

UNIVERSAL
LIBRARY

OU_148570

UNIVERSAL
LIBRARY

OUR-881-5-8-71-15.000

OSMANIA UNIVERSITY LIBRARY

Call No.

301/E4717

Accession No.

1354

Author

Title

This book should be returned on or before the date last marked below

DUKE UNIVERSITY PUBLICATIONS

METHODS IN SOCIOLOGY
A CRITICAL STUDY

METHODS IN SOCIOLOGY

A CRITICAL STUDY

BY

CHARLES A. ELLWOOD

Professor of Sociology in Duke University. Author of "The Psychology of Human Society," "Cultural Evolution," "Social Problems—A Sociology," etc.

WITH AN INTRODUCTION

BY

HOWARD E. JENSEN

Professor of Sociology in Duke University. Author of "Social Progress and Christian Ideals" (Part IV)



DUKE UNIVERSITY PRESS

DURHAM, NORTH CAROLINA

1933

**COPYRIGHT 1933
DUKE UNIVERSITY**

**THE PRESSES OF
THE SEEMAN PRINTERY INCORPORATED
DURHAM, N. C.**

CONTENTS

CHAPTER	PAGE
INTRODUCTION BY HOWARD E. JENSEN.....	ix
I. THE WORK OF THE SOCIOLOGIST.....	3
II. SCIENTIFIC METHOD AND PHILOSOPHICAL PROCEDURE IN SOCIOLOGY	11
III. OBJECTIVISM IN SOCIOLOGY	28
IV. THE INADEQUACY OF BEHAVIORISM IN THE SOCIAL SCIENCES	46
V. SCIENTIFIC METHOD IN SOCIOLOGY.....	67
VI. OBSERVATION AND THE SURVEY METHOD IN SOCIOLOGY	85
VII. THE USES AND LIMITATIONS OF THE STATISTICAL METHOD IN THE SOCIAL SCIENCES	100
VIII. SOCIOLOGY, HISTORY, ECONOMICS, AND CULTURAL ANTHROPOLOGY	114
IX. THE SOCIOLOGICAL BASIS OF ETHICS.....	128
X. THE SOCIOLOGICAL BASIS OF LAW AND GOVERNMENT	150
XI. THE SOCIOLOGICAL BASIS OF SOCIAL WORK..	162
XII. THE SOCIOLOGICAL BASIS OF THE SCIENCE OF EDUCATION	177
XIII. THE EDUCATIONAL THEORY OF SOCIAL PROGRESS	190

ACKNOWLEDGMENT

The chapters of this book, with the exception of the Introduction by Professor Howard E. Jensen, have appeared in whole or in part as articles in *Social Forces*, *The American Journal of Sociology*, *The Scientific Monthly*, *Science*, *Education*, *The Survey*, *The Historical Outlook*, *The Green Bag*, and *The International Journal of Ethics*.

INTRODUCTION

FOR more than thirty years the author of this volume has been an indefatigable contributor to the literature of sociology. His publications have covered a wide variety of topics, ranging from concrete investigations of local social conditions to the most fundamental problems of sociological theory. From these works there emerges a well formulated and consistent methodological standpoint in American Sociology.

All contemporary sociologists are agreed that sociology, as distinguished from social philosophy, must be developed by the methods of empirical science, that is, by accurate observation and description of phenomena and by the formulation and testing of hypotheses to explain the facts described. But at this point they divide into two major methodological schools. One school holds, with the author of this book, that sociology is an autonomous science. It must make whatever assumptions, formulate whatever postulates, develop whatever conceptual systems, and adopt whatever research techniques its data may require. The sociologist may and should learn much from his studies in the methodology of the physical and biological sciences; he may and should

adapt their methods of quantification and experiment wherever they are applicable to his problems and materials, but he must not be limited by them. In proportion as his data are different, he must be left free to develop a different methodology,¹ content ultimately to leave to philosophy the task of criticism and synthesis of the methods and results of the various sciences into an organic unity of all knowledge.²

The second, and perhaps at present the most popular, school holds that social phenomena are natural phenomena, and that scientific sociology must confine itself to methods analogous to those employed by the natural sciences. Unfortunately, the word "natural" in this context is an ambiguous term. If it is used, as by some writers, merely to emphasize the fact that social phenomena come within the range of common experience or have to do with objects and events occurring in the order of nature, and that they require for their fruitful investigation a dispassionate testing of hypotheses by accurate observation and logical reasoning, there can be no objection to this view. But the methodological school which takes its stand upon this principle, while varying greatly within itself as to the exact connotation of the term *natural*, intends in some man-

¹ For a similar position in social psychology, see Kimball Young, "Method, Generalization and Prediction in Social Psychology," in *Publications of the American Sociological Society*, Vol. XXV, No. 2 (May, 1933), pp. 33 f.

² See A. N. Whitehead, *Process and Reality*, chap. I.

ner or degree to equate the social with the physical, to emphasize the greater significance of "objective" or external as opposed to "subjective" or mental data, and to imply that only as sociology is successful in employing methodological assumptions and developing research techniques which are in general analogous to those developed by the physical sciences does it free itself from the swaddling clothes of philosophy and take its rightful place among the sciences.

Among sociologists who have taken this position the thorough-going behaviorists have developed the most coherent and consistent body of postulates and techniques considered as a methodological system, however contradictory of man's conscious experience they may appear to be. But here again meanings are uncertain. Because of the great popular vogue of the term, many psychologists have hastened to call themselves behaviorists who mean nothing more than that "psychology is the positive science of human conduct or behavior"³ or that the laboratory methods employed in the study of animal psychology should be pursued as far as possible in the study of the human subject. Similarly, sociologists have called their work "behavioristic" merely to indicate that they have based it upon as accurate observation of

³ This definition was advanced as early as 1904 by William McDougall, *bête noir* of the behaviorists, and is still defended by him as the best brief definition. See his "Experimental Psychology and Psychological Experiment," in *Character and Personality*, Vol. I, No. 3 (March, 1933), pp. 202 f.

human beings in association as lay within their power.⁴ But in this sense "we are all behaviorists now," and the word ceases to have meaning.

A strictly logical behaviorism bases itself squarely upon the physical sciences and pursues its researches exclusively by the use of physical science methods, with an ultimate view to explaining human conduct, whether individual or social, in purely physico-chemical terms. Stimuli are physico-chemical objects or processes external or internal to the organism, which impinge upon the "receptors" or sense organs and set up physico-chemical reactions which are transmitted through the neurones to "effectors" in the muscles and glands, whose integrated responses collectively constitute the behavior of the organism. Behaviorists may admit that we are conscious of a series of mental events, sensations, percepts, images, concepts, affects, and so on, which accompany the physical series, but they insist that scientific psychology can deal with the physical series alone, since these alone can be observed and measured, actually or potentially. Although it may be necessary at times to employ words which imply conscious states, this is regrettable and should be

⁴ E.g., Jerome Davis and Harry Elmer Barnes (editors), *An Introduction to Sociology: A Behavioristic Study of American Society*, little of which is behavioristic in any clearly defined sense. So little is the second editor committed to behaviorism that in his *New History and the Social Studies* he proposes that historical biography and cultural and institutional history be rewritten in the light of psychoanalytic concepts. History, if thus rewritten, would undoubtedly gain in vivacity more than it loses in objectivity!

avoided wherever possible. "We have beforehand decided," writes Max F. Meyer,⁵ "to reject all terms that have a subjective meaning, that refer to consciousness . . . for the same reason we avoid here . . . the use of the term sensations. It is far better to use the term excitations, which has no subjective meaning. Speaking later in detail of the functions of the several senses, again it will not be advisable to speak of such sensations as green, red, and so on. It is much clearer to use the purely objective term and speak of the specific excitation green, red, and so on."

While the majority of psychologists and sociologists who call themselves behaviorists hold the doctrine in a more or less attenuated form, only those whose position coincides substantially with the foregoing quotation can justly claim to be developing their fields along natural science lines.⁶ Only *they* are consistently endeavoring to explain human behavior as movements of particles in time and space strictly in accord with mechanistic principles which admit of quantitative verification, and which do not involve reference to conscious states or purposive factors of any kind. If psychologists and sociologists wish to develop "natural sciences" which will be recognized as such by

⁵ In his *Psychology of the Other-One*, p. 17.

⁶ This fact is recognized by the more critical of the "attenuated" behaviorists. Thus, Edward C. Toland, in his *Purposive Behavior in Animals and Men* (p. 425), concludes that his "purposive behaviorism" differs "from a true naturalism in that we admit and stress the fact that naturalism is truncated—that it does present a map-account only. If ours is a naturalism, it is a naturalism plus."

the physicists and chemists, they must be willing to view individual and group behavior in strictly molecular terms, and to adopt for their respective sciences a position as consistently and uncompromisingly mechanistic as Joseph Needham does for biology. Neo-mechanism, he writes, or mechanism entirely dissociated from scientific naturalism as a metaphysical doctrine, "realizes itself for what it is, the backbone of scientific thought in biology, and lays no claim to validity of a philosophic kind. . . . If biology is to be a science, in biology it must reign."⁷

But however vigorously the sociologist and psychologist may profess the orthodox mechanistic faith, Needham will never admit them to the blessed fellowship of the scientifically elect, for in his opinion they lack the saving grace of being able to live up to their professions. "The name of science must be withheld from the latter (psychology) because of its qualitative and non-mathematical character," and he asserts that any science whose "story can not be told save in psychological terms" must abandon "all hope of . . . ever becoming an exact science."⁸

This is the only tenable position for one who holds that there can be no science except of those phenomena that can be explained on mechanistic principles. Since the most important events in human experience cannot be so explained, we can

⁷ "The Sceptical Biologist," in *Hibbert Journal*, XXV (1926-27), 284.

⁸ *Ibid.*, p. 278 f.

have no scientific knowledge of them. " 'If a man referred to his brother or his cat,' says C. D. Broad, 'as an ingenious mechanism, we should know at once that he was either a fool or a physiologist.' In this little quotation one scents the uncomfortable possibility that its author regarded the two callings as substantially the same, but the Neo-mechanist need have no fear. If he should refer to his cat as an ingenious mechanism, it will only be as a matter of scientific exigency, regrettable, perhaps, but necessary. He has made it perfectly clear that he does not, outside the laboratory, continue in that attitude, though within it he finds it necessary to act as if it were true. He recognizes the necessity as the only basis for his work, but he does not ultimately honor it."⁹

On this basis, there can be no science of human behavior, individual or social, other than the neuro-physiology of the total integrated activities of the organism, as the most orthodox sect of behaviorism clearly understands.¹⁰ The strictly logical behaviorist will have to continue to regard any knowledge which he may have of either his cat or his brother, except as an ingenious mechanism, as extra-scientific, or at best as *ad interim* knowledge, to be discarded as rapidly as he is able to reduce it to those physical correlates which alone are real and existential, and therefore constitute the proper subject matter of science.

⁹ *Ibid.*, p. 283.

¹⁰ John B. Watson, *Psychology from the Standpoint of a Behaviorist*, p. 40.

Whether or not the methodological principles which have resulted in the magnificent achievements of the physical and biological sciences during the past three centuries will prove adequate to continued progress in those fields must be left for specialists to discover, but their inadequacy in the psychological and social sciences is becoming increasingly clear. As Cohen has said, they can give us nothing more than a psychology "which looks back to physics and chemistry for its causal methods and guiding principles, and a mechanistic sociology" which may describe animal events, but which does not get close to the specific structures and processes of human society.¹¹

The dominance of natural science methodology in the study of human nature and culture has led to the neglect of those aspects of social phenomena which do not lend themselves to mechanistic treatment, and it is precisely such aspects which characterize these phenomena as social. For the social sciences are essentially sciences of culture, and culture, as a field of research, possesses characteristics which have no analogues in the subject matter of the natural sciences. It also presents problems which require historical knowledge, critical insight, rational analysis, logical inference, and what Cooley has called "sympathetic introspection,"¹² and for these methods, especially the last,

¹¹ Morris R. Cohen, *Reason and Nature*, p. 321.

¹² Charles Horton Cooley, "The Roots of Social Knowledge," in *Sociological Theory and Social Research*, pp. 289-309.

there are again no genuine analogues in physics, chemistry, or biology.

Since the sciences of culture differ from the natural sciences in their subject matter and problems, they require a different methodology for their development. First, cultural phenomena can not be analyzed and described without reference to meaning, which implies conscious states; second, they can not be explained without reference to purpose, which involves a consideration of ends; third, they can not be predicted, except in terms of crude probabilities, without reference to values; and fourth, they can not be controlled without reference to motives, both of which require insight into impulses, wishes, attitudes, and desires. Contrary to the natural science viewpoint, which determines what cultural problems are available for research by their amenability to investigation according to certain methodological principles, it is here proposed to let cultural problems themselves determine what methodological principles and procedures we must employ.

In the first place, then, cultural phenomena require for their analysis and description not only external observation of material objects and overt activities as do the natural sciences, but also knowledge of the values and meanings which they have acquired in the history of the group which manifests them. Although the history of a cultural fact does not exhaust its meaning and can not dispose of the necessity for its logical analysis,

no cultural fact is fully intelligible except in its historical setting. It is sometimes asserted that this dependence of cultural facts upon history does not clearly distinguish them from the facts of the natural sciences, since geology, to cite but one example, is both an historic and a natural science.¹³ But the historical significance of a geological fact is completely explored when it has been related in its time-sequence to other geological facts, and such sequences appearing on one continent can be fairly well equated with similar series appearing in other geographical areas as Eocene, Oligocene, and so on. But interminable confusion has been introduced into our interpretation of the development of culture by the attempt to employ similar methods in anthropology. Field workers have been too ready to equate with one another cultural traits appearing on different continents because of similarities in their purely objective manifestations. Thus the pyramids of Egypt and Mexico, mummification in Egypt and Perú, or the invention of the zero in India and Central America, have all been claimed as examples of diffusion, of parallel evolution, and of convergence. Here the objectivist predilections of the investigator are barriers to scientific progress, since such problems, unlike those of geology, can be settled only as we acquire fuller knowledge

¹³ Morris R. Cohen, in his *Reason and Nature*, p. 344, advances this view.

of our data in terms of their inner meanings, their psychological content, and their history.

Similarly, in the study of prehistory, where the continuity of cultural tradition as a system of subjective values and appreciations has been broken, our collection of artifacts may be ever so complete, but they remain nothing but curios unless the anthropologist can reconstruct the inner world of meanings in which these articles again become significant as cultural objects. The Aurignacian *bâtons de commandement*, the frescoes on the walls of Magdalenian caves, or the painted pebbles from Mas d'Azil become intelligible only as we can conceive how they functioned within a system of values in Paleolithic culture, either intrinsically as objects of desire or instrumentally in the attainment of desired ends.

Moreover, the sciences of contemporary culture, economics, political science, and sociology, must take into account not only the objective situations and the reactions of human beings, but also the subjective meanings which they attach to these situations and to their own behavior. In all the sciences that deal with culture, therefore, there is no way to avoid giving priority to the subjective elements in determining, defining, analyzing, classifying, and describing the objective phenomena. These subjective elements no doubt have their physical correlates in the brain and nervous system, but we do not know what they are, and considering their complexity and their infra-micro-

scopic character, it is not likely that we ever shall know. To employ such phrases as "sub-vocal talking" or "neuro-muscular tensions" in order to avoid the use of the term "meaning" is to darken counsel by a form of words which add no knowledge, for it substitutes a purely fictional neuro-anatomy for the most patent facts of conscious life.

Second, cultural facts can not be explained without reference to purpose, which involves a consideration of ends. Few social scientists will dissent from the proposition that every social fact is deterministic, completely explicable in terms of its antecedents, provided that among the antecedents there be included not only mechanistic, but also purposive factors. For the most part, however, those who admit the category of purpose interpret it as crypto-mechanism, at least potentially reducible to mechanistic terms. Purpose becomes merely the set of an organism toward a goal. Its conscious correlates have no causal efficacy in controlling, guiding, or maintaining the behavior in process. Only bodily states can cause bodily states, and man's belief that by thinking of things as values to be desired or avoided he can in any significant way modify the course of events is a vain illusion.

Descartes's distinction between matter as extended, corporeal, unthinking substance and mind as unextended, incorporeal, thinking substance, contributed much to establish this dogma in mod-

ern science. For in spite of Descartes's ingenious pineal gland hypothesis, how two such vastly different substances could have any influence on one another remained a mystery. Frederick the Great's court atheist, de la Mettrie, who traced his own materialism to Descartes, declared that the latter was a "wily philosopher" who, "purely for the sake of the parsons, had patched on his theory a soul, which was in reality quite superfluous."¹⁴ Descartes's admiring disciples, however, fell back on the Divine Omnipotence. Two substances so diverse as mind and matter, they said, can not influence one another, but when the human will acts, God intervenes to change the course of events and secure the desired result.

The doctrine that conscious states can not participate in ordering physical events was further strengthened by the law of the conservation of energy enunciated by K. F. Mohr in 1837. According to this law, the total amount of energy in the processes of nature remains constant; none is either created or destroyed in any causal sequence, every gain or loss of energy in one form being exactly compensated for by a loss or gain in some other form or forms. To admit the existence of psychic determinants in behavior, it is held, violates this law. It introduces a non-quantitative, mental series into a quantitative, physical series and implies that motion can be changed, accel-

¹⁴ F. A. Lange, *History of Materialism*, I, 246.

erated, or diminished by something that is not itself motion.

But this argument cuts both ways. If to admit that conscious states have efficacy in the causation of behavior is to introduce ghostly antecedents, to derive them from behavior is to extract ghostly consequents! Ideas, feelings, and emotions become dancing shadow shapes that require no energy for their creation and consume no energy in their dancing. If it is contended that they do involve a transformation of energy from the physical series, there seems to be no logical ground why they may not influence events by re-introducing this energy further transformed.

