly its ritual or active side.[19] While it has been questioned[20] whether man's behavior toward ghosts in this early avoidance stage should be called a cult, since the element of care *for* the ghost is absent, we shall call it so, since care *about* the ghost and care *for* the group's interests are very plain. This primitive cult form has a vast amount within it in the germ. Strange as it may seem, the ghost of a former man of the group is the active cause[21] of the long upward climb by which man has arrived at his most refined conceptions of a God. The widespread forms of ancestor-worship have their rise in this same early cult. In fact, it lies at the base of almost the whole extent of religious phenomena, for even where the claim has been made that no religion exists among a people, it seems the invariable rule that fear of the dead plays a large part in their lives.[22] Still another line of religious development of later times that is prefigured in the ghost cult is that of devils, or the Devil, which grows out of the idea that what we would call natural death (and other evils as well) could only have been caused by "the dead brother," who forthwith begins to acquire the character of a demon. By a slight variation in construing, another line of development leads to the old mythic theme of death coming into the world through sin, that is, through the displeasure of the god. All in all, it is clear that one[23] of the main sources of religious behavior is fear of the dead.

Ways of avoidance.—A great variety of methods has been used by primitive peoples to "avoid" the ghost, that is, to

19 This word "cult" should be further studied as to usage and meanings.
20 Lippert.
21 Not the first nor the final cause.
22 Spencer, "Principles of Sociology," Vol. I, Part I.
23 For the possibility of others, see Part III of this chapter.

avert ill that might come from him. They fall chiefly into two kinds,[24] (1) getting rid of the corpse, and with it of the ghost, and (2) avoidance of calling or attracting him back in any way. First, perhaps, among the ways of getting rid of the corpse was throwing it away. There were at least two reasons why some improvement on this method was certain to be made. For one thing the abandonment of the body meant its being devoured by dogs or wolves, and to some extent natural feeling would be against the procedure. Secondly, it was not a visible finale; it left the question of what ultimately happened to the corpse—perhaps even what the corpse *did*—quite open. Something done by the survivors, some gesture of disposal, was more efficacious in quieting imaginative fears. Abandoning the dwelling to the corpse was a bit more definitive, suggesting the localizing of the deceased in his manifestations of post-mortem power. Still, the leaving of haunted abodes had its disadvantages, and burning the hut, with or without the corpse, was sometimes resorted to. If the corpse was buried, it was quite generally in the squatting position, which may have had something to do with rendering it harmless. At any rate, precautions were taken against the return of the dead by tying or disabling or locking up the corpse, or by deception and trickery, as for instance removing the corpse by a hole in the wall which was then filled in so as to deceive the dead and confuse it. That these things are very primitive methods is shown by the fact that they must all have been in use before it was considered possible to propitiate or mollify the ghost. One of the most blood-curdling of human inventions in the line of ghost-lore is the vampire, a ghost that cannot be made harmless by the methods employed by the cult. The second general method of avoidance is the abstaining from provoking the ghost to activity or presence among the living. The ghost was thought of as eager to share in food. In the Odyssey, Ulysses, visiting

24 Lippert, "Culture History," Chap. 2.

Hades, calls the shades together by digging a pit into which he pours blood, honey, milk, and wine as a banquet. Calling the ghost as one would call the living to share food was, however, just what the living did not wish anyone inadvertently to do. Hence arose the custom of not mentioning the dead by name.

Some of the customs having to do with avoidance of relations with the spirit permit of more than one interpretation. This may mean that some other root idea was present at the beginning, or it may mean that some refinement of ideas grew up later and parallel with the original meaning. Burning the dead may be interpreted, on a higher plane, quite differently from an avoidance ritual, for it may indicate simple indifference to the desire to defeat time and decay. Mummifying, in itself, is an effort to retain and do well by the dead; but the trussing of the body, a part of mummification, may be a relic of the old desire to restrain it. Deep graves, heavy grave stones, cairns, handfuls of soil thrown on graves, etc., may be signs of old efforts to keep the ghost laid, and at the same time may be memorials or expressions of faith.

(*b*) *Propitiation*

The spiritualizing of the ghosts.—In the course of time, something very interesting began to happen to the ghosts. They developed a double nature in man's thought of them. On the one hand they were like their former selves, as they always had been conceived to be—disembodied, perhaps, but retaining the bodily attributes, if not the substance. On the other hand they began to have "spiritual powers," i.e., a set of attributes and of behavior habits that were different from those of human beings in the flesh. We have here the first clear intimation of the conception of the supernatural, and we see that it derives from the superhuman attributes of the inhabitants of ghost-land. At the same time, the old attributes

of the dead man who in his decayed state had yet to be avoided and deceived, remain within the concept of what these supernatural spirits are. "The same spiritual being who according to the one deduction is bound forever to the vicinity of the body . . . indeed to its very dust, according to the other possesses equally certainly the property of lingering, though by no means all the time, in his favorite places and of penetrating into the bodies of his victims. The same being loses his way to his hut by a simple deception and finds his way on all paths of the air, cannot cross a tiny water course and scourges the body with rude drops, flees from the fire which consumes his dwelling and casts thunderbolts from the air . . . demands the miserable gifts of men and without them would have to die another death, and grants the fields their fruitfulness or withholds it from them." [25]

Nature-myths as an early form of the cult.—Whence came the "spiritual" qualities of the other world and its denizens? The answer is suggested in part by the foregoing paragraph, in which it is shown that the association of the ghost with ill-fortune brings him into association with thunder and lightning, tempests, excessive cold or heat, disastrous drouth, flood, earthquakes, or any undesirable aspect of nature. And this means that the spirits have begun an enlarging process. Instead of being merely the transference into the other world of particular ancestors or tribal chiefs, they have cosmic attributes, becoming nature gods to some extent. It has been thought by some students that myth-making, or reaction by the imagination upon natural objects and forces, was the origin of religion. Without attempting to settle this question, we incline to the position that the nature element in religion, while not as ancient as the ghost element, is one of the earliest expanding factors, adding breadth, power, beauty, and character to the somewhat sordid first appearance of religion under the ghost regime. In a word, the nature

25 Lippert, "Culture History," ch. 2. Murdock's translation.

element gave religion a chance to mold men's minds to somewhat larger thoughts.

Metempsychosis.—Among the ideas that now took larger form was that of the transmigration of souls. The ghost had always been thought of as likely to enter the flesh again in the person of another (this idea leading to that of spirit-possession), or in some new-born child. Under the greater creative fancy accompanying the nature element in early thought, very elaborate views on the reincarnation and cosmic peregrination of souls evolved, for which the general name is metempsychosis—the belief that the soul as an immortal essence, at the death of the body which it inhabited, may enter another body, either brute or human. Some important developments emerge from the transmigration doctrine. One is that certain half-lights are thrown on the custom of cannibalism, under which the ghost-cult and the transmigration belief converge, with the assistance of certain other factors, in a definite practical attempt to appropriate the power or soul of another person by consuming it. One of the ways of disposing of the corpse and still averting trouble was to eat it. If the soul then wanted to return it would enter the eaters, who would acquire its powers. This is only one of the roots of cannibalism; it did not make headway among all peoples, nor did cannibalism ever prevail everywhere; but there is evidence that prehistoric man was cannibalistic in some measure.

Another and more important idea of a social and religious nature is that of the totem, which is likewise associated with the transmigration of souls. In totemism we get a combination of the two factors of high regard for ancestors (ghost cult) and belief that the soul may pass from animals to men or vice versa.

Propitiatory developments in the cult.—Almost everything in religious life has its origins back in the ghost-cult stage, but we have discovered by this time that the very early

form, when avoiding the evil consequences of associating with a ghost took up most of the attention, was a low and unfruitful sort of religion, a mere "calculus of ill-fortune." [26] What really lay at the bottom of the development of totem, nature worship, and other forms of the "spiritualizing of the ghost" was the realization that the ghost was not being avoided after all. As we have hinted, this was the fault of the living quite as much as of the ghosts, for man will not take his mind off the spirits. And in the second stage of behavior toward them he tried to mollify them, to mitigate their ill or mischief-making propensities, to propitiate them, on the principle of "What can't be cured must be endured."

The most natural idea of how to propitiate a spirit is to accede to his will, meeting his foibles and demands, and since the ghost was conceived to be in need of the same sort of things, especially food, as he used in this life, propitiation took the form of gifts, or sacrifices. This could best be done, when men ran in small, roving, improvident groups, by simply abandoning property to the spirit. Thus it is evident that avoidance and propitiation are not at first very sharply distinguished. But the intention is different, in the case of propitiatory acts. Abandoning a dwelling because one died there is simply avoidance; its natural conclusion is the ruin or the burning of the dwelling. But relinquishing a dwelling to the departed is propitiation; it is easily elaborated so that the place is embellished with votive offerings; its logical conclusion is a temple dedicated to the spirit (now become a god), and along the way occurs much compromising so that the less notable spirits become the little household gods to whom some part of the life is consecrated, but not too much. There is also to be noted a certain correspondence between the economic stage of development and the method of propitiation. Where there is a more settled mode of life, and a larger accumulation of property has taken place, it is more desirable to sacri-

[26] Sumner and Keller, "Science of Society," p. 851.

fice objects than to abandon them, and with them to abandon a place.

Tabu.—We come now to a phase of propitiation that is one of the most far-reaching, subtle, and persistently powerful factors in human history. Tabu, spelled also "taboo," has for us a rather limited usage in the sense of "banned from polite conversation" or even "prohibited from use." This is an acquired meaning, and grows out of a far earlier one whereby things were indeed prohibited to use, but for the reason that they were devoted to the ghost or god. It is a Polynesian word for private property in the old meaning of that which is relinquished to the spirit. But from that old meaning has sprung such a vast ramification of repressions and negative customs, accompanied by fear, that the very social psychology of man has been affected. To this day we walk through a maze of social restrictions which, often unknown to us, originated in prehistoric tabus. Of course there may be a present value to our tabus, for the old value may have persisted, or a new situation may have given new significance to the old custom. As we have seen, tabu is one of the sources of custom-morality. It is a conservative force, in religion as in other things, and not always for good.

In some instances where there seems to be no particular cult or service of the dead, there are complicated social tabus, and the existence of these may even explain the absence of a cult of sacrifices, for, whatever the tribe may now assign as a rationalized explanation of the tabus, they are themselves a sort of sacrifice or primitive propitiation. The souls of the dead need no food sacrifices because the tabu on certain natural food sources was originally for their benefit. The whole round of tabus is connected with the subject of food. Modern fastings and periods of rest (abstention from the food-quest) hark back to the tabu renunciation. "Although to the subjective point of view . . . fasts and holidays may seem more refined and hence presumably later forms than

offerings and sacrifices, they have actually grown out of a primeval form of self-preservation (propitiation by tabu) and are hoary heirlooms in the strong box of our civilization." [27]

(c) *Coöperation*

The emergence of the spirit world.—As we saw, man could not avoid the ghosts, and so he moved on in the realm of religious behavior to propitiation of the spirits. But propitiation, involving sacrifice, tabu, and custom ritual, meant the building up of a socio-religious world, and at the same time the increased emphasis on the ways of religion brought into existence within the social mind and consciousness of the community a corresponding spirit-world "beyond the grave." The continual acting out of sacrifices built up an assurance of other-world background. The location of this was not at first in a "spiritual" realm, which, as with modern men, has no definite location in a spatial sense, or at least none except "beyond the sky." Early conceptions of the spirit world made it almost a matter of geography. The dead dwelt where they were left, and then by an enlargement of the idea, in mountains, in the bush, beyond the river, across the seas, in caves, in the bosom of the earth, beneath the earth (Hades). But gradually the spirit world and its inhabitants assumed a fixed character and stability of their own.[28] And with this came a definiteness in the whole business of religion. The situation called for something like diplomacy, or skillful conduct of relations between the two worlds, and this in turn called for a specialist.

The medicine-man.—The first specialist was in the field of religion, unless we except the field of politics, where the headman or chief was early differentiated from the rest of

[27] Lippert, "Culture History." Murdock's translation. Cf. the story of the Garden of Eden, and the Sabbath of the O. T.

[28] Cf. the mountain-side spirit realm of the Bontoc Igorot (Jenks: Report of U. S. Ethnologic Survey, "The Bontoc Igorot").

the group. But the warrior-king, the chieftain, was a general overseer of community welfare, while the medicine-man arose in response to the special field of religious practices. He represented in germ or arch-type the priesthood,[29] one of our seemingly permanent social types. It is the function and privilege of the priest, always and wherever he may appear in social evolution and history, to act as a go-between for the two worlds. He can approach nearer to the dangerous person of the divinity than can the ordinary person. He can exert, either by virtue of his knowledge of the correct (successful) behavior (ritual) or by virtue of his ascribed holiness, an influence with the power that the people have to do with in the beyond. He can get something done. And this implies that a certain relationship, a give-and-take, has been established between this world and the other. This is the co-operative stage of religious behavior, and with it the cult may be considered fully established. The disposition of the dead is settled; they have been allocated to a realm of their own; they nevertheless mingle in the affairs of men, and demand care (cultus) from the living.[30] They have less of the character of mere ghosts and more that of dæmons[31] or settled and characteristic denizens of the spirit-world. And differentiation is taking place among them. A ghost is a ghost, but one dæmon differeth from another, both in power and in purpose. And therein lies the guarantee of a permanent position of influence for the medicine-man.

The problem of evil.—Looking deliberately at the priest's function in human affairs, especially at the beginning, we see that it really centers about what is generally known as the problem of evil. This is a philosophical and theological problem of the very first magnitude, and has never been solved. Even Christianity, a monotheistic religion, has carried along

29 Distinguish prophet, pastor, priest. Which was the medicine man?

30 Primitive man is not troubled greatly by many things that seem inconsistent to us.

31 Do not confuse with the ordinary use of the word "demon."

in its literature an unresolved duality in the form of a conflict between a greater and a lesser power.[32] For primitive man it was a practical question. Inadequate giving to the spirits of ancestors, or, later, to the more socially detached but definitely individualized gods or dæmons, was supposed to be the main reason for visitations of pestiferous powers, and adequate giving turned them into benevolent powers. But how to know what would be likely to offend, or how to present the offering acceptably, or how to get the friendly "tip" from the deity as to what would please, or how to be assured of good will in a social undertaking—all these things constituted a task for the medicine-man. The problem of evil, in brief, was a question of how to avert illfare, not, as with us, the abstract discussion of why evil exists; and the priest rather than the philosopher came to the fore.

The complication of the cult.—Under the control of the medicine-man (who acted from mixed motives of social welfare and personal shrewdness), religion began to be professionalized and stereotyped. The dealings with the dead were more systematized. Mourning and mortuary practices appear, partly as social precautionary measures. Somewhat as we consult a physician on a socio-scientific basis, individuals or groups in difficulty looked to the medicine-man on a socio-religious basis. That is to say, some of the contents of the previously Unknown was transferred from the Unknown to the category of Known-to-the-Medicine-man, and in the assumption by an embryonic priesthood of an enlarged field of knowledge we must see some of the germs of science, of social development, of magic, and of further religious advance. Religion and the priesthood made a great early encroachment upon the field of unorganized ignorance. To some extent an offensive had been organized against the ghosts, and importunity by the race through its priests began to extort a measure of security and welfare, through the channel of con-

32 Matt. 13: 24–28.

formity to knowledge. Many things of a cruel character, and more that were futile, were fastened upon the cult, but at least there was a slender basis of experience and experiment beneath the complicated prophylactic procedure. Sacrifice of property, of body by mutilation or ordeal, human sacrifice (with cannibalism as an accompaniment sometimes), food offerings, and many miscellaneous forms of propitiation were developed, but with this advance: there was a coöperative basis now for religious life, as between the unseen powers and the worshipers. This is one of the great steps in religious history. Its consequences are tremendous. Mankind, by devising ways and means for dealing with the spiritual world, began to coöperate with the Universe. And at the same time, his daimonistic spirits advance toward the godhood.

Fetishism.—It must not be supposed that all formal practice of religion passed into the hands of the medicine-men. On the contrary, it has never been possible to exclude the ordinary man from the religious life of society. In one of the practices that prospered on the understanding of two worlds and two orders of existence, the earthly and the spiritual—the practice, namely, of fetishism—we see a wide-spread custom, practiced by individuals as well as by priesthoods, and still lingering among advanced peoples. A fetish is an object which has become associated with the spiritual potency or the effective characteristics of some power or personality from the supernatural world. Horseshoes, rabbit's feet, lucky stones, etc., as bringers of good luck to the possessor, are fetishes still operative for many people. The fetish-belief may be analyzed into three concurrent parts: (1) the need for concreteness in religion, (2) the urgent tendency of the uncritical mind to ascribe a cause at once for the unusual, without the patient sifting of logical or minute investigation,[33]

[33] Cf. the easy insistences with which people attribute their catching cold or other ailments to this or that recent circumstance.

and (3) the deep native proclivity of the mind toward what is called association of ideas. Since every mind is free to operate associatively among its own stock of images and experiences, there are innumerable fetishes, ranging from purely private pet avoidances or practices connected with some object [34] to widely observed social practices. The way in which an object may be erected into a fetish [35] through association of ideas is illustrated in the following instance: "He was once going out on important business, but crossing the threshold he trod on this stone and hurt himself. Ha! Ha! thought he, art thou there? So he took the stone and it helped him through his undertaking for days." [36]

Fetishism is such a simple form of expression of the religious impulse that it could almost as well have been mentioned in an earlier section of this chapter, were it not for the fact that it belongs in its most distinctive manifestations to a stage in which the mutually inter-acting two worlds are believed in. These two worlds are two forms of existence, and animism itself is an assumption that things are of the present world and yet possess spirits which are of the other order. Fetishism is an attempt to corral some of the spiritual power in the visible form of the fetish, for the use of the individual holding the latter, and hence it is an attempt at coöperation between the two worlds, under which heading we are now considering religion. Another thing of importance about fetishism is that it tends toward the idea of charms, magic, and knowledge of how to control nature, and thus it develops toward science eventually rather than the higher

[34] The practice of private fetishes may become a sort of game in which the person is so interested that he hardly knows whether he believes in it longer or not. E.g., the childish etiquette in which the sidewalk becomes invested with fetish powers: "If you step on a crack, you'll break your mother's back." The individual does not literally believe this, but presently nevertheless will go to extremes of inconvenience to observe the rule. Cf. also the fetish of counting up all white horses seen. No less a personage than Dr. Samuel Johnson used to make a point of touching posts as he passed them on the street.

[35] E.g., the Kaaba or sacred stone of the Mohammedans. Cf. the Blarney Stone.

[36] Tylor, "Primitive Culture," II, 158.

aspects of religion.[37] And finally, fetishism has a tendency to selfishness and private advantage, whereas religion seems to have a social side that pushes always to the fore and draws altruistic forces to itself in the long run.

(*d*) *Aspiration*

Refinement in religious evolution.—In spite of the fact, already referred to several times, of the persistence of primitive features in the religion of civilized peoples, it is true also that certain lines of development were going on at an early date and have continued, whereby religion has been ridding itself of encumbrances and emerging into more refined expressions. We shall consider some of these sublimations of lower forms into higher meanings, under the general term of *aspiration*. It is not intended to imply that man was always consciously aspiring in these developments, but merely that in the process of division between lower and higher forms of religious behavior, the lower were slowly sloughed off and the developing society showed a preference for those which were aspirational.

Some instances of emergence of refined forms.—Among these refinements we notice the recession of fear as a motive in religion. That cautionary motives ruled at the beginning of man's dealings with the ghosts is perfectly clear, and even into civilized times it has been held that "the fear of the Lord is the beginning of wisdom," but in this latter quotation fear is evidently changing to mean intelligent respect. Primitive fear of ghosts separates into two attitudes: one of fear of daimonic agencies of all kinds, commerce with whom is left to the more or less socially shunned individuals who have doings with "familiar spirits"; the other, of loyal preference and open social performance of rituals by the priests

[37] For this reason *Shamanism* and *Magic* have been left for treatment in Chapter XXI, under "Science."

in the service of proper deities. The first road leads back into the primæval jungle of religious origins; the second goes on to such rare conceptions of deity as are found in the historic religions. Tabu, from being a prudential affair, designed to avert social disaster or personal wrongs, as in food and property tabus, becomes a means for the preservation of the sacredness and high character of the gods.[38] The older conception of being at odds with the ghosts was that of offense to them through personal slight; the emergent idea is that of sin toward a god with the fault, one of character, resting in the person himself. Propitiation, instead of being merely a making up to the ghost of what was lacking, emerges into the concept of making oneself fit for renewed association with the god. Ritual, once a scheme proved by practice to be efficacious in getting results from beyond, sights new ground, namely the performance of ritual as a self-expression and cleansing. Sacrifice begins to shadow forth the idea of reconciliation or readjustment, instead of being a bargain. Prayer appears in the new possibility of seeking conformity to super-human ways, not mere asking for favors. Human sacrifice, with its traces of cannibalism, fades out in various sacramental developments. Sacrificial prostitution is metamorphosed into ascetic practices. Auguries, omens, and similar ways of ascertaining the divinities' will are overlaid by prophetic or priestly oracles that give the moral basis of conduct to be followed.

Connection of morality and religion.—In the lower stages of religious evolution, morals have little to do with it. But morals progressively are involved, till today we find the two inseparably connected in popular thought. This steady moralization of religion is one of the principal points in social evolution. Not only men, but the gods, are moralized. When, under an early régime, some particular spirit avenged a vio-

[38] Cf. the O. T. restriction of the Holy of Holies to the high priest, once a year (a plain case of tabu), with the idea emergent in the later Psalms: "Who shall stand in His holy place? He that hath clean hands and a *pure heart*."

lation of tabu, the motive is presumably an egoistic one on the part of the god; yet this act helps lay down a religious sanction for moral conduct, and also commits the god to a moral code. Morality is thus lifted somewhat out of its native soil of the *mores,* and comes to be thought of as rooted in divine law. Whether this is ultimately for the good is a very interesting question. The present tendency is undoubtedly toward the freeing of morality from religious dominance, and the restoration of it to a practical and experimental sanction. But throughout most of the long evolutionary process the case has been the contrary; the gods, so to speak, have been taking over the purely moral functions of the undifferentiated social life, and adding them to religion. For example, while the *ghost of a slain parent* merely avenged himself on the patricide, the *ancestral divinity* avenges all offenses in the family, the *national god* metes out punishment for wrong done in the nation, and finally systematic retribution appears in a divinely administered future life. In short, the disciplinary power latent in the fear of spirits and a spiritual world surpassing this one was the grand cultural element in primitive religion, from which have emerged successive higher concepts of gods, of worshipers, and of priests themselves.

III. Stages of Religious Development

(*a*) *Animism*

Personalism in religious evolution.—Until religion encounters certain philosophizing tendencies of maturer peoples —that is, until comparatively very recent times—personalism [39] was the root and fruit of religious thought. Only translations of persons from this life to the other sufficed to initiate religion, and only personal, self-demonstrating gods could prevail in religious competition. The stages of religious de-

[39] Not in the technical sense.

velopment (considered from the thought side) which we are about to trace really show how personalism was slowly clarified. But in the first stage, that of animism, there is a mistiness and a fading and reappearing of a clear personal concept that obscures the development of personal gods for a time. It is true that the ghosts with which the development starts are persons, but in the process by which they get located in a definite world and status of their own there is another idea that beclouds their personality. It is the same thing that we noticed under fetishism, an almost abstract idea of spiritual power in natural objects, in natural environment, detachable and transferrable between objects. As we work out of this we find religion more definitely centered in personal code.

Faery.—Before we pass on finally from animism, we must notice a form of thought which has been a constant accompaniment of man ever since he left the old forms of animism behind him. We mean the belief in fairies, the realm of faery. This realm and these creatures, of various kinds and characters, have danced along beside man in his more sedate advance toward rational knowledge, and though they do not fit into his ultimate scheme of things they have contributed no small bit to the zest and beauty and variety of life. It will repay the most serious student to investigate such terms as fairy, fay, elf, gnome, sprite, giant, dwarf, troll, dryad, pixie, mermaid, siren, nymph, sylph, ogre, faun, satyr, imp, and many more, if for no other reason than this: they carry us back to the kind of world our ancestors dwelt in, and which children still inhabit.[40]

40 Prof. E. R. Groves writes: "Last year in ——— I came across a notice of an Englishman who was giving a lecture on fairies, with slides showing them dancing in an English meadow where he had discovered them. As I remember, he was a university graduate and a member of some society that believed in fairies." This brings to mind the character of "Lob" in Sir James Barrie's exquisite play, "Dear Brutus."

(*b*) *Polytheism*

When animism was passing into the stage of definite personal divinities (naturally very numerous—hence "polytheism") there was also going on a sifting and stratifying of the divinities who were coming into existence in man's mind. We can discern four castes, as it were.

(I) The chief, authoritative gods or goddesses of the cult. These changed from time to time as migrations or new ideas brought a different set of myths or formative interests into prominence. The well-known Greek pantheon, the Roman "nine gods" by whom Lars Porsena swore,[41] the similar group of Norse gods (Odin, Thor, etc.), are of this variety. The ruling god is characteristically a sky-god, and there is a touch of the nature-myth, with a frankly anthropomorphic character, about most of the gods, which keeps them from monstrosity even though they are endowed with special attributes.

