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SOCIAL EDUCATION

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FOREWORD

THE development of social competence has been an important objective of the schools throughout the history of American education. However, it takes on a new significance in the present period. Rapid social change, economic, social, and political disturbance, and modifications in school practice combine to make the program of social education a concern for all who are interested in public welfare.

While schools have long had a program of social education and while educators have long paid tribute to "training for citizenship" as a major objective of education, relatively little attention has been given to a study of the social problems facing the people of this generation. Students go out from schools and colleges with little recognition of or concern about the social issues with which they and their fellow citizens must deal. The inadequacy of the existing social education program in most schools ought not to continue.

Educators are recognizing the importance of social education. Many schools are experimenting with improved procedures, and many educators are giving thought and study to the educational needs of modern society.

The improvement of the program of social education cannot be undertaken alone by teachers and school ad-

ministrators. Parents and social groups sometimes block needed reform because of being uninformed concerning social needs* Consequently parents and other citizens should recognize the importance of social education, become informed as to the characteristics of a program which gives promise of developing needed social competence, and give community support to the efforts of educators to improve instruction in the field of social education.

It was in recognition of the importance of social education that the School of Education of Stanford University arranged a conference in the summer of 1938 to consider the nature and educational needs of contemporary American culture and the nature of a desirable program of social education. The large number of requests tor copies of papers presented at the conference encouraged the publication of a selected group of manuscripts.

This volume contains three sections. The first section, or "Introduction," sets the task of social education and notes the general relationship of culture and education. The second section, "American Culture," contains seven chapters on American life. This emphasis on the interpretation of American culture is made desirable by the necessity of having a well defined conception of the nature of American culture if one is to project a sound program of social education to serve that culture. The third section contains five chapters on social education, with recognition of the psychological and philosophical considerations basic to thought on the problem.

The viewpoint presented in each chapter is that of the author. Nearly all of the presentations were subjected to critical discussion by those attending the con-

ference, and in some cases revisions were made in the light of those discussions.

It is a pleasure to acknowledge the excellent co-operation of the authors in the preparation of their manuscripts for publication and the editorial assistance given by Lois Carman Adams. Grateful acknowledgment is also made for the permission granted by authors and publishers to use the quoted material in this book.

GRAYSON N. KEFAUVER
Stanford University, California

I

THE PROBLEM OF SOCIAL EDUCATION

Paul R. Hanna

THE purpose of this chapter can be thought of broadly as an attempt to define the scope of the problem of social education. In broad strokes and with a liberal use of light and dark color an introductory sketch is drawn of our culture, its major accomplishments and its shortcomings, and the role education might play in solving our cultural problems. Each of the papers which is to follow will more exhaustively develop selected aspects of this initial sketch, and each will examine the related issues and proposals in much greater detail than is attempted herein. While no subsequent paper is in the least bound to the point of view or limited by the content herein presented, this paper is an attempt to orient us to the problem of social education in our culture.

There is considerable agreement among students of society that each culture is primarily shaped by those activities men carry on to satisfy the elementary biological or tissue needs—food, shelter, protection, reproduction, and so on. Each culture is rooted in certain environmental conditions—climate, fertility of soil, availability of water, barriers against contact with other groups, and ease of adaptability of sticks and stones for tools, utensils, or shelter. These simple environmental conditions are major forces in shaping the manner in which men work and play together in groups. Within

these environmental limits men create tools and technics for the purpose of satisfying their biological needs. These tools and technics in a large measure determine the institutions that emerge. And in turn the ideology and value system of a culture feed on the institutional arrangements—a process that results in a philosophy that supports those social habits that have stood the acid test of usefulness.

One student of political theory states these relationships as follows: "The basic factor in any given society is the way in which it earns its living; all social relations are built upon provision for those primary material appetites without satisfying which life cannot continue. And analysis of any society will always reveal the close connection between its institutions and culture and the method of satisfying material appetites. As these methods change, so also will the institutions and culture of the society change. . . . Changes in the methods of economic production appear to be the most vital factor in the making of change in all the other social patterns we know. For changes in those methods determine the changes of social relationships; and these, in their turn, are subtly interwoven with all the cultural habits of men." (6:91) *

While we are hilly aware of the dangers of oversimplified analogies, nevertheless a comparison is risked. This relationship among the various aspects of each culture may be likened to a pyramid divided into a number of horizontal cross sections. For the first cross section, the base, of our pyramid we may think of the material appetites or tissue needs of man, which are the driving force in most of his activities. The second horizontal

. Page 91 of reference 6 at end of chapter.

section, emerging out of man's appetites, can be thought of as representing the tools, implements, and prime movers man devises in winning from his physical environment those goods and services which give him satisfaction. Advancing one more section upward in our figure, we have the technics designed to relate the various tools, prime movers, and processes into an organized way of producing life's necessities. The plow is a tool, the ox is a prime mover, while the organization of the plow and ox together with numerous other tools and power sources into a series of steps from the preparation of the soil for planting to reaping the harvest—all these together make up a hierarchy which we call a technic of agriculture.

Resting solidly upon these three sections of our pyramid is the section representing the institutions which men design to facilitate the harmonious operation of the technics used in satisfying human needs. Obviously the economic, social, political, religious, educational, and other institutions designed in a culture using hunting and fishing technics would all be indelibly stamped with common characteristics and as a group of institutions would differ sharply from corresponding institutional arrangements designed to systematize life in a culture using industrial technics.

As the capstone section in our pyramid each culture formulates a philosophy of life or a value system which incorporates the work habits, the institutional arrangements, and the folkways as crystallized by usage. These generalized folkways—taboos, virtues, and values—once established, in turn shape human activity all up and down the cultural pyramid; and this reciprocal relationship contributes to stability throughout the entire range

nistic nature of a pyramid and the dynamic nature of a culture at this point breaks down badly.) There is no denying that the capstone, once set, becomes binding on all the social structure. But the central idea in this analogy resides in the fact that each horizontal section rests firmly on those sections below. No value system can be achieved apart from the social patterns and institutions existing within a culture; no institutions emerge except in relation to the existing technics; no technics can be created outside of the elements—tools and prime movers—which are present; few tools are created except in the pursuit of satisfying man's biological needs. This unity of a cultural pattern is *sine qua non* of the argument of this paper.

Further, it is documented by recent researches that, when a significant change does occur in a cultural pattern, it most usually commences with the invention of a new tool, the use of a new source of power, or a reassembling of existing tools into a more advanced technic. Such an innovation in the mechanical aspects of culture in turn demands that new habits of social intercourse be established and that some older habit patterns be unlearned. New institutions eventually emerge in order better to utilize the human values inherent in the newer technics, and these modifications in turn have their influence in reshaping the value system. In short, change usually starts with the introduction of a new tool or power source and the process of change vibrates throughout the width and depth of a culture. It must be noted that this wider change is often long overdue and that countless human beings suffer before the correction is made. The flow of change is usually uneven

and at times violent, for it is much simpler to substitute a cotton gin for hand cleaning of cotton than it is to create the social, economic, political, and educational arrangements demanded by the substitution of the new technic.

If this analysis of cultural patterns and their change be acceptable in the large, then we can turn to an examination of the technics and institutions which characterize our age and evaluate the results of the use of these in satisfying human needs. We must critically measure the degree to which the technics and institutions mutually support each other in the fulfillment of basic human desires. Within the framework of such relationships we shall discover the problem of social education.

It is difficult to say when our newer power technics came into dominance. Some of the elements can be traced back at least a thousand years. Mumford (10) has documented the history of technics in such a manner as to leave little doubt as to their genealogy. But during the past century and a half, and more particularly in the twentieth century, there has appeared what Barnes (1:759) calls the most ominous of all developments in the history of human culture." Through a combination of inventions (3) we have created a technology which is so different from that of two hundred years ago that many authorities characterize the change as one of kind rather than degree. In four areas this change is particularly marked: (i) automatic, continuous-process, machine, and factory proceedings; (2) non-human energy; (3) chemical processes; and (4) controlled biological processes.

Recently I spent a day in a modern automobile fac-

tory. In two wings of this huge building two different assembly lines move as two headwaters of a great river —move constantly closer to the point of junction and gather volume as they move. One assembly line starts with the engine block. From side conveyors as from tributaries to a stream come valves, pistons, rings, cams, shafts, oil lines, bolts, nuts, pins, and hundreds of other uniform parts that together make up a modern automobile. As these separate parts join the engine block on the main assembly line they are fixed in place by men with power-driven tools—wrenches, hammers, or screw drivers. The engine block grows into a chassis and moves continuously as one after another of the parts are attached. In the other wing of the plant a similar process flows; on this line the automobile body is taking shape. A sheet of stamping metal moves on an automatic conveyor to a huge stamping press; it comes out a metal top. Another sheet is stamped and hammered into the back and sides. An electric welding machine fuses the pieces into a strong body. This shell of a body moves steadily forward, assimulating fenders, insulation, upholstering, glass, and the scores of other separate standard parts.

Within the lapse of one clock hour from the time the engine block and the metal sheets start down their respective assembly lines, the two streams have merged, the body has been bolted or welded to the chassis, and the complete automobile is ready to be driven to the testing floor under its own power. From hundreds of separate parts to a beautiful and smoothly functioning automobile in less than an hour—this phenomenon is typical of the genius of automatic and continuous-process technology. Throughout this technology man is

being removed as the power source and the direct cause in fashioning the goods of our culture.

A second example, in the area of nonhuman energy, will further illustrate the point. Last fall I stood at the brink of a coulee and listened to the deafening roar of the greatest engineering project of all ages—the construction of the Grand Coulee Dam. When this hydroelectric plant is completed, it will furnish 2,646,000 horsepower of electricity. This is an amount so vast that none of us is able to comprehend its meaning. If we translate it into work which men could do in shifts of eight hours each, we have the staggering result of a population of approximately 40,000,000 laborers. From this great hydroelectric project we shall gain electrical power to replace man and animal power in turning the wheels of transportation and production; power to turn our farm and shop machinery; power to run our household appliances and to heat and light our buildings; power to run our trains and possibly, eventually, our airplanes and automobiles; power to lift our loads; power to carry our messages; power to serve man in his daily rounds. In the hydroelectric plants and in the numerous oil refineries and coal mines man produces quantities of energy today exceeding the most fantastic dreams of the Aladdins of the past. From 1900 to 1930 we increased the amount of nonhuman power in this country by over 2000 per cent. We have learned to control and shape the raw materials and forces of nature into power, and with it we have multiplied many times over the amount of work we can accomplish.

In another area we find equally challenging illustrations. In the science of chemistry we find infinite ways in which man's needs can be served. We are able to

cal vat the same food solution that the plant roots take from the earth. In hydroponics—the new technic of feeding plants in chemical solution vats—we sense potential release from climatic vicissitudes or soil depletion. In another type of chemical vat we can produce cellulose, from which synthetic textiles can be produced. Chemistry today produces our colors, our perfumes, our photographic films, our antiseptics, our inks, our plastics, our sugar, our steel and alloys, our glass, our refrigeration—chemistry has given us a miraculous alchemy for short cutting the processes of natural growth and fashioning at will goods with which to satisfy human needs.

In yet another area of modern technics we have recently made magnificent advance. In biological processes man now is able to control, within increasing limits, the plant and animal kingdoms. We can produce desired strains of beef cattle or hogs; we can produce a sugar cane or a wheat that will grow abundantly in a given climate and resist certain pests; we can control the life processes of many insects and bacteria and thus eradicate some of those that are detrimental. We can in large measure control human disease; we know enough about the relation of vitamins to growth to select a proper diet for children; we are able to prevent ill health by prophylactic measures and to cure many of the human ills when the organism falls prey to disease or accident. We are as individuals more certain than formerly of reaching maturity, and the normal life span is increased by several years.

No one can deny that modern science has created the most amazing array of new control technics man has

ever had at his command—technics with which he can at last face the conditions of life on this planet with considerable feeling of security. No longer need we fear, as once we did, the overwhelming odds of cold, heat, flood, drought, unfriendly animals, and the host of imaginary spirits that could do us harm. Relative security against these vicissitudes has been won with modern scientific methods. In a like manner man (at least within the geographical area of our North American continent) can count on abundance of the material goods and services with which to satisfy his tissue needs. Never again need he be so exclusively concerned as he once was about a shortage of food or water, tools or clothing, vehicles, shelter, furniture, and the other implements essential to a balanced life. Modern technical advance can satisfy such material needs with a fair degree of efficiency.

Equally significant with security and abundance for human welfare is the promise of leisure in which to develop to the full the general personality and the good life. Man's end is not merely the satisfaction of material appetites; once these are satisfied, there remains a great potential of spiritual and social appetites to nurture and enjoy. Previously man has had to give his strength and time to producing the bare necessities, with little time and energy left for the creative phase of living. Under the conditions of power technology man can arrange even the productive activities so that they themselves give opportunity for developing the creative urge; and having satisfied the material appetites, man now turns to the pursuit of types of satisfaction new to the majority of the race. For the first time in history we can organize our environment on a regional basis—plan it

beautifully and organize it for use and enjoyment by human beings; organize it for the efficient production of life's essentials and for the pleasurable exchange of goods and services through efficient transportation and communication; arrange it in such a manner that it will produce longevity for mankind. Never before has the human race been so fortunate in the quality and in the quantity of technics with which to fashion the good life.

But one cannot be alive today without feeling and hearing a vast discord that all but ruins the potential symphony of the good life. In the midst of possible security hundreds of thousands of people are dying violent deaths through undeclared war and industrial accidents; others are dying painfully through unchecked disease, starvation, and other human or controllable causes. In spite of all our technics for preventing or lessening insecurity, life in many areas is increasingly thwarted.

We grant the promise of the new leisure, but few find it anything but disintegrating idleness, for who can turn leisure to advantage except one who has life-giving work first and in addition a surplus of the material and spiritual necessities out of which to create a better life in his leisure time? We must acknowledge frustration in the face of great promise. It would seem that some malady or spell had been cast over us, for we sit at a bountiful table but our mouths are sealed or we hold in our hand a beautiful object but our eyes will not focus.

The documentation of the discrepancies between the possibilities for the good life inherent in modern power technics on the one hand and the actual life lived by

the common man is voluminous. The survey of medical costs (4) shows that the majority of our people are not availing themselves of medical aid largely because they cannot afford to pay for it. The survey of this country's capacity to consume (7) discloses the majority of our citizens existing on a level below that considered a minimum standard of living. The survey of our capacity to produce (8,12) shows our magnificent productive plant capacity used inefficiently and sporadically. The survey of the control of wealth (2) shows that the vast majority of men have no stake or voice in ownership or management of our productive wealth. The survey of our soil resources (11) indicates that we are losing the usefulness of large regions through uncontrolled flood and wind erosion—conditions that affect human beings living now and in years to come. Our Middletowns (9) and Centervilles, when examined closely, prove to be anything but the humanly desirable communities sketched by our city and regional planners and our architects.

A survey of crime, or of family relations, or of working conditions on farms and in factories, or of sanitation in urban and rural areas, or of congestion in city traffic, or of mental health, or of modern conveniences in homes, or of care of infants, or of use of radio and press for propaganda—a survey of almost any aspect of the current scene will disclose shocking shortcomings. True, in many areas conditions are improved over a hundred years ago and steadily growing better; but in terms of immediately available practices we fail shamefully to achieve the conditions of life which are urgently needed and rationally sound.

The question, then, to which we must turn our at-

tention is a simple query—what is the chief cause of our frustration? Risking an oversimplification of the answer, we may say that many arguments lead to the conclusion that these new technics have not been supported with new institutional arrangements. Further, we are attempting to mold the use of the new technics into patterns set by an older system of values. The practice of "plowing under our hogs" to establish economic scarcity is a good illustration of an old pattern thwarting modern agricultural technics. Most of the institutional patterns and values by which we operate social intercourse today were designed to carry on life under the simpler adjustment technics existing before the advent of modern science. We have seen the absurdity of preserving, in an age of automobiles, the rules of highway navel designed for oxcarts. We have experimented with and formulated new highway regulations to insure safe and rapid travel, and as our highways become essentially national avenues of communication we are even shifting the responsibility for highway construction and maintenance fiom local to federal government. In highway mattcis we have experimented both with materials and with the institutional arrangements. There are many aieas in which similar gains are evident. But in the more basic and abstract relationships we tend to hold to arrangements rooted in prior technics. The confusion and periodic breakdown of our production-distribution system is clearly due to the outmoded social, economic, political, and educational thought and practices under which we insist that our new technics must be operated. It is becoming increasingly evident that, not until we are as experimental in the field of human relations as we have been in the area of new automatic machines,

new power sources, or new chemical and biological processes, can we hope for much relief from our present frustration.

The argument of this paper may be summed up as follows (13:8-9) :

1. Man has constantly struggled to provide a greater quantity and quality of goods and services to satisfy human needs, but his struggle has been slow and until recentlyrelativelyunsuccessful.

2. Man is increasingly giving up his belief in superstition, magic, blind chance, and supernatural powers and is relying more and more upon reason, science, human design, and control.

3. This reliance upon a new way of thinking has brought about rapid increase in man's control over natural phenomena and an increase in the number of human wants of a material nature.

4. This rapid change in the technological aspects of production, transportation, communication, and the like has not been paralleled by a corresponding modification of our mores and institutions. Nor has the use of these new technological advances been squared with the criteria of the good life.

5. As a result we find ourselves at an impasse. The utilization of our new control over nature is frustrated by the continuance of outmoded institutional controls and by the lack of a philosophy of life which admits the new technics in their properly subordinate place in human affairs.

6. In order to establish integration again in our culture and to utilize our recent gains over the physical world, our next great period of progress must be in the direction of creating new institutional controls and

value systems designed by the people for their common welfare.

The task of education now becomes fairly clear. The task of education is the challenge of our age—the task ol designing social arrangements and value systems which will facilitate the basic human satisfactions under the conditions and possibilities of our new controls over nature. Education is to be conceived as the institutionalized and purposive intelligence of our culture. Through the instrument of education we (in a democracy this *we* implies all of us to the limit of our ability to participate) collectively examine our value system, our institutions, and our technics in the light of our needs and desires. Atter critical examination we consciously design a culture toward which we desire to move because we see in the projected pattern more promise of the good life than we get under present arrangements. Having constructed our ends, we select "learning" experiences for ourselves and our young which will make it possible to achieve the desired goals. As we move forward toward our goals we constantly criticize both the goals and the means, always improving, always growing in an organic manner.

According to this concept of culture and education, the institutions of education are no longer responsible solely for passing on the accumulated social habits found satisfactory in the past. Education still has this task, but in addition a task far more significant—that of serving as the laboratory of culture in which the culture is examined for ways of continuously improving it, not to "learn" the culture but to work with culture to better it—a challenge large enough for anyone.

It must be said directly that education is not thought

of herein as confined to the school. Education broadly conceived involves all agencies of the culture and particularly those we know as the home, press, pulpit, radio, cinema, service club, government, economic enterprise, or social organization. The school as such will no doubt undergo great modification until it is working closely with all the educative forces in the culture—perhaps in a new combination which we might call the *Institute for Individual and Community Development.* The Institute would serve as the instrument through which the desire for a more adequate community life could be progressively realized. Better community health, improved recreational facilities, adequate housing, more beautiful physical environment, more humanly operated industrial and agricultural enterprises—in fact, any and all problems of concern to the culture would be brought to the Institute for study and experimental action. Obviously the staff of such an Institute would consist of specialists not only in personality growth but also in all the areas of human affairs. Physicians, psychologists, engineers, homemakers, architects, regional planners, economists, political scientists, artists, recreational directors, and all others whose services are essential in assisting in the continuous development of the culture would have membership on this Institute staff.

But there is another function of our proposed Institute. A curriculum must be so designed that all who have the selected experiences will come to see that the culture is constantly changing the rules and regulations as new technics are introduced. We must understand and appreciate the place of conscious social invention in the achievement of human welfare. Our curriculum

must create a climate of opinion friendly to new institutional arrangements and must encourage social, economic, political, and educational inventiveness to meet the demands of each new age. Crowning our problem of social education is the necessity of developing appreciation of and loyalty to our democratic way of life. Throughout, the threat to the democratic form of human association increases yearly. A noting from a recent document of an educational association (13:7) follows:

There are many reasons to believe that democracy is approaching a supreme test in this country as well as in the rest of the world. Privilege is once again employing authoritarianism to maintain and sanctify its power. It is too much to hope that the United States will escape this struggle. True, the outlook is encouraging, for democracy is deeply embedded in our tradition. As yet no country with a long experience with democracy has gone Fascist. We still have almost boundless natural resources. We are today the freest country in the world. In no other country can be found so articulate and influential a group of liberal and progressive leaders and educators. Yet, with all these important assets, the outcome of the possible struggle is not predetermined in favor of democracy. The outcome will depend upon the use we make of these assets and the wisdom of educational leadership in sharply contrasting the opposed value systems and critically evaluating the alternative roads to security, freedom, and peace.

In conclusion: We hold that the problem of social education is that of taking the vast potentialities of modern scientific technics and by democratic and educational means creating a harmonious and integrated culture in which man lives in peace, abundance, security, and beauty. Such a culture may be approached

first through developing a knowledge of the fact that within a century the technics of satisfying our basic appetites have changed from primarily simple adjustment and handcraft tools and processes to complex automatic continuous-process factories, nonhuman power, and chemical and biological processes. These new control technics do not function properly for our betterment when operated under the economic and social rules and regulations designed for the prior type of technics. We now face the problem of inventiveness in human relations in order that we may design those institutional arrangements that from new technics will result in a gain to human welfare. And, secondly, the method of approach must be the democratic one. It is left to those whose scholarship fits them for the documentation of these arguments to support or to challenge them.

BIBLIOGRAPHY

1. BARNES, HARRY E., *History of Western Civilization,* Vol. II; Harcourt, Brace and Company, New York, 1935
2. BERLE, ADOLPH A., JR., and MEANS, GARDINER C, *The Modern Corporation and Private Property;* The Macmillan Company, New York, 1933
3. BURLINGAME, ROGER, *March of the Iron Man;* Charles Scribner's Sons, New York, 1938
4. COMMITTEE ON THE COSTS OF MEDICAL CARE, *Medical Care for the American People;* University of Chicago Press, Chicago, 1933
5. COUNTS, GEORGE S., *The Social Foundations of Education;* Charles Scribner's Sons, New York, 1934
6. LASKI, HAROLD J., *The State in Theory and Practice;* Viking Press, New York, 1935
7. LEVEN, MAURICE, MOULTON, HAROLD G., and WARBUR-

TON, CLARK, *America's Capacity to Consume;* Brookings Institution, Washington, D. C., 1934
8. LOEB, HAROLD, and others, *The Chart of Plenty;* Viking Press, New York, 1935
9. LYND, ROBERT, and LYND, HELEN, *Middletown in Transition;* Harcourt, Brace and Company, New York, 1937
10. MUMFORD, LEWIS, *Technics and Civilization;* Harcourt, Brace and Company, New York, 1934
11. NATIONAL RESOURCES BOARD, *Soil Erosion,* Part V of supplementary report of the Land Planning Committee; U. S. Government Printing Office, Washington, D. C., 1935
12. NOURSE, EDWIN G., and others, *America's Capacity to Produce;* Brookings Institution, Washington, D. C., 1934
13. PROGRESSIVE EDUCATION ASSOCIATION, *Report of the Resolutions Committee;* Progressive Education Association, New York, 1938

II

CULTURE AND EDUCATION

Alexander Goldenweiser

IN a broad way both culture and education go back to the animals. When an animal enters the world, it finds among its kind certain material equipment, a nest, a cave, a beehive, or a system of dams. This equipment is there when the animal arrives. Historically it is prior, like our own culture in its relation to the individual. The young animal also finds others of its kind acting and reacting in fairly definite ways within a limited and particular physical environment; and, further, it discovers that there are certain prevalent behaviours toward other creatures of the same variety and different behaviours toward creatures of other varieties. In a sense, then, we find here a social setup with its own use and want.

Though ignorant of most particulars, we know that with reference to things and creatures the young animal does not emerge as a *tabula rasa;* on the contrary, it is equipped with powerful instincts oriented toward certain forms of activity and technique, as well as toward such psycho-social reactions as food getting, affection, companionship, hostility (fear, struggle), mating, leading, or being led. Just what part imitation plays in all this we do not really know. A nightingale, we are told, falls short of its potentialities when brought up among meadow larks. But there can be no doubt that instinc-

live disposition, built into the organic structure, accounts largely for the varieties of behaviour among kind, as well as for the rapidity and perfection with which the young learn the w[r]ays of the mature of their own kind.

Then comes man. His equipment is different. Much is lost, more is gained. The instinctive baggage has somehow become largely dissipated. In its place have come: a superior brain, with enormous, perhaps only partly known, potentialities; a pair of capable hands, marvelously complex, refined in stiucture and versatile in function;erect stature, which permits the specialization of legs and feet for locomotion and of arms and hands for exploration and manipulation; and articulating organs, guided by the brain and assisted by digital gestures, which eventuate in speech. With this remarkable technical and intellectual equipment and power of imagination, there is a capacity to transcend the actual in favor of the possible or even of the impossible. This creature, wondrous though it is, would have been doomed to failure if it were not for one other factor —a prolonged infancy. 11ns enabled man, bom an animal and a savage—-the ultimate fact, incidentally, in all educational philosophy—to commit errors and correct them, to Iearn the ways of nature and those of his tube, without paving the penaltv of his iniquities. Initatingly misinformed though we are as to the precise *when* and *how* of this prolongation of infancy, there can be no question that without it man was doomed, that with it he could forget his losses and capitalize upon his gains. Around prolonged infancy there grew up the family, a relatively lasting association of the mature with the young; and within the family there

arose the human individual, in control of his technical and intellectual equipment and steeped in the tradition of the tribal past.

The primitive community is past-bound, conservative, authoritarian. It educates to reproduce itself. In this process the family stands uppermost. It is the major locus of cultural transfer. In composition the family, as an educational agency, may vary. For example, the mother's brother may all but usurp the place of the father. But no matter; there still is a mature male in the picture, and the mother is always the mother. Here all the basic technical accomplishments are learned, by precept in part but mainly by example, such as weaving, modeling, carving, building, hunting, fighting. Here also the social amenities are introduced to the young, kinship terms with their adhering functions, ceremonial proprieties, the proper ways of treating tribal friends and enemies. Tribal lore is called upon for reinforcement. Before adolescence is reached, the boy or girl has thoroughly mastered the A B C of work, of social behaviour, and of divine things as well.

Of course the family does not stand alone in this educational task. A formal school, to be sure, is absent except in the higher reaches of primitiveness; but always there are the old men, who have experienced most things and know the rest. Early they take the child in hand, especially the boy, and impart to him many kinds of skills, as in magic, and such knowledge as lies outside the competence or authority of the family. In due time the boy finds out certain things every man should know. He learns, for example, the identity of the spirit Twanyirika in Central Australia, a fact not known by women, at least not officially, not even by his mother.

At regular critical points in his career the young man is subjected to what Van Gennep called "the rites of passage," more or less prolonged and severe, in the course of which he is inducted into ever widening spheres of social participation, and also into the sanctum of the deeper things of life. Throughout, ritualistic affairs, precise, inexorable, but thrilling as well, punctuate the life of the individual. Here he finds opportunity to excel in whatever skills may be involved, in dance, recitation, song, magic; but also and mainly he learns to feel, with ardor and finality, about those things, natural, supernatural, social, which are as they are and should never be changed.

One should not forget that all this takes place within a peculiarly restricted social and intellectual setting. The primitive community is small numerically, relatively isolated geogiaphically, and thin historically. This spatial and tempoial lestriction all but cuts off opportunities for comparison between one's own culture and that of others, whether contemporaneous or ancestral. Thus local loyalty remains unimpaired, the intellectual hori/ons aie limited, nor is there much occasion for either toleration or prejudice. Within its lights the primitive group is thus capable of solving its educational pioblcm almost perfectly. With scaicely a break the present performs its vehicular task of passing the past on to the future. Persistence is the watchword, with only hcie and there an invention, a change in physical environment, an invasion of strangers, to relieve the monotony and perhaps initiate a process of readjustment.

Whatever we may think of the knowledge or attitudes of primitives, this picture may well serve as an instruc-

tive example of education successfully fulfilling its intended purpose, namely, cultural perpetuation. Likemindedness invites conformity, and skills are acquired in performance under guidance. Opinions about verities, actual or presumed, are molded and held by authority. And, most important of all, life reaches out toward education, to give it impetus and content; and education, from beginning to end, inducts the individual directly into life.

As our second sample let us take the three millenniums in European culture, roughly from 1000 B.C. to 1800 A.D. This enormous span, say from Homer to J. J. Rousseau, of course does not exhaust the entire range of the educational experience of literate mankind, even as known to us. There were also the Chinese and Hindus, the Assyrians, Babylonians, Egyptians, and Persians. However, the inclusion of these ancient civilizations would not significantly alter the picture. What they had, by way of education, the Greeks and Romans also had, and in some respects the latter had more.

Now what strikes one at once, as he surveys these three thousand years, is that in children's education no radical invention occurred in the entire period. It is true that Rousseau felt justified in referring to Plato's *Republic* as the greatest book on education ever written. Plato did, in fact, have remarkable insight in this domain. When he speaks of the mind as forward-reaching and dynamic rather than merely passive and malleable, so that the teacher's task is reduced to providing a proper setting, the modern progressive educator may well feel handsomely anticipated. But this was Plato, and his *Republic* was merely a dream recognized as such by its creator. Meanwhile Greek elemen-

tary education remained prescriptive and authoritarian, as was also that of the Romans, and that of the White clergy and the Black clergy throughout the Middle Ages and beyond. The *trivium* and *quadrivium* of the medieval school hardly presented an advance over Plato's projected curriculum. On the other hand, people understood the value of early and intensive training in a restricted field. Thus the Jesuits of the Catholic Counterrevolution successfully applied, in the name of the Church, the principle "catch them young and drive them hard," even as the Spartans had done for centuries, when they took the boys from their families at the age of seven to turn them, in the name of the state, into warriors, tough ("hard-boiled" we would say), courageous, loyal to the city, and nothing else. In all these centuries the idea of education of some sort for all was unknown and undreamed of, outside the bosom of the family of course. Free public education did not come until the middle of the seventeenth century in the New World state of Massachusetts.

In Europe public education was first introduced by the Prussian King Frederick William I. Compulsory (free) schools soon followed. His son, the great Frederick, continued his father's policy; and after the Napoleonic defeats German rulers made persistent efforts to universalize education. Other states followed Germany. In Fiance free public education, for children from six to thirteen, did not come until 1882; and in secondary schools fees were not abolished until 1933. Similar slow progress occurred in England throughout the nineteenth century. In the United States of America free public education became general under Horace Mann, toward the middle of the last century.

However, let us turn back for a moment. In Greece the discussion method, cultivated by the Sophists, developed into an art by Socrates, and immortalized by Plato's *Dialogues*, was a signal contribution to education in thinking; but this was not for children. This device, moreover, was far from general or even common in education, then or later. It was, on the contrary, only to be observed in those rare cases where a man who had something to say and ardor and patience enough to want to say it to others became the center of a philosophical school. Such schools did not disappear with the political collapse of Greece. By Alexander they were carried to Asia; in the Hellenistic Age they throve in Alexandria, Syracuse, and Tarentum; they were not unknown in Roman days, not quite forgotten in the Middle Ages, and blossomed forth once more in the Italian Renaissance.

At the beginning of the eleventh century the spirit of these schools reappeared in a different formal setting in the European universities, first in Italy, then in France, England, and Germany. In these institutions the higher learning of the day was expounded by scholars who had enough to give and enough skill in the giving to leave a lasting mark on the careers of their students. What counted was not the town or the school, but the man. A student worked with Aboard, Erasmus, or Beccaria, just as in more recent days he sat at the feet of a Helmholtz or Kuno Fischer, a Pasteur or a Vladfmir Solovyov.

Nor were the universities unique in exhibiting this master-disciple relationship. Far from it! From the Persian Wars to the French Revolution some of the best things in culture, as well as some of the worst, were

passed on from man to man outside the channels of formal instruction or even of institutional sanction. In philosophy Socrates might have communed with Athena herself—for no records are extant of his specific antecedents—but Plato learned from Socrates and Euclid, and Aristotle from Plato. In the arts of war Philip of Macedon learned from Epaminondas, the Theban; Alexander from Philip; Haephestion and Ptolemy from Alexander. Similarly in sculpture Phidias in the fifth century and Praxiteles in the fourth had disciples who had students of their own. It was the same in the minor arts, as well as in music and the drama.

So also in the Middle Ages. In the days of chivalry the young noble started his career as a page at the court of another noble. Here he learned the proprieties. Later he became a squire, in which capacity he followed his lord in chase and war. Thus he learned the use of arms and the virtues of courage and self-control, as well as that peculiar attitude toward the feminine sex, mixed of contempt and adoration, which characterized that period. When he reached the age of twenty-one or thereabouts, he was initiated, with much decorum, into the status of a knight. In scholarship or systematic thought he remained at best a weak brother; but whatever he knew or acquired proficiency in came by way of direct experience of a certain kind of life, including the example of his betters.

Similarly in the crafts the young aspirant started as a boy with a master who fed and clothed him, after a fashion, and taught him his craft or at least permitted him to learn it by watching and doing. Later the apprentice, still fairly raw in his chosen field, packed his meager belongings and started out "into the far" as an

itinerant craftsman, stopping off here and there to pick up experience and skill from one master, then from another. When his *Wanderjahre*, perhaps as many as seven, were over, he finally settled down as an independent master, joined a guild, and soon had apprentices of his own.

We hear of great merchants in the middle centuries and of greater ones in the Renaissance. The preserved records of the business operations of the Medici, merchant princes of Florence, bear a curiously modern look. Where did these gentlemen acquire their craft and their craftiness? There were no schools of business or of business administration for them to turn to. Like those who preceded them and others who followed them, they went to school in the shop, the office, and the market place. His ear close to the ground, his eye open for the ways and desires of men, the merchant in perplexity would turn for a hint to a trusted friend, now white and bent, who had gone through the mill in his day. As business goes, they did not do so badly, these merchants of a trading age.

Toward the end of the eighteenth century and the beginning of the nineteenth, when so much happened in politics, science, and philosophy, education also was quickened by new beginnings. I could not here review, even in telescoped fashion, the rise of progressive education from Rousseau's E*mile*, through Pestalozzi, the saint of Yverdon, whose chaotic humanitarian longings were given point and direction by Jean Jacque's book, through Froebel, through Madame Montessori, to the Gary schools, John Dewey, and the experimental schools in their many varieties and shadings. Rather, let me draw a composite picture of this phase in education as

it obtains today in the United States and set it against the background of our particular problem, the relation of education to culture and specifically to the individual.

The experimental schools of this country differ widely in leadership, curriculum, and philosophy. Some, like the Lincoln School, strive to preserve in a measure the conventional curriculum; others, like the Stelton School, abandon curriculum altogether, reduce the teacher to the position of a visiting adviser or consultant, place children of different ages and educational statuses within four walls and a roof, and trust in God or whatever *dens ex machina* may hold their allegiance. Some favor psychoanalysis, others Watsonian conditioning. Some specialize in discovering proper ages for particular subjects, others in keeping careful biographical records of their wards. Some stress the arts, others more definitely intellectual techniques. And so on and on. But in this maze of opinion, principle, and performance certain guiding ideas are discernible which are accepted by all and serve to reduce these schools to the common denominator of the progressive education movement. Let me mention some of these basic ideas:

1. The child, though always a potential adult, is also a person; and childhood is not merely a preamble to life, but life. Hence the child should be treated as a person; and its life, at home or in school, should be expected to have a content, a meaning, a wholeness all its own.

2. The most significant years from the standpoint of personality formation are the earliest, say up to seven. \Vhat is formed in these years, in the way of basic disposition, attitudes, and emotional set, persists and is

hard to dislodge; what remains unformed is hard to recoup later. Hence the concentration of the experimental school on these years.

3. Every child is creative. This does not mean of course that all children are potential creative artists but that there is a creative urge in all, which if unimpeded will express itself. Experimental children are not, in the first place, *taught* art. Ready models and patterns would overwhelm them in no time. They are merely placed in a setting ot materials—pencils, crayons, clay, paper, boxes, surfaces of all things (including doors, walls, window sills of the classroom) —and left alone, to work out as best they can that relationship of personality, material, and technique which lies at the root of artistic work. Guidance and system come later and then cautiously and tenderly, always with an eye on what the child himself wants to do.

4. Knowledge is good, but thinking is better. Thinking feeds on knowledge, it is true; but knowledge without thinking is mere dead weight. Hence the school turns its back upon the tirneworn ideal of an educated man whose mind was a storehouse of facts, truths, relevancies, and oddities but whose thinking played tag with this mental baggage rather than used it as a tool of thought. Instead, the school is moderate in its presentation of facts but exacting in its expectation of their being used as steppingstones to conclusions, operations, hypotheses.

5. Authority kills thought. The only way to learn to think is by thinking. Hence no *conclusions* of teacher, director, author, or parent are expected to be accepted by the child, although many *facts* of course must be accepted on their "say-so." Either the child learns to

reach the conclusion, or he finds grounds to reject it, or he remains in a state of doubt (a most soul-saving predicament, educationally speaking).

6. Abstraction is at best difficult. It will be achieved. When prematurely introduced, it easily degenerates into verbalism or cultivates insincerity. The concrete and directly given, that which is open to the eye, ear, and touch, speaks to the mind of the child in a language he can understand. Hence the many devices used by the school to give reality to this conviction: projects, workshop, theatricals (self-composed, self-taught, self-acted), visits to places, people, and institutions.*

7. Interest shortens the road to knowledge and understanding. The obsessing sin of the conventional classroom is its dreariness. If the teacher is dull, the pupil will be dumb. The experimental school will have none of this. The teacher here is attuned to every sign of interest in the students. He seeks it and builds on it. He elaborates a topic while the enthusiasm lasts, knowing that it will stick. If need be, he abandons, if only temporarily, what he intended to do or say in favor of that which holds the attention of the moment.

8. Logical thought at bottom is a technique, and science is a method of discovery. Man is not born with these, nor docs he find them casually on his way. He must seek them, cultivate them, make them habitual. Hence the school's preoccupation with research and method. Parts of every day, sometimes days on end, are

•'There are of course special situations. Take, for example, mathematical abuluy. The very devices which serve so well to induct other children into the world of numbers fail with the born mathematician, Ix'cauve they bore him. To him mathematical abstraction is a happy hunting ground. He feels peifectly at home in it, without introduction For such children special provision is made in many schools.

consumed by things that are not given but must be found out. The child starts with a question, there emerges a problem, and the search is on! At an early age the accessories have been explored. He has learned where to find references, how to use encyclopaedias, and what to do with bibliographical indices (and first where to locate them). In the exploration of a topic, methods of procedure are examined and analyzed and conclusions are questioned and criticized. What can be tested is tested. Experimental children are merciless in pursuit of the answer.

I could continue with this for some time, but let what has been said suffice. Plainly experimental education in many of its aspects is a palliative for a civilization in which life and instruction, culture and education, have parted company. Among primitives such a procedure obtains naturally. I do not of course refer to that large baggage of traditional lore which is transmitted dogmatically and on authority. What I have in mind is the enormous range of active experience, with things and with people, which the primitive finds opening up before him at an early age—skills, techniques, personal contacts, terms of address—to which he is introduced from the first and by means of which he is drawn into the life of the spot and the moment without being quite aware of what is happening to him. In our society there is a gap here which the conventional school does not close; rather does it emphasize it. The experimental school emerges at this point, to reconstitute, by deliberate foresight and device, a process that was once natural and spontaneous.

This sketch of the experimental system, in the setting of our culture, should not be taken too realistically. At

best it is but a symbol, an indication of a direction, and a possibility. Especially is it so in two respects. The progressive schools represent but a drop in the bucket of our educational setup, nor is this situation likely to change significantly for a long time to come. Furthermore, what the democratic world needs today is not alone progressive education in general but more particularly education for social participation. This it needs urgently and on the widest possible scale. It seems fitting therefore that the last section of this chapter should be devoted to a discussion, all too brief though it needs must be, of this topic.*

As one looks in perspective at the history of man from the earliest days to the present time one fact stands out supreme. Man has solved the problem of living in nature. Not in the sense of course that nothing remains to be done—the task presumably is an endless one—but in the sense that what we have accomplished is sufficient unto the day. We live comfortably and could do so even more comfortably it certain problems not involved in our relation to nature were also solved. This is so because we have explored the nature of materials. We know where to find them, how to transform them, how to employ them for building, decoration, clothes, utensils. We travel with safety or could do so if certain problems referring to human behaviour were also solved. Not only this, but also transportation has become both comfortable and rapid beyond the wildest dreams of

* Editotial note: At this point there followed in Dr. Goldemseiser's original paper a fairly elaborate discussion purporting to answer the questions' what do we have? what do we want? how can we get it by way of education for social participation? For editorial reasons this section was eliminated. He plans to revamp the deleted section and publish it in one of the educational journals.

our not too remote ancestors. This is so because, in addition again to our knowledge of materials, we have learned to apply to the problems of transportation on land, under water, and in the air certain theoretical insights applicable to the behaviour of things, insights reached by science and elaborated to an amazing degree of certainty and precision. Similar achievements have led to the transmission of sounds, forms, or symbols with accuracy and speed so transcendent as practically to eliminate space and time. Combining theoretical, experimental, and organizational factors, we have learned to construct and operate industrial plants which would more than suffice for all purposes of need, convenience, comfort, and even luxury for all if (again that fateful *if!)* the human situation were as intelligently and competently handled as is the technological one. And so on and on, all along the line.

In comparison the human scene has lagged behind. Old bonds of sympathy and co-operativeness were broken, and no new ones emerged to take their place. The individual, pulled hither and thither by conflicting currents of influence, economic, political, moral, intellectual, is whirling about in bewilderment if not in despair. Ideals have grown thin and unconvincing. No longer do they seem capable of arousing enthusiasm, commanding allegiance, or exacting sacrifice. In a physical world man has learned to harness, he has become strong almost without limit. Now that he also has the opportunity to become wise and sensitive and good in matters human, he has run amuck among other men: he is suspicious, envious, selfish, unsocial, prejudiced, and above all bewildered and incompetent. We have, in fact, come to such a pass that it is not at all unlikely,

as Santayana says, that "civilization is perhaps approaching one of those long winters that overtake it from time to time" (13:6),* an Ice Age more horrible than any of the past, because what is congealed in it is humanity itself.

What confronts us, then, is the problem of society, of social life, of man among men, man versus man. Solutions have indeed been attempted, so much so that we in the United States are in a position to choose between two alternatives, samples of which are available for study and evaluation. In the words of John Dewey: "To these questions the world offers two opposed answers. The one answer is dictatorship, more or less catastrophic, where a few knowing the changes they wish will impose by force and indoctrination their chosen cultural elements (ideas and habits) upon the many. The other answer is democracy, where the culture develops within itself, by processes of study and education, the needed new ideas and habits" (11:61).

In harmony with the vast majority of our educators, Dewey chooses democracy. "We aim to bring up a generation," he says (11:65), "able to and disposed to study and conclude freely and act appropriately where social matters are concerned." And, as those whose function it is to do this "bringing up" are mostly the teachers, "this building of intelligence for actual service is the peculiar duty of the teachers of the country." So it is democracy and education—education, moreover, headed toward the future but grounded in the present. As Charles Beard has well stated, "It is in the living present, with things as they are, with time forever irreversible, that the bearings of education must be taken

* Page 6 of reference 13 at end of chapter.

and its future chartered" (3:5) • If so, the social sciences, as knowledge and as tools, come upon the scene. We must know man and his ways if we are to have a say in the management of his, that is, our affairs; and the systematic study of man and his ways, in society, is the particular preoccupation of the social scientist, though not all of us are equally optimistic as to the promise of this program. Beard's words on this point also deserve to be quoted: "Although the social sciences have not attained, and in the nature of things cannot attain, the exactness of generalization reached by the physical sciences, they are as indispensable to efficient individual conduct and social practice as technology is to machine industry; and reliance on them will increase as society grapples resolutely with its problems and potentialities*' (3:62). If it is to be democracy and education, it seems that the teacher must be the agent, the social sciences the tool, and the school the place. Nor is it to be forgotten, as Beard wisely remarks, that "if the schools do not participate in this creative enterprise, it will go forward without them, reducing their significance in the educational process" (1:53) • The school has an opportunity to lead. If it fails to seize it, it may find itself unable even to follow. This is precisely what has happened to the parent. He also might have assumed leadership in the present educational crusade. This he has failed to do partly through weakness of spirit, but mainly through incompetence. Now he finds himself unable, in all but a few cases, even to follow or understand the content and relevance of that phase of the educational movement which comes nearest to our needs, the experimental school.

The proposed induction of the social scene into the

school curriculum is no mere change in the study program, requiring at most the reduction or elimination of some other subjects. What is involved is a change in social perspective in the community at large accompanied by a shift in teaching techniques, in the equipment of teachers, and in the type of school administration. George S. Counts, who has devoted himself to this matter with much insight and courage, writes as follows: "The individualistic tradition, except as it finds expression in the narrow sphere of competition for pecuniary success is out of accord with present-day conditions in America and serves to obscure the real nature of the contemporary social order" (5:121). And Dewey says: "Indeed, many intellectuals pride themselves upon keeping their thinking 'pure' by keeping it remote from social problems and needs. In consequence, there is relatively little ability to think effectively upon collective matters to a collective effect. There is a painful contrast between personal culture and culture that is socially grounded and effective. In consequence, no small part of our present crisis is due to the fact that social belief and thought are dominated by convention and outworn tradition and by notions that are deliberately put in circulation by publicity agents of the dominant pecuniary group. Our literature is marked by the growth of a critical spirit, but one which has contributed little to the integration of a new social culture" (10:56). And again, even more trenchantly, Dewey says: "In the making of tools and mechanical devices we have been prominent, but there has been comparatively little inventiveness in social affairs. Here we have been largely content to depend upon tradition and accident. Nothing like as much creativeness has gone into the

formation of ends and purposes as into mechanical means for ends externally determined. Since foresight and planning of consequences are conditions of a recognition of responsibility for results, an indirect outcome of the absence of systematic social planning is absence of any conviction of personal responsibility. When things go wrong on a large scale, the blame is put on uncontrollable natural and social forces, and the same forces are depended upon to bring a turn in the wheel of fortune. . . . The final result is a spirit of fatalism combined with one of reckless speculation" (10:57).

Bertrand Russell, whose cultural orientation is more individualistic than Dewey's and who has delved deeply into the findings of modern psychology, comments on the situation, in a passage of characteristic eloquence, as follows: "This collective failure to use the intelligence that men possess for purposes of self-preservation is due, in the main, to the insane and destructive impulses which lurk in the unconscious of those who have been unwisely handled in infancy, childhood, and adolescence. In spite of continually improving technique in production, we all grow poorer. In spite of being well aware of the horrors of the next war, we continue to cultivate in the young those sentiments which will make war inevitable. In spite of science, we react against the habit of considering problems rationally. In spite of increasing command over nature, most men feel more hopeless and impotent than they have felt since the Middle Ages. . . . The cure for our problem is to make men sane, and to make men sane they must be educated sanely. . . . Can it be wondered at that a world in which the forces of the State are devoted to producing in the young insanity, stupidity, readiness for homicide,

economic injustice, and ruthlessness—can it be wondered at, I say—that such a world is not a happy one? . . . Our age is so painful that many of the best men have been seized with despair. But there is no rational ground for despair. The means of happiness for the human race exists, and it is only necessary that the human race should choose to use them" (12:239-240). I want to draw attention to the fact that Russell, in this passage and elsewhere, while of course admitting the supreme importance of applied intelligence, also stresses the cultivation of the sentiments and attitudes, a factor our best educators frequently fail to emphasize or even to mention—as if intelligence alone could possibly show us the way out of the present predicament. Reason is important, teaches Russell, but so is "love," a term he uses in a felicitously broad sense.