The exclusion of conscious states from consideration as determinants of cultural phenomena, or their reduction to crypto-mechanism, is itself a scientific hypothesis and must be settled by empirical methods. If cultural facts reveal purposive connections, their investigation is as much a part of social science as mechanistic connections. And the fact of purposive connections is inescapable in the everyday conduct of human affairs which it is the task of social science to describe and explain. "Almost every sentence we utter and every judgment we form, presuppose our un-failing experience of this element in life. The evidence is so overwhelming, the belief so unquestioning, the evidence of language so decisive, that it is difficult to know where to begin in demon-

strating it.”¹⁵ We can exclude it from social science only on a priori methodological grounds, because we have adopted the mechanistic assumptions of physics which are inadequate to the investigation of our data, or on equally a priori metaphysical grounds, because we are troubled by the difficulty of correlating the processes of extended, corporeal substance with unextended, incorporeal substance, a difficulty which roots in the philosophy of Descartes. But surely scientists who protest the introduction of metaphysical considerations into science will not permit the subject matter of their science to be dictated by metaphysical considerations!

Nevertheless, in our own behavior, where we know the facts more completely than we can ever know them anywhere else in nature, mechanism and purpose exist side by side in the determination of events. For it must be clearly noted that the denial that social science data are completely expressible in mechanistic terms does not mean that there are certain phases of experience in which mechanism can be entirely dispensed with, nor does the complementary idea of purpose mean the occasional introduction into the order of events, which is ordinarily mechanistically determined, of whimsical, capricious, non-natural forces, subject to no law and amenable to no order. Both mechanism and purpose are causal and orderly. The orderliness of mechanism consists in the uniform-

¹⁵ A. N. Whitehead, *The Function of Reason*, p. 9.

ity with which events succeed one another in time as cause and effect, and the orderliness of purpose consists in the adequacy with which means are adapted to circumstances in the attainment of chosen and desired ends. Only in a world of dependable mechanisms and conscious purposes can human choices be significant and human goals be efficiently realized. For only in such a world can we acquire sufficient knowledge of the probable outcome of physical events and sufficient insight into human purposes to manage human affairs with prudence.

This raises a third consideration. Cultural phenomena, unlike physical phenomena, can not be predicted without reference to value. For it is precisely its nature as a value, as something to be used, desired, or avoided by human beings, that constitutes anything a cultural fact. For the most part, social prediction consists in counting and measuring physical data which have become cultural data because of their value aspects, and the dependability of the prediction depends upon the stability of the system of values into which the data have been incorporated. For example, a birth is a biological fact. Births can be counted, their ratio to deaths calculated, and the future growth of population predicted. But a birth is also a cultural fact in so far as it is a locus of value, reënforced or attenuated by its relation to other values in the culture complex. When it has become closely associated with religion, as among the He-

brews, where a large progeny was considered as evidence of divine favor, or among the Chinese, where numerous descendants were necessary to assure the continuance of the sacred rites for the dead, the birth rate has approximated its maximum. But when, as in Western culture generally, the system of values changes, statistical curves depicting the increase of population go wrong, and the birth rate drops to a level too low to provide for growth, or even to sustain numbers.

Prediction is possible only because we have causal knowledge. It has been said that "causation is practically correlated variation,"¹⁶ but this is a metaphysical, not a scientific statement. It is evidence of the survival in modern science of the sensationalistic empiricism of David Hume, Ernst Mach, Karl Pearson, and Bertrand Russell. Causal knowledge is vastly more than correlated variation. In the physical sciences it implies an invariant interconnectedness, a mutual implication of events which can be rationally apprehended as an external order of nature, but in the social sciences it implies insight into the impulses, wishes, attitudes, and desires of men, as well as of the external objects and situations towards which their activities are directed. In the former case causation is mechanistic, in the latter it is both mechanistic and teleological.

Finally, cultural phenomena can not be con-

¹⁶ William F. Ogburn, "Sociology and Statistics," in Ogburn and Goldenweiser, *The Social Sciences and Their Interrelations*, p. 380.

trolled without reference to motives. In case of the individual, if we wish to influence another to act in a certain way, we must employ threat, persuasion, suggestion, education, or other means of modifying choices and decisions through the medium of consciousness. Often the advertiser, the salesman, or the politician is more successful in this respect than the educator, not entirely because they may be less scrupulous in the methods they employ, but also because they possess keener insight into the springs of human action. As far as modifying culture in its larger aspects is concerned, such as controlling the basic institutional patterns of war, nationalism, property, religion, or the family, it is true that we can do but little. This is partly because our knowledge of collective human nature is less adequate than that of the individual, partly because the technique of mass appeal is less efficiently developed, partly because of our inability to agree upon how the patterns should be modified, and partly because of our inability to control the media of communication in the interest of these ends if we could agree upon them. But where agreement can be reached as to the culture patterns to be inculcated, and where church, school, platform, press, and radio can be controlled to this end, as in Soviet Russia, the cultural changes promise to be enduring and profound.

Many who agree substantially with the foregoing emphasis upon the rôle of the inner life of

thought and feeling in the scientific interpretation of culture will enter a *caveat* at this point. "That we cannot agree as to how the cultural patterns should be modified," they will say, "constitutes the nub of the whole matter, and upon precisely this question the social sciences can throw no light. It is true that the subject matter of social science is culture and the essence of culture is values, but the scientist can deal with them only as data. When he has described how they have arisen and how they have functioned within a given culture, his task is done. He has no advice to give regarding alternative values." This is due, says Max Weber, to the fact that when values conflict, "they can not be reconciled by proportional mixture" since "they can not be quantitatively measured." Consequently, "the conflict between values can be decided only by an arbitrary choice."¹⁷

But if opposing scientific views can be reconciled only by measurement and "proportional mixture," the situation for social science is hopeless. Weber's own "formal" sociology collapses, since little of it can be quantified, much of it is challenged by other schools, and there are significant differences among the "formalists" themselves.¹⁸

Weber's dictum that "in the light of reason every decision is arbitrary" is an a priori assump-

¹⁷ Howard Becker, *Systematic Sociology on the Basis of the Beziehungslehre and Gebildelehre of Leopold von Wiese*, pp. 5 f.

¹⁸ See Howard Becker's "Field and Problems of Historical Sociology," in L. L. Bernard (editor), *Fields and Methods of Sociology*.

tion. Its vogue in social science represents the perpetuation of a philosophical theory of value which is intelligible only in the light of its history. It took its rise in the revolt against the authoritarianism of the Middle Ages, which blocked the road to knowledge with its doctrine that all values, truth as well as beauty and goodness, had been delivered unto man once and for all through revelation and tradition. It gained impetus from a second intellectual revolution, that against philosophical rationalism, which resulted in the dominance of sensationalism and empiricism in the field of philosophy during the formative period of science. But its immediate roots lie in the hedonistic and utilitarian ethics of the eighteenth and nineteenth centuries. Pleasure, it was held, is the only good, and if a felicific calculus be developed by means of which the total net pleasure offered by alternative courses of action may be reckoned, the moral life can be reduced to quantitative terms. Various attempts to construct a "moral and political arithmetic" followed, notably that of Bentham. Beginning with Beccaria's suggestion that the value of a sensation is a function of its duration, intensity, certainty, and proximity, Bentham added a fifth element derived from his own social outlook, that is, its extent, or the number of persons involved. By such methods, he thought, "the foundation for a complete system of moral science" could be laid. But the enterprise was ultimately given up, because it became

apparent that the problem involved, not extensive, but intensive magnitudes, to which the ordinary rules of addition and multiplication do not apply. Five one-pound cubes of melting ice enduring for one minute are five times as heavy as one cube, but they are not five times as cold nor if they endure for two minutes are they either twice as heavy or twice as cold. And neither can it be demonstrated that a pleasure one-half as intense lasting twice as long is equal to one twice as intense lasting one-half as long, or that one penalty is four times as effective as another because it is twice as certain and twice as near, whatever such terms may mean.

The abandonment of the felicific calculus has left hedonistic ethics with no basis for moral choice but arbitrary will. Utilitarianism is dead, but its ghost still walks in the form of a priori theories of value grounded in the principle of psychological appreciation or conscious desire as it manifests itself in direct experience. But such a theory of value is logically self-contradictory and factually false, and is therefore an unstable position for thought. For when subjected to critical examination it tends to merge into either the natural science theory of elective affinity or the logical theory of conceptual worth.

If we start with the appreciative theory, a value is any object of interest or desire, any end to be sought or avoided. But we do not determine our interests from moment to moment by conscious

reflection. For the most part, they are so deeply embedded in our culture or in our personal life organization that we take them for granted, or are entirely unconscious of them as automatisms. But other ends are conditioned by the basic biological processes and innate behavior equipment of the organism, whatever our theory of the unlearned behavior of the individual may be. Consciousness is not the only factor in determining ends, and if the concept of interest is to be helpful in value theory, it must be defined in its original etymological sense of "it concerns," or "it is advantageous to," since biological needs can not be ignored. Value as psychological appreciation, therefore, breaks down under criticism into the elective theory, which is grounded in the principle of indifference in nature.¹⁹ Consciousness ceases to be a *sine qua non* of value. A thing is a value to whatever it is important for or interacts with, whether it involves consciousness or not. Some such theory of value must be the outcome of a logically consistent behaviorism.

But it may be urged that although value may not be exclusively a human affair, and although human choices are not arbitrary in the sense of being unaffected by biological need and by highly integrated patterns of culture and personality, yet *judgments* of value arise only under the influence of conscious desires in situations which involve choice among alternative courses

¹⁹ See, for example, John Laird, *The Idea of Value*, chapter III.

of action, and such judgments are arbitrary. This is again an unstable position, and breaks down under criticism into a logical theory of conceptual worth. Knowledge of value no more ends with the raw material of desire than does scientific knowledge with the raw material of sensation. But in both cases a long process of critical examination of all available data intervenes between the raw material and the finished product. Methods will be different because the problems are different, but in both cases success depends upon the capacity of human reason to deal logically with fact. The naïve man's immediate certainty as to the true and the good furnishes no criterion of either truth or goodness. Only at the price of arduous toil can man develop the conceptual systems in the light of which he can decide how to do a thing and whether it is worth doing.

There is, then, no ground for the assumption that we can have no valid knowledge of values. Since both the descriptive and the evaluating disciplines pursue logical methods in their attempt to organize experience and render it intelligible in terms of conceptual systems, they may be developed in close coöperation to mutual advantage. The descriptive and the normative must not be confused, but they can not be isolated, except to the stultification of both. That branch of social philosophy which deals with the values of human association is social ethics. It builds upon all the social sciences, and is the logical continuation of

them. It must arrive at social norms by developing and criticizing the logical implications of man's social experience which the social sciences have analyzed. And ethics in turn can serve the social scientist in at least three ways. First, it can give him keener insight into the functional significance of cultural values by providing him with a critical theory of them. Second, it can increase his scientific competence by insisting that the implicit assumptions as to values which as a human being he must inevitably make shall be adequately grounded in logical thought rather than unconsciously accepted on the authority of naïve fancy. For no student of human relations today can remain uninfluenced by ethical presuppositions in his interpretation of facts, or even in his decision as to what facts are important for collection and analysis. The best recent example is Leopold von Wiese, who, for all his insistence on excluding value-judgments from sociology, writes that exploitation exists "whenever one person forces another to do things he should' do for himself," when toil is "unrequited," when leisure is "purchased at the cost of others," or when one is failing to "bear the burdens consequent upon existence itself."²⁰ But all of these are value-judgments, for no one can say whether they exist or not until he has considered the ethical implications of the prevailing economic system. And

²⁰ Howard Becker, *Systematic Sociology on the Basis of the Beziehungslehre and Gebildelehre of Leopold von Wiese*, p. 379.

third, ethics is essential to social science in mediating between theory and practice. If the results of social science are to be tested out in social situations, they will contribute to the realization of certain values and seal the doom of others. If social science is to employ such methods in the verification of its results, it must complete itself in ethics, for it will settle ethical questions whether it considers them or not.

We may summarize this discussion by reference to an historic case. When Socrates sat still in his prison in Athens after his friend Crito had arranged his escape, he was in fact an object of interest to both natural and social science. As a natural science object, he was a mechanism for the discharge of energy, and any causal explanation of his behavior or prediction as to its possibilities must reckon with the fact. But Socrates himself was inclined to think that the situation was wholly unintelligible in these terms. Insight into the conscious states of both the Athenian populace and Socrates himself, he thought, was more important. For purpose loomed larger than mechanism among the antecedents on the basis of which the consequents could be explained and predicted. His muscles and bones would have gone off to Megara or Boeotia long ago had he not chosen "the better and nobler part." The mechanist, Anaxagoras, would have given ten thousand causes, but he left out the most important thing, "which is, that the Athenians have thought

fit to condemn me, and accordingly I have thought it better and more right to remain here and undergo my sentence."²¹ For twenty-three centuries men have meditated upon that supreme decision to objectify in action the moral values of courage and loyalty to the conviction that the unexamined life is not worth the living. And they have come about as near to unanimity as they ever do in their judgment that his choice was grounded, not only in his own subjective preferences, but in certain principles of conduct universally valid in human experience.

And every social situation, like this in ancient Athens, is shot through and through with value, in the light of which our external observations and measurements get whatever cultural significance they have. Perhaps John Laird²² is right in suggesting that "value may prove the key that will eventually release all of the human sciences from their present position of pathetic, if dignified, futility."

Such, at any rate, is the thesis of this book.

HOWARD E. JENSEN

August, 1933

²¹ Phaedo, steph. 99, in Jowett's translation of the dialogues of Plato, Vol. II, p. 244.

²² *The Idea of Value*, p. xix.

METHODS IN SOCIOLOGY
A CRITICAL STUDY

CHAPTER I

THE WORK OF THE SOCIOLOGIST

THERE is every reason to think that no more important work is being attempted in our world today than that which is being attempted by the scientific sociologist. I use the term in the broadest sense to mean anyone who is attempting to furnish the world with dependable social facts and dependable social theories. Our world is threatened with chaos. It is divided into hostile groups which mutually seek to subordinate or to destroy one another. The solution of the problems of social adjustment in our world manifestly depends upon intelligence—upon dependable knowledge of very complex situations and forces. The scientific sociologist should furnish the knowledge which is needed; but sociologists, instead of being able to agree upon this knowledge, are divided into hostile schools which mutually seek to undermine and discredit one another. Sociology thus at the present time reflects the divided condition of our world. This is true, however, not only of sociology, but of all the social sciences. None of them have any program upon which their conflicting schools can agree or which commands the general assent of thinking people.

The chaotic condition of the social sciences is largely responsible for the chaos which is threatened in our civilization. These sciences, including biology and psychology, have destroyed the traditional ways of thinking once furnished to the masses by religion; but they have failed to put in the place of the traditions which they have destroyed any common understanding, to say nothing of constructive ideals and values. Now, civilizations rest always upon values and standards generally accepted; that is, they rest upon accepted beliefs of a more or less intellectual character. The intellectual life of modern men especially centers about modern science. Scientific men, and least of all the workers in the social sciences cannot therefore disclaim responsibility for the economic, political, and moral condition of our human world. They should be able to come to some fundamental agreement among themselves, and to show the way out of the threatened chaos.

A certain faction of the workers in the social sciences have sought to bring about agreement in them by introducing into them the exact quantitative methods of the physical sciences. They have thought to make the propositions of the social sciences unassailable by physical science methods. But the social sciences for reasons which we shall see later are not physical sciences and are not amenable to physical science methods, as the latter are ordinarily understood. While the social sciences deal with real processes, the processes

with which they deal are essentially psychological, and are only to a small extent amenable to the physical science methods of exact observation, experiment, and measurement. To follow the physical sciences in their method is therefore a wrong lead in the social sciences, and presents very little hope of bringing students of human society to agreement. Such students cannot come to agreement regarding social processes through methods of measurement, because quantitative measurements, even if possible, are too limited and too superficial to bring men to agreement regarding fundamental problems. They should, of course, be employed wherever they can be employed, provided that they are recognized to be by themselves inadequate. The social sciences from the very nature of their subject matter are necessarily *reasoned* sciences, and must be established through critical thinking rather than through physical science methods. This is particularly true of sociology, which is a general science dealing with the most abstract and fundamental problems of human society.

The purpose of this book, therefore, is to propose another way out of the present disagreements and disparagements which now characterize the social sciences, both singly and collectively. *The way out which is proposed is that of a broader method*, supplemented by critical scholarship. Nothing so quickly gives rise to narrow views in a science as narrow methods. A scientific method

to be adequate should include all dependable means of testing human reasoning. I mean by scholarship, knowledge of all that men have thought or done along a given line. Scholarship involves exhaustive knowledge of the literature available in modern languages on any problem. Critical scholarship means that logically trained minds are turned loose on all this thinking of the past or of the present, to discover if possible the way to the truth.

It has been a reproach made against American sociologists that they are lacking in scholarship. Whether this reproach is justifiable or not, it is true that scholarship in the sense in which we have just used the word is along every line at a very low ebb in American institutions of learning. There is too much truth in the European criticism that American colleges and universities train students in skills and techniques but do not develop scholars and, in general, favor superficiality and not the profundity shown by the best European thinkers. It would be well if American sociologists would recognize all this, and try to give their students, not simply training in skills and techniques useful in science, but also high standards of scholarship in the sense in which we have just used the term. Even graduate students in American institutions, as a rule, know very little of the history of thought in the fields in which they are working. Too many of our young sociologists repeat the mistakes of Thomas Hobbes

without even knowing that he made similar mistakes, and perhaps even without knowing how to spell his name. Too many of our students of economics repeat the mistakes of Malthus, or the Manchester school. Too many of our students of political science repeat the mistakes of Machiavelli.

The only remedy for this state of affairs is the development of critical scholarship, and this, I believe, will also be found to be in time a pathway to agreement in the social sciences. Perhaps I can illustrate best what I mean by taking Charles Darwin as an example of the type of scholarship which should be encouraged in the social sciences. Darwin had laboratory and field experience in the biological sciences, but he had much more. He was practically master of the whole literature of biology and natural history written before his time. It was just because he knew all that had been thought and done in this field that he was able to formulate a satisfactory theory of organic evolution. In the sociological field the work of such men as Professor L. T. Hobhouse, and Professor P. Sorokin again illustrate, and in the clearest and most unmistakable way, what I mean by adequate scholarship in the social sciences. Unless American universities stand for such scholarship, their work in the social sciences will continue to command but little respect.