(II) In the background are the "old gods." Most religious cultures have these shadowy, vast, half-forgotten, and partly amorphous older gods constituting a background. For example, in the mythical and epical complex of narratives which were woven by Homer into the Iliad, the god of the sea is, as we should expect, Neptune. Yet the cause of the Trojan War itself, we learn, was originally the apple of discord, which was thrown into the midst of the wedding feast of Thetis and Peleus. Now Thetis was one of the daughters of Nereus, a sea god so ancient that his very name goes back to primitive Aryan roots. Again, in the Roman pantheon we meet Ceres, goddess of the grains or cereals. But Ceres was accounted for as the daughter of Saturn and Rhea. Rhea was an ancient goddess of corn and tillage, and was the child of Goea (Tellus, Terra) the still older earth divinity. It is of no special moment to us whether we follow this or that

41 Macaulay, "Horatius," in "Lays of Ancient Rome."

genealogy of old peoples and their gods, but it is significant that the myth-makers found old divinities always at hand to form a background.[42] These older and half-forgotten deities (preserved doubtless among the common people for a long time), are apt to be of an earthly ilk, and are sometimes known as the chthonian or tellurian gods.

(III) Another line of development and consequently another type of god is the likewise old and honorable group that hark back to the first forms of ghost fear, but which eventuated in the "Manes, Lares, and Penates," the little household gods, the ancestral spirits in divine form. These are innumerable, each family having its own. Ancestor worship, so widely ramifying in some parts of the world, as in China where it almost obscures all other religion, is an exaggerated form of these intimate lesser gods, who are nevertheless so vital and "folksy."

(IV) Still another route was being taken by some of the primitive spirits of the cult. For as the cult itself developed definiteness and respectability, many forms of religious behavior less desirable socially, because more selfish and leaning more to sorcery, were associated with certain lesser gods who, forgotten as family ghosts, lived on as semi-private deities or familiars of the medicine-men. To some extent this less reputable but much feared set of spirits tend to demoralize some of the medicine-men themselves, who instead of evolving upward into priests, degenerate into wizards and sorcerers. In the history of Christendom, a very interesting fusion of folk-demons and Satan has been made.[43]

In all this development, the gods who were in the open, receiving the benefits of the socially administered cultus, became the great ones. A very illuminating summary of this whole subject is contained in the following quotation: "My-

[42] Sargent has skillfully presented this idea in his painting in the upper corridor of the Boston Public Library, showing Neith, the very ancient mother goddess, as a background for the Egyptian and other national divinities.

[43] Cf. "Flibbertigibbet," "Puck," and "Macbeth," Act I, Sc. 1, all from Shakespeare; and "Fairy Mab" and the "Goblin" in Milton's "L'Allegro."

thology may contain the tale of a culture hero, or of a creator, but he is not worshipped. The cults concern the spirits presiding over the things of the day. As we ascend . . . the high gods begin to take more definite shape. We have not only vague spirits, but beings with a definite personality, like Zeus or Yahweh; separate from natural things and presiding over them . . . with a home maybe on Olympus or Mount Sinai, perhaps with family connections and finally a definite place in a complete theogony. How these higher gods remain entangled with the magic and animism out of which they evolve, how the problem of religious conservation is solved by a variety of names, attributes, local habitations, or animal associations, how spirits become functions of a god, or a function of an attendant spirit, how in some cases one god becomes the guardian of the people and his worship is preferred to every other; how in another case political integration involves a complicated identification of different gods, or a system of correlation like the Egyptian Enneads, is a long story. . . . We note only that in the archaic civilizations we find in general gods of distinct personality usually presiding over some department of nature or human life and in some way related to each other, perhaps under the presidency of a supreme god. Magic and animism may still be the most vital elements of popular belief, and even of priestly ritual, but they begin to take a secondary place. An alternative possibility is that instead of high gods the more human side of religion takes the form of ancestor worship, expressing and reinforcing the solidarity of the patriarchal family, while the ancestral side of the ruling family may, like the Mikados, form a religious rallying point for an intense nationalism." [44]

(c) *Henotheism*

How gods attain preëminence.—Henotheism is a transition stage between polytheism and monotheism, and as its

[44] Lippert, "Culture History," Chap. IV.

name implies, it is the worship of one god preferred above others whose existence is not denied or debated. This would not be important enough to make into one of our chief stages of development were it not for the fact that transitions are processes or social movements, and therefore they reveal the evolution that we are studying. Henotheism shows how closely national, tribal, political, and cultural phases of life are bound up with religious advance. The story told in the Bible (I Kings, 20:23) of the fluctuating tide of battle and its supposed connection with the titular authority of the god of the locality, is one of the most illuminating documents on this subject.

National religions.—Polytheism is naturally associated with tribal, patriarchal, and primitive family life. Henotheism goes with nationalism. Tribal gods were extremely partisan; a national god belonged to and watched over all the tribes of that nation. Religious forms under these national auspices combined religious and political sanctions to the end of strengthening law. Moreover, since the clan- or blood-tie is weaker under nationalism, the agreement on a preferred or first god gives a much needed new social bond. Examples of national religions are that of the Incas, and of the Mayan peoples of America before the Colombian era, that of the Greeks, the Egyptian religion of ancient times, and notably that of the Hebrews. From this it will be seen that a national religion need not be henotheistic.

(*d*) *Monotheism*

Is monotheism early or late?—Monotheism, the worship of and belief in only one god, is naturally thought of as a later development than any of the three already mentioned and in the normal evolution of religion it is. But in many instances it would appear that one of three things has occurred: (1) by an anticipation or acceleration in evolution monotheism has been arrived at in some earlier period, or (2) some form of henotheism almost gives the appearance

of monotheism, or (3) monotheism having once been arrived at, retrogression has taken place, and the monotheistic ideas have been partly smothered by an over-drift of lower forms. The fact is that monotheism or something very like it is quite likely to have appeared, as a matter of practice, somewhat ahead of schedule time, in a great many cases. It has sometimes been a consummation of a line of evolution, and at other times more of a starting point for deterioration.[45]

Monotheism a logically late appearance.—Whatever appearances monotheism may have made along the evolutionary way, it is in itself a sign of advancement in socio-religious thought and organization. We have seen that there were two main possibilities open to man's religious thinking at the beginning; one was the ghost-belief, the other the nature-myth line. Either one was sure to get caught up in that inescapable tendency of the human mind to integrate or unify its concepts. Polytheism had to succumb to the overwhelming impression made by the world upon socio-rational man that reality is a *universe,* and the religious side of that impression is monotheism. While a philosophical pluralism shows unmistakable signs of life today, the religious tide has for a very long time been setting toward monotheism.

(*e*) *Ethical Monotheism*

Monotheism's juncture with ethics.—Peoples who became monotheistic were certain to run into a great deal more of the unifying tendencies of thought. With one god to worship, and the necessary corollary of all peoples as subject to this god, the question of a universal code of conduct agreeable to him could not be avoided. This meant, among other things, that the exceedingly varied background of the *mores,* which was sufficient for separate peoples in their separate circumstances, but which could not present an authoritative ground

45 "The Bantu gives one accustomed to the negro the impression that he once had the same set of [monotheistic or henotheistic] ideas but has forgotten half of them." Kingsley, "Travels in West Africa," p. 442.

for a higher and more universal morality, gave way to the fewer but more fundamental moral laws that could stand the test of being associated with a moral god. It is true that we often see certain national or local prejudices in morals fastened rather gratuitously upon the deity in the naïve assumption that he will father them. But on the whole monotheism has grown parallel with ethical universalism.

Internationalism in religion.—Religions not based on tribal *mores,* or national feeling, but built in the belief of universal authenticity, of course ignore national bounds. A religious map of the world today, showing the situation after all the social evolution of the past, would set forth: (1) "Heathenism," a quaint name that we give to all that congeries of earlier forms, the rock from which we were hewn, the germinal forms which we have altered but never entirely done away with. Heathen means the men of the heath or moors, the religiously conservative, the rural, the people who still possess the old ways of approach to the Beyond. (2) A number of national and cultural religions, of which Confucianism, Taoism, Shintoism, Brahmanism, and others are outstanding examples. (3) A few great international or "missionary" religions: Buddhism, Mohammedanism, Christianity.[46]

Christianity: an example of religious evolution.—Not because of any presumptive superiority to other religions, but because it is known in some form and with some degree of thoroughness to nearly all readers of this book, Christianity is chosen as an example of a monotheistic religion—that is, a religion representing in a general way the fruition of religious evolution up to the present time. In the following analysis, it should be remembered that we are interested as social evolutionists more in the points of contact that Christianity exhibits with social evolution than in its differences from other religions. At the same time we shall try

[46] Judaism may be thought of in this connection as the source of Christianity.

to avoid the externals and the accumulations due to time, and probe for the social roots of Christianity.

The most common formula to express the teachings of Christianity is "the fatherhood of God and the brotherhood of man." Three ideas comprise this phrase: (*a*) the ethical motive, (*b*) the love motive, (*c*) the universality motive. Each of these three ideas stands in definite relation to the other two. Thus, the idea of a *father* implies the supremacy of his will, and that his will is "right": this makes God and man mutually *ethical.* It implies further that the relationship between God and man may be like that between father and son, namely, one of *love,* in addition to mere respect or fear. And it implies that God is the god of every person, just as a father loves all his children: this is *universalism.* Again, from the point of view of brotherhood, there is the assumption that every person (universalism) must be regarded as within the family group and hence entitled to respect and fair play (the ethical motive) and affection (the love motive). In all this, one cannot fail to see the evolutionary convergence of much racial experience and institutional growth in the field of the family, the state, and ethics.

If we seek an historical origin for these ideas of Christianity, we discover that their earlier appearance is in the utterances of the Hebrew prophets, showing again that Christianity is an evolution. In illustration of this, the following passages may be consulted:[47] (1) from Amos "the prophet of moral law," 5:21–24; (2) from Hosea, "the prophet of love," 11:1–8; (3) from Isaiah "the prophet of faith," 28:16; 30:15; (4) from Jeremiah "the prophet of personal piety," 31:31–34; (5) from Ezekiel, "the prophet of individualism," 33:11; (6) from Deutero-Isaiah "the prophet of universalism," 55:1–2; 51:4–5; 45:22–23. On the foundation suggested by the prophets, Jesus laid down the structure of Christianity. But with equal force we can say, the social

[47] Knudson, "Beacon Lights of Prophecy."

evolutionary forces in religion came to fruition in Christianity. And if in Christianity, assuredly in other religions also. We see certain similarities, between this, that, or the other religion and Christianity, showing that various lines of development appear and reappear in different parts of the world. Thus, Christianity, Mohammedanism, Judaism, are alike, in contrast with Buddhism, in seeking a single cause of phenomena in a unified world. On the other hand, Christianity and Buddhism are alike in being reactions against a caste priesthood, and in their deep democracy. With regard to the close correlation between social development and the emergence of religious ideas, Lippert says, "It is impossible to mistake the correspondence which exists between these stages and the law of the extension of self-preservation in time and space."[48] In other words, a more widely integrated social system evolved a more universal religion.

(*f*) *Rational Readjustment*

The possibility of further religious evolution.—The progress from animism to ethical monotheism brings us to a seeming conclusion. From a world peopled invisibly by as many spirits as the roll of the dead can muster, to the conception of a universe governed by one personal god in whom all morality and ethics are headed up, is a progress that leaves us no further step unless we go on into atheism, which is not strictly a religion at all. Nevertheless, some change is inevitable in any social situation, and in the case of religious progress we note two phases of it. One is the strictly intellectual movements, which have been suggested now and then all along the way. These are illustrated by such theories as monism, pantheism, deism, etc., all of which have social significance insofar as they are attempts to adjust religious thought to new experiences. The other phase is the more or less conscious effort to dispense with the supernatural claims

[48] "Culture History," Chap. 2.

of religion, or at least to abstract its dynamic and transform it into social service.

IV. Contributions of Religion to Social Evolution

The contributions of religion to social evolution, as well as its retarding influences at certain points, may be listed as follows:

(*a*) *Religion as a motive force*

(1) It has systemmatized the human trait of evaluation. Religion is an organization of values. There is infinite disagreement as to what are and what are not values, but agreement as to their importance.
(2) It has given moral motivation to social groups who would not advance by rational motivation.
(3) It has sponsored early forms of *law*.
(4) It has afforded the means of social and individual *morale*.
(5) It has disciplined and sublimated the psycho-physical *impulses*.

(*b*) *Religion as a conservative force*

(1) Through ritual and other social behavior patterns it has directed the masses of society in accordance with the ideals of the most thoughtful portion of the group.
(2) It has kept man occupied with old ideas, some of which were better abandoned, and some of which retained their value.
(3) It has maintained the priesthoood as an organization constantly influential over men.
(4) It has acted as a reserve force in ethics.
(5) It has often hindered science.

(*c*) *Religion as a synthetic force*

(1) It has drawn individuals together into remarkably cohesive and persistent voluntary organizations.
(2) It has provided mental and spiritual harmony of thought for like-minded groups.
(3) It has kept some values in solution till they could mature and be used.
(4) It has raised racial and geographic distinctions into dignity.

CHAPTER XX

MAN HEARS THE STARS SING

Art is the child of nature: yes,
Her darling child in whom we trace
The features of the mother's face.
—LONGFELLOW.

I. ORGANIC AND PSYCHIC BASIS OF ART

(*a*) *Art as a Reflection of Nature*

The æsthetic sense.—Just what we mean by beauty no one knows. Like any other apparently ultimate thing, we can only tell—and very imperfectly at that—how it affects us. In the various attempts that have been made to state the essential nature of the beautiful, there is a persistent tendency to reduce it to one principle. This is to be expected of a philosopher, and is perfectly legitimate. Our discussion is rather on the question of how the realization of beauty emerges in social evolution, and not so much its metaphysical nature. We may therefore remark at the outset that for our purpose it is more profitable to acknowledge various genetic lines by which the æsthetic seems to have arrived. One of these is the organic nature of the person who experiences beauty. Deep-lying physical and nervous satisfactions seem to be involved. Another is the probability that somehow an excess of energy is released whenever we add to mere sense perception the realization that what we perceive is beautiful. Still another possibility to consider is that the æsthetic, in

an objective sense, may be simply the perfectly functioning or truly useful forms of matter. In any case the sense of the beautiful implies a feeling of satisfaction and of harmony between the mind of man and his environment. Even though it may be running parallel with pain or sorrow, the sense of beauty makes us acknowledge something that we approve, mingled with the experience. Hence we shall look at art—man's behavior in response to stimuli that rouse a sense of beauty—first of all as a reflection of nature. It was said by Shakespeare, one of the great artists of humankind, that the artist "holds the mirror up to nature." Yet when *he* held it up, the mirror—which is nothing else than his mind—showed not only forms, but added a beauty value. It is not surprising that the philosopher persists in saying that the æsthetic experience is a seeking for the *inner form* of things, discoverable only within the inner or mental presentment of the outward object. Finally let us observe in advance that man's social history shows that it is only in a social environment and as social achievement that art can long survive or rise to great heights.

The imitative basis of art.—Artistic expression of the social self often appears to spring from an impulse to imitate. But this is not sufficient evidence to allow us to call art an expression of an "imitative instinct." There could not be any such thing as an implanted and inherited mechanism for imitating all the specific behaviors one may encounter through life. Indeed the very idea of instinct precludes that of imitation. Man can get pleasure through mentally retarded and imaginatively reinduced experiences, without the necessity of physical re-experience, and the very fact of his having few instincts to get in his way makes it the easier for him to imitate. Nevertheless, the instinct theory dies hard. For example: ". . . it is not necessary to go far into the field of psychology in order to determine whether this deep-rooted desire to imitate is an instinct or whether it has be-

come imbedded in man by a long process of social selection."[1] This begs the question, which is precisely whether imitation is at all a "deep-rooted desire" "imbedded in man," or, on the contrary, a learned behavior, recurring in individual after individual because nature and the plastic organism of man practically always find the imitative route in response to a situation.

(*b*) *Art as Self-Realization*

The emotional character of art.—The æsthetic impulse is perhaps not an independent one, but a fusion of the constructive with the emotional interest. Doing or experiencing in a specially enjoyable way—perhaps self-realization is found in such behavior, and perhaps that is what art is. Some things which we do not as a rule associate with art have nevertheless come into existence along the road of emotional self-realization. The clothing complex, for example, is quite a prosy and matter-of-fact affair when we think of it as a necessary conventionality to conform to before appearing in public, or as a way to keep warm. But when one dresses with the deliberate purpose of looking one's best, in a social gathering, there is a third motive dominant, that of self-realization. It is so dominant that social usage freely condones the fact that the motives of modesty and of protection have to recede somewhat. And yet it was this motive of self-realization through beauty of adornment that originated clothing. Clothing, in other words, is due to vanity more than to shame, and to self-expression rather than self-concealment, and clothing oneself is therefore an art. Speech is another performance which certainly is far from being treated as though it had any artistic possibilities by most people, yet it began as music did, by being an expression of the self that brought pleasure. To utter an articulate noise is very close to being rhythmical, and the noises or notes of

[1] Havemeyer, "Drama of Savage People," Yale University Press, p. 12.

lower animals show that there is pleasure in such rhythm—for example, the "singing" of frogs. Apparent monotony may be a modulated expression of feeling.

The æsthetic aspect of any situation is a meeting of the intellectual and emotional. The intellectual side is the recognition of relationships; the emotional is an apprehension of relationships, totalities, and meanings too large to be compassed by the intellect. It is as if some insistent cosmic fact were clamoring for recognition, with all the elemental naïveté of primitive things. The insistence takes the form of rhythm very often, though not always. To illustrate, we may see how certain poetic compositions, especially in modern "free verse," as they proceed or approach a climax, fall into rhythm and even rhyme, which is simply a form of rhythm.

The play impulse and art.—The word "play" has a great variety of meanings which can be reconciled only on the theory that play is art, and art is self-realization. Whether we think of play as a recapitulation of race development, or as imitation, or as overflow of energy, it is self-expression. When play passes from its natural history to its cultural history it becomes more formally art. But when that happens, play and work have joined forces. Art seems to have appeared whenever and wherever individuals could happily express themselves as such, and thus be at play, while actually carrying out the necessary behavior patterns of their group-culture, in other words, carrying on social work.

The sensuous side of art.—Art is an expression by the mind of what has come to it through sense stimuli. The expression must be in sensuous terms, though the mind may add creatively by symbol and arrangement. It is possible that we have, in the cave drawings and paintings of Paleolithic man a piece of evidence as to how the passage was made from the life of external and easily dissipated impressions that most of us live, to that of reproduction in art. Too practical a life, taken up constantly with the swift succession of sense

stimuli from without, and the necessity of responding by action to most of them, does not foster the reproductive imagination, still less the productive. Adornment of the body is a partial contradiction to this statement, but it does not lead far. On the other hand, a complete seclusion would be deadening to all ideas. The half light of a cave avoids both difficulties. Memory images, "ideas" in the original sense of the word, which relate it to imagination, come clearly to mind and are projected creatively upon the sides of the rocks. It is an archæological and historical fact, verifiable by the experience of persons who have frequented caves or played in them as children, that a cave wall is an opportunity for artistic outlet. Hence the caves, the oldest habitations with permanent walls, show us a transition from "a graphic art serving the purposes of adornment or magic to an art unfettered except by memory." [2]

II. Social Origins of Art

(*a*) *Social Nature of Individual Art*

The alter ego.—Art is not only self-expression; it is profoundly social. Art is, in fact, a seeking of sympathy. If the artist has no public, no group to please, he finds it in his "alter ego" or objective self. And in the group he finds himself again. The knowledge of their sympathy makes a true artist feel more deeply and work better. Artistic expression is a kind of self-enlargement. The social diffusion of one's own emotions increases them. A creative artist, then, has two selves: one does the work, and the alter ego furnishes the sympathy which drives him pleasurably on.

Art is a great social force because it is always moral. That is to say, the moral consequences are always present, in some form. There is an ethical aspect to all art, because, like the

[2] Wundt, "Elements of Folk Psychology," p. 23.

teacher and the preacher, the artist is a sharer of experienced reality. Art is a social force, again, because it harmonizes society. Art shared relieves social tension. The radio and the cinema, for that reason, are great social and artistic forces; longer ago the folk-dance and the stage worked to the same end.

The craving for appreciation.—One of the reasons for holding that individual expressions of art are also social is that the earliest expressions of art that we know about appear as social endeavors or as bids for social approval and admiration. Personal adornment, whether in child or in savage, is done for the pleasurable enlargement of the self, and considerable attention may be directed to the decorative work, but then enters the added fact that the individual cannot enjoy it alone, but must bask in the warm glow of commendation and appreciation. Few persons have so much individuality that they can work out æsthetic ideas regardless of whether others are interested or not. This is doubtless why the great master-works of art have so often been public works or have been executed under royal or other patronage. The greatest masterpieces of prehistoric times are some of the paintings by Cro-Magnon artists in caves. These must have represented the joy in one's work which is the spring of all artistic expression, for no such delineation could be made without an inner functional harmony which would give great pleasure when expressed. Yet the occasion for its expression was social, too, for these cave paintings and statues are religious and ceremonial in meaning, and the conclusion we draw, therefore, is that an individual who had æsthetic ability found his incentive in carrying out the significant ideas of his social group and thus winning approval or moral support.

(*b*) *Group Manifestation of the Artistic Sense*

Mimetic expressions.—When a social group finds some mode of self-expression, it goes through a development or education with regard to its appreciation of the artistic forms by which the particular mode in question is being carried out. In the earlier stages of expression, great pleasure is derived from imitation. The achievement of verisimilitude in itself seems to please the child-like mind and likewise the adult mind, though the latter presses on to something less naïve after a short time. Whether we consider recent forms of artistic expression, like the radio and the moving picture, or old and simple forms, like primitive dances and ornamentation, there is discernible that early stage when just to do or make *like the object observed* is the ideal. Much of the hearty and not very delicate artistry of social groups is carried on at this level, as we shall see presently when we take up the drama. It is hard to tell where this stage ends, but somewhere in personal and social appreciation of art the second factor appears, namely, the infusion of meaning and symbol into the simple forms. Until that stage is reached, mimetic excellence may be very great, and the physical excitement as well, but the mental and emotional side of art must lag.

Ritual as art.—Ritual is merely one of the art forms in which the symbolism of ideas has come forward into prominence, but it will serve as an example of group manifestations of the æsthetic impulse. Let us begin by reminding ourselves that the natural, joyous expression of emotional states, which is a motive power in art, appeals to people as an ultimate or primary good. Secondly, let us recall that people pass through successive "crises" or highly important social steps graduating from one stage to another in development or responsibility or rank. Birth, adolescence, marriage, death are some of these crises. But individuals and groups both

tend to increase the number of these important or state occasions. Inaugurations, anniversaries, religious ceremonies such as confirmation, etc., are of this character. The importance of them inculcates a desire and effort to do them justice, to perform the ceremonies connected with them in the most careful way. This centering of interest and emotion upon behavior patterns means ritual. Ritual is an art because it is the attempt to do something in the most fitting and beautiful way possible.

Connection between æsthetic and other ways of the group.—The artistic life of societies may soar, but it springs from the mundane characteristics of their cultures. Thus carpet-weaving has been called the art par excellence of the nomad, who could carry little furniture or other property about with him, but who made himself as comfortable as he could with mats, carpets, and cushions, and then, being interested in them, sought beauty through the exercise of care and the working out of patterns. Again, the themes set forth in folk-dances reflect the common life. This connection between art and life is nothing more than we should expect, but it is worth while to stop and reflect that the æsthetic is not a remote and "toploftical" aspect of human nature, but just the common activities functioning more perfectly.

III. Forms of Art

(*a*) *Arts of Motion*

The dance.—If we once start with the assumption that an organism derives satisfaction from being in motion, we have practically arrived at the dance as one of the arts of motion. In the broadest possible sense, dancing is going through the movements expressive of one's situation and function, and going through them in an orderly and satisfying way. For the higher animals, the dance would therefore

most naturally emerge as some variation or performance of walking or running, since that is the simplest and most characteristic life action. It is worth noticing that in recent years the popular dance has returned to the form of simply walking or of walking with very simple rhythmic variations. Rhythm, in fact, is so usual in dancing that we must include it in our conception of what the dance is. Walking is a rhythmical shifting of weight, and dancing is almost certain to be that, too, whatever else it may be. Rhythmical shifting of weight from one foot to another means the alternation of the muscles of one limb against those of the opposite one. This means that dancing is connected with the very form, structure, and functions of the body itself. Rhythmic motion gives deep satisfaction, and though simply to move in rhythm is not in itself emotional, it is one of the ways of action that results readily in emotion. An elephant swaying his trunk and body and lifting his forefeet alternately, a cat going through the same performance with its front paws on a soft, warm surface, a baby being rocked to sleep, a child consoling itself in disappointment by swinging or by rolling himself from side to side in his bed, are all "dancing," though the emotional content varies greatly. Dancing is, then, the seeking of beauty (harmony and satisfaction) through rhythmic muscular movement.

Singing is not greatly different from dancing, if the emphasis is on the action itself rather than the sound. Man has always been able to make a great deal of his dancing. He has had his arms free to add expressiveness, besides the use of the head and trunk in large measure. His intellectual capacity resulted in his infusing ideas into the dance, which thus became dramatic at a very early time. It is a sort of core from which have split off various forms of expression. These, becoming more and more socialized, have been thought of as arts separate from dancing. But there is a great deal of original psychology as well as social history in the ex-

pression sometimes used to describe the purposeful but not logically convincing effort of one person to impress another: "a song and dance." The difference between the actual song and dance of savages, carried out in the hope of influencing the gods, and the distrust of the "song and dance" on the part of a modern business man is indicative of some of the changes in society that have slowly taken place.