In the social sciences the demands upon the teacher are peculiar in certain respects. A physics teacher is expected to know and clearly expound his physics. He need not have any personal opinions or views on the subject, nor is it necessary for him to know more than the essentials of the other sciences of nature. Not so in the social field. Here, as elsewhere of course, the requirements of scientific analysis and technique have brought about a parcellation of the field. Nevertheless, a sociologist must know the field of the political scientist and that of the economist. Each of the three must know the fields of the two others. More and more we come to realize that all three must also know anthropology. Any social scientist, moreover, must be grounded in psychology; else he is bound to go astray sooner or later. The training of the social science teacher, then, must be unusually comprehensive. Not only this. Social

science deals with human affairs about which any social science teacher, if he is also a person and a citizen, will have certain private views and opinions. If he has neither, he should not teach social science. His class is always on the *qui vive* as to what *he himself* thinks of the tariff, immigration, the Supreme Court, the New Deal, the Soviet Union. The class is right, and they are entitled to know. When he deals with facts, he must be well informed and accurate; when he expounds the views of others, he must be "fair," that is, impartial. His own views must not color the exposition. When he makes a personal confession, he must have the courage of his convictions without expecting others, in this case his students, to accept what he says as more than "one man's view/' If he is a good teacher and a forceful personality, his students will of course be influenced by his standpoint. This much we must grant him, but not more.

If efficient progressive democracy is to be achieved, a transformation of our educational setup along some such lines as here indicated is urgent in the extreme. At the same time the difficulties confronting us are overwhelming, if not insurmountable. Shall we undertake the task regardless of the difficulties?

BIBLIOGRAPHY

1. BEARD, CHARLES A., *A Charter for the Social Sciences in the Schools,* Part I, Report of the Commission on the Social Studies, American Historical Association; Charles Scribner's Sons, New York, 1932
2. ——, *The Nature of the Social Sciences in Relation to Objectives of Instruction;* Charles Scribner's Sons, New York, 1934
3. ——(editor), *The Unique Function of Education in*

American Democracy; Educational Policies Commission, National Education Association, Washington, D. C., 1937

4. BENEDICT, RUTH, *Patterns of Culture;* Houghton Mifflin and Company, Boston, 1934
5. COUNTS, GEORGE S., *The American Road to Culture, A Social Interpretation of Education in the United States;* The John Day Company, New York, 1930
6. DEWEY, JOHN, *A Common Faith;* Yale University Press, New Haven, Conn., 1934
7. ———, *Experience and Education;* The Macmillan Company, New York, 1938
8. HUTCHINS, R. M., *The Higher Learning in America;* Yale University Press, New Haven, Conn., 1936
9. KALLEN, HORACE MEYER, *Individualism; an American Way of Life;* Liveright, Inc., New York, 1933
10. KILPATRICK, WILLIAM H. (editor), *The Educational Frontier;* D. Appleton-Century Company, New York, 1933
11. KILPATRICK, WILLIAM H. (editor), *The Teacher and Society,* first yearbook John Dewcy Society; D. Appleton-Century Company, New York, 1937
12. RUSSELL, BERTRAND, *Education and the Modern World;* W. W. Norton and Company, New York, 1932
13. SANTAYANA, GeORGE, *Character and Opinion in the United States;* Charles Scribner's Sons, New York, 1920

Ill

BASIC FACTORS IN AMERICAN DEMOCRACY

Edgar Eugene Robinson

ALL well know that in the past dozen years democracy has been widely discussed. There were some to say that it was discovered. But we know, if we consider for a moment, that the discovery was rather of the theme than of the reality. But why was it uncovered as a theme for discussion? The answers to this question would be various. Three of them may serve to help us now. First, the war to make the world safe tor democracy, which came to an end over twenty years ago, brought the whole process of our own building of a nation into a new perspective. We saw, as with new eyes, that democracy had grown to be our very life. Second, the denial of democracy in the lurid 'twenties that followed the war made all thoughtful Americans restive and uncertain. We saw that neither economic opportunity nor civil liberty was a fact in the modern America. Finally, as the world sank deeper and deeper in the economic backwash of the war, as the thirty-year depression entered the second decade and as even our own country gave way in 1929, the advocates of democracy faced, as never before since the closing years of the eighteenth century, the opposing philosophies of government and society. Once more, as in the Age of Revolution, the basic interest of all was in man's attempt to govern himself. These indeed are enough

facts to explain the interest of students and citizens in a discussion of American democracy. And the continuing appeal of Communism and the mounting triumphs of Fascism made it seem a matter of course that there should be campaigns of endorsement of democracy. No longer was it taken for granted, as it was a hundred years ago or even twenty-five years ago. As America was a land of many peoples, it was also a land of many minds; so democracy was endorsed without too careful attention to the contents of the bottle. We knew the prescription was good!

Critics, scholars, and propagandists, all turned to an analysis of the democracy we thought we had. What a result was here! Not one answer—a thousand answers. The findings were on the whole disheartening, not to say adverse. To some it appeared that democracy did not work; to others it appeared that we never had tried it. These were the simplest forms of denial. But however thoroughgoing the attack, however devastating the revelations of what life had been for the millionaire and the unemployed in this land of plenty, always there was this surprising outcome. I mean surprising to those who did not know their America very well. Always there was the basic belief that, *if* it were not here, it *ought* to be. If it did not *work* well, it should be made to do so. No critic, scholar, or propagandist who spoke for any considerable body of Americans in these past twenty years has not built his future upon the triumph of democracv. This unanimity should warn us of the danger that lurks in agreement. When the Liberty League speaks in terms of democracy, we are prepared to express a certain degree of caution in full acceptance. But when the Communist partv formally appeals to the

American tradition of Paine, Lincoln, and Jackson, we ought perhaps to be a little more wary than the boyish orator who still follows Paul Revere. After all, what is this glittering symbol we all wish so much?

Let us look at the record. What have been the basic factors in the life of this growing organism? How did it come to have this appeal? Nothing in its present appearance nor in its present functioning would warrant such a widespread belief that it is our American way of life. The modern scene in these United States looks too much like any other modern scene. No, it is in the lifeblood that the answer is to be found. Such a view is immediately a corrective. We enter a world of reality when we conceive of democracy "in history." As Professor Woodrow Wilson said at a meeting of teachers in 1899—about forty years ago—the United States "originated in a kick." And he went on to say: "When I see schoolrooms full of school children, going through genuflections to the flag, / am willing to bend the knee, if I be permitted to understand what history has written upon the folds of that flag. If you will teach the children what the flag stands for, I am willing that they shall go on both knees to it."

First of all we must say again that democracy has always been under discussion. At every stage in our life as a separate people there has been discussion, because democracy in theory and in practice was the most important aspect of life. In theory of course democracy rested in laws that protected the individual and provided for him certain rights as a citizen. In practice it went much further than that. In America, in economic and social relations, there was a democracy that rested in actual living conditions. The theory of democracy

has little place in our federal Constitution, written in the closing years of the eighteenth century. But the life of our people has been upon the physical frontier of the nineteenth century. In that experience, when reality of equality was based on reality of economic opportunity and social relationship, was found the inheritance that marks us out from all the other peoples of this earth.

The basic meaning of a word rests in its use by the people. Democracy has meant our way of life; it has meant not denial, but fulfillment; it has meant affirmative attainment, not negative protection. The basic assumption has been that the individual in America would be interested, would improve his status, would be in a position to help himself and also his less fortunate fellows. It is all a conviction of individual responsibility.

Were it not so obvious, it would be a matter of importance to amplify and explain why it is that our people have had such heroes as Jefferson, Jackson, and Lincoln. So, too, would we gain insight if we turned from action to thought and examined, as we cannot examine here, the expression that lies beneath the messages of Emerson and Franklin and Wilson. Their abiding faith in the people is no mere reliance upon the popular will. It is deeper than that. It is not the right that the individual has that concerns these exponents of American democracy. It is what the individual will do with this freedom. None of these men conceived of constitutions as giving birth to freedom, nor did they feel that laws would provide democracy. The liberty of which they wrote was the liberty the masses of Americans felt to be part of their experience.

If they did not have it, they expected to have it. Why did they have this faith? I think we ought to seek the answer.

We have said that Americans have lived the life of a frontier people. This is important. It carries us back to the day when the building of the United States began with the transit of European civilization. In this new land to which in time millions of Europeans came, there was by contrast with Europe wider ownership of property, freer exercise of religion, and a considerable participation in local government. But, most of all, there was on the first frontier and on all successive frontiers a greater need of human material. Building a civilization called for man power. Man power was precious. Moreover, the demands of the pioneer years placed a premium upon accomplishment. For a time it was ability that counted, and in the contest all had a chance to show ability. There was created a social democracy, and this social democracy was closely related to an economic democracy. That in turn was a reflection of the conditions that obtained in a period of building. And a people who lived together and worked together formulated in time a code of conduct that reflects these conditions of equality. It was a natural result of this opportunity in building that a political democracy was provided in the right to vote, in the protection of property, in stated elections, in an executive that represents all the people, and in a judiciary that exercises judgment in dispute.

Strange it is that this sequence in the creation of our democracy has not been given more emphasis. It explains our strength by contrast with political democracies which have arisen in imitation. It explains a grow-

ing weakness in our own time. Experience does show how easy it is to overthrow or at least to control political democracies; but a people who had lived in a social and economic democracy, as had the American people for three hundred years prior to the World War, found it comparatively easy to maintain their basic liberties.

At least they did until it became clear in the twentieth century that we, too, entered a new world. Three developments began to change the American conception of America. Well before the World War Americans were apprised of the need of restoring the government to the people. In a word, they had lost control in politics. They were conscious also of the fact that the conditions of economic equality were slipping from them. In a word, there must be a new basis for liberty. Again, they were told that class lines had obliterated the old-time social equality. There must be a rebuilding of our social structure. Here it was that the schools entered the picture.

Of course the schools had always been the fundamental basis of the whole conception of a democratic America. The schools were the doorway through which successive generations of American youth marched to opportunity. The public school system was the heart of the body because of the basic belief of Americans in the importance of the individual. This, too, was not a theory or a doctrine or a belief, but a product of their own experience. So it was that, when men spoke of democracy as our way of life in America, they did not mean, in the first instance, laws or constitutions or rights or privileges. They did mean that in our experience there was certainty of change for the group and for the individual and that because of this we had a

changing creed and an ever evolving system. We not only marched westward toward the setting sun; but, well before the scientists provided evolution as a watchword for the nineteenth century, Americans also accepted "progress" as a touchstone to success.

Now it is not accidental—nor is it unimportant—that the elements that actually dominate in American history are the elements that make up a democratic society. As we find them embedded in our experience as a people, we find them deeply embedded in the emotions of our present population. No campaign to indoctrinate the American people with the essentials of democracy would succeed by democratic means were it not for the fact that these essentials are a part of our national heritage. We cannot escape our history. And in that history social opportunity and economic livelihood have been facts and political protection has been taken for granted.

Conquest of the "new frontiers" consists therefore not in denying these well accepted beliefs, but in adapting them to the new economic and social conditions of modern America. To expect to provide a political philosophy for the new era that does not project itself out of American experience is to imagine a vain thing. That is why neither Communism nor Fascism may take successful hold in America. A political democracy might succumb before their onslaughts, but not a people with a tradition of economic and social democracy.

Would you have illustrations? Henry Wallace has compelling reasons in his *New Frontiers* (14);* Herbert Hoover has memorable historical parallels in *The Challenge to Liberty* (8). And again may I say that the great-

* Reference 14 at end of chapter.

est foe of a successful movement to maintain a democratic America is the man who fails to see that our whole conception of society as an organism proceeds from belief not in laws and constitutions, but in the temperament, customs, and traditions of our people. It is not law that will provide fair living conditions and adequate wages; it is not law that will continue to make it possible to live and prosper in America whether you be Gentile, Jew, Negro, or Chinese; it is not law that will insure to you and to me an equality of power at the polls and an equality of treatment in the courts. If law is to provide these elements in a Good Society, then there is no hope, for our experience teaches us that laws do not create these desirable rights. If they do, you glorify the state; and God help us. In America people have acquired these rights, and laws have followed to protect them.

I call to witness in our own recent experience the triumph of the tactics of Sidney Hillman in the field of labor relations, the success of Edward McGrady in the field of industrial relations, and the organization and appeal of the Committee of Forty-three in our own San Francisco. These men exemplify in our own American life the priceless practices and principles that come out of our unusual history as a self-governing people.

If what we have said comes from a study of our history as a people, we are ready for the assertion that in the heritage at this present moment are to be found three demands upon the future: (i) that every citizen shall be secure in his person and assured of an opportunity for livelihood; (2) that there shall be freedom of action and liberty of conduct with due respect to others; and (3) that there shall be assurance of a society within

which growth for the individual is assured whenever that individual has power of growth—in short, that the American heritage shall be protected in the conditions of our own time. This protection of our heritage the schools can and must provide.

For the sake of brevity may I summarize what seem to me the intangibles of our heritage. Words are pale, but they must suffice to clothe these shining symbols of our faith: freedom of speech, freedom of worship, and freedom of the press of course. But note also: tolerance, protection of minorities, law and order, the general welfare, equality of opportunity, consent of the governed—all of these are values that are of concern not only to the state but also to the individual. These have the sanction of our history. These the citizen must maintain. These the schools must nurture. In his brilliant chapter "The Climate of American Ideas," in *A Charter for the Social Sciences,* Charles Beard writes, "Nothing is more evident in the American tradition than the right of the individual to resist excessive social pressures" (1:69). Again he writes, "Underlying all these national ideals is a belief that the lot of mankind can be continuously improved by research, invention and taking thought" (1:70-71).

We have a heritage of social democracy, and denial of it is on every side in our own unhappy day. Can the schools save the heritage and by so doing rebuild our social order?

Do not underrate the need of an insistence upon this thoughtful tradition. "More and more, as I think about history," says the hero of *It Can't Happen Here,* "I am convinced that everything that is worth while in the world has been accomplished by the free, inquiring,

critical spirit, and that the preservation of this spirit is more important than any social system whatsoever. But the men of ritual and the men of barbarism are capable of shutting up the men of science and of silencing them forever" (9:433). Most of all therefore shall we beware of those who would seek to provide a democracy in the United States based upon experience with democracy elsewhere. Our American experience places emphasis upon the individual and not upon the state. It places social, economic, and political democracy in that order of natural sequence, and in so doing has provided thus far a means for a continuing functioning of a growing organism.

From what I have said, the reader will surmise that I yield to no man in my devotion to the belief that in education lies the hope of the future for our people. Out of our history comes clear evidence that the voice of the people is often not the voice of wisdom; that, only as the processes of education continually raise the objectives, the factual content, and the abilities of our people, can there be hope that there will be realized in these United States the vision of leaders and the means they offer us as a self-governing people of attaining the better life. As President James B. Conant of Harvard has well said, "Learn to know history, but do not worship it." And President Roosevelt, commenting upon the spread of intolerance and hate, said before the National Education Association, "If the fires of freedom and civil liberties burn low in other lands, they must be made brighter in our own." Why can we repeat this freely, gladly, and with enthusiasm in America? Surely the answer is clear: because of our history as a thoughtful people.

BIBLIOGRAPHY

1. BEARD, CHARLES A., *A Charter for the Social Sciences,* Part I, Report of the Commission on the Social Studies, American Historical Association; Charles Scribner's Sons, New York, 1932
2. ——, *The Discussion of Human Affairs;* The Macmillan Company, New York, 1936
3. BEARD, CHARLES A., and BEARD, MARY R., *The Rise of American Civilization;* The Macmillan Company, New York, 1927
4. BECKER, CARL, *The Declaration of Independence;* Harcourt, Brace and Company, New York, 1922
5. ——, *Everyman His Own Historian;* F. S. Crofts and Company, New York, 1935
6. COUNTS, GEORGE S., *The Prospects of American Democracy;* The John Day Company, New York, 1938
7. FISH, CARL R., *The Rise of the Common Man;* The Macmillan Company, New York, 1927
8. HOOVER, HERBERT, *The Challenge to Liberty;* Charles Scribner's Sons, New York, 1934
9. LEWIS, SINCLAIR, *It Can't Happen Here;* Doubleday, Doran and Company, Garden City, N. Y., 1935
10. NEVINS, ALLAN, *The Emergence of Modern America, 1865-1878;* The Macmillan Company, New York, 1927
11. ROBINSON, EDGAR E., *The Evolution of American Political Parties;* Harcourt, Brace and Company, New York, 1924
12. TURNER, F. J., *The Frontier in American History;* Henry Holt and Company, New York, 1920
13. ——, *The United States, 1830-1850;* Henry Holt and Company, New York, 1935
14. WALLACE, HENRY A., *New Frontiers;* Reynal and Hitchcock, New York, 1934
15. WARFEL, HARRY R., GABRIEL, RALPH H., and WILLIAMS, STANLEY T., *The American Mind;* American Book Company, New York, 1937

IV

THE DYNAMICS AND CONTROL OF SOCIAL CHANGE

William Fielding Ogburn

CONTRARY to traditional belief, history does not repeat itself. At least it does not in modern times. The fact that culture is changing brings a multitude of problems that would not exist were we living in a stationary society and were things the same yesterday, today, and forever. But change also brings hope, the idea that mistakes of the past are being left behind. Change brings the hope that we may build a better world. Since everything is changing, may change not be controlled and directed, so that this vale of tears may become a happier place in which to live? Before discussing the possibility of controlling social change, it is desirable to examine first the processes of change. This is in accordance with the working rule that it is good practice first to inquire what is likely to happen and then later to see what can be done about it.

The change that is occurring is not in climate. What change there is in the earth's surface and the surrounding media is too slow to be of concern except in a few such specialized problems as droughts, floods, and erosion. Nor is the change that is occurring in the biological nature of man of importance, for selection is measured for a whole people in terms of hundreds of

years and mutations are measured perhaps in thousands. The changes, then, are taking place not in nature or in biological man; they are taking place, rather, in our social heritage, that part of our environment not possessed by animals in the wild state, which is sometimes called culture.

Social change exists because there are inventions. An invention is the combination of existing elements, material and/or social, into something new, and hence it is the changed element in social change. The invention may be mechanical or social. In either case it usually precipitates other changes which are themselves inventions, mechanical or social, though these inventions may be minor ones. The study of social change, then, focuses on invention.

An invention is a change itself, but it has social effects and creates social changes. The appearance of an invention is often only the beginning of a whole chain of social changes. Thus the invention of the elevator leads to the construction of the tall apartment building, which, being unadapted to children, leads to a decline in the birth rate, which makes for employment of women outside the home, which in turn facilitates separation and divorce, and so on to still other consequences of a minor nature. The process is somewhat similar to a billiard ball striking another billiard ball, which hits another, which in turn strikes another. Each ball creates motion in another, but the force is eventually spent. So it is that an invention starts a chain of consequences. After the first social effect of an invention, there are various derivative effects, secondary, tertiary, and so on. Thus if a moratorium could be declared on all mechanical inventions and scientific discoveries, the motion set

going by those at present existing would still continue probably for hundreds of years, being manifested in the form of social changes.

If an invention is an important one, the changes it precipitates project outward, not in one direction, but in many directions. Thus short radio waves are used for broadcasting music, drama, agricultural information, and weather reports, for flying, tor getting ships into port, for safety at sea, for treating rheumatism, and for killing insects. Indeed one hundred fifty different influences have been recorded for the radio. The influences spread outward like the spokes of a wheel. In each direction there are likely also to be many derivative influences in addition to the immediate influence.

Though the derivative influences, when the motion is nearly spent, are slight, they are not to be ignored. Thus the mechanical stoker has increased the number of Negro porters at the railroad stations. This it has done incidentally by increasing the size of the locomotive to be stoked and hence the length of the train. Some passenger trains are a quarter of a mile long. Thus there is increased demand for aid in handling the luggage of passengers, especially those in the rear cars. This influence is quite slight, however, in affecting an increase in the number of Negroes in cities of the north. But there are other derivative influences than those of the mechanical stoker bringing about this effect. A social invention, the restriction of immigration from other countries to the United States, is one, for demand for labor in northern cities was supplied by Negroes from the south in the place of foreign-born immigrants. The transportation inventions and the expansion of factories are other forces that facilitate the growth of Negro popu-

lation in the north. There is thus a convergence of influences from many different inventions on the same phenomena. A very good illustration is the growth of suburbs. This growth is promoted by a great variety of inventions, such as the automobile, the electric train, the telephone, the radio, the motion picture, and the chain store. The influences of all these inventions converge from many directions upon the suburb very much as "all roads lead to Rome.'*

The reason why inventions have all these various influences, particularly the derivative ones, is that the parts of culture are interconnected. Culture resembles a machine, such as a clock, where all the parts are related to one another. A change in one part necessitates a change in the other parts. If the dial of a clock is made larger, the hands must be enlarged, too. So also must the springs and the various other parts. Thus the invention of the automobile is connected with the state and produces reverberations in the distant field of the theory of government, for the automobile tends to break down county government, to weaken the states' rights theory, and to centralize further government in Washington. In modern culture the interrelations of parts are observed between education and industry, for the question of vocations and school attendance, which touch both, is involved. Indeed the whole curriculum is a concern of both state and industry. Religion and science, two other parts of culture, are also closely related, as is shown by the effect discoveries in biology and in astronomy have had upon the forms of religious belief. The family and industry are interrelated, for the use of steam power by steel tools has taken industry away from the family. The family is thus not independent of business developments.

This intercorrelation of the different social institutions means then that an invention is not an inert thing alone, but a force sometimes of an explosive nature.

The picture of the inventional process is not one of a series of great inventions of revolutionary significance strung together across time. It is rather one of a multitude of small inventions occurring with great frequency. There are some fifty thousand patents a year in the United States; most of them are minor. Indeed an invention might be better defined as an improvement on something already in existence. The work involved in an invention is by no means an indication of its greatness. Big inventions are big because of their significance. The first dynamo was merely a single loop of wire hung in a small horseshoe magnet, a rather simple invention; but its use as an instrument of power has been stupendous. The effect of small improvements is to make the process one of evolution rather than revolution. The history of the automobile has been a series of year-by-year improvements. These have made the automobile a vastly improved article over what it was in the 1890's. But there are revolutionary improvements. Perhaps the self-starter was one of these, for it opened driving to women. The automobile itself, like the steam locomotive, was a revolutionary invention in vehicle transportation. Any one series in a part of culture, like vehicular transportation, appears to evolve slowly through slight improvements at frequent intervals; but interspersed at long intervals are basic inventions of radical significance, such as the chariot, the stagecoach, the steam locomotive, and the automobile. The improvements occur with greater frequency soon after a basic radical invention has been made. Thus the invention of the plow sulky was fol-

lowed by hundreds of patents on it, which finally all but ceased. The growth of any one series is likely to be relatively sudden at one point with a significant invention, which undergoes many improvements, rapidly only at first. Then another big invention comes along, and the process is repeated. When all the series in all the parts of culture are added together, the growth of the whole of any such series seems less violent and irregular. The inactive gaps in one series are timed with great changes in another. In this way the evolution of the whole is more continuous and smooth than any of its parts. Violent changes in state or national government are called revolutions, but the political organization is only one part of culture. More violent changes may occur in other parts of culture than in political organization. Continuity and evolution are common, violence and revolution rare.

Inventions arise as a result of three factors: the existence of materials and knowledge with which to make them, the demand, and the presence of an inventor. Unless the materials and knowledge exist out of which to make an invention, genius and demand can hardly produce it. Leonardo da Vinci could not invent the airplane without the light combustion engine. Newton could not have invented calculus without analytical geometry. The demand for medical progress has always existed and the best brains of antiquity worked at it, but medical progress had to wait for scientific progress. Here are important limitations on the control of invention if we assume control to mean production as well as restriction.

However, often there exist adequate knowledge and abundant material, but the demand is lacking. In such

cases necessity is the mother of invention. An illustration is the drinking fountain. It was invented by merely turning the faucet through an angle of 180 degrees. It could have been invented at any time after plumbing was introduced; but it was not invented until the spread of the germ theory of disease, which caused a great demand for cleanliness. In a situation such as this much can be done to speed an invention.

Where there is demand and where the elements that go to make up an invention exist, the inventor appears. There seems to be no shortage of inherited mental ability necessary to make inventions, for the distribution of such ability assumes the form of a normal probability curve. The area in any segment of the upper portion of the curve is large for a large population. Every great invention in modern electricity has had more than one inventor. Newton and Leibnitz invented the calculus. If Darwin had died in infancy, Alfred Russel Wallace would have discovered the principle of natural selection in biological evolution. There seem to have been, in these cases, inventors at times when the demand and the materials existed. Inventions thus appear to be inevitable. The difficulty rather lies in training the basic inherited ability of the potential inventor so that it is equipped with adequate knowledge to make the invention. Thus, if social attention is directed enough to the desirability of the invention, the existing inherited ability will be selected, trained, and equipped for the making of the invention, so that there appears to be no inherent barrier from a shortage of hereditary genius in a large society.

The conclusion on this point is that the social demand for an invention can do much to bring it into be-

ing, but not if the elements that go to make up an invention are not in existence.

For any particular state, inventions need not be invented by inhabitants of that state if they have been invented in another country. They may be imported. Indeed most of the inventions existing in any one area were not created by the people living in that region but were imported from other lands. The possibility of control of invention when the process is one of diffusion is a matter of speeding up the importation if there is the desirability of doing so. Japan imported great western inventions much more quickly than did China. It must not be assumed that it is easy to import and adopt inventions from other peoples. The natives of Australia could hardly import the steam engine. It was necessary for the English to be imported with it. The American Indian adopted the gun, but at a price, sometimes, of killing off too quickly his food supply. The more similar are the levels of two cultures, the easier it is to exchange inventions. Inventions from the United States can be adopted more easily by the English than by the natives of the Congo. It is possible, however, for the Japanese to exercise some control over their rate of social change by regulating the importation of scientific discoveries from other lands.

The foregoing remarks sketch the main outlines of the dynamic processes of social change. These processes, while charted in terms of mechanical invention, are true also for inventions other than mechanical ones, which here will be called social inventions. There needs next to be singled out for presentation a rather practical observation of a process in contemporary western civilization. The process to be singled out for discussion is the

great role of technological change in producing social change. The reverse is a possibility and often occurs; that is, a social invention may produce technological changes. Thus the World War, which may be called a social invention, caused thousands of mechanical inventions. An illustration is the device for detecting sound under water in such a way as to locate a submarine. It is also true that social inventions often produce many social changes. Thus legislation prohibiting the sale of liquor in the United States greatly magnified organized crime as an illegal business. So, while social inventions often produce social changes and technological changes, the more common process appears to be for technological inventions to produce social inventions and social changes.

One reason for this is the tremendous accumulative nature of invention and scientific discovery, which does not seem to exist at the present time in social organization. Now the number of inventions bears a functional relationship to the number of existing elements that may go to make up an invention, very much as the amount of interest paid by a banker is a function of the size of the principal. The accumulation of the elements of material culture and science has thus gone forward like compound interest, until today it is very large indeed. Hence the great number of mechanical inventions and scientific discoveries exert great social influence, and there is correspondingly a tremendous amount of social change. But, whatever be the proportion of social changes caused by scientific discovery and mechanical invention and whatever the proportion caused by social invention, everyone admit? that there is a vast amount of technological change, which produces social changes. The

family is being changed by the power inventions, religion by scientific discovery, government by the transportation inventions. The phenomenon of social change caused by mechanical invention is of sufficient magnitude to demand special consideration with respect to control.

Modern society is characterized, then, by a vast number of important inventions that cause a great proportion of the social changes of contemporary life. In considering this situation from the point of view of control it is well to distinguish between the uses of an invention and its social effects. The uses are generally its first direct influence, and the social changes it produces are usually its later, derivative influences. The uses of inventions are highly praised by society, for they save labor, increase production, and in general are useful to the individual having them. Hence inventions are admired for their uses. But their social changes are another matter. They are indirect influences and are not always admired. The factory gave us cheap products with less labor, a good service; but the social changes it brought in child labor, injuries by accidents, occupational diseases, and overcrowded living conditions are evils.

Our policies of control are likely to be those of gaining the good uses of an invention but at the same time avoiding the harmful social effects. There are those who have despaired of thus separating the two. How can we have the very productive factory which destroyed domestic production without homes broken by separation and divorce?

On the other hand, might we not have had the cotton gin with its speed and economy without slavery and a war? The problem of control, then, may center not so

much around the control of the invention as around the control of the social changes it precipitates. Such a program of control may be effective in some cases and not in others. Thus the inventions increasing mobility of the population bring more contagious diseases and insects affecting agriculture. These may be controlled. But these inventions weaken local government. It is difficult to see how this result can be prevented.

One of the greatest needs for control of social change lies in lessening the delay of the adjustments to the new inventions. This situation arises because invention causes a change in one part of culture to which another part of culture is (losely adjusted. Unless the other part of culture changes also, and promptly, there is likely to be a maladjustment. If the dial of a clock is changed and the size of the hands of the clock is not changed also, there is a maladjustment. If airplanes are used to bomb the interior of a country, neglect to protect the water reservoirs and central electric stations causes a serious maladjustment. Our light and water supply are fairly well adjusted to warfare on the front, but warfare is changed by the air bomber. Hence the water system and central electric stations must be changed accordingly. There is, however, likely to be a lag in the protection against air raids, as is the case in England and as might easily be the tragic situation in the United States. This point may be stated by saying that, if a change occurs in one part of a culture which is adjusted well to other parts, then changes should be made in these other parts of the culture to keep the harmonious adjustment to the changed part.

Another illustration—the cities that are increasing rapidly have only about half as many police per thou-

sand inhabitants as those cities that are losing population. The change occurs first in the population; but the adjustment in the number of police occurs only after a considerable delay, causing either inadequate police protection in the case of growing cities or unnecessarily large budgetary expenditures in cities of decreasing size. There is a lag in the correlated part of culture to keep up with the changed part. This is a clear case ot the need for control. A city grows in population generally under the impetus of some invention, but the budget makers do not anticipate the growth and base the police budget on the past. The government of a decreasing city does the same thing. It is quite understandable why there is the lag; but, if there were not, the adjustment could be improved. In this case it is subject to human control.

Sometimes lags cannot be eradicated quickly. They are beyond satisfactory control. For instance, immigrants can come to Chicago in two weeks from rural Poland, to which they are fairly well adjusted, at least so far as language and knowledge of customs are concerned. But these immigrants cannot learn the language and customs of a great American city in two \veeks, indeed sometimes not in a lifetime. Removing the lags in stationary or slowly changing parts of culture which are correlated with rapidly changing parts may take place with varying degrees of success or failure according to the situation.

It may be well at this point to summarize the steps of the analysis. The first part of the paper was used to sketch the main outlines of the dynamics of social change. Then a special case was singled out, because it was quantitatively significant for present-day society. The part of the process selected was the social changes

precipitated by the great number of mechanical inventions and scientific discoveries. If the analysis is for the purpose of developing any policy of educational control, this special case is thought to be the most fruitful point of attack.

Our field glasses are directed then toward the situation in modern civilization which shows the different paits of culture changing at unequal rates, producing maladjustments. The focus of our glasses shows further that the lust precipitating changes are occurring frequently in the material culture. The technology is moving forward most quickly. By comparison the nonmaterial parts of culture are seen to be generally sluggish in their motion. The unequal degrees of motion are, moreover, seen to produce stresses and strains in the pattern of society, whereas culture is best where the different parts fit harmoniously together like the parts of a machine. But in our rapidly changing civili/ation they do not fit thus because technology is changing first and fast and social institutions are changing later and lagging behind.

The progiam of control, then, may be one of slowing up invention and scientific discovery until the sluggish social institutions catch up; or a better, perhaps wiser, progiam is actively to go about speeding up the social changes that will bring a better adjustment to the technological changes.

The next and last step in the discussion is the consideration of adjustment ways and means that are practical and within the scope of human effort as we know it. This task is extremely formidable and is generally today the concern of reformers. All the programs of all reformers are not wise of course, for much the same reason that all patents are not good inventions. The death rate

among patents is high and no doubt rightly so. So also there are many so-called reform measures that ought to die. I was told that, while Mr. Hoover was President of the United States during the long downward course of the business curve, for a time the number of plans for curing the depression that came in by mail to the White House averaged around three hundred a day. The head of a large cancer laboratory once said that the number of reported cures for cancer averaged one a week. Perhaps these data should not be interpreted as an index of the number of crackpots in our society, but as an indication of efforts to improve conditions. For one good reform measure we must have a number of inadequate proposals.

The observation to be made about these efforts to control is that a very large number of them are efforts to remove lags. The safety campaigns are attempts to adjust to a whirling technology that changed first. The growth of the federal government in Washington, which is the objective of many liberals today, is an endeavor to adjust the central government so that it will keep pace with the centralizing tendencies of technology, especially as evidenced by the automobile, airplane, telephone, railroad, radio, and printing inventions. The controversy that centers around the Supreme Court decisions turns upon the same point, that of speeding up the changes in a lagging government. For instance, the inventions just mentioned have rendered the state boundary lines less significant. The truck driver would not know when he had passed a state boundary line unless a marker on the roadside informed him. State boundary lines were laid off long before industry had grown so great that it spread over into many states. Yet the Court decisions interpret

the interrelations of business very narrowly, so that the control of business tends to be thrown back on the state, whereas a highly articulated industry spreads irrespective of state boundary lines. What happens to the trapping of animals in Maine, apparently a purely local affair, affects the fur trade in distant St. Louis, one of our biggest markets for fur. The courts accentuate the delay in adjusting lagging parts of our social system, because they rely on precedents. Precedents too often relate to times greatly different from the ones in which they make their decisions.

Then the effort of the CIO to organize the unskilled labor in the great mass production industries is an attempt to remove a lag. Industry is organized on a national scale, and to bargain with industry on anything like an equal basis calls for powerful organization of labor on an industrial basis, as well as on a trade basis. The labor unions in this country have lagged behind the growth of industry, with which of course they are closely articulated.

It may be argued that the organization of medical practice in a somewhat similar way has lagged behind the great growth of scientific medicine. To practice medicine successfully today requires extensive equipment and large capital outlays, as suggested by modern hospitals. With the growth of medical science has come specialization. The situation is much like the coming of the factory system among the handicrafts of the early nineteenth century. In industry the coming of advanced technology, large capital outlays, and specialization meant organization and cheaper prices. The attempts to organi/e medical practice through state health insurance or through private associations are attempts to keep up

with the advancing technology and bring about mass production and low prices.

Reformers, radicals, progressives, and liberals, then, are busily engaged in trying to speed up the lags in our social institutions to keep pace with an advancing science. They may be working unwisely at times, and certainly all their proposals are not well thought out and matured. They represent, though, an attempt at control of social change, a great phenomenon of historical times. They are concerned also with other problems than those of accumulated lags, but certainly a large portion of their effort is devoted to adjusting to a rapidly moving science.

Their task is a formidable one. The opposition they meet is powerful. The resistances are numerous: fear, inertia, sentimental attitudes toward the past, and many others.

Often the mere effort of movement is stupendous, just as the moving of a building requires effort. Thus to introduce the metric system, to change the calendar, or to simplify our spelling are tasks staggering to contemplate. We can get along with the old systems, but they represent crude folk origins. The yardstick, the length of the month, and the spelling of the word *through* represent early accidental origins for which more facile inventions exist today.

One of the greatest obstacles to the control of change is the "vested interests," a term popularized by Thorstein Veblen. The vested interests are those groups in power who will lose their preferred position if changes come. The change in their differential position often means loss of income, but it may also mean mainly loss of administrative power or prestige. An interesting illustra-

tion may De drawn from tne annals ot tne last century. The reformers of the time wanted to have mail delivered to farmers. They had to fight for years, however, to get this service, which seems quite natural today. One of the leading vested interests that opposed this reform in those days was the liquor dealers. Their lobby was effective for years. No doubt they argued that it was good for the farmer to have a respite from his toil by coming into town for his mail. There he could have a little recreation and a glass of beer. The other city merchants feared that they might lose trade also, though the mail order houses should have favored the change in mail delivery.

This pattern of behaviour by vested interests in the face of a proposed reform is a familiar one to radicals and reformers. It is obscured by a barrage of rationalizations. The abolition of child labor is opposed in states with textile mills by the argument that such legislation is an unwarranted intrusion of federal action into the territory properly under state jurisdiction. The right of local action must be safeguarded, even if little children suffer and even if the transportation inventions have broken down local autonomy, for our great democracy rests on the springs of local action and liberty must not be interfered with by an imposed authority from a central government. These rationalizations are all plausible. However, the almost universal use of them in various forms by the vested interests that oppose change suggests that the opposition is really due to the danger of loss of the favorable differential in their position.

There are many obstacles to those who advocate social change. But experience shows that the two just discussed, vested interests and the mere size of the physical task,

are two of the greatest. Introducing a mechanical invention is different. The invention is useful, a profit can be made from it, it is put to use in small numbers; so technological changes come more easily than do the social changes of adjustment.

It may be questioned whether the efforts of social reformers can properly be called attempts to control change. Reformers are often merely running to catch the technological train. Their effort at changing society is to bring it into harmonious relationship with technological advances. Catching up lags is not exactly the leadership one associates with control. It is, rather, more like holding on to a runaway horse, if a different metaphor may be used. The control that one thinks of when the captain sails the ship of state is somewhat different from that exercised by the social reformer. Such control would mean, rather, anticipation and planning, as well as skill in managing the social forces. This idea will be examined next.

Consideration of control of the planning and direction type must also rest on the validity of the preceding analysis of the dynamics of social change. It does not seem reasonable that invention, the beginning of change, will be controlled by a democracy based on a laissez faire philosophy. The virtue of laissez faire, as Adam Smith and others pointed out, is in the eonomic balance obtained by a free enterprise system. Even so, there is no inference that invention would ever be controlled under a condition of laissez faire. The probabilities are much greater under the totalitarian state though it may be questioned as to how effectively even a totalitarian state, as it is ever likely to exist, could control all invention. Such a state or even a superorganization of industry

might conceivably control the introduction of some major inventions. However, this idea is not yet in the realm of practical discussion. Many of our population, however, would rather have free invention than a totalitarian state.

These remarks have concerned the negative aspect of change, the denial of invention. But control of change cone erns as truly the promotion of invention. This may be done under a system of free enterprise. Indeed it is possible that new inventions may be made better under a democracy than under a totalitarian state. Much is being done now to discover a cure for cancer. Good progress lias been made toward developing television. There are about two thousand laboratories connected with industries in the United States concerned with promoting inventions or watching for possible improvements. But, when an industrialist lets loose an invention on society, he really does not know what he is doing. He may know what some of its uses may be, but he does not know what social changes it may produce. The faculties of our institutes of technology know little about what social effects their technologies will produce, nor do they appear to care much about them.

The problem of control of social effects of invention resolves into one of anticipation. It is necessary first to anticipate the inventions and then to anticipate their social influences. With regard to forecasting inventions something can be done. It can be known at what assignments many inventors are working. After an invention has been patented, it often requires a quarter of a century to develop it for the market. Inventors have been at work for a hundred years on the mechanical cotton picker. The mechanical harvester required the aid of

over thirty inventors. Indeed most of the revolutionary inventions for the rest of the twentieth century are probably already in existence in some crude form. The difficulty in forecasting invention lies not in taking inventories and broadcasting the information. It lies, rather, in forecasting which of the many existing inventions will die, for, as we have said, the death rate of inventions is very high. While the mature inventions may be predicted with some success from the incipient ones, the forecasting of the birth of infant inventions seems to be impossible with our present knowledge.

Forecasting what social changes a particular invention will make is quite necessary to any control over these changes. To foresee these seems more difficult than to predict the maturing of an infant invention already in existence. The effect of the automobile on urban real estate was not foreseen, nor was it anticipated that the automobile would break down county government or create the need for a new unit of government for a totally new aggregation of people known as the metropolitan community. It is not known today what political changes will be produced by the mechanical cotton picker nor what changes will be made in the status of the Negro population. Yet undoubtedly study ol such problems would do much in anticipating the social changes inventions will produce. But little attention is being given to it. I know of but two courses in any institution of higher learning on the social effects of invention. There is almost no publication of books on the subject, and there are only a few articles. Fifty years of extensive study of the question would increase greatly our knowledge of what social changes inventions induce.

The first step in studying the possibilities of social

change is to get the habit of looking ahead. Social scientists have their attention fixed on the present or on the past. We teach what the first industrial revolution did to the family, the handicrafts, and the city. We do not teach what the industrial revolution of the twentieth century will do during the remainder of that period. Yet the students we teach, who have an average expectation of life of forty-five years and whom we are preparing for life, will live their lives throughout the remainder of the century. The training of scientists is rather against looking ahead. Suspended judgment is their ideal and caution a much prized trait. These characteristics are justified. Yet teachers have a responsibility to their students, who will live in a world that will be different from the one in which their parents lived and who ought to know something about it.

From the analysis and discussion it is clear that something may be done in the direction of the control of social change, but probably not much will be done until many years hence. The spirit of man is proud. He flies through the air and telephones across the ocean. It is natural that in his pride of achievement he should talk of control of our changing culture. But to expect to control the evolution of our whole social heritage is a grandiose dream. The growth of the superorganic, as Spencer called the social heritage, is one of the really great processes of nature, as yet far beyond the reach of man. But for effective action in planning and in solving our social problems such an ambitious fantasy is not at all necessary. A much more limited program may be effective. What we want is really a more harmonious adjustment between man and culture. The superorganic impinges on organic man in many critical places. These

are the sectors which should be attacked. One of these is the distorted functional life of man occasioned by the long hours of specialized and monotonous labor at a poverty wage. He needs more recreation to exercise his other biological functions. Another critical area in the adjustment of man and his social heritage is shown by the prevalence of nervous and mental disorders. When one in twenty boys and girls of high school age of today will be confined in an insane asylum sometime during his life, all is surely not well with man's adjustment to culture.

The manageable problem of control of social change, a task more nearly within the capabilities of man as he is in this century, is to try to control the forces of change that precipitate the critical spots in the adjustment of man to the superorganic, typified, for instance, by mental disorder. To do this, these forces must be anticipated and we must begin by turning our faces forward instead of backward.

BIBLIOGRAPHY

1. GILFILLAN, S. COLUM, *The Sociology of Invention;* Follett Publishing Company, Chicago, 1935
2. MUMFORD, LEWIS, *Technics and Civilization;* Harcourt, Brace and Company, New York, 1934
3. OGBURN, WILLIAM F., *Social Change;* B. W. Huebsch, Inc., New York, 1922
4. PRESIDENT'S RESEARCH COMMITTEE ON SOCIAL TRENDS, *Recent Social Trends,* Vol. I, Chap. Ill; McGraw-Hill Book Company, New York, 1933
5. WALLIS, WILSON D., *Culture and Progress;* McGraw-Hill Book Company, New York, 1930

V

SCIENCE AND TECHNICS IN AMERICAN CULTURE

Lewis Mumford

WHAT is the most important contribution that modern science and technics have made to civilization? Once people used to answer this question by bringing forward some masterly scientific law, like the law of gravitation, or some single invention, like the steam engine. By now, however, we see in all the separate advances something much wider, much more pervasive, much more permanent than any separate invention or discovery. We see the triumph of an impersonal sense of order, spreading from the cosmos to man's institutions and his daily life, an order described by the astronomer and the physicist and given practical form and application by the inventor, the engineer, and the organizer. This order is based not on mere untutored human preference, but upon the objective nature of things. It displaces the *"I* will" of the human despot to the "It must" or "It probably will" of the scientist. Wherever man attempts to live rationally, purposefully, intelligently, this new order of science becomes like the warp on the loom: the strict foundation of all his more human imaginings and patternings.

But the will to order, which has transformed the physical world during the last three centuries, did not arise exclusively in the astronomer's observatory or in the

mechanic's workshop. Long before Copernicus and Galileo it had shown itself independently in other parts of the social milieu in western Europe. It appeared in the inflexible routine of the monastery and in the daily discipline of the capitalist countinghouse, where men learned to deal with the abstractions of quantity and measure and where they subjected themselves, in the pursuit of power, to a regimen almost as impersonal, almost as abstemious, as that of the monastery itself.

In all these fields the will to achieve order concentrated on those elements in life that could be measured, isolated, repeated, or reduced to the bare mechanical skeleton of time, space, matter, motion, or number. Quantitative appraisal displaced qualitative appreciation; color, form, pattern, the important attributes of the artist's world, were cast to one side as purely secondary attributes of matter. In the effort to achieve a mastery of the physical world, human interests were disregarded and belittled unless they submitted themselves easily to quantitative analysis. As a result the immediate gain in mechanical efficiency was immense, but the order that was created was a one-sided and partial one. To understand the immediate task of science in our own day, we must appreciate how much of the real complex universe the seventeenth-century scientists emptied out of their scheme, with its practical short cuts, its too facilesimplifications.

Mark that the new quantitative accountancy, which is the very basis of the physical sciences, had by the seventeenth century begun to spread into every department of living. The new capitalist, no less than the new natural philosophers, reduced all the qualitative items of the economic life—wine, meats, clothes, houses, men and wo-

men themselves—to an abstract common measure: money. Money represented social power, command over the services of other men.

The new soldiers and drill masters, no less than the new capitalists, reintroduced mechanical habits of drill. They treated the individual soldier as a mere mechanical unit. They concentrated on conditioning his reflexes to a machinelike precision of obedience. They treated the man himself as a uniform, replaceable part in a larger mechanism. By carrying the principle of uniformity through to every part of the army's equipment, beginning with the new uniform itself, the army made some of the critical contributions to large scale mass production. Eli Whitney's gins, Samuel Bentham's frigates built of prefabricated parts, and the first sewing machine were all witnesses of the army's new passion for uniformity and rigorous mechanical organization.

One cannot properly evaluate the vast triumphs of the physical sciences—or the inherent limitations in their origin—unless one remembers the social milieu in which the scientist operated. He was not alone. The merchant, the soldier, the mechanic, each in his own way was pursuing the same methods and concentrating upon a similar type of experience. In this universal search for order a methodical man came into existence, a man who lived by the clock, who believed, like Franklin, that time was money; a man whose efficiency as a working unit was vastly increased by the orderly regimen of daily living he imposed upon himself.

Nor can one properly understand all the changes that have taken place in our external environment through mechanical invention unless one realizes that the machine itself was a result rather than a starting point. In

present-day thinking the machine has become the symbol of this new order, for a whole world outlook is crystallized in the automatic power machine, with its use of extrahuman sources of energy, with its displacement of the active manual worker, with its precision and fine articulation, with its emphasis upon impersonality, regularity, and efficiency, and with its inhuman capacity for repetition and perfection, so that the millionth light bulb or the millionth motor car is for all practical purposes the counterpart of the first.

But one must remember that the will to mechanize antedated the invention of most of these special mechanisms. The machine is the projection of certain elements in the human personality itself. The machine is the outcome of a deliberate human desire for power even though it be obtained at a sacrifice of life. We have machines because we have made ourselves mechanically minded, because we admire mechanism, because we have been able to transfer to mechanical instruments our own specially developed habits of repetition, of exactitude, of precision, and of punctuality. We have in the past two centuries projected this mechanical animus outside us in a whole complex world of independent forms, but the animus originates in us. It is due to our willing, our liking, our ordering.

Through the accidents of its origins one of our greatest human achievements, namely, the impersonal order achieved by science, has in the past been associated with merely one aspect of the human personality, the desire to master the external environment and by mechanical discipline to control the actions of other men. When we think of science, we usually automatically think of the physical sciences. When we dream about the future of

technics, we think lazily in terms of a widening of the province of mechanism. But meanwhile our very triumphs in mechanization have taught us that every other part of the environment must experience a similar discipline if the machine itself is to be a blessing rather than a curse. In general we have achieved order only in the simplest parts of existence—those parts in which mechanical devices take the place of man and multiply his individual powers. We have now to achieve an equivalent order in the world of living organisms and in human society. Let me put this problem in a simple concrete form.

Consider the place occupied by the machine in the life of the typical working-class inhabitant of Middletown, as revealed in the Lynds' study and as known by cursory observation to all of us. Behold the well-built sixty horsepower car, far exceeding any reasonable demand for speed and long-distance locomotion, which is installed in the family garage. The car is often bought at a sacrifice of essential items in the family budget, like food and medical care. Beside it, in a secondary position, is the dwelling house of the same worker, narrow, cramped, insufficiently surrounded by open space, without a gaulen or a pleasant outlook. It is ramshackle and inferior even as a mere technical instrument and positively horrifying if one remembers that here is where young children are reared, where the sick are nursed, where the love exchanges between man and wife are carried on. The motor car, built for speed and motion, receives homage, care, almost worship. The house, built presumably for living, is a sour caricature of a human environment. The machine itself belongs to the twentieth century. The human environment, into which it

should smoothly slip, has only fitfully and intermittently been molded by the application of our collective intelligence.