Adequate scholarship in the social sciences means exhaustive and comprehensive study along given lines. If this is so, it will be a broad scholar-

ship. Perhaps social scientists cannot be expected to be experts on biological and psychological questions. But they should know and keep abreast of the best work in these fields. Social scientists are surely not prepared to interpret social behavior or movements until they know the best that modern biology and psychology can teach them regarding human nature. Even more do social scientists need to know human history in order to know their human world; for history has even more to give to the social scientist than biology and psychology. On the other hand, the newer social sciences have much to give to history, and the historians who are ignorant of what has been achieved in such social sciences as politics, economics, and sociology present a sorry spectacle.

An adequate scholarship in the social sciences will not be a conservative and timid scholarship, which piously hopes that the social sciences will have something to show to their credit a hundred or two hundred years from now. If Darwin had been such a timid and conservative type of scholar, he would never have set forth the hypothesis of organic evolution. Every student of biology must be grateful to Darwin for not waiting until the inventory of biological facts was completed before giving to the world his theories. Today, we need bold generalizations in the social sciences whenever we have sufficient facts to warrant generalizations. The world cannot wait a century or so, until all social facts are known before social gen-

eralizations are attempted. The attitude of timid and conservative scholarship is sterilizing the social sciences in many institutions. If wrong generalizations are made, critical scholarship will soon detect that they are wrong, and will be able to overthrow them. It is a great deal better that some mistakes should be made upon the basis of bold scientific generalization, than that thousands of mistakes should be made as they now are, through sheer ignorance. The history of all sciences shows that science develops, not through lingering in the field of factual description, not through timidity and caution, but through the development of bold hypotheses, and then by testing these hypotheses, not only through further research, but through actual experience and experimental action. Factual science is dead science, and should not be tolerated in institutions of learning which accept any degree of responsibility for leadership in our civilization.

All this implies that I am not one of those social scientists who believe that the social scientist has no duties as a citizen, and should have no interest in current problems. On the contrary, in this crisis of the world's affairs, I believe it is the duty of social scientists to place their scholarship at the service of their communities and of humanity at large. While the scholar must preserve the detached and impersonal view in the study of human affairs, yet he should never lose touch with the actual, concrete human world, and the social sci-

entist will probably retain a better realistic appreciation of social problems and of possible methods of their solution if he keeps in touch with real life through actual participation in human activities. Scholarship is not an end in itself, in such a world as ours. On the contrary, it is, and should be, an instrument of social control and of social service.

But the problem of broadening the method of sociology until it includes all dependable means of testing the truth or falsity of social theorizing must now concern us. That is the problem of this book. The contributions of philosophy, of objective observation, of imagination, of historical interpretation, of psychological analysis, of statistical measurements, and of social experiments, to sound social theorizing must all be evaluated, together with the bearing of sociology upon social practice and of social practice upon sociology.

CHAPTER II

SCIENTIFIC METHOD AND PHILOSOPHICAL PROCEDURE IN SOCIOLOGY

SOCIOLOGY is again in danger of becoming a dead science, of relapsing into a polite amusement of our intellectual classes. This is largely due to the invasion of the spirit and method of the so-called natural sciences into the field of the social sciences.¹ Whether we like it or not, the question of method is fundamental in the social sciences, for it involves a theory of scientific knowledge. Scientific social knowledge is bound to be limited, not only in content, but also in its practical utility for social control and social reconstruction, by the methods employed in the social sciences.

An eminent contemporary European philosopher² tells us that "sociology is the youngest of the philosophical sciences," and calls sociology "the philosophy of human society"; but recently a former president of the American Sociological

¹ For a refutation of the fallacy of physical-science methods in the social sciences, see chapter V of this book, the paper by Professor R. M. MacIver on "Is Sociology a Natural Science?" in *Publications of the American Sociological Society*, XXV (1931), 25-35, and the chapter by Professor Morris R. Cohen on "The Social Sciences and the Natural Sciences" in Ogburn and Goldenweiser, *The Social Sciences* (chap. XXXIII).

² See W. Jerusalem, *An Introduction to Philosophy*, Seventh Division.

Society has declared in the effect that modern sociology represents a radical reaction against philosophical procedure in its field, and that modern sociologists have come to recognize that "scientific methods, found useful in the natural sciences, must be adapted to sociological material."³ Whatever this statement may mean, it will be regrettable if all philosophical procedure should be excluded from sociology and the other social sciences. Probably the maker of this statement meant simply to report a fact rather than to express his own personal conviction. That such a trend exists in the social sciences at present is a matter of common knowledge. It was strongly in evidence in the address of the president of the American Sociological Society in 1929, when he declared that intellectuality would probably be at a discount in the social sciences in the future and that its place would be taken by careful methods of observation and measurement, especially by statistical methods. Therefore he concluded that in the future "a scientific sociology will be quite sharply separated from social philosophy, for it will be recognized how much social philosophy is a rationalization of our wishes."⁴ Reliance in the

³ *Sociology and Social Research*, XV (Jan.-Feb., 1931), 203-208.

⁴ W. F. Ogburn, "The Folkways of a Scientific Sociology," *Publications of the American Sociological Society*, XXIV (1930), 3-7.

A recent writer in a leading American weekly has charged: "A great part of the energy of social scientists has been spent in a sort of mad attempt to run away from philosophical ideas in order better to live up to the stage conception of science" (Benjamin Ginsburg in *The Nation*, Aug. 31, 1932, pp. 190-191).

social sciences must be not upon logical reasoning, but upon the gathering of facts and statistical methods of measurement and verification. In this way the social sciences will be put upon the same basis as the physical sciences.

It seems foolhardy to go against this popular trend in the social sciences, grounded as it is in the traditions of the older sciences. It would be easier to go with the tide in this as in all other matters. But we are convinced that this attempt to introduce into the social sciences the spirit and the methods of the physical sciences is a mistake, not only from the standpoint of their practical utility for the guidance of social action, but also from the standpoint of the increase of knowledge. What are the reasons for this conviction?

First of all is the nature of science itself as an open-minded quest for reliable knowledge of reality, whether that reality be physical or social.⁵ As such it must involve a careful sifting of evidence and a resolute refusal to ignore any evidence which experience seems to afford. Courts of law at their best have always had a similar method. A simple illustration may help to show the essence of scientific reasoning or thinking. Suppose a boy goes out to hunt rabbits on a winter morning after a fresh fall of snow. He sees rabbit tracks in the

⁵ Professor Stuart A. Rice has said (*Sociologus*, Vol. 9, p. 11): "Science can never be made coextensive with, or duplicative of, the world of reality." That may be, but it surely should not misrepresent the world of reality; otherwise, it ceases to be a search for the truth.

fresh snow leading toward a brush pile. He examines the snow carefully on all sides of the brush pile and finds no rabbit tracks leading away from it. Therefore he concludes that the rabbit is still in the brush pile.

Now such a conclusion is valid scientifically if there is nothing in the boy's experience to contradict it, and it illustrates the nature of scientific reasoning. As a matter of fact this is the way in which the great conclusions of all sciences have been reached—all the facts of experience are seen to point in one direction and to one conclusion. Thus the theory of organic evolution has been accepted by biological scientists because all the facts point in that direction—no facts are known which are clearly against this conclusion. Organic evolution is regarded as an established scientific fact not because it has been demonstrated by observation or by methods of measurement, but rather because all known facts point to that conclusion.

This simple illustration shows that what we call scientific method is nothing but an extension and refinement of common sense and that it always involves reasoning and the interpretation of the facts of experience. It rests upon sound logic and a common-sense attitude toward human experience. But the hyper-scientists of our day deny this and say that science rests not upon reasoning (which cannot be trusted), but upon observation, methods of measurement, and the use of instru-

ments of precision.⁶ Before the boy concluded that there was a rabbit in the brush pile, they say he should have gotten an X-ray machine to see if the rabbit was really there, if his conclusion is to be scientific; or at least he should have scared bunny from his hiding place and photographed him; or perhaps he should have gotten some instrument of measurement, and measured carefully the tracks in the snow and then compared the measurements with standard models of rabbit's feet and hare's feet, to determine whether it was a rabbit, a hare, or some other animal hiding in the brush pile. Thus in effect does the hyper-scientist contrast the methods of science with those of common sense.

Now it cannot be denied that methods of measurement, the use of instruments of precision and the exact observation of results of experiment are useful in rendering our knowledge more exact. It is, therefore, desirable that they be employed whenever and wherever they can be employed. But the question remains, in what fields of knowledge can these methods be successfully employed? No doubt the fields in which they are employed will be gradually extended, and all seekers after exact knowledge will welcome such an extension of methods of precision. However, our world is sadly in need of reliable knowledge in many fields, whether it is quantitatively exact or not, and it is

⁶ Thus Ogburn says: "A body of knowledge ought not to be called a science until it can be measured" (*The Social Sciences and Their Interrelations*, p. 379).

obvious that in many fields quantitative exactness is not possible, probably never will be possible, and even if we had it, would probably not be of much more help to us than more inexact forms of knowledge.

It is worthy of note that even in many of the so-called natural sciences quantitatively exact methods play a very subordinate rôle.⁷ Thus in biology, as we have seen, such methods played an insignificant part in the discovery and formulation of the theory of organic evolution. Yet this theory has revolutionized the biological sciences, including the sciences of man and human society, and is now affecting profoundly our culture and social order. But our hyper-scientists, if consistent, should call Charles Darwin a biological philosopher rather than a scientist. Darwin, to be sure, had made a number of field studies and some experiments; but the most superficial study of his works would convince anyone that his main method was that of constructive synthesis of all the results of biological observation, experiment, and thinking which had preceded him. An invalid during the latter part of his life, he was a voluminous reader and was acquainted with pretty nearly everything significant that had been published in his field. His actual scientific method was that of constructive synthesis by means of reflective thought. He might today be called an

⁷ Geology would be an equally good illustration with biology, of a science in which quantitatively exact methods play a subordinate rôle.

“arm-chair theorist” by some, and might be told that his generalization was premature, because it had not been preceded by enough exact, inductive, experimental studies. However, Darwin’s generalization, even if premature, proved to be the most prolific and fructifying perception of nineteenth century thought, and it would seem that the social sciences of the present need for their development exactly this type of generalization, based on extensive and mature scholarship.

As to arm-chair methods, we need more use of them in the social sciences if they are of Darwin’s type.⁸ It became very popular about two or three decades back to denounce all arm-chair methods in the human sciences. If a social scientist could contribute nothing in the way of constructive thought, he could at least gain notoriety by denouncing the arm-chair methods of those who are doing so. But as Stefansson, the Arctic explorer, has recently said, “The arm-chair explorer often sees in better perspective the experiences of those who stumble across frozen seas or splash through steaming jungles than do the adventurers themselves.”⁹ Stefansson through his general knowledge resulting from his experience with Arctic conditions was better able to tell how An-

⁸ It is noteworthy that the method of William Graham Sumner was the same, and was inadequate only because he confined his study so largely to primitive societies. See Professor Stuart A. Rice, ed., *Methods in Social Sciences*, p. 4; also the article by Cooley, “Sumner and Methodology” in *Sociology and Social Research*, XII, 303-06.

⁹ *The Readers Digest*, March, 1931.

dree and his companion died on White Island than those who investigated upon the spot the circumstances under which their remains were found. Thus, too, in the social sciences the arm-chair explorer may often prove superior in his perceptions of truth to the field worker or the statistical expert.

Of course, we need both these types of workers, and they should not throw stones at one another; but the final work of science must fall to those who by means of reflective thought undertake the work of synthesis. The contention that we are not yet ready for the work of synthesis and that in the field of social sciences we need "more investigation and less interpretation" will hardly bear critical scrutiny. Science has always advanced over the ruins of hypotheses, and if scientific knowledge is to grow normally, investigation and interpretation should go hand in hand.

We are now prepared to see why some elements of philosophical procedure should remain a recognized part of scientific method in the social sciences, if the latter are to have a normal and humanly helpful development.¹⁰ This is obvious if reflection upon experience constitutes the method of philosophy and if synthesis is the final work of science. This does not mean that we should confuse science and philosophy. Philosophy as a science of the sciences has its own

* This problem is nowhere faced in *Methods in Social Science*, edited by Professor Stuart A. Rice and prepared under the auspices of the Social Science Research Council.

problems and nothing is gained by confusing philosophy with any science or any science with philosophy. Nor does it mean that in the social sciences we may use a priori methods, taking some assumption, such as the existence of God, and reasoning deductively from it. Modern philosophy itself no longer employs such a priori methods. It is scientific in spirit in the sense that it proceeds from the facts of experience. That is one reason why there is, and should be, much overlapping in the methods of science and philosophy. Let us now try to see exactly what philosophical procedures can and should be retained by the social sciences.

In one general respect and in at least three specific ways the methods of philosophy and the social sciences should continue to resemble one another. The general resemblance is in the larger use which both philosophy and the social sciences make of logical reasoning. This is because the social sciences do not deal simply with external appearances, which can be measured by instruments of precision, but with qualities and conscious values. Like philosophy, they are necessarily reasoned sciences, as over against the mathematical-physical sciences of external nature with their methods of measurement. Like philosophy, the social sciences will continue for an indefinite time to make preponderant use of qualitative methods, as against quantitative conclusions. This is not simply because social processes contain

a large number of indefinite cultural and psychological factors, but because the very nature of human society makes a qualitative approach necessary to understand social problems.

This has never been more forcefully expressed than by Professor R. M. MacIver, when he says: "In the study of society we have to do with the relationships of conscious beings, with the motives and purposes that determine these, with ways of living and of acting which depend upon them. . . . Social science has suffered greatly from the attempt to make it conform to methods derived from the older sciences. . . . It is a common view that science begins and ends with measurement. Whether or not this is true of physical science, it is certainly not true of social science. . . . The range of the measurable is not the range of the knowable. There are things we cannot measure, like happiness or pain, and yet their meaning is perfectly clear to us. Perhaps, after all, we can measure only the external, the unknown, and can know only the internal, the conscious state, the incommensurate. In which case science, *if it is limited* to the measurable, is limited to the unknown, perhaps even to the unknowable."¹¹ Very rightly Professor MacIver concludes that the social sciences cannot be limited in this way.

The social sciences should be synthetic of all facts which have any significance for the understanding of social processes, and hence their sci-

¹¹ *The Elements of Social Science*, pp. 15, 16.

entific method' should be a synthesis of methods. In this special respect they again resemble philosophy, which, in one aspect, aims at a synthesis of all knowledge. The social sciences have found that to deal with any problem scientifically they must deal with the total situation. This total situation is made up of interacting personalities with their attitudes, values, and purposes as well as of physical stimuli. It is necessary, therefore, to understand minds of personalities as functioning units interrelated with one another and interacting with their physical environment. It is for this reason that anything approaching a pure behaviorism in the social sciences must be regarded as a major methodological error. The gestaltists in psychology have taught us to regard personalities as functioning wholes. The soundest tradition in sociology has long stood for the same view in the functioning of groups. But to understand such a total situation, we must have a social scientific method which will provide for the coördination or synthesis of the results of different sciences as they bear upon the total situation. Every sound sociological judgment is necessarily a common-sense synthesis of all the factors bearing on a situation. If synthesis be philosophical rather than scientific, we need more of it in the social sciences.¹²

¹² Ogburn and Goldenweiser open their book on *The Social Sciences and Their Interrelations* (1927) with a section on "The Decline of Synthesis." But events often correct theories, and in his work on *Recent Social Trends* Ogburn acknowledges again the need of synthesis.

Again, the social sciences resemble philosophy in the large use which they make of the method of logical criticism. This criticism is one of concepts, of methods, and of theories. The critical use of concepts implies that their meaning shall be carefully defined.¹³ To be sure, there is danger of word juggling here, but if we do not know clearly what we are thinking about, there is even greater danger of fallacious conclusions. However, the main use of critical method in the social sciences is in the criticism of hypotheses. The criticism of concepts is preliminary to the criticism of theories. The place of hypothesis in scientific method is often misrepresented. It is just as much the first step in scientific as in philosophical method. Scientific method brings hypotheses to the test of facts and of experience, while philosophy on account of the difficulty of its problems frequently has to be content to test its hypotheses merely by logical criticism. If the content of both science and philosophy be essentially hypotheses, we see the difficulty of distinguishing in any hard and fast way between the

¹³ For a brief discussion of the use of concepts in the social sciences, see the article by Professor Herbert Blumer on "Science Without Concepts" in *American Journal of Sociology*, XXXVI (January, 1931), 515-533. Professor Stuart Rice acknowledges (*Sociologus*, Vol. 9, p. 11) that "the first and fundamental task of science is definition," for "science is built up from concepts about reality." In *Methods in Social Science* (p. 8) he says significantly: "At the very moment when the social sciences are striving to become more factual, physical scientists are becoming less and less certain of the meaning of 'facts,' and more interested in the underlying concepts." For an exhaustive discussion, see Eubank's *Concepts of Sociology*.

two. A little charity is needed here. The danger is not in hypotheses, but in "pet" hypotheses, to support which we distort or select facts—in what has recently been called "wishful thinking." The remedy lies not in the suppression of hypothetical thinking, but in getting rid of "pet" hypotheses and in keeping many working hypotheses deliberately in mind. The method of multiple working hypotheses remains the soundest method in scientific investigation in the social as well as in all other complex sciences. There is no reason to think that impersonal, logical testing of hypotheses is impossible in the social sciences any more than in other sciences.¹⁴ Even the conclusions of Aristotle did not always reflect the influence of Greek culture. But impersonal testing and selection of hypotheses requires both emotional and logical training. Hence the necessity of emphasizing training in logical thinking in the social sciences. There need be no fear of the hypothetical or philosophical element in the social sciences when once we agree upon the necessity of impersonal logical thinking and of submitting all of our hypotheses to the test of human experience.