The drama.—The word "drama" carries with it, to many people, a suggestion of advanced intellectuality and high attainment in culture in the narrower sense of that word. But with our understanding of evolution as a succession of forms arising in sequence, each from the preceding, and operating in the social field as well as in the biological, we shall have no hesitation in looking among simple forms of folk-life for the germinal forms of the drama. Nor is it merely germinal forms; many simpler peoples have a complex and highly developed drama, for to them it has a vital social significance, wrapped up with the whole struggle for self-maintenance, and partaking of the sacredness of religion.

Imitation: the basis of the drama.—The childlike mind reacts to a pleasurable experience in the direction of repetition. "Do it again!" is the spontaneous cry of children when something entertaining has been done for their benefit. "Tell about the three bears again!" is likewise the request, even unto seventy times seven, and the discerning parent will introduce ever new realistic touches of mimicry into the old tale. But whether it be a matter of play or not, the essentially youthful spirit in man, child, or even the lower animal, demands repetition, which, if faithfully enacted, leads to imitation and dramatic action. A child's use of the word "play" (like the most sophisticated artist's in the theatrical world), often means to carry on some rôle, some conscious imitation, some fictitious sequence experienced or thought through previously. "Playing school," "playing house," "playing we are ladies," "playing Indian," etc.,

all bear witness to the deep psychological fact that with children, actors, and with members of certain other callings as well, the veil that separates self from other-than-self is easily passed through. To become in this fictitious yet wholehearted way a reproduction of another self or of one's own self in a former situation (as when the South African hunter recounts his exploits on his return to his village) is imitation and the beginning of the dramatic art.

Even the lower animals know this artful play. "A tiny kitten creeps from its nest, still blind, but as soon as even one eye is open, it toys [note this word, symbol of behavior on a mere stimulus-response plane] with every rolling, running, sliding, or fluttering object within its reach. [No play, as yet, in the dramatic sense, but only in the physical.] If a cat keeps running after such a ball, in time a sort of role consciousness comes to her, something like that which accompanies human actions that are intentionally make-believe. When the ball starts rolling, the kitten starts it up again by a gentle tap with her paw in order to begin the game again. . . . This seems like a conscious self-deception, involving some of the most subtle psychological elements of the pleasure that play gives."[3] Thus it appears that no very great change of character need be pretended in order to shift from natural to dramatic behavior. A child of three, running along the street with her father, picked up a dry leaf, held it up to her breast, and repeated over and over, to her own great merriment, "Nancy's little flower!" There was more of fact than of make-believe in the whole situation; she was playing at being herself, except that (1) the leaf stood for the flower, and (2) she was "putting on style," heightening the tempo a little. In this we may see, as in the case of the cat and the ball, three springs of action: (1) pleasure sought through expenditure of energy, (2) the self-ministering to

3 Groos, "Play of Animals," p. 130, quoted in Havemeyer, "Drama of Savage Peoples," p. 7, Yale University Press.

the ego by exalting it, and (3) the re-creation of a situation in which the preceding two things could occur. We shall be getting near to the root of the drama if we say that it arises from the desire to re-experience a pleasurable stimulus-response pattern, and the key word is "rehearse."[4] The dramatic "instinct" is nothing more than a readiness of action along reconstructive behavior paths.

Conscious and unconscious drama.—A distinction can be drawn between the conscious drama of plot and highly developed technique, and the unconscious drama of primitive man acting out the events of everyday life and his myths and primitive ritual, but it is a precarious distinction at best. However, it does help us to see that in the earlier stages, the drama was a natural, undifferentiated, practical part of the social economy, and not, as now, a thing set apart for upliftment, amusement, or other eclectic purpose.

Gesture language.—The pantomime of the Plains Indians sought to express thought (the individual side of language), and convey meaning (the social side), by imitative actions, and by gesture movements, and this was one of the beginnings of the drama.

Stages of Pantomimic (Dramatic) Language:

1. Historical, or narrative. Representing a particular action that has already occurred.
2. The abstract stage. Action of a kind, but of no particular time.

Methods of Presentation:

1. Unorganized.
2. Organized.
   (*a*) Dance.
   (*b*) Language more narrowly.

[4] "Take heed that in thy verse
Thou dost the tale rehearse,
Else dread a dead man's curse . . ."
—Longfellow, "Skeleton in Armor."

(*c*) Drama more precisely.
(*d*) Ritual: more social.

Music.—The musical art is an excellent example of the two-sidedness of all art—the esoteric side, grasped by the artist and expressed for his own satisfaction, and the social side, in which he communes with his fellows. For example, let us consider Rimsky-Korsakow's symphonic suite "Sheherazade," a composition conceived in the spirit of the "Arabian Nights" and intended to be suggestive of mediæval Bagdad. Quite apart from the technical excellence of the piece, theoretically viewed, but inseparable from it in reality is the flow of pictures through it all. In other compositions there is less of the pictorial, but more of ideas. After Cesar Franck's great symphony we feel that some profoundly wise personality has been discoursing to us. It is this capacity of music to absorb so great a volume of fine thought, while it depends fundamentally upon sensuous impressions, that makes it hard to say just what its function in social life has been. Much has been said in praise of the music of simpler peoples, but very little can be adduced for the musical capacity of peoples that we rank as nearly primitive.[5] The course of technical development seems to have been something as follows: (1) Appreciation of rhythm, generally found throughout savagery. (2) Simple melody. (3) Harmony. (4) Thematic development; the elaboration of musical ideas. It is only the first, and the second in a slight measure, that is found among ethnic groups of lower general culture. But for all that, the power of music from primitive days onward has been great as a social expression of emotion. The song as personal triumph, praise, invocation, war-preparation, imprecatory magic, etc., was known and used long ago by peoples wishing to put themselves into an active state for social achievement. So today students hold "rallies" before foot-

5 Sigmund Spaeth, "How Good Is Primitive Music?" *Harper's Magazine*, Mar., 1928.

ball games and sing to inculcate the spirit of victory—though nowadays there is a good deal of distrust in the efficacy of the procedure, and consequently much indifference.

Musical origins are so little known that it is impossible to say whether man's attention was first drawn to the possibility of tone (a sound of fixed pitch) by the exercise of his own vocal organs (in imitation of birds, perhaps) or through mechanical means, such as plucking strings, blowing into tubes, or striking resonant surfaces. But after the musical art was started, it practically always took on a twofold development. On the one hand there was *cult* music, which served the purpose of the religious organization, the priesthood or the church. This is the form of music which, somewhat divorced from the religious motive in the narrow and liturgical sense, gave western civilization its great musical heritage of the 18th and 19th centuries—the symphonies, sonatas, concert-masses, operas, and other forms. The other form in which music has functioned socially is in secular music.[6] The relation between the two forms is best indicated by saying that music, as a form of self-expression, follows either the sensory or the motor type of expression—if the former, the result is the cult or spiritual music, and if the latter, secular music. Now, the spiritual character of this kind of music—and by spiritual we mean a psychic appeal that is deep but not necessarily religious—rises from the fact that there are certain wide-spread native responses to tone intervals in music, and these constitute a sort of emotional, organic language of universals, upon which rests the social character of the music. To illustrate we may take the well-known hymn, "Lead, Kindly Light." In the tune to which this is usually sung ("Lux Benigna") in the key of A flat, in the next to the last measure, in the bass, occurs a lone and searching note, an E flat, which is the emotional key to the whole song. A similar tonal interval was used deliberately

[6] Bekker, "The Story of Music," p. 31, Norton & Co., 1927.

and with great effect by the accompanist in certain evangelistic meetings held on three continents some years ago. The emotional and image-invoking power of a recurring note is powerfully used by Chopin in his Fifteenth Prelude. Simpler instances of the more or less widely recognized qualitative value of simple musical patterns extend back into the earlier musical life of the race. The two notes "do-la" in the descending scale, are generally known as the "cuckoo song," after the call of that bird. This designation is itself a social datum; it signifies a fact of nature held in common consciousness. But man has gone farther with it, and has another name for it: the "Come Hither" call, in recognition of its wide-spread use in casual hail or summons. Instances like this do not carry over recognizably into the life of primitive peoples—of whose musical appreciation we have necessarily a rather inferential knowledge at best. But some distinctions seem to be easily caught by most people. The mournful quality of "fa" in relation to the rest of the scale is an example,[7] and the shift in emotional basis from the major to the minor.

Cult music, and its sister, classical music, serve the definite, circumscribed task of expressing "the solemn, the sublime, the mystical, artistic conceptions of the superhuman, the divine, the mysterious." Secular music allies itself with song, dance, and drama, and by its emphasis on rhythm rather than tune, it forms a contrast with the more intellectual form. Such tunes as "Turkey in the Straw" or "Yankee Doodle" are alliances between music of tone and music of motion. Folk music the world over takes some such form. In its more emotional forms it may rise, by melody and harmony, to sweet and simple excellence, as in a berceuse, or it may sink to bathos and "barber-shop harmony."

Literature.—The literary art, though set forth commonly among peoples of higher culture in some visible and static

[7] See the children's song, "Mistress Doh and Her Neighbors," in Gaynor, "Songs of the Child World," John Church Co., 1897.

form, was not originally written, of course, but was closely related to speaking and singing. It is the vocal culture of man, slowed down to written form where thought can work it over and over into a fine expression of the intellect as well as of the emotions. Literature is in one sense the most remarkable of the arts, for it combines the definiteness, the detail, and the nuances of language with the emotion of music, or of dancing. When we read

> Tears, idle tears, I know not what they mean
> Tears from the depths of some divine despair,
> Rise from the heart and gather to the eyes
> In gazing on the happy autumn fields,
> And thinking of the days that are no more,

we are conscious of music, of social experience, of philosophical thought, and of a picture, all at once.

But the same, or nearly so, may be said of the song in the Maize Ritual of the Omahas:[8]

> O hasten!
> Behold,
> With yellow tassel I stand,
> Behold me!
> O hasten!
> Roast by a fire
> My fruit as I stand,
> Even roast me!

(*b*) *Arts of Rest*

Architecture.—The art of architecture is a specially fine example of the social emergence of which we have had so much to say from time to time in this book. Man's early building (Chap. XIV), centering around the shelter motive, at length formed a partnership with the æsthetic motive, and these two, enlisting the further aid of religion, social welfare and utility, patriotism, etc., have come forth into a

[8] See Case, C. M., "Outlines of Introductory Sociology," p. 313.

creative realm in which idea and form are wonderfully joined, and in the following out of which there has been a social growth and unity which makes all ages and all places akin. In the arts, and especially in architecture, the root-interest of mankind, seeking connection with the outer cosmos yet aspiring to satisfy its inner self, has found rest for its spirit. Let us see if we can find the point in architecture at which social life and material culture, on its utilitarian side, breaks out of the chrysalis into the larger and more joyous air of æsthetic striving and achieving. First of all comes the simple idea of shelter. Nature herself suggests the twofold aspect of this need: sun and rain from above, wind and invasion from the sides, make roof and walls necessary. To get under something, and to get behind something: either of these can be done without building, but to do both at once is more of a trick. Construction begins at that point. Something must be run up, and then there must be a crossing over of the space above. As soon as man thought seriously about that, he had become an architect, for he was not merely piling things up on top of each other, but was engaging with "the first and last serious problem of building—the bridging over of openings and spaces in permanent fashion."[9] But at once it was found that some ways of doing this were better and more satisfying than others. Thereupon the two systems of construction appeared upon which all architecture is based—the post and lintel system, and the arch system. In finding ways to arch over the upper spaces of his buildings man has come into some of the most exalted social experiences in all his history. It is doubtful if his whole social venture in conquest of time and space can offer anything to surpass the Gothic cathedrals. Concerning the social character of architecture the following quotation,[10] at random, will illustrate the point:

9 Statham, "Short Critical History of Architecture," p. 5, Scribners, 1927.
10 *Op. cit.*, p. 447.

Of all the architectural styles of history, Gothic was the most vivacious and changeful, because it was ever seeking after improvement. The very intensity of its vitality shortened its history. While Egyptian architecture went on for century after century undisturbed in its conservative repose, Gothic architecture, continually on the strain for improvement, arrived in the sixteenth century at the point when it seemed that nothing further could be done. What might have happened to it if left undisturbed at this point one can only conjecture. But a change had come over the spirit of the dream. The Renaissance movement had arisen, and henceforth architecture was to be no more the history of national styles, but of the aspirations of the individual artists; was to be a matter of intellectual choice rather than of automatic evolution.[11]

Other arts.—Among the other "arts of rest" that might be discussed are sculpture, drawing, painting, besides many less well-known arts of design. Many of these have a social history that is prehistoric. Whatever their value in social development may be appraised at, it has been long and steady. From prehistoric times on we have a practically unbroken line of evidence that the artist has been esteemed very highly not only by rulers and influential classes, but by society at large.

11 See the remarkable passage on the Gothic Churches in Chateaubriand's "Le Genie du Christianisme."

CHAPTER XXI

MAN CARRIES THE TORCH

It will doubtless always be true that *omnia exeunt in mysterium;* but at least there is zest in widening the arch of twilight that surrounds our little camp pitched in the wilds of the universe.

—Sir W. Beach Thomas.

I. Organic Basis of Thought Life

(*a*) *What Thinking Is*

Recreative thought.—Throughout our study of man's evolution we have been taking it for granted that man is intelligent and that his intelligence is back of his achievements. Now we are to consider that trait of intelligence itself, and something about its emergence in social relations. If we were to make a brief outline of the whole matter of man's "carrying the torch" it might be something like this:

I. Evolution of man into the capacity for reflective intelligence.

II. Practical manifestations of intelligence: technological and institutional.

III. Higher manifestations.
   1. Art and Religion.
   2. Ethics and Social Institutions.
   3. Philosophy and science: the knowledge-seeking and intellectual activity par excellence.
      (*a*) Holding up the torch: discovery and research.
      (*b*) Carrying the torch: organization and application of knowledge.
      (*c*) Handing on the torch: education.

The thought life of man may be viewed as re-creative, that is, reproducing experience or holding uncompleted experiences in solution, and again as creative, in that it re-combines the elements of experience so that new things are created. It is the first, or re-creative, aspect that we are now discussing.

Man naturally acts in response to stimulus, without thought then and there as to what form of response his life-interests will find best. But by thought he intervenes between stimulus and response, takes the elements of the half-completed experience and distinguishes the permanently significant from the transitory, reorganizes the stimuli in new forms in imagination and responds to these recombined stimuli in some other than merely impulsive fashion. Thought thus governs impulse. But it is not a thing-in-itself, and its power is in the connections which it sets up within the stimulus-impulse world into which it thrusts itself. By means of thought, man can bring the permanent [1] into proper relation with the specific, the detailed, and the ephemeral.

Man's mental growth, then, appears all the way along as an increasing power of relating experiences to each other so as to serve the root-interests of life. In time, as we shall see, the accumulated related experiences held in the mind become almost a root-interest themselves—the so-called cognitive interest. The cognitive interest is especially advantageous to man's progress because it uses each situation as a starting point for fresh acquisitions.

Conscious thought.—We cannot prove the fact of consciousness in other people, but neither can we do without it as an assumption in social relations. The necessity of assuming it need not cause us to forget that thought need not always

1 Of course, if man loses the conscious presence of a great root-interest in accordance with which he can organize his daily life, it will come to pass that his thought, instead of carrying him forward, will leave him dissatisfied and unhappy. One of the differences between primitive men and a great many civilized men is that the former *always* had the root-interest of hunger and self-maintenance. The absence of this as a pressing need in many civilized persons' lives constitutes a social, moral, and religious problem of the first magnitude. Can man by thinking find a root interest for his life?

be conscious thought. But throughout the ordinary give and take of social intercourse and cultural life conscious thought is playing about over the surface of the great mental deep. It is a focus of the elements of the past that shifts from combination to combination with lightning rapidity, in the light of which culture can be projected upon the social background.

Subconscious thought.—Mental life has always been going on below the surface of man's experience-complexes. This part of his mental life is in part the source itself of his conscious life. Consciousness enables man to make something out of his experience, but the organic and neural responses to his environment, flickering upward from his lower centers to the threshold of his cortical centers, and acquiring there a sort of tenuous flame-like form—these *are* experience, and yet are a part of man himself.

The roots of man's unconscious thought life go even deeper than the responses he makes to his outer world. Before birth the nerve cells of the cortex are stirred to action by the stimuli of the body itself, and this embryonic mental life must be primitive in its character, for the body is still primitive—in fact, pre-human. Without intending any mystical meaning, we may call these original experiences ancestral. Man undoubtedly brings up from the biological soil some elements that he can hardly account for on the basis of experiences after birth. But experiences they are, nevertheless, or else they would not be a part of his mental furnishing.

(*b*) *Cognition as a Root Interest*

Curiosity.—Since society is composed of individual minds, each of which is an organic unity unfolding from within in accordance with the laws of its being, and reacting to its environment at the same time, we can see that it is of great social importance that the mind is always reaching out for

connections between things. This curiosity about the order and structure of the cosmos is the so-called cognitive interest, and it is one of man's root-interests, along with self-maintenance and self-expression. The cognitive interest is about the same thing, in its simplest manifestations, as plain inquisitiveness. Mere sense satisfaction is sufficient for animals when the inquisitive motive is in play. But among human beings there is a farther reach to it: even children ask *why* and *whence,* after learning the *what* of a situation. This spirit of inquiry has played such a great part in the social life of the race that it is strange to have to admit that it comes to an early stopping place in most minds. But the minority, in whom it goes on to almost any length, are the social builders. Hobhouse thinks "we may regard the cognitive root-interest as phylogenetically a late and for that reason a very unevenly distributed impulse more readily atrophied than others." [2]

Knowledge and power.—That "knowledge is power" is a familiar saying, easily and flippantly repeated without much appreciation of its meaning. What are the social implications of it? First, man's knowledge enables him to put forces outside of himself into operation and reap the benefits. An animal can only perform as much work as it has physical strength. Man, by his knowledge of other animals, put them to work for him. Then he harnessed the water, the wind, and finally steam, electricity, and gasoline, besides many other physical and chemical powers. On the material base furnished by these he was able to build a very complex society.

(c) *The Social Conditioning of Thought*

Environment and thought.—The direction and the speed of intellectual activity are affected by the social life of the group. Inventions, for example, are not alone the work of

2 "Social Development," p. 166.

the individual inventors. They usually come to pass because of social need, and often, besides, because of social accident and variation in behavior within the group. There is almost always a long period of felt need on the part of society, and another period of incubation of some hint pointing toward its solution. The incubation goes on in the inventor's mind. Invention, whether in the material or the institutional realm, is thus a joint effort of society and the inventor, a living through the problem together. Social environment is thus a pre-conditioning of thought, and a part of the thought processes. Sometimes discoveries and inventions are made and lie unexploited until the social environment takes them up and gives them life. As far as thought was concerned, the western route to the east was a foregone conclusion long before Europe was ready to use it. The principle of the airplane was thought out, but had to wait for other thought, directed to the end of lighter engines, to coöperate with it. The telephone was invented and demonstrated by 1876, yet twenty years later it was not in general use, and therefore remained somewhat inefficient. Fifty years and more ago the magazines carried advertisements of "pen fountains," but the social conditions that led the intellect on to perfect the fountain pen had not yet come. Photography has been known a much longer time than the ubiquitous kodak. When there is a demand in society, that is, a market, it almost seems as if the intellect of man is invariably capable of meeting it. Hence we may give the economic status of modern society a high place in the social conditioning of intellectual achievement.

In primitive life there must have been a great many things that were partially thought out and abandoned because social conditions were not ready for them. One of these conditions was the very fact of not being accustomed to change. Another was the paucity of accumulated material culture. Nowadays an inventor has thousands of varieties of nails, screws,

wires, lumber, metal, pipe, chemicals, etc., with which he may carry out and test his idea. Ideas in the mind of Cro-Magnon man, who seems to have been our equal in intellectual endowment, often had no chance to be tested.

Conscious social attitudes toward thought.—One great difference between the intellectual life of primitive man and of modern man is the conscious social attitude of acceptance of the higher intellectual life as such that is so common today. We have such an intellectual accumulation that we divide life into the everyday things that we must know about, and the higher or more difficult or less necessary ideas that we should like to be familiar with if possible. Self-improvement in all sorts of forms is common now. The Chautauqua, in both its older and newer forms, the famous "five foot book shelf," the women's clubs, the outlines of science and the popular histories of philosophy all bear witness to man's desire to go aviating with his mind. Primitive man had a far less imposing empyrean in which to range, and he had to think more about merely keeping alive. His cultural efforts had to be directed to an increase of material things, and there was more homogeneity of intellectual attainment in the group. There was the medicine man, of course, with his esoteric knowledge, but that was not for the vulgar herd to know.

Spiritual effects.—Man's increased intellectual powers meant, among other things, an increase in the ability to form and hold steadily in view ideas of ends that were highly desirable but that could not be immediately gained. It is not necessary to explain that the social utility of the higher concepts of ethics, religion, and other departments of life depends upon that very ability to prefer steadily the remote rather than the near. Impulses that intervene before the mind and frustrate the plan must be put down. All the various activities of the mind must be co-ordinated to the pursuit of the deliberately chosen end. Kipling's "Road Song of the Bandar Log" in the "Jungle Book" is a fine

illustration of the inability of monkeys to do this, and of their consequent social ineptitude. At the other end of the evolutionary series is the student who has learned to hold himself to his intellectual project after the initial enthusiasm has departed, or Thomas Edison, living most of his life in his laboratory, or a chess player, motionless yet highly active, and getting pleasure from his concentration of mind, or St. Paul with his "This one thing I do, . . . I press forward toward the mark." This great power of holding on with the mind has lifted the leadership of the race beyond the useful but limited trial and error stage, and has added to that method the foreseeing of the consequences of an action. As man has reflected upon his life, he has done much to ameliorate it. There is no assignable reason why he should not go on bettering the conditions of his social life for an indefinitely long time.

At the same time, the increased intellectual life causes much discontent and unhappiness. Its capacity for setting forth an ideal for society far outruns the capacity of the social body to carry it out in behavior. Reflection by the best minds on the inconsistencies of conduct and of the *mores* is the realization of social injustice. Such minds are doomed to discomfort, and yet they are the means of awakening the rest of society to some of its absurdities—such as slavery, human sacrifice, the "lex talionis," the duel, the vendetta, and, perhaps, in the future, war, race prejudice, economic injustice, and many other absurdities.

II. Forms of Intellectual Expression

(*a*) *Stages of Intellectual Expression*

The imaginative stage.—We sometimes hear of primitive peoples whose intellectual concepts are so undeveloped that counting is not carried above 10 or 20, and who consequently

seem to have no idea of infinity or of immortality. On the other hand we are told that primitive man may, if we like, be called different in mentality from us, but not stupid; that, though he may not have traveled the intellectual road so far as we have, he must not be considered inferior as to comprehension and capacity to develop. When we try to harmonize these sayings, we come to the conclusion that primitive and early man was in a certain stage of social-intellectual development, in which imagination played a relatively large part as compared with abstract thought. Impulse and feeling played a large part in directing thought currents. Of course there had to be some rational thought to give coherence to conduct, but considerations of logic and of reliable evidence were so slight that imagination was dominant. In other words, the human mind, prone to magic, animatism, and mythology, was evolving into a stage of expression in which common sense based on observation and practical tests should come to the fore, against a work-a-day background of experience.

The influence of hunting life upon intelligence.—The hunting period in human life was an immensely long one, beginning probably before true man had been developed, and going on through all of the Old Stone Age. It was under the circumstances of that method of life that his intellectual development in the imaginative stage took place. Discrimination, strategy, and persistence—the same qualities needed for a general or a business man—were needed and were developed by variation and selection. And this growth in mental power brought preference for orderly thought. Thinking became in some degree a search for truth conceived as order.

The authoritative stage.—Subsequent to the stage of dominant imagination, then, came a time when the human intellect went more by rule and by authority. This stage corresponds to the late prehistoric and most of the historic period. Tradition was very strong, though here and there a more independent and critical intellectual life was manifested.

Those who possessed it were such as would be encountered in an "intellectual history." In this period, too, as an effort at escape from fragmentary knowledge and authority, we have the greatest development of philosophy. There was a long-drawn-out effort to find some scheme of explanation of the whole world. It was a wonderful intellectual attempt, and no one who reads the history of philosophy can fail to take pride in it as a human accomplishment, but it came at length to its time of disillusionment. Today philosophy, which will never die, is nevertheless aweary, and science takes its place.

> The wind is a half-word the old gods whisper,
> The stars are a blind script none may ever read.
> Why does a blown leaf in a blue twilight
> Teach us more philosophy than wise men will heed?

The critical stage.—After myth and after philosophy, though never to displace them in their proper places, came the critical type of intellectual life in which science comes into its own. Philosophy, of course, is highly critical, yet its approach was more from the point of view of logic, while the critical scrutiny of data, of sources, of nature itself is a characteristic of science. Indeed, it was in the realm of metaphysics, mathematics, and ethics that humanity first developed any systematic critical method of thinking, involving a regular and accepted procedure of inquiry and proof. It is for this reason that we may regard Socrates as standing for one of the greatest of forward steps in human history: namely, the realization that there is no use in talking any more about anything until we have agreed upon a definition of our terms. It is a great moment in social and intellectual history when we first hear him saying "But tell me, what do you *mean* by . . . ?"