And if we examine the social relationships in this community, we shall find an even grosser picture of backwardness. Viewed with respect to the total personality, our society is in a state of dangerous disequilibrium. The plainest symptom of this is the recurrence during the last generation of deliberate, systematic barbarism not alone in totalitarian states, but also in large patches of so-called democratic communities—a barbarism accompanied by contempt for the intelligence, a glorification of the brutal and the irrational, and an abandonment of objective science. The very height of our technical achievements in the construction of power plants, long-distance power lines, telephonic systems, and synthetic fabrics only emphasizes the disparity between the mechanical and the human parts of our environment.

This gap between our extraordinarily refined technical organization and our still limited and imperfect capacities lor human association and collective discipline raises one of the main problems that confront the modern world: it is the burden of the present discussion. To confront the many disturbing paradoxes we now face, I shall begin by asking what the physical sciences and our present mechanical apparatus have done to alter our social relationships. Then I shall attempt to show that within the world of science and technics the limited mechanical order of the seventeenth century no longer suffices; the power complex, representing the interests of the capitalist, the soldier, the bureaucrat, the inventor, and the physical scientist, is on the point of disinte-

gration, and a new set of interests and attitudes has appeared within the frame of modern technics itself. This new ideology is founded not on a restriction of experience to the quantitative and the repetitive, but on an attempt to embrace every aspect of it; not on a reduction of organism to mechanism, but on an attempt to widen the order originally established in our preoccupation with the mechanical so that it will include, without violence or injury or debasement, every aspect of life.

Let us begin, then, with the most fundamental changes that science and technics have wrought in the modern world. First of all let us consider the new structure ol time. One of the real contributions of Oswald Spongier was dramaitizing and sharpening the sense of time as the individual expiession of a particular culture. Each great epoch in cultuie has had its own particular attitude toward time, its special beliet or disbelief in the importance of time, its peculiar interest in orderly time sequences or its indifference to them. Thus the Hindu cultuie has no accurate date keeping lor historic events. The doctrines of transmigration and an ultimate Niivana both made time, as a succession of localized events, practically nonexistent.In no other culture, apparently,has time played the part that it does in our own. In no other do the notions of accuracy in time keeping, and regularity in time sequence, play such a part in regimenting the activities of men and bringing them into fonnal harmony. Even in modern sport, although freed from the constraint of productive activity, time pla\s an impoitant part: the stop watch of the engineer, useful in following the motions of a worker at a lathe or drill press, also follows the events of an athletic contest. Here

even the fraction of a second marks the difference between victory and defeat.

This preoccupation with time, this belief in the importance of temporal order, was in part a by-product of one of our greatest western inventions, the mechanical clock. It was the first accurate, automatic power machine, by now the most universal. Through the very mechanism of the clock we have learned to associate measured space with measured time, visual space with temporal space, as in the swing of a pendulum, the movement of an escapement wheel, the passing of a clock hand over a certain number of inches on a dial. Through the long use of the clock the habits of accurate scientific measurement have become second nature to us. Instead of living in a world of vague duration, in which events are as long as they feel and vary with the beat oi the heart and the amount ot emotional interest or intellectual stimulus they hold, we have trained ourselves to live more and more in a world of counted days, hours, and minutes—a world of common time, which we share with all other time measurers. If punctuality is the courtesy of kings, the articulation of our entire commercial and industrial structure has made universal, at least within our western cities, a kingly courtesy.

The association of time, space, and motion, symbolized by the mechanical clock, has for the last three centuries been deepened by the progress of mechanical invention. Through various ingenious devices we have discovered various means of contracting time, either by doing more things within a given time or by doing one particular thing at a higher rate of speed and therefore in a shorter span of time. While the clock itself keeps a standard pace, regulated by the master clock of the universe, every

other instrument in our technology has been speeded up, solely with reference to the product, rarely with any respect to the worker or the user. Because of our concentration upon mechanical time speed has asserted itself in the modern mind as a good in itself, and in the effort to achieve greater speeds power production has taken on a new value.

Since the middle of the nineteenth century a mechanical time consciousness has become omnipresent. By means of our common time measurement and time obedience an entire population is regimented into a uniform sequence of behaviour, from the punctual rising with an alarm clock to the equally punctual arrival of the metropolitan worker at a rapid transit line or a railload. Punching a real or an imaginary time clock is a constant accompaniment of urban living. But, although in industry our time has contiacted, in the sphere of thought time has undergone a different evolution. It has expanded both backward and forward. B\ means of archaeological and historical studies we now reach back into the past. Our historians are far more aware of actual events in Mesopotamia, in Egypt, and in Greece than the people who lived almost on top of these places. Similarly we reach lorwaid into the future with the aid of statistical (harts and their indicated trends, with the use of instruments like promissory notes and timed contracts and planned programs of work. We even deposit money in a bank or with an insurance company with the singular faith that twenty years hence our stun will emerge again, to help us meet an emergency that is at present untbiesceable. The result is that with every addition of time, time as the significant past and as the anticipated and foremolded future, our world becomes more

extensive and the contracted present, the immediate, becomes less significant.

The contraction of time has been marked by an increase of tempo not only in mechanical occupations themselves, but also in every adjacent activity. Time saving is one of the most obvious stigmata of our unparalleled industrial efficiency. But what shall we do with the time that is saved? The ancient New York yarn about the man who desperately changed from the local subway train to the express train, got to his destination a minute and a half sooner, and then did not know what to do with the time he had saved holds in varying degrees for our whole civilization. I suggest that the only significance that our time saving has, from a human standpoint, is to give us the necessaiy extra margin by means of which we may assimilate a world whose time boundaries must extend ever farther beyond our immediate circle of events. We must save time in the present, in order to spend more time actively in the past and the future. It is by his critical assimilation and evaluation of history, it is by his selective forecasts and projections into the future, lor his whole community, that the modern man shall be known. Thomas Mann, in his two great novels *Magic Mountain* and *Joseph and His Brothers* has dramatized our new highly complex time sense, but we still take it too much for granted. Time saving without the leisure to live more extensively in the past, through memory, reflection, and history, and more extensively in the tutuie, through plan, forecast, and anticipation, is a meaningless futility—a deliberate chunking of life.

This brings us to our third temporal problem, the problem of reconciling an external, mechanical, public time, associated with space and motion, and an internal,

organic, private time, associated with metabolism, memory, and human experience, dependent upon the rate of growth and the capacity for assimilation. Organic duration and mechanical time are often in conflict, and the subjection of the human organism to a routine that is too inflexible may cripple many of its higher capacities. The spasmodic, the irregular, and the capricious are as necessary for human balance, indeed for human efficiency, as the orderly time routines we too easily take for granted. Thought cannot be chopped into fifty-minute parcels merely in order to make a university's administrative mechanism run more glibly. Artists and musicians cannot be put on strict eight-hour schedules even for the privilege of being accepted in a labor union. Lovers who govern their emotions by the clock or the calendar will find themselves headed for desperate boredom. Organic duration, with its lags and its spurts, its sell-centered regularities and its uneven spans, cannot be wholly ironed out into mechanical sequences without vital losses that offset the apparent gains in efficiency and order. The problem is not to displace one kind of time by another. The problem for our modern world is to discover a method tor their dynamic readjustment, so that our gains in power and order will also be directly subservient to life. The conquest of space accompanied the conquest of time. Indeed both types of effort, with all the mechanical inventions that aided them, were made possible by means of the new ideology of order and in turn exemplified and furthered that order. The magnetic compass, the sextant, the accurate chart, with distances marked off by lines of latitude and longitude, laid a basis tor that world-wide exploration of the seas and the

lands beyond the seas which put the entire world more or less under the rule of those who employed the new technics.

The settlement of the United States itself was a by-product of the deliberate conquest of space undertaken during the Renaissance. And it is not entirely by accident that we Americans strove to foster, at a reckless sacrifice of public resources, the building of a continental railroad system. Nor is it an accident that here Joseph Henry and Samuel Morse invented and perfected the telegraph, that here Bell perfected the telephone, that here De Forest's improvement of the termionic tube gave electrotechnics one of its widely useful inventions, and that here the Wright brothers finally perfected the airplane.

This diminishment of distance by means of fast transportation, the postal system, the telegraph, and the telephone has fulfilled one of the long dreams of the race. The winged man and the flying carpet and the wishing rings reached out in fantasy to these very mechanical achievements. But here again the conquest has had a somewhat paradoxical result. We have had our wish; but the outcome, as so often in the fairy story, has had a wry twist we did not anticipate. With respect to speed in communication and movement we may adapt the excellent French proverb and say, "The more one moves, the more one remains fixed." The contraction of space, so far from opening up the world to us, has actually shrunken great parts of it. By annihilating distance, all too literally, we have wiped out the life-quickening possibilities of change through movement. Quick transport and quick communication, though accompanied by a feverish transfer of symbols, goods,

images, and voices, leave us standing precisely where we were in the first place. The more completely we break down distance, the more difficult it is for us to move from the place from which we originally set out.

In short, we are back again where we started in a parochial world, where intercourse takes place by voice-to-voice and face-to-face contact. In a sense we now have millions of neighbors where before we had but a few hundred. Though the scale has changed, the underlying facts of personality have not changed. In achieving the power to diminish space and to multiply our neighbors we have not yet increased by moral discipline and intellectual preparation the ability really to command these new potencies. The radio, the motion picture, and the approaching television set have so far merely magnified and multiplied the banalities of an essentially limited existence. When we travel at seventy-five miles an hour along an express highway, even the visual scenery largely disappears. When we travel at highest speed by airplane, we travel for the most part over a cloud bank. In general, the quicker the means of intercomse, the vaster the multiplication of the means, and the greater our command of space, the emptier is the content. What Emerson said of travel—that wherever you go, you take the same old rogue with you—applies to the entire conquest of space.

But il space, through the shortening of distances, has been emptied of its contents, another movement has taken place which has increased its depth and its cultural significance. What the machine has taken away science has given back to us. One is struck, in the study of past civilizations, by the fact that their insight into the world around them was essentially as superficial as a child's

view. What they saw was only what lay immediately upon the surface, and often they did not see much of that. The Greeks of Homer's day, for example, had names for only a few primary colors. But at the very moment when our mechanical devices were shrinking distances no less than time spans, or rather both together, our sciences were opening up new distances, exploring spatial perspectives that had hitherto been neglected, and endowing with an almost infinite richness of content the most barren square mile of the planet.

Space expanded both outward and inward, the first through the telescope and the second through the microscope. A knowledge of structures and causes replaced our limited knowledge of surfaces and incidents. Remote galaxies, astronomical events countless light years away, have been brought within the consciousness of the astronomer. But even more pertinent to our human existence, the world of microspace, of the infinitesimal, and of organisms that hitherto had existed below the threshold of direct vision became part of our world. A drop of water has become for us, as it were, a peopled universe. We know that our very health or illness depends upon the existence of light rays we cannot see and micro-organisms that only powerful lenses bring within our field of vision. Even apart from this alteration of our common standards of measurement the growth of the biological and social sciences, no less than those that deal with the earth by itself, has infinitely multiplied the number of facts and relationships that the world discloses to us. We live in an environment whose many-threaded complexity, as woven and patterned in the mind, completely gives the lie to the banal impression

of uniformity with which our space-conquering devices sometimes afflict us.

So what our technics has taken away by breaking down distances our sciences have restored again to those who have the equipment to master, in all their exuberant details, the characteristics of the many-dimensioned and many-textured world in which we live. To be fully conscious of what is taking place, below us in the geological formations, around us in the atmosphere, through us in the working of the ultraviolet rays, within us in the busy chemistry of our cells and plasma, intermingling with us in the activities, the intercourse, the interdependences of other men, welling out of us tlnough memory and unconscious impulse and purposive activity—to be conscious of all this adds not alone to the physical dimensions of our experience but also to its cultural contents. It is only in the most meager sense, the purely physical sense, that our planet has become smaller. That is an observation which holds only for bored people oscillating between a ticker tape and a transcontinental airplane or a cosmopolitan cabaret. Symbolically all our distances have lengthened. By being increasingly aware of the number of events that exist *in* space, we have stretched out our horizon. To tiaveise any small part of our new found spaces with complete understanding easily requires the application and patience of a lifetime.

Here, as with time, we begin to see that the contraction of space and the expansion of space are really complementary facts. Today perhaps a million people must be joined together, where a few thousand existed bclore, in order to carry on and develop and interchange our rich heritage of knowledge and skill. But the only

reason for breaking down spatial distances and promoting this closeness, giving to a geographic region the unity and coherence ot a crowded city, is so that all the dimensions of experience, for every normal human being, shall be expanded. Until this educational process takes place, the triumph is largely an illusory one. The mechanical conquest of space, then, is merely a preliminary to the rational and esthetic occupation of space —its settlement and high cultivation. This is true both with respect to the world of thought and practically with reference to the occupation of the planet as a whole by its peoples. Conquest without settlement and appropriation without cultivation are hollow, meaningless gestures. The chief rational use for breaking down planetary distances, for making travel speedy and intercourse instantaneous, is to give ourselves the benefits of world-wide co-operation in the understanding and the recasting of the region in which we live and the community of which we are a part. The final result of this will not be uniformity, one city like another, one region like another, all reduced to an identical pattern. The final result, rather, will be to disclose the utmost individuality of each area of human settlement and to make it capable of satisfying the most varied human needs and aptitudes.

The rigorous organization of time and space is probably the most fundamental achievement of our technics, since it bottoms and goes along with everything else. But the fact that has sei/ed the imagination of the ordinary man has been the transfer of labor from human personality to an automaton, from the hand and eye of the old-fashioned artisan, working at his own pace, to the uniform operations of the machine, paced by the

steam engine or the electric motor. The change has been from a human being, who was prime mover, machine, motor, administrator, and merchant, all in one, to a series of specialized instruments forming a collective whole. The Factory Era and the Power Age are the common names we have given to this many-sided transformation.

The dream of multiplying human power is doubtless as old as that of flight; hence tales of the giants and their extraordinary feats of strength, from Goliath to Paul Bunyan, and the dream of material abundance obtained without toil and difficulty, such as that in the garden of Eden and the overflowing cornucopia. Most of the predatory struggles for power that have taken place have been for the purpose of achieving, for the benefit of a limited caste or group, this dreamlike facility of existence. Power meant essentially soldiers and servants. The more, the mightier the ruler. In one's dreams one rubbed a lamp and a strong slave appeared to execute one's commands. Today one presses a button, a door opens, a meal is served, a message is instantaneously transmitted. Modern science itself arose in part out of an attempt, on the part of the alchemists, to achieve magical controls through transmuting gold or compounding the elixir of life.

Until the development of modern technics the only way of achieving this ease, power, and abundance was for limited groups of men to become parasitic upon the life and labor of other groups. The success of the attempt in history, on the part of special castes, to do so is scarcely less astonishing than its original impudence. But in the nineteenth century, through the development of new sources of energy and new facilities for perform-

ing work, man succeeded in the extraordinary feat of becoming in part parasitic upon the machine. Exploitation, slavery, predatory domination were thus potentially removed from the human sphere and transferred to the realm of the machine, in which these evils were neutralized by the very nature of the agent. But unfortunately our human institutions have been slow to take advantage of this change. Individuals and small rapacious minorities still attempt to isolate for themselves advantages and opportunities that belong to the whole community.

So it has come about that the efficiency of modern mechanical production embodied in the marvelous list of machines and utilities and final consumption goods that has been added to the simpler arts of the past has not been without exacerbating results. For one thing power, far from increasing the dimensions of the human personality, has tended to lessen them. Each individual performs but the fraction of a task; he uses but a fraction of his organic capacities; he lives, so far as his work is concerned, but a fraction of a life. This is the first serious limitation. In doing away with servile forms of work, we have likewise in some degree ruthlessly removed those forms of stimulating and educative activity that are the better part of anyone's life.

Again, over the process as a whole, the worker has a much less effective grasp, either practical or intellectual, than the old-fashioned weaver, for instance, who combed his own wool, went out into the woods to pick his own dyes, and spun and wove the fabric with the aid of his household and his helpers. The processes of production have become more scientifically organized and more rationally controlled than before. That is a great ad-

vance. But each detail of the process has become, by that fact, extrapersonal. It means less to the worker and gives him less opportunity to use his intelligence, his active discretion. As the system itself becomes more rational the work of its members becomes, as the sociologist Karl Mannheim has pointed out, less and less rational. By now it has become plain that the concentration upon the merely mechanical details of industrial organization is one of the main factors in the social inefficiency that now manifests itself in economic crises, costly wage struggles, and obstinate refusals on the part of the owners of industry to share either power or responsibility with the workers.

The humanization of the industrial process itself, originally the dream of a Fourier, an Owen, a Marx, has now become an essential ingredient for its effective organization. A little while ago this fact was brilliantly demonstrated on a small scale in an experiment with a group of Western Electric workers. A handful of workers was selected out of a factory unit and given special pel iods of rest at intervals in the day. They accomplished more work than those who were kept unremittingly at work. By now that is an old story. But the same special group, after having been treated with consideration and understanding, were put back on the old schedule of work and still their production level continued high. By adding special human compensations to the job, by according to the tested workers the special rank, as it \veic, of an aristocracy, the physical level of achievement was raised.

This experiment entirely reverses the notion, introduced into factories by Sir Giles Overreach, that the worker is a mere mechanical unit, working best under

the brutal whips of necessity and iron constraint. Misunderstandings, human frictions, stoppages, sabotage, strikes, battles, all reduce the efficiency of the mechanical plant to absurdly low levels of annual output, proof that a mechanical order cannot function well even mechanically until the social order is lifted to an equally high level. This generalization has universal point. The effciency of a modern motor car, capable of doing seventy-five miles an hour on an unobstructed road, has hitherto been nullified by our failure to provide the necessary collective utilities, road systems, and city layouts that can take advantage of this speed. The factory speed of the car is one thing. The social speed of the car, so to say, is another. By concentrating on the mechanical elements alone we have not achieved even mechanical efficiency.

In short, our whole system of mechanical production has been undermined by the extremely crude social and psychological basis upon which it has functioned. On one hand, the power complex has favored a predatory type of personality—the ruthless enterpriser, the Napoleonic organizer, ambitious, grasping, seeking individual domination, never sufficiently understanding the impersonal processes of science to submit himself to the co-operative discipline of the laboratory or the workshop. With respect to the final aims of machine production we have, however, favored parasitism, we have acted as if an easy existence, an effortless existence, were a mark of biological success. A good part of this sort of labor saving has been a form of life denying. We give up walking for the automobile and then have to submit to a mechanical exerciser. We abandon the simplest and healthiest forms of manual labor in garden and field,

and then we find that it is necessary to exert ourselves lugubriously in sport in order to make up for the vital deficiency.

Meanwhile the real justifications for the marvelous exploits of science and technics lie in quite other departments than where we usually look for them. Thus the chief glory of mechanized production is not that it can indefinitely increase the amount of goods the individuals must consume per year in order to keep the wheels turning. The real sanction is that it increases our range of choice and therefore refines the adaptation of the environment to human needs. So, too, the rational excuse for labor saving is not that it increases profit but that, for the same expenditure of energy, it frees time for other activities. Thus leisure becomes potentially the possession not of a privileged class of rentiers or beggars, but of an entire community. Finally the true use of those partitions and specializations that are necessary in our productive system, as well as in the world of thought, is that thereby we make possible, in the community, a higher type of wholeness, a richer and more complex synthesis, than was possible at the crude level of production.

But plainly the goal of production lies not in the machine, but in the nature of human society. The goal cannot be set by the factory or the business office. It is not efficiency: it is not profit; it is not power. Neither is it the possibility of a universally functionless and parasitic life, dependent wholly upon the machine, in which man would have no other duty than to absorb passively the images, the sounds, the foods, and the equipment unctuously provided by the machine—that nightmare Aldous Huxley depicted in *Brave New*

World, a horror that is almost fulfilled in many respects in the totalitarian states of present-day Europe. No, the goal of a productive system must be set no longer in terms of power, but in terms of man's total personality. It includes the esthetic and final as well as the practical and instrumental. It must be expressed in relation to biological development, social activity, and personal growth. In short, it must be expressed in terms that were originally left out of the mechanical universe of discourse and that were deliberately dismissed as romantic, as sentimental, and as nonutilitarian by those who pinned their entire hopes for human improvement upon mechanical invention alone. What are these terms? What has science itself done to define and express them?

Though science and technics grew up together, they have rarely developed at the same rate of speed. Until the first quarter of the nineteenth century science's direct effect upon the development of modern technics was small; the improvements that made the steam engine practical, that resulted in the power loom and the railroad, were due to the labors of mechanics and gifted amateurs. The coal-and-iron phase of the Industrial Revolution was essentially a series of empirical improvements. Invention came first, as in the steam engine. The scientific observations usually followed at a distance, as in Garnet's and Joule's researches upon heat. Unless he invented a practical device, like the Dav) safety lamp, the scientist was mistrusted by the practical business man.

The next phase of the Industrial Revolution was essentially a different one. This is the phase to which Patrick Geddes gave the name *neotechmt,* as contrasted

with the *paleotechnic* coal-and-iron revolution. All the critical inventions of this age, from the water turbine to the electric motor, were worked out theoretically in the scientific laboratory before they were even conceived as practical possibilities. Ingenious hands might have fiddled with copper wire and magnetic iron till doomsday without inventing the generator or the telegraph. Even the typical metal of this new age—aluminum—was a laboratory product; and the heavy elements, like tungsten, which have likewise transformed our entire iron metallurgy, are in the same class. The theoretic researches of Henry, Faraday, and Oersted led directly to the invention. They made the path so clear that within two short generations the world became, in more than one sense, electrified.

Meanwhile science itself was undergoing an important expansion during the nineteenth century. It claimed the whole domain of living organisms and human gioups. Systematic biology and sociology were born. Claude Bernard, Charles Darwin, Louis Pasteur, and their fellow workers now gave to the biological sciences the passionate attention that had hitherto been claimed by physics, mechanics, and chemistry. In this way knowledge not merely filtered rapidly from the physical sciences into the arts of life, as nitrous oxide and ether revolutionized the methods of surgery; but this new interest in the world of life as a domain for scientific exploration also flowed back into technics.

So awed have we become by the merely mechanical conquests of the machine, so conditioned are we to put power and profit first, that most people do not realize how little some of the greatest technical achievements of the nineteenth century owe to our increasing scien-

tific knowledge of the processes of life. The mechanical possibilities of flight with heavier-than-air machines were first demonstrated not by a mechanic or a mathematician, but by two biologists, Marey and Pettigrew, who derived their knowledge from observations on the locomotion of animals. The phonograph and the telephone both grew out of a knowledge of the physiology, as well as the physics, of voice production. The moving picture camera was a direct result of Muybridge's and Leland Stanford's interest in the movement of running horses. The control of pain, the control of human fertility, and the control of disease through sanitation and hygiene were the direct outcome of the new biological sciences. The invention and technics associated with our new biological knowledge have revolutionized the world quite as exhaustively as our time-saving and space-conquering devices.

This new biotechnics has three important characteristics. The first characteristic is that its chief inventions do not spring out of the old power complex. Their order owes little to the restrictive disciplines of the monk, the soldier, the financier. They spring out of an interest not in power by itself, but in life in all its complex actualities and possibilities. Biotechnics does not renounce the organic and the human. It utilizes them. And the technical product itself is not necessarily material goods in any sense. Often the product is a particular physiological or psychological state, such as the decrease of physical shock through anesthesia or the ability to correlate childbirth with adequate child care, as in contraception. This condition means not merely control over the physical environments. It means also a heightened direction of human activity.

The second important characteristic of biotechnics is a shift of emphasis from the quantitative to the qualitative and even within the realm of quantity from big amounts to little amounts. The change that has taken place in diet properly dramatizes this new focus. As a result of crude chemical analysis the value of a late nineteenth century diet was measured in purely quantitative terms, so many calorics or heat units. Thanks to further chemical and physiological investigations we now know that a well-balanced diet depends upon the presence of infinitesimal quantities of vitamins and minerals, the mere trace of which may make the difference between bodily equilibrium and disorder. The fact has wide applications. It goes along with our new awareness, too, of psychological imponderables, of minute, lorgotten experiences, undetected traumas, in the individual's past, which may have a warping influence upon his conduct thirty years later. This widening of science and technics to include the field ot lite obviously has given to the once-backward fields of agriculture, medicine, public health, and education the benefit of the same type of co-operative discipline and systematic experiment that has transformed the mere mechanical parts of our environment. Even within our own generation further changes have taken place, in the domain of psychology, whose implications are far from being grasped by the world at large though the catchwords of this science are on everyone's tongue.

But the work of Freud, Jung, and their followers has not resulted merelv in a mote thorough understanding of the complexities of the human personality, with its deep urges, its unconscious drives, its involved mechanisms of defense and equilibrium. In addition it has

placed upon the plane of scientific observation those obscure feelings, those dreams and fantasies, whose projections, in art, in religion, and in the molds of social life, were originally rejected by science as outside the pale of either quantitative measurement or systematic investigation. The methodical man, the mechanical man, the rational man was unable in the past to take the measure of his own irrationality. He accepted as a norm his own particular kind ot aberration. As a result of our psychological studies we are returning to the study of the whole man. We no longer take any particular fragment of the personality as a norm or as a naturally dominating element. We begin to realize that a person's intelligence may hang upon his emotional development even as his ability to digest his dinner successfully may depend upon the turn the conversation takes at the dinner table.

The new order is essentially a more complicated, a more interrelated order than that which gave rise to the automatic machine, for it includes not merely matter and motion, but also living organisms and developing societies. In this new order one no longer thinks of mechanical inventions by themselves as the main source of human benefits or as a remedy for all the defects of the human personality or the ailments of society. On the contrary we see in the very perfection of our mechanical devices a grim challenge to the human personality and the communal group. Indeed the airplane and radio, products of our refined technics, it left in the hands of fascist barbarians, will only add to the sum of desolation, woe, and human enslavement. There are still people perhaps who keep hoping that some mechanical invention will lift the country out of the economic

doldrums. Recently they thought it was the prefabricated house or, again, air conditioning. Always the machine is looked upon as a substitute for justice, for moral insight, for co-operative political action, for purposive social intelligence, for esthetic command. But this view is entirely inadequate. The machine, far from being a substitute for social invention, is rather the early harbinger of a new type of order which will finally enable us to discipline more effectively the human personality and to transform, for more rational purposes, our clumsy, empirically-contrived, retarded social institutions. Industry and politics have been governed too largely by neurotic and immature personalities, people whose very lust tor power was an indication of infantilism, people who sought by strenuous external organization to stave off a sense of personal inadequacy and defeat.

Le Play's great observation, that the most important product that comes out of the mine is not the ore but the miner, applies to every other part of the environment. Power is not power, knowledge is not knowledge, unless in their final operations they sustain men and women and promote a more human life. Science, as a practical form of magic, has already transformed large sections of the external world; but science, as a humanist discipline, has another function to perform before its magic can become other than a pernicious invitation to the foolish to commit greater follies and to the evil to perform vaster evils. Science is in essence a moralizing mode of thought. Its habits of orderly observation, systematic measurement, co-operative comparison and repetition of experiments, faithful record, impersonal respect for fact and truth, and loyal international communication

and co-operation place science among man's spiritual achievements.

These virtues do not belong to any one department of science, nor do they belong to the practitioner of science alone. Whatever their relevance to the specialist, they are equally important to everyone who shares in any degree this civilization. The imagination itself is transformed by the processes of science. A Melville writing *Moby Dick*, a Zola writing *Germinal*, and a Thomas Mann writing the *Magic Mountain* are sustained and nourished by the same currents of thought. But if science and technics are to play their proper role, the new shift in interest, from one-sided random analysis to deliberate, many-sided synthesis, from the machine to the organism, from the organism to the social whole, must be recorded in our whole system of education. We cannot achieve the necessary social co-ordination by a mere encyclopedic massing of specialisms. We can achieve it only by beginning at a common point, working out a common method, and keeping our aims and interests within a common focus while we are sustained by a common system of values.

In order to achieve this many-sided discipline, we must be prepared in education to sacrifice a little of that machinelike perfection which comes only through intense specialization. Likewise, as the psychologist Jung has pointed out, this involves a need to compensate on points of inferiority and to redress by a more even development the bias of a strong natural talent. Even from a purely intellectual point of view, even from the standpoint of vocational aptitude, it is as necessary that a student should be maturing toward responsibile sexual relationships, marriage, parenthood, as that he should be

acquiring a basis for his professional career. We have in general a crude, lopsided society because it has been developed mainly by crude, lopsided people, utilizing equally crude and lopsided methods of thought and entirely unaware of their own naive distortions.

The type of balanced personality that we need to develop, if our technics itself is not to remain half-baked, is one not unknown even in the physical sciences. It is embodied for us in America by Joseph Henry. Henry's speciali/ed talents as a physicist put him in the rank of Faraday and Helmholtz, but he nevertheless voluntarily gave over his active scientific career in favor of the Directorship of the Smithsonian Institution because he felt that the co-ordination of knowledge was as important as its discovery. Henry's well-balanced life as scientist, as parent, and as citizen may well serve as a pattern. The educated man of the future, if he is to deal successfully with the more comprehensive technics involved in the development of society and the total personality, will be less the fragmentary specialist concentrating, like Dr. Oliver Wendell Holmes's doctor, on diseases of the right leg; he will be more of an amateur. He will have to learn the difficult art of knowing everything a little and nothing too well. He will have to learn the art of remaining a scientist when he goes outside his field, just as he will have to remain a whole man even when he turns momentarily to some intensive investigation within his field. Only thus can our world escape the aippling effects not of science and technics, but of science and technics that have not yet advanced far enough, taken in enough of the world, or taken hold of human society itself in all its manifold relationships. Only thus will order finally carry through from the

cosmos to human society, from human society to the ever-beckoning, ever-retreating image of the just man made perfect.

BIBLIOGRAPHY

1. GEDDES, PATRICK, and THOMSON, J. A., *Life; Outlines of General Biology;* Harper and Brothers, New York, 1931
2. SOMBART, WERNER, *The Quintessence of Capitalism;* T. F. Unwin, Ltd., London, 1915
3. SPENGLER, OSWALD, *The Decline of the West,* Vol. I and II; Alfred A. Knopf, New York, 1926 and 1928
4. VEBLEN, THORSTEIN, *The Place of Science in Modern Civilization;* B. W. Huebsch, Inc., New York, 1919
5. WHITEHEAD, ALFRED N., *Science and the Modern World;* The Macmillan Company, New York, 1925

VI

EXTENT AND USE OF NATURAL RESOURCES

Ray Lyman Wilbur

AS destroyers of natural resources, civilized human beings have proved themselves more efficient than a plague of locusts. With lire, ax, saw, shovel, drill, and powder they attack or consume precious reserves of all kinds, above and below ground. Nature knows how to restore, but her methods are often at geologic speed. Man is the one living thing to whom speed, except tor escape or capture, is important.

Fundamentally life on this planet depends upon sunshine, air, water, and soil co-operating with chlorophyll to make foodstuffs out of water, gases, and minerals. The richness ot our country in all these elements has given us a diversity of plant and animal lite existing under climatic conditions favorable to the health and happiness ol the human race.

We have been in a hurry. With a large food supply we have multiplied rapidly, and immigration has poured in millions of newcomers for many decades. One of the greatest of all human dramas began with the opening of the American continent to European peoples after millions of years of preparation with a comparatively recent, widely scattered, and insignificant population. What a turmoil has taken place since the days of Columbus! How the human droves have scattered over a vast terrain to use, destroy, consume, or build and to apply the great

inventions and scientific facilities of a machine and industrial age! The world has never seen its like and is not apt to see it again.

The great advances made by the immigrants who came to the shores of North America, while in part due to the stimulating climatic and physical conditions, have been so rapid because of the great quantity and high quality of the natural resources of the region. Those who came first found an abundance of game and fish and nourishing plants, together with great forests supplying food and excellent material for the construction of homes, furniture, vehicles, and boats. The mountains and valleys held vast stores of coal, oil, gas, and such minerals as iron, copper, gold, silver, zinc, and lead. In fact, almost every substance of value to man was represented in some degree on our part ol the continent. Perhaps most significant of all were the enormous quantities of stored-up heat energy from the past ages and the possibilities tor the development of power either through the use of this heat energy or by falling water. We have had full occupation of our whole territory tor only a short number of years, but the speed with which we have expended our heat energy in the form of coal, oil, and gas and have consumed our minerals has been at a per capita rate higher than that of any other country even in comparison with such thickly settled areas as France, Germany, and Great Britain.

If we turn to our America as it is today, our impression is that of a land of fabulous wealth and of resources of almost unbelievable richness. In the United States there are one billion, nine hundred three million acres of land. A billion acres of it are used for grazing and three hundred fifty-nine millions for crop raising..

There are a half billion acres of forests and seven million acres in parks. It will take but a small addition to our present cultivated acreage to feed the estimated population twenty years ahead. By the development of irrigation, control of erosion, and regulation of grazing and lumbering, very substantial benefits can be obtained. Our wealth of water supply is at times destructive; but we do more each year not only to bring water under control but also to harness it for the development of power. There are coal and iron and aluminum for centuries ahead. We are probably exhausting our supply of petroleum and must develop synthetic gasolines. Except for rubber, coffee, tin, and platinum we have the essentials for our civilization. Modern intercommunication has opened up to us every product of the world. Our climate is most suitable for the comfort and activity of man. We have hundreds of thousands of factories and farms, great quantities of the precious metals, and intellectual qualities stored in human brains which have proved resourceful and creative.

Our principal problem is wise utilization. Certain limitations upon our rate of consumption of natural resources are resulting from the increasing costs of production. In recent years we have suddenly sensed the way in which we have been consuming our apparently limitless heritage of soil. We have certainly reached the stage where we must carefully analyze exactly what we have in the way of continental possessions and endeavor to use them in as wise a way as is possible. This wise use of our resources is CONSERVATION. From the very first we must make a distinction between those resources that can be replaced and those which, when consumed, are irreplaceable. Whatever we desire to do in the way of

complaint about the past is futile unless it shows us the way to do or not to do things in the future.

We still belong to an age of furious haste, frightful waste, and much spurious progress. We can no longer hope to advance, though, by the overconsumption of those resources that were available upon the touch of man. In the future our advance must be through savings, through preserving carefully such natural stores as we have available, by conserving margins of the capital that the use of these natural resources has given us, and by the constant development of new ideas and new procedures. If we consume as current income our stores of gas, oil, and coal, instead of preserving a large portion of the sums that come from them in the form of capital account, we shall have made a fundamental mistake that saving animals, such as human beings are, cannot afford to make.

One of our major problems is to view our various racial stocks as a natural resource which should be used in the very best way not only to maintain itself but also to maintain and protect our national and natural resources of all other sorts. Fortunately we can see the possibility of maintaining millions of the human family on this continent with the food crops which can be grown without much loss of soil and without undue depletion of our stores of organic substances. Since we have been able to fix the nitrogen of the air by the use of power, we are in a much better position to look forward for many thousands of years without undue concern as to food for the human family. Hydroponics, or the growing of plants in water containing the proper mineral substances, is now successful on a small scale which can be indefinitely extended.

One of the great needs of all conservation is to discover what the natural laws are that have to do with the development and protection of all forms of replaceable natural products. In no way can we avoid the wear and tear upon the soil or the effects of oxidation upon it or the constant changes brought about through what we might roughly call the forces of geology. Even the lowly earthworm will continue to cultivate the soil of many parts of the world in its own particular way regardless of what we may do about it.

Perhaps we can best understand the rehabilitation of natural resources by referring to the guano on the Chincha Islands off the west coast of South America. The Humboldt Current flows along this west coast and supplies food for at least five million birds through its prolific marine life. These birds—cormorants, gannets or boobies, and pelicans—have raised their young and roosted upon these islands in a climate that is practically free from rain. The accumulation of dead birds, bones, excrement, and the like has supplied at least ten million tons of fertilizer for use in all parts of the world. The ancient Peruvians regulated their visits to these islands, allowed no one there during the breeding season, and pennittcd no birds to be killed, for they had discovered the significance of these deposits to their agriculture. Later there was a reckless destruction of birds and eggs, but now again through methods of conservation the birds are coming back in almost untold numbers. It is quite clear that, unless there is some great change in biological balance between the fish of the Humboldt Current and the birds, there is an established source of organic material for plant food of great extent available throughout the ages. This guano problem is perhaps

one of the best illustrations of what can be done in handling replaceable natural resources. It brings out very clearly that conservation must be considered as dependent upon natural laws, that we must know what Mother Nature is doing and what Mother Nature can do.

Sometimes merely to preserve various forms of life does not lead to true conservation. There is a time when a tree is old or ripe and will soon fall when it can be wisely turned into lumber for practical use. There are ways in which we can harvest portions of any forest and many other natural products without any great disadvantage. What we need is full biological information and careful organization and management so that we may be in a position to achieve for ourselves utilization without destruction.

One of the most important problems of all conservation is to know something of the number of human beings that are likely to live in any given territory and their habits and wants. Anyone who has watched the effect upon a patch of land when it is overpastured by grazing animals can sense what overpopulation can and will mean insofar as the human family is concerned. While our numbers have greatly increased in recent years with our capacity to store and distribute food, the population experts tell us that there is a limit to this process and that we shall not see the crowding of all parts of the world that has taken place in special areas that are most favorable from the standpoint of protection from disease, quality of soil, climate, and presence of adequate water. We have no way to assure ourselves, though, that there will not be climatic changes in the future. A few widespread heavy frosts, extensive

droughts, or persistent rainfall could profoundly affect our present agricultural situation.

The human family has gotten ahead through a genius for organization and a capacity to save, build, and plan. We have gone far beyond the squirrel, which puts aside nuts tor its reserve food supply, or the bee with its stored honey. It takes so many years for the human being to become mature and self-sustaining that our biological weakness demanded extra work from the cortices of our cerebrums. Our responses to natural plenty were profligate and exuberant. Our responses to threatened scarcity must be prudent and protective. All sorts of schemes, from infanticide and migration to the support of institutions ol research, have been tried. Tribal management and communal plans, with free movement with the seasons, and the chance to capture the food supply of the more fortunate through war worked well enough in Indian days. Now, with our country well settled, we find our relationship to natural resources confused by all sorts of associations with one another and with the established order. The complexity of the situation is increased by the fact that much of our land is in private hands under a definite jurisdiction.

We must work in between the various governmental units to bring about cooperation and joint handling of the problems involved. Under our federal system there must be a sharing of powers. There are difficulties, but they are not insurmountable. We have shown this in connection with the exploration for minerals and oils. The main difficulty is to obtain unity of control over any particular area, so that all factors are represented and justice and fairness can be combined with reasonable efficiency. There is a constant temptation, in utili-

zation, for overlordship by the federal government. Absentee and distant control through bureaus of government is full of perils, both for conservation and for democracy. Enlightened self-interest on the part of the individuals concerned is the best way to bring about proper utilization. One of the best ways to protect agricultural land is to have it in the hands of trained farmers who wish to pass it on to their sons and daughters. In this country we have had too much of a sense of exploitation of land due to the fact that one could move on to new lands. Enlightened self-interest is something which needs to be developed. Often people conduct their relationships to natural resources without understanding just what they mean to them. In the long run the only thing of ultimate value, insofar as the human race is concerned, has to do with the human resources. If these human resources can be combined with our natural resources in an intelligent manner, the wisest utilization will be possible. These questions of conservation, or wise use, should be made a regular part of the curriculum of our schools; and the facts should be taught without prejudice. One main difficulty with human beings is that they are apt to divide themselves into groups, one group for a certain plan and one against it—one group, for instance, believing in public ownership and the other in private ownership. In spite of such human contradictions it makes little difference to the pine beetle whether the pine forest which it is attacking is on private land, Indian land, park land, national forest land, or state land. If we want to control the beetle, we shall certainly have to learn how to manage and control our own procedures.

To pass lands over into the hands of a governmental

unit is often a good way of having them cared for by unsympathetic and un-understanding individuals. The way our governmental taxation system has destroyed parts of our forests is a national disgrace. Whether we work out a form of state or regional or other control is not so important as it is to know what we wish to control and how we wish to control it, basing our judgments not upon our ideas, but upon the laws of nature. If we can get ourselves into harmony with these laws through the knowledge brought to us by the scientists, we shall at least know what *not* to do; and not doing things is often the very best conservation measure. Whatever else we do, we must reali/e that man is an emotional being, full of contradictions, inconsistencies, and surprises. He can, though, be taught something by observation. Most people learn that it is not wise to jump off a sixteen-story building. We ought to be able to show our youth that ovcuonsuinption of our natiual lesources in any given pciiod is helping a huge part of the human family to take a sixtccn-stoiy hop at some future date.

Thoie is no one way to utilize our rcsouices to the best present and future advantage. Merely to repose power in governmental units large or small is no final answer. What we do must be reasoned and reasonable and wear well, which means it must be based on scientific data, not upon the reactions, selfish or altruistic, of the extremist, be he superconservatiomst or superdestiunionist. Too manv sheep or goats will wreck ranges whether the animals or the ranges are ouned by the government, Indians, private parties, or United States Senators. In utilization facts rule, not fancies, and the long look is often the right one even if it means present self-denial. We must learn all we can, pass on the in-

formation to as many as we can, and try to make the oncoming generations conservation conscious.

BIBLIOGRAPHY

1. BAKER, D. M., and CONKLING, H., *Water Supply and Utilization;* John Wiley and Sons, New York, 1930
2. BRISTOW, WILLIAM H., and COOK, KATHERINE M., *Conservation in the Education Program,* Bulletin No. 4, Office of Education; U. S. Government Printing Office, Washington, D. C, 1937
3. CAMERON, JfNKS, *The Development of Governmental Forest Control in the United States;* The Johns Hopkins Press, Baltimore, 1928
4. CHASE, STUART, *Rich Land, Poor Land;* McGraw-Hill Book Company, New York, 1936
5. GARHAS, V. R., *Petroleum Resources of the World;* John Wiley and Sons, New York, 1923
6. JOHNSON, GERALD W., *The Wasted Land;* The University of North Carolina Press, Chapel Hill, N. C., 1937
7. NATIONAL RESOURCES COMMITTEE, Washington, D. C., their several reports:

   National Planning and Public Works in Relation to Natural Resources and Including Land Use and Water Resources, December, 1934

   Regional Factors in National Planning and Development, December, 1935

   Series of regional planning reports—Part I, *Pacific Northwest;* Part II, *St. Louis Region;* Part III, *New England;* Part IV, *Baltimore-Washington-Annapolis Area;* Part V, *Red River of the North;* Part VI, *Upper Rio Grande;* Part VII, *Alaska*
8. ODUM, HOWARD W., and MOORf, HARRY E., *American Regionalism;* Henry Holt and Company, New York, 1938
9. PARKINS, A. E., and WHIIAKFR, J. H., *Our Natural Resources and Their Conservation;* John Wiley and Sons, New York, 1936
10. *Report of the Committee on the Conservation and Ad-*

ministration of the Public Domain; U. S. Government Printing Office, Washington, D. C., January, 1931

11. *Report of the National Conservation Commission,* Senate Document 676, Goth Congress, ad session; U. S. Government Printing Office, Washington, D. C., 1909
12. VAN HISE, CHARLES, and HAVEMEYER, LOOMIS, *Conservation of Our Natural Resources;* The Macmillan Company, New York, 1930
13. WILBUR, RAY LYMAN, and Du PUY, WILLIAM ATHERTON, *Conservation in the Department of the Interior;* U. S. Government Printing Office, Washington, D. C., 1931

VII

WELFARE LEVELS IN AMERICAN LIFE

Theodore Kreps

THE acid test of any economic system is its performance in supplying to consumers a continuous flow of desirable goods and services in amounts limited only by available natural and human resources. Any form of business or governmental enterprise or practice which by inertia, incompetence, or willful action restricts production, keeps up prices, causes temporary or permanent unemployment, or keeps down wages and other forms of mass income thereby forfeits its right to public sponsorship and protection, for the primary social function of private business and its sole *raison d'etre* is to provide the American people with the maximum possible amount of the necessities and comforts of life.

A survey of welfare levels in American life is fundamentally therefore a social audit of the operations of government and business. To be sure, it shows results, not causes. It summarizes actual rather than possible or desirable accomplishments. Inasmuch as the government provides but a fraction of the total goods and services enjoyed, a survey of welfare levels makes in essence an accounting of the trusteeship of business. It indicates what business does with America's vast endowment of natural resources, private ownership and business control of which have been granted and protected by the American people. It depicts how the great American

family lives and manages its national household, how it makes things go around, how it economizes. But it does not show why or how welfare levels came to be what they are. Nor does it show how, when, or where such levels may be improved.

Any attempt to define and describe welfare levels in American life must necessarily start by giving the term a more or less arbitrary scope, for *welfare* is a word with confusing and contradictory meanings too numerous even to catalogue here, being differently used in various countries by ethical philosophers, sociologists, political scientists, economists, businessmen, and statesmen. In many important respects welfare levels are not only incommensurable but also devoid of economic content. Welfare in the sense of well-being or happiness depends, according to the sages, not on worldly goods but on virtuous living. Thus Confucius emphasized reverence tor ancestors, Buddha the pursuit of the eightfold way, Christ the piactice of the Golden Rule and charity, Plato the philosophic contemplation of all time and all existence, Spinoza the aesthetic and noetic worship of God, Wesley the life of social service with the world as one's parish, Jefferson the enlargement of political liberty, Lincoln the recognition in word and deed of human equality, and Woodrow Wilson the creation of a new economic freedom for those millions whose lives and fortunes are now regimented by powerful, undemocratic economic and business overlordships.

But, while the philosophers and economists realize perfectly that wealth and welfare are not synonymous, the bulk of lay and business opinion does not. It judges a man by the house he lives in, the car he drives, and the number of figures in which he can write his checks. Rich

and poor alike are more concerned with the economic than with the noneconomic constituents of "welfare." Not only do the laborers prefer higher wages to "pie in the sky by and by"; but even the professional classes with professional standards of ethics, such as lawyers and doctors, also frequently exhibit more concern about their monetary rewards than they do about public service. Dollar chasing, if not dollar worship, is a prevalent, possibly dominant, American activity. Success generally means getting ahead financially. The "self-made man" usually turns out to be someone who has made a great deal of money. While the ideal man in other countries may be the scholar as in China, the philosopher as in ancient Greece, or the preacher as in Puritan New England, the ideal man in the United States, at least judged by the fiction or stereotype to which modern advertising has found it profitable to gauge its appeals, is the businessman: primarily an extrovert interested in golf and other sports; frankly contemptuous of long-haired intellectuals, idealists, musicians, poets, and artists (particularly when penniless) ; puzzled by humanitarian and social service workers and hostile to government, particularly to public servants trying to help relief workers, laborers, and consumers; harassed by the constant striving to keep up with the Joneses in conspicuous consumption; and careful to belong to the "right" clubs, wear the "right" clothes, cultivate the "right" people, and hold the "right" opinions—in each case "right" connotes not conforniance to carefully considered standards of beauty, personality, or truth, but conformance to the activities, opinions, and consumption of those whose wealth or incomes are thought to be higher.

Consequently, in spite of the fact that every school of

ethical idealism known to human thought condemns individual gain seeking and the pursuit of wealth as a vice generating perpetual individual and social unhappiness, those who wish to treat realistically of welfare levels in American life must plunge boldly ahead as we shall do, discussing welfare solely in materialistic terms. While life is obviously "more than food and raiment," the non-economic constituents of welfare may be assumed while we consider prevailing American standards of value and cultural mores to correspond to, or at least closely depend upon, the economic constituents, that is, upon levels of income and the flow of goods and services thereby made reducible to possession.