Finally, the social sciences resemble philosophy in that they both deal with moral values. The

¹⁴ Calverton's article to the contrary on "The Compulsive Basis of Social Thought," in the *American Journal of Sociology* for March, 1931, proves too much; for his argument is equally valid against any scientific generalization which has any social bearing, as e.g., the theory of organic evolution. The testing of hypotheses, as Professor Hornell Hart shows (*The Technique of Social Progress*, chap. XII), is the essential method of all science, much more so than measurement.

social sciences deal with moral values, because moral values are social values, and are as much facts of our social experience as any other facts. The social sciences are therefore in a broad sense ethical—that is to say, they deal with values. Ever since the time of Machiavelli, however, the world has been troubled with social sciences which claim to be completely divorced from ethics. There was some excuse for this in Machiavelli's time when ethics was non-scientific and based largely upon theology. There is little excuse for it in our time when ethics aspires to be scientific and to take its place among the social sciences. Scientific ethics is rooted in the social sciences, and every social science contributes something to a scientific ethics. It is true that there is nothing to compel any particular social science to make moral judgments. Indeed, that task in a systematic way belongs to ethics. But on account of the unity of our social life and the interrelatedness of the social sciences, all social facts have an ethical aspect and all moral values and ideals are at the same time social facts. The social sciences cannot avoid dealing with moral values any more than they can avoid dealing with economic values. If it be said that in their pure aspects they do not need to evaluate in an ethical way the social facts and movements with which they deal, that is of course correct; but on the other hand, it does not invalidate their scientific character if such evaluations are attempted, any more than it would

invalidate the scientific character of biology if some biologist points out the bearing of certain biological facts upon the problem of public health. Probably the biologist is best prepared of all men to do this. Probably the sociologist is best prepared of all men to judge and evaluate social movements, policies, and philosophies. Moreover, it is scarcely possible for the social scientist to avoid making relative judgments of the socially desirable and the socially undesirable. Thus in dealing with such problems as crime, unemployment, and industrial depression, it would be a very inhuman and sterile social science which would indicate nothing as to what is socially desirable and what is socially undesirable. It would be much better to recognize frankly the ethical implications of the social sciences and to recognize ethics as a social science closely related to all the other social sciences. In this way the social sciences would coöperate in furnishing human society a new and scientific social philosophy, which is surely their ultimate goal.

These are only a few illustrations of the overlapping of the problems and methods of philosophy and the social sciences; but they are enough to show that the methods of the social sciences, if not strait-jacketed by a scientific orthodoxy, are more closely related to philosophical procedure than to natural-science procedure in the narrow sense of that phrase. Yet someone has said that the motto of our Social Science Research Council

is "Millions for concrete research, but not one cent for philosophy." If this is so, it is unfortunate, to say the least. For we need more trained, critical, philosophical thinking in the social sciences, and especially in sociology as the general science fundamental to all. To put it concretely, we need more sociologists like Hobhouse and Cooley, more economists like Veblen and Tawney, and more political scientists like Wallas and Laski. All of these men were broadly trained in the spirit and methods of modern science, but at the same time they illustrate a philosophical approach to the problem in their fields. Many others might be cited whose work illustrates equally well the open-minded, but critical scientific approach, which overlaps with philosophical procedure.

Too narrow a view of scientific method in the social sciences is dangerous because in certain circles there is a disposition to erect this view into an orthodoxy. Now, orthodoxies in the history of thought, whether in the field of religion, politics, or philosophy, have invariably proved in the long run to be impediments to progress. There is no reason to think that the result will be different in the social sciences. If we wish the social sciences to develop normally, if we do not wish them to become sterile and die, we must keep orthodoxies in their methodology from getting a hold. Our attitude must be the pragmatic one of welcoming any method which will yield truth that will work. Scientific methodology is not a closed

science. It is a growing one, and it needs to preserve the experimental attitude just as much as any other science. Moreover, if the social sciences are to progress, we need to keep the mind of youthful students not only open but adventurous; not bound by physical science traditions, but eager to discover new knowledge by any methods which trained human intelligence can follow.

CHAPTER III

OBJECTIVISM IN SOCIOLOGY

THE word "objective" seems to be one of the chief stumbling blocks in sociological thinking among American sociologists. A generation ago Professors Small and Giddings began to demand that sociology become an objective science, and that sociologists think objectively. An examination of their writings shows clearly enough that they did not mean by this that sociological thinking should be entirely in terms of external observational phenomena. On the contrary, both Professors Small and Giddings made free use of subjective factors in their sociological explanations. Clearly what they meant by "objective thinking" was impersonal, detached thinking—thinking, in a word, which is not colored by one's subjectivity or personality.¹

The best sociologists have always recognized the necessity of eliminating their subjectivity—their personal equation—in order to get imper-

¹The variety of meanings of the words "objective" and "objectivity" in sociological literature deserves investigation. Professor Clark Wissler seems to regard as "objective" any study "as through the eye of an outsider" (*Middletown*, p. vi). Others apparently mean by "objective" any study where there is no intent at propaganda; while some regard as "objective" only quantitative descriptions.

sonal, or "objective" views of social reality. In common with all other scientific workers, sociologists have always aimed at "objectivity"—that is, such a description of processes investigated that the description can be verified by any scientific investigator whatsoever. It is only as we eliminate the personal equation that science becomes possible. But in this sense, the desires, wishes, interests, beliefs, and ideas of individuals in society can be studied as objectively as any other social phenomenon. And this was undoubtedly the scientific attitude of Professors Small and Giddings.

But now a new school of "objectivists" in sociology has arisen, which claims that these old standards of objectivity are not adequate to produce "objective" social science. The adherents of this school assert that a fact for scientific purposes must be "something that can be observed," a happening in the external world which impresses itself upon the senses, and which can and should be described without reference to psychic processes or factors. This school would describe everything in the social life in terms of habit and environment. They find no place in science for such terms as feeling, idea, belief, value, standard, or mental interaction. The more extreme would exclude all reference to psychic processes whatsoever in the description professing to be scientific. Others would tolerate the use of such terms to

some extent in scientific description, but would recognize them as of inferior scientific value, and would not use them along with objective terms in describing different phases of one complex process. A process may be described, they say, in either subjective or objective terms, but the latter description is alone scientific, and the two types of description should never be mixed. The implication is that description in subjective or psychic terms is only of literary or artistic value. A war, for example, may be described in objective terms as a series of collective behavior complexes, dependent upon certain stimuli in the environment; or it may be described in terms of the opinions, ideas, interests, values, and standards of the belligerent peoples. The former, if properly done, would be a scientific description; the latter, might have artistic or literary value, but could not be called scientific. In no case should these two ways of looking at social events be mixed. It would be scientifically wrong, for example, to trace any of the behavior complexes observed in a war to the ideas, values, and standards of the peoples concerned. For, according to these extreme objectivists that would be explaining a scientific fact by something which is not a fact at all.

It has been claimed that Auguste Comte was the father of this objectivist movement in sociology, and even of the behaviorist movement in psychology. Comte, himself, however, repudiated

this kind of objectivism.² What Comte asserted was that introspection, as it was practiced in his day, could not be used to give valid scientific results. But no one was more insistent than Comte upon the essentially psychic nature of human society; for he held that human history was a developing tradition, or rather, we might say, the development of the human mind. In the *Positive Polity* he goes so far as to say that sociology is "reducible to true mental science."³

The modern objectivist movement in sociology has, as its real father, Professor Émile Durkheim. Durkheim claimed to be rigidly objective in his method. He defined a fact as whatever impresses itself upon observation. If sociology is to become scientific, he said, social facts must be treated as things⁴—that is, social facts must be studied apart from the conscious subject in whose minds they exist. Sociology need not consider individual consciousness, and should not be based upon psychology.⁵ Thus, in tracing social causation, according to Durkheim, one cannot appeal to the conscious innovator; for the conscious innovator is determined by the social milieu in which he exists.

² How ridiculous it is to cite Comte as the father of modern objectivism may be shown by a quotation from his *Positive Polity*, III, 20: "Doubtless a preponderance of subjectivity in its old shape would now-a-days tend toward *madness* by neglecting external data on pretext of dignity. But we must equally recognize that the modern ascendancy of Objectivity, by repressing the imagination, is now tending to *idiocy*."

³ *Positive Polity*, III, 40.

⁴ *Les règles de la méthode sociologique*, chap. II.

⁵ *Ibid.*, chap. V, pp. 120-137.

Accordingly, if social causation is explained by appeals to individual psychic phenomena, one may be sure that the explanation is false.⁶ According to Durkheim, the explanation of a social phenomenon must be sought in other social phenomena, in group characteristics, not in individual consciousness. The determining cause of a social fact must always be sought in an antecedent social fact.⁷

But Durkheim was only half-hearted in his objectivism. Instead of going on to construct a sociology in terms of the behavior complexes of the aggregate, he accepted the hypothesis of "collective representations," such as popular beliefs and social traditions. Thus, Durkheim's objectivism was strongly tainted with a subjectivism of the worst sort, for his hypothesis of "collective representations" transcends his definition of "fact." Durkheim is no more entitled to be called an objective sociologist than Giddings or Cooley whom he criticized for their subjectivity.⁸

The only way in which psychic elements or factors can be gotten rid of in the social sciences is to interpret all social processes in terms of purely physiological processes. In other words, human society would have to be explained exactly as the animal psychologists would explain the behavior

⁶ *Les règles de la méthode sociologique*, p. 128.

⁷ *Ibid.*, p. 135. Compare the much more scientific statement of Prof. W. I. Thomas: "The cause a social or individual phenomenon is never another social or individual phenomenon alone, but always a combination of a social and an individual phenomenon" (*The Polish Peasant in Europe and America*, I, 44).

⁸ Compare Sorokin's discussion of Durkheim and his school in his *Contemporary Sociological Theories*, pp. 463-480.

of a rat—in terms of hereditary reflexes, conditioned reflexes, and environmental stimuli. So far as the writer knows, only one social thinker has had the courage to state clearly and explicitly—in a manner beyond criticism—all that is implied in such a program. This writer was Dr. G. P. Zeliony,⁹ a former docent in physiology in the University of St. Petersburg (now Leningrad). In 1909 Dr. Zeliony read a paper before the philosophical society of that city, in which he presented a rigid sociological objectivism and carried it without reserve to its ultimate conclusion. Zeliony had been a student of Pavlov, and wished to apply Pavlov's rigidly natural science methods to sociology. Natural science, Zeliony declared, is *the science of phenomena which are objects of investigation by the senses* and not of the conceptions which ordinarily accompany them. The task of natural science is therefore simply the description of observable phenomena, the discovery of new phenomena, and finally the deduction of relations of laws between phenomena.

Many sociologists, Zeliony said, accept this attitude in theory, but not in practice, owing to their unclear conception of phenomena. Now a clear conception of phenomena compels the scientist in the examination of mankind, says Zeliony, to leave the psychic side untouched. For instance, a man with an angry face and a menacing attitude

⁹ Sorokin spells the name *Seliony* (*op. cit.*, pp. 619-625). The paper referred to may be found in *Archiv für Rassen-und Gesellschafts-Biologie*, IX, 405-430.

attacks another. We usually explain such incidents by what we see, namely, a man with an angry face and a menacing attitude. But I see only the sum total of the outward phenomena which I have abstracted from the surrounding phenomena. The man's face is clouded, and from the appearance I declare it to be anger. *But the mind of another cannot be considered as a phenomenon, nor as a fact.* The conception of consciousness cannot have a place as a scientific designation of a natural phenomenon. Consciousness must be ignored by the natural scientist, as it is not available for his observation, neither can it serve as a transcendental hypothesis.

The whole of modern sociology is full of such mistaken designations. It regards such social phenomena as "marriage," "crime," and the "family" as similar to natural phenomena. But crime cannot be such a phenomenon. For instance, a man strikes a knife into the breast of another. That act can be seen with the eyes; but if we characterize this act as a "crime" we involve or build on the psychic side of another person which is inaccessible or unavailable for us. Again the concept "family" requires the presentation of the psychic side of individuals, and thus must also be barred from scientific sociology. Crime and the family can be made objects of scientific investigation; but the concepts should only play the rôle of drawing attention to the other facts connected with these; and, when we examine phenomena, we must aban-

don concepts, as they are only guides to be dispensed with when the destination is reached.¹⁰

Frequently it is granted that the mind is no phenomenon for the scientist, but it is claimed that he can take refuge in it for the explanation of certain phenomena. But neither can such a contention be admitted. Science is founded on the principle that every overt phenomenon has a cause in another overt phenomenon; but this cause must be considered in the sense of "condition for the act." The scientist asks "how," "under what conditions," and not "why." He seeks no hidden inner cause, but only conditions or laws, according to which phenomena take place. What causes the angry man with the stick in his hand to raise his hand? In a certain sense it lies in the wish of the man to hit his opponent. But such an answer from a scientific point of view is of no avail, Zeliony says, since to explain a phenomenon signifies to designate the causal connection with other phenomena; and as the psychic side of a man is unavailable for observation, the connection of it with the physical phenomena of the organism is no explanation. But when we explain the raising of the hand in connection with the physical effect on the organism, then, and only then, do we give a scientific explanation. *The scientist has no right to explain human phenomena by, or take refuge in, the mind.*

¹⁰ Compare the opposite statement of Professor Rice in chap. II, p. 22 above.

But it may be objected that the natural scientist does deal with psychic phenomena, and thus the method of natural science should permit the use of the psychic in the social sciences. But to such a contention Zeliony replies that this method does not deal with science itself but with the individual scientist, and thus he deals only with what is phenomenon for him, and not with that which is found in the mind of another. Thus he touches only what is physical for him. Again, it might be objected that science is based on metaphysical hypotheses, and proceeds from them. For instance, science dealing with hypothetical atoms and electrons as a working basis, uses mind and consciousness. But when the scientist examines the physical side of the human body he gets no idea of the mind or consciousness; but through the investigation of physics and chemistry he knows that he is led to such concepts as atoms and electrons.

Zeliony insists that we must get rid of the presentation of man as a psycho-physical organism, and consider him as a biological organism alone, and ignore the mind entirely. But such a procedure, he admits, requires a difficult mental discipline.

The world shows many changes. Some are from natural causes, as rivers and earthquakes. Others result from living organisms. Bacteria result in changing the surrounding medium. More complex organisms produce more complex

changes, as ant heaps. But the largest changes, such as cities and canals, are due to the most complex organism, namely man. From the physico-chemical view there is no difference in the result on surrounding nature of the unorganized forces, such as ice, wind, or rain, and the highly organized work of the human organism. Animals affect not only nature, but also each other. A bird's-eye view of any nation shows us that some individuals go in one direction, others in other directions. This direction and the character of the movement depend on the surrounding people and other natural conditions. Again some require little, some much, food. Differences in race will also be noted in the care of the wounded and dead, and in the styles of clothing. These differences give the scientist his objects of investigation; and if these cannot be explained without reference to the mind, then natural science must be ignored. An organism produces no energy. The activity of every organism represents energy taken from outside of itself. This condition is true if the process goes on between two organisms, or one organism and nature, as both are under physico-chemical laws.

Again, there are two kinds of complicated relations between the animal organism and the environment. There is, first, the interaction of the organism and the environment which follows from reflection, through the intervention of the nervous system as the result of the outer world

acting on the sense organs. In the second place, there is the non-reflective influence which is not entirely dependent on the nervous system. A reflex action of an organism is due to an exchange of excitation of an ingoing nerve with an outgoing nerve through the nervous system of the organism. Not only the laity, but many well-educated persons as well, insist that some acts are different, requiring something called consciousness to carry them to completion. It is not a reflex mechanism, they think, but a psychic process, such as words spoken in response to a question. These together are called "behavior." It is perhaps true that these reactions really do have their cause in psychic processes; but for the scientist the cause lies in the mechanical processes of the nervous system—in other words, in the reflexes. Even if the mind does regulate the nervous processes, the work of the physico-sociologist is not changed, for he considers only the process, and not mind.

A chief reason for the reaction against such an objective method, Zeliony thinks, is that until recently human action was supposed to follow no laws; but now the result of scientific investigation has given us the concept of conditioned reflexes.

Unconditioned reflexes require no previous conditions. They show themselves through being general. Certain excitations call forth in each individual a complete definite reaction, as, for instance, a sour substance in the mouth causes saliva to flow. But some excitations get certain reac-

tions in one organism, but not in others. The breaking of toast causes saliva to flow in some dogs' mouths, but not in others, depending on whether they have been previously fed on toast or not. The conditioned reflexes thus build themselves through combinations with unconditioned. Furthermore, the conditioned can disappear, as when the dog, hearing the crumbling of the toast, is never fed on it, and the reflex finally dies. And again, the conditioned reflex can be modified. If the dog is scratched immediately after the crumbling of the toast, he gradually fails to react in the same way toward the crumbling alone.

Most reflexes are conditioned and are the basis of habits. Words spoken or written are excitations to which we react in a certain way. Human behavior can be reduced to objective terms, as most of it is reflexive. At the rattling of dishes a man goes into the dining room. Scholars go to classes at the ringing of the bell, and soldiers at a given command react in a given way.

Now Zeliony raises the question whether or not under these conditions a scientific order in human society can be sought, or whether sociology does not become collective physiology. There is no doubt but that the changes of society are the result of the activities of the nervous system. Excitations vary with the same animal and with the same class of animals. The problem of the socio-physiologist is to find out what are the excitors and what the inhibitors. Physiology gives the

laws of the nervous system, which exclude appeal to the psychic. Thus the duty of the socio-physiologist is to give a description of the nervous processes of groups which have resulted in changes in the environment. In the primitive stages of development the unconditioned reflexes play the most important part. An organism reacts on another by bodily movement, or by the voice, or otherwise. In cultured society, however, one organism affects another by means of definite excitations, such as letters, papers, telegrams, and other products of reflective activity.

Physiological sociology will also have to take into consideration natural selection, or the struggle for existence. In this consideration, however, the psychic side of the organism will not be considered as a factor directly, but only through its physical correlatives, that is, through the function of the nervous system. But such a physiological society will be possible only when the physiology of the nervous system and the reflexes have been satisfactorily developed. Great aid in the understanding of these reflexes, Zeligson thought, will be gained through the close examination of the physiology of animals below man. With these we can use instruments and methods which cannot be used when dealing with man. And from such procedure we can make generalizations which can be used in the analysis of human activity. The knowledge of the above-mentioned conditioned reflexes which has been gained by observation of

the behavior of animals can also be used in the explanation of the behavior of the human organism.

Furthermore, a socio-physiological pathology will become necessary. Its field of observation will be the deviations from the norm which are observed either as a result of the pathological differences in the organism or as a result of other conditions, as in the insane or those addicted to the use of alcohol.