(*b*) *Types of Intellectual Expression*

Mechanical.—The intellectual achievements of the race have followed various lines, one of which is the mechanical. By this we do not mean the long history of hand-tools and simpler devices, with which early man accomplished so much. It is true that every tool involves the application of one or more of the basic principles of mechanics—the lever, the pendulum, the screw, etc.—but there is a difference nevertheless to be noted between simple tool-using and the advanced stage that we call mechanical. In the former, simple observation or imitation gives the essential point to the performance; in the latter, conceptual thought has to follow out some process by which things are put into certain working combinations. Even primitive man may illustrate both for us. The two ranking weapons of early humanity are the bow and the boomerang. The bow can be accounted for by observation: a bent branch has projectile strength when released. The boomerang can be accounted for by imitation: a certain shaped stick when thrown once described an arc which caused it to return toward the thrower, and so other throwing-sticks were made in that way. On the other hand, when primitive men hunted the mammoth, and arranged a sharpened timber overhead which would impale the animal when it released the restraining cord, this was something thought out in advance by combining simpler concepts, and it was mechanical. To this day, in millions of homes, almost as though it had become a ritual, man goes hunting—for a mouse. If he uses a cat, that is one well-known method—the use of domesticated animals in hunting. If he—or she—makes a lunge at a scampering mouse with the broom or the rolling-pin, that is tool- or weapon-using. If a trap is baited and set, that is mechanics. Now it is evident that the honors lie with the cat or with the trap. The cat is a natural specialist in mouse-catching, but we have no animals with instincts or with

brains sufficient to do our more elaborate tasks, and so we are driven to the use of mechanical means more and more. It is notorious that man's intellectual life, mechanically, has led him on to perfect prodigies of achievement. The trap, of which we have just spoken, represents one great stage in mechanics. The clock may stand for another, in which accuracy has been added. The steam-engine is typical of another step ahead, when new forms of power, greater than before, are applied.

Literary.—The old saying that "actions speak louder than words" rests on the assumption that actions are somehow more real than words, and reveal more truly the inner man. We find less truth in this point of view than we used to suppose. The more recent psychology sees that words are actions of a kind, and that both words and deeds are a kind of thought-expression. Actions, in the ordinary sense of the word, are the concrete expressions of our intelligence, and are organized into the arts of common life and the fine arts. The inner thought life has a world of its own which does not necessarily make itself manifest in any visible action patterns. Between the two stands the world of speech, partaking partly of the nature of thought and partly of action. We may conceive of the speech faculty, figuratively, as seeking expression by thinking ("sub-vocal") in one direction, and through action (audible or visible speech) in the other. And when it issues in speech, it is involved in the difficulty that all muscular motion is subject to—it is a fleeting and momentary expression. It is true that words can be repeated over and over, and situations thus partially recreated, but it is not always easy to do this, and man began many thousands of years ago seeking how to catch and hold in permanent form the evanescent flow of words and meanings that came from his lips. The literary art, or writing, is the result, and it constitutes one of the major achievements of man. It has several steps in its development, some of which, though sub-

heads of the topic of literary evolution, rank as social evolutionary steps of the first rank.

1. *Pictography.*—To appreciate the social significance of man's first essay in writing—namely, the pictographic or picture-writing stage—we must refer to our chapter on Speech, where we shall recall that gesture-speech, the appeal to the eye, gave way, for reasons of efficiency and quickness, to oral speech, the appeal to the ear. But man, as we have before pointed out, is the time-binding animal, and as soon as he had accumulated a sufficient deposit of culture and tradition it was inevitable that he should seek some method of preserving his utterances against the flight of time. The eye is the organ of vision, and to see things best they must be at rest. Focus is difficult and eye strain accompanies too great motion of things looked at, while it is monotony that hurts the ear, not movement. Visual devices, objects arranged so that they could be continuously looked at, was the time-binder's speech solution. It is natural that we should find that the Egyptians, who are famous beyond all peoples for their effort to defy temporal mutations, have left us the oldest known writings. In these writings pictures are freely used. And we know that simple peoples remained in the picture-writing stage even to our own times, as for instance, the American Indians.

2. *Ideography.*—The next great step was to use pictures as symbols of ideas. This is idea-writing, or ideography. First the pictures were nearly as they had been when they conveyed no other meaning than that of the pictured object, but since the picture used as an idea did not need to be pictorially very good, and since the same ideogram would be used often, or as frequently as the same idea was repeated in the writing, these signs became quite conventionalized. The great drawback to the ideographic method of writing was that unless the reader knew a great many conventional ideograms he could not read the writing; moreover, it was cumbersome.

3. *Phonography.*—The most important step, perhaps, in the whole developmental series came next. It was the representation of sounds rather than ideas by symbols. Of course this was really a form of ideography, for the sounds represented were word-sounds, i.e., idea-sounds. But so great an increase of possible usefulness came out of this advance that it seems equivalent to an entirely new human activity. Phonography had several stages. The symbol represented the sound of a word, at first. This was the stage in which phonography separated itself from the old parent stem of pictography. To illustrate: if we send a picture of a man it may mean "man"; if we follow it with a picture of a date, that may mean "a date"; but if the context is right, we may easily be made to understand that it is the sound, not the meaning, of the parts which the writer was using, and we shall know that he is writing about a "mandate." It only needs then to conventionalize the symbol for the sound "man" and the sound "date" in order to write "mandate" at any time. When the familiar game of charades is played, people are really putting themselves back in this word-sound stage of phonography, and perhaps doing for entertainment what readers had to do in all seriousness once on a time, namely, guess at the application of the symbol. A second stage of phonography was the employment of the sound of a syllable instead of a whole word, and the final stage of this line of development was that of signs for the simplest sounds —"letters," as they ultimately became.

The word "phonography" suggests the modern phonograph so strongly that an observation or two on the social significance of the latter seems in place. "Phonography" means "sound writing"; a letter is a written sound. But a phonograph as we know it reproduces all kinds of sounds. Not only that, but since it gives us, not symbols of sounds, as a book does, but the sounds themselves, it seems at first that a phonograph is radically different from the phonography which

we have called the great last stage of symbol evolution in writing. On closer analysis, however, we see that a phonograph record is a book, and the irregularities in the spiral groove which the needle follows are phonograms exactly as letters are, for they are symbols of sounds, and might, with a keen eye, be learned and read. But when the phonograph is played, *it is the needle and sound-box diaphragm that do the reading.* This is significant as suggesting two things: first, the seemingly unlimited service that electrical and other physical knowledge can give to man, and, second, the question whether it is intellectually good for people to have their reading done for them, however good it may be for them socially.

4. *Book-making.*—Another great step in the literary evolution of human society has now to be mentioned. It has to do with the making of books, of which there was said to be "no end," as far back as the writing of the Old Testament. Before books could become a part of the intellectual equipment of the race, several practical difficulties had to be overcome. There was the momentous question of method of writing, of which, (aside from monumental inscriptions on stone) two came into common use. These two methods were the opposite of each other. One was the scratching or impressing of the surface to be written on; the other was the rubbing off of a part of the writing tool or material, leaving it behind on the writing surface. The first grew up, in the Tigris-Euphrates world, into the cuneiform method, and later, in the Roman and Greek life, became the wax tablet and stylus. The other method was far more influential in the world: it gave us such concepts as crayon (chalf), slate, lead- or graphite-pencils, charcoal, paint, and, greatest of all, ink and pen. The principle in pen and ink is the application of a fluid dye to a membrane. The membrane was usually papyrus in Egypt, where this method of writing was developed. It is an interesting commentary on the changing spirit back of a common act, to compare the conventional gesture of the an-

cient Egyptian scribes and copyists who flipped a little ink on the ground before writing, as a libation to their patron divinity, and the similar flirting of the fountain pen by a modern school-boy. The purpose is the same, to get a free flowing pen and auspicious circumstances for writing. But one approach is religious, the other scientific. Then there was the invention of parchment (a by-path in the development of the art), and the fixing of the alphabet (a vast and intricate story in itself, but properly only a refining process in phonography). The end of the process was the world of *books in manuscript.*

5. *Typography.*—Books in manuscript had a glorious enough history, as the work of copyists and illuminators proves, but one last great step was to take place, eclipsing all previous events in the history of writing. This was typography, the printing with movable type. It was preceded by block printing, which was twice invented, once in China, and, long after, in Europe. Block printing developed many side lines, such as paper money, playing cards, etc., but not till printing with movable type appeared in Western Europe a little less than five centuries ago did the literary miracle of the ages take place. Movable type printing had been known to the Chinese, but the vast number of characters used in their writings prevented it from being very serviceable. But in the Western World it has become such a prodigious institution, ramifying into every department of life, that it can hardly be estimated. It may safely be asserted that there are only three events in the history of man's material culture that can rank with the invention of printing from movable type—namely, fire-making, agriculture, and the Industrial Revolution.

III. The Realm of Science

(*a*) *The Origins of Science*

Magic and science.—The beginning of science is man's attempt to behave intelligently in the presence of nature. There was much behavior before that, in which the object was to obtain pleasure or satisfaction. But satisfaction in behavior comes through success. And, again, success is more likely to come through intelligent behavior than otherwise. As soon as man was able to hold himself in check sufficiently to make the search for the intelligent behavior dominant, he was started on the scientific road. Science may thus be viewed as highly developed reflective thinking, in which the great characteristic always is the delayed response to stimulus and the internal adjustment of possible behavior outlets.

As a matter of social history, however, we find that it was a very long time before man was able to quest for knowledge in general—that is, unrelated to immediate advantage. When he did arrive at such a state he found that the quest itself was a mighty motive. At that point science in the larger sense was born. We have then an early or preparatory stage of science, in which humanity stayed for much the longer time, and a late one which is better entitled to the name. It is of the first stage that we are to speak in this section.

Science is a body of knowledge acquired by certain methods. It is also the procedure of acquiring that knowledge. It is the latter consideration that is of more importance, for the validity of what we regard as our knowledge depends upon whether we got it by valid processes or not. The acquiring of the better ways of knowledge-gaining is as much a matter of social evolution as any other kind of achievement has been.

The earlier chapter of man's knowledge-getting (aside from the everyday knowledge in which everyone shared and in which there was no felt mystery) runs strongly to magic.

The attitude of most modern people is so intolerant and incredulous toward magic that it seems wise to approach the subject with the warning that magic itself is just a form of behavior which a given social group has found efficacious, and it is therefore to be viewed with respect. Let us take first that form called sympathetic magic. This is at once a highly developed form,[3] and also a sort of primal form out of which all magic comes. It rests on the belief in the efficacy of the mimetic representation of some previous successful procedure; the belief that the mimicry will bring the result again, without the presence of all the previous factors. This belief in the efficacy of repeated or imitated action is not greatly, if any, different from the mental set in favor of repeating any piece of conduct that has once been carried through successfully. Behavior-patterns are always by way of becoming fixed in the organism. It "seems natural," we say, to do a thing again as we have once done it. This is, of course, a misuse of the word: it is not natural at all, but learned. Yet it evidently has the position of advantage; it is all ready to run itself off as a behavior-series. Now this is organically akin to what belief is. We may say, without very greatly straining the facts, that when we have acquired an habitual way of doing something, to meet some need, we are like magicians, in that we have learned a "spell" (we may call it a "method" if we prefer) and we believe in it. The rest is a matter of critical development. If the savage uses "spells" that we think are worthless because he does not take all the necessary factors into account, then we are the better magicians, or he is the poorer scientist, and our scientific formulæ are more potent spells. But at the bottom of it all is this organically implanted preference for or belief in the tried way of behavior. The cat that caught a mouse which she saw while lying on her master's lap before the fire-place one evening, so that she always returned to that

3 See the poem, "Sister Helen," by Dante Gabriel Rossetti.

position to watch for another, was (1) from a psychological point of view, organically prejudiced in favor of a certain procedure associated with success; (2) from a magician's point of view, a believer in a potent spell for success in catching mice; (3) from a scientific point of view, a careful repeater of an experiment; (4) from a common-sense point of view, a crafty and accomplished hunter.[4] Similarly we find primitive hunters among men combining what we should call real wood-craft (science) with "magic" rites preparatory to the hunt. The magic is equally valid to them with the wood-craft, because their scientific method is not sufficiently developed to enable them to reject the accidental factors from the necessary. Under such circumstances, believing and knowing are very similar, and so are magic and science. A white man sells an African tribal magician a crystal of permanganate, which when dropped into a vessel of water, turns the water a beautiful reddish-purple. The African has acquired a magical object: he does not know why the water turns red, but he can make it do so. The white man, even if a chemist, does not know why it turns red either, yet to him it is a scientific fact, rather than magic. The line between the two is not easy to draw. Magic (particularly "sympathetic" or imitative magic), is, then, a procedure aiming at successful action; and the accumulation of magical charms (guaranteed action patterns of formulæ) is the acquisition of knowledge.

Magic and religion.—In the foregoing discussion we have derived magic and science from the same source. Another point of view, upheld by some students of the subject, associates magic and religion very closely. We have already (Chap. XIX) indicated why we prefer to think of them as essentially different. Religion has to do with that which is beyond the cognizable boundaries. It eventuates in faith,

[4] And, we may add, from an æsthetic point of view, a primitive dramatist, reënacting the past. The illustration, though not the interpretation, is taken from Havemeyer, "The Drama of Savage Peoples," Yale University Press, Chap. I.

which does not prove what is believed. Magic, on the other hand, is knowledge, even though it be very trivial knowledge. It eventuates in science, which is verified belief. Again, religion does not have the dominating attitude. Coercion of the ghost, we saw, gave way to propitiation and sacrifice. Humbleness is of the essence of religion. Magic is an attempt at mastery of nature or whatever powers may be mingled with nature.

Nevertheless, there is a stage of development in which it is hard to distinguish magic, science, and religion. The medicine man proposes to use mysterious means to control phenomena. If he were less self-seeking he might be a priest. If he were more truth-seeking he might be a scientist. Of the three—medicine man (magician), priest, and scientist—the scientist emerges latest in social evolution, because for a long time there were two simple motives only in the struggle to master the universe—the assertion of the self, and the escape from ill fortune. Afterwards comes the motive of love of truth, the desire to be in correspondence with the whole of creation. The pure scientist's mind is hard to attain: at his worst he may be merely the magician in motive; at his best he may be almost a priest of humanity.

Moreover, it is hard to distinguish at all times the states of mind and body that lead respectively to magic or to religion. Dreams (whether in sleep or daydreams), trances, abnormal experiences of all kinds, hypnotism, crystal-gazing, and even the simple stimulus of the imagination, may induce behavior and experiences that lead either to uncanny knowledge or to religious emotional states. The distinction is this: if the objective in view is to *know* or to *get* by knowing, the road to magic is being taken; if the purpose is safety, or harmony, or acceptability with the gods, it is religious.

Shamanism.—At the place in this series of developments where magic, science, and religion are as yet undifferentiated, but are about to separate and go their different ways, we

encounter a very significant figure, the shaman. In order to understand him we must appreciate the social purpose of coöperation with the accepted gods of the group, rather than with *daimons,* spiritual beings in general, outside those of the group's own patronage. Individuals of the medicine-man type who go off into strange by-ways of occult knowledge, though they may be seeking it as truly as others, are regarded with suspicion. The black art is the outcome. It is known to witch and wizard, sorcerer, warlock, and to all those thousands who have supposedly sold themselves to the Evil One—a belief reaching down practically to our own time and place. The white art, on the contrary, is that which is practiced by the socially acceptable medicine men who deal with the recognized gods of the tribe and who work for social welfare. The shaman (a name coming from the interior tribes of Asia or Siberia and indicating possession by a spirit) is a very great and accomplished kind of master-daimonologist. He has undoubtedly demonstrated very remarkable powers along magical lines.

The shaman is the true medicine-man, which means the man of mysterious knowledge. When he develops toward religion we get a priesthood, which usually does not come until primitive life is outgrown. But he is also the man of knowledge, and until the advanced stage when the wizards and magicians as a whole are accepted without fear by society, he represents the respectable acquisition of knowledge. A situation similar to this prevailed for a while in the Dark Ages when the Church (priesthood) had control of education and science. Particularly important among the shaman's functions is that of curing disease. Although the shaman is the great man in primitive religion, yet we have spoken of him in connection with intellectual evolution. "If ignorance has always ascribed superior knowledge to wizardry, if it has stood in awe before the empty occult, it has yet reverenced the best there was available, the germ out of which real knowledge was yet to

evolve. The savages were too near to the raw struggle for existence to hold in light esteem that which they thought contributed strongly to their insurance against ill; it has been reserved for civilized man, secure behind the bulwarks of which the savage laid the foundations, to play the wanton fool, as no nature-man could or would, with fanciful or perverse floutings of the knowledge—of the science—he ought to reverence. Only civilized man is secure enough, by virtue of the work and thought and suffering of those who gained knowledge for mankind, and for him, to affect contempt and condescension for their indispensable labors." [5]

(*b*) *The Maturity of Science*

The accomplishments of science.—Without insinuating that science has run its course, we may yet regard it as having passed out of its childhood and as having attained a robust maturity. If science as a mode of human life were to cease suddenly and give place to some new thought-way, it could still point with pride to the most imposing structure of thought and of achievement ever reached. No attempt will be made here to catalogue the accomplishments of science, but some less obvious aspects will be pointed.

Man's problem is twofold. First there is the question of existence or self-preservation. Second comes that of happiness or self-realization. Considering his capacities for happiness as revealed in his highest or deepest moments, it would seem a pity if man must forever expend his energies in merely keeping the biological series from extinction by starvation or exposure. Yet that is just what man has had to do for the most part throughout his period of occupation of the earth. He has long resented the fact, and has tried to avoid the routine of existence. Nature has made it plain that she thinks it might not be good for him to escape too soon.

[5] Sumner and Keller, "Science of Society," p. 1420, Yale University Press.

But though it would be regrettable for man to escape the struggle for existence and still die from inner decay of character, we cannot but hold that he must be given the chance to escape to something higher if he chooses. His idealism is a human trait and needs satisfaction, so that he will not say, as did a young mother facing financial worries, "Oh, I never thought life would be like this."[6]

Science has made it possible for mankind to put the mere struggle for existence behind it. The possibility is not realized, but it exists. A few generations ago we were taught that man's population increase tends to outrun his food supply. Now we are told that his productive power may outrun his consumptive power. The proportion of men actually needed to supply food is becoming less each year. Science has practically won the first battle. The increase of material capacity leaves us ready for the next and more difficult quest, —happiness. In this quest we are patently only beginners.

The functions of science.—During the career of the scientist, a great deal of expansion of intellectual attainment has gone on. The question is whether it can be participated in by society at large. Science must take up the social problem from now on. The functions of science, in the future and in a social sense, may be set down as follows:

1. To carry forward and gratify the desire for knowledge as an expansive life force in human minds.
2. To offer a systematic and dependable interpretation of nature as a background of life and a storehouse of energy.
3. To discover the functional nature of the human mind and personality.
4. To bring about consistent social conduct patterns and organizations.

[6] Grace Scribner, "An American Pilgrimage," p. 42.

IV. Education

(*a*) *Primitive Education*

The older concept of education.—The weighty business of education has always been a burden to be carried by society, and has always received considerable attention. There are two ways in which cultural evolution has brought about a great change from the older type of education to the new. The first is in respect of the amount of energy, the furor and the tension accompanying education. There was very little of that in olden times. Education was an easy matter, and consisted in transferring or implanting the total body of culture of the group to the younger members. The direct oral precept was used to supplement what the child learned by observation. He saw practically the whole culture in use before his eyes, and the rest he was told in ritual, dramatic story-telling, secret initiation ceremonies, proverbs, etc. The psychologic power of habit, and the group force of tradition were the forces employed. Modern education has become a very much greater and more complex process, due to the greatness and complexity of modern social life: this is the first of the two great changes referred to. The other is even greater, it is a change of purpose, and is taken up in a succeeding paragraph under "Modern methods of education."

Methods of primitive education.—One of the points of view presented by modern educators is sometimes called "the play-way," by which is meant education through liberation of energy in pleasurable and spontaneous ways, though under controlled situations. Primitive education had a great deal of the play-way in it, until supposed maturity was attained. Probably the two greatest educational methods used by savages are imitation and narrative. Of the first we may remark that children not only like to imitate their elders, but they are almost unable to do anything else. In one respect they can-

not match them: in continuity of effort. It is this quick fatigue which sends their minds off at tangents. Among primitive peoples there is little need for "holding their noses to the grindstone," for the entire body of transmissible culture is not so great as to necessitate haste or routine. Of the second feature, narrative (dramatic or oral), by which tradition is taught, the most recent psychological opinion must necessarily think highly, for narrative is the repeating of happenings in sequence, and hence it resembles motion, conduct, behavior, life itself.

(*b*) *Complex Aspects of Modern Education*

The changed meaning of education.—In its simplest terms, education used to be simply putting the individual in possession of the knowledge and the action-ways of his group. Modern education cannot for a moment contemplate such a program, for the civilized social groups of today have more knowledge at their disposal than any individual can hope to acquire. Intellectual evolution has had to enter a new stage as far as education is concerned, and instead of aiming to convey all, now seeks to do three things:

(1) To equip the young person with such knowledge and skills as shall enable him to earn his living. This alone takes many years.

(2) To put him in appreciative possession of specimens of the finest things in the cultural store, so that he may have the capacity to enjoy and socially share the cultural heritage.

(3) To give him such mental experiences as shall result in his ability independently to find and use when needed, knowledge from the store accumulated by society, and to think his way into new knowledge.

The older education, in fact, had a static ideal. If a person could carry the torch that was handed him, figuratively speaking, he was educated. Modern education tries to pro-

duce a person *habituated to change.* Instead of carrying the torch merely, he must know how to light new fires when he pitches a new camp "in the wilds of the universe."

Moreover, education today is in possession of knowledge concerning the reasons for our behavior, especially our impulsive behavior. The experiments that led to the theory of the "conditioned reflex" are quite widely known. In the educational world, this knowledge entails new responsibility. "Unless the school forecasts the requirements that the group behavior of tomorrow will place upon man's impulsive nature, social loss and retardation must follow. . . . Education, to be of social service, has to discipline and develop the impulses of the child in such a way as to make the inherited tendencies conform to the more wholesome, the more complex society that rightfully belongs to the next generation." [7]

Modern methods of education.—To go into the subject of modern educational methods would be out of place in this book. But it should be realized that in no department of life is the unceasing process of social evolution more clearly revealed than in changing educational ways. At the risk of being arbitrary, we select one instance for illustrative purposes. In the Danish Folkschools we have an example of education as a gathering up of the winnowed harvests of social history, a transfusing of them from the intelligentsia to the masses. Old emotional possessions and new science and social life are combined so that "the Danish peasant, in 1865 inured to the agricultural practices of Neolithic times and today the most scientific and prosperous farmer in the world, attributes his extraordinary transformation to the teachings of the Folk Highschool."

[7] Groves, "Personality and Social Adjustment," p. 38.

CHAPTER XXII

MAN DINES OUT

Of all letters, the love letter should be the most carefully prepared. Among the written missives, they are the most thoroughly read and re-read, the longest preserved, and the most likely to be regretted in after life. They should be written with the utmost regard for perfection. An ungrammatical expression, or a word improperly spelled, may seriously interfere with the writer's prospects.—HILL'S MANUAL OF BUSINESS FORMS AND GUIDE TO CORRECT WRITING. (1877.)

I. INTERPLAY OF INDIVIDUAL AND GROUP

(*a*) *Surplus Content of the Word "Social"*

Meaning of "social."—We have previously pointed out that the word "social" has several meanings, and that there is a surplus content of meaning about it that eludes definition. This surplus meaning is highly important, for it consists of miscellaneous items which together make the well-known overtones of our speech and the mingled light and shadow of our group behavior. The infinitely fine modulation of response with which we vary our actions, even contrary to habit, when with other people, is the very source and replenishing of our more imposing social institutions. Individuals determined to form groups, or to remain in those they are already in by nature, have always had to maintain a running accompaniment of compromises, adjustments, subordination or indirection of purposive actions, and a thousand alterations of conduct to express the conscious balance that must be maintained between individual and group life. When these adjustments

become great, and we are grouped around some center, we have institutions, such as the patriarchate or the tribal chieftainship or the church. But there are always a multitude of little formative adjustments going on, working like the coral polyp to produce at length a visible form. Culture is the outcome of the little adjustments of human life, as well as of the larger ones.

Though culture is compounded of biological, psychological, and social elements, it is in its essence a social thing, and cannot appear until the social side is dominant. But when the social life has become rich enough, it flowers forth into culture—*the social elaboration of the commonplace.* For instance, man builds on the *biological* fact of sex the *social* fact of family life, and then, in exuberance of social feeling, he adds the *cultural* fact of marriage. In like manner he takes the need of food (*biological*), and raises a *social* structure, say the hunting tribe, upon it, but more than that, he adds *cultural* patterns such as the use of weapons, and ritual, to make game plentiful.

If we take the universal and frequent human activity of eating as an example of what man does to himself in the way of filling up the meaning of his social life, we may perhaps sum it up by saying that he teaches himself to "dine out," that is, to feed himself, when in company of others, with due regard to their presence. When a person goes out to dine—that is, when he has outgrown the nursery and can take his place on his own responsibility among his fellows, he "takes his manners with him." Every sort of social group among mankind has its elaboration of the commonplace in eating or in other things. The social richness of life depends upon its being fed by these shifting pattern ways.[1]

The social tendency to refinement.—The cycle of development through which a great many behavior-patterns go is as follows: first the effective means of accomplishing the desired

[1] See Sumner, "Folkways," pp. 458–9 and 462.

object, then an improvement in details, then a conventionalizing of procedure for efficiency's sake, then a slow transfer of emphasis from the central purpose to the details themselves. This last happens because the social need that called forth the pattern of response does not exist any longer. The response is no longer a response, but a fictitious and possibly superficial custom—a convention.

A convention is not always superficial, even though its observance may be so. Though the spontaneity and apparent purpose have gone from it, the original purpose may still be served. It insures conduct, though perhaps uncomprehending conduct, which accords with the conclusions reached at some former time by older members of the social group. The younger generation does not have to experience and draw conclusions in order to live a more or less harmonious group life. They have many adjustments made for them already in the shape of conventions, and for this reason social life has a tendency to refinement—it is always picking up and carrying along a quantity of detail which is better than it knows.