Even when expressed in measurable economic terms, the concept of welfare levels is an amalgam of at least three sets of ideas. For example, in describing welfare levels one might attempt merely the prosaic, statistical task of presenting "what America consumes"; convenience and economy in handling the large mass of pertinent data require the development of fact-groups which 1 shall call *levels* of living. Variously termed *plane* or *scale* of living, a level of living represents simply the summation ol all the consumption choices made by the individual or selected group of individuals under study. It consists ot the conglomerate of goods and services actually consumed in a given interval of time, usually expressed in monetary terms. The principal categories *ot* items comprised are those entering into the budget and cost of living of the ordinary family, namely, food, clothing, shelter, heat and light, transportation, and professional and personal services.

The indicators of welfare levels in the sense of levels of living are thcicfore quantiu iigiues on such items as

per capita amount and variety of foods ingested, preferably reduced to calories; the number, floor space, and modernity of facilities of dwellings per 1000 inhabitants; the consumption of important commodities, such as milk, sugar, shoes, cotton goods, steel, and fuels, not to mention paper, soap, tea, coffee, and tobacco; the number per 1000 population of doctors, teachers, musicians, artists, and individuals rendering personal services, such as hairdressers and maids, and the telephone, telegraph, and postal messages per capita; automobiles, jinrikishas, refrigerators, vacuum cleaners, and electric washing machines per 1000; and the consumption of electric power.

Few there are, however, who would measure welfare levels merely in terms of what is actually consumed, for welfare obviously depends on consumption compared with needs. Thus, when Lewis Corey maintains (8:158)* that even during the prosperous years 1925-1929 more than 10,000,000 wage earners, clerical employees, and farmers received incomes that compelled them to live below the subsistence level, he is making comparisons with a configuration of utilities so objective, at least to him, as to constitute a norm, namely, that minimum of things to eat and wear necessary to keep alive. Similarly, when another writer (6:62) estimates that 16.7 per cent of all the families in the United States exist on the pauper level, 34.8 per cent maintain a minimum of subsistence, 44.6 per cent enjoy incomes sufficient for health and decency, and only 3.9 per cent live above that margin, he, too, is measuring "have" against biological "need," or "ought to have."

* Page 158 of reference 8 at end of chapter. He states that, if dependents are included, at least 85,000,000 persons were living near, on, or below the subsistence level during this "golden age of American capitalism."

In physical terms *norms* of living are independent of income or of individual psychological or ethical caprice. Instead they depend primarily on what for lack of a better term may be called medical *absolutes,* such as the minimum calories content of foods necessary for survival; the amount and variety of vitamins required for health (to avoid pellagra, scurvy, rickets) ; the minimum diet of milk required tor growth of children; and the amount of clothing, type of shelter (sunshine, air, light), and sanitary facilities (water, sewage disposal) necessary to keep down epidemics of preventable diseases.

Attempts have been made to formulate other "absolutes," such as the minimum literacy, education, and reading material required for effective political and economic citizenship, or the minimum of recreational facilities needed to keep down psychological abnormality and crime. But despite a voluminous literature (18, 21) on family budgets and scores of books advising consumers how they should spend their money, fully objective norms of living have not yet been developed, even in physical terms. Moreover, most of these norms ot living, or minima, have been much higher than the actual levels of living which the majority of the population can afford.

The problem of specifying actual commodities and prices which shall constitute the norm permits of answers so diverse that one seems hardly justified in speaking of norms. If we grant that a fully grown, reasonably hard-working manual laborer needs 70-100 grams of protein and from 3000 to 3500 calories of energy per day, that his house should have 400 cubic feet of air space per adult, and that it should be heated to 68° F., how shall we determine the particular list of foods or

type of house or heating equipment which shall constitute the norm? The required amounts obviously vary with the age, sex, physical condition, and occupation of the individual and the composition of the family. The prices vary seasonally, cyclically, geographically, between different stores, between farm and city, and so on. Clearly the minimum amount of income necessary for subsistence or for minimum health and decency is not an absolute figure—such as $500 per year—that is valid for the United States as a whole at all times, but a range of dollar values varying with the general level of prices, the geographic area,* the size of the city, the size and composition of the family, its peculiar physiological needs, and the like.

These qualifications apply of course to descriptions of levels of all sorts, including those of welfare levels in American life. The difficulty is, however, neither unusual nor insurmountable, being merely a result of the well-known circumstance that economic data, because they deal with life, do not divide with precision into hard and fast categories. Such norms, which can be reasonably well determined for the individual case, form an indispensable criterion of the adequacy of incomes, *e.g.*, of levels of relief wages or of minimum wages. They also constitute objectively valid tests of the efficacy of the business system as a whole.

The indicators of welfare levels in the sense of norms of living are consequently such vital statistics as death rates (inverted) ; morbidity rates (inverted); infant

* Quarterly surveys are made of such differences. (See reference 17 at end of chapter.) They have been considerably exaggerated, for the report for June of 1938 shows a variation (excluding Mobile, Alabama, and Washington, D. C.) of less than 20 per cent from $1239.69 in Birmingham, Alabama, to $1413.34 in Chicago, Illinois.

mortality rates (inverted); hospital beds per 1000 of population; hours of wages required to buy standard amounts of food, clothing, and shelter (inverted); per capita consumption of energy-producing foods and of foods containing essential vitamins; per cent of literacy; dwelling rooms per person; and density of persons per city block (inverted).

The concept of welfare levels considered solely from the economic point of view contains in the third place an ingredient which for lack of a better term I shall call the *standard* of living. One compares what he has not only with what he needs but also with what he thinks he needs. Standards of living are subjective and individual, comprising the aggregate of economic goods and services which men think they "have to have" in order to maintain their social and economic status rather than that which, according to the concensus among doctors and experts in home economics, they "ought to have" in order to maintain existence or minimum health and decency.

Standards of living, even when reduced to simplest economic terms, are largely stereotypes, reflecting a hodgepodge of value judgments of all sorts—those uncritically accepted from the circle of one's birth or one's livelihood, those worked out independently in conformity with an accepted ethic or world and life view, and those foisted upon one by the incessant reiterations of commercial advertising. They represent the type and content of the living of one's aspirations, that which one strives, as long as one can, to keep even at great cost. Thus in classical economic theory, particularly in dealing with the relationship of wages to labor supply and population, the standard of living was defined as that

total of goods and services which man deemed to be superior to wife and family. Culturally and ethically individuals may have low or unworthy standards of living; but in economic terms the more reluctant a person is to undertake family responsibilities, the higher his standard of living.

Standards of living by their very nature are difficult to measure, particularly when attempts are made to specify the constituent commodities. Wives of men in the working class make almost any sacrifice in order to wear silk hose. Those in the upper brackets "must" have a woman "by the day" to wash and clean. Frenchmen must have their bottle of wine, Germans their beer, Americans their moving pictures, and Japanese girls their obis. In each group there are objects of prestige value, the possession of which brings a sense of well-being or welfare. So far as detail is concerned, standards of living obviously depend on the volume and character of products afforded under existing technological conditions by available natural resources, on occupational perquisites, and on religious, cultural, and racial patterns of consumption.

But welfare levels, while depending upon comparisons of levels of living with standards of living, may none the less vary with income if all classes have more or less the same standard. And this indeed turns out to be substantially the case, for Americans fairly uniformly test their well-being according to the degree by which they fail to have what foreign observers have called the "American standard of living," meaning thereby such mass-produced items as automobiles, plumbing, central heating, electric household appliances, canned goods, cigarettes, and chewing gum. A small but spectacular

portion of American business, instead of making goods to suit the customers, has found it cheaper by sales propaganda to produce customers to fit the standardized, mass-produced goods so profitably turned out by modern technology.

Needless to say, popular striving to attain the so-called "American standard of living" sometimes lowers the "welfare levels" afforded by incomes all along the line, for it greatly overemphasizes pecuniary emulation, conspicuous consumption, and high living while it diminishes the welfare that can be obtained from inexpensive simplicity, trom plain living and high thinking. Primary stimulants to such overemphasis are obviously the newspapers and the radio, insofar as they are dominated by the propaganda and profit requirements ot business. Even the teachers in public schools, by their bias toward, if not active sponsorship of, materialistic standards of value, tend to create unhealthy wants for those goods whose selling happens to yield some private individual a profit, to the detriment of goods that are "best." Such unhealthy wants lor goods, even if not drummed up to an intensity sufficient to lead to crime and political spite, diminish the satisfactions which the incomes of the poor might by wise apportionment otherwise provide. In terms of utility that portion of modern advertising which emphasizes envy and snobbery takes from the poor some of the little welfare they might otherwise have, while the rich not only glut but gloat.

If we regard welfare levels and income levels as substantially identical or proportional, the problem of depicting the welfare levels that actually exist in the United States is simplified, but by no means without complications. Income is calculated in diverse ways.

Statistics are sparse, incomplete, and nonhomogeneous, consisting at best of sample surveys and estimates based on them, together with estimates based on income tax returns, on reports of industrial payrolls, on crop figures, and on records of disbursements by governments.

Only three studies of note have attempted to estimate how the national income is divided. The first oi these was published by the National Bureau of Economic Research and applied to the year 1918 (15). The second was published by the Brookings Institution and applied to the year 1929 (14), while a more recent publication of the institution (13) takes account of some of the stupendous changes that were caused by the world depression.

But by far the most valuable studies are now on the verge of appearing (scores of mimeographed releases for various localities are already available) from the Study of Consumer Purchases—a Works Progress Administration project conducted by the United States Bureau of Home Economics and the United States Bureau of Labor Statistics in co-operation with the National Resources Committee and the Central Statistical Board. This notable project provides the first real information showing not only incomes received but also in detail how those incomes were spent and who did the saving and how much, by region, by type of city, by occupation, by size of family, and the like.

The most notable publication thus far is entitled *Consumer Incomes in the United States: Their Distribution in 1935-1936* (12), a study made under the direction of Miss Hildegaarde Kneeland. It presents estimates which for the first time in the literature of the subject are based on a nationwide sample of incomes actually

Table 1
How Incomes Were Divided in 1935–1936 *

Income Level	Among Families						Among Single Individuals					
	Number of Families (Add 000)	Aggregate Income (Add 000,000)	Per Cent of Families	Per Cent of Income	Cumulative Per Cent of Families	Cumulative Per Cent of Income	Number of Single Individuals (Add 000)	Aggregate Income (Add 000,000)	Per Cent of Individuals	Per Cent of Income	Cumulative Per Cent of Individuals	Cumulative Per Cent of Income
Under $250	1,163	136	3 9	3	3 9	3	961	158	9 5	1 4	9 5	1 4
$250–$500	3,015	1,167	10 3	2 4	14 2	2 7	1,572	601	15 6	5 2	25 2	6 6
$500–$750	3,799	2,384	12 9	5 0	27 1	7 7	1,973	1,232	19 6	10.6	44 8	17 2
$750–$1000	4,277	3,738	14 5	7 8	41 7	15 6	1,599	1,391	15 9	12 0	60 7	29 2
$1000–$1250	3,882	4,348	13 2	9 1	54 9	24 7	1,109	1,241	11 0	10 7	71 7	39 9
$1250–$1500	2,865	3,908	9 7	8 2	64 6	32 9	878	1,201	8 7	10 4	80 5	50 3
$1500–$1750	2,343	3,778	8 0	7 9	72 6	40 8	547	883	5 4	7 6	85 9	57 9
$1750–$2000	1,897	3,469	6 5	7 3	79 1	48 1	399	745	4 0	6 4	89 9	64 3
$2000–$2250	1,421	3,002	4 8	6 3	83 9	54 4	284	601	2 8	5 2	92 7	69 5
$2250–$2500	1,044	2,472	3 5	5 2	87 4	59 6	210	497	2 1	4 3	94 8	73 8
$2500–$3000	1,314	3,569	4 5	7 5	91 9	67 0	161	436	1 6	3 8	96 4	77 6
$3000–$3500	744	2,388	2 5	5 0	94 4	72 0	108	349	1 1	3 0	97 5	80.6
$3500–$4000	438	1,626	1 5	3 4	95 9	75 4	64	237	6	2 0	98 1	82 7
$4000–$4500	250	1,048	9	2 2	96 8	77 6	36	154	4	1 3	98 4	84 0
$4500–$5000	153	719	5	1 5	97 3	79 1	25 5	122	3	1 1	98 7	85 0
$5000–$7500	329	1,900	1 1	4 0	98 4	83 1	57 3	344	6	3 0	99 3	88 0
$7500–$10,000	187	1,606	6	3 4	99 0	86 5	28 6	242	3	2 1	99 5	90 1
$10,000–$15,000	132	1,497	5	3 1	99 5	89 7	20,861	250	2	2 2	99 7	92 3
$15,000–$20,000	58 5	1,014	2	2 1	99.7	91 8	9,436	161	1	1 4	99 8	93 7
$20,000–$25,000	34 2	762	1	1 6	99 8	93.4	5,617	127	.06	1 1	99 9	94 8
$25,000–$30,000	22 2	628	08	1 3	99 88	94 7	3,350	93	03	8	99 93	95 6
$40,000	15,561	560	05	1 2	99 93	95 9	2,398	81	02	7	99 95	96 3
$50,000	6,603	315	02	7	99 95	96 6	1,737	76	02	6	99 97	96 9
$100,000	10,571	755	04	1 6	99 99	98 2	2,470	153	02	1 3	99 99	98 2
$250,000	3,336	441	01	9	99 99 +	99 1	808	98	01	9	99 99 +	99 1
$500,000	699	200	†	4	99 99 +	99 5	217	64	†	6	99 99 +	99 7
$1,000,000	197	111	†	2	99 99 +	99 7	43	24	†	2	99 99 +	99 9
Over $1,000,000	75	143	†	3	100 0	100 0	12	15	†	1	100 0	100 0
Total	29,400,300	$47,697,238,000	100 0	100 0			10,058,000	$11,579,390	100 0	100 0		

*Source of data—12 18, 30.

†Less than .05 per cent.

received by families and individuals from all sources—from net earnings of all the members, from profits, dividends, interest, and rent, from pensions, annuities, and

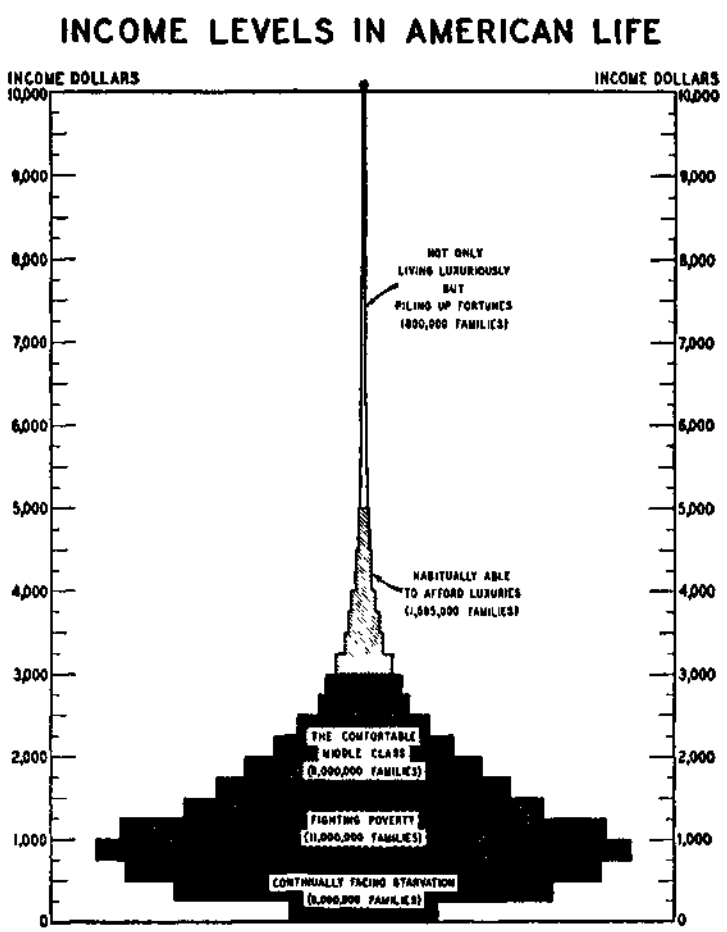

FIGURE i.—About 283,000 families with incomes of over *$10,000* get as large a share of the total income as nearly 11,000,000 families at the bottom. The largest income, that is, the highest point of this pyramid, if drawn on a vertical scale of i"=$1000, would be 350 feet higher than the top of this diagram.

benefits, from gifts used for current living expenses, from the occupancy of owned homes, and—for rural families—from home-grown food and other farm products used by the family.

The results for the nation as a whole are shown in Table I and in the accompanying charts (Figures i and 2). Certain general features should be carefully borne in mind. Notice that the table gives data both for families and for single individuals while the charts refer only to families. Furthermore, scrutinize carefully the rows of data divided at the $750, $1500, $2500, and $5000 intervals. These income levels have been selected as the upper limits of the starvation, poverty, comfort, and luxury levels respectively; the wide range of incomes beyond $5000 is termed the savers' level. Such divisions, while deemed substantially correct and justifiable at the

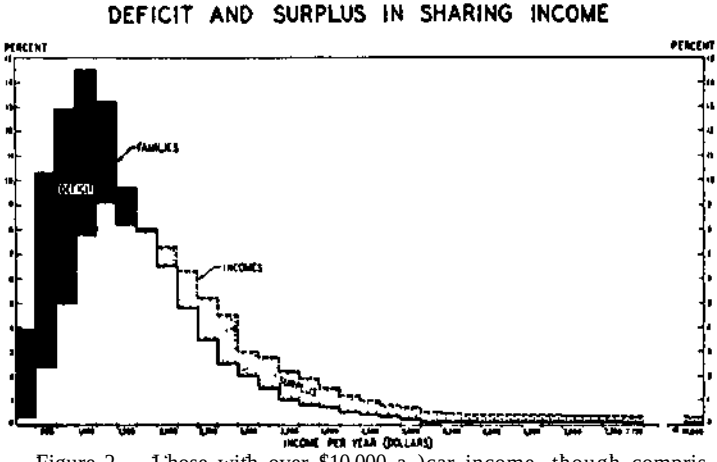

Figure 2 — Those with over $10,000 a year income, though comprising i per cent of the families, get 135 per cent of the total income, as much as 40 per *cent* of the families at the bottom. If drawn on a horizontal scale of i"—$1000, the tail of this curve would have to be extended nearly 120 yards to represent the highest-income class.

1935-1936 levels of the costs of living (the index of the National Industrial Conference Board hovered between 80 and 85), are unavoidably arbitrary, making no allowance for variations in detail. Differences in size and constitution of family, in degree of urbanization, in regional costs of living, in occupational status, and the like are of course highly important. There are, to take but one example, many families living on farms on $600 a year whose fight against pauperism is no more difficult than that of families of identical size in metropolitan centers getting $850 a year.

The range of incomes from zero to "between $4,000,-ooo and $5,000,000" * could have been divided at other points and the number of families in each group changed accordingly. The number of groups could readily have been larger or smaller than five. The essential facts would, however, have remained the same.

The top three rows summarize the welfare of roughly 8,000,000 families continually facing starvation, frequently forced to apply for relief or charity, and borrowing or otherwise securing enough to keep body and soul together. Here of course are found most of the six million households which received public relief or assistance in some form during 1935 and 1936 (22:367). Here, too, are found most of the hundreds of thousands of families of migratory laborers. Equally heavily represented are the native white and Negro farmers, share croppers, and urban workers of the South whose plight, President Roosevelt has stated, constitutes the nation's No. i economic problem. Even in 1929 per capita incomes in Kentucky, Tennessee, Missouri, Mississippi,

• Thus the Bureau of Internal Revenue of the United States Treasury indicates the highest individual incomes reported for 1935-1936.

Alabama, Georgia, and North and South Carolina averaged less than $400 a year as compared with figures more than twice that amount in most of the states on the north Atlantic and the Pacific seaboards (13:III, especially p. 40) . In 1935—1936 the middle family had an income of only $19 a week in the South as compared with $23 a week in the mountain and plains area, $26 in New England, $27 in the north central states, and $29 on the Pacific coast (7:28-29). On this level, too, are the stranded populations, the hill folk of the southern Appalachian coal plateaus, the farmers in the old Cotton Belt and in the Dust Bowl portions of the Great Plains, and the remnants left in the cutover areas of the states along the Circat Lakes (i, 10) .

These top three rows represent the third of the nation's families getting less than $750 a year income. Even the most fortunate among them must try to meet all expenses for families of about four persons out of $65 a month. No wonder that they are ill-led, ill-clothed, and ill-housed. No wonder that three to tour times as many of their children die before the age of one year as in the average family. These are the families that suffer more than six times as often from acute and chronic illness as do those with incomes in excess of $3000 (20) . Though their average income is only $40 a month, they manage to beg, borrow, or secure from merchants and others an additional $12 a month, representing the average amount monthly of accumulating deficit. Their total expenditures of $52 a month are divided on the average as follows: $10 for housing, $25 for food, $7 for household operation and furniture, $4 for clothing, $2 to $3 for medical care, $1 for recreation and education, with the remaining $2 or $3 left for miscellaneous needs.

This summarizes in terms of averages the sufferings of 8,000,000 families.

In Table I notice that the next cluster of three rows of figures comprises about 11,000,000 families. In this group is found the representative city wage-earner family, paying about $20 a month for the rent of a tenement or flat that ordinarily has no steam heat and in at least one third of the cases no gas, electricity, or running hot water. This typical family spends about $36 a month for food, mostly flour, potatoes, bread, and pork. Fruits are of course Sunday delicacies, while less than three out of five families can afford as much as two quarts of milk per person per week. Telephones, electrical refrigerators, electrical washing machines, vacuum cleaners, and other such accoutrements of the American way of living are seen primarily in the advertisements and in the movies. Usually less than a half and in some cities less than a sixth of the workers in this group own automobiles, the average value of which is less than $50. Only one or two out of a hundred ever buy a new car.*

The farmers, who comprise by far the next largest number in this group, are no better off. In fact, when we consider the farm population as a whole, only three out of five (58.0 per cent) have automobiles and one out of three (34.0 per cent) has a telephone. Only one out of eight (13.4 per cent) enjoys electric light in the home or running water (15.8 per cent). Even radio sets are

* For the facts in this paragraph sec address by Dr. Isador Luhin, United States Commissioner of Labor Statistics, February 13, 1937, on the topic "What Is the Present Standard of Living of Our Laboring Population?" This address summarizes in preliminary fashion the detailed results of surveys that have been made in such cities as Chicago and Providence.

owned by only one out of five (20.8 per cent) rural farm families (2).

TABLE II

PERCENTAGE OF OCCUPATIONAL GROUP IN EACH WELFARE LEVEL*

LEVEL	WAGE EARNERS	FARMERS	THOSE WITH CLERICAL OCCUPATIONS	SALARIED BUSINESSMEN	INDEPENDENT BUSINESSMEN	SALARIED PROFESSIONAL MEN	INDEPENDENT PROFESSIONAL MEN
Starvation, $50–$750	22.5	35 7	6 8	1.7	16 7	5 5	1.8
Poverty, $750–$1500	45.1	39 2	33.0	13.8	32.8	20.7	12.5
Comfort, $1500–$3000	29.1	20.3	48 5	46.8	33.5	48 3	27.3
Luxury, $3000–$5000	3.1	3.4	9.9	21.4	9.2	17 0	21.2
Savers Over $5000	.2	1.4	1 8	16 3	7.8	8 5	37.4
Number of families in each group (add 000)	9459	6167	3626	1113	2373	989	341
Per cent of all families	37 9	24 8	14 5	4 5	9.5	4 0	1.4
Median income per family	$1175	$965	$1710	$2485	$1515	$2100	$3540

*Source of data – 11 26

The figures in this table exclude all families receiving any direct or work relief (however little) at any time during the year

The percentages across the page fail to add up to 100 because 845,700 families are omitted which either had no income from earnings during the year or obtained major earnings from farming though they were village or city families The farm group correspondingly includes only families living on farms in rural areas

The extent to which persons other than farmers and laborers are compelled to struggle with poverty is shown in Table II. Notice that, except for independent businessmen (the peanut vendors and operators of roadside stands, small service establishments, and so on) the percentage at the starvation level is enormously smaller for all other groups than tor wage earners and farmers. This contrast acquires heavy additional emphasis when

it is remembered that Table II excludes all those on relief, again mostly laborers and farmers. Thus the table should be read as follows: 45.1 per cent of the laborers not receiving relief got between $750 and $1500 a year, and so on.

Needless to say, the comfortable middle class getting from $1500 to $3000 a year has relatively few laborers (29.1 per cent) and fewer farmers (20.3 per cent) but of course large percentages of those in clerical occupations (48.5 per cent), of salaried businessmen (46.8 per cent), of independent businessmen (33.5 per cent), and of salaried professional men (48.3 per cent) . This group of roughly 8,000,000 families, while compelled to keep track of the nickels and dimes, is able habitually to buy the less expensive mass-produced gewgaws found in abundance in variety stores, specialty shops, and department stores.

The distinction between the comfort and luxury levels is unusually tenuous. Inexpensive items, such as imported perfumes and cosmetics, that are luxuries for families at $1750 a year become comforts and, psychologically at any rate, even necessities at higher levels of income. On the other hand, those getting less than $3000 a year manage to enjoy occasionally such expensive luxuries as a trip to Europe by economizing on what for other families are habitual luxuries, such as liqueurs or opera tickets.

There are no doubt many persons struggling to make both ends meet at salaries well above $1500 who may feel that the lower limits of both the comfort ($1500) and the luxury levels ($3000) are somewhat too low. But one should remember that consciousness of one's own wants is often more acute than awareness of "how the

other half lives." Relative to that third of the American families that must live on less than $65 a month or that half that gets less than $1070 a year or that two thirds that must make ends meet on $1450 a year or less (which is less than $30 a week), the families here talked about, particularly the million and a half getting between $3000 and $5000 a year may be regarded as highly fortunate. It is they who live as advertised, *i.e.*, in accordance with the "American standard of living." It is they, but they alone, who can habitually afford the comforts and luxuries which businessmen fondly imagine and stubbornly maintain are enjoyed by the bulk of American laborers.

Only one out of thirty-seven American families, or a total of 800,000, gets more than $5000 annually. These are the pampered darlings of the American economy. By far the largest proportion are of course salaried business executives, independent businessmen, and independent professional men. Though they constitute but 2.7 per cent of all families, they get more than a fifth (20.9 per cent) of the national income, an amount so great that nearly all the incomes of the lower half of the families must be added together to equal it. Moreover, there is a select group of 283,000 families, those with incomes in excess of $10,000, who get as much as the poorest 11,000,000 families. Thus the highest i per cent extracts from society as much income and has as great a command over the good things of life as the lowest 40 per cent. There are 75 families with top incomes of over a million dollars each who get more than 1,200,000 families at the bottom! They, the 800,000 families getting over $5000 a year, are the "thrifty abstainers," accounting usually for more than 85 per cent

of all savings (14:96 et seq.). In May of 1936 only 416,-ooo of their number were needed to account for 72 per cent of the individual demand deposits of the country. Those at the bottom of the scale, needless to say, incur deficits—80 per cent of all families save only about 2 per cent of the total.

The incomes enjoyed are not net incomes, either at the top or at the bottom. The taxes, such as excise, sales, and property taxes and tariffs, which are actually shifted upon and borne by those in the lower brackets, are often underestimated; but they take between one tenth and one fourth of their incomes. On the other hand, the amount of taxes paid by those in the upper brackets is often exaggerated. In 1936, for example, of the 800,000 families and 130,000 individuals estimated in Table I to receive in excess of $5000 spendable income, 651,866 persons reported a correspondingly high taxable income. These reported a total income of $10,054,262,000, upon which a federal income tax of $1,143,875,000 was paid, leaving nearly 90 per cent, which is substantially more than the portion left to the group at the bottom. Accepting the deductions of $1,341,326,000 at face value (though many of these, such as contributions to charity and interest payments on borrowed money, are also subtracted from low incomes) , we still find left in their hands a total of $7,569,061,000 which they are able to spend and save. This amount gives an average of $9500 per family.

Even the highest brackets, often alleged to pay excessive rates, cannot help piling up fortunes, for although 87 families and persons are estimated in Table I to have an income of $1,000,000 or over, only 61 in 1936 reported taxable incomes of that amount. After paying alfc

taxes and allowing in full for all deductions, they still had left an average of $500,049 each (4) !

The income of those in the savers' group comes from a variety of sources. In 1929, for example, they not only got a tenth (10.1 per cent) of all compensation paid to employees, but in addition they collected 19 per cent of all rents, 24.7 per cent of all entrepreneurial income, 40.7 per cent of all interest paid, 48.1 per cent of all property income, and 71.2 per cent of all dividends (i 1:22). It is they who own the stocks and bonds of the country, not the much advertised millions. Even in the American Telephone and Telegraph Company more than half of the stock in 1935 was owned by 5 per cent (33»938) of the stockholders, while the small stockholders, that is, the 382,000, many of them women, who play so large a role in company advertising, owned less than 10 per cent of the stock. It is the 800,000 savers, moreover, who own the life insurance of the country; a sample study shows that less than 13 per cent of the matured policies get about 85 per cent of the moneys distributed by life insurance companies in payment of insurance claims. To talk of millions of savings bank depositors or stockholders or policyholders is like estimating the number in a herd of elephants by counting together with the elephants the flies, fleas, and ticks on their backs. Needless to say, among these 800,000 families are the two or three thousand individuals who control American enterprise and manage the economy to suit their ends even under the New Deal. They are the apex of the political, economic, and social system that exists in this country.

By way of conclusion turn again to Figures i and 2. Figure i presents the distribution of incomes in the

shape of a pyramid or peg-shaped top, representing not only income and welfare levels in American life but various educational, occupational, sociological, and opportunity levels as well, in which each level is largely self-perpetuating. Chances to rise in the American system are not only small, but they are also growing smaller (9) . As elsewhere, so apparently in the economic world, like begets like; nature and nurture conspire to keep the children of laborers in the wage-earning class while the business executives of the future, like Edsel Ford, are for the most part the sons ot those now in control (19).

Figure 2 indicates deficit and surplus in the sharing of income. The bottom 3.8 per cent of the families get only .3 of i per cent of the income. The two curves cross at the point of the arithmetic average $1615. About seventy out of a hundred families get less than this mean income, which is $545 highei than the median income, $1070. The latter is of course the real amount although the inaccurate and excessive amount of $1615 will no doubt be solemnly ([noted as representative of the income of Americans by those who (ail or do not wish to understand that the arithmetic mean yields a fictional result when high magnitudes of millions of dollars are averaged in with small numbers. Those with a sense of realism and a devotion to truth naturally use the median, especially when comparing incomes between occupations or between countries.

Lack of space prevents discussing many other interesting aspects of the problem, such as the detail of what is consumed at each level and how much is spent for food, clothing, shelter, medical care, and recreation (3) . Figures on these details are now becoming available and

cast amazing new light on consumer expenditures. They indicate that more than 16,000,000 out of 29,000,000 families failed to make ends meet in 1935-1936, incurring net deficits fraught with human tragedy far exceeding that involved in the bookkeeping business losses so highly publicized by the Department of Commerce and various highly paid bank- and industry-minded "economists." The distress and losses which these millions of consumers suffer, one half of whom are compelled to live in places renting tor $15 a month or less, result in high infant mortality rates, high death rates, and high disease and morbidity rates, not to speak of engulfment in the vicious circle of low income, undernourishment, lack of education, lack of occupational training and skill, and low marginal pioductivity, all of which makes virtually impossible an escape Irom low income.

Finally the fact must not be forgotten that none of this extieme poverty is necessary. In the United States there are enough land and raw materials, sufficient capital, equipment, and plant, and an adequate labor force, skilled and unskilled, to bring the "families whose incomes were less than $2000 all up to that level" (16:429). This estimate is highly conservative, for it assumes merclya hillutilizationof the existing plant and equipment in 1929.

What, then, is lacking? Primarily among those in business and government who hold the reins of power the capacity and will to biing our economic system into full production. In 1937 some of the largest and best managed business organi/ations in the country restricted pioduction by as much as 75 per cent, throwing more than 4,000,000 laboiers out of work. However necessary this procedure may have seemed from the point of view

of the individual balance sheet and the profit and loss statement, its effects upon the many were almost unmitigatedly bad. Millions were pushed down from the low levels of welfare in which, as has been shown, they eked out subsistence in 1935-1936. This is neither the time nor the occasion to enter into the problem of methods of abolishing poverty. But let no one add insult to injury. Welfare levels in the United States need not be low. They can be raised. As Professor T. N. Carver of Harvard University said more than twenty years ago, "Poverty is as unnecessary as malaria or yellow fever" (5:349)-

BIBLIOGRAPHY

1. ARMSTRONG, LOUISE (VAN VOORHIS), *We Too Are the People;* Little, Brown and Company, Boston, 1938
2. BUREAU OF AGRICULTURAL ECONOMICS, compilation published August 11, 1937, Appendix p. 11196, *Congressional Record;* U. S. Government Printing Office, Washington, D. C., 1937
3. BUREAU OF HOME ECONOMICS, Department of Agriculture, Study of Consumer Purchases, press releases, Washington, D. C.
4. BUREAU OF INTERNAL REVENUE, United States Treasury, *Press Release No. 14-2;* Washington, D. C., July 18, '938
5. CARVER, THOMAS NIXON, *Essays in Social Justice;* Harvard University Press, Cambridge, Mass., 1915
6. COMISH, N. H., *The Standard of Living;* The Macmillan Company, New York, 1923 (now out of print)
7. CONSUMERS' COUNSEL, Agricultural Adjustment Administration, *Consumer's Guide;* Washington, D. C., September, 1938
8. COREY, LEWIS, *The Decline of American Capitalism;* Covici Friede, New York, 1934
9. DAVIDSON, PERCY E., and ANDERSON, H. DEWEY, *Oc-*

cupational Mobility in an American Community; Stanford University Press, Stanford University, Calif., '937

10. GOODRICH, CARTER, and others, *Migration and Economic Opportunity;* University of Pennsylvania Press, Philadelphia, 1937
11. HART, ALBERT G., *How the National Income Is Divided;* University of Chicago Press, Chicago, 1937
12. KNEELAND, HILDEGAARDE, *Consumer Incomes in the United States: Their Distribution in 1935-1936, 2* volumes; National Resources Committee, Washington, D. C., 1938
13. LEVEN, MAURICE, *The Income Structure of the United States;* Brookings Institution, Washington, D. C., 1938
14. LFVeN, MAURICE, MOULTON, HAROLD G., and WARBURTON, CLARK, *America's Capacity to Consume;* Brookings Institution, Washington, D. C., 1934
15. MACAULAY, FREDERICK R., *Income in the United States, Its Amount and Distribution, 1909-1919,* Vol. I and II; National Bureau of Economic Research, New York, 1921 and 1922
16. NOURSI-, EDWIN G., and others, *America's Capacity to Produce;* Brookings Institution, Washington, D. C., 1934
17. Stecher, MARGARET LOOMIS, *Intercity Differences in COA/V of Living in March, 193*5, Research Monograph No. XII; Works Progress Administration, Washington, D. C., 1937
18. ——, *Quantity Budgets for Basic Maintenance and Emergency Standards of Living,* Research Bulletin, Series I, No. 21; Works Progress Administration, Washington, D. C., 1936
19. TAUSMG, F. W., and JOSLYN, C. S., *American Business Leaden;* The Macmillan Company, New York, 1932
20. UNHID STATES PUBLIC HEALTH SERVICE, *The National Health Survey,* 79^5-56, especially Bulletin No. 2, "Illness and Medical Care in Relation to Economic Status"; U. S. Government Printing Office, Washington, D. C., 1938

21. WILLIAMS, FAITH M., and ZIMMERMAN, CARLE C., *Studies in Family Living in the United States and Other Countries: An Analysis of Material and Method,* United States Department of Agriculture, Miscellaneous Publication No. 223, especially the bibliography, pp. 57ff.; U. S. Government Printing Office, Washington, D. C., 1935
22. Woofter, T. J., JR., and WHITING, T. E., "Households and Persons Receiving Relief or Assistance," *Journal of the American Statistical Association,* XXVIII, 367, June, 1938
23. WYAND, CHARLES S., *The Economics of Consumption;* The Macmillan Company, New York, 1937

VIII

GROUP STRUCTURE AND SOME OF ITS IMPLICATIONS FOR SOCIAL EDUCATION

Harold C. Hand

ANYONE invited to speak or to write concerning the group structure of American society and its implications for social education could develop his theme along any one or more of a number of approaches. He might well devote his entire time or space to a discussion of the eclipsing of primary by secondary groups, so centrally important for social education are the consequences of this change in the structure of our society. Or again, because of the perplexities it poses for educators, he might with profit (enter entirely within the area of group conflict; within this problem he might exclusively deal with the conflicting demands of piessure groups upon the school, or he might instead give his attention solely to the implications of the fact of the plurality of groupings for any one individual. Or he might attempt to define, clarify, and apply the philosophy of compromise with reference to group conflict and perhaps suggest how this might be extended into the philosophy of integration. Or he might choose still other alternative aspects of the group sturcture situation which are of significance in social education but which we shall not take space to enumerate here.

Since this volume is presumably being prepared for practicing teachers and administrators engaged in the

work of social education in the public schools, as well as for citizens interested in education, the approach utilized in this chapter should be one which will be maximally meaningful to these groups. It is believed that an examination of the question of neutrality in social education affords such an approach. In dealing with this question we must make continuous reference to the facts and implications of most of the aspects of group structure alluded to in the first paragraph. Before plunging into the central theme of the chapter, however, it may be advisable to attempt to lay a bit of groundwork concerning each of the two principal aspects of group structure to which reference has been made, namely, the rise to dominance of derivative groups and the phenomenon of group conflict.

Let us first briefly suggest what is meant by the eclipsing of primary by secondary groups. "The primary group, whatever its form or type," wrote Bernard, "has always had the function of molding the personality of the young and of controlling the behavior of the old. . . . [However] the derivative group is growing into dominance as a molding and controlling mechanism over the primary groups. . . . Associations of the indirect contact type are the inevitable result of modern life. Modern communication and transportation systems have made it increasingly easy for widely separated individuals to combine into associations for mutual benefit, and the needs of modern life have made it equally necessary" (6:413, 418, 481) .* For example, the family as the primary group *par excellence* now yields to various groups, associations, publics, and what not of a derivative and non-face-to-face character with reference to much of its

• Pages 413, 418, and 481 of reference 6 at end of chapter.

former molding and controlling of its members. Occupational, recreational, and other bodies have to a marked and in an increasing degree taken over much of this molding and controlling. Production for the market instead of for the household has for most of our population moved the center of production outside the family. Consequently, not the family but the trade union or the employers' association chiefly controls the adult's occupational behavior. What the movie, radio, and press "publics" demand or tolerate is in most instances more significant than the family desires in the molding of the young. Membership in the Boy Scouts, the American Legion, the Ku Klux Klan, the Better America Federation, the Public Ownership League, the Young Communist League, or some other organization may and in most cases probably docs issue in types of molding and control far more pervasive than those which today flow from the typical family.

As we shall point out in considerably greater detail later in this chapter, the chief significance for workers in social education of this eclipsing of primary by secondary groups resides in the fact that our people continue to place their chief emphasis upon primary attitudes and ideaIs in a world dominated by secondary or derivative groups—a world in which cherished primary values can be realized only to the degree that appropriate derivative attitudes and ideals can be devised, inculcated, and made the prime conditioners of behavior. "Just as industry has outgrown the empirical invention and demands the projected or logicalh synthetic invention, so also has society grown bevond the point where it can be successfully and properly controlled by primary emotional attitudes" (6:433) .

We turn now to the laying of at least some groundwork for our later treatment of group conflict within the context of social education. To the student of social education, and even more to its practitioners, the plurality of publics in "the American public" is a fact of basic importance. Newlon has observed that "the people are divided into many publics locally and nationally along occupational, social, religious, economic, geographical, and other lines. The multitude of groups in every community comprises just so many publics ..." (20:36). That this is no new phenomenon is evidenced by the fact that Alexis de Tocqueville recorded a similar observation in connection with his visit to the United States in the eighteen thirties. "Americans of all ages, all conditions, and all dispositions," he wrote, "constantly form associations. They have not only commercial and manufacturing companies, in which all take part, but associations of a thousand other kinds—religious, moral, serious, futile, general or restricted, enormous or diminutive. . . . If it be proposed to inculcate some truth, or to foster some feeling, . . . they form a society" (29: 114).

Thus today we find that virtually every conceivable type of interest is somewhere in the United States being advanced by one or more organized groups. The number ol these groups is almost beyond computation. Certain it is, however, that they run well into the hundreds. Including only those groups "whose memberships were large and influential and who have been instrumental in shaping the channels of American thought," Bessie L. Pierce in 1933 investigated the educational attitudes and proposals of "more than 200 organizations" (23: XI-XII). At that, this number did not include several large

and influential groups which she had examined in a previous investigation (24). In another investigation Bruce Raup centered upon some 88 organizations as being those of most significance in their impacts upon the school (25) . This list, however, like that of some 200 plus compiled by Pierce, predominately represents "pressure groups" and does not include the much larger number of what might be called "interest groups." Were organizations of the latter type included in either the Pierce or the Raup selections, the number in either list would without question be increased threefold or fourfold at the very least.

Perhaps a word should be inserted at this point regarding the distinction which has just been made between the two types of organizations. As R. M. Maclver has pointed out, "The tcnn pressure group has recently come into use to signify any aggregate, organized or unorgani/ed, which applies piessurc tactics. This usage is seiviccable it at the same time a distinction is drawn between an inteit'st group and a pressure group. Even if it were true that all interest groups seek in some way or at some time to exercise social pressures, the distinction would be relevant. For the exercise of social pressure is not inherent in the concept of an interest group, say of a musical organization or a philatelic society, whereas it is the defining function of a pressure group. Social pressiucs, in a word, constitute a particular method of achieving results—one of the many methods which interest groups mav adopt. . . . Pressure involves more than persuasion: it involves some kind of external inducement to change or limit the activity of others, ranging from direct or indirect economic inducements to ostracism, intimidation and violence" (26, Vol. XII:

347) • As Park puts it, "The pressure group is not an army which seeks to win battles by frontal attacks on hostile positions; it is, rather, a body of sharpshooters which picks off its enemies one by one" (26, Vol. **XII:** 345)-

The principal significance of this tremendous plurality of publics for social education resides in the fact that among the multitude of interest and pressure groups which constitute "the American public" there is virtually none that is not diametrically opposed by one or more others. Especially is this true of those organizations of the pressure variety. This fact of conflict has been ably and convincingly documented by both Raup and Pierce in their investigations. Many of the conflicts have been schematically portrayed by the former in a two-way chart centered around twenty-six issues of primary importance in social education. For example, on one or more of these issues Raup found the following paired groups holding diametrically opposed positions: the National Association of Manufacturers and the National Consumers League; the American Federation of Labor and the Chamber of Commerce of the United States; the Daughters of the American Revolution and the Public Ownership League; the Federal Council of Churches of Christ in America and the American Coalition of Patriotic Societies; the National Council for the Prevention of War and the American Defense Society; the General Federation of Women's Clubs and the League of Women Voters; the Navy League and the American Civil Liberties Union; the League for Industrial Democracy and the National Security League; the Veterans of Foreign Wars and the Peoples Lobby; the National Child Labor Committee and the American Legion; The

United States Patriotic Society and the Workers Education Bureau; the Women's Trade Union League and the National Electric Light Association; and the National Catholic Welfare Council and the League for Industrial Rights. These represent but a few of the very numerous conflict situations centering around issues significant in social education which Raup found among even the relatively small number of pressure groups which he studied. His findings, especially when compounded with those of Pierce and Counts, clearly demonstrate that in carrying forward the work of social education the school is constantly under concerted cross-pressures from various quarters. "Every vibration that agitates the social structure must sooner or later reach the public school," concluded Counts. "Only the most stupid and unenterprising can fail to perceive the promise of power which the school holds out to those who would organize its curriculum. . . . To any social group, educational thinking is not acceptable because of any claim to intrinsic validity, but rather because it serves that group in its struggles for rights, privileges, and 'a place in the sun.' . . . Toward truth in any abstract sense, social groups have no inclination; rather do they seek effective instruments for the winning of battles. If truth, however it may be defined, serves them, well and good; but if it does not, so much the worse lor truth" (11:340-347).

From the immediately preceding observations it must not be inferred, however, that educators should deplore the fact of conflict. On the contrary, they should recognize it as an indication of vitality in the society which they would serve through the providing of appropriate social education. As Cooley put it, "Conflict, of some sort, is the life of society, and progress emerges from a

struggle in which each individual, class or institution seeks to realize its own idea of the good. The intensity of this struggle varies directly as the vigor of the people, and its cessation, if conceivable, would be death" (10: 199). How validly to steer their course amid the cross-currents generated by conflicts and how to define, to focus attention upon, and to educate in the service of the broad uniting interest which underlies the narrower dividing interests is the proper problem of educators. "The problem," wrote Cooley, "is one of giving it [conflict] its setting in the larger social whole, along with co-operation, and bringing it under the control of the larger order, and at the same time stepping up the level of struggle from a lower to a higher plane" (10: 422). As we shall later point out in some detail, the "broad uniting interest" here assumed is that centered in democracy as a way of life envisaged in the Constitution of the United States.

We come now to a consideration of the central approach utilized in this chapter—an examination of the question of neutrality in social education. Both from within and from without the profession public school educators have times without number been told that their task is impartially to serve the American public (3:83; 14:222, 233, 583).* By its very nature this declaration, if honestly and disinterestedly made, is necessarily based upon the assumption that it is both desirable and possible for the school equally (at least roughly so) to serve the interests of all groups which constitute the American public.

This may have been more nearly possible and prob-

* For more or less typical declarations arguing for impartiality see references 15, 16, 28 at end of chapter.

ably even desirable in the relatively simple agrarian communities of the early frontier—at least to the degree that any given community was homogeneous with reference to the outlook and interests of its citizens. Today, however, it is clearly both undesirable and impossible for the school in all aspects of its work of social education to serve all groups impartially. We shall attempt to show, first, why this is undesirable and, second, why it is an impossibility. In so doing our hope is that some light may perhaps be shed upon the dilemma which such a situation presents to the troubled members of a profession steeped in the folklore of neutrality. In our examination ot these questions we must at several points necessarily tin to the social sciences for illumination.

In our attempt to show why it is no longer desirable, if indeed it ever was, for the school impartially to serve all lawfully constituted groups in the community, we begin by assuming that the purposes set forth in the Constitution of the United States necessarily dictate the purposes or goals of social education in the public tax-supported schools ol this (ounti). We assume, in other words, that public school educators are obligated by the logic of the source of their wages to educate *for* the way of life envisaged in oiu basic document and to educate *against* any and all ways of lite which postulate values or conditions in any way opposed to those specifically stated or inferred therein.

At the very outset, then, this means that teachers must approach the task ot social education with a clear conception of the Good Life as believers in constitutional American democracy conceive it—in terms of derivative as well as of primary democratic ideals, be it noted. Upon examination and reflection the conception of the Good

Life as embodied in the Constitution will be found to typify certain values and to embody certain essential conditions.* If the public school is maximally to serve democratic society, these must constitute the social frame of reference which its teachers and administrators must consciously and continuously utilize in the work of social education. Against this value system, and no other, must all facts, the anticipated consequences of proposed social arrangements, and the observed effects of present policies and practices be evaluated in the classroom if we are to have a type of social education in harmony with the basic law of the land.

This can mean only that our social education would definitely and consciously be made the direct opposite of impartial and neutral. It would have a distinct bias—the bias of democracy—and would vigorously be directed toward the attainment of certain values and essential conditions at the expense of contrarily oriented values and opposed conditions. Students nurtured by a social education of this type could confidently be expected typically to favor *(i.e.,* "to consent to"—this consent presumably to issue in political behavior affecting the political process which, as we shall see later, advances the interests of one group as over and against those of one or more others) the proposals of those groups whose programs most certainly promise anticipated consequences most closely in harmony with democratic values. Social education thus conceived and practiced would provide society with a sorely needed mind-forming agency which would do much to insure the maintenance of democracy

* For clear and detailed statements of these conditions and values, both derivative and primary, see references 4-58-81; 5; 7; and 8:125-148

through channeling political support to those groups most deserving of it as judged by derivative as well as primary democratic standards.