The special method of the physiological sociologist will develop as the science develops. One great help will be derived from the method found in the formation of conditioned reflexes. The statistical method will also be found valuable, but not in the form in which it is used today. One will be required which will deal only with scientifically characterized facts. It will, furthermore, need the results of all forms of knowledge, physics, chemistry, meteorology, geology, climatology, astronomy, etc. And, says Zeliony, the object of his paper is to show, not what the sociologist should do, but what he cannot do.

Furthermore, he insists that, in considering man, we must consider him in a way in which alone such a procedure is possible, that is, *physiologically*. We can leave science and use the psychological side also, and by the observation of activity deduce certain things about the individual mind, and then about society. Thus we would have a collective psychology; but *such a procedure*

is not scientific, Zeliony says. We will leave it to the philosopher to decide what it is. What the psychic activity of the other individual shall be called, the subjective sociologist must decide. "Mind" and "consciousness" cannot explain the complicated interaction of human organisms. Thus it is difficult to be a follower of the psychological sociologists. Psychic phenomena cannot be observed in their true form, as observation itself varies, and psychic phenomena are very changeable; neither can they be measured, nor made exact. Thus we are driven to admit that physiological sociology can exist without psychological sociology; but not vice versa, according to Zeliony. As psychology has strengthened itself by connection with physiology, so psychological sociology can progress on the foundation of a physiological sociology.

No one denies that our conceptions of psychic processes are built on the behavior of the body, and external changes. Thus it follows that our psychic activity will be better understood the better we understand the physical, and only then will psychological sociology gain a high plane of development. The subjective sociologist can avail himself of the results of objective sociology on the basis of psychic parallelism. When we get the conditions of the physical phenomena, Zeliony thinks, we also get the conditions of the connected psychic phenomena. To illustrate, an officer has power over his soldiers. Subjectively the claim

is mental interaction. But objectively the explanation would be that certain words call forth certain responses; others call forth inhibitors. Thus the action can be accounted for reflexively; the psychic interactions of people have a physical correlative. We should proceed in sociology about as has been done in the study of acoustics. Auditory sensations are not measurable, and thus do not admit of exact science. The scientist, however, examined the vibrations of an elastic medium which were accompanied by auditory sensations. And as these vibrations were studied and it was learned how to control them, control was also gained over auditory sensations. As a result acoustics have been given a solid foundation.

In conclusion, Zeliony shows the value of a physiological sociology. Science is founded on a careful analysis of facts which it takes years of time to gain, but the results are rich and irrefutable. Boats were once built without the use of physics. But when physics became a science, would it have helped any to say that it was useless because a ship could not be built at once with its principles? But when the science became systematized, it gave us the modern steamship. At present physiological sociology is valueless for social practice, Zeliony admits, but in the future it will aid in the understanding of social interactions as easily as we now understand dead nature. Its laws will enable us to get laws of interaction.

But, regardless of its value, such a procedure

gives the scientist great satisfaction. Under the monadism of Leibnitz, physiology was hemmed in by having the subjective element introduced. Pavlov especially has sought to free physiology of its subjective element, and now its only abode is in the mental interaction of individuals. When the subjective is driven from this place also, then the scientist can regard the world as a large, complicated mechanism, in which mankind represents only one part. Under such a scientific method, Zeliony says, our world-view will show that science is not interested in morality, nor in the value of the psychic or the spiritual, nor in psychic activity; and thus the basis of a practical world view will be sought elsewhere than in the spiritual, namely, in physical conditions. The practical results will be as in biology. In this field no attention was paid to the value or benefit for man, but the results have been unexpected.

I have stated Zeliony's views in detail, because they show so clearly and consistently what a pure objectivism or behaviorism in the social sciences would be like, and also because they are of the utmost importance to sociology. If the psychical is not available for any sort of investigation, then the one safe way for sociology to develop as a science is as a *collective physiology*, or as Bechtereff has termed it, a "*collective reflexology*."¹¹ Such would be the result of carrying out a rigid natural-science point of view in the social sciences.

¹¹ See Sorokin, *Contemporary Sociological Theories*, pp. 18, 19.

But the question arises, is it adequate? What are its limitations? And how far can it be carried? These questions we shall try to answer in the next chapter.

CHAPTER IV

THE INADEQUACY OF BEHAVIORISM IN THE SOCIAL SCIENCES

WE HAVE seen that there is now a strong tendency to confine the social sciences to the physical-science method of making use only of sense data. An increasing number of sociologists, and some economists and political scientists, are claiming that the logic of the social sciences, that is, their methods of approach in the study of their problems, is the same as that of the physical sciences:¹ that very little that has been written in the social sciences until the advent of such objective methods is worthy of serious consideration; and that the social sciences, if they are to be sciences, will have to be rewritten in physical, objective terms or symbols, stating their conclusions in quantitative measurements, at least hypothetically, if not actually. This is sociological behaviorism.

These behavioristic social scientists hold that all subjective terms or names of mental processes, such as ideals, beliefs, desires, wishes, values,

¹ For elaboration of the arguments supporting this position, see the chapter by Lundberg on "The Logic of Sociology and Social Research" in *Trends in American Sociology* (chap. X); also his volume on *Social Research*, which denies that there are essential differences between the social and the physical sciences.

have no place in a *scientific* description of human society, except as they may be temporarily tolerated on account of the lack of objective terms for such processes. The physical alone has real existence for scientific purposes, and since social processes that are observable are physical, the use of any terms which imply mind or consciousness, while of popular literary value, is out of place in science. As one psychological behaviorist has said, "The fundamental difference between a behaviorist and the non-behaviorist is that the non-behaviorist believes that subjective, non-material phenomena are real and existential and that they play an important part in determining and giving significance to objective phenomena, while the behaviorist rejects the concept of non-physical entities or processes."

Moreover, behavioristic social scientists say that science deals with facts which are verifiable, and which hence can be observed by many witnesses. Mental processes are not observable. Only physical processes are observable. Therefore, the gradual exclusion of all subjective or mental terms from the social sciences is the only way in which these disciplines can be made true sciences, capable of advances in the measurement of the processes which they describe. So far as sociologists appeal to ideas, emotions, beliefs, desires, and values, they destroy, according to the pure behaviorists, the objectivity which is the basis of scientific knowledge, and some would say

also the principle of the continuity or uniformity of nature.

Now it is a great mistake to dismiss this movement as simply a temporary fad or fashion in the social sciences. It is too well grounded in the history and the tradition of the physical sciences to be so regarded.² It is true, of course, that some of our younger sociologists appropriate the label "behaviorist" or "behavioristic" because it is popular to attach such labels to one's work. However, the behaviorist movement is the logical outcome of carrying over the tradition of the physical sciences into the social sciences, and it will undoubtedly triumph if the physical or natural-science tradition comes to prevail in the social sciences. What purely scientific objections, then, can be offered to this movement?

² Professor Adolf Meyer has rightly remarked: "Unfortunately science has been built up with such an exclusive interest in physics and chemistry of an elemental kind, and of late in some biology and special physiology equally elemental, that the conceptions of science became and remained unduly mechanistic, with an unnecessary expurgation of all the larger concepts of mind and soul that we meet in ourselves and in our fellowbeings."

Further illustration is afforded by Pearson's *Grammar of Science*. While Pearson apparently starts with a sufficiently broad definition of science and scientific method ("The classification of facts and the formation of absolute judgments upon the basis of this classification essentially sum up the *aim and method of modern science*. . . . The man who classifies facts of any kind whatever, who sees their mutual relation and describes their sequences, is applying the scientific method and is a man of science" [3d edition, pp. 6, 12]), and while he claims that the whole range of phenomena, mental as well as physical, is the proper field of science, yet inconsistently in his chapter on "The Facts of Science" he limits the field of verifiable, *scientific* facts to sense-impressions. He apparently has no conception of a field of facts, which while within experience, yet fall outside of the field of sense-impressions.

As we have already seen, this movement is not new, but it made little headway in the social sciences until Pavlov in Russia demonstrated the conditioning of reflexes, and John B. Watson in this country came forward with his doctrine that consciousness can have no place in a scientific description of natural phenomena, as it is not available for observation and verification, and cannot be made so. Human behavior, therefore, must be studied like animal behavior, which is adequately explained by reference to purely physiological processes without appeal to mind or consciousness. It was at once perceived by the devotees of the natural science tradition that *collective* human behavior must also be studied and explained like animal behavior through physiological reactions to environmental conditions and stimuli.

The development of this movement in the social sciences was made the easier because the social sciences have always preferred objective terminology in the studies which they have made, and have thrown their emphasis upon environment. When they have appealed to the subjective or the mental, they have done so in order to explain objective conditions, which is precisely what the behaviorists claim to be a violation of sound scientific method. Thus the psychological school of economists explains the prices of commodities as due to the subjective value of these commodities to individuals. Anthropologists, historians, and po-

litical scientists have appealed to collective beliefs, traditions, and values to explain many objective phenomena with which they dealt. However, in the main these students of human society have been objective in their statements, and have used the subjective or psychic as simply an important set of modifying factors. *The dominance of environment and of objective conditions is not, therefore, the question at issue in the behaviorist movement.* It is rather the question whether subjective or psychic factors should be excluded altogether from a legitimate place in the social sciences. Probably all who call themselves social scientists today would object to a description of institutions or social life in purely subjective terms. While they might hold that conscious values are necessarily involved, they would also hold that a purely subjective description is unreal and, to say the least, out of date.

In a limited sense, the behavioristic approach has always been used by the modern social scientist, and is universally regarded as a fruitful method, provided it is not claimed to be adequate. Even Professor Charles Horton Cooley, the most pronounced of all of the opponents of behaviorism among the sociologists, says: "The study and measurement of behavior, the outside of life, is a fruitful and promising method, but the idea of a human science consisting wholly of such study, without sympathetic observation of the mind, is, I think, only mystification. Outside and inside,

consciousness and behavior, mutually complement and interpret each other. They cannot be disjoined without denaturing both.”³ Therefore, the objection to behaviorism, it is clear, is the objection to its adequacy in the human sciences. It is seen as a menace only when it sets itself up as an adequate method in itself, without acknowledging its limitations. Like many other methods, it may be valuable, but *it is not adequate*.

Before taking up the limitations of behaviorism in the study of human society, however, let us note first of all certain purely methodological objections. The first of these is that *a purely behavioristic method does not preserve the experimental attitude in the matter of scientific methodology*. It assumes that scientific method in the social sciences is a settled question, and it would put a bar to the development of social science by any other than behavioristic method. But we have no right to assume that our methodological knowledge is complete any more than any other part of our knowledge, and it is quite as important that the experimental attitude be preserved in the field of scientific method as in other aspects of scientific work. This is surely the scientific spirit. Behaviorists are traditionalists in science and in scientific method. They are setting up an orthodoxy which enslaves the scientific mind and shackles science. The scientific student of human society

³ *Life and the Student*, p. 151.

should be willing to use any methods which promise results in the way of trustworthy knowledge.

A second methodological objection to behaviorism is that, *if it claims adequacy, it must adhere to some metaphysical dogmatism*. Now, science is a movement toward knowledge of all reality, and it cannot be built upon any dogmatism, but must be built upon the open mind. Behaviorists, as we have seen, deny the existential reality of the non-physical. They seem to hold that science is interpretation or explanation in terms of mechanistic causation. The philosophical assumption of behaviorism is that only the physical exists and therefore that science must be built upon physical facts and upon a philosophy of mechanistic determinism. But this is a sheer dogmatism which cannot be justified if the scientific spirit is the open-minded love of truth. Science in this sense is always willing to revise theories or hypotheses to accommodate facts. It is not a particular view of reality from some one angle, such as that of physical science, or mechanistic determinism. Neither is it an attempt to over-simplify reality. If there be non-physical, teleological, or indeterminate elements involved in social behavior, scientific method should be broad enough to recognize the fact. It is curious to note that just as the physical sciences seem about to give up a rigid mechanistic determinism, the behaviorists are trying to introduce it into the human sciences. May we not suspect that they are the victims of tradi-

tionalism in science? The social scientist has no right to attempt such over-simplification for the sake of conformity to some scientific or philosophical tradition.

A third methodological objection to behaviorism in the social sciences is that *it states its results in language unintelligible except to the initiated*, thus lessening the practical value of science. We are told by the behaviorists that language is "laryngeal, or verbal, behavior"; that "intercommunication is sensori-motor interchangeability achieved through sensori-neuro-motor structure"; that "institutions and standards result from the conditioned linkage of acts and events to unconditioned avoidance and approach stimuli." Purpose in the terminology of behaviorism becomes "anticipatory behavior"; acts linked with avoidance stimuli are labeled "bad" and those linked with approach stimuli are called "good." Such pedantry, as we must call it, seems to me peculiarly unfortunate in the social sciences. They should be kept as free from jargon as possible. The social sciences can never be of much utility until their conclusions are understood, accepted, and acted upon by the mass of common men. This does not mean that the conclusions of those sciences must be stated in purely objective terms. On the contrary, this frequently results in mystification, as Professor Cooley said, for the ordinary man. No doubt, we need more exact results and better scholarship in the social sciences. But it

will be a great loss to the social sciences if ever they come to be stated in language that is meaningless to the person of average intelligence. We cannot cancel out the conscious factors in social behavior without making the social sciences meaningless to the average man, and so dead sciences, so far as any effect may be expected from them in the human world.

But the greatest and final methodological objection to behaviorism in the social sciences is that *it offers no adequate basis for dealing scientifically with the non-material aspects of culture*. Of course, the behaviorist denies that there are any non-material aspects of culture. But culture, even in the strictest anthropological sense, is at bottom an appreciation of values, and it has many non-material aspects which are more fundamental than its material aspects. Behaviorism, for example, offers no adequate basis for dealing scientifically with such an aspect of culture as religion; for the essence of religion is to be found in belief. The pure objectivists in the social sciences must either deny that a science of religion is possible, or hold that it is possible only regarding objective religious behavior, such as ritual and ceremonial. But we have every reason to believe that it is the purely subjective aspects of religion which we term religious beliefs and values which are most significant for the social life generally. Moreover, these purely subjective aspects lend themselves to historical as well as to introspective

treatment. Not only may they be brought within the realm of tested knowledge, but it is not difficult to make certain correlations between these beliefs and values and objective facts in culture. Any approach to social problems which would bar the way to the study of the non-material aspects of culture would also bar the way to the development of the social sciences, because the most fruitful development in those sciences in the future will probably come through the study of the non-material or strictly psychological aspects of culture.

We now come to the main reasons why behaviorism, in the sense in which we have defined the term, is inadequate in the study of human society. For purposes of discussion I shall reduce these reasons to three. The first reason for the scientific inadequacy of behavioristic descriptions of human social behavior is that *they do not show the true nature of the human social process*, which is essentially a process of intercommunication. The second reason is that *they do not show the true nature of adult human behavior*, which is essentially cultural. The third reason is that *they fail to show the true nature of human institutions*, which are essentially based upon values and valuing processes. Let us now take up these inadequacies of the purely behavioristic interpretation of social phenomena in the order in which they have just been stated.

In the first place, the social process among hu-

man beings is essentially a process of adjustment through the exchange of conscious experiences, by means of articulate speech and other forms of intercommunication. Now, the exchange of conscious experiences is impossible unless meanings, values, ideas, are conveyed from one mind to another. There can be no intercommunication without the sharing of certain subjective states or processes. This is what the word itself means. As Professor Sorokin has insisted, "meaning" is the essential element in true communication, and is not capable of being described in physical or behavioristic terms, as it is not a phenomenon which can be observed in any bodily change of which we have knowledge.⁴ It depends wholly upon subjective appreciations. If group behavior is possible without true intercommunication, it is only possible on the low level of collective reflexes, conditioned or direct, which are shared by a group of individuals. Such collective reflexes may suffice to explain the group behavior of most animals below man, and there may be some sense in describing them as simply cases of sensori-motor interchangeability; but they cannot explain the intelligent, purposive changes in human groups, which are possible only through the exchange of conscious experiences. We do not know whether the exchange of conscious experiences goes on in the animal world below man; but we do know that it goes on in the human world, that it is the real

⁴ *Contemporary Sociological Theories*, p. 624.

content of the process of human social interaction, and the method by which groups of human individuals coördinate their actions and act as one. Behaviorism is probably adequate for the explanation of most group phenomena which we find below the human level, and it is probably adequate also for the lower levels of the behavior of human groups; but to insist that it is adequate to explain all forms of human communication and social interaction is, in the light of evidence, a sheer dogmatism. There is a difference between our knowledge of human behavior and our knowledge of the purely physical world, and so a difference between our knowledge of human society and animal group life. This difference is due to the fact that human beings participate consciously in social processes, that they are a part of their immediate experience, in a way in which the processes of physical nature are not. In other words, knowledge of human behavior and human relations rests upon a very different level of perception from knowledge of the behavior of purely physical nature.⁵

Knowledge of the labor problem, for example, is impossible without the exchange of experiences and sympathetic imagination. The physical scientist is never presented with any such situation. Knowledge of human society is thus always both behavioristic and sympathetic or appreciative; but

⁵ See Cooley's article, "The Roots of Social Knowledge" in *American Journal of Sociology*, XXXII, 59-79; also in his book, *Sociological Theory and Social Research*.

if we eliminate the sympathetic element in it, we reduce the behavioristic element to the non-human level, and we get no correct understanding of human life. To know human life we have to know it both outwardly and inwardly. The inner conditioning of human behavior by meaning, feelings, values, and ideas is quite as important as the outer conditioning by physical facts. The subjective is therefore as much a part of the social reality as the objective, if we use those terms in the sense of the inner and the outer.