The Germans have a turn of language to bring out the idea that a man may, for example, be more than a mere beast when satisfying his appetite: they use the word "essen" (to eat) when referring to human being and "fressen" when referring to beasts. The difference is one of "refinement," i.e., of cultural accumulation. We could devour food without any lessons in etiquette, but it might be a long time before we could invent the interesting and stimulating procedure of the banquet hall. We might, again, say that while a dog may eat his dinner, he can never *dine*.[2] Only man can do that, and a very high-flown and fine-spun procedure it may be, so conventionalized that one may be embarrassed if he omits a detail. Presently arises the "plain man" and makes some such declaration as "Back to nature!" or "Fingers were

2 See Dealey and Ward, "Introduction to Sociology," pp. 100–101; "It might almost be said," etc.

made before forks." He may get some brief applause, but the fact is that a fork is a very helpful thing, invented long ago, definitely fixed upon as better than a knife to eat with, and the best social procedure would seem to be to accept this refinement as our heritage from former experience. Primitive man was highly endowed mentally, but we have the advantage in our accumulation of social experience, a sort of endowment. All this endless refining of detail makes "the social heritage" worth more to us. The old gentleman in "Les Misérables," instead of saying pointedly, "Will you let your daughter marry my grandson?" says, "M. Tranchelevent, I have the honor to ask you, in behalf of my grandson, the Baron Marius Pontmercy, for the hand of mademoiselle." Somehow we feel that such language is "socially" to be preferred. The old gentleman has learned to dine out. Social life raised to its higher possibilities, civilization, culture, are much alike. They are the handiwork of man, retaining his experience memories and erecting them into functioning series of repeated actions.

(*b*) *Social Penumbra of the Individual*

The social compulsion of the environment.—Every person, in any social group whatsoever, casts the shadow of his own personality upon the scene of which he is himself a part. The center and most intense part is made up of whatever is most individual in him—his heredity traits and his peculiar habits. But the half-shadow on the outer edge of his life is a mingling of himself and society. His environment, a social and dynamic thing, presses upon him and rings him round in a complex set of half-free, half-determined movements. A man's procedure, as to little things, during the course of a day, is a continuous series of adjustments to the people around him. He goes where he pleases, perhaps, but for the most

part by using the beaten paths and by observing the rules of the road.

This social compulsion means that there are ways of living characteristic of the whole group, and these ways are so well fitted to social ends that the individual cannot successfully replace them with a set of his own. Men like Henry David Thoreau may go quite a distance in that direction, but never succeed in clearing themselves from the social penumbra. To the extent to which they do succeed they are suspected of being dangerous, like the man in the legend who lost his shadow. It is indeed true that anyone who has cast off a part of the shadow of social compulsion, even though he may have found some better way, has been regarded all too often as in league with the devil. Now, in general, society is right in its conviction that there is safety in the continuity of its patterns. But in our own times we are certainly witnessing a change in the attitude toward new inventions. The individual, here or there, is constantly offering some new way of life which is instantly taken up and absorbed. In the realm of thought it is not clear that such rapid progress is either possible or desirable.

In both material and mental culture there is constant selection and accumulation of traits. The social penumbra or half-shadow of social influence around each person is the area within which the selective process goes on.

Overcoming the social compulsion.—The group usually forces its elaborated conduct patterns upon the individual. But where does the group get these elaborations? The answer to that is the fact that a good many individuals overcome the social compulsion in some particular respect and force their own ways upon the group, which then proceeds to take its amended pattern and fit it to the other and younger members. The Ford automobile is a historic case of a man's individual pattern of material culture being strong enough to overcome group inertia. But before it could win, the struggle took

place in the debatable ground, the social penumbra. Every step in progress in the fictitious but illuminating "Dissertation on the Origin of Roast Pig" by Charles Lamb is a triumph of the inventive individual over the shadowy ring of influence of the group way.

II. Social Tendencies in Everyday Life

(*a*) *Social Preconditioning of Individual Experience*

The emotional patterns.—Man's emotional life might seem to be free, if anything ever is, from social dictation. But such is not the fact. Although the individual mind does flash through in emotional responses to situations, the flashes are almost always colored by the real or implied presence of the social group. Humor, for instance, is associated with feasting, harvest and vintage festivals, social indulgence, "broad" jests, rest after labor, and the common consciousness of amusing situations, character, or happenings.

Likewise the emotional expression of grief is connected with old popular customs of inculcating social solidarity in time of trouble. This was socially useful, strengthening the tribe and making for survival. It has always been quite the thing for the group to prescribe the correct procedure for mourning and penance, and this is still done even among civilized peoples.

The teaching of connotations.—In the use of language there are two types of mentality with which one has to deal. There is the literal-minded person, first. He inclines to learn his words as though they could have but one meaning, and the meanings are clear-cut and limited, as he uses them. The other kind of word-user—most of us are of this kind, though not all in the same degree—is always conscious of his past experiences, usually social, which modify the meaning of the word. For these persons a word has conno-

tation; for the first kind it has simply a notation. Though it might seem that the literal-minded are more exact in their speech, this is not true in social situations, for words as they use them are inelastic. Now, in the same way, social acts, social ways of life, can be followed out literally and without imagination or adaptation, or they can be performed with an accompanying envisagement of the total situation, and in that case they will be subject to endless variation in detail. A man may greet an old friend with the words, "What you been doin' with yourself, you old hoss-thief?" meaning, "You're an interesting old chap, and you and I share our memories of former days." The same greeting in certain parts of the west might be resented, because the connotation of "horse-thief" is socially a very serious thing. The unsuspecting grocer who once selected St. Patrick's Day to display a large consignment of oranges in his show window, and who incurred violence as a result, was encountering social and verbal connotations which he might profitably have been informed about. Savage man has very complicated social elaborations of this kind. His ceremonies, if anything, surpass ours for detailed significance. Men of savage cultures, moreover, are bound in everyday affairs more closely than we are by the significance of the little things they do. They are possessors of a rich set of cultural ways, but they have little freedom within them. They have connotations, based upon experience, but the superstitious element in their lives makes them partly the slaves of their customs and meanings. The trend of social evolution in this regard is clearly toward personal liberty in the use of social symbols. But he who takes liberties will always be limited by the understanding that the group has of the symbols with which he plays.

(*b*) *Folkways*

Group insistence as a factor in folkways.—Folkways are accepted behavior patterns characterizing a group. If the degree of acceptance becomes very great, so that enforcement follows, the folkways become *mores,* with which we are not now concerned. But even when the folkways fall short of the standing of the *mores,* there is a quiet, perhaps unconscious, insistence or pressure toward conformity. Folkways are on the border-land between free individual action and group compulsion. An example of a possible folkway in the making is the custom of men appearing with straw hats on a certain date, and not a day before. This is not a law, nor a moral requirement, nor even a *mos,* since there will be no physical force used and no severe disapproval visited upon the non-conformist. Yet occasionally he may encounter some good-natured interference, and a great many men in cities would on no account disregard the date and invite social pressure to be focused on them. It is in the realm of the folkways that customs and habits are selected, much as biological traits are selected, to become fixed and perhaps to go on to the status of *mores.* Thus the folkways have a shifting, plastic character. At the upper end they tend to stiffen into required ways, and at the lower end they ravel out into personal preferences. Thus, the illustration is used of the custom of removing the hat when meeting a lady on the street—this being a folkway, accepted but not enforced, whereas monogamy is a *mos.*[3] Yet that very folkway was much nearer the rank of *mos* a generation ago than now, and there is evidence enough that it is now on the way to a rank somewhat less than a folkway.

In primitive societies there is much less range in the folkways, which, for social safety's sake become *mores* more surely than in modern society where half-serious experimentation can be tolerated more safely.

[3] Sumner and Keller, "Science of Society," I, p. 33.

The changing emotional basis of the folkways.—It is clear that social groups, through their folkways, will persistently weave a web of changing conduct patterns, taking as their material the commonplace, and making it into the elaborate, the charming, the quaint, the fantastic, or what not. But even though this process goes on forever, it does not proceed in the same fashion altogether. The changed basis of construction of folkways is one of the reasons for believing that social progress is not a vain hope. What are some of the differences between the old and the new ways of forming our social patterns? First, it seems plain that man has learned a good deal about controlling his impulses for social ends. We may be discouraged when we read of lynchings, gang warfare, and other outbursts, yet the long look back to *Homo Neanderthalensis* must reassure us that the earliest campfires of *Homo Sapiens* were schools of self-control, as indeed all campfires are. But, second, there has been change in the emotional basis of our social elaboration. Fear plays a much smaller part in the folkways of today than it did with savage man. The whole history of tabu reveals this. The savage observes a tabu so meticulously because he is desperately afraid of the consequences of violating it, while civilized man still talks of "tabus" but with a smile, and without fear. Rivalry without anger has certainly made some headway against rage and resentment as a mold in which to fix social behavior. The winning of social equality by women has as one result a quite different set of folkways regulating social sex relations. In some respects it seems as if the old human weakness of rationalization and phantasy is being replaced by straightforward, more truly rational folkways. Modern realistic literature reveals this change, and the diffusion of scientific knowledge probably accounts for it.

CHAPTER XXIII

MAN TREADS THE DANCE OF LIFE

And who made 'em? Who made the skyscrapers?
Man made 'em, the little two-legged joker, Man.
Out of his head, out of his dreaming, scheming skypiece,
Out of proud little diagrams that danced softly in his head.
—CARL SANDBURG.

I. NATURAL BASIS OF BEHAVIOR COMPLEXES

(*a*) *Features of Mental Development Leading to Behavior Complexes*

Mental growth.—As the mind of man develops, his behavior in groups develops also, and we can trace a resemblance between the two. Mature societies, like mature individuals, overcome the tendency to random movements, and economy of motion results. The *habits* of a maturing individual and the *culture-patterns* of a maturing group are alike in that they are the outcome of past experience of the random kind, followed by trial and error, and finally fixation on a pattern that seems to bring the desired end most easily.[1] At the same time, maturity results in a widened range within which response can be made. This feature of mental growth is illustrated for the individual by the larger number of situations in which he can take care of himself by using or finding proper responses, and for the group in the same way by its

1 "Given these two responses at birth—tool-using and ritual-forming—we can account for a large fraction of culture trait-complexes by conditioning, as that term has been used. The universal pattern for culture is then largely determined by the number and kind of these inborn responses." Wissler, "Man and Culture," p. 267.

ability to behave successfully in relation to its successive crises. The maturity of the social mind, as of the individual mind, is measured by the amount of reflective thought that has been and can be intervened between stimulus and response. The complicated procedure of a social group in solving the situation-problem that recurrently confronts it is a witness to some previous mental performance. Thus we may say that mental growth is a part of the natural basis of behavior complexes, and that the "dance of life"[2] is the product of interactive minds.

Organic basis of culture.—If we view culture as human behavior in response to environment—and that is just how we propose to regard it—we perceive that its basis is organic. That is, the needs of the human organism, insistent, dominating, must be met, and culture ways are indirect ways of meeting them. Earlier modes of behavior are simple because the organic needs themselves are simple and are the first to be met. Society goes on to more indirect ways of behavior, but at bottom the great organic needs are always being ministered to.

(*b*) *Parallelism Between Needs and Cultures*

Human needs and cultures.—The culture of a social group is the response to its needs, and when the needs change, the culture must also change. But it does not do so at once, for it is in league with the conservatism of human nature, the habit-forming proclivity. If the group refuses to change, it will fare badly under the new conditions.[3] If it changes slowly enough, it will not undergo any special shock. If it has the change energetically instigated by leaders within the group, there will be a period of tension and maladjustment. The de-

2 Cf. Havelock Ellis, "The Dance of Life." In this connection it may be recalled that a blunder in social intercourse is called by us a "faux pas," i.e. a false step in the Dance of Life.

3 See Harold J. Laski, "The American Political System," *Harper's Magazine*, June, 1928.

cisive factor will be the extent to which there is actually a new need.

China gives us an example. In her development of writing she produced a cumbersome system of thousands of characters, difficult to learn. Printing from movable type was not a very useful device under such circumstances, but neither was there any great need for it under the old Chinese régime. Now that China is emerging into the competitive world of printing presses, typewriters, etc., a discerning group have foreseen the need of an "alphabet" of a limited number of characters, and this has actually come into use in a small way. The chances are that the pressure of great need will insure its success.

Instances of deliberate cultural change.—The following list shows how a recognition of change, followed by a felt cultural need, results sometimes in cultural change:

Cases of successful attempts at change:

New types of roads in response to the automobile
New etiquette of the road
The shortening of labor hours
"Temperance"
Abandonment of the old "classical" studies
Abolition of slavery
Revival of old Christmas customs

Unsuccessful attempts:

Mah Jong
Esperanto
Cricket in the United States

II. How Behavior Becomes Culture

(*a*) *Factors Working for Routine*

Matter of fact.—The most elementary forms of relationship between man and his environment are the observed recurrences in nature and the dependable qualities in things

with which man has to do. These things are matters of fact; they constitute the "matter-of fact" world, and the individual whose conduct or whose thought suggests especially implicit reliance upon these elementary facts is called a "matter-of-fact" person. We smile at the matter-of-fact person, but we respect him, for he is simply emphasizing what primitive man had to bank heavily on in order to get a start along the cultural road, and what we all have to rely on almost every moment in order to carry on our sometimes top-heavy scheme of superimposed culture. It is, in fact, a bond of similarity between the most painstaking scientist and the most primitive man.

What are the most ordinary instances of matters-of-fact? It is not hard to make a collection of them. Fire will consume many things, but not all; fire is hot; water is wet; water runs down hill; the sun belongs to the day, and the moon and stars to the night; certain seeds are good to eat and others are harmful; objects fall if there is nothing under them; fishes cannot live out of the water; man cannot fly like a bird; blood flows from a wound; babies cannot walk or talk; trees shed their leaves; different objects have different colors; flint will fracture along definite lines; sharp things penetrate; wet ground is slippery; smoke makes the eyes smart; wood will float. These and many more facts like them are the A-B-C's of life, and like the A-B-C's that a child learns, they are concepts. That is, they are not only experiences, but they are recognized as repeatable experiences, and that is what gives man his impetus into culture-forming—a procedure impossible for the lower animals. A cat, for example, after experiencing the wetness of water and being unpleasantly affected by it, is thereafter "conditioned" to make an unfavorable response when confronted by water, but there is nothing to indicate that the cat has, apart from stimulus, any concept of water-and-wetness, around which it could construct imaginative responses to

apply when the occasion offered. The cat therefore develops no cultural behavior along this line—or along any other. But man's conceptual faculty enables him to react to the wetness of the water when it is not actually and presently stimulating him to an overt response. His knowledge of it as experienced fact becomes knowledge of it as matter-of-fact, and about it he arranges such a series of revelant actions, based on other matters-of-fact, as to put himself in a different class from the animal. Thus he may combine the concept of sinking in water with that of a log's floating in water; the result is a raft or a dug-out canoe, a cultural fact. But the cultural fact could not emerge unless it could depend upon the fixed character of the matter-of-fact world. Matter-of-fact makes for routine combinations, provided it be recognized.

Culture as response to matter of fact.—Culture, it is evident, is man's attempt to match his nature with the natural scheme of things around him. The succession of seasons, for instance, is an elementary example of matter of fact. Fitting into this with admirable nicety man has a twofold culture, one side of it being the response that he makes perforce, and the other the social elaboration that he makes from choice. On the one hand there is the plowing and planting, the haymaking and harvesting, the accumulation of fuel in the fall, the lumbering or ice-cutting in winter. Parallel with these things goes his series of voluntary culture items, every one of them a *jeu d'esprit*, a "fancy step" in the dance of life; harvest festivals, May-pole dances, Midsummer's eve frolics, observance of the almanac, taking notice of Candlemas Day ("Half your wood and half your hay ought to be left by Candlemas Day"), and so on in great variety.

In other words, man is continually selecting from his matter-of-fact folkways such as he needs for his higher cultural flights. But it is obviously among the economic or maintenance folkways that he is most likely to find this trans-

formable matter of fact. So culture is very largely a growth of behavior patterns in response to the facts encountered in getting a living.

(*b*) *Division of Life Into Separate Patterns*

Patterns of common life.—Since culture is a behavior-response to matter of fact, and since matter of fact is so various, culture is likewise varied. But on the other hand, since matter of fact falls into great classes, so culture forms out its patterns, which are separated again and again. Patterns of common life are so well known that they are not recognized as such,[4] but long ago they began to form. Some of them have undergone a good bit of alteration, yet are recognizable as old patterns showing through like an outcrop of old rock. For example: Peter, in his vision at Joppa, heard a voice say, "Rise, Peter, kill and eat." Could anything be more elementary? The kill-and-eat pattern is being re-enacted in some form in all the great regions of the world today, but with wide variations. The Eskimo hunter represents a simpler form of it, and the Chicago packing house a more developed form, but the essentials are the same. Again we read in Walter Savage Landor's poem:

> I warmed both hands before the fire of life.
> It sinks and I am ready to depart.

This also is an old pattern worked over anew—the social formula of the subsiding fire and the removal of the human life from the place. In new form it might suggest the curfew of mediæval times. Still later, it might refer to the rekindled stove fire in kitchens. But it remains a common life pattern.

Patterns on the grand scale.—Besides the more humble patterns by which human conduct was shaped, there have

[4] For an excellent exposition of the printing culture-complex, see McMurtrie, "The Golden Book," 1927, Covici.

been more sweeping and "stagey" ones which have prevailed in their day and then receded. For a very long period humanity lived on terms of familiarity with rural activities, and its greatest aggregates were villages in all essentials. In different parts of the world at different times society has gone on to set the patterns in which town life prevailed. Again, the great-city scheme of things has absorbed or centralized the patterns of more mature societies into one great over-pattern.

III. Forms of Culture

(*a*) *Institutional Forms Within Culture*

Having seen that human culture may organize itself around great central ideas over large areas and long periods, we shall now observe how every great culture pattern has certain divisions or departments of activity. That every culture tends to develop these institutionalized forms is simply a way of saying that there is a universal culture pattern, made up of culture complexes or institutions. One way in which the universal pattern may be seen is to read the table of contents of this book through. However, we attempt herewith an outline of the Grand Pattern, showing (1) the institutions or culture complexes, (2) the principal patterns that compose each one, (3) some sample smaller patterns that operate intimately within each of the larger ones. (It is down where these simpler little behavior traits are at work that the "social elaboration of the commonplace" occurs).

1. *Speech:* Languages; writing.
   Anecdotes, forms of greeting, correspondence, signs, names, etc.
2. *Domestic:* Family; marriage; home.
   The hearth, the table or "board," bedtime, heirlooms, relatives, etc.
3. *Material traits:* The common arts of life.
   Principal tools, knowledge of materials, etc.

4. *Economic:* The "occupations"; production; distribution; exchange.
   Daily labor, wages, dickering, "caveat emptor," etc.
5. *Political:* The state; law.
   Police, cabals, popular opinion, meetings, etc.
6. *Social:* Voluntary organizations, spontaneous relationships.
   Friendship, love, etiquette, etc.
7. *War:* Local group conflicts; national and international wars.
   "Glory," heroism, battles, duels, vendettas, captives, etc.
8. *Education:* The school; experience.
   "Lessons," *A—B—C*'s, etc.
9. *Moral:* Group custom loyalty; ethical principles.
   "Fair play," "standing by," charity, etc.
10. *Religion:* Social attitudes toward the Greater Powers; personal attitudes toward the Unknown.
    Ritual, ceremonies, prayer, temples, altars, etc.
11. *Art:* The various fine arts.
    Exhibitions, the artist as a specially endowed person, etc.
12. *Science:* The various branches of learning; magic.
    The sage, the magician, the scientist, etc.
13. *Personal:* All the individual experiences in addition to the above.

The culture units.—The cultural anthropologist has by this time investigated so many tribal cultures and accumulated such a mass of data about them, that he can see more than their peculiarities. He perceives that they are composed of units, which form larger units, and so on. The simple unit of culture is called a culture trait, which is simply a distinct or characteristic way in which some common human action within one of the great "complexes" (see preceding paragraph) is performed. Each trait of a culture, on analysis, proves to be made up of a series of acts, and therefore is in itself a complex—a trait-complex.[5] Traits, or trait-complexes, it appears can be grouped into culture types, each of which has its culture area.[6] Finally, a tribal culture, or

[5] The terminology of this paragraph follows Wissler, "Man and Culture," Chap. IV.

[6] See M. J. Herskovits, "A Preliminary Consideration of the Culture Areas of Africa," *American Anthropologist*, 26: 50.

other group culture, is a collection of trait-complexes, and the question of what trait-complexes shall become associated in a tribal culture is one that can be answered only by inspecting the culture of each group. In other words, a tribal culture area does not necessarily coincide with the limits of a culture-type area or of a trait-complex area.

(*b*) *Great Culture Types*

Existent types.—"Cultures fall into types and the number of these types is not very great. Of the so-called higher cultures of the last five hundred years there are but two existent types; the remainder comprises something less than fifty primitive types. All show the same tendency to overstep the bounds of states and language, as if culture and political unity were two unrelated phenomena."[7] The two great types referred to are the European-American and the Asiatic. From the culture history standpoint, Japan is the center of cultural evolution and amalgamation on the grand scale, for the two great types have met there and merged.

Vanished types.—From among the many culture types that have run their courses and then dwindled to permanent disuse, we shall select only one for description. For the others we must be content to salute them en masse and let them recede into oblivion, even as "the Merovingian kings, slowly wending on their bullock-carts through the streets of Paris, with their long hair flowing, have all wended slowly on, into eternity."[8] The culture which we describe was one of the Neolithic period, and its remains, older than those symbols of antiquity, the pyramids themselves, stand here and there across the drifted world with a strange dignity. Its origin was presumably in the Mediterranean region, and it possibly flourished for more than ten thousand years. It

[7] Wissler, "Man and Culture," p. 25, Crowell, 1923.
[8] Carlyle, "French Revolution," Bk. 1, ch. II.

is called the heliolithic or sun-stone culture, from its trait of setting up great monoliths and other megalithic arrangements, such as the famous Stonehenge in Salisbury plain, in connection with sun-worship. The heliolithic culture had the following traits besides the dominating one of megaliths; circumcision, couvade, mummifying, cephalic deformation by bandaging, practice of massage, tattooing, connection of the serpent with sun worship, the use of the swastika. Not all these items always appeared together, but taken by and large they constitute a cultural migratory unity. It extended through the area of the old "Mediterranean" race, and into India, coastal China, Malaysia, Polynesia, even to Mexico and Peru. It is noticeably a follower of coasts, not an inland culture, and it does not appear either in primitive Nordic and Mongolian cultures nor south of equatorial Africa. The reasons for the distribution of this remarkable old culture are, of course, obscure, but "an English scholar has lately made it clear that if we mark on a map, along with the megaliths, the lodes of metallic ore and precious stones and the banks of pearl oysters in India and the Pacific world, we see the most striking coincidence."[9] But the currents of communication have so changed, and races and cultures have so crossed each other's paths that peoples in some parts of the world do not know anything about the megaliths in their midst. In the Easter Islands, in the South Pacific, the natives only say, when asked the origin of their megaliths with human faces carved on them, "Old fella man before me, he make 'em."

Another illustration of vanished culture-types is the recurrence of "cup-stones"[10] in different parts of the world. These are stones upon which cup-shaped cavities have been carved. They often appear combined with conventionalized figures or lines, and the cups are arranged in groups. The

9 Febvre, "Geographic Introduction to History," p. 322.
10 U. S. G. and G. Survey of the Rocky Mountain Area. Contributions to North American Ethnology, Vol. V.

meaning of these cup-stones is lost, yet the fact that they were carved prehistorically in the British Isles, Europe, India, and America, indicates that a great culture type once existed over a large area.

IV. Culture in Human History

(a) *Cultures of Great Groups and Long Periods*

Stages of human development.—Anthropologists and other students of human culture were formerly much given to constructing schemes of development or evolution through which at some time or other all peoples were supposed to pass in order. These schemes are "unilinear": that is, they assume that there is one line of development through which societies must normally pass. But more recently there has been less of this sort of evolutionary reconstruction of the past and more of the historical approach—in other words, a disposition to inquire into what actually has happened, rather than to fit the past into our theoretical molds. It is in fact impossible to lay down any scheme of cultural periods through which we can say that man has passed or must pass. Such an attempt was too philosophical and subjective. We were inclined to read our own thoughts into the record. But investigation brought out more and more that peoples might skip over some of the stages. This is just what we ought to expect, since culture is human behavior, and behavior is response of an inherited organism to environmental stimulus. Even if we disregard differences in racial inheritance, still no two groups ever had just the same environment, and consequently have not followed exactly the same sequence of cultures.

In spite of this, however, there is value in knowing some of the attempts that have been made to construct valid schemes of development, for each of them shows how the

history of mankind appears from a certain point of view. We select three kinds for illustration.

(1) *Lubbock's Four Epochs.*—Sir John Lubbock (Lord Avebury) suggested the now generally accepted division of culture history into the Old Stone, New Stone, Bronze, and Iron Ages. These have been greatly subdivided, and intermediate stages have been inserted. (See Chapters VI and VII). Regardless of whether all peoples have passed through this culture series or not, it represents the best knowledge we have of what a great many prehistoric and early historic peoples did go through, and it is becoming more and more necessary for a student of human affairs to know what these stages stand for.