In this way social education could and should help solve the perplexing and constantly recurring problem which Maclver has called to our attention: "Every organization [our nationwide democratic organization in this instance] presupposes an interest which its members all share, and its task is to find a way of reconciling with or adjusting to this wider interest the conflicting interests o[its component groups or individual members" (26; Vol. VIII: 147). The wider interest here presupposed is that of democratic living, especially in terms of derivative democratic ideals, and all that this implies. Social education of the type described is here suggested as "a way of reconciling with or adjusting to this wider interest the conflicting interests of its component groups."

A possible misinteipietation of the position just taken should probably be set at rest at this point. It is *not* argued that *any* fact or *any* piogram of *any* group should be barred horn the classroom. On the contiary, it is urged that so far as possible *all* pertinent social facts and the progiams and proposals of *all* groups fighting for political support be brought into the school, honestly and realistically studied, and *evaluated*—evaluated in the light of democratic values (derivative as well as piimary) and the essential conditions of democracy. This is the crux of the whole social education situation and is the point—and the *only* point—at which bias should be introduced into instruction. Bias—conscious, specific, and continuous democratic bias—we assuredly must have in this aspect of instruction, however, if

democracy either as a way of life or as a form of government is to be maintained and nurtured through social education.

Let us now turn to our second argument in which we shall attempt to demonstrate that, in addition to being undesirable, it is no longer possible, if indeed it ever was, for the school to be impartial or neutral with reference to the interests and programs of all the lawfully constituted groups in the community. We begin by noting the fact that America has effected a transition from an agrarian and pre-industrial to a predominantly industrial way of life. This has had a profound effect on the group structure of our society. As Maclver has pointed out and as we have already noted, "In an industrialized society with its division of labor and its opportunity for widened contacts every interest of any proportions establishes an organization for its promotion" (26; Vol. VIII: 147). That a great many of the interests around which such organized groups have developed in recent years are economic in nature and, as previously pointed out, reflect desires which are in direct opposition was suggested by Bernard when he observed that "the various industrial and occupational and social class publics perhaps come next after language [publics] in the matter of extent. . . . This . . . consciousness of classes, based on class interests, appears to be growing everywhere throughout the world. . . . The relations of associations, Societies, . . . and publics are still more frequently negative than positive. This is probably because they are so universally organized around highly conscious derivative interests. This is particularly true of associations, which have come into existence for the specific purpose of promoting some particular collective

interest or concern. Consequently, they are frequently fighting as well as constructive or creative groups. . . . Group conflict is [inevitable]" (6:486, 510, 514).

If, as asserted by competent social scientists, American society is composed of numerous groups many of whom are in direct conflict either as to the ends sought or the means to be employed, it is of course clearly impossible for the school in its program of social education to serve the interests of any given group without at the same time working contrary to the conflicting interests of any and all opposed groups. For example, to introduce military training into the school is to advance the interests of certain publics and to work counter to those of opposed groups and vice versa. In such a situation it is obviously impossible "impartially to serve the American public."

Critics of the position we have taken may point out, however, that most school practice consists in "studying about" rather than in direct action and that all conflicting groups can impartially be served in all "studying about" situations by having—as we earlier in this chapter insisted should be done—-all the facts and both or all opposing points ol view brought into the classroom and examined in the light ol the facts by the students. Let us examine this contention. Let us use the "public versus private ownership ot utilities" issue as an example.

In the first place, "the facts" are very much in dispute—those advanced by the public ownership group are branded as untruths by the advocates ot private ownership and vice versa. Even "the facts" as yielded by supposedly impartial government surveys are so characterized by one or the other of the parties to the controversy. Clearly this is indeed a "pretty kettle of fish" for the educator who would be neutral. A closely compara-

ble situation with reference to "What are the facts?" will be found to exist in connection with virtually all, if not all, of the other "hot" socio-economic issues of the present day. Thus "merely" to introduce the facts into the classroom frequently makes necessary what one or the other of the parties to the conflict will brand as discrimination or bias.

Let us suppose, however, that indisputable facts could be secured regarding the utilities issue and that the teacher proceeds to guide his students in the examination, *i.e.*, the evaluation, of these facts. Inevitably some frame of reference or scale of values will be operative in the class whether or not the teacher wills it or is even conscious of it. We have already attempted to demonstrate that the value system of democracy should constitute this frame of reference and that it should be consciously held and continuously applied. If it is, however, we do not serve both the contending utility groups equally—one or the other is certain to come out either slightly or considerably "on top" when the ends sought and the means employed by each group are subjected to analysis in the light of democratic values, derivative as well as primary.

In guiding students in their evaluation of the facts it is also possible of course for the teacher to adopt the point of view of one or the other of the two parties to the conflict here being used for illustrative purposes. The acceptance of this alternative would likewise issue in a biased education—and this bias would not necessarily be the bias of democracy.

Let us look at a third proposal which is sometimes urged as an alternative. It is said that the teacher should admit both of the frames of reference *(i.e.*, those of the

private and of the public ownership groups) to the classroom and let the students evaluate the facts in the light of whichever group they prefer. This to us is closely akin to a confession of moral bankruptcy. The word *prefer* implies the operation of some scheme of values—no one can make prelerences in a vacuum. This scheme of values may be unconsciosly held, but it is a scheme of values nevertheless. II such an alternative were adopted, then the tacts might be evaluated in the light of values directly opposed to those of democracy—this to us would make the acceptance of this third alternative equivalent to educational treason. True enough, some students under such an alternative would probably employ democratic values in formulating their preferences, but that all or even any considerable proportion would do so is quite unlikely in view of the conditioning they would previously have received from the press, the radio, and the cinema. Further, the adoption of such an alternative would almost certainly result in an advantage to one or the other of the two conflicting groups and hence would not issue in an "impartial" education—it is inconceivable, lor example, that exactly half of the stuents in any class so conducted would emerge as proponents of the private ownership of utilities.

A possible misinterpretation of the position taken regarding this third alternative should probably be faced at this juncture. It must not be inferred that the frame of reference or point of view of either the private or the public ownership group is to be excluded from the classroom. Instead, our position is that both points of view should be brought to the careful attention of the students. However, our point is that neither viewpoint is uncritically to be accepted as constituting the criterion

for evaluating the facts bearing on the utilities issue. Rather, it is asserted that both frames of reference should carefully be checked against the values, both derivative and primary, of democracy and by this criterion pronounced acceptable or unacceptable. Only in this way can we guarantee that democratic purposes are being served by the program of social education. And in this way, be it noted again, one or the other of the two contending groups would inevitably profit to a greater degree than would the other.

With reference to such issues as the issue concerning public versus private ownership of utilities, however, a great many, if not most, public school educators are adopting another alternative—an alternative which they believe insures the neutrality of the school. They are simply not introducing such topics into the curriculum; they are "doing nothing about it"—or so they think. In the opinion of the writer this is a particularly vicious illusion, partly because it is so plausible (to most teachers and administrators at any rate) and partly because it is so widespread in the profession.

It seems clear to the writer that "doing nothing about it" in the schools is openly, though perhaps unconsciously, to take sides in favor of whatever happens to be—to support the status quo. "Doing nothing about it" on the part of the school really means that the educator is willing to see continued the same practices under the same policy that now exists. This is the direct opposite of "doing nothing" and certainly renders the school anything but impartial. Thus, if the private utility group is "in" and if the school does not introduce the private versus the public ownership issue into the curriculum, the school is clearly working for the private ownership

group and against the other—if the issue were introduced and studied, there is a strong presumption that at least some of the students would not give their consent to present practices and policies. Yet public school educators by the thousands typically practice this do-nothing policy in the belief that they are teaching neutrally.

This illustration dearly suggests that all social education (even though that social education be but a silence which gives tacit approval to what is) is in the last analysis political in nature, for it will inevitably issue in some form of political behavior. This behavior may cxc hide any discussion of social issues and include a consistent failure to vote; yet it is still political behavior which is anything but neutral—this by virtue of the fact that he who "does nothing" in reality gives consent to whatever the majority happens to sanction. In consequence "doing nothing" nearly always issues as support for the status quo. Thus we see that those who do nothing by so doing make the outcome of the political process something other than it might have been had they been "active" instead of "inactive." In short, when we have government by consent, "doing nothing about it" in the realm of scxial action is an impossibility in any real sense. Consequently, since social education has been shown to be a form of social action, it is likewise an impossibility in social education.

Let us briefly sum up our second argument to this point. If the American public is not of one mind with reference to the* issues with which social education deals but is instead dixidecl into two or more groups cither as to the ends sought ot as to the means to be employed *(i.e.,* as to the gioup interest to be served) , if all social education (c\cn the "do nothing" variet\) inevitably

issues in political behavior and hence affects the political process, and if, as political scientists insist, the political process is in actual fact "the translation of social pressures into policy" (21: IX) through the operation of which "the influential . . . get the most of what there is to get" (18:3), it follows that neutrality or impartiality is impossible in the realm of social education. If this is true, moreover, public school educators, since the rise of industrialism at least, have never been neutral—the vigorous protestations and angry or pained denials of teachers and administrators to the contrary notwithstanding. Indeed, through a careful scrutiny of the record, competent historians have already conclusively demonstrated that our folklore of educational impartiality is almost altogether in the nature of a myth (14: VI; 3) . "Perhaps the most uneditying spectacle in present-day education," said the members of a recent national committee, " is the persistent and fatuous attempt to avoid the whole issue by a specious claim of neutrality. It seems almost a pity to disturb the complacent conviction that we arc completely objective and impartial in dealing with controversial issues it we keep ourselves 'open-minded' and 'scientific' and undertake to deal with 'every side of the question* " (i: 14) .

We tuin now to the implications of a change in our group structure, a change which is of the greatest significance for social education. We have at several points in this chapter anticipated this section by our allusions to derivative democratic values. Specifically the change to which we here refer is that associated with the rise to dominance of secondary or derivative groups. Let us turn again to the social scientists for illumination.

"As individuals and groups become more mobile, as

culture becomes more complex, and especially as differentiation of function develops, secondary or 'derivative' groups arise next to primary ones" (30:4). "The old neighborhood and community no longer exist intact outside of rural life, and even there they are being broken up or merged into larger and more abstract units. . . . Contacts in modem life have come to be at such long range and so indirect in character that derivative groups have become a necessity. They dominate our social organization, just as the primary, close or direct contact gioups of primitive men dominated the social life of that time. . . . The underlying cause of the expansion of gioups beyond the limitations of direct or face-to-face contacts was the growth of productive technique or inventions" (6:117, 122, 466).

As we have already pointed out, the chief significance of all this resides in the fact that primary group controls still pcisist—the standards ot morality and law which we attempt to apply in a society dominated by derivative or secondary, indirect contact groups are too largely those which were designed for and have been inherited from a primary group culture. As a consequence of this lag it is today easily possible for an individual or a gioup to be "good," "moral," and even "democratic" in terms of primaly group standards and ideals and still be guilty of grievously serious antisocial conduct. In other words, it is possible to keep the letter of the lau of primary group righteousness while violating the spiiit of modem (that is. derivative gioup) social righteousness (9:X). This mav be, and probably usually is, done ignorantly by persons trained in primary ideals but innocent of any knowledge of 01 feeling for the wider derivative ideals. There is reason to believe, however, that designing per-

sons and groups are at times consciously guilty of anti-social conduct in indirect relationships under the smoke screen of approved primary attitudes. "Sinning by syndicate" was the phrase coined by Ross to characterize such behavior. Even earlier Stunner was keenly conscious of the need for an overhauling of inherited beliefs and ideals. ". . . the alternative," he wrote, "is the reign of old abuse and consecrated error" (27:634).

This clearly suggests that we must in social education look first to the development of derivative democratic ideals. Not to do so is to lose the fruits of our primary democratic ideals. This movement is already well under way in the work of social education. A more detailed explanation and justification of the reasons for this shift in emphasis were afforded by Bernard when he wrote: "Personal equality and a feeling of friendliness and brotherhood are still important in democracy. But we no longer place the chief emphasis on these attitudes, important as they are. We recognize that we cannot have friendliness and brotherhood without equality of opportunity, and further that we cannot have either this equality of opportunity or the more personal amenities without first securing certain abstract and far-reaching types of social organization which stand back of and promote the personal democratic relationships. Hence the first consideration in modern democracy is the building up of derivative democratic ideals . . ." (6:432) .

So far as the argument of the present chapter is concerned, this in turn suggests that the programs and proposals of all groups studied in the classroom must be evaluated primarily in terms of derivative rather than of primary democratic ideals though we should by no

means permit ourselves to lose sight of the latter. This viewpoint definitely introduces an additional very severe bias—but a fundamentally necessary one, as we have seen—into instruction in social education.

Since democratic social education as we have here envisaged it would inevitably place the programs and proposals ol all groups in jeopardy to the degree that these arc freighted with either demonstrated or anticipated social consequences which run counter to either derivative or primary democratic ideals, it is to be expected that such an educational program would be anathema to those groups whose political (here conceived as embodying the struggle "to get the most of what there is to get") aspirations would be defeated by it. This raises the centrally important question of group representation on boards of education, for both by tradition and by law the local lay board is typically empowered to shape and to control the policies of the local school. True enough, there are certain state statutes providing for certain types of instruction, but rro such proposal as the argument of this chapter implies has am where been enacted into law.

Consequently, to the degree that any board of education is predominantly made up of the members of any given socio-economic group, it is tantastic to assume that the schools in that community would in the long run be either encouraged or permitted to embark upon any program, however democratic, which might engineer a consent to policies and programs inimical to the economic interests, social prestige, and security of the group represented by the predominant majority of the board. Rather, in such a situation the educational policies which would be permitted or encouraged would almost

certainly be only those which either advanced or promised not to run contrary to the interests of the group predominately represented. This is not necessarily, and perhaps only occasionally, due to conscious self-seeking; rather, it is probably more often than not due to the inclination to believe that "what is best for us is best for everyone," so prone are we to read the socio-economic situation in terms of our own station in life. Whatever the reason, however, the record clearly reveals that such restrictions are almost universally placed upon the school (3) . This results in biased education, but the bias is that of the controlling socio-economic group, not the bias of democracy.

All of the investigations which have thus far been conducted concerning the socio-economic status of school board members point without exception to the same conclusion, namely, that typically these boards are predominantly made up of representatives from the upper and more privileged socio-economic groups in our social structure (13, 19). Little wonder, then, that "we have not yet learned how to make the dissemination of knowledge and the creation of public opinion a function of the total social interest instead of partisanship and prejudice" (6:494) nor are we likely ever to do so, so far as social education is concerned, until we awake to the realization that the total social interest must first be represented on our boards of education. To have them so, we may in all likelihood find it necessary to do an about-face from our typical present policy of nonpayment (sic) of board members and institute the practice of paying a modest per diem sufficient to make it possible for a laboring man or woman to be able to afford the luxury of school board membership.

Were we writing of the general instead of the public school problem of social education, we would feel obliged to insert a section at this point calling attention to the necessity of providing for the representation of the total social instead of a narrowly restricted special group interest in the control of such mind-forming agencies as the cinema, the press, and the radio, as well as boards of education. All three are in the hands of roughly the same numerically small socio-economic group, and all three manipulate social pressures to get for their owners "the most of what there is to get." Beside these three giants, the public school dwarfs into minor significance as an agency lor social education. Since we are not dealing with the general problem, however, we must return to our theme.

Though the situation with reference to the socio-economic composition of boards of education is of the greatest importance and has for years been grievously in need of reform, we must not overlook another important group-representation situation, namely, that of the teachers and administrators in the public schools. If the total social interest is to be represented in the school, teachers and administrators must not be restricted to those of but one religion, political outlook, economic persuasion, and the like. Yet this is precisely the situation in far too many communities; it usually mirrois the prejudices of the nonrepresentative board (6). Again this situation makes for a biased education, and again the bias is not the bias of democracy.

Although most teachers and administrators in the public schools come from the lower middle socio-economic classes, their socio-economic attitudes are for the most part one with those of the numerically small

group whose representatives occupy the vast majority of school board posts. While this situation is in large part due to the fact that only those teachers and administrators who possess such attitudes can usually find or maintain positions, no small part of the explanation is to be found in the type of professional training to which they have typically been subjected (17, 20). Most teachers, it is perfectly safe to assert, have not been grounded in the social sciences and consequently are not equipped at the present moment to think through the issues associated with social education for democracy in a society characterized on every hand by group conflict and changes in group structure. The nature of the needed reform is so obvious that no further space will be taken to detail it here.

At least one additional consideration related to the phenomenon of group structure as it affects the social education program of the school must be noted before this chapter is concluded. If we except the elementary schools, it can be demonstrated that our public schools are to a marked degree class schools. The high school and junior college populations arc largely and very disproportionately made up of the sons and daughters of parents in the upper socio-economic brackets (2, 12). This is largely because our public high schools and junior colleges are not free institutions in any real sense —our only genuinely free secondary schools are the reform schools and possibly the Indian schools. When it is noted that the average annual expenditure per student is approximately $125 in the high school * and probably at least a third again as much in the junior college and

• Unpublished study embracing seven high school situations, on file in the writer's office.

when this finding is considered against the background of the facts of family income in the United States, it is not surprising that most students who drop out of secondary school do so because they cannot afford to stay in school (22). Again the nature of the needed reform is clearly apparent. It must be said, however, that putting another law on the statute books will not solve the problem. California has a law providing that all necessary expenses in connection with school attendance be paid out of tax funds; yet to the vast majority of boards of education in the state this law is a dead letter. Whether this is because most of the school board members in the state represent the owners of property, the writer cannot but guess. He believes, however, that most if not all truly representative boards, if and when they come into being, would comply with this law and thus make it more easily possible for all the children of all the people to attend the high schools and junior colleges of the state.

Although adolescents and young adults who are excluded from school obviously cannot participate in the full program of social education provided by the institution, there is still another problem which must be noted in connection with the group structure of the secondary school population. Those in charge of any program of social education must always reckon with the socio-economic interests and prejudices which the students bring to school with them. In the last analysis it is only to the degree that the total social interest is represented by the social composition of the pupils in the classroom that this total social interest can adequately and effectively be introduced into the school. "Reading about" poverty or riches or religious intolerance or racial

prejudices can never be anything but a poor and flabby substitute for actual experiences with these phenomena. Further, there is evidence to show that teachers are cowed by the prejudices of their students (3). Again we have a bias introduced which is not the bias of democracy. This distasteful situation might conceivably be mitigated to an appreciable degree were the total social interest more fully represented in the classroom. The economic barriers which prevent at least 3,000,000 adolescents and young adults from attending high school and junior college must be removed before this relief to frightened teachers can be afforded, however. Patently these observations suggest that social education for democracy is no task for teachers lacking in courage. They also suggest the desirability—to the writer, the necessity—of affiliating with those groups (especially organized labor) in society who stand ready to support social education of the democratic brand. Interestingly enough, such affiliation is frequently opposed by board members in the sacred name of maintaining educational neutrality—the same board members, frequently, who urge their employees to join Rotary, Kiwanis, and Lions Clubs and Chambers of Commerce in the belief that these organizations are truly representative of the community as a whole! The special group character and bias of boards of education are seldom more openly shown than in such prohibitions or admonitions.

We conclude with a brief summary. The argument of this chapter has been that democratic social education must by definition be a biased social education. The ideals and essential conditions explicitly stated in the Constitution or inferred therein—and the derivative democratic ideals to be inferred from these—must de-

fine the nature of this bias. All pertinent social facts and the proposals of all groups seeking to engineer consent should be brought into the program of social education and co-operatively evaluated by students in the light of both derivative and primary democratic ideals. This will inevitably channel political support to those groups whose programs would most certainly promote the realization of these ideals. The interests of all groups which constitute the American public would thus *not* be impartially served; the school, even as today and in the past, would *not* be neutral, but the bias would be that of democracy rather than that of a special minority group as at present. To make possible such democratic social education, the total social interest must so far as possible be represented on boards of education rather than, as at present, only that of a small minority of the population. The argument also implies that both the teaching force and the student body must likewise so far as possible be made representative of the total social interest if we are to have the best possible type of social education for democracy.

BIBLIOGRAPHY

1. ALBERTY, HAROLD B., and BODE, BOYD H. (editors), *Educational Freedom and Democracy,* second yearbook John Dewey Society; D. Appleton-Century Company, New York, 1938
2. ANDERSON, H. DEWEY, "Whose Children Attend Junior College?" *Junior College Journal,* IV, 165-172, January, 1934
3. BEALE, HOWARD K., *Are American Teachers Free?* Charles Scribner's Sons, New York, 1936
4. BEARD, CHARLES A., *A Charter for the Social Sciences;* Charles Scribner's Sons, New York, 1932

5.——, *The Unique Function of Education in American Democracy;* Educational Policies Commission, National Education Association, Washington, D. C., 1937
6. BERNARD, L. L., *An Introduction to Social Psychology;* Henry Holt and Company, New York, 1926
7. CARR, WILLIAM G., *The Purpose of Education in American Democracy;* Educational Policies Commission, National Education Association, Washington, D. C., 1938
8. CHILDS, H. L. (editor), *Propaganda and Dictatorship;* Princeton University Press, Princeton, N. J., 1936
9. CLARK, HAROLD F., *An Introduction to Economic Problems;* The Macmillan Company, New York, 1936
10. COOLEY, C. H., *Social Organization;* Charles Scribner's Sons, New York, 1909
11. COUNTS, GEORGE S., *School and Society in Chicago;* Harcourt, Brace and Company, New York, 1928
12.——, *The Selective Character of American Secondary Education;* University of Chicago Press, Chicago, 1922
13.——, *The Social Composition of Boards of Education;* University of Chicago Press, Chicago, 1927
14. CURTI, MERLE E., *The Social Ideas of American Educators;* Charles Scribner's Sons, New York, 1935
15. HULLFISH, H. GORDON, "Why I Am Resigning from the Teachers' Union," *Social Frontier,* III, 110-112, January, 1937
16. KANDEL, ISAAC, "Where Propaganda Begins," *Nation's Schools,* XVIII, 21-23, September, 1936
17. KILPATRICK, WILLIAM H. (editor), *The Teacher and Society,* first yearbook, John Dewey Society; D. Appleton-Century Company, New York, 1937
18. LASSWELL, H. D., *Politics: Who Gets What, When, How;* McGraw-Hill Book Company, New York, 1936
19. NEARING, SCOTT, "Who's Who on Our Boards of Education," *School and Society,* V, 89-90, January, 1917
20. NEWLON, JESSE H., *Educational Administration as Social Policy;* Charles Scribner's Sons, New York, 1934

21. ODECARD, P. H., and HELMS, E. A., *American Politics;* Harper and Brothers, New York, 1938
22. PALMER, EMILY G., *Pupils Who Leave School,* Division of Vocational Education, Part-time Educational Series, No. 17; School of Education, University of California, Berkeley, California, 1930
23. PIERCE, BESSIE L., *Citizens' Organizations and the Civic Training of Youth;* Charles Scribner's Sons, New York, 1933
24.——, *Public Opinion and the Teaching of History in the United States;* Alfred A. Knopf, New York, 1926
25. RAUP, BRUCE, *Education and Organized Interests in America;* G. P. Putnam's Sons, New York, 1936
26. SELIGMAN, EDWIN R. A. (editor), *Encyclopedia of the Social Sciences;* The Macmillan Company, New York, '937
27. SUMNER, W. G., *Folkways;* Ginn and Company, Boston, 1907
28. SYMPOSIUM, "The School Executive Looks at the Teachers Federation," *Nation's Schools,* III, 43-46, March, 1929
29. TOCQUEVILLF, ALFXIS DK, *Democracy in America;* A. S. Barnes and Company, New York, 1856
30. YOUNG, KIMBALL, *Soune Book for Sociology;* American Book Company, New York, 1935

IX

ART IN AMERICAN CULTURE

Daniel M. Mendelowitz

THE arts which emerged in both Europe and America in the late nineteenth and early twentieth centuries were dominated by the social and intellectual changes which were transforming society, changes which resulted from the application of scientific and democratic attitudes to all phases of life. Since an advanced industrial technology and a democratic form of government are particularly characteristic of America, a study of the emergence of the arts resulting from these factors constitutes a most important part of any study of American culture.

The succession of scientific discoveries and resultant inventions which led up to the contemporary industrial scene and the continuous interplay between these technological forces and the changes in our political and social organization are too complex and subtle to be discussed in a paper of this length. The general characteristics of the industrial and social scene today are familiar to most readers.

It would seem logical to turn our attention first to the way in which industrial produce has had its form and style changed by modern industrial methods. The relationship between technological change and aesthetic expression is more direct and therefore more apparent in this field of activity than in any other.

One of the first qualities to result is uniformity or standardization. When a specific problem in terms of human needs is set up (say a washbasin), a calculation of an essentially mathematical nature ensues. The nature ot the act which created the need (washing the face and hands) determines the shape, dimensions, and materials from which the object will be made. The physical properties of these materials, their malleability, pliability, tensile strength, and the like determine the factory piocesses and machines which will be used. The character and potentialities of these processes and machines in turn modify the final results. The problem of the need is solved in terms of the materials and the techniques. When the answer has been achieved, the dies aie cast, the machines are set, and an endless number of like objects result. Variations indicate only an imperfect control ot processes and materials. The washbowl resulting from such calculations should be directly expressive of washbowl needs in its si/e, weight, width, depth, surface textuie, and color.

To many this suggests an unbearable monotony—a mechanical leveling of all opportunities for expression o! personalitv. This over looks the tact that only where the' ouginal need is a universal one is there only one answei. No sensible poison feels that uniform breathing habits make bieatlung a leveling experience. Where variations in actions, tastes, and habits appear in individuals, a genuine expression of those personality factors will appeal. Sentimental expressions of personality and taste are necessary only when there is no genuine originality ot personality and taste.

A second quality that characterizes modem industrial products might be called plasticitv. The use of high-

powered machines which can exert tremendous pressures and the use of high temperatures which can reduce previously intractable materials to a malleable state have resulted in molded rather than constructed forms. These forms are much more expressive of function than were the designs in which the final result represented a compromise between rigid construction units and the desired shape. This genuinely expressive plasticity is most apparent in those fields where there was little or no precedent (note the ovoid, flowing forms of airplanes, plumbing fixtures, telephones, and electrical equipment) . In fields where precedent in the form of handicraft pattern dominated both the designer's ideas and the public taste, we have muddled compromises and affectation (furniture, lamps, and modern pottery) .

High temperatures, powerful machines, and modern chemistry have also made it possible to use many materials which were formerly intractable and to develop new synthetic materials. These materials have changed the surface character of much modern produce. In addition the unvarying character of machine processes and the use of rapidly rotating finishing and polishing machines have developed forms which arc beautifully precise, sharp, shining, and (lean. The use of materials of great tensile strength has permitted lighter construction. The combination of thin, shining, and reflecting surfaces and ovoid, flowing forms has resulted in a feeling of lightness, brightness, and grace which is very different from the sculpturesque and weighty quality (generally referred to as "richness") of handicraft produce. A recognition of the aesthetic potentialities of the machine has resulted in an increased uniformity of style in all our industrial produce. Thus the general

stylistic characteristics are the same in modern architecture, furniture, automobiles, and electrical equipment, just as definite stylistic characteristics were found permeating the entire body of Renaissance arts and crafts.

Architecture might be said to be a more solid and accurate barometer of changing mores than the other arts inasmuch as it embodies only those changes which have been incorporated into living procedure. Music, painting, literature, the motion picture, the dance, our games, and our fashions reflect the tendencies which are "in the air"; therefore they serve as an invaluable counterpart in conjuring up a complete picture. Architecture represents an act; the other arts represent ideas. Artists might paint pictures or write books about the delights of the bath; but bathing does not become a part of daily procedure until the bathroom is constructed. Together these arts make up a complete whole in which the impulses that modify human activity are seen in relation to the expression of those impulses as acts.

Before we mention the auhitects through whose work the development of the modern style can be followed, there should be a brief noting of other influences which have interplayed with the technological factors just mentioned in determining the modern style.

The body of living habits which have grown out of medical and psychiatiic science has resulted in an increased respect for light and air, with a consequent increase in si/c and number of doors and windows, a free relationship botueen aichitecture and the garden, and an elimination of dust and dirt collectors, such as moldings, iiregular surface textures, and unnecessary

pieces of furniture. Modern psychology has influenced the colors used for decorative purposes, has emphasized the need for recreational facilities, and has provided many psychological justifications for modern stylistic developments. Social and economic factors have been equally important. For instance, the decrease in the number of household servants, the increased number of women who work outside the home, and the small size of city apartments have necessitated furnishings which can be cleaned with a minimum of effort, which are compactly designed, and which occupy a minimum of space. The more casual and informal character of modern social intercourse and the increase of democratic and socialistic concepts have developed a taste for simpler materials and a more candid statement of structural methods. In consequence a distaste has developed for the ostentatious character of Victorian furnishings, with their insistence on conspicuous expenditure, their pseudo-religious and aristocratic sentiment, and their elaborate veneer of unstructural decoration.

The most important American architect of the nineteenth century was probably Henry Hobson Richardson. In his buildings there is the first vigorous reaction against the confused eclecticism of his day; and in the work of his student Louis Sullivan and Sullivan's student Frank Lloyd Wright there emerges a continuously developing architectural tradition adapted to the changing social needs.

In the homes, courthouses, churches, libraries, business buildings, and railway stations designed by Richardson between 1870 and 1886 one sees a naturalistic style of building in which the Romanesque style is modified in terms of American needs. In a characteristic

structure such as the Crane Memorial Library at Quincy, Massachusetts, there is a logical solution of functional problems in terms of the interior arrangement expressed externally by an asymmetric arrangement of the main masses and an original grouping of the windows. This combines with the bold handling of arches, rough stone, shingle, and unbroken wall areas to create a powerful and unified effect.

The naturalism of Richardson with its suggestion of the landscape and pioneering vigor gives way in the work ot Louis Sullivan and other members of the Chicago group to technical preoccupation with the new materials and methods of building. Between 1880 and 1890 the invention of the elevator and the development of skeletal steel construction permitted the construction of taller buildings. An early architectural statement of the problem of a succession of stories piled one upon another had been attempted by Richardson in the Marshall Field building in Chicago and the Ames Building in Boston in 1886. Although cast iron posts had *been* used as vertical internal supports around 1850, the use ot a steel skeleton to relieve the walls of their supporting (unction was not perfected until the time of Richaidson's death. In the Tacoma Building, designed by Holabird and Roche in 1888, and in the Monadnock Building, designed by Bin nham and Root in 1891, there is a matin e use of skeletal steel construction with the entire weight oi the building carried on the steel Irame.

These Chicago architects, all under the influence of Richaulson's first essavs in skyscraper construction and with Sullivan as the most aiticulate leader of the group, established the type form and the stylistic characteristics of this method of construction. Thus in Sullivan's

Schlesinger-Mayer Building, constructed in Chicago in 1899, there is a candid statement of the nonsupporting character of the walls. The window area is increased until the horizontally composed windows fill the entire area between walls, and the terra cotta sheathing between window areas is kept as light and flat as possible. The building looks like what it is, a glazed cage divided vertically by stories and horizontally by many equal-sized rooms.

The logical and straightforward quality of the midwestern architecture of the 'nineties soon gave way to what Lewis Mumford describes as the "imperial facade." Although in some later buildings the massing and planning were a direct outgrowth of contemporary conditions and needs, on the whole the subservience to the Beaux Arts tradition, inaugurated by the World's Fair in Chicago in 1893, resulted in a continuous distortion of design. In the early twentieth century skyscrapers, lor instance, the surface decoration, whether Gothic, Renaissance, or "moderne," was an attempt to spiritualize big business by clothing it in the forms of the palace, the cathedral, or pseudo-science. Undecorated, they ceased to be "art" and appeared clearly as what they were—dehumanized structures, monuments to the engineering genius of today, but a sad commentary on our inability to utilize that engineering genius to develop a more humane way of living and working.

The only dissenting note was struck by the industrial engineers and Frank Lloyd Wright. In factory buildings, grain elevators, service stations, and innumerable smaller business buildings the exigencies of necessity forbade a false front. Vigorous forms employing glass, steel, reinforced concrete, and tiles gave a direct and

forceful expression to our industrial activity. An orderliness related to the organization of human activities is often apparent, in contrast to the bisymmetric orderliness of business and public buildings which resulted in crowded entrance ways and much waste movement in carrying on work. Though the industrial buildings lacked the conscious refinement of expression that differentiates architecture horn engineering, the freedom and force with which the masses of smokestacks, paved courts, loading platforms, and rectangular blocks of buildings play against one another is closer to architecture than the pictorial facades of mansions, banks, and public buildings.

Frank Lloyd Wright worked under Sullivan as a draughtsman between 1889 and 1895; and, while his work retains none of the personal idioms of Sullivan skyscrapers, we see in it the same search for an organic architectural style. Like his European contemporaries, Wright remains close to the craftsman tradition in his feeling ior a natural use of simple materials, his candid statement *ol* structural methods, and his feeling lor the landscape as an environmental factor. In his use of the machine technology, concrete, metal, and glass he renounces the medievalism of the early craftsmen and allies their humanistic virtues \\ith the structural accomplishments of the engineers.

Wright turned his attention to all types of design; his prairie houses, desert houses, hotels, apartment houses, factories, and dun dies give evidence of the versatility of his interests. In each new situation he changes his materials and basic structural units according to the needs and dictates of the problem. In Broadacre Cit\ we see Wright coincieving a whole community

bound into an organic unity by a recognition of the relationships that exist between industry, agriculture, business, residential areas, schools, traffic arteries, and so on. Each facet of human living receives the recognition which it deserves: the factory is spiritualized by becoming incorporated into communal life; community centers are such in fact, not in name; the groundwork for a democratic co-operation of all members of the community is laid out.

By 1915 foreign critics had recognized the contributions that Wright had made to modern building. The monumental character of his masonry began to be reflected in the work of the Dutch and German functional architects. His handling of windows suggested the continuous ribbon windows of the international style. His feeling for the wall as a volume-defining plane and his experiments in horizontal composition influenced many men.

While the American tradition as exemplified by Wright moved over to Europe, its European equivalent, the nationalistic craftsman movement, invaded this country. The design submitted by Saarinen for the Chicago Tribune Building, with its fenestrated setbacks, established an architectural precedent followed in many subsequent skyscraper designs. In the same way the Viennese craftsman designers, with their peasant patterns, hand-blocked and hand-woven textiles, and their pottery and bentwood furniture, introduced to America a new "art" concept, which still prevails in schools and industry.

In the period following the World War the entire development just outlined came to fruition in the work of a number of European architects. They formulated

the theories of the international style and incorporated their theories into an impressive body of buildings in which the dominant note is a respect for the machine and modern standardi/ation and a disciplined subordination of romantic and sentimental tastes to the austere logic of functionalism.

Around 1930 the influence of the international style began to appear in America. Two large eastern skyscrapers, the McGraw-Hill Building in New York (1931) and the Philadelphia Savings Bank (1932), employed the continuous horizontal bands of windows and abandoned all surface ornament. The Daily News Building (1930) and the Rockefeller Center buildings (1933-3^), in New York, also abandoned all three-dimensional ornament and treated the wall sheathing as a tight vertically striped curtain of stone and glass drawn taut over the frame of the building.

In the preface to *The International Style: Architecture u nee n)22* (3:13) * Ilemy Russcl Hitchcock, Jr., and Philip Johnson have formulated the three basic aesthetic piinc iples of the style. They are: (i) "emphasis upon volume—space enclosed by thin planes or surfaces as opposed to the suggestion of mass and solidity"; (2) "legulurity as opposed to sMiimetry or other kinds ot obvious balance"; and (3) "dependence upon the intiinsic elegance of materials, technical perfection, and line piopoilions, as opposed to applied ornament."

The more superficial eaimarks of the style are: (i) an hutcased use of glass, often in long continuous hori-/ontal bands, in both residential and industrial buildings—this is made possible by cantilever construction, which iclievcs the wall of all supporting function—(2)

* Page 13 of reference 3 at end of chapter.

an emphasis on horizontal line; and (3) the use of curved planes in conjunction with rectangular forms and the use of screenlike partitions in the interior which go only part way to the ceiling, two devices for emphasizing spatial volumes. A fourth general characteristic is the free and informal relationship between the interior of the building and the out-of-doors in the form of rooms which can be made open by means of sliding doors and an increased use of sun decks and patios as part of the building.

No discussion of the international style can overlook the profound sociological interests of the architects working in this manner. Much of their serious work is in the field of municipal housing for workers, in the form of both city apartments and suburban projects. Schools, public administration buildings, hospitals, and libraries have also absorbed much of their attention. Human problems outweigh aesthetic considerations. The severe discipline of working only with standardized forms and of eliminating all decorative enhancements is compensated for by the knowledge that this restraint makes possible more substantial construction, more room, better plumbing, and more windows. Lower rents, hygienic and recreational facilities, sunshine, and health for all have become architectural ideals.

The impact of the international style is evident in almost every field of architectural and industrial design in this country. Pottery, china, furniture, lamps, kitchen utensils, electrical appliances, glassware, and hundreds of other everyday objects arc being designed with honesty. Store fronts, service stations, private homes, housing projects, schools, and hospitals are revealing a more frank acceptance of twentieth century life. Pre-

fabricated houses are being experimented with and used.

That conventional designs are often superior to that distortion of the functional approach usually termed "modernistic" no one will deny. Superficial designers adopt the idiom of the style and misapply it. Houses, silverware, and solas are streamlined; lamps are made of precaiiously balanced cones; triangular luncheon plates and unjustifiable comer windows abound. Merchandiseis and public alike, intent upon exploiting novelty, can hardly be expected to be discriminating. But patent medicine has not made us lose our faith in medicine, rather in merchandising.

The general pattern of development which we have noted in architecture dominates all the arts in this period. In the nineteenth century naturalism was an outgrowth of democratic humanitarianism and the growth of natural science. Toward the end of the century scientific innovations brought a period of concern with technical problems which lasts until today. Since the World War there has been an ever-increasing variety of experiments in subject matter and techniques. This experimentation has provided new means tor the expression ot the social idealism which is becoming a dominant esthetic impulse today.

A minor factor which at times almost obscures the more positive aspects of the entiie development of modern art is the element of revolt against constraining and outworn conventions. Some of the more familiar of the negative expressions were iconoclasm, pessimism, social satire, and "debunking." The reawakened interest in folk culture represented another phase of the same general revolt. An outgrowth of nineteenth century

naturalism, it attempted to revitalize expression by going to primitive sources. Many of the byways explored by artists in their attempt to find expression for new attitudes and situations proved to be blind alleys (the primitivism just mentioned is one of them), but no exploration failed to make some contribution to the general stream of development.

The more important American painters who are exponents of naturalism in the nineteenth century are Thomas Cole, Winslow Homer, George Inness, and Thomas Eakins. In the paintings of Inness the grand manner developed by Cole and the Hudson River painters is modified. Inness chose the more intimate aspects of our countryside, and by enveloping the forms in mist or semidarkness or choosing the rich light of late afternoon he created a lyric art with metaphysical overtones. A literary equivalent is Thoreau, while William Cullen Bryant and Lowell give a more sentimentalized and popularized expression of the same attitudes.

In the painting of Winslow Homer and Thomas Eakins there is more sense of fact and less mysticism and sentiment. In Homer the rugged and vigorous life of the sea, austere and harsh on the Maine coast and exuberant and colorful in the West Indies, is recorded. Eakins chose less romantic material. In his portraits of scientists, students, his family, and his friends he repeatedly showed his respect for the dignity of the fact. His genre scenes, shad fishing on the Delaware River, boxing matches, a medical operation, a child playing with toys, all show an American's honest reaction to the life about him stripped of the romanticism which most artists of that day felt must be inherent in "great art."

Both men employed traditional techniques, as did Richardson in architecture and William Dean Howells, Henry James, Henry Adams, William Vaughn Moody, and even Walt Whitman and Emily Dickinson in literature.

In this entire body of work we see a tendency to discard nineteenth century romantic emotionalism and eighteenth century aristocratic elegance in an attempt to give a more honest expression to personal experience. The popular and less philosophic expressions of that day reveal the same desire. Political cartoons, the writing of Artcmus Ward and Mark Twain, Peter Finley Dunne's "Mr. Dooley," all display a lively distaste for pretense and social hypocrisy combined with the same desire to communicate familiar sentiments and experiences that is shown in Stephen Foster's ballads and the writings of Eugene Field.

The tradition established by these people is continued down to the present day. Robert Henri, George Luks, John Sloan, and Geoige Bellows continued the work ol Eakins and Homer until it coalesced with the experiments of the impiessionists and postimpressionists. In the same way in literature Frank Norris and Theodoie Dreiser form the bridge between the nineteenth century naturalists and the twentieth century realists. In the popular arts George Ade and Ring Laulner, Mack Sennett and Charlie Chaplin, and the popular earlv twentieth century magazine caricaturists continue to laugh at social hvpocrisics and to dispel the chill of puritan constraints. The interest in techniques and structural problems which begins about 1890 does not become a dominant note until the second or third decade of the twentieth century. If on the surface con-

cern with techniques seems a foreign importation far removed from the earthy and naturalistic beginnings of the late nineteenth century it should be remembered that this was also, like naturalism, an attempt to discard romantic elegance and to develop the means for expressing contemporary attitudes and concepts. The line of development is confused by the fact that the character of our culture underwent its greatest change at the very moment that the tools for describing it were being evolved.

The first evidence of an increased interest in techniques appears in the paintings of William Chase and Frank Duveneck, who studied in Munich. Their bold manipulation of thick masses of paint revealed a conscious consideration of the character of their medium and their tools. However, the purely visual approach which distinguished late nineteenth century realism from that of the early part of the twentieth century did not become dominant until the influence of the French impressionists appeared in the work of Mary Cassatt, James McNeil Whistler, William darkens, Frederick Friescke, Childe Hassam, J. Alden Weir, and their followers. These artists occupied themselves either with the problem of duplicating atmospheric effects by the use of the pointilist technique and highly keyed colors or with problems of surface patterning. Discoveries concerning the physical nature of color and the phenomena of sight had a direct bearing on their methods.

The famous Armory Show in 1913 gave New York its first glimpse of the cubist and postimpressionist painters, and from that time on an increasingly complex series of experiments in problems of technique and compositional structure gave the arts a chaotic and confusing

character. The two basic movements behind this ferment are best described as expressionism and structuralism. Structuralism, the interest in pictorial, plastic, and architectural organization, relates itself in the general cultural reorganization to the perceptions and changes resulting from technological advance. Expressionism, with its interest in the emotionally expressive character of dynamic arrangements of abstract and distorted form, affiliates itself more closely with the human factor—the validity of individual emotional experience—particularly as insight into this subject had been deepened by psychoanalytical study. The lack of opportunities for the social integration of the artists and the personal and specialized character ot much of this experimentation encouraged an "art for art's sake" attitude. So, paradoxically enough, the cult of unintelligibility, of a glorification of esoteric and purely personal experience, became one phase of a sincere attempt to rediscover the common denominator of expression in all the arts.

The literature of this period is more familiar to the public than the painting; and, since this text cannot be icinfoiced by illustrative material, a partial list ot books and authors that appeared on the American scene between 1910 and 1920 may evoke the flavor of the period. Theodore Dreiser published *Jennie Gerhardt* in 1911. In 1912 books of veise were published by Robinson Jeffers, William Ellery Leonard, Vachel Lindsay, Amy Lowell, Ezra Pound, and Sara Teasdale. Harriet Monroe founded *A Magazine of Verse.* Edna St. Vincent Millay published "Renascence," her first ambitious poem. In 1913 Willa Gather's *O Pioneers!* appeared. In 1914 Sinclair Lewis published his first novel, *Our Mr.*

Wrenn. In 1915 *North of Boston,* by Robert Frost, and the *Spoon River Anthology,* by Edgar Lee Masters, appeared. Gertrude Stein brought out *Tender Buttons.* In 1916 we witnessed the production of a one-act play of Eugene O'Neill by the Provincetown Players and were thus introduced to the little theater movement and America's most important playwright. Sherwood Anderson's first novel and Carl Sandburg's *Chicago Poems* appeared in the same year. In the following five years E. E. Cummings, Nathan and Mencken, Floyd Dell, John Dos Passos, and Scott Fitzgerald appeared upon the literary horizon.

The dominant impulse underlying most of the writing produced by these people is to depict American life critically either by straight exposition or by satire. But for this words had to be revitalized; new methods had to be coined. Both the terminology and the forms of nineteenth century literature had to be modified in terms of the newer concepts and experiences. For instance, the desire to penetrate psychoanalytically into human thought and feeling demanded more tenuous and supple forms of sentence structure—just as the desire to portray the barren and depressing life of Main Street necessitated the abandoning of the too smooth formula of cultured speech. The cross-section-of-life novel, in which the fragmentary glimpses of characters and situations were used to portray a haphazard and confused social pattern, represented a reaction against the Victorian novel, in which cause and effect, reinforced by the long arm of coincidence, built solidly through the entire life of its main characters to suggest a reasoned and orderly world.

The concern with words, sentence arrangement, and

form, like the painter's concern with textures of paint, lines, and space relationships, at times becomes an end in itselt. Gertrude Stein, E. E. Cummings, and many of the imagist poets repeatedly lose themselves in abstraction. The psychological novel with its continuous introspection oitcn lost all sense ot action. But even the most rarefied and speciali/ecl interest had purpose; and gradually an impressive body ol expression, varying tremendously in degrees of excellence and maturity, testified to the success with which a new tool ol expression had been forged. In the poems ol Edna St. Vincent Millay, William Ellcry Leonard, Edwin Arlington Robinson, and Robert Frost; in the novels ot Ernest Hemingway, John Dos Passos, William Faulkner, and the many regional novelists; and in the paintings of the entile American scene group, Charles Sheeler, Edward Hopper, Charles Burchfield, and Reginald Marsh, to name but a few, we witness the increased force that resulted from the early experiments of these artists and writers and those of their precursors and contemporaries. This integration of the developments of the twentieth century experimentalists with the older tradition has been variously described. *Neoclassicism, neo-objectivity,* and *neorealism* are three of the more familiar terms used in the attempt to identify the quality found when form, content, and purpose again coalesce in expression.

In the past ten vears American artists have become increasing!) concerned with the social urgencies of today. The camases of the American scene painters neglect the pastoral landscape and the still lite for city streets and the factor). Figures reappear, the human component, man at work and out of work, becomes increas-

ingly insistent. The growth of mural painting, stimulated by the example of the Mexican muralists and the Federal Arts Projects, has reintegrated painting with architecture. The social 1unction of mural decoration was combined with the convictions of the painters to give purpose and force to an art that had become ingrown from a lack of function. The field of prints has also turned from passive commentary to a more vital social activity, ranging from the satires of Peggy Bacon and Adolph Dehn to the brutal social commentaries of George Grosy and William Gropper.

In literature, the motion picture, and the drama the psychological study has steadily given way to the sociological stuch, with its analysis of social factors as they cause individual and group maladjustments. Clifford Odet's *Awake and Sing* and *Waiting for Lefty,* Sidney Kingsley's *Dead End,* Robert Sherwood's *Idiot's Delight,* Irwin Shaw's *Bury the Dead,* and Maxwell Anderson's *Winterset* illustrate this tendency in the theater. John Steinbeck, Leone Zugsmith, James Farrcll, Robert Cantwell, and a host of other young novelists testify, along with Hemingway's recent *To Have and Have Not* and John Dos Passos' *U. S. A.,* to the novelist's increased concern with industrial problems and social unrest. Even the motion picture, which ordinarily avoids any contnnersial subject in its attempt to maintain box office revenues, has produced *They Wont Forget, Black Legion, Black Fury, Our Daily Bread,* and *Modern Times,* as well as a host of semi-serious social commentaries.