As Professor Cooley said, "Much would-be social science seeks to dodge the mental and emotional processes in which society consists, to circumvent them, find them superfluous, arrive at social truth without them. This is pseudo-science; in the end it will not work; these phenomena are nature; there is no substitute; if we are to have a science, it must advance through them, not around them."⁶

The behaviorist usually replies that behaviorism is a matter of method, and that he does not intend to deny the reality of the inner or subjective, only that he finds no means of reducing it to any form of scientific control, and that therefore social science *as science* is necessarily confined to the observation, description, and measurement of objective behavior. But this is surely an unwarranted position and is practically giving up the possibility of social sciences as adequate bodies of

⁶ *Life and the Student*, p. 154.

knowledge to guide us in all human situations. As a matter of fact, introspection of their own minds and of the minds of their associates has always been used by men in guiding them in their practical affairs and conduct. It was only the abuses of introspection by the philosophers of the eighteenth and nineteenth centuries which started the reaction against it, and which led to the dogma that it could have no place or function in obtaining valid scientific knowledge. If science is to come back, however, to the basis of common sense, we must give introspection, or self-examination, a place. As Professor Cooley said, "Introspection, however abused by philosophers, is a normal and common process, without which we could know very little about life." To be sure, the careful social scientist acknowledges that introspection, whether it is the introspection of others' minds or reflection upon our own experience, should always be checked up wherever possible by more objective and impersonal tests. Nevertheless, the fact that we use both sympathetic and self-introspection in daily life ought to be a presumption that, with safe-guards, the method of introspection is capable of being used scientifically. It is curious to note that even the behaviorists, when they come to study human society, resort to such methods as the personal interview, the questionnaire, and the study of historical records, all of which imply something more than behaviorism, because none of these methods could be used in the scientific

study of the behavior of animals below man. Human society affords many other forms of evidence than the observation of external behavior.

The second reason for the inadequacy of a purely behavioristic description of human social life is that adult human behavior is essentially cultural. It has been demonstrated over and over again that ordinary adult human behavior, and so also the behavior of human groups, is an effect of the culture of the group. Behaviorists have claimed that this perception is favorable to them, since they claim that culture is but a series of conditioned reflexes. But the essence of culture is in the appreciation of values, and it is the value responses of human beings which make human culture. Moreover, culture has arisen through invention, which is creative mental synthesis. Culture, in other words, has arisen through the creativeness of man, and it is this very element of creativeness which behaviorism denies or ignores. This means that every element in culture, if analyzed, may be traced back historically to the creativeness of the individual human mind. As Dr. Goldenweiser has said, "The whole of civilization, if followed backwards step by step, would ultimately be found resolvable without residue into bits of ideas in the minds of individuals."⁷ In other words, all culture is the product of the human

⁷ See article on "Psychology and Culture" in publications of the *American Sociological Society*, XIX, 15-23.

mind, and of its distinctively human attributes, its powers of imagination and reason; and yet, behaviorism proposes to leave these out of account. The sociologist would miss the significantly human in man's social life if he adhered to a strict behavioristic view. Behavioristic sociology may work for a colony of rats, but it is hardly adequate for a society of men. Behaviorism thus far has shown itself totally unable to deal with the "culture" which is the chief factor in human social behavior.

Not only does culture arise through distinctly mental or subjective processes, but it is diffused and transmitted essentially in the same way. The vehicle of culture is intercommunication, or the exchange of conscious experiences, especially through articulate speech. This the behaviorist terms "verbal behavior." But since every word is a symbol of a concept, culture is essentially concept-making, and concept-using, and this depends upon such subjective processes as appreciation and meaning. So far as we know, there is nothing approaching such use of symbols in the animal world below man, but even if there were, it would in no degree lessen the importance of the fact that man uses, first of all, the concept and the spoken word as his chief tools of social adjustment. Behaviorism throws no light upon the nature and origin of concepts except to say that they are verbal behavior or vocal gestures.

The making of inventions and the diffusion of

inventions in human groups is obviously a process of learning by individuals and groups. Progress in culture takes place essentially through the learning process.⁸ Now, we have no right to believe that the process of learning can be reduced in human beings to the conditioning of reflexes. We know that in human beings imagination, insight, and meanings play a part in the learning process. Indeed, the gestaltists in psychology have shown that *insight is the essential element involved in learning*. Practically everything in the process of learning is missed by the behaviorist except the modification of habits or reflexes. It is said that this is the important thing; but on the other hand, it must be said when it comes to human interactions that other things, such as imagination, sympathy, and understanding, are equally important. Hence behaviorism is powerless to help us to understand the whole structure of human culture, except as a series of conditioned reflexes which have arisen in some mysterious way by the conditioning of reflexes! The creative mental synthesis by which man builds up new concepts, language, invents physical tools, human institutions, government, religion, morals, art, and science, is by the behaviorist left out of account. The behaviorist calmly ignores the creativeness of the human mind and attempts to describe human society in the

⁸ See final chapter in this book on "The Educational Theory of Progress"; also chaps. I-V of my book *Cultural Evolution*.

same terms in which he would describe a colony of rats.

We now come to the third and final reason why purely behavioristic methods must fall short of scientific adequacy in the social sciences; and that is that they fail to show the true nature of human institutions which are essentially based upon values, and valuing processes. Sumner said that human institutions involved concepts as well as social structures; but he should have added that institutions always involve values. He nearly said this when he remarked, "Institutions begin with the *mores*," for the *mores* are habits or customs considered important for social welfare. Every institution, therefore, involves values which a community has reflected upon and approved. The latest student of institutions emphasizes that the sanction or authority of institutions is the result of group valuation.⁹ Hence, the special social sciences, such as economics, political science, and ethics, all in one way or another, treat of values. Whether these special sciences treat of markets, of government, or of religion, if they enter upon any work of explanation, they find themselves forced to treat of these phases of culture in terms of values. Even the very quantitative measurements which they may attempt are very largely measurements of values. The social life of man is a life which involves the appreciation of values and value-responses in practically all of its phases.

⁹ Hertzler, *Social Institutions*, chapt. VIII.

This is the result, as we have seen, of the exchange of conscious experiences in human groups as the basis of social adjustment. Consequently, any study of human society except the most superficial must take the value-responses of individuals and groups into account. But as values are the creation of the human mind and attach themselves to situations or objects because of human wishes, desires, or beliefs, all of these must also be taken into account in any adequate scientific description of human society. Pure behaviorism in the social sciences thus reduces itself to mere external social description.

Perhaps all the reasons for the inadequacy of behaviorism in the social sciences, and especially in sociology, may be summed up in a single sentence, namely, that *the social sciences are much more sciences of culture than of nature*. It is difficult to see why any sociologist, if he accepts this view, should permit himself to be labelled either as a behaviorist, or as a subjectivist, for the reality which he studies is much too complex to be brought under either category. The obvious need of sociology at the present moment is a synthetic method which will bring together the insights of both objective and subjective methods. The opponents of behaviorism should not be so dogmatic that they are unwilling to welcome the light which the study of external behavior throws upon human social life. On the other hand, the advocates of behavioristic methods should not be so dog-

matic that they are unwilling to see the light which the knowledge of mental processes, such as ideas, feelings, emotions, values, desires, and wishes, throws upon collective behavior. Science must be pragmatic rather than dogmatic. The social sciences should welcome everything which will throw light upon the nature of social reality.

I cannot close this chapter without a word about the ethical implications of behaviorism. Behaviorists accuse non-behaviorists of sentimental attachment to social traditions, and say that in this sense non-behaviorists are traditionalists. This is probably correct, if they mean by this that non-behaviorists see in behaviorism a threat to the higher social values. The human world is badly divided at the present time as to the place and function of spiritual values, values which concern the non-material phases of life. The battle for the recognition of these higher social values has come into the field of science. The behavioristic movements assume that such values may be largely ignored, that they are illusions, or else arbitrary conventions to uphold an existing order. They say that behaviorism is favorable to change and to progress, and ask that their movement be judged by its results. Behaviorism has been enthusiastically received in Russia, and made a part of the official Russian state philosophy, known as "dialectical materialism." Non-behaviorists have the right to reply, that if Russia represents the fruits of behaviorism, then all their worst appre-

hensions as to the moral effects of behaviorism are realized. More than that, behaviorism, whether in Russia or the United States, tends always to convert itself into a dogmatism which is intolerant of other methods in the human sciences. In a word, it becomes a tyranny over the human mind fully as bad as any which theology has established in days gone by. The real ethical significance, therefore, of opposition to dogmatic behaviorism is the belief that intellectual honesty requires the indefinite maintenance of the open mind in all scientific work.

However, the question may still be raised whether natural science attitudes should not be preserved in social science. Even if behaviorism is the legitimate offspring of the natural science tradition, is it not possible that this tradition can be adapted to the social sciences so as to become very fruitful? Even if it be granted that human society is a product of culture, still is culture not a part of nature? I shall try to show that even though culture is a part of nature, it is so distinct from the rest of nature that it has to be studied and understood in ways quite different from physical nature.

CHAPTER V

SCIENTIFIC METHOD IN SOCIOLOGY

THE authors of *Trends in American Sociology* declare in their Preface that "sociology is a natural science, and hence must study human associational activities in the spirit and by the methods of natural science." This dogmatic declaration raises the question whether the methods employed in the social sciences should be the methods employed in the so-called natural sciences, or whether the social sciences need to develop distinct methods of their own. I shall endeavor to show that the scientific methods found useful in the natural sciences cannot be adapted with any high degree of success to the social sciences, and that the social sciences must therefore develop distinct methods of their own. To some extent, as I have pointed out in chapter II above, these methods will resemble more nearly those of philosophy than those of the natural sciences, in the sense that they will make a large use of logical reasoning, of synthesis, and of logical criticism of both concepts and theories. However, in addition to these philosophical methods, the social sciences can and should develop methods of their own, which,

strictly speaking, have no parallel in the natural sciences.

The main methods of the natural sciences are usually recognized to be observation, experiment, and the use of instruments of precision and of measurement. The natural sciences may, of course, in common with philosophy and the social sciences, employ methods of logical reasoning, of synthesis, and of logical criticism of concepts and theories. But these philosophical procedures the natural sciences, by which I mean the sciences of physical nature, share with philosophy and the social sciences, and they are not the distinctive methods of the natural sciences. Natural science devotees would unhesitatingly acknowledge observation, experiment, and the use of mensurative procedures to be the distinctive methods of the natural sciences, and the concrete embodiment of their spirit.

Now, the social sciences, especially economics, political science, and sociology, have for a long time aimed at becoming true sciences and at having their scientific status fully and cordially recognized by the devotees of those older sciences which we call the natural sciences. Accordingly, the devotees of these new social sciences, in order to get standing with natural science students, have in many cases advocated the adaptation of natural science methods to the field of the social sciences. All of the authors of the book mentioned at the beginning of this chapter, for example, would

agree that sociology is a natural science and must employ, so far as it can, the methods which have been successful in the physical sciences. They do not tell us what they mean by "natural science." All sociologists would of course agree that sociology is a natural science in the sense that it deals with real processes and does not question the reality of its subject matter. "Natural" is a tricky word, celebrated in philosophy for its ambiguity. But it is plain from reading the book mentioned that its contributors mean by "natural science" a science fundamentally like physics, chemistry, or biology. More particularly, they mean to accept the general theory of knowledge pragmatically followed by workers in those sciences; namely, that all scientific knowledge comes from the generalization of sense data. The most conspicuous contributor tells us that "theory that is not based upon logical inferences from sense-experience is not sound theory."¹ Like a physical science, moreover, sociology is ethically indifferent. "Sociology is a natural science," says this contributor, "and as such it is non-utilitarian, non-normative, and no more 'important' than any other natural science."² So much from the champions of natural science methods in sociology.³

Let us now see whether observation, experiment, and mensurative procedures can be very

¹ *Trends in American Sociology*, p. 73.

² *Ibid.*, p. 106.

³ On the side of method, these positions are defended by G. A. Lundberg in the final chapter of the book.

well adapted to the material with which the social sciences are forced to deal. Whether the subject matter of the social sciences be considered human relations, social interactions, social institutions, or group behavior, the material with which they deal is very rarely directly observable, or at least only in small parts. Human social phenomena of every sort, be they political, economic, religious, or educational, are in a genuine sense constituted of psychological activities or processes. They can only be in a slight degree observed, and then not the significant elements in the process but only certain incidental products or end results. It is true that we can see certain external forms in human relations, and can observe certain processes in social interactions, and also certain results of institutional activity. But the interstimulation and response, the attitudes, values, motives, desires, impulses, and ideals of individuals and groups are not directly observable. We have to infer them from behavior or results which can be observed, but which we must interpret before we can understand. Perhaps no one has stated this more clearly than Professor C. H. Judd in a recent article⁴ on "The Nature of Social Institutions." "The social sciences," says Professor Judd, "have been timid in recognizing the reality of the entities with which they deal. The physical objects with which the natural sciences deal are so directly recognizable through our sensations that we think of

⁴ In *Social Forces*, October, 1931.

their having a reality and an influence which is primary. The influence of institutions on the life of an individual is less direct, and lacks the immediate sensory appeal that physical objects have, but it is none the less real."

To put the matter very tersely, the social sciences deal with real processes, which are, however, much less observable than the processes and objects dealt with by the physical sciences. Therefore, the rôle of imagination in the social sciences is much greater than in the physical sciences. To be sure, as has often been pointed out, the rôle of imagination in the method of the natural sciences is also very great, and it would be a mistake to minimize the part played by imagination even in the physical sciences.⁵ Thus a leading physicist has recently declared that there was little or no experimental evidence for the existence of atoms and molecules up to about fifty years ago, and that even yet the existence of these particles is an inference, an inference which is now supported, however, by an overwhelming accumulation of experimental evidence. Nevertheless, prior to fifty years ago, the concepts of the atom and the molecule were found to be very useful in the physical sciences. They were purely imaginary concepts, not observable objects, but were found to be useful and even necessary assumptions in explaining physico-chemical processes.

⁵ Compare Pearson, *The Grammar of Science*, 3rd edition, sec. 11: "Disciplined imagination has been at the bottom of all great scientific discoveries."

Again, a leading American biologist has declared: "The constructive usage of the imagination, ever checked and reoriented by observation and experiment, is the very essence of science and of spiritual freedom. It is the only means we have of reconstructing the unwritten past, and anticipating or prophesying the future. . . . The chief purpose of the imagination is rightly to orient mental and bodily growth to world growth; rightly to picture the world as it was, and shall be, in order to fit life more profitably to the world as it is. . . . The imagination is the eyes and legs of the spiritual body with which man annihilates time and space and matter, and with which, in effect, he may project himself far beyond the narrow confines of his physical sanctuary into realms his physical body may not enter. Imagination opens the gates of the universe. In his search for wisdom, it gives man the instant power to look over the edge of yesterday and the top of tomorrow into the abyss of universal time; to fly through and beyond all physical barriers into the infinite expanse of universal space; to explore the dead past and invade the germinating future."⁶

Now, it is the contention of the author that scientific imagination, important as it is in the physical sciences, must play even a larger part in the social sciences, and virtually takes in them the place of observation. When I say, "scientific imagination," however, I mean an imagination

* Patten, *The Grand Strategy of Evolution*, pp. 292-295.

which builds itself upon and has respect for all observable facts or processes. Imagination is scientific, as Huxley would say, when it permits one little fact to change its entire world-view. A scientific social imagination in this sense is our indispensable method of getting at social processes. Professor Charles Horton Cooley, in his remarkable paper on "The Roots of Social Knowledge,"⁷ pointed out that there are two sorts of knowledge, one coming from sense contact with material things, which he calls spatial or material knowledge, and the other developed from contact with the minds of other men through communication, which sets going a process of thought and sentiment which enables us to understand them by sharing their states of mind. This latter he calls social knowledge, and he added that while the distinctive trait of spatial knowledge is that it is mensurative, the distinctive trait of social knowledge is that it is "dramatic."

In my opinion, Professor Cooley would have been happier in his terminology if he had said that the distinctive trait of social knowledge is that it is "imaginative," and that it becomes scientific by submitting itself to scientific criticism. To paraphrase Professor A. J. Todd, "Imagination is not sufficient unto itself. Its reservoirs need constant cleaning and overhauling. Here is the function of critical thought. The springs of imagination are not released as long as tradition and

⁷ In his book, *Sociological Theory and Social Research*.

superstition hold sway. Imagination is dynamic, tradition and dogma static. The chief glory of science—far overtopping its contributions to material achievement—is to have broken through those crusts of authority.”⁸ In other words, the imagination which we make use of in the social sciences must be critical and must constantly be checked up by the facts of experience.⁹ It is this scientific social imagination which enables us to see and visualize social processes and group behavior. The method of the “participant observer” is nothing but the use of imagination to put ourselves in the place of the group described, checked up, however, by our actual experiences as members of groups. The method of “sympathetic introspection”¹⁰ by which we try to understand the behavior of someone unlike ourselves, such as a child, a criminal, or the member of another race or sex, is again the use of imagination to put ourselves in the place of such individuals, checked up by the facts of our experience with the class of individuals described.

It will at once be said that the history of the physical sciences is replete with instances which show the danger of the use of imagination in scientific investigation and thinking. Thus the history of the medical sciences shows many in-

⁸ *Theories of Social Progress*, p. 484.

⁹ This is plainly what Comte meant when he demanded the subordination of imagination to observation in the social sciences.

¹⁰ For this sharing of feeling and thought, the University of Chicago Department of Sociology has revived J. S. Mill's term “empathy”; but “sympathetic introspection,” is surely better.

stances of imaginary hypotheses as to the cause of disease; but Pasteur, with a few facts observed through the microscope, was able to overthrow all of these imaginary hypotheses, and to present for the first time a scientific theory as to the cause of many diseases, namely, the germ theory. This very illustration, however, shows exactly what is meant by scientific imagination. Pasteur was not a man without imagination. The use of exact instruments of observation enabled him to verify what was certainly at first only an imaginative hypothesis. Now, it must be granted that at present the social sciences lack such exact instruments of observation. There are, however, plenty of facts of history and of individual experience which enable us to check up our social imagination. The very lack of exact instrumentalities of observation in the social sciences leads us almost necessarily to make larger use of scientific imagination, and in my opinion, it would be more honest and more intelligent on the part of students of the social sciences to recognize this fact. Again, I feel that it would be more intelligent for the students in the social sciences to make use of the critical apparatus which the science of logic affords than to hunt around for more exact methods of social observation. I do not mean, of course, that we do not need these latter, but I do mean to say that we have not yet exhausted the resources of logical science. Better and more critical thinking is needed in the social sciences,

even more than better methods of observation. Nothing seems to me more stupid than the motto of some of our hyper-scientific friends, when they say: "Don't think; observe." If this motto works well in some of the natural sciences, it certainly will not work in the social sciences.