(2) *Morgan's Culture Periods.*—The American ethnologist, Lewis H. Morgan, something more than fifty years ago, suggested a scheme of development based, like Lubbock's, upon inventions or advances in material culture, but in a much broader way and not restricted to tool-culture. The succession of periods according to Morgan was (1) *Savagery.* Lower Status: from human beginnings to the development of fishing and the use of fire. Middle Status: Ending with the invention of the bow and arrow. Upper Status: Ending with the invention of pottery. (2) *Barbarism.* Lower Status: Ending with the domestication of animals, in the Eastern hemisphere, and irrigation and adobe buildings, in the Western. Middle Status: Ending with the smelting of iron ore. Upper Status: Ending with the invention of a phonetic alphabet and its use in literature. (3) *Civilization.* Various subdivisions.

Morgan's culture periods are not regarded any longer as an authentic summary of man's career. But they have done a great deal to familiarize the world with the idea that there are many grades of cultural achievement, and that we must not confuse savages with barbarians, or think of all uncivilized peoples as in one category. One of the modifi-

cations of Morgan's scheme calls for five periods instead of three: Primitive Life, Savagery, Barbarism, Civilization, Enlightenment. The last-named division is, of course, aimed to set off the modern scientific and industrial cultures from those of ancient or mediæval times or from those of Asia, so different from the Occidental, yet unquestionably "civilized." But whether, in the light of recent history, western civilization can arrogate to itself the adjective "enlightened" is a serious question.

(3) *Wundt's psychological stages.*—Wilhelm Wundt, the great German teacher, psychologist, and anthropologist, approached the task of marking out the great stages of culture history by looking out, as it were, from within the mind of man. This psychological approach convinced him of four great stages of thought, each of which has developed its own life-pattern. (1) *The Primitive Stage.* Difficult to characterize except by cataloguing the accomplishments of "primitive" man (who of course is never absolutely or uniformly primitive) and his mental traits. Of the latter Wundt concludes that they are restricted in their sphere of activity but not noticeably inferior in quality to the mental traits of modern man. (2) *The Totemic Age.* In this period, psychically speaking, "man does not have dominion over the animal, but the animal rules man. Its deeds and activities arouse wonder, fear, and adoration. The souls of the dead dwell within it; it thus becomes the ancestor of man. Its flesh is prohibited to the members of the group called by its name, or conversely, on ceremonial occasions, the eating of the totem animal may become a sanctifying cult activity. No less does the totemic idea affect the organization of society, tribal division, and the force of marriage and family."[11] (3) *The Age of Heroes and Gods.* The chieftain gains in power, and the State emerges, as do religious cult and formative and dramatic art. (4) *The Age of Advance Toward*

11 Wundt, "Elements of Folk Psychology," p. 8.

Humanity. The transcendence of the old restricted folk circle, especially by religions, but by commerce and politics as well.

There are many other ways of dividing human history and prehistory into culture periods, and each is suggestive, but not to be taken too seriously. Most of the great factors of social life which make "the great culture pattern" have their grand stages. Within the strictly historic epoch of mankind we can make up various useful schemes of cultural succession. For instance, there is the potamic—thalassic—oceanic succession of cultures. But the most suggestive of all diagrams representing cultures as following pre-destined paths is that of Oswald Spengler in his remarkable book "The Decline of the West."

(*b*) *Historical Culture Manifestations*

Ethnic cultures.—One of the ways in which great cultures manifest themselves is through "ethnic" groups. "Ethnic" signifies a "people," and as used here, a people in the psychological sense. Acting over great periods of time, in large areas, and upon great population, great culture types slowly melt those populations into a unity of mind. This is referred to in the following passage: "To my thinking a 'people' is a unity of soul. Speaking strictly, the great events in history are not the achievements of 'peoples,' but, rather, have called 'peoples' into being."[12] As a result of such processes, we can speak of the populations of India, or China, or Arabia, as having ethnic cultures.

Briefer historical culture periods.—The great importance of culture history comes nearer home when we realize that some of the briefer but definitely defined chapters of history

12 "Decline of the West," Spengler.

really refer to some dominant set of culture traits which gave name and character to a particular time, place, and people. Some examples are: France in the time of Louis XIV, Russia in the nineteenth century, the Victorian Era in England (and America), the old South, the Middle West today, Elizabethan England, Renaissance Italy, Homeric Greece.

CHAPTER XXIV

MAN WEAVES IN PATTERNS

Our dear mother, Orthodox Russia, might sink down to the nethermost hell, and not a single tack, not a single pin, would be disturbed, . . . because even the samovar, lindenbast slippers, shaft-arch, and the knout—these renowned products of ours—were not invented by us.—TURGENIEFF.

I. ALTERATION OF CULTURES

(*a*) *How Cultures Change*

Culture change from within.—The culture patterns, by which man weaves his life into that of his fellows, are continually changing. Most of the great movements of history are meaningless unless we read them as pattern changes. Such, for example, are the agricultural, commercial, and industrial revolutions of modern times, the Renaissance and the Reformation, the shifting of authority to science, the economic revolution in the United States after the Civil War, the transformation of Japan, the "emancipation" of woman, or the development of the automobile. There is almost always a combination of inner and outer forces at work when culture is undergoing change in a group, but either the one or the other is likely to be stronger at a given moment. We shall think first of culture changes brought about predominantly from within. When we examine a culture of which a good picture has been drawn for us—say the Greek culture of the Homeric age—and compare it with the culture of the same people at another date—e.g. the

Greeks in the Age of Pericles—we are struck with its appearance of having simply gone on into new ways, developing from the old. "Heroes" and petty tribal kings have disappeared, while a rule of the "demos" or people has come in; evidences of pastoral life have given way to urban concepts; the gods are less anthropomorphic; commerce is more stabilized; art has reached a pinnacle; epic poetry has given way to dramatic. In all these details there seems to be at work an onward process by which without exterior compulsion, one strand of culture fades off into another, largely by wearing itself thin with usage and being supplanted by some form which it has suggested or led to. The development of a language is, of course, a culture change, and although new elements do come to a language from without, the usual process, observable anywhere, any time, is one of internal activity and verbal metabolism. Inventions always mean culture changes, and yet invention is a working over of already available materials—an internal development.

Coincidence of cultures.—The question of how cultures change or develop is largely one of estimating the relative influence exerted by factors from within or from without. This question is presented the more forcibly when we realize that the various culture patterns of the world's social groups not only vary a great deal but have remarkable resemblances on a rather wide scale. This coinciding of cultures permits of two points of view in explaining it. The first puts emphasis upon forces from within, the other, on forces from without. This second we shall take up in later paragraphs, particularly under the heading of Diffusion of Cultures. With regard to the first, the emphasis on inner change, we can again divide current explanations into two groups. One of them regards likenesses of culture patterns in separated groups as accident or coincidence. We cannot discuss this very profitably, as it is difficult either to prove or disprove such a proposition. The other approach to the problem is

by recognizing that there is a certain element of uniformity in nature which weights the scales in favor of the recurrence or similarity of methods and forms of behavior. This set for similarity is nothing else than the "matters-of-fact" which were discussed on a previous page. The regularity of the every-day facts of life gives us what has been called "the universal pattern." "It is because the same relations in communication, thought, and tools everywhere prevail that the cultures of the world have the same form and manifest the same processes."[1] Thus all cultures may be thought of as springing from the same basic necessities, mathematical, physical, or what not, in the very structures of the world, and diverging within those limits to form the wonderful variety encountered by travelers.

On the other hand, we may also infer that there are instances where the natural logic of events has brought about a development of cultures toward likeness with each other by quite the opposite route. That is, cultures starting out differing widely may by natural evolution arrive at identical forms. This is called "convergence of cultures." It is quite the opposite from diffusion of culture traits by travel or penetration from one group to another. It shows that there are various ways of meeting a cultural need. It also shows that progress in culture is apt to come when the culture is ready for it, even appearing in the same form in more than one spot.[2] This independent convergence of cultures, in other words, shows that similarity of culture does not mean genetic or psychological community in the past.

1 Wissler, "Man and Culture," p. 97.
2 See list of inventions made independently by more than one person: Ogburn, "Social Change," p. 90.

II. Diffusion of Cultures [3]

(*a*) *How Cultures are Diffused*

Undirected diffusion.—Human ideals, aspirations, institutions, cultures, like plants, have to be re-potted and transplanted occasionally to insure continued vigor. But there the figure ceases, for institutions or parts of institutions are almost always transplanted into an environment where other institutions are already planted, and what results is the interpenetration of the old by the new. The immigrant culture traits are *diffused* or soaked up into the social body.

Even very primitive groups have never been completely isolated, in all probability; much less have modern groups. Constant exchange of cultural elements always goes on, though not always rapidly. Though there may be no written record, yet culture migrations can be traced and mapped sometimes. A certain type of pottery, a style of coin, or a twist of language (as when the New Englander, with his inability to deal with the letter "r" goes west) may tell the route of an alien trait. A thousand years from now, one fancies, it will be clear that the era from about 1500 to 2000 A.D. was one of extraordinary diffusion of European culture elements.

It is not necessary to deny diffusion if one holds to the theory of "convergence." The two methods can occur side by side, and the same culture-trait may be subject to both methods of developments at once. Thus the well-known phenomenon of the bull-roarer, a device of men to warn women away from secret tribal rites—has doubtless had the same motive the world over, while the form in which it is carried out has been diffused and imitated to a great extent between various peoples.

Warfare is one of the ways in which cultural diffusion

[3] For the diffusionist point of view, see Elliot Smith, "The Migrations of Early Culture," and "Elephants and Ethnologists."
For critical estimates, see Lowie, *Journal of American Folk Lore*, 25:24–42, and Boas, *Science*, 34: 804–810.

comes to pass. This does not occur so much in the stage where simple conflict at intervals takes place, with casualties on either side, but no prisoners. But in the later forms where enslavement or conquest follows war, there is sure to be an infiltration of one culture into another. In the case of conquest, the culture of the conquerors is active, but that of the conquered remains the fundamental form.

When we find a culture trait, which we have reason to believe has been diffused and not independently invented, very widely distributed over the earth, we might suppose that a long time had elapsed for it to go so far, and hence that it is a very old trait. But this cannot safely be asserted unless we know something about the rate of diffusion, and culture traits certainly travel at very different rates. In general, of course, modern conditions of communication are such as to make possible very rapid diffusion; witness the spread of tobacco, potatoes, and maize after the discovery of the new world. Yet among these three things we note a difference. Potatoes do not displace wheat easily as a daily article of food, for instance in Italy, where macaroni is preferred; "corn" does not mean Indian corn, but rye or wheat to a great part of agricultural Europe; but tobacco had no rival, and has spread everywhere. The diffusion rate of a trait of culture is affected by the degree of completeness with which the group where it appears has already something to meet the particular need.

Another detriment to culture diffusion is geography. If the surface of the earth approximated everywhere a level plain, and climate were uniform, the tendency of a culture would be to spread circle-wise, as a circle does in a pool of water. But geographic and climatic factors bring irregularities into the distribution. To take an obvious instance, a littoral culture cannot radiate inland, because it does not fit the situation there. The birch-bark culture of the Algonquins cannot go where the birch does not flourish. The rich culture

of the east cannot make the ascent of the Tibetan plateau, where a culture based on the domestication of the yak takes its place. Yet the architecture of the Tibetans shows Chinese affinities, for that is a trait that could be retained on the heights of the Himalayan approaches. This illustrates how a culture depends upon the food complex of a group, though not entirely. And if a culture trait can travel independently of the remainder of the culture pattern from which it has become somehow singled out, it will disregard political barriers (which are very weak against culture migration) and even transgress physical barriers more surely than an invading army can. There need not be movement of peoples in culture diffusion. Indeed, in pure diffusion, there is none. The more efficacious medium is the flora and fauna. Where they have penetrated, culture is likely to spread also, because culture prefers an economic soil in which to fasten itself.

Diffusion of cultures is a fact particularly inimical to the idea of a law of historical culture series such as Morgan's, for diffusion of a trait into a new group may interrupt the natural development of culture at any point.[4]

Deliberate diffusion.—Purposeful or deliberate culture diffusion, belonging, of course, to a comparatively late date in social evolution, will be considered under the headings of colonization, politics, militarism, commercialism, and the missionary motive.

The migrations of individuals from group to group do not usually occur with any thought of transplanting a culture-complex. Most individual changes of permanent residence in remoter times were due to marriages out of the group, and there was little readjustment beyond that of the new member to the life of the group he or she had entered. If the newcomer introduced changes it was without the intention of changing the community, but of doing things in his or her

[4] A very interesting case of cultural diffusion, with geographic convergence, is that of the "Hoosier" population of Indiana—a group of southern traits in contact with others of northern origin.

accustomed way. Of course there has been a good deal of this, but it cannot be called deliberate diffusion. Whenever and wherever the motive of "going to seek one's fortune" was operative in individuals, culture was unconsciously diffused.

Colonization is a different thing. The mother-country remains the cultural center for a while, but the culture-patterns drawn from its life are deliberately introduced to a new area. Even when as is probably the case, the colony remains segregated for a long time from the native inhabitants, this situation will eventually give way to one in which the two will interpenetrate—unless the conflict be so sharp as to annihilate one party entirely, which rarely happens. The colonization of the Americas resulted in a nice diffusion of Spanish culture among the Indian population. Some of it has made a permanent place for itself, particularly the religious element, while the economic organization of large land-holdings, the hacienda, seems to be under fire after all these years.

Political and military diffusion of culture seem to go together. The former is apt to be a desire for dominance, and has to operate through war. Whatever may be said against war, it has served in the past as a means of spreading various cultures over the earth.

The commercial motive in culture diffusion is the most recent to display intense energy, yet it is very old. However, it is not so old as it at first appears, so far as deliberate activity is concerned. Trade in primitive times may to some extent have altered cultures, but more often it was an exchange of goods for consumption only. The tribe took what its neighbor had to offer, but did not learn to make that thing for itself. Of course even the use of the article involves a diffusion of culture, but the change is superficial. In modern times a new aspect of deliberate diffusion by merchants has come about. It is best illustrated by the profession and art of advertising, which in international ways seeks to create

a market for various wares, and to create a taste for what it has to sell.

The missionary motive is unique in that there is resident in the very thing diffused—usually religion—the idea of the necessity of diffusion. Missionary work has been a function of broader cultural movements. When a whole world culture has been on the move, as Latin civilization was against the barbarians, or European against Asiatic in modern times, missionary organization has been most successful. The "foreign missionary" idea is really an attempt at culture diffusion. Recently it has manifestly incorporated the idea of coöperation in the working out of truth from two points of view—supplementing rather than competing. Thus altered, it holds some of the finest promise for the future, for interracial adjustment.

(*b*) *Instances of Cultural Diffusion*

Some suggestions are given herewith for investigating concrete instances of cultural diffusion. Any number of cases can be added if the student is inclined to follow this fascinating subject:

(1) The horse culture.[5]
(2) The maize complex.[5]
(3) The heliolithic culture.[6]
(4) The spread of the Hittite iron culture.[7]
(5) Greek architecture.
(6) Roman law.
(7) Hebrew religious ideas.
(8) English representative government.
(9) Byzantine influence in Russian church life.
(10) Phœnician influence in the spreading of the alphabet.
(11) Alexander and Hellenic culture.
(12) Spanish culture in the southwestern part of the United States.
(13) Tea-drinking from the East, and the use of spices.

(14) The dissemination of revolutionary ideas under the Napoleonic regime.
(15) The popularity of base-ball in various parts of the world.
(16) The distribution of the "Boston baked beans" culture in the Middle West.
(17) The appropriation of snow-shoes and the game of la crosse from the Indians.
(18) The distribution in prehistoric times of the laurel leaf pattern in decorative design.
(19) The swastika.
(20) The "Arabic" numerals.
(21) The salt-beds, amber, coral, spice, and metal trade routes of early times as culture dispersion agencies.
(22) The distribution of portable ecclesiastical bells by Irish monks along continental pilgrim routes.

III. Conflict of Cultures

(*a*) *How Cultures Compete*

External conflict.—It would avoid a great deal of tragedy in human life if culture-complexes could continue indefinitely. But the principle of natural selection works as remorselessly here as elsewhere. Cultures compete and strive with each other in the sense that a readjustment of social groups disturbs the equilibrium of distribution of their culture traits, and necessitates a conscious or unconscious choice between them.

Conflict between two cultures, of which one belongs to a given group and the other does not, is about the same thing as conflict between the two groups. Therefore war is, of course, often an example of conflict of cultures.

Internal conflict.—Conflict of cultures within a group means as a rule that there are two or more lesser groups within the larger group, and these constituent groups may be in conflict, as well as their cultures.

5 Wissler, "Man and Culture," Chap. VII.
6 Wells, "Outline of History."
7 Breasted, "Ancient World."

(*b*) *Instances of Cultural Conflict*

The following cases of cultural conflict illustrate some the internal type and some the external:

(1) The contest between the cattle ranchers and the homesteaders in the plains country of the United States.[8]
(2) The conflict of the plantation slave-holding culture with the free-soilers in Kansas.
(3) The twentieth century Ku Klux Klan movement.
(4) Mormons vs. "Americans" in the Rocky Mountain states.
(5) Canadian French vs. New Englanders in certain Massachusetts and New Hampshire mill cities.
(6) The Dayton, Tenn., anti-evolution trial.
(7) The "little Italies," "little Russias," etc., of some American cities.
(8) The German and Scandinavian rural population islands of the Middle West.
(9) The "ethnic islands of expansion" of Germany into Slavic territory.[9]
(10) The Boxer movement in China.
(11) Greek relations with Persian culture.
(12) Athens and Sparta.
(13) "Long barrows" vs. "round barrows" in the New Stone Age.[10]
(14) The Crusades.

IV. Persistence of Cultures

(*a*) *Cultural Vitality*

Cultural resistance to change.—Sometimes culture traits survive so long after the need of them has gone that the

8 In contrast with this, the conflict of labor and capital is one of classes, not of cultures. The laborer is striving to enjoy the resources of the common culture on the same basis as the capitalist. Again, a reform group and an anti-reform group do not necessarily represent opposed cultures. Assuredly they did not in the case of northern abolitionists and anti-abolitionists. In the case of prohibition there is a suggestion of cultural conflict, but the old question of abstinence vs. indulgence comes nearer to it. Finally, competitive trade groups do not mean competitive cultures.

9 Semple, "Influences of Geographic Environment," p. 223.

10 Quennell, "New Stone, Bronze, and Early Iron Ages," p. 24.

question arises whether the human mind is not actually inimical to change. The truth is that it takes more than mere absence of utility to displace a culture trait, for the very existence of it depends upon habit, and the following of habit is pleasurable. Discomfort in the following of the old way must be greater than the pleasure of routine, if a new way is to intervene—either that or else some effective stimulus from outside must over-ride the old habit. Styles of clothing illustrate this, as do also persistent language traits. Various cases are known where adjoining tribes of low culture go on for generations hardly borrowing any traits from each other at all. Of course if the utility of a custom is very slight, it will not take much to dislodge it. But some traits of culture that seem to have no "practical" utility really have the great one of filling up the mental gap caused by helplessness or a sense of inadequacy. Thus many surviving superstitions perform the service of giving the person something to do in accordance with rules, and the effect is to relieve his mind. So it seems after all that culture does not resist change, but that rival ways have differing degrees of utility or satisfaction, and the older has the advantage of providing the utility of satisfaction in doing the usual.

There is one factor in the persistence of culture traits that is frequently overlooked. A custom that has existed for a long time appeals to the historic-mindedness of people, and thus has a value in its very antiquatedness. Historic-mindedness is the desire not to lose touch with what has been caught up by the flow of time. It is a form of social-mindedness. A trait that suggests respect for the past has cultural vitality, for it can send its roots into the soil of the human mind to feed on that desire to outwit "change and decay." In early society culture gets definitely associated with ancestral and group piety. In modern times a trait may be deliberately revived with the same intention, as for example the use of candles in windows on Christmas eve.

Another way in which cultural resistance to change is manifested is the tendency of the group in power to keep themselves so by rejecting social machinery that they are not used to. These groups exist politically, economically, religiously, and in other ways, and have a tendency to coincide and become one group. In primitive societies there is political inequality, the chief and council, or other governmental group, being conservative and custom-guarding. In modern times there is a pronounced movement of control toward the wealth-holding group, which is so resistant to cultural change that it often sanctions black lists of those who have made even moderate proposals for reshaping the cultural and social order. The ability of a religious culture (cult) to keep ancient forms alive is notorious. Then there is the vague but real group of parents, older people, and others who resist social changes because of their own comfort.

Loyalty and cultural persistence.—The trait of loyalty is very near to the source of the finest things in human thought and behavior,[11] yet it is not a simple thing. Its motives are not always the same; at least its values are various. These values it will seek to preserve. The dominant group rationalizes and idealizes its preferences and then discovers a sublime loyalty to them. As a rule, the more primitive the group is, the more persistently it holds against cultural change. This is not surprising. The reasons for aversion to change are apt to be fear and ignorance—fear of the unknown consequences of the change. Primitive peoples live so much nearer the margin of safety that it is natural that they should have more fear, and as their economic and intellectual advance has not carried them to the enviable position occupied by some modern societies in which laboratory experimentation can go forward in advance of actual adoption of a change, they must be more careful to cling to the culture of their ancestors. Thus we see that tradition and cultural per-

[11] Josiah Royce, "The Philosophy of Loyalty."

sistence, which are much alike, are rational "according to their lights."

Instances of Cultural Persistence

The cases of cultural persistence in the midst of progressive surroundings are often highly stimulating to the imagination, even mysterious and romantic. Tennyson has caught the mood of this social phenomenon in these lines in "The Passing of Arthur":

> Where fragments of forgotten peoples dwelt,
> And the long mountains ended in a coast
> Of ever shifting sands, and far away
> The phantom circle of a moaning sea.

Some interesting examples of cultural tenacity in or near a typically different pattern are the following:

(1) The persistence of the couvade in parts of mediæval Europe [12]
(2) Gypsy or Romany culture
(3) Survival of traits due to a previous environment, but no longer pertinent, e.g., the Turkish preference for mutton and goat's flesh over pork [13]
(4) Jewish culture
(5) The slowing down of the Russian soviet propaganda when in contact with Western culture
(6) The retention by the English people of their now nominal monarchy

Instances of Culture Fusion

Among the instances of fusion of cultures into a new form and quality, the following are conspicuous:

(1) Feudalism
(2) Primitive Greek with Ægean cultures
(3) Etruscan with Latin cultures

12 Cf. "Aucassin et Nicolette."
13 Semple, "Influences of Geographic Environment," p. 26.

(4) Norman with early English cultures
(5) Anglo-American and Continental fashions in clothes. For example, a Boston store, in one page of advertising, uses the following expressions: "A hat produced in our own *atelier*," "Our *Paris* office," "The *Kashmere* coat," "The *Tweed* coat," "Bordered *homespun*," "*Milanese*, Silkanese, or Tricot," "*pastel* shades of *beige*, green, blue, black," "*café creme*," "navy blue," "*Castilian red*," "*Monet blue*," "*Lucerne blue*," "*blue de Lyon*," "*georgette*," "Dress *ensembles*, *chic* for misses," "Kid *suede* gloves, Boulton thumbs."

Instances of Cultural Decline

Some examples of the decline or disappearance of a culture before the onslaught or the gradual erosion of other cultures are here suggested:

(1) The passing of the Puritan culture of New England
(2) The disappearance of the bison culture of the plains Indians
(3) The Mayan temple ruins in the Central American jungles
(4) The near annihilation of the early modern trans-Saharan trade, and its replacement by ocean trade
(5) The destruction of the trade in animals for sacrifice, brought about in the Roman Empire by Christianity

CHAPTER XXV

MAN COMES TO DARIEN

. . . like stout Cortez, when with eagle eyes
He star'd at the Pacific—and all his men
Look'd at each other with a wild surmise—
Silent, upon a peak in Darien.—KEATS.

I. LINES OF APPARENT DEVELOPMENT

(*a*) *A Backward Glance*

The rise to civilization.—In this final chapter we shall survey the whole social evolution of mankind, looking backward over the fields of development traversed through the ages, and, with that development in mind as a possible guide looking forward into the even more obscure reaches of the future.

From out of a fathomless biological history in which his human characteristics were projected onto the field of action, man stepped forward and off into some first series of acts constituting his slender body of culture. A minimum of tools; a suggestion of family cohesion; inexact horde limits for the hunting group; some regard for the dead, and perhaps a campfire;—these were practically all that he possessed in distinction from the beasts. Yet in such beginnings we discern the Emergent Society of Mankind, carrying itself forward on the tidal lift of great revolutionary, though slow, changes of Behavior Patterns. These changes, combined in myriad ways, may be discerned, with our present perspective, as divided into great time divisions (Stages); again, into great spatial or geographical divisions (Culture

Types); still again, into cycles of activity centered in one or another of the principal modes or aspects of life (Institutional Development).

The first great stage discernible in the remote past seems to have engaged the life of practically all societies on their way up from the primitive period. It was at bottom an economic movement, or at least it received its primal energy from an economic event: the development of the Hunting Economy. Speaking in the broadest terms, hunting brought at least enough division of labor to differentiate the food-getting activities of the two sexes; it reduced the influence of the family somewhat in favor of the tribe; it encouraged an elementary kind of warfare and also trade; and it brought about a pervasive form of psychic background and social organization and general outlook on life known as Totemism, in which human relationships are set forth in terms of animal kinship.