The iconoclastic and pessimistic character of much contemporary art, the lack of ideals in the form of "noble sentiments," the insistence on the part of the

artist to look at the unpleasant side of life, and the lack of sensuous beauty have often been decried. These qualities have provided the main bone of contention between the exponents of "the genteel tradition" and the American scene artists. The arguments put forward by the great mass of people when confronted with the work of almost any important artist of the last fifty years is invariably the same. Homer and Eakins were painters without finer sensibilities to the cultivated audiences of their own day, and the same people found Mark Twain coarse and boorish. Frank Morris, Theodore Dreiser, Sherwood Anderson, and Sinclair Lewis have shown a deplorable intcicst in the more disturbing aspects of our existence. The functional architects of today seem sensible enough but totally lacking in a feeling for charm, personality, and the decorative embellishments that lift architecture above the utilitarian level and give it the right to be classed as a "fine" art. Steel chairs lack warmth and co/incss. The artist invades the laymen's sense of security, violates his feeling of Tightness, attempts to destroy his sense of values. A wanton perverscness causes the aitist to bring to the surface, for contemplation, all the phases of existence which society and the individual would rather not recognize as existent.

In contrast, the manufacturers of motion pictures, popular magazines, best selling novels, department store furnituic, and subdivision architecture seem constructive, idealistic, noble, and decorative in their creations. They see the glamour, color, and mystery of life; elegance, grace, and charm characterize their output. Maxfield Fairish was neither messy in technique nor abnormally interested in awkwardness and sadness. Zane

Grey shows villainy as despicable and heroism as noble, and heroism wins. Department store furniture shows a refined use of historically correct decoration; it is shiny, graceful, and wholly desirable. Subdivision architecture is sufficiently varied so that one can choose a style of home that suits the dweller's personality (colonial, French provincial, Italian baroque, and so on) and still be assured of elegance, picturesqueness, and good taste.

The popular motion picture today stands as an embodiment of conventional virtues. It is optimistic, clean, and beautiful. The characters are young and almost universally attractive. Those characters who are not young and attractive are picturesque or humorous, tender and self-sacrificing, noble and devoted to humanity—or villains. Even the villains have Hair and color. The locale of the movies is the past, a past with grandiose architecture and splendid costumes, or the haunts of the rich of today, the rich of the novelette, with fine homes, yachts, automobiles, servants, and resplendent clothes. The plots come out according to a simple and idealistic set of ethics. Youth, beauty, and right always win. The dialogue is made up of witty and sparkling conversation and noble sentiments. The music is tuneful and ingenious. The world flashed on the screen is a concoction of all those things which are merchandised in the world markets to make civilized living more delightful. Can art serve a more noble end?

The great gap in understanding that is made evident by the public's acceptance of the sentimental idealism of the popular arts and its condemnation of more serious works as being harsh, dissonant, and often pessimistic is affiliated with other social paradoxes. Any progress brings unfamiliar situations and elements which appear

offensive because of their unfamiliarity. Thus our advanced industrial technology with its amazing productivity is indirectly blamed for the poverty and want produced by our present unemployment situation. The customs and conventions of the past—and each of them had its meaning and purpose—stay with man, and every step into the future painhilly dislodges some old custom, belief, or standard which seems to many to be the distilled wisdom of all the past ages.

Mr. I. James Quillen has formulated a statement concerning this "cultural lag." "All cultures seek to utilizethe natural environment in carrying out the basic social functions. In carrying out these basic social functions tools are invented and techniques developed. In older to utili/e these tools and techniques patterns of social arrangements cmcigc out of which are developed conceptions of the fitness of things, ideologies and value stanclaids. If a culture is in a healthy state patterns of social arrangements, ideologies, and \alue standards change as tools and techniques change. In our culture we have chasticallv changed our tools and techniques. But we are holding, by and large, the social arrangements, ideologies and \alue standards developed during the early industrial revolution."

A tew specific illustrations of the wav in which value standards are maintained which aie unrelated to the tools, techniques, and functions of modern art will claiifv this statement. Wood carving was a craft which developed \\hcn the cabinetmaker saued, chiseled, tinned, and whittled his uood b\ hand. Enriching the surface In carving was a natural expression of the craftsman's delight in an ingenious manipulation of his tools and his materials. It also provided him with an oppor-

tunity to comment on the wonderful variety and intricacy of form which he found abounding in nature. Irregularities of material, such as knots or an unusual grain, were at worst a challenge and at best often suggested new and novel treatments.

In our machine-made furniture produced for mass consumption there can be none of this. The machine can cut cleanly and precisely; it can glue, press, and polish. But it cannot caress a surface, elaborate a knot into a flower center, or utilize a grain pattern to make a cluster of leaves more effective. Mass production has its virtues. The family of the wood carver sat on backless benches and slept on the ground. Mass production may provide all with comfortable and substantial chairs. If the democratic ideal means anything, the impersonal character of the machine-made chair is a necessity which should make it acceptable. Instead of a frank acceptance of an undecorated form much of our contemporary machine-made furniture shows an attempt to imitate hand-carved furniture. A mixture ol glue and sawdust is poured into molds. The resultant mass is fastened on the furniture in a vain attempt to imitate the styles that grew out of another way of living. Each mass of glue and sawdust which is fastened on a piece of furniture, inasmuch as it represents a waste of materials and energy, puts off the day when the machine will have freed men of menial tasks by producing our needs with a minimum of human effort—thereby releasing men for more creative activity, such as wood carving.

Another admirable illustration of the lag which exists between value standards and current tools and techniques can be pointed out in the field of photography. The camera is a mechanism designed to record surface

appearances with complete objectivity. No effect is too temporary, too tenuous, or too complex to be caught by the camera. Surface textures, infinite detail, the most sudden gestures of people, the splash of a drop of water, the confusion of a city street with its varied movements and its multitude of lights and reflections, all can be caught by the unerring split-second exposure. The mechanical character of the camera allows it to focus with impartiality on any subject; and by the same token no element of selectivity, reorganization, or distortion is inherent in its basic piocesses. Subjectivity, reorganization, and distortion are inherent only in the process of choosing the subject, camera angle, distance, focus, and exposure.

The objective character of the camera makes it admirably adapted to the needs of an age which uses exact observation as one of its basic means of obtaining knowledge. The ait of photography would be, one would think, the art of utilizing the mechanical and unselective capacity of the camera for recording exact appearances in their full complexity, But an examination of the products of almost any exhibition of contemporary photography would show the prevalence of an entirely different ideal. Many photographers have as their basic aim the imitation ol painting or etching effects. Now panning differs from photography in that every element seen by the painter receives the imprint of his personal tastes in the process of beirrg recorded. Selection, elimination, reairangement, and distortion, both deliberate and unintentional, are a part of the process of painting. Painting is an art that has been honored by the centuries; consequently concepts of beauty developed by painters have been adopted by most photographers. The unique

opportunities inherent in the photographic technique have been subordinated in an attempt to simulate painted effects. Photographs are fogged, faded, retouched, underdeveloped, or overdeveloped; and juries at photographic salons too often award prizes to twentieth century photographers who can make their prints resemble nineteenth century etchings.

University libraries, in which students are to pursue knowledge, are built to look like Gothic cathedrals. Furniture is battered, bored, and bleached to give it an antique finish. Advertisements are lettered in indecipherable medieval-style script to give an air of dignity and authenticity to twentieth century products. The list of paradoxes is endless.

But progress has taken place, and the degree to which forms of earlier times constrain our living can be exaggerated. A house today built in the Georgian style will probably retain that style only in the form of a high-columned front porch, an Adam style fanlight in the front hall, classical details in the cornice and overmantle, and a Grand Rapids Chippendale dining room set. The general arrangement of the house, the kitchen and the bathrooms, the presence of a sleeping porch and windows that allow for cross ventilation, and the vacuum cleaner, electric icebox, radio, linoleum, and reading lamp testify to the fact that much of the living procedure is determined by more recent concepts. Only in the expression of conventionally correct tastes does this strange atavism persist. Is it that the eighteenth century decoration suggests an aristocratic and elegant social pattern which the twentieth century home owner still finds admirable? Does the democratic home owner still retain in his heart the desire to be, within discreet bounds, an

aristocratic gentleman? The ideal of many seems to be to care for their bodies in a twentieth century manner and their businesses in a nineteenth century manner and retain tor many of their basic social relationships an eighteenth century, sixteenth century, or medieval manner.

"Cultural lag" is a familiar term, but it must not be interpreted superficially. It is a serious phenomenon because it indicates the retention of social arrangements and value standards which prevent the fullest utilization of our tools and techniques. The merchandisers of "artistic" wares will invariably conform to all established conventions and prejudices in the attempt to produce salable novels, pictures, homes, or movies. If the serious artist ol today refuses to idealize and beautify, it he refuses to eliminate the sordid and vicious components of reality horn his work, it is only because of his desire to eliminate them from life. To overcome our weaknesses, we must lust iccogni/e them. In the last analysis the arts ol today have inherent in them as much idealism and nobility as the aits ol any past period. II they seem to lack a lyric note, it is because of the desire "to get back to essentials; to strip speech as well as things of vain delusions, false heightening, and inorganic adornments" (6:198).

BIBLIOGRAPHY

1. BEARD, CHARLI s A., and BEARD, MARY **R.,** *The **Rise** of Anir)nan Civilization;* The Macmillan Company, New York, 1927
2. CAHili, HOLGeR, and BARR, ALFRED H., *Art in America in Modem Times;* Reynal and Hitchcock, New York, !9M
3. HITCHCOCK, HENRY RUSSeL, JR., and JOHNSON, PHILIP,

The International Style: Architecture since 1922; W. W. Norton and Company, New York, 1932
4. HOWARD, J. T., *Our American Music;* Thomas Y. Crowell Company, New York, 1929
5. LA FOLLETTE, SUSAN, *Art in America;* Harper and Brothers, New York, 1929
6. LEWISOHN, LUDWIG, *Expression in America;* Harper and Brothers, New York, 1932
7. MUMFORD, LEWIS, *The Brown Decades;* Harcourt, Brace and Company, New York, 1931
8. ——, *Sticks and Stones;* W. W. Norton and Company,. New York, 1924

X

PERSONALITY FACTORS IN SOCIAL EDUCATION

Reginald Bell

"Personality is the dynamic organization within the individual of those psychophysical systems that determine his unique adjustments to his environment" (1:48).*

THE concept ot personality is difficult to treat with precision or simplicity, for personality corresponds to no single trait. It does not depend upon one characteristic or a lew characteristics only, but upon the interaction of all the traits or characteristics ot the individual. Habits, specific and genet al attitudes, sentiments, and dispositions of othei orders, all contribute to personality, not as sepaiate entities but as organized, structured, mind-body patterns. Vitally affecting them of course are the individual's physique, intellective power, emotional sensitivity, and available physiological energy. Perhaps even more significant is the accumulation of his experience, his background of social contacts and values, the culture that deteimines his motives of behavior, his ambitious, his interests, his goals, and to a large extent his needs.

But even this is too simple. For any one individual all this could probably be described and analyzed, its loots could be feireted out, and a label could be put on

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it. But it would be untrue, for the essence of personality resides in three other characteristics. First, it is constantly evolving and changing; second, it is motivational, self-regulating, and to a considerable degree selective of future experiences (the personality can, within limits, choose what it will attend to, what it will allow to affect it); and, third, it is adjustive to the immediate environment, physical, social, or imagined, or at least to that part which for one reason or another has meaning for it.

The dynamic quality of this adjustment must not be lost sight of. Allport (1:50) says:". . . adjustment must not be considered as merely reactive adaptation such as plants and animals are capable of. The adjustments of men contain a great amount of spontaneous, creative behavior toward the environment. Adjustment ... involves *mastery* as well as passive adaptation."

The possibility of maladjustment is there of course. On the one hand we may have an individual who wants to master his world in ways to which it is not currently amenable and who crashes in the attempt. On the other hand we may have a physical, social, or imagined world (very real to the individual) which is intolerable to the individual who lives in it and which is stubbornly unyielding to adjustive efforts. The problem of maladjustment cuts both ways. Remedial activity may be started at either or both ends.

In spite of the complexity of concept and make-up of personality, educators must come to grips with it, for in its dynamics reside the major motivations of an individual's life. What he will *do* when presented with a specific situation will inevitably depend upon what he *is*, how he, with his particular, uniquely organized habits, attitudes, sentiments, ambitions, and experience, sees

and feels the stimuli that impinge on him, and how he interprets them in terms of his own goals. What characteristic patterns of reaction each individual will develop, what stimuli will arouse them, and how socially acceptable and valuable they may be are central problems for both the individual and the educator. Is not the major task of the school the development of individuals with such motivating dispositions and such patterns of adaptive behavior as will enable them to live successfully?

For the United States, and tor its social education, this means the development ot individuals who can adjust themselves to modern American life or, within the framework of American ideology, adjust modern society to the needs of its citi/eius. How can the school facilitate such development? What leads, il any, can be found in the studies ol the psychologists, sociologists, anthropologists, and psychiatrists who have been studying personality intensely these late years?

In the first place, these students are not, on the whole, fatalistic about the matter. Motives, certainly those accepted by a society as a whole, are seemingly not biologically determined. The cultural anthropologists are particulaily emphatic on this. Reinhardt (17:241) * concludes his summary of their studies as follows: ". . . A society beginning with a slight inclination in some direction, an inclination brought about by wholly fortuitous causes . . . continues to grow and integrate its activities more and moie around certain standards of behavior. Its children, molded by the type of care imposed upon them in infancy and the pressure of adult attitudes as they grow older, take on a culturally assumed mask—a mask

* Page 211 of reference 17 at end of chapter.

which has nothing to do with innate biological inheritance." And this mask, culturally determined, is their personality make-up insofar as their social habits, their attitudes, their sentiments, or other dispositions go. It is pretty largely their motivational system!

Yet the anthropologists are not naively deterministic on the environmental side either. They admit the reality of differences in drive, energy, personality traits, and ambitions in different individuals within a cultural group. They discuss at some length the problem of the maladjusted individual in a given society who might be a well-adjusted individual in another society where values were different. But they do not attempt to sidestep the obvious tact that for the majority of people within a given cultural group the demands, expectations, and values of that group are rather fully determinative of their motivational systems. The motive centers of personality are intimately related to the "psycho-social world of values."

Reinhardt (17:245 ff.) set for himself the task of discovering the relationship between individually acquired values and culture norms on the one hand and on the other personality breakdown when, under unemployment, goals related to these values were individually impossible of attainment and accustomed culture status could not be maintained. He studied individuals and families who had been economically self-sufficient until forced to go on relief. The theses growing out of his studies, and seemingly sustained by his data, are so pregnant for the social educator that they are quoted here in full (17:246) :

First: any fundamental alterations in the factors of environment affect personality disastrously in proportion as

they block the individual's ability to function in the direction of personally acquired "goals." Second: since the personally acquired goals are derived through experience, the consistency of the goals depends largely upon the extent to which the person, particularly in early years, is provided with a harmonious outer world of values. Third (a corollary of the second): the inconsistencies and abnormalities in observable behavior are in reality consistent and normal with respect to individual experience. Fourth: an adequate explanation of individual behavior requires more than a mere listing of traits in terms of acquired and inherited mechanisms and desires. It involves, also, an analysis of the individual's experimental past in terms of the major factors of his total environment.

Another approach to the same problem has been made by Mrs. C. W. Tryon, in an unpublished study at the Institute of Child Welfare at the University of California. The data wore gathered in connection with a Growth Study of Adolescents at that institution from some 350 boys and girls in successive testings based on a modified form of a technique used by Hartshorne and May in the Character Education Inquiry and called by them the "Guess Who" test. The study was concerned with children's evaluations of twenty personality traits and the manner in which these evaluations differ as between the sexes and between two age levels. The analysis represented a search to determine for the several age groups what are the various traits that tend to form patterns or constellations according to the values held by children.

For example, leadership was one of the qualities evaluated. What qualities associated with that trait at the fifteen-year-old level were the same as those at the

twelve-year-old level? Or had the group changed its expectancies for its leaders during the three years? If it had, what about youngsters who had been rated leaders at twelve years of age? Had they changed with the expectancy of the group, or had they for one reason or another been left behind? Were they still on the twelve-year-old level and, if so, what had that retardation done to them?

As a matter of fact, at the twelve-year-old level the four traits *leader, daring, active,* and *friendly* had been found closely associated by the children. At the fifteen-year-old level the constellation had changed at but one point. The traits now closely associated were *leader, daring, active,* and *fights.* But that single change in this constellation, associated with others in other constellations, might of course make the difference for an individual boy between having a continued place in the sun and being left in unwanted shade. As a matter of record, one boy, lor constitutional reasons (slow growth of height and weight, retarded sex maturation, retention of a happy-go-lucky, noncombative disposition), did lose his status as a leader in the group. He drifted out of it to join a smaller group, where he gained leadership status by capitalizing on his daring in stealing automobile accessories. For this he was hauled before the juvenile court and finally shifted from one school to another where he could start afresh. How much one can generalize on case material such as this is problematic. But the data are strikingly in line with Dr. Reinhardt's thesis: fundamental alteration in the factors of the environment (in this case group value-expectancy) affects personality disastrously in proportion as they block the individual's ability to function in the direction of per-

sonally acquired goals (in this case leadership of his social group).

The record of suicides of men, women, and children defeated in the pursuit of their life goals supports the position taken. Their inflexibility (psychical or physical) in the face of a changed social situation in which they find themselves makes successful shift of goal impossible for them, and they go down in complete personality collapse.

On the positive side oi the argument we have quite (onviiu ing evidence of the strength of group expectancy fioin, among otheis, the anthropologists. Margaret Mead leports in *Sex and Temperament in Three Primitive Societies* (n) that in one group the child born with the naval cord about the neck is supposed to possess unusual artistic abilities. The strong emotional power of this idea is confirmed in the individual himself. His personality takes shape under the conviction that he really lias a special gilt horn the hands of destiny, lie actually becomes a more skillful aitist than the majority of his fellows. Others may have equal innate organic rapacity, but their ambition is not forwarded by the group's expectancy of them. Reinlurdt sa\s (17:256): "All the evidence liom studies ot piimitive peoples tends to confirm the thesis that individual personality develops as a unitarv pattern through inteiaction with the outer woi Id ot values, and that the organism is prepared by eailv experiences, in haimony with these values, to confirm its deep-seated expectations."

The untoitunate thing of course, both lor the individual and lot the teacher who tries to help him to develop a turn, unified, dynamic personality, is that the value world corporating the individual today is not logi-

cal and coherent in itself. Value systems come to us from the past. They may fit the changes in the outer world of fact. Oftentimes they do not. In a period of very rapid economic change the old stereotypes around which personality centers may quite completely fail. For example, in the United States the assumption was made quite validly for many people during the nineteenth century that the ladder of economic and social success was open for ambitious and able youth. Jobs were relatively easy to get. Vertical mobility was a seemingly established charac teiistic of American lilc. Powerful vocational motivation was rewarded frequently enough to make it a valid functional center for education and for life. Recent studies by Davidson and Anderson (7), however, point to the fictional nature for twentieth century youth ol the idea that very great social, economic, and occupational movement up the ladder is frequent or, for the majoiity of individuals, is to be expected. As a motivational center it is increasingly unrealistic and untrue. What have we to offer in its place?

Social psychologists point out (17:257 ff.) that in some societies compromise and rationalization may offer more or less adequate ways out for the individual. The man who "has made a good home" or "lives in his children" may be content even though his own life's ambitions have not been reali/ecl. But when ". . . the individual's 'goal field' lies within a closed framework of values, standards of individual worth and success, the appearance of any factors which threaten to block the ego expansion in the direction of these goals produces personality frustration" (17:257-258). What else can we expect but personality frustration from our high school, junior college, and even university graduates brought

up as they are with ambitions, hopes, and expectancies which are far beyond the limits of attainment in economic society as currently organized? Especially is this true when they remain unemployed in their chosen fields for months or years after the close of their formal schooling (3» 12. 15)-

The social educator attempting to study this problem with his students will in many American communities be working in a dangerous whirlpool of conflict, for in our society the principal motivating purposes of life still grow out of the drive for personal acquisition and display ol ptoperty, and those who have authority and prestige derive these frequently from "special interests," often predatoiy in natuie. Frequently, too, they acquire tremendous influence by their control of agencies of communication, through which they seek to rationalize their conduct. Reinhardt says (17:259) , "By subtle and repetitious language . . . community welfare, national welfare, good citi/cnship, good religion, good science, personal lieedom, and so foith, become identified with these 'mtetcsts'." Kducatois who attack the problem may find themselves accused, instead, of attacking these identified values! The logic is c lear but vicious.

Social edmatois attempting to come to grips with the centers of personality by this route will find, too, that the ratioualizations aie stubbornly fixed in the minds of even their victims. Reinhardt (17:259) discusses one case in point:

> . . . the accumulation of \ast holdings is, within the American framework of values, proof of commendable ingenuity, but a man demonstrates social worth In hiring others to work for him. The fact that he lures on teims most fa\orable to himself, tries to secure large profits by paying as

little as possible, and turns his workers out upon the community when they are no longer profitable, has relatively little relation to the definition of worth. So firmly fixed is this rationalized employment value in the old framework that six years of unemployment and community feeling hardly gave it a jar. As a matter of fact, a wide examination of the literature dealing with the effects of the depression upon individual personality strongly supports the view . . . that the most difficult hurdles in the way of an adequate understanding of the problem in its totality are the rationalizations of techniques of acquisition. As one illustration we may point to the overemphasis, in a relative sense, of attempts to solve the problems of individual personality by clinical searches for individual causes, and an underemphasis, also in a relative sense, on the total culture situation in which these personality manifestations appear.

It is significant to note that in psychiatry itself there is emerging the same emphasis upon dealing with the culture in the interest of the individual. Plant (14) in his book *Personality and the Cultural Pattern* voices again and again the need for the sociological and cultural approach in the revision of psychiatric techniques and emphasizes what he terms "situational" therapy as a sound aid to "individual" therapy. The social psychologist goes further. He says (17:259-260) :

It should be noted that ... in our culture . . . the most prized values of the outer world, those toward which the individual personality must be oriented, are essentially paranoic values. That is, they do not conform to established rules of logic. For many people they provide no certain and sure ground for goal attainment arid no rational escapes from the personality strains caused by economic failure. ... In this view, attempts to dissolve the social problem of inner conflict by adding a wing to the state hospital and

employing a psychiatrist reach fundamentals about as effectively as did earlier attempts to prevent typhoid in Arkansas lowlands by giving pills to patients. Equally one-sided are attempts to prevent crimes caused by a paranoic outer world of values by installing a vocational laboratory in the penitentiary and putting the isolation cells on the second floor.

Inevitably the social educator interested in personality development must go beyond this, must interest himself in the ielation of culture to the individual. He must be conceinccl with every aspect of community life which affects the inteiests, motives, habits, and sentiments of the individual pupil. The community forces become his allies or his enemies. The customs of the community, its Luge habit pattcins, its structural organization, and its controlling ideas become of major concern to him. Now how lai any particular teacher should become a force in bunging about social and economic readjustments in the interests ot healthful child hie may become a question of social expediency, dependent on many factors which vaiy from situation to situation. Suilice it to say here that, appioaclung the pioblem of social education from the* standpoint of the teacher interested in personality health and development, we are plunged into the major cuiiiculum problem of our day—what is the relation of the school to intelligent social change?

Impoitant as ate the definitions of personality and these obsei\ations iclati\e to the significance of the social scene for its development, vet to leave the discussion of the topic at this point would be quite inadequate. What considerations relating to the general nature of giowth, and to the growth ot personality in particular, can be drawn from the students in the field which would

add to the understanding of the social educator? How does the biological organism that is born into the world become transformed into the adult person able to take his place in the highly complex world of affairs?

Although no complete answer is available, yet certain principles can be listed with some confidence (18:II; i: Part II, 101-231). The first principle has already been implicit in the preceding part of this chapter: *Growth is 'the product of the interaction of the organism with its environment.* Human beings are, in common with all living beings, subject to the laws of heredity. Basically, bony structure, muscles, heart, glands, nerve tissues, cortex, all are inherited as structure. But the growth process even for these seems to be resultant from a constant interchange of energies within the organism and within its environment. The limits, general direction, and general sequential pattern of growth seem to be set by the genetic constitution, the particular combination of genes in the chromosomes of the new organism. But what limits it will reach, what specific direction it may take, and what success it will have in functioning are dependent pretty largely upon the environment given it from conception on.

There is a luither complicating factor: characteristics induced by genes may also be induced by environmental forces. (For example, in the case of a certain species of fish two-eyedness may result if the ernbryos are raised in ordinary sea water, one-eycdness if they are raised in a different saline concentration. In personality, for another example, one individual may be reclusive and retiring primarily because of inborn qualities, another because of unsuccessful conflict with the environment.) Specifically, then, one aspect of personality may be rela-

lively more a product of heredity, another more influenced by the environment. However, there seems to be rather general agreement in the light of current knowledge that heredity plays a stronger role than environment in the determination of three important underlying conditions of personality: *physique,* including glandular setup; *intelligence,* especially as related to relative brightness or dullness; and *temperament.* Beyond these given raw materials personality has primarily a social referent or base.

A second generally recognized principle of growth is this: *Growth is on the whole continuous and gradual rather than saltatory.* There is essential continuity in the growth process. In spite of the fact that there are structural changes and emergences, such as the marked expansion of the sex organs and of the secondary sex characteristics at the time of the pubertal cycle, the process is fundamentally one of continuous maturation, not of sudden and spectacular, unprophesied and unprepared-lor new development. To be sure, growth rates foi specific body functions vary among themselves, and a specific growth rate may be more rapid at one time than at another. But if one studies the *process* of growth by means of individual growth curves for physical and mental traits, one cannot but conclude that on the whole, in spite of fluctuations, manifestations of behavior are the product of extensive underlying preparation and continuous maturation.

McDonnell (18: j.i) gives a corollary of the principle of continuity of growth which is especially important for the student of mental development. He says, *"Although traits grow at different rates, and reach their maximum at different times, simultaneous rather than serial de-*

veloprnent of broad mental junctions is the rule!' In support he discusses the development of problem solving, once thought to be a capacity that did not appear until early adolescence, and cites Alpert's (2) study of preschool children's "reasonable" (insightful) attack upon problem situations. On his level of development the child is capable of rational behavior. Quite far-reaching reorganization of the general school curricula may be justified if this corollary is acceptable. No longer will it be thought that curricula should differ in *kind* for different school levels—fact and process drill for the lower elementary school, problem solution for the upper elementary and secondary schools. Rather, they will differ mainly in *degree* of complexity and in terms of their reality for the pupil.

What significance has the fact of maturation for the student of personality? Allport (i: 149—150) makes these observations:

> If, in line with available evidence, the process of maturation is regarded as limited to the general ripening of somatic and nervous structures, and to the ripening of a few rather specific locomotor and vocal functions, it cannot be regarded as one of the *direct* fashioners of personality. . . . A man's personality and career are not due primarily to what ripens within him but to the manner in which he lays hold of these maturing functions and incorporates them into what he has already learned. . . .
>
> Maturation contributes to the development of personality by bringing out every inherited feature. . . . They (these maturational features) contribute to the formation of personal dispositions, but their influence must be combined with the demands made by the environment upon the individual. Goals and purposes are not inherited, unless one

grants that vague primordial nced-to-live. Special interests and so-called "instincts" develop, as do traits and attitudes, through the many-sided effort of the individual to find a balanced position for himself in the world he has to live in. Maturation presents him with new internal situations to which he must adjust; but excepting at a rudimentary motor level it does not provide him with ready-made instruments for the task.

Because in the use of maturing functions personality waits on environmental demands, growth in personality may not always be gradual. Rather, it may be spectacularly saltatory. A man, heretofore quiet and in the background, may, in the lace of a crisis, rise to unpredicted leadership and stay there. Another, from shock dtie to business failure, to illness, to religious conversion, or what not, may suffer swiit and profound negative or positive alteiations. Educational use of the situation to show its legitimate demands upon the individual for desiiable personalitv attributes and desirable social behavioi is ol course to be encouraged. Thoughtful utilization ol case study material will be helpful to the educator in explaining to himself specific changes in personality, though too great naivete in this is to be deplored. But to count on sudden, catastrophic, or shocking environmental situations as a major method of personality education, rather than on tire more normal principles of learning, is to be unwise.

A third principle of growth which is illuminating to student of personality development is this: *Growth is a process of both differentiation and integration.** Most

• Commins (6*29-39, 331-316) goes farther than this and adds *precision* and *abstraction in* his discussion of leainini; 01 giouth. To the writer of this chapter these tuo seem to he special cases of the first

of the psychologists and biologists up to about 1925 described the formation of complex behavior patterns as the synthesis, or integration, of smaller elements. Recently the work of Coghill on the embryonic development of Amblystoma, of Minkowski on the human foetus, of Irwin and others on children during the first few days of life (8:1) has shown that the elements of activity which the earlier observers described were derived from larger, less particularized mass movements. The process of the emergence of localized behavior from mass action has become known as the process of differentiation.

Lewin (13:121) gives an account of differentiation helpful to the student of the genetics of personality. He says: ". . . the child to a greater extent than the adult is a *dynamic unity.* The infant, for example, acts first with its whole body and only gradually acquires the ability to execute part actions." Unlike adults, Lewin continues, the young child has only slight functional firmness in the boundaries of the various psycho-physical systems he uses. As he becomes an adult, movements, mannerisms, attitudes, and traits become more definitive, more fixed, less confused with unrelated tendencies. Likewise the barrier between the adult and his environment is firmer, leaving him less a prey to all manner of environmental stimuli that earlier were uninhibited. Personality development on the neurological side may well consist of the building of barriers which reduce the excitation of the total nervous system by such stimuli and make it possible through localizing reaction to cer-

tvvo, since *precision* seems to be a kind of sharp mental differentiation or individuation and *abstraction* seems to be mental integration or generalization

tain limited psycho-physical systems to mobilize accurately the amount of energy and the behavior patterns required by the stimulating situation (10:342, 1:134).

But even though particularized behavior probably arises in this way, yet it is obvious that after these responses have emerged the organism has the power to integrate them into new and more complex patterns. Growth ohen appears to be a matter of building up larger processes Irom smaller ones. Especially is this true in die later stages of learning. Many acts of skill seem to involve the selection of already formed reactions and their reorganization, perhaps with other responses, into new ones. The development of concepts or meanings, while it may include individuation within a class already set up, may also demand inclusion within the class of items not already there.

For the student ot personality, integration has proved a helplul and popular concept. Insofar as it describes the process by which unity comes about in the person around a centially potent goal or purpose and by which conflict within the personality is reduced, it is supremely valuable (1:138-1.17). Insofar as it leads rather to a great oveiemphasis upon a somewhat amorphous congeries of ideas, it has been detrimental to clear thinking (4, 5) . Insofar, finally, as integration is seen as one approach to a sound learning theory—particularly related to insight and to the developing ability of the individual to sense relationships between facts and ideas, between ideas and sentiments (tolerance and race prejudice, for example) , and so forth—it cannot and must not be disregarded.

It is of course impossible within the confines of this brief chapter to discuss adequately the subject of learn-

ing. And yet no one working on the problem of personality in relation to social education can afford to disregard the generalizations made by the students of learning. All that has been said about principles of growth is of course pertinent. In addition certain principles characterizing the learning process will be briefly discussed because of their special relevance for the teacher of social education.*

Learning may be defined for purposes of this discussion as the progressive changes taking place in the individual's patterns of experience and behavior in the direction of better adjustment to the felt demands of life. If progressively changing activity of an organism—animal, child, a man—be closely observed, clear evidence will be found of a number of characteristics of learning. First, there is the fact that the learner is "going some place," he is trying to attain some goal. Second, his behavior is variable within wide limits, though it remains consistent with his goal—unless that changes in the process! As he goes on and begins to lay hold of the situation the variability resolves itself into greater directness toward the end-state, with a consequent smaller expenditure of time and energy. Finally, all this takes place of course within the conditions imposed by the situation to which the learner is adjusting and in consonance with the developmental level he has reached.

Out of this crude kind of observation, as well as out

* In the following discusssion the writer is using principles formulated by Commins (6; 305-347) in his recent educational psychology not because his formulation is sounder than that of other students of the topic, but because it offers a better starting point than most formulations for the discussion of learning in relation to personality and social education. No attempt will be made in the writer's discussion to validate the principles. For that the reader is referred to Commins, h's sources, and his critics.

of the highly refined and technical studies of psychologists, have emerged various generalizations regarding the learning process. A (ew very broad and inclusive ones follow:

I. *Motive is the basis of learning.* Certain psychologists discussing learning made it synonymous with refinement of goal-directed activity; no purpose, they say, no learning. Some go so far as to make all activity of the organism purposeful in that it is an attempt to get horn ,i state of disturbed physiological equilibrium to a state of complacency, icstorcd equilibrium (16). Practically ,all experiments on learning in animals or men emphasize the fruitful nature of purposive learning. What the organism is about is above all things the most important. Modern pedagogy, with its emphasis upon beginning with the run cut interests of the learner so lai as they can be determined and offering him experiences th.it have some immediate connection with them, is both good psychology and sound common sense (18:95).

In the psychology ol personality motivation is again the nub of the matter. Its primary problem is to understand the dynamics—the motivational power source and its expression—ol the perso*n*. Modern students of the problem cannot, in the lace of the infinite varict\ of human motives and ol their contemporary nature, rely upon the older lor mutation of a few simplified needs, four fundamental wishes, a list of so-called "instincts," an overworked expansion ol an all-powerful sex dri\e, or any combination of these. They admit the historical tie of c uncut interest back to infantile needs, desires, and motives: but they protest that the tie is only historical, not functional. Allport (1:191 ff.) , following Wood-

worth's lead, introduces a principle of growth that he terms the *functional autonomy of motives.* By it he refers to the commonly observed fact that activities and objects which earlier in the game were means to an end, if they open up unfinished opportunities and incompleted tasks, become ends in themselves. "What was entered upon as an instrumental technique becomes a master motive" (i: 196), he concludes as he discusses workmanship as an example of functional autonomy. "A good workman feels compelled to do clean-cut jobs even though his security, or the praise of others, no longer depends on high standards. . . . Workmanship is not an instinct, but so firm is the hold it may acquire on a man that it is little wonder Veblen mistook it for one." The *drive* to do excellent work on each new task possesses the workman. In the case of the permanent interests of personality the situation seems to be the same. Lasting interests are recurrent sources of discontent, and from their incompleteness they derive forward impetus.

Educationally we have just begun to take organized advantage of this principle, though artist teachers have always used it. The awakening of the "divine fire of discontent" has been the function always of our great educators. We, with our neat "unit-culminations," with our choice of activities "within the reach[0] of our pupils, have not always been careful to help our pupils choose activities that open doors, that lead to other activities and to lasting, permanently unsatisfied interests. Particularly has this been true in the social studies. Too often we have so taught the history of a given period or a given people, for example, that our students have completed their work with us with the exclamation: *"That's* finished. I'll never have to do *that* again." Our econom-

ics has been taught as a completed system of principles and rules, not as a fascinating developing science always incomplete because the wants, needs, and habits of men on which it is founded are always changing. Social educators cannot afford to leave out of their scheme this first principle of learning—*motive* is the basis of learning.

II. *It is ttie whole organism, the whole individual, that acts, reacts, and leains.* Man is not solely a mental-intellectual being. lie is inextricably a unified organism. In his attempt to reach his goal, all powers, skills, and energies that seem to him pertinent to his goal attainment will be utilized—mental, intellectual, physical, social, emotional, what not. Equally he receives from the situation various impicssions and gets from his adjustment to it learnings along diverse lines. For example, in a schoolroom he may fail to learn algebraic skills—or only partially learn them—but he may learn very effectively to hate algebra and all that he sees tied up with it—the teacher, mathematics in general, and the special, "good" students. In a baseball game he may not merely learn certain physical skills and gain greater insight into an organised game. He may also learn race prejudice 01 leadership or cheating or any one of a score of other habits, dispositions, or attitudes. The earnest teacher almost despairs ol predicting what for any given pupil will be the main behavioral residuum from any given expericMice! And yet, if the teacher knows what the child is really about—what his purpose really is—he has a pretty good chance of helping the child to see in the educative experience some of the value residua which are his own goals as he sets up the teaching-learning situation. Social educators particularly deal with funda-

mental social motives and with developing them in children. They above all others must look to this principle, for social motives are often "caught, not taught," learned incidentally rather than pedagogically.

III. *All situations for the learner are patterned.* Koffka has made a significant contribution to our understanding of human behavior and human learning by introducing into his discussion of behavior the concept of the behavioral environment (9:27-52). Neither the child nor the adult is affected by all the facets of his environment. A child of two, for example, is absorbed in playing with his blocks in the family library. His mother is working in the fairly distant kitchen. A telephone bell rings in the library. To the child, insofar as his behavior goes, nothing has happened. He simply ignores—"doesn't hear"—the telephone bell. But to the mother, geographically thirty feet away, the telephone bell is a specific stimulus; it puts her into rapid action. It is a part of her behavioral environment. It has meaning and hence relationship to action. New, immediate goals are aroused, or old ones which have been held in abeyance are renewed.

Teachers are all too apt to forget this important fact when they expect specific books, newspapers, or ideas which arouse them to be part of the behavioral environment of their pupils, to be seen by their pupils as part of the pattern which, if followed, will lead to the solution of their problems, the attainment of their goals. The situation is not similarly patterned for both the teacher's and the pupil's mind. Rather, it is seen by the individual in terms of his own past experiences, his own contemporary motives, and his own current dispositions or attitudes. And until the teacher is able to share to

some extent at least the mind of the child, sense *his* attern, tuition is apt to be relatively sterile.

IV. *All behavior is patterned.* In a sense this is a arollary of the preceding principle. In another sense it ; a statement of dynamics, tor it is a recognition of the ict that all human beings with intelligence have the ower to see the situation to which they must adjust in jrms ot their own goal directionality and in terms of icir own past experience. How understandable so-called abnormal" experience (stealing, lying, even sex per-eision) becomes when one knows the goal toward rhich a child is struggling and senses his interpretation f the situation he has to meet! How "normal" it is, in is tcinis! The majoi problem ot education may be just lis one of helping children to get their patterns straight, c.ilistu, logical, and nonparanoic. And, since all situa-LOIIS aie patterned for the learner, is it not education's rovince to help set the situation straight—make it non-aianoic and tolerable? Again we see the two-way nature f all social education!

V. *Learning is a matter of genesis or development.* licit! is essential continuity to all learning. It may not e a logical continuity. Indeed the principle of insight—sudden. flashing sensings of relationships between tacts, leas, altitudes, piocesscs, or habits which solve problems instantaneously—demonstrates again and again that ime children need not tread the long, logical, step-by-tep routine which we as pedagogs have otten thought ssential. And vet al\\a\s theie is something pre-existing ut of which the leained act emerges. In no sense are icts, ideas, and content to be dispensed \\ith. Children aiinot leain in a vacuum. Personality must be grounded ti realitv or it will fail when faced with reality.

All the principles of growth already discussed apply: integration, differentiation, interaction, maturation. None can be disregarded. But no further implementing of them in learning terms will be offered here.

VI. A summary principle: *Learning comes about essentially through a reorganization of experience and behavior.* In a sense this principle is a definition. Learning *is* essentially reorganization of experience and earlier patterns of behavior in terms of adjustment to new conditions which confront the individual. For social education, on the individual instruction side, its import is simply this: the major task of the social educator is the development of individuals who are flexible and successful in new situations in their utilization of basically sound patterns of behavior that have been successful in old conditions. On the social side its import seems to be this: the social scientist should lead in the production of new ideas for adjustment of the social scene in the interests of the individuals who are now its victims. If men have not learned how to do that—how to reorganize their own social experience in the interests of their own personal health—it is high time they were creatively about it!

BIBLIOGRAPHY

1. ALLPORT, G. W., *Personality—A Psychological Interpretation;* Henry Holt and Company, New York, 1937
2. ALPLRT, A., *Solvmg of Problem Situations by Pre-School Chddien;* Teachers College, Columbia University, New York, 1928
3. BELL, HOWARD, *Youth Tell Their Story;* American Youth Commission, Washington, I). C, 1937
4. BURNHAM, W. H., *The Normal Mind;* D. Appleton-Centur) Company, New York, 1924

5.——, *The Wholesome Personality;* D. Appleton-Century Company, New York, 1932
6. COMMINS, W. D., *Principles of Educational Psychology;* The Ronald Press Company, New York, 1937
7. DAVIDSON, P. E., and ANDERSON, H. DEWEY, *Occupational Mobility in an American Community;* Stanford University Press, Stanford University, Calif., 1937
8. DEWKY, EVFLYN, *Behavior Development in Infants;* Josiah Maty Jr. Foundation, New York, 1935
9. KOFFKA, K., *Principles of Gestalt Psychology;* Harcourt, Brace and Company, New York, 1935
10. LURIA, A. R., *The Nature of Human Conflicts;* Liveright, Inc., New York, 1932
11. MFAD, MARCARI-T, *Sex and Temperament in Three Primitive Sodeties;* W. Morrow and Company, New York, 1935
12. MINAHAN, THOMAS, *Boy and Girl Tramps of America;* Farrar and Rinehart, New York, 1934
13. MURCIIISON, C. A. (editor), *Handbook of Child Psy-(hology;* Claik University Press, Worcester, Mass., '93[l]
14. PLANT, J. S., *Personality and the Cultural Pattern;* The Commonwealth Fund, New York, 1937
15. RAINFY, MONTI-R, *Flow Fare American Youth;* American Youth Commission, Washington, I). C., 1938
if>. RAUP, ROBI-RT B., *Complacent^: The Foundation of Human Bchavim,* The Macmillan Company, New York, 1925
17. RHNH\RDI, J. M, *Social Ptydiology;* J. B. Lippincott Company, Chicago, 1938
18. SKINNeR, C E. (editor), *Educational Psychology;* Prentice-Hall, New York, 1936

XI

AN EDUCATIONAL PHILOSOPHY BASIC TO SOCIAL EDUCATION

William H. Kilpatrick

THIS is an effort to state some of the more strategic principles underlying an educational philosophy suitable for a democratic social program. Why a democratic program is here advocated will be justified, at least in intent, in what follows. The principles here stated in a series separately must not be supposed to exist and act independently of one another. On the contrary, the several principles not only apply simultaneously but they also mutually support and explain each other.

If any ask as to the justification of the principles proposed, the answer is, first, that they represent generalizations drawn inductively from many centuries of criticized experience—my choice from the world's generalizations—and, second, that they are here offered as hypotheses, already in part supported by observed experience but to be experimentally verified by unending actual trial in the social process.

i. *Life itself is a positive good to be made better on its own terms, not something to be denied or reduced or postponed to another world.* This principle has not always been accepted. Many alternative social philosophies, now mostly obsolescent, have viewed life differently. Various religions have seen life as evil or at best as a transition stage to some later better state. The early

church father St. Jerome, writing to a widow who had withdrawn to a monastery in the desert, counseled that her beautiful young daughter should "make haste by deliberate squalor to destroy her good looks," quoting with approval the saying common among ascetics of his time that "a clean body and a clean dress mean an unclean soul" (4:206).* In supporting the avoidance of baths against the opposition he said, "To induce you to take baths they will speak of dirt with disgust," and added: [14]It is usual in the monasteries of Egypt . . . for virgins and widows . . . to cut their hair. It is designed to save those who take no baths and whose heads and faces are strangers to all unguents Irom all accumulated dirt, and from the tiny creatures which are sometimes geneiatcd about the roots ot the hair" (4:218) .

Similaily Hindu theology taught the error and pain of individual living and the desirability of final absorption into the unconscious world soul; while our own immediate spiritual ancestors sang:

> This world's a wilderness of woe,
> This world is not my home,

and

> I'm a pilgrim, I'm a stranger,
> I can tany, I can tarry, but a while.

In opposition to all such it is heie proposed to think of "the good lite" as desirable in and of itself; and how to make it <;ood is to be found out by a study of life itself. The good lile is a life good to li\e, as good music is good to hear. Not that all life is good, but we learn by actual living to criticize different kinds of life and by trial how

* Page 206 of referefnce at end of chapter

to live better. The moral good becomes in this way a service function to the life good to live. And in accordance with this it follows that the proper basis of ethics is human wants. A good is the recognized answer to a want. Wants, however, get in one another's way, goods conflict. Whenever we start to study the matter, we find that we have already a set of values (criticized goods) that we live by more or less closely. We start then with these and learn to criticize them so as to improve upon them. Many acts of conduct affect the happiness (the good life) of others. Man long ago learned to hold each human individual responsible for the foreseeable consequences of such acts. The correlative obligation we call a moral obligation and we demand this of all men.

It follows finally from this principle that all institutions, all types of conduct, all standards of living, all rights are to be judged by their tendency to bring the good life to all concerned. How far this conclusion will lead us we shall better see in the development of some of the succeeding principles.

2. *Personality as such is to be cherished in all men and as far as possible on terms of equality. The moral obligation to this is universal.* This principle repeats in good measure the preceding, but from a different angle. Personality is the individual structural side of life. Only individual persons live; there is no humanity beyond this. To cherish and respect personality means to seek for each human individual the fullest feasible good life. This means to develop and express each one of all, as far as feasible, and on terms of equality with the rest. Education is the very process of developing personality and is therefore essential to this principle. Also morality is herein further defined. Some acts, perhaps all, affect

the lives of others for good or ill. Most people learn, at least in the more usual personal affairs, to act upon this fact and so therein to respect the personality of others. The culture stores up distinctions and modes of conduct appropriate for treating others properly and teaches observance thereof to successive generations.

These things show that obedience to moral obligation is a social fact already in active operation. There is no point then in asking whether the "laws of nature" allow "freedom of action." That question is *solvitur in ambulando.* The actual tacts of considerable moral conduct are mattcis of everyday life, known and observed of all men. The practical questions are: First, how can we make finer and better distinctions than hitherto in this field and, second, how may we bring it about that the best already known shall be well observed? In other words, the problem of morals as the actual development of this second principle is lather practical than theoretical. The ever more effectual respect for human personality becomes our never ending task.

3. *Change is inherent in human affairs. The future is not yet fixed. Effort counts, but the event is precaiious, Our logic must accordingly shift from its former static basis to a dynamic ba^is.* To say that change is inherent in human affairs is not to assert universal flux. The prin ciple heie enunciated docs, however, intend to assert that the stream of affairs develops continually in novel fashion. Neither life nor history ever repeats itself ex actly; each succeeding stage builds itself upon the pre ceding accumulation. The event is thus always novel Moreovci (as we shall in a moment see) , it is uncertain and precarious.

Older views weie different. Various ancients believed

in fate, that certain important events were fixed in advance to come inevitably to pass irrespective of what events might meanwhile intervene. The Greek tragedies were founded on this belief. Later, various theologies and Newtonian science agreed that all the future had been once for all fixed even to the smallest detail.

> Yea, the first morning of creation wrote
> What the last dawn reckoning shall read.

One group said of all this that it was the "will of God" or the "decree of Heaven," the other that it was the universal reign of law. On either basis the results were the same. All future events were already fixed, so that forethought and effort are not what they seem.

The position here taken is that the future is not yet fixed. In human affairs effort does within limits count to determine what shall be. Man thinks creatively and by his efforts actually helps to determine events. Each change, to be sure, has its character fixed in part from the past, but not entirely. In an infinite universe chance supervenes to create antecedent, uncertainty, and precariousness as to what will happen. We can never foreknow precisely. Always then the old and familiar appear commingled with the new and unexpected. We strive to control and the old and familiar give more or less of a basis for control. But the event is precarious; we never know just what will happen. The universe is thus, as James said, open to the future. The lid is off.

It was geology and evolution that taught us thus to think. And, so thinking, we need a dynamic logic in place of the static kind given by Aristotle. The syllogism contemplates a completed w[r]orld founded in fixed distinctions (as befitted the feudalism of Aristotle's day).

Up to Descartes mathematics reflected this static logic. With Descartes came analytical geometry, making place for one thing to vary as another varied. Newton and Leibnitz followed with the calculus, which treats of the ratios of change. Not until the eighteenth century did man first get the idea of progress, historic change affecting the structure of social affairs for the better. Darwin (as already noted) , building on these foundations, took the lid off the universe. Change in fundamentals became a possibility. Social dynamics *(vs.* social statics) becomes the object ol our most significant study. A new logic of change becomes necessary.