No better characterization of these hyper-scientists, or, as Professor Hornell Hart calls them,¹¹ "positivists," than that phrased by Tyndall over a generation ago, when he said, "There are men who, however wealthy in regard to facts, can never rise into the region of principles; and they are sometimes intolerant of those who can . . . There are Tories even in science who regard the imagination as something to be feared and avoided rather than employed. They have observed its action in weak vessels and are unduly impressed by its disasters. But they might with equal justice point to exploded boilers as an argument against the use of steam."

As soon as we understand the nature of the subject-matter of the social sciences, that it is nothing but collective human behavior with its correlated psychological processes,¹² we perceive at once that we have two approaches to social reality, which, while they both make large use of scientific imag-

¹¹ See his *Technique of Social Progress*, chapt. XII.

¹² "It must be remembered," says Ogburn and Goldenweiser, "that the social sciences are all psychological, that the facts they deal with belong to the psychological level, that the processes of intercommunication, without which there could be no society and no social science, are intercommunications between minds" (*The Social Sciences*, pp. 4, 5).

ination to interpret their recorded facts, yet have become so systematized that they rise to the dignity of great methods for the understanding of human society. These are psychology and history, or more strictly, psychological analysis and historical interpretation. Psychology and history are the two great foundation sciences for all the other social sciences. As all social processes are rooted in the human psyche on the one hand, and in the experiences of human history on the other hand, it becomes indispensable for the competent social scientist to understand, so far as scientific knowledge will permit, human nature and human history. The psychological method, or the method of psychological analysis, and the historical method, or historical interpretation, take the place in the social sciences very largely of the use of instruments of precision and mensurative procedures in the natural sciences; and *there are no analogues of these methods in the natural sciences.*

There is nothing in human relations, human culture, social interactions, social institutions, or group behavior which does not proceed from the possibilities of human nature; and by human nature we here understand all the capacities, tendencies, activities, and capabilities of the original nature of man. The study of these capacities, tendencies, activities, and capabilities of the human psyche is what we call psychology. It should be evident, therefore, that a scientific psychology furnishes us at once a deductive approach to the

study of all problems of human behavior and so all problems of human society. But it may be asked, whether we have any psychology sufficiently scientific to be used as a basis of deductive inferences in the study of social problems; and if so, which psychology? The answer must be that this is the problem of the psychologists, and that the social scientist has no right to say what scientific methods psychologists shall use in their study of human nature and individual human behavior. They may be introspective, psycho-analytic, or behavioristic. But the social scientist has the right to judge the quality of the theory of human nature delivered to him by the psychologist, as to whether or not it is adequate in interpreting the facts with which he deals. The social scientist frequently brings theories of human nature into more vital contact with facts than the psychologist in his laboratory. The social scientist, therefore, has the right to decide what theories and interpretations of the psychologists he finds adequate for his purposes. All this is perhaps equivalent to saying that psychology, or theories of human nature and behavior, as an instrument of research is very inadequate for the purposes of social science. The psychological approach to social facts must be supplemented by another approach, the historical approach.

It should be emphasized that psychology as a theory of individual human nature and behavior only gives us the possibilities of human society.

No psychology, for example, could have foretold even the probability of the Great War; but a critical knowledge of European history would have indicated the probability of such a conflict. Again, psychology could not possibly predict the present machine age; but a critical knowledge of cultural history could hardly have failed to perceive the age of the machine. More concretely, one of the greatest of American psychologists notoriously failed when he came to write a very learned work upon the psychology of Jesus of Nazareth. On the other hand, an eminent American historian was able in a brief monograph of eighty-five pages to make the personality of Jesus quite understandable, because this historian knew quite adequately the historical circumstances under which the personality of Jesus developed.¹⁸ There can scarcely be any doubt, therefore, that the content of the individual mind, the forms of individual behavior, of social interactions, and of institutions, are much more determined by historical circumstances and situations than by what we ordinarily call psychology or human nature. Both are necessary to understand human behavior and especially group behavior; but history unlocks more doors to concrete processes and events than psychology. History without psychology may be blind, but psychology without history is empty.

There can be scarcely any doubt entertained as

¹⁸ Simkhovitch, *Toward the Understanding of Jesus*. For a more concrete discussion of the relations of history and sociology, see chapt. VIII of this book.

to this by the student of human society when once he grasps the fact that present social institutions and behavior are largely products of culture. The anthropologists have shown us that the essence of culture is invention, and that all human cultures have attained to their present state by a series of inventions which have grown one out of another through the creativeness of man and which have been diffused to the peoples of the world through man's capacity to learn and to imitate. This is as true of customs and institutions, of morals, religion, and government, as it is of physical tools.

In other words, all of the natural behavior of man has been modified by the historical development of culture. Human societies as we now find them, whether they are societies of Eskimo or of Englishmen, are all products of history. Hence, knowledge of the course, the trends, and the tendencies of the cultural development of any people, including in that phrase their total institutional life, will help us to understand the forces and factors, the possibilities and probabilities, of any social movement or condition. Historical method and historical interpretation, therefore, become equally indispensable for the social scientist with psychology, or psychological analysis. Indeed, because of the wealth of concrete facts which it marshals, historical method is the only sure way to save the social scientist from the pitfalls of psychological theorizing.

If what has been said is true, then the method

of such a social science, as economics, for example, should be a method of psychological analysis on the one hand and of historical interpretation on the other. Institutional economics, if conceived in a broad enough way, becomes the only scientific economics; for industries and markets, methods of production and habits of consumption, are all institutions in a very broad sense, and are all historical products. Someone has said that we could have a more scientific economics, with much greater scientific foresight, if our economists could live about two hundred years. Then they would get the historical point of view and understand the trend of events. However, every economist and sociologist, if he wishes, can live at least three thousand years in imagination, for there is that much, if not more than that, of recorded economic and social history. Here it may be remarked that the great defect of the historical method is the breaks or *lacunae* in our historical records. Of course, another fault of those who use the historical method is lack of scientific imagination in interpreting records, and lack of psychological insight into historical events.¹⁴ History alone is inadequate, and if at times it saves us from the pitfalls of psychological theorizing, it also leads us, if we have no adequate knowledge

¹⁴ One should also not forget the personal bias of the historian. "The facts of human history—the raw material of social science—are even more dependent than the facts of physics upon the pre-suppositions of those who record and interpret them (Stuart Rice in *Methods in Social Science*, p. 8).

of human nature, into very stupid conclusions. Synthesis of all methods that will yield truth is alone adequate for the purposes of the social sciences.

Someone may ask, if we conclude that scientific imagination, psychological analysis, and historical interpretation should be the main methods of the social scientist, where the place is for those newer methods which have been developed under the names of statistics, the social survey, and case study. The reply is, that these do not have distinct places apart from these larger methods, but are special methods of research that have been developed within the larger methods named. For example, we have no difficulty in seeing that the statistics of a century ago, so far as we have them, are a part of history and will be included in the historical method. The same would be true of social surveys made a century ago, or of personal case studies; they would all become so much historical data. The adherent of these methods seems to forget that present society is a part of history. Statistics, surveys, and case studies are all useful in correcting errors and misapprehensions of historical facts. If we are to interpret correctly statistics, surveys of present society, or personal case studies, we must do so in the light of historical development and with scientific social imagination. And it is the interpretation of statistics, not mere statistical measurements, which creates social science. The exact place of the statistical

method in the development of the social sciences will be discussed in a later chapter.

We may conclude, therefore, that while observation will remain the starting point of the social sciences, as it is of all science, the main methods of research in the social sciences must be and will become imagination, psychology, and history, when these have been rendered thoroughly scientific and matter-of-fact. These three main methods of the social sciences stand in contrast to the main methods now in use in natural science, which are, and will perhaps remain, exact observation, experiment, and the use of methods of measurement. However, it would seem probable that both the social sciences and the natural sciences, as they exhaust the possibilities of their main methods of research, will turn more and more to the philosophical methods of logical reasoning, of synthesis, and of logical criticism of theories. If these philosophical methods were once the original procedures in all the sciences, there are now some symptoms, even in the natural sciences, of renewed vitality in these methods. The greater maturity of the physical sciences would suggest that it is hardly to be doubted that the final development of all sciences will be philosophical. They began as philosophies without a basis of tested knowledge; they will end as philosophies based upon tested knowledge. The factual and quantitative stage of science appears to be merely transitional. Sociology in its final de-

velopment, therefore, will be synthetic and philosophical. Without ceasing to be a science, it will find a place for both the material and non-material factors in life, and for the proper evaluation of these with reference to the problems of collective living.

CHAPTER VI

OBSERVATION AND THE SURVEY METHOD IN SOCIOLOGY

WHILE sociology will find it difficult if not impossible to use to any great degree the exact methods of the natural sciences, it should of course employ these methods wherever and whenever they are adapted to its purpose. To use them exclusively or predominantly is to overlook the differences between social and physical phenomena. We have shown that the phenomena studied by sociology are dissimilar in nature to those studied by the natural sciences, and therefore require different methods of investigation. Nevertheless, wherever exact observation, experiment, or measurement—the methods of the natural sciences—can be used in the study of social phenomena they should obviously be employed.¹

No one doubts that personal observation is the mother of all science, and most would probably agree with Comte that even the personal observation of a single individual, when extended over a life time, not infrequently reveals important social principles. The difficulties, however, in the per-

¹ For a detailed and concrete statement of the methods discussed in this chapter, the reader would do well to consult Odum and Jocher, *Introduction to Social Research*, chaps. XV, XVI, XVII.

sonal observation of the behavior of social groups have not been appreciated until very recently. Now that these difficulties are beginning to be recognized, sociological research students are attempting to establish for small groups sociological laboratories where the actual processes of social life take place within a sufficiently narrow scope to permit consistent observation and recording. Such a sociological laboratory may perhaps be helpful in the observation of certain social processes. However, it would seem that in general the conditions are too artificial and too limited to throw much light upon human social behavior. It should be remembered that the best sociological laboratory is always in the social life around us, the natural human community, a nation, a civilization, the human world at large, and even, in one sense, human history. Ultimately sociologists are driven to consider these larger units, though, of course, there are many psychological advantages in observing small groups that can be seen, such as the family and the neighborhood.

A recent symposium on the observability of social phenomena puts forth the claim that social interaction can be studied observationally and reliable scientific data obtained.² No one would dispute this within limits. Social interaction is analyzed into spatial contacts, physical contacts,

² Dorothy Swaine Thomas, F. Stuart Chapin, James M. Woodward, Stuart A. Rice, E. B. Wilson, and M. J. Adler, in *Sociologus*, Vols. 8 and 9, pp. 436-456 and 1-24.

verbal contacts, and gestures; or in other words, into spatial contiguity, bodily contacts, spoken language, and facial and bodily gestures. One of the more careful critics in this symposium points out that all that is strictly observable in these social processes, comparable to the exact observations of physical science, are movements in space and time and that all the rest are interpretations.³ He, therefore, distinguishes five levels of social observation. The first is the strictly behavioristic observation of bodily movements in space and time. The next level is when these space and time movements are related functionally to some total configuration of movement. The third level of observation is when implications of consciousness and of its influence on behavior are admitted into the observations recorded. This is where interpretations of behavior are often attempted in terms of epiphenomenalism, interactionism, or psycho-physical parallelism. A fourth level of observation is where some obscured or simulated meanings are found in the total behavior configuration, such as bluff, conceit, affectation, evasion, etc. Very rightly this critic of social observation says, "No one doubts that there are phenomena of this level of description. No one denies the hazard of error in working in this field. And no one can deny that *a completely objective account (of such behavior) would be directly false.* The problem of this and the succeeding level is

³ James M. Woodard, *op. cit.*, Vol. 9, pp. 4-10.

the problem of rendering a subjective observation objective on the one hand, and on the other of devising objective check-ups and validations for identifications and processes which in their nature will perhaps always remain subjective in their apprehension." A fifth level of difficulty in social observation is the observation of obscured or simulated meanings in behavior configuration of which the subject himself is not aware or which he actively protests as unreal. This, the writer says, lands us in the psycho-analytical realm, the most hazardous realm of human observation. He concludes: "We are brought to face the central problem of whether there is only one way of arriving at scientific conclusions—by quantification. Or whether in the psychological or in the social, we may not also validate laws by the internal rational consistency of inferences gained by insight. It would seem that *in the socio-psychological this is not only possible; it is absolutely necessary.*"⁴

The limitations of purely objective personal observation in sociology apply, of course, in all their force to so-called sociological experiments. Physical scientists and those enamored of physical science methods frequently tell us that it is only through the method of experiment that the social sciences can be given a basis of unquestioned fact and theory. Usually such advocates of the methods of experiment in the social sciences mean by

⁴ The italics in these quotations have been added.

it, however, something very different from what we find in natural science laboratories. They usually mean by it nothing more than the careful observation of the results of some new "experiment" in the social, political, or economic field. Thus a physicist who has recently advocated the extension of the experimental method to the social sciences acknowledges, "It is difficult to see how to apply the experimental method . . . to the solution of such questions . . . perhaps the experiment is one which must be prolonged over the centuries . . . such experiments are extremely difficult because of the great number of uncontrollable variables that enter into the observations. But unless experimental evidence pro and con can be collected, such questions must be assigned either to the realm of pure logic or to the realm of taste." This quotation makes it clear that what the writer is really thinking of is an improved historical method based upon exact personal observation. It is hardly justifiable to speak of such a method as the same as the experimental method in the natural sciences where conditions can be controlled and where variables can be arbitrarily altered at the will of the experimenter. Almost never do such conditions present themselves in the field of the social sciences. A recent advocate of exact, quantitative methods in sociology confesses: "The sociologist's ability to control his conditions and set up any experiment worthy of

the name is probably so limited as to be negligible.”⁵

Social scientists who have been enthusiastic advocates of the statistical method frequently claim that that method bears much the same relation to the social sciences that the experimental method bears to the physical sciences. This is because they believe that the statistical method not only furnishes us the means of measuring social facts and forces upon a wide scale, but also yields correlations between variables which hold universally. This claim we shall examine in the next chapter. Here it is only necessary to point out that the statistical method bears very little resemblance to the experimental method in the natural sciences, where exact observations may be made under controlled conditions. It would seem, therefore, that the nearest approach to the experimental method in the social sciences which we can get would be the careful study of social phenomena by trained observers under controlled conditions.

Here opens the possibility of two sorts of scientific monographs, both of which are needed and useful in sociology. The one is the case study, the other is the community or regional survey. The case study method was taken over by sociological students from social workers and physicians. In both social work and in medicine it has been found that carefully compiled case histories were of the utmost practical value. Sociological stu-

⁵ *Sociologist*, Vol. 8, p. 439.

dents soon perceived that case histories could also be made very valuable for purely scientific purposes. Case studies usually deal with an individual or with a family. There is doubt about the propriety of employing the term for the study of much larger groups. Most case studies have dealt with the individual and have sought to find out all about the individual's life experience, his interaction with other persons, and with the situations, institutions, and materials in his social environment. The methods employed have varied and are almost necessarily complex. The personal interview with the individual and with others closely related to him is usually an indispensable part of the case study. But wherever documents of any sort, whether private letters, diaries, or other kinds, are accessible, they are used and analyzed. Thus in some respects a carefully made case study approaches the historical method. There can be no question as to the value of the case study method in throwing light upon processes of social interaction and their results in personality and thus also, indirectly, upon social conditions. However, case studies are too narrow to throw any light upon the larger sociological problems connected with social evolution and cultural changes.

The survey method furnishes a somewhat broader basis for the inductive study of human society. A community survey, if centered upon the social processes of the community, may pos-

sibly be said to be a case study of a community.⁶ Certainly there is no possibility of conflict between the case study method and the survey method. Like the case study method the survey method was taken over from social workers. About a quarter of a century ago the practical needs of social workers for more accurate knowledge of social conditions in their communities led to their instituting programs of social investigations which they called "social surveys." One of the first and the most extensive of these "surveys" was the well-known Pittsburgh Survey. This was followed by surveys of all sorts in widely scattered communities, such as "health surveys," "educational surveys," "crime surveys," "industrial surveys," etc. Over thirty thousand of such surveys have now been made in the United States alone. It will be noted that the movement to make such surveys arose entirely to meet practical needs, and at first there was no thought of making them a contribution to scientific methods of studying social life. Moreover, the surveys were at first confined largely to the material aspects of community life such as sanitation, housing, wages, etc. They were entirely studies of local and temporal

* My colleague, Professor Howard E. Jensen, comments: "Surely the typical survey is no more a case study of a community than a purely behavioristic study of a personality is a case study of the individual. On the other hand, I should say that the case study method is applicable to any size of group; that it is applicable from the study of the personality to the study of civilization itself. Any adequate sociological study shows fusion of case method and historical method."

phenomena and seemed to promise very little in the way of making a contribution to scientific social theory.

But after a time it was noted that the social workers, while they had popularized the survey method, were by no means the first to employ it, and that probably that honor belonged to the field anthropologists. The old-time anthropologist was a laboratory or library worker, usually relying for his knowledge of customs and institutions upon the reports of travellers and missionaries. But the latter years of the nineteenth century saw the development of anthropologists who are mainly field workers. In many cases they worked coöperatively, organizing expeditions which undertook extensive anthropological surveys investigating minutely the customs, institutions, and even the ideas, beliefs, and history of the population of a given region. Such were, for example, the Jesup North Pacific Expedition and the Torres Straits Expedition. Very valuable scientific results came from such anthropological surveys, especially when their facts were compared with one another.

Now it is entirely conceivable that the survey method is capable of being developed in all the social sciences in the spirit and with similar methods to those employed in cultural anthropology. Indeed, it is well-known that the famous survey of "Middletown" was undertaken and carried out in the spirit and with the methods of

modern field anthropology. This notable survey of a middle western community deserves to become the model for practically all community surveys in the future. However, the basis of even this survey is too narrow. All that is said about interracial relations in the community is virtually condensed into a footnote, and the very slight consideration of the social tradition of the community leads to little or nothing being said directly about nationalism, militarism, and other vital social attitudes. But this survey remains the best example we have of a scientific case study of a community.