At the same time that totemism was dominating a large part of the world, another series of development, rising from the more vegetative and abundant environments, was bringing agriculture to the fore as an alternate line of emergence from primitive life. The idea of private property, which under a hunting economy tended to be restricted to personal property, now expanded in the direction of property in products. Relationship, perhaps matrilineal naturally, was preserved in various forms of the "matriarchate" rather longer in early agricultural societies than in pastoral groups. Sedentary and unspectacular arts and thought-ways were encouraged, such as weaving, pottery, and ancestor-worship. Something like our modern conception of political life appeared in the various forms of headship, from the matriarchal influence in the "Long House" of the enlarged communal group, to the headman or patesi of early Sumerian "city-states." Agriculture likewise varied from the merest "house-yard" or garden type to the settled field tillage of river-

valley communities and the specialized terrace agriculture and other forms met with in Asia.

Still a third type of life was the pastoral, based on the ownership of flocks and herds. If hunting is associated with forests, and agriculture with river-valleys, pastoral life is associated with the steppes or grass-lands, though not restricted to them. The pastoralists were nomadic and patriarchal, and in the earlier forms they were more likely to be monogamous, whereas, after the decline of the matriarchate, the primitive agriculturists, whose women were wealth producers, were inclined to polygamy.

Of the three variant master-types—hunting, agriculture, herding—that thus grew up from primitive life, the first did not eventuate in anything higher, but the second gave rise to civilization in the stricter sense of the word, and did so because, largely, of the impact of the third type upon it. The word "impact" is used advisedly: first, it suggests that the pastoral nomads actually moved from the grasslands and attacked the hoe-culture peoples; second, that the retention of a certain amount of zoöculture (as, for that matter, of hunting and fishing) within the agricultural economy stimulated the latter to new advances, such, for instance, as are illustrated by the population of a modern "mixed farming" region. To sum things up at this stage of the game: hunting, fishing, shepherding, animal husbandry, gardening, field culture were mingled in varying proportions depending upon local situations, but in general they progressed in importance in the order named. Private division of land was foreshadowing private property in land; pasturage and timber lands remained common for a longer time. Degrees of ability united with private holdings to foster social classes. Warfare made for a leadership of ability, and for slavery. A sort of primitive feudalism showed signs of appearing. War leaders achieved petty dominance, and were glorified into heroes and gods after death.

Civilization.—When the main current of social evolution had reached the stage indicated in the last paragraph, we may consider that "civilization" was about to begin. Civilization is no longer viewed with the complacent pride of a former time; it may be a form of mental and spiritual maturity followed by old age, or it may be a transition æon in man's life. Certainly the heart of a civilization, as the word implies, is the being "citified" in body and mind, and whether we view Babylon, Rome, or New York, we have abundant reason to reserve judgment on the value of being citified. It is a nice question whether today, in the United States, cultural advance is going to come about, and whether the fact that far less than 25 per cent of the population will soon be needed for raising food is to mean that the metropolitan centers will continue to grow, or whether certain forces are not in operation to alter the peculiar mode of city-domination that has been so common since long before the bells of London spoke to Dick Whittington. Withholding our discussion of the future of the city for a little, let us see what it is that gives title to civilization. So many characteristics have been stated as essential, by one authority or another, that the matter is a trifle vague. A certain degree of political control, the existence of written records, a complex economic organization, the use of metals, a degree of sedentary life and urbanization—all these and others have been suggested, yet no one of them is absolutely essential. If one of the list were to be insisted on as indispensable, it would probably be the possession of written records, but the significance of a people's having records, a literature, and written communication lies in a certain attainment of self-awareness and group-continuity, a transcendence of time limitations. The very essence of civilization is in a collection of proverbs, for when a people have become "wise" enough to hand on in writing their concentrated experiences with a smile and a shrug, they have entered the shadow of their

own achievements. For similar reasons, another good symbol of civilization is a sun-dial.

At any rate, the developments which take place characteristically in civilizations are in the direction of clearer consciousness of social unity and common life. The development from open country and hamlet, through village, town, city, and metropolis, with all the sophistication implied by the process, goes on. But for a long time no great cities appear. Towns become centers of petty states. About this time we look for *kings* and for the *priesthood,* then presently a nobility or an official class of some sort—often both, with the latter serving as a balance to the centrifugal tendencies of the aristocracy. Warfare comes into its own as a behavior pattern, but without great constructive effect. Trade routes, slavery, and shifts of territorial empire are influenced, but the culture of the affected peoples as a whole counts for more than the occasional cataclysm. The conquering community itself goes on its way relatively unaffected by its spectacular exploits. The episodic aspects of its life are in the hands of a self-constituted, eclectic, superimposed governing group; the true cultural life of the people is not in the politics. The common life is thus renewed at the roots, while the tendency of the political group to subordinate one part to another somewhat interferes with the common life.

Land-hunger and power-hunger, with their shifting arrangements, particularly as demonstrated by the men of the grass-lands, plus the internal cultural and political developments of the agricultural societies, produced the picturesque and varied nations of early historic times. These large communities did not all develop after the same pattern. There was the empire type, growing by territorial expansion and accretion, and ruled by the semi-divine king. There was also the small but internally highly active free state, usually centering in a city, and with a jealously guarded definite form of government. Interesting and inspiring as the city-

state is to us, and deathless as the originator of a great culture, we have to record that as to form it could not lead the way into further developments, but slowly come to a stop in its own narrow orbit. It was too small to grapple successfully with the world-scale economic problems; it never sensed the fullness of political freedom, and it could not submerge itself willingly in larger units. Perhaps most important of all, there was no free labor class. This great lack was met by certain populations that began to leaven the historic lump far back, but which come into their own on the continent of Europe in time to lay the foundations of a peasantry or yeomanry engaged in live-stock agriculture,[1] and capable of producing the bourgeoisie of modern times, in national states.

Flowing down out of the past in living streams, two great forms of cultural life have been running parallel but independent of the rise and fall of states, and we inherit them in full volume, augmented in some respects by our own recent efforts. One is the intellectual enlightenment, the practical and applied science, the art, the philosophy, by which man seeks familiarity and mastery of the world. The other is the religious dynamic of personal and social salvation. These compete for man's allegiance, though they are but the obverse and reverse of the same thing.

Such, in broad strokes, is the picture of man's past. What can we discern emerging from it into special significance for the present and the future? This we shall try to answer in our next section—knowing that the answer must be a groping one at best.

(*b*) *Emergent Factors in Society*

The synthesis of East and West.—In casting about for the really significant developments in social evolution we must

[1] The fictitious but historically informing character of John Ridd in "Lorna Doone," with his hay-ricks, his sheep, his independence against aristocratic lawlessness, and his acquisition of a family coat of arms up at London, well illustrates the point.

try to avoid two pitfalls: one is mistaking the temporary for the permanent change, and the other is confusing what transpires in a limited field with the true world developments. There has been a good deal of expansion of mind and enlargement of outlook in the thinking world of late, but even those who have attained a certain catholicity in national matters sometimes fail to see that the biggest social movement of all is taking place before our very eyes. It is the approach of the Orient and the Occident toward some great unity. These immemorial halves of the human world, so long alien to each other, are at last swinging into the first measures of some vast and intricate symphony of which the theme is as yet unannounced; but which can hardly be less than a consummation of all the partial movements thus far wrought out by human races.

The differences between the Occident and the Orient are suggestive of a fascinating future for social evolution if the two should react intimately upon each other.[2] The Western World—Europe and America—has developed a type of individualism well represented by the frontiersman with his ease of manner and motion, his initiative and adaptability, his naïve optimism and objective thought-interests, his democracy and mass education, and his national states with their ideal of "liberty, equality, fraternity." We must add to this type a variant, but a highly important variant, the scientist with his study of nature carried out in practical inventions, and his inclination to look upon history as evolution, and upon evolution as progress. The great Asiatic East, holding the greatest population masses and the oldest continuous civilizations of the world, is characterized by patience, wisdom based on experience, passivity, introvertive thought, disillusionment and disbelief in history and evolution, philosophical and religious thought rather than scientific; empire politics without "imperialism," and broad-based pyramidal stratification of

2 See Giddings, "Studies in the Theory of Human Society," p. 179.

social classes rather than democracy. The Brahmin priest, the Chinese mandarin, and the ubiquitous coolie could serve as Oriental types of what social evolution has arrived at in the twentieth century.

However much we may insist—and rightly—on the essential unity of mankind, it is clear that this unity has never yet clearly emerged into actuality. But in the international and inter-cultural era of television, intercontinental airplane service, and mutual trading of styles which has come to pass, we see the unquestionable beginning of a great human *rapprochement.* Unity consists in the consciousness of social relationships arrived at by evolution.

The recognition of human value.—The attitude of mind that puts a high evaluation on the individual in his social setting is usually called democracy. But democracy in modern times has acquired certain definite meanings, at least in common use, revolving about the thought of privileges enjoyed, functions permitted, or powers inherent in personality. Western peoples have especially adhered to this theory, and the central item of their democracy has been political—the right to vote. There are certain moods of reaction observable today [3] indicative of another interpretation of the democratic theme in the direction of equality of opportunity rather than equality of power. At all events, although neither political nor economic democracy has ever been fully achieved, the ideal is a very present force today in the social stirrings and the regathering of energies so manifestly going on. Whether democracy appears as equality of power, of opportunity, or of service, it remains true that the recognition of human value is an emergent factor in social evolution.

Internationalism.—For a number of generations now, the civilized world has accepted the idea of exclusive and some-

[3] E.g., the Mussolini régime in Italy, and the Soviet movement in Russia. Diametrically different as these two social schemes are, they are both impressed with the idea of restricted participation in control of social policies.

what jealous national states. The national state is a supposed political organization in a definite territory of people of one "blood." Of course it is not really any such thing, but rather a cultural and psychic grouping. Comparatively recent as the nationalistic habit of mind is in history, society is already evolving from its creative depths something to supersede it, at least in its aggressive and provincial aspects. Patriotism, the dynamic of nationalism, is of questionable further service. Regard for the cultural heritage of one's group may continue without most of the manifestations of nationalism with which we have become too familiar. In its place internationalism will function. Internationalism emerges as a consciousness of social relationships beyond the limits of *any* cultural grouping.

Education.—A survey of the world today shows that education is on the up-wave. In places there seems to be little less than a stampede for education. It is prescribed for all problems; it is applied to old and young alike; it takes place far beyond the school-room and the campus; in short, education has arrived on the scene. In this new magnitude we may think of it as one of the emergent factors of society. The function of education, from the standpoint of the social group, has always been to fit the immature members for entrance into the cultural activities of the group. The newness of the present situation lies in the convergence of these two factors: (1) the great economic accumulation and well-being of the world, compared with previous ages, and (2) the great accumulation and complexity of culture patterns with which familiarity is desirable. The first renders prolonged and universal education possible; the second makes it highly advisable. Mass education thus emerges as a great social possibility.

Science.—Western culture has given itself heartily over to science. This fact is one of the great group phenomena of all time. It takes on a twofold aspect to the student of

society. In the first place there has been a small directive inner group, the real scientists, who have, so to speak, raided the wilderness of truth and brought back the treasures of knowledge with which others, the inventors and appliers of science, have built our city of habitation. And then there has always been the great mass who have entered into the fruits of the scientists' labors without comprehension and with little appreciation.[4] Their intelligence rises to the level of being able to use the appliances for social comfort and pleasure and for economic gain which the scientific group has provided.

II. Present Problems

(a) *Older Problems*

The insistent major problems of society.—The outcome of social evolution so far is a moderate attainment of mastery over natural forces and of adaptation of conduct patterns to the natural forces. At the same time an array of problems confronts society, and these call for further adaptation and social evolution. Moreover, as one scans these problems of society, he perceives that they are new forms of age-old challenges—a shifting but recurring series of unsolved major problems, to which man must ever return and which perhaps can never be more than temporarily settled. These permanent problems may be listed as follows:

1. *The population problem.* Eugenics, or the problem of insuring that every individual shall come into existence rationally and not by accident. Such questions as birth control and companionate marriage are special phases of the population problem.
2. *The psychological problem.* The question whether we can find

[4] Compare the scientific standing and the social effectiveness of these men: (1) A merchant or a ship owner who makes use of the Panama Canal; (2) Gen. G. W. Goethals, who built the canal; (3) Gen. Gorgas, who rid the canal zone of yellow fever, making work possible there; (4) Walter Reed, the bacteriologist who discovered the method of transmission and the preventive method for yellow fever; (5) the soldier who allowed himself to be infected with the germ of yellow fever for experimental purposes.

out enough about the nature, growth, and hygiene of the human mind to enable us to let each personality emerge from its biological and social background without being hurt or warped on the way.

3. *The economic problem.* The question whether the golden mean can be found whereby the greatest coöperative production of wealth may be conjoined with the greatest individual sharing in the use of it.
4. *The technical problem.* The question whether man's hands and tools can keep pace with his brain and yet not mechanize his soul.
5. *The political problem.* How to maintain social control, lodged in some authoritative group, on the one hand, and preserve the civil liberties of the individual and the right of primary democracy on the other.
6. *The sociological problem.* The problem of the related functioning of natural groups and voluntary social groups so that the largest measure of enrichment of life may be achieved with the least frustration of individual traits.
7. *The intellectual problem.* Can experience be transmuted into knowledge, and knowledge into understanding, without cutting the nerve of personal vitality?
8. *The scientific problem.* Can the discovery of the laws of the universe be applied to human life so as to heighten its possibilities indefinitely?
9. *The educational problem.* The placing of each immature individual in such degree of effective response to the world as he is capable of carrying on, and the enlargement of his response-patterns as he develops.
10. *The historical problem.* The problem of keeping an unbroken connection and a keen, sympathetic insight into the past of our race.
11. *The moral problem.* How to conserve the values demonstrated by past experiences of society without cramping the individual in his necessary search for new ways of life.
12. *The ethical problem.* The fine task of pursuing personal desires in a social environment without degrading other persons to the position of means to one's own ends.
13. *The æsthetic problem.* Can life be lived on a pleasure basis without brutalization?
14. *The religious problem.* Can loyalty to values be maintained parallel with belief in material facts?

The oneness of the major problems.—Every one of the problems just listed is a variation on the great central problem: to what extent shall the individual lose himself in society and to what extent shall he proceed as an end unto himself? The answer has long been guessed: the two horns of the dilemma can be rounded over till they are one and the same. Social evolution is the human adventure of of demonstrating that truth.

(*b*) *New Emergencies*

New forms of old problems.—After social evolution had reached a certain pitch of intensity, and human life became more congested and changed more rapidly, some old facts assumed new aspects, and new problems resulted. For example, such matters as the purity of the water supply and the question of sanitation, though they had to be looked after in some fashion always, never took on the dimensions of an insistent social problem till civilized populations appeared.

Another reason why new problems have arisen in recent times is the much more rapid rate at which new things have had to be assimilated. The following exercise, if worked out carefully, will show the acceleration of invention and the growing difficulty of adjusting social movement to the clutter of things:

Make a list of the things which have come into common use during these successive periods: (1) From the dawn of human life to prox. 2850 B.C.—about the period of the first dynasty in Egypt. (2) For the four thousand years from 2850 B.C. to A.D. 1150 (3). For the four hundred years from A.D. 1150 to 1550. (4) The two hundred years from 1550 to 1750. (5) The hundred years from 1750 to 1850. (6) The fifty years from 1850 to 1900. (7) Since 1900.

Some examples of the newer social problems.—Certain of the newer social problems, brought vividly before us by modern developments, are herewith mentioned briefly.

Biological improvement.—This problem is that of substituting social control in physical evolution. That this can be done in great measure outside the human realm is unquestioned. The difficulty arises that if biological improvement of the human stock were carried on, by scientific selection of parents, the characters developed might not be socially better. Although certain theorists have carried the Darwinian doctrine of selection to such an extent as to denounce Christianity for its preservation of the weak and unfit, it is by no means evident that the personal traits of the "weak" have not been socially advantageous. But, of course, if any trait is demonstrably bad for society, it ought to be eliminated, if that can be accomplished without some accompanying social injustice.

Problems of the machine.—Of all the ages of man, this is the greatest in respect of mechanical service exacted from nature to carry out his wishes. The strangest inversion of history has occurred: hand-made goods are valued, if at all, largely because they are unusual. The problem arising from the dominance of the machine is that of mechanization, monotonizing, speeding, and the throwing off of concentric rings of population classes. Because the machines set the pace, other departments of life become stimulated to high pressure,[5] and a restless, willful temper is engendered which seeks here and there for the quick satisfaction of ephemeral desires. It is probably no accident that the nation most completely equipped today with machines is the one most noted for hurrying about saving time but not knowing what to do with it after it has been saved.

There are a great many other recently emergent social problems, perhaps as important as the foregoing, but no attempt at completeness can be made here.

5 See Freeman, "Social Decay and Regeneration."

III. Forecast

(*a*) *Probable Changes in Culture Patterns*

"I will lead them in paths that they have not known."

Quo vadimus?—There is a great deal of natural concern as to whether the world is getting better or worse, but the question underlying that is whether the world is on its way to anywhere in particular and what the social structure of the future will be. This is not such an academic question as might be supposed, for since the day of Lester F. Ward the concept of social telesis[6] has been more or less familiar. Briefly, the idea is that the time has come when it is no longer ridiculous for mankind to plan toward an end in social evolution. The end can only be chosen within the limits allowed by the nature of things, of course, but within such limits, control in evolution is perhaps feasible. This is one of the most awe-inspiring possibilities ever confronted by man. If it is a fact, then social purpose could become at once an operative force. In that case "Quo vadimus?"—"where are we going?"—becomes a practical question.

Social telesis.—Among the new forces of the future in social evolution, this of social telesis is probably the most striking, and from it will come important changes in the culture patterns of the whole world. Already there are many indications that society is getting ready to assume control of its evolution. The situation may be likened to the history of balloons. For generations they were sent up to drift with the wind, but recently the dirigible balloon has become a fact. Is society dirigible? Some of the attempts at laying a course and steering by it are found in the many societies and organizations that contemplate a changed social order; for example, the peace societies, the temperance organizations,

[6] First stated in "Mind as Social Factor," Ward's "Glimpses of the Cosmos," Vol. III, 1883, p. 179.

the birth-control and eugenics associations, the missionary societies, the institutes and foundations under which vast sums are administered in constructive ways, the semi-political organizations such as certain socialist groups, etc. Political parties and even governments sometimes assume this character, as in the case of the Soviet government of Russia. The organized religions of the world have always been close to the idea of social telesis, but often have insisted on a mere holding to an established course. But on the other hand, the prophetic movements that foresee necessary changes in the life-ways of the race have sprung from religious soil time and again. It is difficult to draw the line between real telic agencies and others, but an illustration may help. A society for the buying and public use of a forested area which might otherwise be stripped of its timber is not strictly telic, for it does not contemplate a change in the established procedures of society, nor does it seek to avert such a change, though it does aim at control in a specific social situation. But the conference on rural life called by President Roosevelt was an example of social telesis, for there was behind it the realization that social development had taken a certain course over a long period, and that it was desirable to alter that general course. Thus social telesis appears to be the introduction of rational thought into the field of a social complex.

Some probable changes in culture patterns.—Some of the changes in social procedure that an era of control may bring about are these:

1. Social refusal of the right to propagate on the part of the defective individuals in any group.
2. Insistence on full knowledge of himself by every person, including sex education.
3. The diffusion of language knowledge, and perhaps the development of some international language.
4. The utilization of some form of atomic energy.
5. A readjustment of the rural-urban opposition.

6. Some modification of the "acquisitive" capitalistic society of the present.
7. A probable resurgence of the attempt to de-mechanize life and to devote its surplus to fine and beautiful expressions.

(*b*) *The Idea of Progress*

In the mud and scum of things
There alway, alway, something sings.
EMERSON.

The apparent fact of progress.—Whether it be demonstrable or not, there is an apparent progress felt by most people to be going on from age to age. A comparison of life as lived today in America with the life of our colonial ancestors or with that of *their* ancestors under mediæval serfdom; summaries of civilization in the ancient Orient, Greece, Rome, and modern Europe; or, most startling of all, a comparison of the life of man in the Old Stone Age with civilized life, conveys the vivid impression that the world of human life is on its way toward better things. It is only when we discover that in capacities for enjoyment we are not certainly superior to the Greeks; that even our items of material culture have a disconcerting way of appearing in antiquarian finds; that the heights of art and of creative religion seem to be far behind us; that man perhaps moves in cycles, but not always forward; that some cultural values have undoubtedly been lost forever;—it is then that we are forced to ask what we really mean by this elusive thing called Progress. To the Asiatic philosophy,[7] progress is a mirage. "Maya," the world-weary succession of forms whereby empires wax and wane, kingdoms rise and fall, leading nowhere, seems self-evident. To the typical western mind progress is self-evident.[8] Certain opportunities opening before society

7 See Thomas, "Source Book for Social Origins," p. 170.
8 Sir Oliver Lodge: "We are deaf and blind to the imminent grandeur about us if we have not insight enough to recognize in the infinite progress toward perfection, the ever-growing garment of a transcendent God."

stir our enthusiasm. We see them as forward steps to be taken, but it is possible that they are the kind that a squirrel takes when running in a revolving cage.

The real nature of progress.—If we take a long enough backward glance, we feel somewhat assured about progress in the individual. The skull of the Piltdown man set alongside that of a modern Englishman seems to leave no room for doubt. The frontal regions have developed, and man has acquired familiarity through them with the higher intellectual life. But within historic times we cannot make out any certain continuation of this progress in body and brain. What we do find is an immense cumulative culture. But since culture is a social thing, we are forced to conclude that for man today the idea of progress must be a social one. An increased ability to coöperate, due to social machinery, may be what progress means.

Civilization as a criterion of progress.—Looking at the various things that distinguish a civilization from a "lower" grade of culture, we notice that growth in coöperative relationships is the characteristic of them all. Urban life, a complex economic structure, the developed state, the linking of past and present by written records—all these imply that progress inheres in the attainment of finer mutual functions. Certainly we have no reason to doubt that personal happiness and social betterment go hand in hand. The ever-increasing measure of these things is the Emergent Society.

APPENDIX

CHAPTER I

INTRODUCTION

Questions for Discussion

Discuss the following paragraph, showing as many evidences of social development as you can, and contrasting the total situation with that of primitive man. "An employee hurt his thumb, wrapped it in bandages soaked in kerosene, and then accidentally set fire to the bandages in trying to light a cigarette. Held, that the further injury from burning was proximately caused by the original injury, and, therefore, compensable."

Topics for Investigation

What possible limitations has the evolutionary theory in social science?

Readings

Case, C. M., "Outlines of Introductory Sociology." *Introduction*, Secs. 2, 3; Chap. II, 2, *The Super-Organic as a Fourth Order of Phenomena.*

Hobhouse, L., "Social Development," pp. 29–37, *A Survey of Social Development.*

Thomas, W. I., "Source Book for Social Origins," pp. 13–22, *Crisis and Control.*

Ward, Lester F., "Pure Sociology," pp. 15–36, *Continuity in Social Evolution.*

Ward, Henshaw, "Evolution for John Doe."

Kroeber, A. L., "Anthropology," Chap. I, *Scope and Character of Anthropology.*

CHAPTER II

THE INFLUENCE OF ENVIRONMENT

Questions for Discussion

How does geography interfere with cultural change?

Does culture itself interfere with cultural change?

State which you consider the more important consideration: (*a*) that culture traits are correlated and thus maintain a sort of equilibrium which makes a change of any one culture trait distasteful, or (*b*) that one trait of a culture group can frequently be changed without affecting the others.

Topics for Investigation

What is the science of ecology? What affiliations has it with social science?

Trace the parallel 40° N. around the earth on a map, listing the points of historical and cultural interest on or near it. Does any other parallel equal it in this regard? What conclusions do you draw?

Readings

Bernard, L. L., "Introduction to Social Psychology," Chap. VI, *Environmental Bases of Behavior.*

Brunhes, J., "Human Geography."

Fairgrieve, J., "Geography and World Power."

Febvre, J., "A Geographical Introduction to History," Part II, Chap. II, *The Determination of Natural Areas and their Boundaries.*

George, H. B., "The Relations of Geography and History."

Gilfillan, S. C., "The Coldward Course of Progress." (*Pol. Sci. Quarterly,* v. 35.)

Goldenweiser, A. A., "Culture and Environment." (*Amer. Jour. of Soc.,* Mar., 1916.)

Huntington, E., "Civilization and Climate."

Semple, E. C., "Influences of Geographic Environment."

CHAPTER III

THE BIOLOGICAL BACKGROUND

Questions for Discussion

Is there any observed basis for the idea of Nordic superiority?

On a clock-dial of twenty-four hours, let each hour equal 25,000 years. Assuming that the hands have moved once around the face of the clock since the time of human origin, and now point to noon, at what point would you indicate (1) pithecanthropus erectus, (2) Piltdown man, (3) Cro-magnon man, (4) the beginning of the Christian era, (5) the discovery of America?

Topics for Investigation

The Malthusian theory.

Lamarck vs. Weismann as to inheritance of acquired characters.

The cephalic index in anthropological study.

Monogenesis vs. polygenesis in the origin of the human race.

Readings

Bernard, L. L., "Introduction to Social Psychology," Chap. V, *The Organic Bases of Behavior;* Chaps. VII–XII, *The Foundations of Collective Behavior.*

Blackmar, F. W., "History of Human Society," Chap. IV, *Prehistoric Man.*

Case, C. M., "Outlines of Introductory Sociology," pp. 417–422, *Population Growth.*

Guerard, A. L., "French Civilization," Chap. IV, *Diversity of the French Race.*

Hertz, Friedrich, "Race and Civilization."

Keith, A., "Differentiation of Mankind into Racial Types." (In Case, "Outlines of Intro. Soc.," p. 201 ff. Special reference to Endocrine Glands.)