4. *The free play of intelligence is our final resource to tell us what to think and do in all individual and social affairs.* On the method side this is the most fundamental ol our piinciples. Intelligence here means the ability to manage an actual situation—in some connections the supciior ability so to manage. As consideration will show, any actually embodied intelligence has two components: native ability on the one hand and the cultural accumulation on the other. The former varies from individual to individual, but it probably has not changed appreciablx uithin the race tor a very long time. The lattet has c hanged gieath within the time known to man and is now dunging very rapidly, more so than ever beloie. In eailv class, ue aie told, man went lor 30,000 \eais without improving upon his stone implements. He kne\s so little of possibilities that he could haidly frame useful questions ieluding significant impicnement, and he kneu even less ot am piocesses of stuch 01 discovery. Ncm nun has learned hem to discover and has besides built the cultiual appunal of studv and invention, so that the abilits to invent is mm greath superior to what

it was in the Stone Age, although the native-ability component has since then changed little if at all. The cultural component has particularly improved in methods of discovery and invention. By using these methods we have in the past century or so accumulated great stores of reliable knowledge and skill. But both the methods of study and the stores resulting therefrom can be taught. It becomes therefore proper to say that we have built actual intelligence as never before. In this way the intelligence of modern man—of a surgeon, say, or an engineer or a laboratory scientist—is largely a social product. This is true in less spectacular sense of all of the rest of us. Effectual intelligence is thus largely social, the result of the cultural accumulation. And education finds herein possibly its chief aim, the building and spread of a more adequate culture.

To say that the free play of intelligence is our final resource docs not mean that we are to accept the private, unaided intelligence of even the genius, still less of any and every hard-boiled self-seeker. Rather does it mean that it is intelligence which shall tell us what to do and think, not authority, whether of church or of state or of tradition. The free play of intelligence further means that it is intelligence, and again not authority, which is to tell intelligence what it has or has not done. In other words, the free play of intelligence means that unhindered and unimpeded study is the method of finding out what to do and think. To state boundaries in advance as to what people shall not hear or consider is by so much to choose unintelligence.

This fourth principle is tied up with the third. When men believed that truth existed *a priori* and therefore prior to man, that there were ceitain finally correct

doctrines or laws which man should find and follow, when they believed in a "faith once delivered to the saints," and therefore no more subject to review or revision, and in scientific "laws" which controlled phenomena—when men believed these static ideas, it was easy, almost inevitable, that the *status quo* should claim that it had found this unvarying faith and these unchangeable laws. Any questioning was therefore immoral and unpatriotic; any new proposal was "subversive." It is on this false basis that all "isms," except "Americanism" (as *we* hold it), are wrong and must be fought; that the existing order is held to be the only order and all else chaos.

All these wrong reactions, upheld by such as the D. A. R., the American Legion, and the Chamber of Commerce, along with the Hearst newspapers, easily followed from a belief in static ideas fixed in advance. As opposed to all such, this principle of the free play of intelligence stands back of our Constitutional provisions for iree speech and a free press and back of our demand for free study in school and college (academic freedom generally so called) . A democracy, as government, is the effort to make the free play ot intelligence rule in governmental affairs. In a developing world new problems will arise, new thinking becomes a necessity, and unhindcied study is the only way to make intelligence prevail. No lines can be drawn in advance as to what study will be rewarding. Actual search is the only way to tell what is worth studying. No Mayor Hague or his Chamber of Commerce or church or Legion backers can decide what the people shall hear or consider. Since these things are true in the case of citizens now responsible for affairs, it becomes incumbent upon pupils and

students to learn this kind of citizenship; that is, they must learn how to bring intelligence to bear upon social problems, and for such study only current live problems in the curriculum will suffice, so that current controversial issues become an essential in the schools of democracy.

When a president general of the D. A. R. said some years ago that "academic freedom of study has no place in a school where unformed minds are being formed/' she had in mind that a school is properly a place which forms the minds of children to think what "we" (the D. A. R. and others who agree thereto) already think. But the free play of intelligence means something else. It counts that a school is an institution which tries to get pupils to the place where they can and will think, increasingly think, each for himself and ultimately bring them to the place where each will be able and disposed to think, even to the degree of finding any weak points in what his elders have hitherto thought. This D. A. R. president believed in indoctrination, not in education. She believed in introducing "our" ideas into the young so that these would stay there against any probability of change. Thus will the *status quo* be maintained, right or wrong, good or bad.

But education, education in the full sense, frees one to think, frees him, not to follow his whims, not to think as he "pleases" (so to say), but frees him to wish the intelligent way and to seek it; frees him from prejudice; frees him by giving him fruitful methods of study; frees him by teaching him to be critical of his own wishes and his own thinking; frees him to wish that his wishes themselves may follow only intelligence.

In accordance with this fourth principle we owe, then,

final allegiance not to what we have hitherto thought, not to what the wisest and best have thus far "proved," but to the best that the best thinking can find out. This is no formula with which to run wild, to seek change for the sake of change, to take from those who have simply because "we" want it. No, this is a formula to study, study honestly, both what now is and what is proposed to be, and to wish the best that best thinking can find out, whether this best be new or old. But this formula, following the third principle, does know that the lid is off the universe and that history goes only forwatd.

5. *Demon acy is the effort to run society on the basis of (he principles herein enunciated.* This is perhaps not so much a piinriplc as a definition, a definition founded on the principles already discussed. Democracy, then, seeks life. It proposes to respect personality in all that it docs and honestly in terms of equality as far as possible. It knows that change is inherent in human affairs, and it proposes to follow intelligence in trying to direct this change so as the better to bring the good life for all. It is on these bases that we accept the principle of democracy.

f). *Society can no longer run itself on the individualistic basis of each man for himself alone.* There was a time in American history when *latssez fane* seemed productive of the best living for all, but that was a time of self-sufficient farm life and of unlimited hce land. That day has passed. Scientific invention, factories producing on a basis of division of labor, large corporations owning nianv factories—these have brought it about that the farmer no longer produces mainly for home consumption, but now mainly to sell. The wheat farmer will sell his wheat and buv his flour or perhaps even his bread

along with nearly everything else that he and his family use. In this way the farmer instead of being independent as formerly is now dependent, dependent on the market, dependent on "business conditions." If the farmer has thus become dependent, dependent on "business conditions," how much more so are all those who work in factories or in the transportation of goods or in the selling of goods! If business conditions are bad enough, these may lose their positions and so cannot buy. It is this situation, as the depression showed, that has brought us all to a common state of interdependence, all now alike dependent on the industrial system and how it works.

Under these new conditions of living we must restudy our institutions and along with them the problem of rights. As stated earlier, all institutional arrangements, including all the things we call rights, are to be judged by the way they work, by the way they do or do not bring the good life equally to all. If under these new conditions there are conceivably new institutional arrangements, different conceptions of what constitutes rights, that promise to bring the good life better to all than now obtains, then it becomes our duty to study out all that is therein involved and democratically decide what to do and democratically do it.

Among these institutional arrangements is democracy itself. This then cannot escape study and possible revision and remaking. To ask it would be undemocratic. For myself, thinking as I now think, I cannot conceive that intelligent study will change substantially the general principles herein proposed: respect for personality, substantial equality as an aim, the free play of intelligence as our guide. However, as already stated, I

owe allegiance not to what I have hitherto thought, but rather to what better study can find out. So I must ask for a restudy of democracy, an honest restudy of its several principles, and I must not be surprised if amid other great changes some of that which we have hitherto prized under the name of democracy must be given up. For one thing, unlimited property rights may have to go, for another possibly our competitive business system. I do not know; but I must encourage study, and I am reasonably sure that we must look forward to considerable planning, with much more of co-operative and collective responsibility for the common good than we have thus far known. The time may very possibly come when we can no longer wait around for "confidence" to revive business and start production. Instead, we ourselves may decide to start production on a basis not dependent on business confidence. But, I repeat, all these and all other proposed decisions will, I hope, be made democratically after adequate and tree study. And, again for myself, I know that I do not know the answers.

7. *Since the culture is the chief educative factor to determine how men shall think and act and since further our culture is now sadly divided and distraught, the conscious improving of our culture becomes a chief determining aim of both social and educational endeavor.* In our discussion of intelligence some hint was given of the part culture plays in the life of men. Each babe is born into an already existent culture. From family and community he learns their language, their manner of living, their customs, their ways of thinking, and mostly their standards and values for judging life and conduct. Thus the Indian child grew up into his tribal ways and ideas. Thus do Japanese babies in Japan learn to be

Japanese but in America are much more like Americans, especially if they go to public schools. In Hawaii, since annexation, children of Hawaiian, Portuguese, Chinese, and Japanese stocks all grow up to be largely American in outlook. In this manner from their respective cultural influences the French and the British and the German children grow up into their several national cultural patterns. As nearly as we can tell, biological stock has nothing to do with the resulting pattern.

Any adequate culture represents a balanced whole; part fits with part to care for the whole round of life. Where any civilization remains long undisturbed, without and within, its culture will gradually approximate such a balanced working whole. So it was with western Europe in the thirteenth century, so was it with China prior to 1800, so was it in great degree in this country in the early nineteenth century. But when, as now with us, certain parts of the culture grow very rapidly *(e.g.*, the scientific and the technologic), then will some other parts closely dependent on these also grow rapidly; but others will lag. In this way, as Dr. Ogburn has brought out in his chapter, come social strains and consequent social problems; and these, if they increase indefinitely, will endanger our civilization. How to guide thought and act so that our divided culture shall become once more consistent, part with part, becomes the great question. If we do not so guide thought and act, disaster threatens. If we do so change our culture and succeed well at it, mankind may enter upon a life of abundance, materially and spiritually, such as has never been beiore. This seems the great question confronting us and our country today.

Many signs indicate that we are in the midst of a

social revolution, peaceful probably, as we greatly hope, but still probably very far-reaching. But also very probably we do not yet see adequately what to do or how to do it. My guess is that three half-generations will be necessary to effect the needed social-economic changes. If so, education should play a great part, especially in the effort to build a higher level of social intelligence. How to manage so that greater social intelligence will result, and along with it the will to make the needed social changes, is our task. Socially and educationally this task is very great, but it is as needed as it is difficult.

8. The final point, relating to the close connection between life and learning, we can hardly develop for lack of space. Learning is far more intimately bound up with living than most of us conceive. Study and learning exist primarily to carry on the affair now under way. At each moment of active experience proposals arise as to how to think and feel and what to do. We weigh and accept—dispose of in some sense and degree—each such proposal. We thus learn our reactions, all of them, in the same sense and degree as we accept them; and what is thus learned is therein built at once into the structure of one's being. In this way character is being built all the time. We may sum this briefly by saying that we learn what we live and in the degree that we live it. We do not learn what we do not live. The character and quality of our living becomes then the supremely important fact and factor in education.

Since the social problem of remaking our society is our present great unsolved problem, education cannot refuse to accept responsibility in connection with it. We who teach cannot claim that we know the answer and proceed to teach that answer authoritatively to our

pupils and students; we cannot so act for two reasons. First, we do not know the answer—that remains to be worked out, democratically if these principles be accepted. Second, even if we were satisfied among ourselves that we had the answer, to teach this authoritatively is not the democratic way of rearing the young, certainly not in a changing civilization.

But the schools can map out a democratic program. The institutions of higher learning should by the creative thinking of scholarly research in the social realm both increase knowledge in this area and at the same time build better students to continue study in the social area. In other words, higher education should add to the culture and in this way build social intelligence. Adult education, next, should help citizens to study social problems in such a way as to upbuild social intelligence among the people generally by spreading the best thus far known of conception, insight, facts, and methods of study. This is a second phase of building social intelligence. The lower schools should work specifically to bring up a better generation of citizens than we now are. It has been said that "we are a nation of economic illiterates." This is too true, and there is danger in the fact. We must make our young people progressively more intelligent in regard to social matters so that as they come onto the stage, which we shall then be vacating, they will be better able to grapple with our social-economic-political problems than we of the present generation have been.

Our young people, however, will grow to be intelligent and responsible citi/ens only as they live intelligently and responsibly in social affairs on their successive levels as they grow older and older. They will

learn what they live, that and that only. We must then somehow remake our schools so that our young people may in them live the highest and best social ideals as they progressively contend with ever more real and inclusive social problems. The details o£ such a program lie beyond this discussion, but it appears that the cooperative community enterprise furnishes the most promising unit of: school-community life and work. This is the typical unit of social life; we must make it the typical unit of school-community life. In it the young can become progressively both socially intelligent and socially well disposed. In this unit all the preceding principles find application so far as immaturity can compass the whole of life. Along these lines the new school must work.

Such are the principles here offered as constituting a philosophy of education adequate to the social needs of today.

BIBLIOGRAPHY

1. BEARD, CHARLES A. (editor), *The Unique Function of Education in Arnencan Demoaacy,* Educational Policies Commission, National Education Association, Washington, D. C., 1937
2. DEWKY, JOHN, *Individualism Old and New;* Mmton, Balrh and Company, New York, 1930
3. ——, *Liberalism and Social Action;* G. P. Putnam's Sons, New York, 1935
4. FREMANTLF, W. H., and others (translators), *St. Jerome: Letters and Select Works;* The Christian Literature Company, New York, 1893
5. KILPATRICK, WILLIAM H., *Education and the Social Crisis;* Livcright, Inc., New York, 1932

6. KILPATRICK, WILLIAM H. (editor), *The Educational Frontier;* D. Appleton-Century Company, New York, 1933
7. MERRIAM, CHARLES E., *Civic Education in the United States;* Charles Scribner's Sons, 1934

XII

SOCIAL EDUCATION AND THE AMERICAN TRADITION

I. James Quillen

THE previous chapters in this book have laid a broad foundation of basic concepts upon which a program of social education can be constructed. The questions which will be discussed in this chapter relate to the trends in social education which emerge from the history of Ameiican culture and an appraisal of these trends in tin* light of the needs of American youth. Such questions will be discussed as: How did the system of social education pievalent in the United States today come to be? To what extent is the school responsible for the failure of American citizens to demonstrate adequate social competence in the affaiis of everyday lite? What is the place of tradition in an effective program of social education?

Schools were established by the American colonists mostly because they were interested in having their children read the Bible and in developing educated individuals who would be competent as preachers (5) .* Education was closely related to apprenticeship and to social status. The children of poor people were bound out as servants and apprentices, and their masters were supposed to see that they learned to read and write with

• Reteiciue 5 at end of chapter. Many of the facts related to the history of education used in this chapter were gleaned from this reference.

some degree of facility. The children of the gentry—the merchants and the planters—learned Latin and Greek so that they could maintain their social position and enter the professions by sharing in the culture of the Golden Age of Greece and Rome. They studied rhetoric and oratory to be able to assume political leadership.

It will be noted that social education for all children and youth had little place in the colonial educational system. The reason for this is clear. Social competence was developed as a normal concomitant of everyday life activities. The pattern of life was largely rural and handicraft. Goods and labor were scarce but resources were abundant. Hence there was a great demand for labor. As soon as they were physically able, children began to work in the home, on the farm, or as apprentices in the homes of master craftsmen. Social relationships in the small communities of the colonial and early national period were direct, continuous, and close. There was a continuous sharing in common activities. House raisings, fish fries, corn huskings, taffy pullings, and the like were common events; youth participated in all these activities. Hence youth developed in social competence by participating directly in the vital activities of social life. There was no need lor a formal institution to furnish social education. Some schooling was needed to learn reading and writing and perhaps a little figuring and spelling. Much education was needed to prepare for the professions or politics and to maintain positions of social privilege and power. But competence in common social activities for all came not from the school, but from the home, church, and community. The school was a minor force in general education.

The Revolution produced great changes in American

society. The great loyalist estates were broken up, the power of the church declined, and democratic values became dominant ideals for the American people. The founders of the nation realized the dependence of democracy upon adequate education. Washington, Franklin, Jefferson, John and Samuel Adams, Madison, and others advocated the extension of education and pointed out that without an enlightened citizenry democracy could not long endure. Madison said, "Popular government without popular information or the means of acquiring it is a prologue to a farce, or tragedy, or perhaps to both." The educational ideas of the founding fathers, however, were not quickly put into practice. Jefferson's famous Bill for the More General Diffusion of Knowledge was defeated by the Virginia legislature.

As a matter of fact, public education in America was at a lower ebb in the early i8oo's than it was in the early 1700'*. There were many reasons for this. The Revolution and the extension ot deism and unitarianism had shaken the political power of the church; the rapid extension of the homier had produced conditions of life and work that had little plate for formal education; and the introduction of the factory system in the budding cities of New England and the middle Atlantic states, together with the rapid extension ot slavery in the South, was breaking doun the apprentice svstem.

By the 1830's, however, conditions were emerging that made universal tax supported education at first a possibility and Lateri an actuality. The period from 1812 to 1860 in America was a period of social ferment. The conquest of the homier was quickened, a war for "manifest destiny" was fought and won, the factory and wage system sunk its roots into American culture, immigra-

tion approached flood tide, and cities grew rapidly. As the frontier broadened, equalitarian ideas, fostered by the abundant resources of the frontier, became dominant in American life. This dominance was established by the election of Andrew Jackson as President in 1828. Attacks on the courts, anti-rent wars, repudiation of debts, and in some cases the threat of an armed rebellion of the poor against the rich quickly followed. The owners of property in America began to fear the grim spector of anarchy and revolution.

Quickly capitalizing on these fears, such educational leaders as Mann and Barnard began to urge a universal system of tax-supported public education. "No efforts were spared to convince men of wealth that education was preferable to revolution and its only certain preventative" (5:80-1) . The educational leaders also capitalized on the desire of labor for equality of opportunity and the expanding humanitarian and utilitarian movements. Education was promised as the panacea for all ills. It would protect the rich from revolution, make the laborer a man of wealth, secure local interests for the West and South, and promote democracy and national unity. With these promises and powerful social forces at work, it is not strange that tax-supported schools were rapidly extended.

The curricula and methods of the new schools differed little, however, horn those of the colonial period. Mastery of the three "R's" became standard for elementary education, and the classical subjects ol the grammar school and the geography, history, and foreign languages of the academy were gradually organized into the pattern of the high school. The methods inherited from the colonial period emphasized authoritarianism and mem-

orization. In short the curriculum consisted of a mastery of basic skills and the memorization of factual material from the past. Discipline was maintained by a frequent use of physical force.

The Civil War was the first great shock to public education in America. It demonstrated, bluntly and tragically, that public education had so far failed to achieve national unity. The time was too soon to determine whether education had decreased economic strife and promoted economic welfare and public morality, but data on that score were soon to come. The war was followed by sectional bitterness, violence, and political corruption; and in the '70*5, '8o's and 'go's came bitter labor warfare and agrarian revolts. Added to these were the lapid extension of the factory system, corporate organization, and financial speculation. A national system of transportation and communication was developed, the influx of immigrants reached flood tide, and the city became dominant in American life.

Those changes all focused attention upon the problem of social education. More attention was directed to the social sciences and the so-called practical subjects, such as commerce, industrial arts, health, and science. National committees began to shape a national pattern for social education. Those committee reports which had the greatest effects upon the pattern of social education were the repents of the Committee of Ten of the National Education Association, which reported in 1893. the Committee of Se\en of the American Historical Association, which reported in 1898, and the Commission on the Reorgani/ation of the Secondary School of the National Education Association, which issued several reports around 1916. Both the Committee of Ten

and the Committee of Seven emphasized a full program of history and civil government with by far the greater reliance upon history. The Commission on the Reorganization of the Secondary School recommended community civics in the junior high school and a one-year course in world history, a course in American history, and a course in problems of American democracy for the senior high school. The influence of these committees is demonstrated by a statement of Tryon made in 1935 in reference to the report of the Committee of Seven: "For at least two decades after its appearance, high school courses in history in the United States were almost 100 per cent dictated by it. In fact even today, more than a generation after the publication of the report, its influence is dominant in probably one-third of the high schools of the country" (13:22). The survey of the Yearbook Committee of the Department of Superintendence in 1936 showed that the dominant offerings of the secondary school, in the area of social education, followed closely the recommendations of the Committee of Seven and the Commission on the Reorganization of the Secondary School (6:63-90).

The reports of these national committees were able to dominate social education so completely because of the common method of approach to social education. Most courses were based upon textbook memorization, class recitation, and fact tests. Since the writers of textbooks followed the recommendations of the committees, their reports quickly set the pattern for social education.

The subject matter approach, however, was not without its critics even before the turn of the century. As early as the '8o's the followers of Herbart were challenging the separation of social education into subjects

and the prevalent reliance upon the textbook. In the 'go's Francis Parker, John Dewey, and others vigorously challenged the traditional approach to education. Advances in biology, psychology, and sociology supported their position. These leaders pointed out that education must be more concerned with a study of the needs of the child and of society and that teachers should be more concerned with child study and social reconstruction than with subject matter as such.

The World War gave great impetus to the movement for educational change. As a result of the war major attention was Ionised upon citizenship, health, science, and international interdependence. The scientific movement entered the schools in full foice. Attempts were made to analyze lite activities into their specific components. The stimulus-response psychology held out hope that drill upon those specific skills required in daily living would effectively promote social competence. Business efficiency also became a fetish in education. The worship of the factory and the business leader, the lapid increase in the school population, and the focus of attention on the elimination of waste caused educational administrators to place heavy reliance upon tests and measurements, the platoon system, and the concept of hiciarchal authority in older to achieve in the school the efficiency of the factory. Where this system was carried to its logical extieme, teachers and children became automatons. Courses of study and orders were handed down from above, and those below had but to follow and to obey. Teachers and children were at the bottom of the scale. The followers of Parker, Dewey, and otheis icacted \alianth against this lock-step method of education. The Progressive Education Association and

other groups sought to bring the child and the classroom teacher into the center of the stage.

The depression of 1929-1933 and the recent recession have again focused major attention on social education. The social crisis has deepened; and in the face of widespread unemployment, national confusion, and international anarchy, a large percentage of the graduates of our high schools have shown social incompetence to a shocking degree. Emotionalism, irrationality, and force are becoming constantly more common as agencies of social control. Millions of American citizens have demonstrated many times in the past ten years their willingness to follow blindly autocratic leaders with impossible panaceas.

As a result of the widespread evidence of social incompetency, educators in recent years have made many modifications in the school curriculum. Many new approaches to social education have been developed. Four examples of these newer approaches to the problem of social education will be described briefly.

(i) One change is from a study of political and military history to a study of civilizations. In this approach American political history becomes American civilization; world political history becomes world civilization. This provides for an extension of social experiences and greater opportunities for flexibility in organization. Contemporary as well as historical cultures can be studied. Tools and technics, social arrangements, and ideologies of different cultures can be contrasted and compared. This makes possible the development of greater insight into the nature of cultural reality and cultural change. The *civilization approach* also makes possible the integration of experiences from many sub-

ject areas. Many schools utilize the study of a civilization, such as American, French, German, or Roman, as an integrating center for experiences in art, literature, language, science, and the social studies.*

(2) The second approach is commonly referred to as the *needs approach.* In this approach the activities of education arc centcicd upon meeting the emerging needs and interests of children and adolescents. This approach was fust applied to the elementary school, but it is now being applied to the secondary school by the Commission on the Secondary School Curriculum of the Progicssive Education Association and other groups. The needs approach is based upon the assumption that a sensitivity to individual needs is essential to any effective program of social education because individuals become active in social situations only in an effort to satisfy felt needs. The influence of the needs approach is indicated by the widespread introduction of social living courses on the sccondaiy school level. In using the needs approach the teacher begins with the needs of children and youth and uses materials and experiences fioin all aicas to satisfy those needs in such a manner as to develop dcsiiablc characteristics of behavior essential to the achievement of democratic values (11).

(3) Another widely used approach is the *problem approach.* This appioach is closely connected to the needs approach. Problem situations arise when individuals are frustrated in satisfying their needs through social activity. The problems approach emphasizes a direct attack upon problems of individual and gioup concern. Materials and experiences from all subject

• The Los Angeles schools. Menlo School and Junior College, and the Santa Haihaia city schools have successfully utilized this approach.

areas and from the immediate environment are used when needed. Students and teachers "purpose, plan, execute, and evaluate co-operatively." On the lower grade level simple and concrete problems in the immediate environment are utilized; problems studied increase in complexity as the child increases in competence and maturity until, by the end of high school, youth are considering directly problems similar to those which they will meet as adult citizens. Thus children might begin in the kindergarten with the problem of safety in crossing streets and by the end of the high school be studying the problem of safety in industry. The problem approach holds great promise under the direction of able teachers. It can be used as a method of teaching within many kinds of curricular organizations.

(4) A fourth movement for curriculum change is that which stresses the utilization of the community in education. In the community school the meeting of individual and social needs is united in a single matrix. The needs of individuals arise from the community environment. In meeting these needs modifications in community living may be necessary. Hence the community and the school become one. In the *community-centered school,* youth participate directly in community activities. They make direct contribution to the development of such community improvements as cleanliness, beautification, and safety (7, 8).

Another approach that might be considered here is the scope and sequence or *core-curriculum approach,* but Dr. Kefauver will discuss this approach in the chapter following this. In many schools a combination of the above approaches is being utilized.

In appraising these current practices and trends in

social education, there is an opportunity to come to grips with two problems that have been emphasized many times in this book. These two problems are: (i) What can we do about the social lags in our culture and (2) what should be the place of the tradition of the past in social reconstruction?

In the school today is found an excellent example of what Dr. Ogburn has designated as the social lag. The first public school curricula in the United States emerged from a slowly changing, handicraft, agrarian culture, where social competence was developed largely through the normal activities of everyday life and where youth by and large were meeting problems similar to those met in the past. In such a cultural situation, a program of general education confined largely to a mastery of fundamental skills and the memorization of facts concerning man's solutions to past problems was a sufficient complement to the educative development which came from direct participation in the activities of the home, farm, shop, and community. However, as a result of mechanical and social invention outside the school American culture has become specialized, mechanized, and urbanized. As the material base has extended, the tempo of change has increased greatly. Meanwhile opportunities for the direct participation of youth in educative activities in the home, factory, and community have decreased tremendously. Hence, at the same time that American culture has become more complex, youth have been closed off from effective participation in it. This situation would be serious enough if American culture were in a healthful condition; but, coupled with cultural maladjustment to the extent that exists today, it becomes a situation of some cruciality.

Thus the cultural situation has presented new challenges to the school. The school, to develop social competence for the needs of American culture, must develop in youth the power to think creatively and to act co-operatively. The school, as an institution charged with the development of social competence, must devise educational situations which will again provide children and youth with opportunities to participate in vital activities which in turn will lead to the development of an understanding of the nature of our evolving culture, a wholesome framework of values, and individual competence in dealing with social actualities. To the extent that the school has held blindly to the curriculum of the past, has kept its teachings aloof from reality, and has failed to meet cultural needs, the school is an example of social lag. Educational leaders as early as the '8o's and 'go's of the last century pointed out the emergence of this lag. At that time clear voices of protest and reconstruction were raised. Francis Parker, John Dewey, and others stressed the fact that the school should change its curriculum so as more adequately to meet individual and social needs.

The pleas of these leaders were long unheeded, and in the meantime the lag in social education deepened. In the past ten years determined efforts have been made on the part of many educators to relieve this lag, and consequently practice has been modified widely. However, the lag still remains. Social lag in education today is indicated by such critical problems as the large number of out-of-work, out-of-school youth; the inability to make the high school curriculum fit the needs of the mass of students who have entered school with the extension of the high school population; and the present

struggle between education conceived of as a static transmission of the culture of the past and education conceived of as a dynamic process of personality development directed toward the achievement of social efficiency. Thus education itself is an example of a critical social problem which results from aggravated social lag.

Lag in education results from the same causes as social lags in our culture generally. Two of the main causes are the power ot tradition and the influence of vested interests. Many of the traditional practices of the school have taken on social sanctity, and many parents want to see their children taught as they themselves were taught. They delend traditional practices emotionally even when they cannot support their position rationally. This emotional attachment to tradition is supported by the influence of vested interest groups both within and without the school. Within the school certain teachers often feel that their economic security is threatened by curriculum changes. Outside the school groups who are profiting by the present social situation want the school to continue to emphasize the past and to avoid controversial issues that might threaten their present control and economic gain.

How is the school to relieve the lag in social education? And what place should tradition play in that task? Educators as a group should apply social intelligence at the points of greatest tension in the lag between the present school curriculum and the development of social competence. How c\m educators discover the points of greatest tension? Here it is necessary to examine the record. In other \\ords, educators need to study carefully the history of American culture and the role of education in its development. The record demonstrates that

the function of education in America has been to contribute to the development of individuals who could achieve democratic values within the realities of our culture. To the extent that education has succeeded in in this task it has been supported by the American people; to the extent that it has failed it has been brought under criticism and lost public support. An examination of the record also indicates the different practices that have been advocated and tried in order to fulfill this role. As the culture has changed, new features have been added to the educational program. New social needs have caused modification. However, educators should not stop with the record of the past; they also have a responsibility to examine the situation today and the probable trends for the future. Out of this examination of the record will emerge a conception of points of tension in the present educational situation which require the immediate application of our best intelligence.

Among these are (i) the compartmentalization of knowledge into sharp subject-matter areas, (2) the separation of knowledge and action, and (3) the lack of opportunity for participation in vital cultural activities. We learn to do by doing; we learn to think by thinking; we become democratic by living democratically. Problems are solved not by the memorization of knowledge as an end in itself, but by the application of knowledge to action. Problems are solved not by the segregation of knowledge, but by the synthesis of knowledge as it applies to the problem to be solved.

In order to relieve tensions in our program of social education and to increase our effectiveness in building social competence, a program of action must be decided upon. This program must be built by creative in-

telligence and executed by group action. Creative intelligence will use data from the past and present in designing the plan to be followed, but neither history nor other social disciplines can indicate the precise nature of the plan that should be followed. Intelligence must anticipate consequences and direct action toward the achievement of values. A scientific study of the past can help us to anticipate consequences, but in the development of values we must turn to philosophy. Science can indicate what is or has been, but philosophy must be used to determine what ought to be.

Since the democratic philosophy of life indicates the values which American education should seek to achieve, plans of action should be developed that will enable individuals to achieve the values basic to democratic living. Since democracy implies respect for the individual, co-operative participation in activities of common concern, and the extension of the application of intelligence, our present school program should be modified wherever necessary to achieve these values. In order to extend the application of intelligence, our attention should shift from the memorization of subject matter to the use of subject matter in thinking about and attempting to solve problems of vital individual and group concern; and in attempting to solve these problems teachers and youth should work in groups operating upon the basis of shared purposes and values.

In meeting vested interests outside the school, teachers should work with community groups in defining the nature of democratic values and in helping laymen to see the new responsibilities of the school. Parents and lay groups should participate whenever possible in programs of curricula!* modification. In resolving the con-

flicts of vested interests within the school, effective programs of in-service education are needed. One of the most effective means of in-service education is participation in the co-operative study of educational problems by the school group and in attempting to make the curricular modifications necessary to solve them. Co-operation comes through teamwork. When teachers understand that basic scholarship in special areas will be needed whatever the curricular organization may be, they will be glad to participate in general programs for improving social education.

There has recently been much discussion of the place of history in social education. The use of history in this book may indicate a possible role of history in general social education. It has been said that history is to the race what memory is to the individual. Without memory man is an imbecile; without history he is a savage. It is unintelligent and socially wasteful to attempt to understand a contemporary problem without a careful study of its history. Most leading educators have recognized this need for history. John Dewey has pointed out that history when properly used offers one of our best resources for increasing insight into the nature of our culture. It makes human implications explicit. It lays bare society in its process of being and in its mode of becoming. But the value of history must be determined by its contribution to the power of thought, including a clear insight into the social situation and the means of modifying it. History then should be used as a means for furthering social understanding, but it is not the only means to that end. Economics, sociology, psychology, anthropology, and many other social disciplines also have valuable data to contribute. Furthermore we must

examine the contemporary environment itself and also attempt to anticipate trends for the future. The past, the present, and the future are all essential factors in our evolving culture. To ignore any part of the process is to limit greatly the development of social competence. Then, too, knowledge has significance only in relation to a felt need tor its use on the part of the individual acquiring it; knowledge memorized and not used is quickly forgotten. The forced memorization of the facts of either the past or present as ends in themselves may hamper the development of an interest in our heritage of human ideals and a concern for social problems. The story is told of an English boy who was being taught to read by a tutor. The boy was difficult to teach, but finally through tiemendous external pressure the tutor was able to say one day, "Well, Johnny, at last you can read." And Johnny picked up his book, slammed it on the table, and said, "Yes, thank goodness, and I'll never read again."

Befoie summarizing, a few sentences about the spirit and lettci of historical scholarship may be pertinent. The essence ot historical scholarship is the objective and persistent serch for *truth.* Today this is the possession of the tew i, ither than the many. The desire for and the ability to discover truth are essential to effective social competence and should be possessed by all individuals laying am claim to a general education. It is an incontrovertible lac t that history as now taught in the high school is not developing scholarship to any great extent. Scholarship tomes from continuous experience in examining the actualities of the past and the present; it is developed by actual experience in research. A continuous investigation of vital problems should be a basic

part of social education. Through a continuous and critical search for facts related to issues of individual and group concern youth will have a greater opportunity to develop basic scholarship. Through the application of these facts to the issues in hand youth will learn to think and act intelligently through experience in thinking and acting.

In this chapter an attempt has been made to show that change is the essence of the American tradition. Education has changed as the culture has changed, but it has not changed rapidly enough; hence today intelligent educational change is one of our critical social problems. The solution to this problem is the challenge to us as educators. We must study and work to help the people of our culture to think creatively and to act co-operatively in the face of rapidly changing conditions. Only through solutions to present social problems can progress be resumed and the democratic values of life and liberty and happiness be achieved.

BIBLIOGRAPHY

1. BAGLEY, WILLIAM G, *A Century of the Universal School;* The Macmillan Company, New York, 1937
2. BEARD, CHARLES A., *A Charter for the Social Sciences,* Part I, Report of the Commission on the Social Studies, American Historical Association; Charles Scribner's Sons, New York, 1932
3. COUNTS, GEORGE S., *The Prospects of American Democracy;* The John Day Company, New York, 1938
4. ——, *The Social Foundations of Education;* Charles Scribner's Sons, New York, 1934
5. CURTI, MERLE E., *The Social Ideas of American Educators;* Charles Scribner's Sons, New York, 1935
6. DEPARTMENT OF SUPERINTENDENCE, *The Social Studies*

Curriculum, Fourteenth Yearbook; National Education Association, Washington, D. C., 1936
7. EVERETT, SAMUEL (editor), *The Community School;* D. Appleton-Century Company, 1938
8. HANNA, PAUL R., *Youth Serves the Community;* D. Appleton-Century Company, New York, 1936
9. HARRIS, PICKENS E., *The Curriculum and Cultural Change;* D. Appleton-Century Company, New York, '937
10. LERNER, MAX, *It Is Later than You Think;* Viking Press, New York, 1938
11. PROGRESSIVE EDUCATION ASSOCIATION, Commission on the Secondary School Curriculum, *Science in General Education;* D. Appleton-Century Company, New York, 1938
12. Rucc, HAROLD, *American Life and the School Curriculum;* Ginn and Company, New York, 1936
13. TRYON, ROLLA M., *The Social Sciences as School Subjects;* Charles Scribner's Sons, New York, 1935

XIII

A PROGRAM OF SOCIAL EDUCATION

Grayson N. Kefauver

PREVIOUS chapters in this volume have dealt with different aspects of American life. These social conditions affect the task of social education and determine the nature of a desirable program. Several of the important characteristics of contemporary American life might appropriately be noted here before turning to the treatment of the program of social education. The society in which we now live is characterized by rapid change. While we have always had social change, the change has become more rapid in recent years. In social literature the present period is often referred to as a period of fundamental cultural transition, as basic perhaps as that experienced by the race when it moved from hunting to agriculture and from feudalism to the free market.

The nature of the social change has significance for the program of social education. The change is extremely uneven and results in tensions and strains which must be relieved to avoid catastrophe. As Dr. Ogburn has indicated, the rapid advances in science and technology and in the substitution of nonhuman for human power disturb other aspects of our lives and destroy the equilibrium of our culture. The greatest need of the present period is inventiveness in the social field. Unless we can develop adequate social arrangements and proc-

esses, our marvelous developments in science and technology may lead to ruin rather than to improvement of our common life.

The task of social education is affected also by the democratic nature of American society. To have all the people participate in shaping social policy is a difficult and noble objective even in the relatively simple society of the early frontier. Present-day society is highly complex and interdependent, and the social problems of the American people are technical and difficult of solution. Whether or not the democratic process can be made to operate effectively under these conditions is still a question. The issue is made more vital by resort to dictatorial methods in many countries and by their attack on the democracies. The American people have not retained the economic and social democracy of the early pioneer life; and, as Professor Robinson indicates, political democracy is not secure and loses much of its significance if it is not supported by a foundation of economic and social democracy.

Social education has no greater tasks than to develop (i) an nucleistanding of, and a loyalty to, democratic values and processes and (2) sufficiently widespread understanding of the major social problems of this period to insure reasonable wisdom in our social actions. Democracyran scarcely survive if discontent with its operation becomes widespread.

The progiam of social education, then, should be determined by the needs of modern society. It is not necessary for us to adhere to traditional educational patterns unless they meet vital needs of this period. We need to examine critically what has been done and to retain only those procedures from the past which will

fit in with newly developed procedures to form a program of social education that will meet the needs of this generation. Those needs vary somewhat from community to community. It is not possible to present a pattern which might be copied by all faculty groups. Instead, consideration will be given to features which should be contained in any effective program of social education.

The development of social competence is a responsibility of the social studies and also of all other areas of instruction, of the guidance program, and of the administration of the school. Study of modern life in the social studies is not enough. All subjects in the school should be given a social orientation. Considerable progress has already been made in this direction. In many schools literature is being selected and taught in part because of the social significance of the content. Art has come to be seen by some as an instrument for influencing human wants and human behavior. Science, when properly taught, aids in the understanding of dynamic factors in social change and contributes methods of thought and knowledge essential for effective handling of social problems. In these and other subjects the significance for building social competence is greatly increased when the relationships with social situations are stressed.

Students have problems in the planning of their lives in their present school and community activities and in their preparation for later living. The educational program should help students to solve these problems. Instruction which relates to the felt needs of students as they strive to realize their purposes will secure their active participation. They are then dealing with issues

that are important to them. They are not just studying about something which might be important at a later time.

The problem approach, here suggested, provides opportunity for a scholarly, scientific study of a social situation. With the help of the teacher, students may define the problem, break it down into its elements, gather, analyze, and interpret data which bear upon it, consider the history of the problem and the proposals for its solution, and make a decision as to the line of action to be followed. Finally they may evaluate the success of the plan which is adopted. These social problems should be treated comprehensively, and they should lead to modified behavior on the part of the student.

The study of social problems is difficult within subject boundaries, as most real problems draw upon the content of several subjects and consequently do not fit into any one field. This fact has led to the broadening and fusion of subjects. Reference to some of the problems projected for use in the high school at Santa Maria, California, will illustrate the necessity of drawing upon a variety of subjects for an adequate treatment of important social and personal problems. The following are typical:

How can I utilize knowledge about human behavior in understanding and modifying my own behavior?

How have industrial processes made the protection of the consumer necessary? How can I select and purchase personal clothing wisely?

How can I utilize my leisure time wisely?

How can medical care be made available for all?

How can we make nonhuman power serve human needs?

How can we make more intelligent use of natural resources by regional planning?

How can we provide adequate housing facilities for our people?

How can we improve the relationships of government, business, and labor?

The subject organization of instruction in the elementary and secondary school encourages the teacher to consider it his task to teach the subject matter rather than to help students develop power in handling the problems of living. While this hazard can be avoided in part by an understanding teacher, the issue raises the question as to what should be the chief determining principle in the selection and organization of the instructional program. There is wide acceptance of the viewpoint that the chief determinant should *not* be the logical organization of the subject matter or a set list of problems to be studied. Rather, it is believed that the program should be shaped in terms of the problems met by students in their activities related to goals which they have defined in co-operation with their teacher. Work on these problems is different from the learning of a body of subject matter even though the area from which the subject matter is drawn has been made broad and comprehensive. The goal of the student is different. The focus is on the problem and the search for a solution instead of on the mastery of subject matter that later *might* be used when a problem appears.

Early efforts to break away from the subject-matter basis of organizing instruction placed great emphasis on the existing interests of students, with little or no preplanning by the teacher. Under the subject-matter organization there is a pattern which teachers and students

are supposed to follow. Under the child-centered program the activities are determined from day to day without preplanning of a general framework by the staff. This lack of a design for the educational program is a serious shortcoming; yet the child-centered approach is probably better than the subject-matter basis of organization. The struggle to develop a program which would furnish a design and at the same time conserve the value of the child-centered program has resulted in the conception characterized by "scope and sequence." The co-operation of the staff in defining the general design, or "scope and sequence," causes them to develop common purposes and to co-ordinate their efforts. Because of the importance of this development for social education one of these programs will be reported in some detail.

The scope of the educational program should be such that the school would deal with all the basic functions of human living. What are these basic social functions? Different professional groups vary in their formulations although there is naturally much overlapping. The eight functions selected for tentative use in the Santa Barbara city program will illustrate. That formulation includes the following:

1. Developing and conserving personal resources
2. Developing and conserving other than personal resources
3. Producing, distributing, and consuming goods and services
4. Communicating
5. Transporting
6. Recreating and playing

7. Expressing and satisfying spiritual and aesthetic needs
8. Organizing and governing

The activities introduced into the school will bear upon these eight basic functions of human living. All of them should receive recognition in the program. It is not necessary, and even not desirable, for all to be under consideration at any one time. The task of the school is to aid students in developing effectiveness in carrying on these processes. Emphasis should be placed on the functions of the individual and the social group, on helping to develop an understanding of the importance of each, on the manner in which each contributes to the total pattern of living, and on facility in the use of the technics involved. The development of skills is one aspect of this broader functional program.

It is not thought best to take up these functions one at a time; that is, it is not intended that one month be given to communicating. In fact, the units of instruction will not be limited to a single function. Any important unit of study will probably include experiences related to several of these functions. The problem of providing adequate playgrounds and recreation centers in the modern city would relate to at least four of the functions—developing and conserving personal resources; producing, distributing, and consuming goods and services; recreating and playing; and organizing and governing. Recreation is one phase of a program of personality development. It involves distribution of services to those who need them, the problem of city planning, the relation of recreation to the schools and to other agencies in the community, and taxing the wealth of the community to support the recreational program.

These social functions are an aid to the teacher as a pattern against which the instructional activities can be checked. At some time the program of the school will deal with each of the eight social functions listed. If one or more are omitted, the teacher should be conscious of that fact so that opportunities might be seized upon to guide the activities of the students in a manner to insure that proper recognition will be given to them.

The definition of the sequence to be followed as the student moves through the twelve or fourteen grades of the public school is more difficult. We have had experience with the subject-matter sequence, involving indication for each of the subject fields the materials which were to be taught on the different grade levels. We have had an arithmetic sequence, a reading sequence, a spelling sequence, and even a writing sequence. This historical practice is indefensible on two major counts. The plan forced the teacher to give first position to subject matter. When students were promoted, they were supposed to be able to spell the words, to solve the problems in arithmetic, and to know the history and geography assigned to the grade from which they moved. The second criticism relates to the breaking of the life of the students into separate compartments. When the different subjects are treated separately, it is difficult or impossible to avoid nonfunctional teaching of subject matter. Certainly normal living is not so compartmentalized.

The subject-matter sequence, defined separately for each subject, is now widely recognized as an unsound basis for planning the instructional program. In fact, any subject-matter basis is inadequate. The needs of the students should guide in the choice of activities. Recognition of the needs of students does not preclude planning

of a general pattern of the program in advance of instruction by the staff. It is desirable for the total faculty to co-operate in developing a pattern for the entire school program. They should formulate objectives, select and classify the major functions of human living, and define the general pattern or sequence of instructional activities. In defining the sequence they can select a large area for each maturity level, which allows students and teachers freedom to select, for treatment in a core course, problems of real significance to students. These integrating themes should be adapted to the maturity level of the students for whom they are provided. Also they should focus upon items of major social importance and of significance to the individual. The sequence itself should represent a pattern which has social and psychological validity. Certainly it should provide opportunity for students to understand the culture in which they are living and to develop the power which is needed by modern society. A great deal of attention should be given to the development of social inventiveness, involving an understanding of new technics and their implications for social arrangements. The sequence in Santa Barbara will illustrate one pattern:

Kindergarten and Grade I

Growth in effective living through self-adjustment within the immediate environment.

Grade II

Growth in effective living through adjustment to the community.

Grade III

Growth in effective living by further adjustment to the community through the development of insights into the manner in which the natural and con-

trolled environment is contributing to life in the community.

Grade IV

Growth in effective living by further adjustment to the community through the development of insights into the manner in which the present culture groups have adjusted to life in our community.

Grade V

Growth in effective living through the development of insights into the manner in which present, as compared with former, culture groups carried on the basic functions of human living in Santa Barbara and Calitoinia.

Grade VI

Growth in effective living through experience with modern technics utilized in carrying out the basic functions of human living in the United States.

Giade VII

Growth in effective living through experience with such newer technics as .ire causing rapid social and economic changes and increasing the inteidependence of people throughout the world.

Grades VIII and IX

Growth in effective living through the development ot insights making lor a more intelligent use of newer technics and discoveries in the biological and inorganic environment.

Grade X

In the tenth grade emphasis will be placed upon understanding ourselves as individuals, extending tli.it to an understanding of other people or men in general in the world in which we live, in order that we may see what is happening to people, what

people are doing, and the changes taking place in what people are doing—in order that we may compare our own personal feelings in terms of men in general.

Grade XI

In the eleventh grade an attempt will be made to secure an understanding of the meaning of democracy as a form of government and as a way of living, both for individual and for social planning: (i) by gaining an understanding of the continuing struggles of peoples to gain social, political, and economic democracy; (2) by gaining insights into the problems experienced by individuals in adjusting themselves and their social institutions to the changing conditions of life; (3) by gaining an understanding of the assets and liabilities of technological changes, which must be evaluated by the scientific method.

Grade XII

In the twelfth grade an attempt will be made to understand the changing character ol American and world culture in modern society and to become conscious of those forces which make continuous change necessary: (i) by appraising various political and economic philosophies and isms; (2) by developing an intellectual comprehension of various proposals for the reorganization of our economic and political institutions; by evaluating these in terms of society's needs and democracy's ideals; (3) by setting up adequate vocational and other personal goals and a functional philosophy so that each individual may contribute effectively to the economic, political, and cultural aspects of life.

It will be noted that during the first four grades there is emphasis on adjustment to the community. In grade V there is a contrast of the local community with the life of the former culture groups in the community. In grades VI through IX the focus is on experience with new technics, and in the senior high school it is on the social aspect of life.

The development of social competence involves more than a study of books on social problems. It means living and doing something about the problems studied. In the end we need to develop the capacity for intelligent action. We do not want the individual who, in the words of George Counts, "adopts an agnostic attitude toward every important social issue, who can balance the pro's against the con's with the skill of a juggler, who sees all sides of every question and never commits himself to any, who delays action until all the facts are in, who knows that all the farts will never come in, who consequently holds his judgment in a state of indefinite suspension, and who, before the approach of middle age, sees his powers of action atrophy and his social sympathies decay" (5:20).*

A desirable program of social education will seize upon the opportunities to participate in the life of the school and the community. Hanna has described a great variety of community activities of students in his volume *Youth Serves the Community* (8) . The thirteen authors producing the volume *The Community School* (7) interpret theory and describe practices in schools which stress student participation in community activities. There are many things students can do. They have studied the living conditions in their homes, found them

• Page 20 of reference 5 end of chapter.

not measuring up to the city regulations, and protested to the City Hall that landlords were violating the law. They have seen the need for more adequate playgrounds in cities and actively participated in getting community action in providing them. They have taken hold in a large city to reduce the destruction of life and property at Halloween. They have studied the merits of different forms of city government and spoken before community groups in support of the viewpoint they approved. Such activities are vital. They make a difference in the life of the community. Young people do not have to wait until they have a vote to become a positive force. They can study community needs. They can formulate plans for improvement. They can help to get the plans approved. The creative energies of youth should be utilized. Also participation of this type is the most effective form of education to develop social competence. The school has great potentialities for social education in providing opportunity for democratic living. Reading and discussions bearing on democracy may not influence behavior as much as participating democratically in the activities of the school. Historically the school has not been a democratic institution. The control has been autocratic. The social and intellectual elite have been given positions of special honor, and the basic underlying philosophy has been authoritarian.