Kroeber, A. L., "Anthropology," Chaps. II–IV, *Fossil and Living Races.*

Pittard, E., "Race and History," Chap. IV, *Primitive Human Races.*

For Man's Place in the Tree of Life, see the following references:

ELLIOT, F. G. S., "Prehistoric Man and His Story."
HUMPHREY, S. K., "Mankind."
KEITH, A., "The Antiquity of Man."
MCCURDY, G., "Human Origins."
OSBORN, H. F., "Men of the Old Stone Age."
OSBORN, H. F., "Man Rises to Parnassus."
SMITH, G. ELLIOTT, "The Evolution of Man."
WHITNALL, H., "Dawn of Mankind."
WILDER, H. H., "Man's Prehistoric Past."

CHAPTER IV

THE PSYCHOLOGICAL BACKGROUND

QUESTIONS FOR DISCUSSION

In view of what was said in this chapter about alternately social and selfish manifestations of the root-interest, what do you think of the statement that Puritanism "is a sort of recurrent divine pulse of the universe"?

TOPICS FOR INVESTIGATION

Construct a satisfactory scheme to show the "original nature" or physical and psychical endowment of man, taking into account the following factors: (1) the anatomical and physiological nature of the species; (2) the nervous mechanism; (3) the ductless glands.

READINGS

BOAS, F., "The Mind of Primitive Man."
LÉVY-BRUHL, L., "Primitive Mentality," Intro., Chaps. I and XIV.
MARETT, R. R., "Psychology and Folklore."
OGBURN, W. F., "Social Change," Part I, *The Social Heritage and the Original Nature of Man;* Part IV, *Cultural Lag.*
STORCK, J., "Man and Civilization," p. 88 ff., *Values.*
TOZZER, A. M., "Social Origins and Social Continuities," Chap. II, *The Nature of the Savage and of His Society.*
TROTTER, W., "Instincts of the Herd in Peace and War," pp. 112–126, 132–139, *Gregarious Traits in Man.*

CHAPTER V

THE DEVELOPMENT OF SPEECH

Questions for Discussion

Does current speech give you the impression that language is becoming a more perfect social instrument?

Topics for Investigation

Why do Roumanians call themselves Romans?
What did the Greeks mean by the term "barbarian"?

Readings

Case, C. M., "Outlines of Intro. Soc.," Chap. XII, *Language and Group Life.*
de Laguna, T., "The Factors of Social Evolution," Chap. XIII, *Improvement of Communication.*
de Laguna, Grace, "Speech: Its Function and Development."
Kroeber, A. L., "Anthropology," Chap. V.
O'Neill, J. M., and Weaver, A. T., "The Elements of Speech," pp. 1–63.
Sapir, E., "Language: An Introduction to the Study of Speech."

CHAPTER VI

TOOLS, FIRE, WEAPONS

Questions for Discussion

Has tool-using been more valuable in social evolution as a means to an end or as an end in itself?

Topics for Investigation

Look up the various forms of the fire-myth.

Readings

Case, C. M., "Outlines of Intro. Soc.," Chap. XIV, *Inventions and Industries of Primitive Peoples.*
de Laguna, T., "The Factors of Social Evolution," Chap. IX, *Utilization of Tool Materials.*

KROEBER, A. L., "Anthropology," Chap. VI, *Beginnings of Human Civilization.*
MASON, O. T., "Origins of Invention."
SUMNER and KELLER, "Science of Society," Chap. VIII, *Fire.*

CHAPTER VII

METAL CULTURE

QUESTIONS FOR DISCUSSION

Considering brick, pottery, and concrete (cement) as forms of stone, how would you rank wood, stone, and metal as to relative importance in human history?

TOPICS FOR INVESTIGATION

To what extent have metal cultures corresponded to general periods of culture?

READINGS

CASE, C. M., "Outlines of Intro. Soc.," Chap. IX, *The Metal Cultures.*
WILDER, H. H., "Man's Prehistoric Past," pp. 234–265, *Copper, Bronze and Iron Ages.*

CHAPTER VIII

EARLY FORMS OF FOOD-GETTING

QUESTIONS FOR DISCUSSION

What is the Malthusian Doctrine? How far is it applicable today? Has every great era of human development been preceded by an advanced step in food-getting?

TOPICS FOR INVESTIGATION

What social evolution is suggested by the word "meal"?

READINGS

FEBVRE, L., "A Geographical Introduction to History," pp. 247–260, *Hunters and Fishers*
WUNDT, W., "Elements of Folk Psychology," Chap. II, *Totemism.*

CHAPTER IX

ZOOCULTURE

Questions for Discussion

What are the socio-ethical aspects of the revival of the nomadic spirit in connection with the automobile?

Natural grasslands, steppes, and prairies have beauty. A meadow has charm. The difference is a cultural one. What is it?

Topics for Investigation

Consider each of the following as to social character and influence upon man in his association with them: horse, camel, cat, domestic fowl, duck, goose, swan, guinea-fowl, peacock, turkey, yak, llama, alpaca, elephant, reindeer, hare, bee, other domesticated or partly domesticated animals.

Readings

Febvre, L., "A Geographical Introduction to History," pp. 280–286, *Oscillations of Nomadism.*

Hudson, W. H., "A Shepherd's Life."

Mackenzie, D. A., "Ancient Man in Britain," *The Faithful Dog.*

Sumner and Keller, "Science of Society," Chap. IX, *Appropriation of Energies: Animals.*

CHAPTER X

AGRICULTURE

Questions for Discussion

What evidence can you suggest that "matriarchy" may actually have succeeded patriarchy, where agriculture was concerned?

Topics for Investigation

Does history show that the most completely agricultural peoples are the most advanced in culture?

Readings

Febvre, J., "A Geographical Introduction to History," p. 290 ff., *Transition Types in Agriculture.*

Roth, H. Ling, "On the Origin of Agriculture." (*Jour. of the Anthrop. Institute,* 16: 102; reprinted in Thomas, "Source Book for Social Origins," p. 98.

CHAPTER XI

ECONOMIC DEVELOPMENT

Questions for Discussion

What sociological insight and economic meaning can be discerned in the Biblical presentation of the perfect society of the future as a *city* of God?

What points of excellence do you see in the following stages of economics proposed by N. S. B. Gras: (1) Collectional economy, (2) Cultural nomadic economy, (3) Settled village economy, (4) Town economy, (5) Metropolitan economy?

Topics for Investigation

Stages in the development from primitive barter to modern commerce.

The history and social significance of the inheritance tax.

Readings

Bücher, Carl, "Economic Life of Primitive People," in Thomas, "Source Book for Social Origins," p. 112.

Case, C. M., "Outlines of Intro. Soc.," Chap. XV, *Primitive Economic Institutions.*

de Laguna, T., "The Factors of Social Evolution," Chap. XII, *Co-operation and the Division of Labor.*

Gore, Chas., *et al.,* "Property: Its Duties and Rights," Chap. I, *Historical Evolution of Property,* by L. T. Hobhouse.

Gras, N. S. B., "Anthropology and Economics." In Ogburn and Goldenweiser, "The Social Sciences."

Sumner and Keller, "The Science of Society," Chaps. IV–VII, *Industrial Organization,* Chaps. XI–XIII, *Property.*

CHAPTER XII

THE ARTS OF LIFE

Questions for Discussion

What difference is there between the fine arts and the practical arts?

Topics for Investigation

In the same manner in which the social significance of some of the craftsmen was described in this chapter, try to reconstruct the following as cultural agents:

The Carpenter, the Joiner, the Turner
The Cook, the Baker, the Miller
The Brewer, the Vintner
The Clerk, the Scrivener, the Bellman, the Publisher
The Mechanic, the Engineer
The Plumber
The Lapidary, the Glazier, the Glassblower

Readings

Goldenweiser, A. A., "Early Civilization," Chaps. VII–VIII.
Pitt-Rivers, A., "Early Modes of Navigation." In Thomas, "Source Book for Social Origins," pp. 405–425.
Quennell, "Everyday Life in the New Stone, Bronze, and Early Iron Ages," pp. 120 ff., *Weaving.*
Tylor, E. B., "Origin of the Plough and Wheel-carriage." In Thomas, "Source Book for Social Origins," pp. 399–404.
Wilder, H. H., "Man's Prehistoric Past," p. 220 ff., *Pottery.*

CHAPTER XIII

WARFARE

Questions for Discussion

Could warfare have been avoided in the past without cultural loss? Can it be in the future?

Topics for Investigation

Warfare as a cultural game among lower peoples.

READINGS

CASE, C. M., "Outlines of Intro. Soc.," Chap. XXIV, *Social Opposition.*

DE LAGUNA, T., "The Factors of Social Evolution," pp. 139–154, *Social Darwinism.*

NASMYTH, G., "Social Progress and the Darwinian Theory," Part I, Chaps. I, III, V.

PITT-RIVERS, A., "Primitive Warfare." In Thomas, "Source Book for Social Origins," pp. 373–399.

SUMNER and KELLER, "The Science of Society," Chap. XIV, *Antagonisms and War.*

TROTTER, W., "Instincts of the Herd in Peace and War," pp. 126–132, *War and Biological Necessity;* p. 139 ff., *Gregarious Species at War.*

CHAPTER XIV

EARLY BUILDING

QUESTIONS FOR DISCUSSION

Compare the cultural advance made in human dwellings and within them with that made outside them.

TOPICS FOR INVESTIGATION

The "tepee" and the "wigwam" as culture traits, and their distribution.

READINGS

See "house," "housing," "shelter," etc., in anthropological works.

CHAPTER XV

THE ORIGIN OF THE FAMILY: MARRIAGE

QUESTIONS FOR DISCUSSION

Is there any connection between biological facts and the widespread social disapproval of incest? Under what circumstances has society relaxed its disapproval?

Is the competition between women and men for positions in business and the professions desirable as removing artificial barriers, or undesirable as reducing variety to uniformity by making women more like men?

In the past the difference between the sexes has reappeared in a scheme of things under which man has usually been at an advantage, as evidenced by the general run of laws as to property rights, inheritance, family and political rights, and freedom from restraint. Related to this has been a certain traditional preference for male children, a premium upon boys, as shown in the customs and literature of many peoples. (Cf. Job 1:2; 42:13.) Many attempts have been made to discover how to predetermine the sex of a child. Would such knowledge be socially desirable? Are there limits to the social expediency of our scientific knowledge?

Males are said to be more *katabolic,* females more *anabolic.* What does this mean? What does it argue as to natural division of labor? Is such a division of labor being relegated to the past?

Does the course of human history suggest that mankind has been progressing toward a sane and healthy attitude toward sex?

Among Western peoples is it true to any extent that an economic surplus encourages polygyny?

Is it true that monogamy is coincident with the most progressive cultures?

Does the child of today get a fairer and more healthful presentation of the facts of sex than the primitive child?

Can man synthesize the two motives of respect (fear, reverence) for woman, and freedom (self-expression)?

What do you think of the following: "Of all the actions of a man's life his marriage doth least concern other people; yet of all actions of our life it is most meddled with by other people." (John Selden.)

Topics for Investigation

Mendel's laws of inheritance, especially in their social bearing—for example, among children of the same parents who vary from each other in a marked degree.

Some old and interesting questions grow out of the supposed or real differences between the sexes. Is there a feminine type of mind? Are there certain intellectual pursuits in which women are less proficient, and vice versa? Do women arrive by "intuition" at conclusions which men reach by logic? If women do drive auto-

mobiles as skillfully as men do, is there nevertheless a woman's way of driving? What social implications have these questions?

Is there a discoverable ratio between number of offspring and biological development? between number of offspring and intelligence? social capacity? height of civilization? standard of living?

What relationship have the terms: *sib, sept, clan, gens, phratry, tribe?*

Readings

Briffault, R. S., "The Mothers."
Case, C. M., "Outlines of Intro. Soc.," pp. 327–340, *Primitive Social Organization.*
Crawley, E., "The Mystic Rose," *Sexual Antagonism and Taboo,* reprinted in Thomas, "Source Book for Social Origins," pp. 512–529.
Groves, E. R., "The Marriage Crisis."
Knight, Peters, and Blanchard, "Taboo and Genetics."
Langdon-Davies, "A Short History of Women."
Lowie, R. H., "Primitive Society."
Margold, C. W., "Sociological Approach to Sex Conduct," *American Journal of Sociology,* XXI, 455 and 634.
Sumner and Keller, "The Science of Society," Part V, *Self-Perpetuation.*
Tozzer, A. M., "Social Origins and Social Continuities," Chap. IV, *Marriage and the Family.*
Westermarck, E., "A Short History of Human Marriage."

CHAPTER XVI

THE FORMS AND FUNCTIONS OF THE FAMILY; THE HOME

Questions for Discussion

Viewed in the light of the home as a social institution, what can be said for or against co-education?

Economic considerations aside, is a small number of children preferable to the so-called old-fashioned family?

What socio-biological justification has the father of a family for carrying life insurance? Should not natural selection be allowed to wipe out the families that lose their bread-winners? State your answer in terms of evolutionary principles.

Is the partnership of equality relation between man and wife in the home a coming form or a disappearing one?

Is the family a progressive or a conservative influence?

What is the connection between the family and altruism in social life?

How do you evaluate the saying "Woman's place is in the home"?

Topics for Investigation

What connection exists between crime and broken homes?

After providing yourself with an estimate of Plato's standing in the history of human thought, find out what his evaluation of the home was. (See the "Republic.")

Readings

Case, C. M., "Outlines of Intro. Soc., p. 76 ff., Chas. H. Cooley, *Primary Groups the Nursery of Human Nature.*

Groves, E. R., "The Home: A Human Need." In Davis, Barnes and others, "Readings in Sociology."

——"Social Problems of the Family."

Groves, E. R., and Ogburn, W. J., "American Marriage and Family Relationships."

Mason, O., "Woman's Share in Primitive Culture."

Mukerji, Dhan Gopal, "Caste and Outcaste," "Gay Neck."

CHAPTER XVII

GOVERNMENT AND LAW

Questions for Discussion

Must the following statement be accepted as it stands?—"International agreements and arbitration may do much to ward off too frequent wars, but civilization is too immature as yet to be able to harmonize human differences in an amicable fashion" (Dealey, "The State and Government," p. 4).

Is the state anything more than an outgrowth of the war-band?

If humanity could be assured that no more wars would occur, would the state still be the dominant social institution?

What are the consequences in behavior if one accepts the proposition that obedience to the state is the price of liberty?

If the economic history of mankind were represented by the four successive figures of the hunter (Nimrod—Gen. 10: 8–9), the farmer

(John Ridd in "Lorna Doone"), the merchant (Sir Richard Whittington), and the mechanic, (Henry Ford), what four corresponding political types and illustrations can you suggest?

Topics for Investigation

What approval or disapproval can be given, in the light of social history, to anarchism, syndicalism, sovietism, communism, socialism?

Can the following terms be arranged in one progressive evolutionary series, or do they occur in retrogressions, catastrophes, and recoveries?—Family, clan, horde, tribe, confederation, kingdom, tribal kingdom, empire, city-state, feudalism, national state, international federation.

The evolution of the theory of sovereignty.

The history of public opinion as the directive mind of the state.

Trace the evolution of the maintenance of internal peace, taking the following as key words: family, fictitious kinship groups, primitive secret societies, patriarchate, guilds, police, injunction.

Readings

Case, C. M., "Outlines of Intro. Soc.," pp. 340–344, *The Tribe;* Chap. XVII, *Foundations of Government and Law;* Chap. XXVI, *Equalization of Opportunity;* Chap. XXVII, *Social Co-operation.*

de Laguna, T., "The Factors of Social Evolution," pp. 324–346.

Sumner and Keller, "The Science of Society," Chaps. XV–XVI, XIX–XX.

Thomas, W. I., "Source Book for Social Origins," pp. 753–835.

Tozzer, A. M., "Social Origins and Social Continuities," Chap. V., *Organization, Association and Classes;* Chap. VI, *Government, Law, and Ethics.*

Oppenheimer, F., "The State," Chap. II, *The Genesis of the State.*

Dealey, J. Q., "The State and Government," Chap. III, *Development of Political Government.*

CHAPTER XVIII

MORALS AND ETHICS

Questions for Discussion

Hobhouse gives the following four stages of moral development: (1) Pre-moral: customary rules obtain, but have not the character

of moral laws; (2) Specific obligations recognized but not founded on any moral principle; (3) Generalized ideals and standards, without knowledge of their basis; (4) Reflective criteria for judging modes of behavior.

Criticize the following scheme of law in human society: I. Free (the moral law). II. Sanctioned. (1) Religious (imposed by or in the name of the divinity). (2) Customary (imposed by the community). (3) Associational. (*a*) Political (imposed by the state). (*b*) Non-political (imposed by associations other than the state).

Keeping in mind that social development brings new needs for moral and ethical adjustments between persons in groups, what can you say about the following subjects: (1) prohibition of intoxicants, (2) regulation of travel, (3) restrictions on noise, (4) regulation of smoke in factory cities, (5) control of libelous or suggestive literature, (6) Sunday laws? What ethical conduct would solve these problems better than law?

Make a solution of each of the following social problems according to ethical principles, using the figure of traffic regulation on life's highways: (1) Are there too many people in our colleges? (2) Should civilized peoples restrict their population numbers? (3) Can cities build a better ethical life than rural communities?

What are the socio-evolutionary problems of ethics involved in the community when some but not all of the people enjoy outdoor phonograph music, conversation during a concert, opening the "cut-out," etc.?

What social evolutionary background can be observed in the throwing-off of restraint of community *mores* that accompanied the old-fashioned Hallowe'en?

Topics for Investigation

How far back in history can the principle of the Golden Rule be traced?

Readings

DE LAGUNA, T., "The Factors of Social Evolution," pp. 316–324.
DEWEY and TUFTS, "Ethics," Part I.
FRAZER, J. G., "The Golden Bough."
GOLDENWEISER, A. A., "Early Civilization."
HALDANE, J. B. S., "Science and Ethics," (*Harper's Magazine*, June, 1928).

SUMNER, W. G., "Folkways."
TROTTER, W., "Instincts of the Herd in Peace and War," pp. 15–41, *Gregariousness and the Higher Social Traits.*
WESTERMARCK, E., "Origin and Development of Moral Ideas."

CHAPTER XIX

RELIGION

QUESTIONS FOR DISCUSSION

How may such terms as "religion," "superstition," and "faith" be distinguished?

Read Walt Whitman's poem, "A noiseless, patient spider." Then comment on the following: "The word 'religion' originally meant merely 'connection,' especially with reference to the connection which man seeks to establish with those powers which are said to be supernatural or inaccessible to his intellectual faculties."

In the light of social history and current events does it appear that religion is a permanent, normal factor in human life?

Has religion, by the hardening of its cults, held back social adjustment to progressive thought?

Is religion more a social or an individual affair?

How do religion and gambling resemble each other? How do they differ? Is mysticism a primitive or an advanced type of human life?

Has the institution of ancestor-worship any social value for modern life?

TOPICS FOR INVESTIGATION

Theories as to the origin of religion. (See Wallis, "Introduction to Anthropology," Chap. XXV.)

Druidism and other prehistoric organized religions.

Totemism in its organization of kinship groups.

Tabu, and its relation to social pathology.

"Isles of the Blest": the evolution of the idea of Paradise.

Evolution of the idea of the Devil.

The Scape-goat: the idea of vicarious sacrifices and atonement.

Readings

Case, C. M., "Outlines of Intro. Soc.," Chap. XVIII, *Social Roots of Religion.*
Durkheim, E., "Elementary Forms of the Religious Life," Book II, *Totemic Beliefs.*
Frazer, J. G., "The Golden Bough," *Totemism, etc.*
Lévy-Bruhl, L., "Primitive Mentality," Chaps. II–X.
Spencer, Herbert, "Principles of Sociology," Vol. I.
Spencer and Gillen, "The Native Tribes of Central Australia."
Sumner and Keller, "Science of Society," Vol. II.
Thomas, W. I., "Source Book for Social Origins," Part VI, *Magic, Religion and Myth.*
Tylor, E., "Primitive Culture," Chaps. XI–XVIII, *Animism.*
Wundt, W., "Elements of Folk Psychology," Chap. II.

CHAPTER XX

ÆSTHETICS

Questions for Discussion

Does the æsthetic sense seem to you to be something derived from other social experiences, such as love, craftsmanship, etc., or does it exist on its own account?

Topics for Investigation

What has actually been the influence of war upon art?

Readings

Case, C. M., "Outlines of Intro. Soc.," Chap. XIX, *Primitive Art.*
Fletcher, Alice, "The Hako: A Pawnee Ceremony." (Bureau of American Ethnology, 22nd Annual Report, Part II.)
Havemeyer, L., "The Drums of Savage Peoples."
Hirn, Yrjö, "The Origins of Art."
Sumner and Keller, "The Science of Society," Part VI, *Self-Gratification.*
Thomas, W. I., "Source Book for Social Origins," Part V, *Art, Ornament and Decoration.*

CHAPTER XXI

EVOLUTION OF INTELLIGENCE

Questions for Discussion

What are the possibilities of the cinema for reversing the trend of history and bringing back the age of pictography?

Illustrate the following stages of written language: (1) Pictures. (2) Symbolic pictures. (3) Conventionalized pictures. (4) Conventionalized pictures to stand for the sound (name) of the thing pictured. (5) Conventionalized pictures (letters) for conventionalized sounds.

Topics for Investigation

The relation between science, magic, and religion.

Readings

Case, C. M., "Outlines of Intro. Soc.," Chap. XIII, *Educational and Social Heredity.*

de Laguna, T., "The Factors of Social Evolution," Chaps. X and XII, *The Development of Thought.*

Groves, E. R., "Personality and Social Adjustment," Chap. IV, *Habit and Social Continuity.*

Kroeber, A. L., "Anthropology," Chap. XI, *The Spread of the Alphabet.*

McMurtrie, D. C., "The Golden Book," (*Printing and Book-Making*).

Millikan, Robert A., "Science and Modern Life," *Atlantic Monthly,* April, 1928.

Thomas, W. I., "Source Book for Social Origins," pp. 143–213, *Primitive Mental Life,* pp. 213–281, *Primitive Education,* pp. 281–303, *The Medicine Man and the Professions.*

CHAPTER XXII

THE SOCIAL ELABORATION OF THE COMMONPLACE

Questions for Discussion

Would it assist rational social evolution if we had less social elaboration of the commonplace?

Topics for Investigation

What is meant by monotypical culture evolution? To what extent does it occur?

Readings

Case, C. M., "Outlines of Intro. Soc.," pp. 435–447, *Socialization of the Individual;* Chap. XXIII, *Creation of Social Values;* XXV, *Social Stratification;* XXVIII, *Social Organization.*

de Laguna, T., "The Factors of Social Evolution," pp. 304–316.

Groves, E. R., "Introduction to Sociology," Part III, *Man and His Social Experience.*

Morgan, L. H., "Hospitality of the American Indian." In Thomas, "Source Book for Social Origins," pp. 835–855.

Sumner and Keller, "The Science of Society," Chaps. XVII, XVIII.

Tozzer, A. M., "Social Origins and Social Continuities," Chap. III, *Crises in the Life of the Individual.*

CHAPTER XXIII

CULTURE AS HUMAN BEHAVIOR

Questions for Discussion

Does the erection of behavior into culture patterns make for human happiness?

Topics for Investigation

Does the course of social evolution indicate that metropolitan culture patterns will eventually dominate, or are they merely intermittent phenomena?

Readings

Folsom, J. K., "Culture and Social Progress."

Kroeber, A. L., "Anthropology," Chap. XV, *Old World History and Ethnology.*

Lowie, R. H., "Primitive Society," pp. 433–441, *Against Uniform Laws of Social Evolution.*

MORGAN, L. H., "Ancient Society," pp. 8–18, Reprinted in Case, "Outlines of Intro. Soc.," p. 135.
TOZZER, A. M., "Social Origins and Social Continuities," pp. 4–14, *Cultural History of Man.*
WISSLER, C., "Man and Culture," Chap. IV, *The Content of Culture;* V, *The Universal Pattern.*

CHAPTER XXIV

CULTURE AND EVOLUTION

QUESTIONS FOR DISCUSSION

Show how cultures are changing in your own community.

TOPICS FOR INVESTIGATION

The wheel as an example of cultural invention and diffusion.
The culture area of the silver dollar.

READINGS

DE LAGUNA, T., "The Factors of Social Evolution," Chap. VIII, *Inter-tribal Contact.*
KROEBER, A. L., "Anthropology," Chaps. VIII–IX, *Diffusion and Parallels.*
RAU, CHARLES, "Observations on Cup-Shaped and Other Lapidarian Sculpture in the Old World and in America." (Contributions to North American Ethnology, Vol. V, Washington, 1882.)
TOZZER, A. M., "Social Origins and Social Continuities," pp. 14–28, *Ways of Cultural Evolution.*

CHAPTER XXV

THE TREND OF SOCIAL EVOLUTION

QUESTIONS FOR DISCUSSION

Can a well-informed student of social history consistently take any other position than that of a mere spectator?

TOPICS FOR INVESTIGATION

The history of Utopian thought.

Readings

Baker-Crothers and Hudnut, "Problems of Citizenship."
Blackmar, F. W., "History of Human Society," Chaps. II and III, *Progress.*
Giddings, F. H., "The Scientific Study of Human Society," Chap. VIII, *Societal Telesis.*
Tozzer, A. M., "Social Origins and Social Continuities," *The Criteria of Progress.*
Trotter, W., "Instincts of the Herd in Peace and War," pp. 42–65, *Sociological Applications of the Herd Instinct.*
Wells, H. G., "The Salvaging of Civilization."

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