Efforts to incorporate in the life of the school the best concepts of democracy have placed emphasis on the so-called extracurricular program. Student participation in school government, student monitors, and student courts, in which students share responsibility for shaping the extracurricular experiences, have all been in the direction of democratic social living. Less progress has

been made in democratizing the curricular life; yet some schools have made excellent beginnings in that direction. In such schools students plan their programs of study under guidance instead of being forced to take certain courses required of all students. Freedom to choose one's own goals and to plan activities leading to their attainment is one of the important elements in a democratic program. Democracy can be practiced also within the classroom. Students can share responsibility in planning the activity of the course and in evaluating results. They can have the experience of studying all viewpoints bearing upon a social question, of forming their own conclusions, and of dealing tolerantly with those who lorm different judgments. The intellectual climate under such a program is strikingly different from the situation where a single text is studied intensively as "truth" and the student is under compulsion to agree or pretend to agree with the teacher's judgments and attitudes. Democracv invokes freedom to do one's own thinking, to examine the evidence, and to make decisions.

The demon atic concept challenges the widespread use of the individualistic competitive technics for motivating school work. The placing of great stress on marks and special honois foi the few \sho can compete successfully is hardly democratic. Social democracy stresses the equality of the moral worth of individuals. The welfare of all must be kept constantly in mind. Students of all national, racial, and ability groups should have opportunity to make some contribution to the life of the school and to be accepted as important members of the social group. Recognition and evaluation of work should not be based on standards which can be met by only a

fraction of the students. The public school, with children from all cultural, economic, racial, and national groups, presents excellent opportunities for democratic social living.

For a school to be a laboratory for democratic living, it is important that the administration be democratic. Teachers should have a part in shaping the policies of the school. Much progress has been made in this direction. Some organizations of teachers have demanded a voice, and many school administrators have recognized the wisdom of participation by teachers in planning and operating the educational program.

The importance of the staff in the operation of a school program justifies an additional statement. The staff should have democratic social sympathies. Their social orientation is probably more important than some of the procedures treated in this chapter. If they admire the "efficiency" of the dictatorships, lack faith in the common man, and have strong negative reactions to racial or national groups, their teaching will probably not support democracy.

Teachers should have judgments on social questions, but these judgments should be reasonably tentative. A "closed mind" is an obstacle to good teaching as it prevents a reasonably judicial examination of all important data and viewpoints. It is probably desirable also to have variation in the social thinking of the staff. Such variation provides for stimulating interaction of ideas within the staff. It also aids in avoiding the acceptance of important social policies without critical examination. If the staff are all of one mind, public opinion within the school can become so powerful as to regiment the thinking of individuals. Under such conditions only the most

daring would present ideas contrary to the accepted ideas. There is value in having on the staff both teachers who are conservative in their social outlook and teachers who are liberal. All should be students of social problems and able to assist youth in the critical study of social issues.

Teachers should be responsible citizens, taking part in the life of the community. Through such experience they can maintain a realistic conception of existing social conditions and of the problem of social improvement. This activity should be on a dignified level, representing the type of civic participation which should be stressed in the social education program.

Participation by teachers in civic affairs may lead to opposition of individuals and groups in the community. The history of American education contains numerous instances of pressures on administrators and teachers to withdraw from community activities. Teachers have been dismissed because of activities objectionable to influential individuals and groups. While some of these disturbances reflect the opposition-arousing methods sometimes employed by the teacher, others represent real interference with entirely legitimate activities of the teacher. Educational organizations have an important function in protecting the rights of teachers. They have already made some contributions to this end although they have not been as militant as some teachers desire them to be.

The security of the teacher of the social studies is sometimes affected also by his activities in the classroom. Many of the social issues studied in school are highly controversial, and powerful individuals and groups in the local community and in the nation are pressing for

social action in harmony with their thinking and interests. They recognize the importance of the program of social education for more than 20,000,000 students in the schools of the country in influencing developments in the period ahead. Consequently the policy to be followed in handling the important controversial issues is of great significance in a program of social education.

While space is not sufficient to allow a full analysis of this important question, certain desirable policies can be noted. The important social problems should be studied in the school. The maturity and experience of the student should be recognized in the selections of problems for study. Young children should not be asked to study complicated national and international questions. Local questions in the school and community are studied by younger children. Broader social issues can be dealt with as students mature and as they secure greater insight into social conditions and processes.

In the study of controversial questions it is desirable to have all important facts and viewpoints considered. For instance, in the study of the relation between management and labor, books, magazines, and pamphlets produced by both groups should be read. The ideas and facts should be analyzed and checked. The writings of university scholars should be considered. Proposals for the improvement of the relations between management and labor should be studied. Existing conditions and proposals should be related to a democratic social philosophy. In all of this study there should be a reasonable objectivity, with critical examination of all important materials, and freedom for students to do their own thinking and to form their own conclusions.

The role of the teacher in the study of highly con-

troversial issues is a delicate one and is difficult of description in a brief statement. In the analysis of democratic social values, of social conditions and problems, and of proposals for the improvement of society the teacher is concerned with the development of a balanced understanding, capacity for critical thinking, loyalty to democratic social values, and disposition to action after carclul study. The teacher has of course formed judgments on many important social questions. He could undertake to make a case for his own position and sell his ideas to the students, not subjecting his own thinking to rigorous analysis. Such a policy is not desirable. He should make a sincere effort to have a fair presentation of the viewpoints different from his own. When a tcachci who is reactionary associates mild liberalism with communism and attacks it as un-American, he is tempeiamentally not fitted to be a teacher of the social studies. A teac hci who is ladical and has a violent hatred of those doing conservative thinking is equally unqualified for effective teaching. While it is not possible for a teacher to pi event Ins own social judgments from influent ing his analysis of social issues, he should attempt to scenic a balanced ticatincnt of social problems with fair ticatincnt of viewpoints different from his own. Ceitamlv he .should avoid questioning the motives and giving uncomplimentary labels to those who differ with him.

The influence of the teacher's own personal social philosophy on institution gives support to a recommendation presented earlier in this chapter, that there be variation in social viewpoint among the faculty. In the past most faculty groups have been unbalanced on the side of conservatism. The proportion of liberals is

usually much smaller than that for conservatives, and one seldom finds a radical teaching in the public schools.

There is some controversy in the present period over the question of desirability of teachers affiliating with labor to secure their support for the schools and to assist labor in their struggle to improve their status. Extreme statements are made for and against this development. Some contend that such a movement is un-American, lowers the status of the teacher, and makes the school a class school. Others argue that the labor group is the only group which has really supported public education, that realistic social education will arouse the opposition from powerful minorities when their interests are threatened by revealing study by students, and that only by affiliation with a large social group such as organized labor can teachers be supported in a desirable program of instruction in the social field.

In the large city, where the political machine sometimes controls schools for the welfare of the political group, to the detriment of the educational service, and where many of the powerful social and economic elite send their own children to private schools to escape from the public schools they consider unsatisfactory for their own children, there is experience to support the proponents of affiliation with labor. In the city, labor is sufficiently organized to have great power and hence is able to influence by vote and by pressure the action of those purporting to control education. Under conditions like those which existed for a time in Chicago, it is not difficult to justify collaboration with a social group with sufficient power to help keep the schools open. On the other hand one should not generalize too freely from instances such as this. In many American communities,

affiliation with organized labor would greatly weaken the position of the teacher groups and weaken the public confidence and support of the schools.

Some teachers will be impatient with the action of state arid national educational organization. What will satisfy the larger professional group will not make a minority contented. When one considers the wide variation in educational and social thinking by more than a million educational workers, difficulty of satisfying the demands of all in the program of a single organization is to be expected. It is not necessary for all teachers and administrators to adopt the same strategy. Many will not want to affiliate with labor; others will. Many will join the state and national organizations and feel that they can work best through the general professional organizations. Many will join a vaiiety of social groups and as individuals will influence the action of the group with reference to education.

There is a tendency on the part of some to conclude that the strategy they consider to be wisest is the only desiiable one and that all in the profession should pursue a like course; they even at times severely condemn those who think and act differently. Such a position is not justified. Many approaches might appropriately be made. It is important, though, that there be sufficient organization of the profession to define and support a sound educational policy and to aid and defend teachers in carrying out such policies. As the instruction in the social field becomes more vital, there will probably be greater need for such support.

The rapidity of social change and the extent of social lag stressed in earlier chapters in this volume cause social inventiveness to be an important objective of a program

of social education. The need of developing a program which stresses creativity is so great that the remaining section of this chapter will be given to a treatment of the elements which are favorable to achieving creativeness by students.

The emphasis on history in all phases of the curriculum has not been favorable for building creativity. In fact, students have sometimes been so much impressed by the importance attached by schools to the achievements of the past that they are led to deprecate the great achievements of the present generation. In literature, students have usually studied the masterpieces of an earlier period and rather completely ignored the literature which interprets the culture in which they now live. Creative writing has quite generally been neglected. In art the paintings of the great masters have frequently claimed attention. Modern art has received little consideration, and creativity in art has frequently not been encouraged. In music the great compositions of Bach, Beethoven, and Brahms have been studied. Modern music has frequently been considered not deserving of recognition in the educational program. In the social studies the dominant emphasis has been on the past, with little attention given to contemporary social problems.

The situation in many schools is not as dark as that described in the preceding paragraph as there has been considerable shift in emphasis in recent years. Modern literature is now being read, and creative writing is encouraged. Wright and Neutra are recognized in architecture as well as the historical developments in Greece and Italy. Modern art is studied, and students are encouraged to express their own feelings and ideas.

Contemporary social problems are given large recognition, and importance is attached to the social experience that occurs in the lives of students in the school and community.

This shift from a study and acceptance of the past to one of building insight into the present with a disposition to try to create a better future is a profound transition. The new position is forward-looking in its orientation. It does not ignore the past, but it does not place the present and future in bondage to the past. It utilizes the past in building an understanding of the present and of some of the possibilities of the future. The focus, however, is placed on securing intelligent and creative living. Students are helped to secure a realistic appreciation of the achievements and inadequacies in modern life. They are helped to define ideals and to dream dreams of a finer culture with a disposition to action to achieve it.

H. *G.* Wells, in his volume *A Short History of the World,* describes developments in Greece when Plato was chief among the young men who taught philosophy in the grove ol the Academy. Wells points out that "he [Plato] was the first man to write an Utopia, that is to say the plan of a community different from and better than any existing community. This shows an altogether unprecedented boldness in the human mind which had hitherto accepted social traditions and usages with scarcely a question. Plato said plainly to mankind: 'Most of the social and political ills from which you suffer are under your control, given only the will and courage to change them. You can live in another and a wiser fashion if you choose to think it out and work it out. You are not awake to your own power'" (16:98-99). Wells con-

tinues: "That is a high adventurous teaching that has still to soak in to the common intelligence of our race" (16:99). Such a creative conception is at the present time gradually infiltrating thought and practice in social education.

Advocates of the historical approach to social education are fearful lest the emphasis here defended will lead to an ignoring of the great achievements of the race. There is doubtless some danger of such an undesirable outcome. But nothing could be further from the intent of this statement. The present can be well understood only by noting its origins. Certainly the potentialities of the future cannot be judged wisely without reference to the present and the more immediate past. On these last two points there is no quarrel. The differences of judgment exist in the extent of emphasis. Surely there is not valid claim for all the materials commonly included in the history courses in the elementary and secondary schools. The issue is not whether the historical materials should be used in a program in social education. All agree that they should. But on what basis should the materials be chosen? What use should be made of materials after they have been selected?

If space were adequate, other important elements in a program of social education to develop social inventiveness could be analyzed. A fully comprehensive statement should include reference to freedom of thought and expression by students, study of controversial questions with opportunity to read materials written by representatives of all important viewpoints, elimination of concentration on a single text and substitution of a wide variety of reading materials, study of the major criticisms of modern society and the proposals of social re-

formers, and flexibility in the life of the school with opportunity for students to participate in planning the class and extracurricular activities.

Social inventiveness is of great importance, and the educational program should be constructed with it as a prominent objective. Yet it must be conceded that the typical school today is not adapted to the development of social creativity. Some progress has been made, but much yet remains to be done.

As teachers and administrators undertake the task of gradually making the program of social education more functional, they will appreciate the creative nature of the undertaking. Even under the most favorable conditions there will be obstacles and discouragement. At other times there will be satisfying accomplishments. The experience will at times probably not be very unlike that reported by J. B. Priestley in *Midnight on the Desert* (13:50) as he was completing a novel. He indicated that it was not quite the novel he planned. "It was as usual a wretched compromise between my fine ambitious plan and my modest ability as a novelist. When the last word would come to be written, the workman, who had been compelled to keep his nose down to it all winter, would be pleased, but the artist in me, who hopefully does the initial planning, would by that time have quitted the scene in disgust. I have never written a work of any size and scope yet that did not seem to the better half of me simply a dreadful botched job, another failure. It is only years afterwards, when I have forgotten what the grand plan was, that I can take a peep at the thing and be surprised that it is fairly passable."

There is need of a well formulated plan in developing a program of social education. While the actual

achievement may fall short of the grand conception, advance will be guided and facilitated by the challenging objective.

BIBLIOGRAPHY

1. ALBERTY, HAROLD B., and BODE, BOYD H. (editors), *Educational Freedom and Democracy,* second yearbook John Dewey Society; D. Appleton-Century Company, New York, 1938
2. AMERICAN HISTORICAL ASSOCIATION, Commission on the Social Studies in the Schools, *Conclusions and Recommendations;* Charles Scribner's Sons, New York, 1934
3. BEARD, CHARLES A., *The Nature of the Social Sciences in Relation to Objectives of Instruction;* Charles Scribner's Sons, New York, 1934
4. ———(editor), *The Unique Function of Education in American Democracy;* Educational Policies Commission, National Education Association, Washington, D. C., 1937
5. COUNTS, GEORGE S., *Dare the School Build a New Social Order;* The John Day Company, New York, 1932
6. DEPARTMENT OF SUPERINTENDENCE, *The Social Studies Curriculum, Fourteenth Yearbook;* National Education Association, Washington, D. C., 1936
7. EVERETT, SAMUEL (editor), *The Community School;* D. Appleton-Century Company, New York, 1936
8. HANNA, PAUL R., *Youth Serves the Community;* D. Appleton-Century Company, New York, 1936
9. KILPATRICK, WILLIAM H. (editor), *The Teacher and Society,* first yearbook John Dewey Society; D. Appleton-Century Company, New York, 1937
10. KIMMEL, WILLIAM G., *Instruction in the Social Studies,* Bulletin, 1932, No. 17, "National Survey of Secondary Education," Monograph No. 21; U. S. Government Printing Office, Washington, D. C., 1933
11. KReY, A. C., *A Regional Program for the Social Studies;* The Macmillan Company, New York, 1938
12. MARSHALL, LEON CARROLL, and GOETZ, RACHEL MAR-

SHALL, *Curriculum Making in the Social Studies, a Social Process Approach;* Charles Scribner's Sons, New York, 1936
13. PRIESTLEY, J. B., *Midnight on the Desert;* Harper and Brothers, New York, 1937
14. RUGG, HAROLD (editor), *Democracy and the Curriculum;* D. Appleton-Century Company, New York, 1939
15. TRYON, ROLLA M., *The Social Sciences as School Subjects;* Charles Scribner's Sons, New York, 1935
16. WELLS, H. G., *A Short History of the World;* Penguin Books Limited, London, 1937
17. WESLEY, EDGAR BRUCE, *Teaching the Social Studies; Theory and Practice;* D. C. Heath and Company, New York, 1937

XIV

EVALUATION IN A PROGRAM OF SOCIAL EDUCATION

Alvin C. Eurich

NEXT to our egocentric interest, no other interest absorbs our attention so easily or for so long as our concern with the social activities of others. Even the interest in ourselves is largely a matter of appraising our actions in relation to the activities of others or to some social situation. Seldom are we concerned about ourselves in the abstract or as isolated individuals. We watch the Joneses, the Smiths, and the Browns. They travel to Mexico. They come back with exciting tales of their experiences—of what they saw and did. Gradually we acquire a feeling of inadequacy. We have not had similar experiences; we cannot meet them in conversation on the same ground. We long to go to Mexico. We begin to save for the trip. Within the next few years we are on the way. Similarly, as the Joneses, the Smiths, and the Browns buy new automobiles, new houses, and new clothes, we, too, desire the latest styles and conveniences. Our observations of their activities are constantly setting the patterns for our decisions and our actions. Through those observations we continuously modify and develop our standards of conduct and in the process the criteria by which we judge ourselves and others.

Curiously our educational programs did not develop

in terms of these dominant social interests. They grew, instead, with an emphasis upon subject matter and book learning. A dualism of functions arose. The schools were to develop the intellect while other agencies were to carry on the work of social education. But such dualism or split in functions was artificial, unreal in life. Within recent years therefore educators have attempted to correct the prevailing tendency. Today the schools are beginning to take cognizance of dominant social interests, as the present volume amply illustrates.

In view of this emphasis it is essential that more attention be given to the matter of evaluation in social education. To date little progress has been made in the development of new techniques that may be used for this purpose. In the social education area, as in other areas, we try to adapt the old techniques to a new concept. The first motor cars were horseless carriages; the motor was merely substituted for the horse. The radios, in appearance, were and still are the old talking machines. Likewise, as we evolve and put into practice our concepts of social education we continue to use old methods of appraisal and evaluation. We are just beginning to realize the inadequacy of these old techniques and instruments. We are beginning to see, too, that, as long as we continue to give the old tests and measurements the emphasis they have had in the past, our social education programs will remain relatively ineffective. As a matter of fact, it is almost axiomatic that whatever is stressed in programs of evaluation is likely to be the dominant emphasis of learning and instruction. As long therefore as the tests and measurements that are now used in schools continue to be the sole methods of evaluation* just so long are the schools likely to emphasize the

outcomes measured by these tests as the purposes of instruction.

The present tendency to turn from an emphasis upon tests and measurements to a concern about evaluation is particularly significant for social education. This is not to imply that tests and measurements have no value but rather that, as tests and measurements have been developed and used, they are too limited in scope for the purposes of appraising all the outcomes of a truly social education.

Evaluation, then, is here used to imply a broader scheme of value judgments than can be derived from the use of tests and measurements only. An analogous situation from the area of physical measurements might serve to clarify the point. One might have at hand a dozen pieces of tin all of which have the same length, breadth, and thickness: yet they may be quite unlike. Some may be painted, some may be rusty, and some may have polished tin surfaces. Some may be flexible, others rigid. Some may be of low grade quality, others of high grade. The extent to which the pieces are useful depends upon the purposes for which they are used. Likewise one may measure or observe the amount of social activity among individuals in a group. It is conceivable that two individuals could be found whose activities are similar in terms of amount. Yet in terms of direction or value to society the activities might be quite different. Viewing the matter more concretely, imagine two managers of public utility enterprises that are comparable as to production of power and area served. Suppose that one of the companies is privately owned and that the other is owned by a municipality. The first exists primarily to make a profit for officers and stockholders and only

secondarily to supply services to the public. The second company exists solely for the purpose of supplying power to the public. It is not interested in profits. Any appraisal of these companies or the activities of the managers must include more than a consideration of capital outlay, operating expenses, income, cost of power to the consumer, and efficiency of service. Any adequate appraisal must also consider the two different underlying philosophies. To the man who believes ardently in the profit system, the second company rates far below the first regardless of what the accounts show. To the man who advocates government ownership of public utilities, the second company is by far the better. In other words, there are values aside horn those expressed in quantitative teims. And it is precisely such values that need to be given greater emphasis in the evaluation of a program of social education. No mechanical scheme of appraisal can possibly be adequate. The underlying philosophy of the social education must also be the starting point for any evaluation program. In other words, the first essential element of evaluation in a program of social education is a *standard of values* or a *social philosophy.* Without such a philosophy, evaluation is a mechanical routine or ritual out of which emerges a set of unintelligible and meaningless data.

The second essential step in an adequate appraisal of social education involves the systematic observation of social behavior. It is at this stage where much difficulty is now being experienced. We have gradually developed a more social philosophy of education, but our observational techniques are still predominantly those that were developed in connection with an educational philosophy that made mental discipline the dominant purpose of

education. As a result, programs of evaluation for social education are inadequate for the reasons that are herewith given:

(1) The emphasis upon a few outcomes of instruction has meant the neglect of other outcomes, such as attitudes, social sensitivity, and the like, which are exceedingly important in social education.

(2) The emphasis upon objectivity and pencil-and-paper tests has meant that characteristics which become apparent only in human relationships have been largely ignored in appraising programs.

(3) The emphasis upon school marks and the improvement of such marks has thrown out of focus the importance of social values in contrast with academic values.

(4) The emphasis upon periodic testing, as at the middle and end of each semester, and the reliance upon records acquired at those periods ruled out observations of behavior that might be made continuously.

(5) The tests themselves frequently became the guide for instruction. With instruction limited in terms of what was being measured, there was no need for other observational techniques.

(6) The observations are almost exclusively teacher observations, with appraisal by associates or self-evaluation seldom a part of the picture.

These inadequacies of examinations for social education were well summarized by C. Delisle Burns (10:79) * in a chapter on examinations tor social needs of the modern world:

> Examinations, from one point of view, are tests of competence on entry into the world of occupations outside the

* Page 79 of reference 10 at end of chapter.

educational system. Their value as tests, therefore, is dependent upon the needs of that outer world for which education is assumed to be a preparation. And even those examinations which link together the parts of the educational system and form the tests of educability, are finally to be judged by reference to the end-product—the boy or girl or man or woman who is to be a railwayman or a textile worker or a doctor or a lawyer. By examinations we ought to discover how far the pupil has been made competent to take his place in the world—how far the educational system has succeeded, and also which person is best fitted for this or that place.

. . . And the tests of competence for a place in a new order are therefore likely to be different from those of earlier times (10:84) •

After considering some of the characteristics of the modern world and pointing out social changes, Mr. Burns turns in criticism upon the British examinations:

These examinations are largely memory tests by essay writing. They do not test most of what schooling has done; for example, sociability, or ability to play together or readiness in a mixed company. They test only book knowledge, which may be far less important than the other results of schooling for the modern world. Again, these examinations confuse two quite distinct questions: (a) whether the pupil is capable of further book learning and (/;) whether he is capable of taking up occupations outside the educational system.

Mi. Bums might just as well have been speaking of examinations in the United States. For the most part our tests are also confined to book learning, and by and large we tend to confuse the purposes for which examinations arc given.

Only as the basic philosophy of social education becomes clearer and as more comprehensive observational techniques are developed will the third phase of an evaluation program become adequate, namely, that of drawing generalization about the student or the program in terms of the actual observations made. It is clearly impossible to appraise the social development of a student without reference to the purposes of social education or without an interpretation of observations of his behavior in relation to those purposes. General impressions based upon casual contacts are quite misleading. When they serve as a basis for instruction, counsel, or advice, they may actually prove harmful. Clearly, then, if we as educators are as much concerned about social education as we say we are, we cannot ignore the task of improving the observational techniques which we use as a basis for determining whether our educational procedures are effective. Likewise, if we use our observations to evaluate the effectiveness of the program of social education, the observations must be adequate in representing the philosophy underlying such a program.

Basically the problem of evaluation in social education revolves around three questions: (i) What are the needs of society which education can and must serve? (2) What are the needs of the pupils for which education can and must provide? (3) What growth and development of the pupils is taking place as a result of their social education?

Although the last of these questions is the chief concern of this chapter, an answer can be derived only in relation to the first two, which have already been considered extensively in the preceding chapters of this

volume. In other words, before it is possible to observe the growth of pupils, the desirable and possible outcomes of social education must be formulated in terms of pupil behavior.

One of the most extensive analyses of what is implied by social behavior was made by Hilda Taba (i i) as part of the evaluation program of the eight-year study being conducted by the Progressive Education Association. The evaluation staff found that the schools were much concerned with "social understanding, social awareness, social responsibility, social sensitivity, and social attitudes." Miss Taba undertook the task of analyzing the type of behavior implied by these objectives taken collectively, for which she uses the term "social sensitivity." Her analysis of the behavior of pupils in relation to these objectives reveals the following component aspects of social sensitivity:

A. Dispositions contributing to social sensitivity
   1. A disposition to project oneself appreciatively and sympathetically into the lives, motives, and problems of other people and other groups
   2. A disposition to look under the surface of social phenomena and to discover the underlying conflicts and problems in social life contributing to the particular phenomenon
   3. A disposition to view social problems and maladjustments as capable of solution rather than to consider them as inevitable consequences of unchangeable circumstances or of human nature
   4. A disposition to consider the effects of one's personal actions as a member of a group upon the welfare of others
   5. A disposition to view difficulties of an individual

or a group as symptomatic of social maladjustments rather than as purely personal problems
6. A disposition to feel personal concern and responsibility for the solution of social problems
7. A disposition to act within the limits of one's ability on behalf of ideals and values

B. Abilities contributing to social sensitivity
1. Ability to perceive and identify problems and conflicts in social life
2. Ability to see relationships between specific social events and problems and their general social implications, between human problems and general social conditions
3. Ability to judge the consequences of social events, plans, trends, and action
4. Ability to project theoretical and actual solutions to social problems
5. Ability to apply techniques of intelligent thought and inquiry to social problems
6. Ability to formulate and to undertake sound action within the limits of one's capacity

C. Attitudes

Miss Taba recognizes further that social experience may involve either "face-to-face relationships" or "person-to-institutions relationships," neither of which can be ignored in any comprehensive effort to evaluate the social sensitivity of pupils. Although the generalized statements of dispositions, abilities, and attitudes, which Miss Taba illustrates well with samples of behavior, may seem somewhat abstract in outline form, it requires only casual study of them in relation to the types of measurements that have been utilized to recognize fully the inadequacy of most present-day evaluations of social

education. In the remaining portion of the monograph Miss Taba refers to some of the observational techniques that can be used in a broader and more adequate appraisal.

In a study concerned with the evaluation of the social competence of college students Carstater (i) secured ratings from fifty-four instructors in various phases of the social studies as to the importance of eighteen objectives for the evaluation of social competence. A summary of the ratings placed the objectives in the following order of importance:

1. Sense of social responsibility—attitudes toward personal rights and obligations as a member of a social group
2. Scientific attitude
3. Adaptability—tendency to react to social change
4. Information—acquaintance with significant acts and generalizations
5. Ideas of right and wrong
6. Ability to interpret investigations
7. Awareness of social action
8. Principles of interaction—knowledge of principles
9. Cultural allegiance—tendency to respect and adhere to or to minimize or break away from the cultural patterns and processes
10. Integration of social sciences—understanding of social processes
11. Record of participation
12. Ability to plan actions
13. Concepts—understanding of terminology
14. Method—understanding of the scholarly methods used in investigating social problems

15. Ability in persuasion
16. Utopian thought—acquaintance with and understanding of the literature on social idealism
17. Ability to plan investigations
18. Organization of the social sciences—understanding of the categories of thought and information

It is of considerable significance to note that college professors of social studies place information fourth in importance for social competence in the list of objectives. A sense of social responsibility, the scientific attitude, and adaptability are regarded as more important. Yet college programs of evaluation tend to give information the most important position. These ratings provide further evidence, if more is needed, to show that present appraisals ot social competence are lopsided and inadequate.

Although these analyses of ability developed through social education are not exhaustive, they include dispositions which nearly everyone who is concerned with the development of social competence would regard as important. Nevertheless, such analyses are not in themselves sufficient. The significant question still remains as to the types of observational techniques that can be used to evaluate student growth in relation to the objectives. The remainder of this chapter will be devoted to a consideration of a few of these which have been developed to the point where they are usable in practical situations.

The method most widely used in school situations for evaluating the results of social education is the pencil-and-paper technique. As already pointed out, this method was developed primarily to measure achievement in relation to the objectives emphasized in the

older education programs. As new objectives with a more definite social emphasis were added to the programs, the older techniques of evaluation persisted. Thus far at least the pencil-and-paper technique has proved to be most adaptable to the measurement of knowledge although some excellent progress has been made in recent years in adapting it to other objectives, such as the ability to apply knowledge, interests, attitudes, and personal adjustment.

In the early stages the written examination was largely of the essay or so-called "subjective" type. Then during the World War and particularly during the decade of the 'twenties considerable emphasis was placed upon objectivity and objective test items. Long and extensive arguments were carried on concerning the relative merits of objective and subjective tests. The battle is too well known among educators and laymen alike to merit further consideration here. As the smoke of the battle cleared away, however, it became increasingly evident that the arguments were rather pointless and futile. Although it was generally admitted that objectivity was desirable wherever it could be attained, the objective pencil-and-paper techniques were too limited to give an estimate of certain abilities and traits that were particularly important in a program of social education. If, for example, it is desirable to estimate the pupil's creative ability in writing, there is still no way to secure that estimate except in terms of a judgment of a sample of his writing. Likewise, if it seems desirable to get an estimate of the pupil's ability to co-operate with others in working out a particular problem, there is no pencil-and-paper test that up to now appears adaptable to the purpose. The best method available involves

getting an adequate sample of his behavior as a basis for forming a judgment. On any pencil-and-paper test the pupil may say that he believes in co-operation and that he generally co-operates well, but his statements may contradict his actual behavior. In this way the measurement of most of the objectives of social education differs from the measurement of knowledge. On an information test the pupil cannot respond correctly unless he knows or has memorized the information called for. On a test of social behavior, however, the student may respond with what he knows to be acceptable behavior rather than with a record of what he actually does. As a matter of fact, the whole school setting has encouraged verbal acceptance of the teacher's standard of desirable social behavior just as it has elevated the teacher to a position of authority with reference to events or facts.

Nevertheless some progress has been made in extending the scope of the objective pencil-and-paper tests. The evaluation staff of the eight-year study of the Progressive Education Association working under Tyler's direction has developed some useful instruments to measure various aspects of behavior, such as those relating to the interpretation of data. Summaries of the application of such instruments to the individual student reveal whether he recognizes true statements as true and false statements as false, whether he tends to be overcautious or extremely overcautious or go somewhat beyond the facts or far beyond the facts in his generalizations, whether he tends to judge statements as being in the direction of true or false when the data support an opposite direction, and whether he tends to judge statements as having a greater certainty of truth or falsity than the data justify.

Other tests developed as part of the Progressive Education Study reveal the extent to which the pupil will draw the correct conclusions and give the correct reasons for his conclusions regarding certain situations that he analyzes in terms of given premises. Still other tests of application reveal the extent of the student's ability to make reasonable predictions in a given problem, to recognize the important reasons which support the correct prediction, to distinguish facts from assumptions, to distinguish among a number of assumptions those which are necessary for proof, to select facts and relevant assumptions from a mass of relevant, irrelevant, and contradictory data and to organize them into a logical proof, and to recognize and to state the important assumptions which are critical in the acceptance or rejection of a conclusion. Attempts have also been made by the evaluation staff to secure through the use of questionnaires a record of the appreciation of pupils in the field of literature, arts, sciences, and foreign languages.

Likewise in the evaluation program at the General College of the University of Minnesota, which has been under way since the fall of 1932, considerable progress has been made in the development of objective instruments for measuring the student's ability to apply knowledge, to evaluate statements in terms of supporting evidence, to interpret the results of an experiment, to distinguish between fact, theory, and misconceptions, to evaluate generalizations and conclusions, and to judge expressions of art in music, literature, design, and the like.

These contributions are merely beginnings in an effort to make wider application of the pencil-and-paper technique. They show possibilities that until recently

have remained untapped. This brief summary serves merely to indicate that the pencil-and-paper technique has possibilities that have not been generally explored. Those interested in studying these developments further may go directly to publications reporting in more detail the results of these efforts (2, 3, 4, 5, 7, 8, 9) .* Insofar as social education is concerned with such outcomes as these, every promising lead should be followed until evidence regarding its merits and deficiencies are made available. It would be a mistake, however, to assume that just because the scope of pencil-and-paper techniques has been expanded, they will serve in and of themselves as adequate methods of appraisal.

Aside from these intellectual objectives or various aspects of thinking, which are certainly important in social education, there are other objectives concerning which the pencil-and-paper technique has been used in appraisal. Attitudes, for example, are generally regarded as exceedingly important in any social education program. During the last ten years especially much effort has gone into the problem of improving the techniques for measuring attitudes. Although there is not complete agreement as to the nature of attitudes, recognition of the fact that the term connotes an important concept is practically universal among psychologists and educators. Thurstone (12), who perhaps has worked more persistently on the measurement of attitudes than any other psychologist, regards the concept attitude as denoting "the sum total of man's inclinations and feelings, prejudices or bias, preconceived notions, ideas, fears, threats, and convictions, about any specific topic." Other psy-

• The tests prepared by the evaluation staff of the eight-year study can be secured by writing to the University of Chicago, Chicago, Illinois.

chologists—Allport, for example—take a similar view but express their interpretation more definitely as a general disposition to act.

Most of the effort to measure attitudes with the pencil-and-paper technique has been expressed in questionnaire form. This form generally includes a number of statements or opinions about a particular issue to which the pupil responds by indicating whether he agrees or disagrees or the extent to which he agrees. In Thurstone's scale on attitudes toward the Chinese,* for example, the pupil merely indicates whether he agrees or disagrees with such statements as the following:

1. I have no particular love nor hate for the Chinese.
2. I dislike the Chinese more every time I see one.
3. The Chinese are pretty decent.

Thurstonc and his students have prepared more than thirty separate and similar scales to measure attitudes towaul a wide variety of definite social issues. Others, such as Harper, Moore, Likert, Hartmann, and Remmers, have conducted extensive investigations using a modification of this technique.

The chief deficiency of the pencil-and-paper method for measuring attitudes arises from the fact that the student can determine while he is checking the statements which attitude he will express. If he thinks it is to his advantage to express a favorable attitude toward the Chinese, for example, he can readily do so even though his real attitude, which forms the basis for his actions, is not favorable. Also generalized statements may be ambiguous so that the pupil may be reading into them meanings which the author did not intend.

• University of Chicago Press

Mindful of these deficiencies, Pace (6) recently attempted to develop a measure of attitudes toward social problems by describing a number of specific social-political-economic situations and asking students how they would react to each. On this type of scale students find it more difficult to express an attitude which they think is expected of them rather than their real attitude, for in stating their reactions to definite social situations they are not always aware of the attitude they are expressing. No one response is indicative of the attitude; the pattern of all responses is the significant measure.

Even with this extension of the old attitude scales it is still clear that the pencil-and-paper technique will not in itselt suffice to give an index of real attitudes. Direct observations of behavior would obviously provide the best index of pupil attitudes, but such observations in extended form are not feasible. Sample observations, however, can be made to supplement and to verify or deny any expression of attitudes derived through the use of the questionnaire technique.

Similar efforts have been made to measure interests with the questionnaire or check-list form. The most successful and carefully worked out of these is that devised by Strong to measure vocational interests. This form has undoubtedly been more effective than the usual attitude scale because it has not been possible for students to indicate directly the vocation in which they are or think they are interested. The pattern of all specific interest indicates the general vocational interest. Taken in combination with other observations, the Strong Vocational Interest Blank* may prove to be a significant evaluative procedure in connection with social educa-

* Stanford University Press

tion. Other scales developed along similar lines, although less extensively, are available for recreational and play interests, scholastic interests, and reading interests. With these latter it is easier than with the Strong blank for a student to respond by designating interests which he thinks others wish to see in him rather than his real interests.

Numerous attempts have also been made to adapt the pencil-and-paper technique to the measurement of social adjustments. The Woodworth Personal Data Sheet is the oldest of these. The difficulties of arriving at an adequate appraisal of personal and social adjustments through "yes" and "no" answers to statements of psychoneurotic symptoms that are inherent in the Woodworth questionnaire have persisted in such later attempts as Thurstone's Personality Schedule, Bernreuter's Personality Inventory, Bell's Adjustment Inventory, and others. Such scales are at the present time primarily useful to the psychologist for designating problems or areas which require further study and exploration. They have relatively little practical value in their present form for the teacher in a program of evaluation of social education. The limitations of the pencil-and-paper tests for observing the more intimate reactions of the individual may prove to be an insurmountable barrier to the use of such instruments in practical school situations.

A review of the pencil-and-paper technique for evaluation in social education leads to the conclusion that the written exercises, either the essay or short-answer type, are most useful in evaluating various aspects of thinking and in obtaining a picture of pupil interests. They have value but are less dependable for measuring attitudes. And up to the present they have little practical value

for ascertaining the intimate personal and social adjustments which might result from a program of social education.

Fortunately there is no need to depend solely upon written exercises in an evaluation of social education. Various types of records can be obtained through direct observation of behavior. The rating-scale technique was developed to obtain a systematic record of impressions that are gained by teachers or others through direct contact with the boy or girl whose personality is to be evaluated. Such scales recognize that no one person has sufficient contact with a given pupil in a wide enough variety of situations to make an adequate appraisal. Contact with the pupil over a period of time and in different social situations gives one a better basis for evaluating the growth brought about through an emphasis upon social education. The most widely used and perhaps best known of the scales for rating behavior is the Haggerty-Olson-Wickman Behavior Rating Schedule,* from which the following item is taken to illustrate the technique:

How does he accept authority?

Defiant	Critical of Authority	Ordinarily Obedient	Respectful, Complies by Habit	Entirely Resigned, Accepts all Authority

It is assumed that the rater has had sufficient contact with the pupil to make a judgment on the trait in question in terms of his direct observations. Work with such scales has shown that their accuracy can be improved considerably through specific directions for making the

* World Book Co., Yonkers-on-Hudson, New York.

ratings. These scales have much value in appraising social education because through their use it is possible to pool a number of judgments concerning the child aside from those made directly by one teacher or through the pupil's responses to a given test.

The time-sampling technique developed by Olson is likewise useful in obtaining a record of direct observations. Olson has characterized the technique as "the *systematic recording* of a definitely *delimited unit* of behavior described in terms of action over a *stated time interval* yielding *quantitative individual scores* by means of *repeated time units."* In other words, a teacher might observe the extent to which children exhibit social behavior such as laughter. With the time-sampling technique he might make twenty observations of five minutes each. If one child is observed laughing during each of the twenty five-minute periods, his observational score is 20. If another child laughs during only one of the five-minute periods, his score is i. Clearly there is a difference in the extent to which the two children laugh, and the difference is expressed quantitatively. To be sure, the adequacy of such observations depends upon the conditions under which they are made and on the period of time over which they extend. They have an advantage over most evaluative techniques in that they provide records of direct observation of behavior under normal conditions. In the use of the technique it is not necessary to set up an artificial situation. Although the method has been used primarily with young children, it is promising enough to warrant trial at upper levels. Such social characteristics as aggressiveness, anger, attention, co-operation, fighting, friendship, language, laughter, and play behavior have already been studied with the

time-sampling method. Of the newer testing techniques it is at the present time the most promising and the least explored.

The anecdotal method is also valuable as a technique for securing an appraisal of the developing personality as a result of social education. Unlike the rating scales and time-sampling technique, the anecdotal records do not yield numerical scores. There is no reason, however, why every observational device should supply the same type of record. In the effort to get numerical scores from all measures, many important traits to which social education has contributed have been overlooked. How absurd we would regard the activities of a tailor who attempted to cut cloth for a suit only on the basis of numerical values derived from measuring the arms, the legs, the chest, and so on! In addition to such measurements, we expect him to use a pattern so that the suit will be designed according to our wishes. We also expect him to secure our judgment concerning the color and texture of cloth he is to use. In other words, in getting the total picture before he begins to cut the cloth, he assembles his objective measurements, various subjective judgments, and his knowledge of us—our occupation, our habits, and our desires. Bringing all these elements together, he is able to produce a suit that is satisfactory to us.

A child is much more important than a suit of clothes. And most certainly the education of a child is a much more complex and significant task than that of tailoring. Why, then, should we expect to take short cuts in appraising a child's development that we would not think of taking in tailoring a suit of clothes? It has been largely because of our desire to take short cuts and place

wholly quantitative reports on our record cards that we have neglected to use the anecdotal behavior accounts. We have looked upon them as descriptions—not knowing quite what to do with them. In the process we have forgotten that many of the impressions and judgments we form concerning the personalities with whom we come in contact are less accurate than written behavior records would be. If anecdotal records are confined to brief accurate descriptions of behavior without interpretations or with any interpretations that are given definitely designated as such, the accumulation of these descriptions throughout the elementary grades, the secondary school, and the college is much more likely to yield a record of the outcomes of social education than a combination of all the various attitude tests and personal data sheets combined. But fortunately, again, it is not a question of either-or; it is, rather, a question of multiplying many observations made with a variety of techniques and devices.

In the long run school records might be improved considerably if dictaphones were available to all teachers, who at odd moments during the day might dictate descriptions of typical and unusual behavior of children whom they are attempting to guide toward a fuller and more complete social life and personal adjustments. Such records would serve a number of noteworthy purposes: (1) They would yield a more complete record of the developing personality than is ordinarily supplied with test scores, school marks, and teachers' ratings. (2) They would tend to develop the observational abilities of teachers, who in time would become much more discriminatory in the behavior they regard as significant. (3) They would furnish clews for the de-

velopment of new observational techniques, for which at the moment there is dire need in any evaluation of social education.

In view of the trends since the development of objective measurement devices, it cannot be said too often that no single technique can possibly be adequate for estimating all the directions of growth as a result of social education—or, for that matter, any aspect of education. The best evaluation projects include as many devices as possible, not merely for the sake of including a variety of techniques but also to observe achievement or growth in relation to the numerous objectives of a broad educational program. Such a concept of evaluation permeated Wrightstone's (15) appraisal of experimental high school practices. He admitted at the outset that there were some major objectives of the newer programs for which there are no adequate methods or instruments for collecting reliable evidence. His instruments of appraisal, however, touched upon broader aspects of behavior than are usually considered. They included the following:

A. Intellectual factors
    1. Recall or recognition of facts, concepts, names, dates, and so on, in social studies, natural sciences, mathematics, languages, and arts
    2. Obtaining, organizing, and interpreting data in social studies and natural sciences
    3. Applying generalizations to events in social studies and natural sciences

B. Dynamic factors
    1. Civic beliefs and attitudes
    2. Science beliefs and opinions

3. Personal adjustment attitudes
4. School and social adjustment attitudes

C. Social performance factors
1. Self-initiated activities
2. Co-operative activities
3. Recitational activities

D. Physiological factors
i. Physical fitness index

Throughout Wrightstone's study emphasis was placed upon qualitative aspects as well as quantitative. Observers made notes of sample situations, activities, experiences, and expressions of each pupil. At present similar observations are being extended in connection with the eight-year study of the Progressive Education Association. Already the emphasis is being felt in schools throughout the country. Now for the first time schools are beginning to do more than merely talk about the development of social characteristics; they are actually going out to observe whether such characteristics are being developed. The dynamic aspects of this emphasis will be felt tor years to come.

It is evident that evaluation in a program of social education must not only be formulated in terms of the objectives but must also be as continuous as the program itself. The old "spotlight" approach, which consists of giving an intelligence test at the beginning of the year, several achievement tests at the middle and end of each semester, with an occasional "personality" test thrown in just because "it seemed the thing to do," is not adequate for social education. As a matter of fact, it is not adequate for a subject-matter education. Evaluation for social education must be more than that.

It must include observations made continuously from the beginning of the year until the end. No significant development in the child should go unobserved; every evidence of growth should be as significant as the infant's first use of the word "daddy" or "mama." The eagerness exhibited by parents in watching all activities of their child as he begins to walk or talk should be characteristic of teachers, for whom the process of education is more than a routine business. Every significant observation of behavior should become a part of the total picture of each child. No simple observation or no single test record should become so all-important as to obscure from view other important aspects of behavior. Like education itself, evaluation, to be adequate, must be a continuous process.

Finally, to be effective, the child himself should play a significant role in the process. As a member of society he is constantly expected to evaluate his own activities and judge their significance with reference to the welfare of the group of which he Is a member. By and large his appraisal determines the course of his behavior. Teachers attend lectures, read books, go to summer school, and travel because they have evaluated themselves with reference to some goal or purpose. Likewise, practically every member of society appraises his abilities and training each time he undertakes a new task. Self-evaluation or self-appraisal is thus a most significant activity as part of the social or community life. This aspect of social education has been almost completely ignored. We have assumed that the teacher must do all the evaluating. Throughout the child's life in school the teacher or administrator does the evaluating, and then we expect the student upon graduation to assume the task of self-

appraisal. If social education is to be effective, it must involve the development of the habit of self-evaluation. At this point evaluation and social education are one and the same process.

It is encouraging to see a number of programs already in operation which emphasize self-evaluation. At Central State Teachers College in Mt. Pleasant, Michigan, student self-appraisal is a significant part of the evaluation program. At Stephens College each girl, in consultation with a counsellor at the beginning of the year, charts her needs for development. At the end of a six-weeks period she returns to the counsellor to report on her growth in relation to the needs. If her growth has not been noticeable to herself, she continues her efforts to develop further. Every sixth week throughout the year she appraises her development in relation to felt needs. For her, too, self-appraisal becomes a continuous process, so that when she completes her college course she is not faced with the necessity of appraising herself for the first time in relation to a social group. She has already developed constantly growing standards of values.

All methods of evaluation including self-appraisal are important, to be sure, but none is so significant as the product of social education—the man and woman living as integral parts of a social group. Ultimately, therefore, evaluation must be concerned with following up the graduates of a school. Are they adjusted vocationally? Do their lives show that they are living effectively as members of a family group? Do they participate intelligently and with understanding in the socio-civic affairs of the community? Are they extending their social education and their critical self-evaluation so that they

are constantly becoming more effective? Questions such as these need to be answered by an adequate evaluation of social education. Such evaluation is extensive; it is not fixed by a few figures or by limited techniques; it is as broad as life itself.

BIBLIOGRAPHY

1. CARSTATER, EUGENE D., *The Contribution of Concept Materials to a Comprehensive Examination in the Social Studies at the College Level,* a Ph.D. thesis, University of Minnesota, Minneapolis, unpublished, 1937
2. COMMITTEE ON EDUCATIONAL RESEARCH, University of Minnesota, *Studies in College Examinations,* 1934 (now out of print)
3. EURICH, ALVIN C., "A Cooperative Project," *Journal of Higher Education,* VI, 480-487, December, 1935
4. ——, "Research That Improves Instruction," *Harvard Educational Review,* VII, 176-183, March, 1937
5. EURICH, ALVIN C., JOHNSON, PALMER O., *et. aL, The Effective General College Curriculum as Revealed by Examinations;* University of Minnesota Press, Minneapolis, 1937
6. PACE, C. ROBERT, *The Relation of Liberal Conservative Attitudes to Knowledge of Current Affairs,* a Ph.D. thesis, University of Minnesota, Minneapolis, unpublished, 1937
7. RATHS, Louis E., "Appraising Some Aspects of Student Achievement," Chap. Ill, 37th Yearbook of the National Society for the Study of Education, *Guidance in Educational Institutions;* Public School Publishing Company, Bloomington, 111, 1938
8. ——, "Evaluation in the Secondary School," *California Journal of Secondary Education,* XIII, 137-162 (March, 1938), and XIII, 201-219 (April, 1938)
9. ——, "Evaluating the Program of a School," *Educational Research Bulletin,* Ohio State University,

Columbus, XVII, 57-84 (March 16, 1938), and others of these bulletins
10. SADLER, MICHAEL, and others, *Essays on Examinations,* International Institute Examination Enquiry; The Macmillan Company, New York, 1936
11. TABA, HILDA, "Social Sensitivity," *Evaluation in the Eight-Year Study,* Progressive Education Association Bulletin No. 6; Ohio State University, Columbus, 1936
12. THURSTONE, L. L., and CHAVE, E. J., *The Measurement of Attitude;* University of Chicago Press, Chicago, 1929
13. TYLER, RALPH, *Constructing Achievement Tests;* Bureau of Educational Research, Ohio State University, Columbus, 1934
14. WOOD, HUGH B., "Planning a Program of Evaluation," *Curriculum Journal,* VIII, 355-359 (March, 1937)
15. WRIGHTSTONE, J. WAYNE, *Appraisal of Experimental High School Practices;* Bureau of Publications, Teachers College, Columbia University, New York, 1936