It is beginning to be perceived, however, that what the social sciences need is not so much careful surveys of relatively small communities as "regional surveys." There is no reason why the area surveyed should not be as large as the natural scientists or the anthropologists would make it for their purposes. If this is done, then valuable scientific facts can be secured and extensive comparisons instituted between different regions and communities. Here we have as near an approach to the laboratory method in the social sciences as it is possible to attain to; for the world of human beings is the only possible laboratory which the social scientists can employ. Like laboratory methods in the natural sciences, the intensive, careful, systematic study of regions and communities might permit the isolation of various social phenomena and their study by a combination of

methods. In a certain sense it is true that for the social scientist nature has set a great many experiments going at once in many different laboratories, and the scientific social observer has only to devise adequate methods of checking up the results. This may be difficult and may necessitate observations over a considerable period of time. Not infrequently, however, a small number of observations carefully made may suffice to establish accurate scientific knowledge. The method of the "participant observer" especially deserves, as we have argued elsewhere, to be more fully tried, even though it does involve a large use of scientific imagination.

However, social life is no longer regional, or even national, but international. What is needed most of all is, of course, accurate survey methods applied to the whole of our civilization. Such a vast coöperative undertaking may at first thought seem fantastic, but is surely the logical goal of the social sciences on the side of induction, for we cannot make world-generalizations without world-induction. The work of the national census bureaus in various countries have shown that the survey method might be applied not only nationally but internationally. If the social sciences are to be of practical value we surely need to know much more about conditions of our whole civilization than we have known. Of course, statistical accuracy must be emphasized in any such development of the survey method. Virtually the gather-

ing and comparison of statistics becomes a part of the survey method.

Moreover, such a survey method is not opposed to the historical method of approaching social problems. From one point of view the historical method includes the survey method; but from another point of view the survey method includes the historical method as one of its necessary parts. The survey must be a study in time if it is to be of great scientific value; for it should always be borne in mind that all social phenomena which we may observe are outcomes of an historical process. Thus, we may expect that the survey method in the future, including, as it doubtless will, a high degree of statistical accuracy and of historical insight, will become a sort of a synthesis of all of the inductive, matter-of-fact methods of studying human society. The superficial social and regional surveys which have been undertaken in the past will be increasingly discounted and increasingly we shall see developed a survey method which will be a combination of all inductive methods for the scientific study of the social life.

Two mistakes have been made by the users of the survey method in the past which need to be corrected before the survey can be made a genuinely useful instrument for the advancement of the social sciences. The first mistake is that the social surveys which have been made have been, as a rule, too static. Surveys need to become more a study of processes, movements, and tendencies

in communities and regions than they have yet become. Modern science is essentially a study of processes, and it is only by understanding processes and tendencies that we can hope to exercise scientific control. Social facts and conditions need to be exhibited as phases of a process of development in order to be understood. This is one reason why the essentials of historical method must be incorporated into the survey method to make it scientifically worth while. Social observation which is static helps but little in the understanding of the human social processes. The social survey should be more than a "photograph of a community"; it should be a "moving picture" of a community or a region. It was the great merit of *Middletown* that it presented such a "moving picture" of a community and made its survey essentially a study of processes.

This brings us to another fatal fault which has too often been present in community and regional surveys; and that is their failure to take into account such non-material elements of culture as traditions, standards, values, opinions, and beliefs prevalent in the group. It is these community traditions which make the civilization and social life of a community or of a region. It is evidently quite as necessary to get at these as it is at the material conditions of existence such as industry, wages, housing, health, sanitation, and standards of living. It is just the study of these material conditions which so frequently makes the

survey method superficial. To be sure traditions, standards, and beliefs are not so easily studied, because they are not tangible and measurable. Usually it is thought that these can only be gotten at by the questionnaire method. The questionnaire method, however, presents psychological difficulties which often make the results obtained by it of little scientific value. A much better method is the study of written documents of all sorts, such as personal letters, newspapers, and other written or printed material which has not been designed consciously as evidence of the state of civilization of a community or region. Of course, such documents will have to be used with the same critical care with which the scientific historian would use them. Here again the survey method coalesces with the historical. A much better plan of getting at regional and community traditions, values, and beliefs is, of course, to live in the community or region which is being studied, in the same way that the field worker among anthropologists would live in a region which he is studying. This virtually becomes the method of the "participant observer," of which we have already spoken. While it is subject to the same pit-falls as the questionnaire method, yet if properly used, as the field anthropologist uses it, the danger of mistakes would be lessened by the very fact that only trained observers were employed in gathering the data to be studied.

It may be objected that the complexity of such

a method of social induction as has been described will place it beyond the ability of ordinary minds. This I do not believe. The practical difficulties of inductive social investigation cannot be ignored, but they can be surmounted by proper training. Social observation and the survey method are still very far from being developed to the point which I have described. Perhaps they cannot be so developed without the aid of governmental and educational agencies. We must all admit that the social sciences, like all other sciences, cannot flourish without the aid and encouragement of society-at-large, especially of governmental and educational institutions. But social scientists themselves, as we have already pointed out, need to raise their present level of scholarship. The sociologist in particular must have not only some mastery of the complexities of the inductive study of human society, but as we have insisted, he must know all that the antecedent sciences have to give him, and at the same time be able to make full use of social imagination and critical reasoning. Without a synthesis of all of these methods scientific sociology is impossible.

CHAPTER VII
THE USES AND LIMITATIONS OF THE
STATISTICAL METHOD IN THE
SOCIAL SCIENCES

CONTRARY statements as to the scientific value of statistical methods and quantitative analysis abound in the present-day literature of the social sciences. Thus Professor Howard Becker in his *Systematic Sociology* says that "sociological problems are not quantitative problems at all."¹ On the other hand, in all the theoretical social sciences considerable schools have arisen of recent years which claim that the only way in which social studies can be made scientific is by the use of the statistical method.² These social scientists apparently subscribe to Karl Pearson's aphorism that "science is measurement."

Now I am not prepared to endorse either the dictum of Professor Becker or the aphorism of Pearson. It seems to me that some of the basic

¹ P. 500. Professor Becker states the reasons for his position on pp. 51, 52, 56-61. Without denying a place for quantitative measurements in the superficial aspects of social life, he concludes: "The behavior of human beings, when all is said, is something qualitative," and so the goal of sociological knowledge lies beyond the mechanistic (p. 52).

² Ogburn and Goldenweiser, for example, assert "The 'scientific' future of the social sciences depends upon their amenability to statistical methods" (*The Social Sciences*, p. 9).

problems of human society are physical and hence susceptible of quantitative statement. In such cases quantitative methods enable us to state the problem in more definite terms, and indicate to us logical possibilities. Such, for example, are in the main the problems of population. But it would also seem to me that science can be measurement only when it deals with those aspects of reality which are subject to quantitative statement, and that there is perhaps no greater source of confusion in the social sciences at the present time than blind adherence to such an aphorism as Pearson's. It would seem to me that as we ascend in the scale of life the view that science is quantitative measurement of objective conditions becomes less and less applicable, not only because measurement becomes more difficult, but because the subjective element plays a larger part. Even if the subjective element is capable of certain measurements and even if it is true that whatever exists exists in some quantity or number, nevertheless, it is obvious that where subjective elements play a large part, measurement becomes of less importance for accurate knowledge because it is confined to the superficial aspects of the total situation and fails to expose the nature of the process which is being investigated. This is especially true in the social sciences and in them measurement seems to me to play a rôle secondary to other scientific methods.

If this is the actual condition in the social sci-

ences, it explains the contradictory statements regarding the value of measurements which we find in present-day literature. It is obvious that Pearson was thinking of the physical sciences when he said that science is measurement, and it is probable that those social scientists who hold to substantially the same view have been unduly influenced by the development of methods of measurement in the physical sciences. On the other hand, it is obvious that Professor Becker, in asserting that sociological problems are not quantitative problems at all, is thinking of the systematic analysis and classification of social situations and processes which must be made before statistical measurements can be fruitfully undertaken.

But the radical reason for opening up afresh this much discussed question of the place and validity of the statistical method in the social sciences is the rise and triumph of the cultural conception of the human society. This new conception, which was alien to practically all social thinking a generation back, puts human social behavior in a class by itself among objects of scientific investigation; for there is no analogue of human culture in the rest of nature.³ As yet,

³ It is, of course, for this reason that Professor Werner Sombart has drawn a sharp line between the sciences of culture, which are "understanding" sciences and the sciences of nature, which "explain" mechanistically. Therefore he says: "All truly scientific sociology strives to become 'understanding' sociology" (Quoted by Becker in *Systematic Sociology*, p. 58). Compare also L. Rogin's article on "Werner Sombart and the Natural Science Method" in *Journal of Political Economy*, April, 1933, pp. 222-236.

however, those working in the field of the social sciences have not come to see clearly that the value of the statistical method in those sciences is necessarily conditioned by the nature of human society. If the study of culture has revolutionized our conception of that nature, then it must also revolutionize our conceptions of the method appropriate to the social sciences.

I mean, of course, by "science" theoretical science. The knowledge which theoretical science gives us must be of a universal character. A scientific generalization is one which will hold anywhere under given conditions. Scientific generalizations in this strict sense rise above the temporal and local. They hold universally. So great is the stability of physical nature that most measurements of physical processes under given conditions do hold universally or nearly so. The question is whether such measurements are possible in human society, and if so how far can they go? Is there the same fixity or stability in social processes, so that measurements once made and correlations once established will, like those of physical nature, hold universally?

Now, the cultural conception of human society is revolutionary for the social sciences just because it emphasizes that all our social institutions and social arrangements are historical, cultural products. The social life and the social processes of the Eskimo, for example, are products of their history—of a process of invention, learning, and

adaptation which began in remote times and which has been continually changing down to the present. But this is equally so of the social life and the social processes of the American people. According to the cultural conception of human society, human societies are what they are, not so much through the working of natural forces as through processes of invention and learning.⁴ The whole institutional and social life of a people has been produced by learned adjustments, and, so far as we can see, will be subject to indefinite modification by invention and learning in the future. Therefore, the social phenomena which we undertake to measure by the statistical method are historical products, as much so, for example, as private property or democratic government. Such social phenomena are subject to change by further invention and learning and rarely show the stability and fixity which we find in physical nature. In other words, social reality is dynamic, while the phenomena which the physical scientist is called upon to deal with are relatively static.

Now, something of the difficulty of the measurement of social phenomena has been perceived by our greatest statisticians. We find Professor G. Udney Yule, for example, saying "statistical methods should be regarded as ancillary, not es-

⁴ Compare Goldenweiser, "Culture, from one angle, is learning." Again, "The life of culture belongs to the psychological level. It is in the minds of men in society." *The Social Sciences and Their Interrelations*, pp. 74, 85.

sential" in the social sciences.⁵ To take another example, Mr. Malcolm C. Rorty, who was president of the American Statistical Association in 1930, in an address before that body,⁶ demanded that statisticians be logicians and scientists in the broader sense, and only secondarily users of statistical techniques; for, he said, all statistical conclusions needed to be reached primarily through logical and experimental processes, supplemented by simple numerical and graphical analysis. He added that the verification of conclusions by means of controlled statistical methods is very rarely possible in the social sciences, and warned against the assumption that a coefficient of correlation establishes any presumption whatever as to cause and effect relations between social variables. Thus apparently Mr. Rorty would restore logic to the supreme place in scientific methodology.

But other users of the statistical methods in the social sciences are not so careful as these leaders. Apparently many of them think that the statistical method is capable of giving measurements and correlations of universal social validity. Thus in the very issue of the *Journal of the American Statistical Association* which contains Mr. Rorty's address there is an article on "The Influence of Population Density on Crime," by a Canadian

⁵ *British Journal of Psychology*, Vol. 12, p. 105. Quoted by Young, *Social Psychology*, p. vii.

⁶ See *Journal of the American Statistical Association*, XXVI (March, 1931), 1-10.

statistician, in which the conclusion seems to be reached that there is a definite correlation between population density and crime. If so, it would be hard to explain why the crime rate in Great Britain is only one-tenth that of the United States while the population density is many times greater. As soon as we understand, however, the differences in the historical culture of the two peoples, the reasons for the differences in crime rate become apparent without the use of statistical measurements. The factors which enter into the crime rate are quite evidently historical and cultural conditions and are very variable.

There is a considerable number of the less critical advocates of the statistical method who seem to hold that in the more fundamental processes of human society statistics give measurements and correlations of universal validity. For example, they seem to think that when it comes to certain biological functions these functions are the same under all conditions of culture. Thus we have the statisticians of population laying down laws which hold universally for the growth of population. They point to the logistic curve which population statistics seem to follow under certain circumstances. Similarly, we have those who argue that the more fundamental aspects of economic life are also the same under all conditions of culture, and we have economic texts which are filled with statistics, graphs, and curves which are held to be

true of human society, if not everywhere, at least in the long run.

Now, I am not prepared to say that there are not physical and biological conditions which hold universally for every human society of which we have knowledge, and which would, therefore, give universal correlations between these physical facts and social facts. If such correlations exist, however, they probably concern processes which are not distinctively human, but concern animal groups quite as much as human groups. But the distinctive mark of human society, and ordinarily of all that we call human, is culture. If correlations exist between physical facts and social processes, they interest us as social scientists only in the same way that we are interested in physical and biological science as a foundation for social science. They do not explain the distinctively human in social processes and conditions.

Moreover, all such correlations, the greatest statisticians are beginning to tell us, are of doubtful universal validity. Thus at one time we thought that a definite correlation could be discovered between the density of population and the death rate; but modern sanitary inventions are making any such correlation doubtful. Again, the incidence of disease and death varies so much in human societies under different cultural conditions that few, if any, correlations which will hold universally can be discovered. Again, we used to think that there were very definite correlations be-

tween the birth rate and economic conditions. But the discovery and popularization of methods of birth control have made such correlations doubtful, because the use of these methods is motivated by other cultural conditions than the economic. It might almost be said that it is doubtful if any correlations of universal validity exist in the field of vital statistics. Correlations which are found seem to have, at most, only a relative validity, that is, relative to a given culture. But vital statistics represent the most physical aspect of the human social process; and if universal correlations cannot be found in this field, we may doubt if they can be found by means of statistical measurements in other social science fields.

Let us use one more illustration to make clear the relativity of all statistical measurements, if they concern cultural appliances and conditions. The illustration is the mortality statistics of automobile accidents issued by the Federal Bureau of the Census and other statistical agencies. We notice at once that these statistics vary greatly from place to place, and if we examine them in time, from year to year. While certain correlations are discoverable between automobile accidents and the number of motor cars, the density of the population and other conditions, they do not seem to hold universally. If, for example, we get a correlation between the number of accidents and speed in driving, we find that such a correlation holds only for a given stage of the development of

the automobile. A new invention may make high-speed driving much safer and the correlation disappears. Thus, it is safe to conclude that statistical measurements of human social processes are so affected by the development of culture that they hold only for a given time and place, are relative to a particular phase of culture, and are only indirectly of value for the construction of theoretical social science.

I am not, of course, raising any question as to the practical value of statistical measurements for the guidance of social action. Just because such measurements are relative to the place and the time in which they are made, *they are of the greatest practical value*. The statistical method can, in a word, give us two sorts of knowledge which we greatly need for the guidance of social action. Statistical methods, when rightly used, can show us, first, what are the social facts, and, secondly, when extended in time, what are the trends in our society and civilization. Statistics thus lay a factual foundation for social theorizing and indirectly they may contribute greatly in this way to social theories which are of universal validity. As Professor Yule says, they should be regarded as ancillary, not essential in the social sciences. They become essential only when we attempt to apply our social science to the interpretation of present human society. Then we need to know to the fullest extent possible all the factors which are influencing social occurrences among

us, such as births, deaths, accidents, market prices, and the like. It is only statistics which can tell us accurately about movements and tendencies in present-day society. Moreover, I am inclined to think that many of the newer methods developed by statistical science such as "sampling" are more valuable for revealing current tendencies than their critics suppose. The "straw votes" undertaken by such enterprising periodicals as *The Literary Digest* have turned out to be surprisingly accurate. It would seem that we can rely upon the method of "sampling" to discover trends in our civilization much more than we had supposed.

But even so, a limitation of the practical values of statistics comes immediately into view. If statistics can show us facts and trends in our present society, we must remember that these facts and trends may sometimes be changed over-night by new inventions, new discoveries, or a sudden change in the emotional reaction of a population. A fact is local and temporal and a trend is temporal. Both are limited by conditions of time and place. A change in culture may bring a change in the correlations which statistics reveal between local conditions or between temporal conditions. The demonstration of a fact or the demonstration of a trend in no way shows what is inevitable or unchangeable in human society. We doubtless need more and better statistics for the guidance of social action, but we shall continue to need careful,

logical interpretation of these statistics before we make them a basis for practical policies.

The utility of the statistical method in the social sciences, therefore, turns out to be very much like the utility of the case-study method. Both are indispensable for the understanding of our present civilization and social life, and these methods it is needless to say are not opposed to, but supplement each other. The followers of the case-study method should make a larger use of statistics, and the students of statistics should get down to the study of concrete cases. Both methods fit in also with the historical method and supplement it. The time has surely come for every student of the social sciences to acknowledge that only a composite method, which shall include all methods of securing reliable knowledge, is an adequate instrument of research in the field of the social sciences.

So far from this being generally acknowledged, however, we find a considerable school who tell us that only quantitative methods in the social sciences are worthy of being called scientific and that the social sciences of the future will become, if not speedily, then ultimately, wholly quantitative. Thus we find one writer of this school asserting that "the new content [of the social sciences] will consist of the statistically summarized results of a large number of behavior records in all fields of social behavior."⁷ This is, perhaps, an extreme

⁷ Lundberg, *Social Research*, p. 20. Says Professor Sorokin: "In the future some thoughtful investigator will probably write a very

example of the attitude of the behaviorist in the social sciences, but it shows clearly the effect upon the social sciences of a one-sided advocacy of the statistical method, despite the cautionings of the great leaders in statistics. According to this view the scientific character of any textbook in any of the social sciences could be determined by simply measuring the pages devoted to "statistically summarized results," assuming, of course, that these results have been reached with meticulous care by statistical experts. The writer of this prophecy, however, forgets that all of the great texts in the social sciences, from Adam Smith to the latest text in social psychology, political science, or economics, have consisted much more largely of careful logical reasoning than of "statistically summarized results." And we have every reason to believe that this will continue to be so, if the positions taken in this volume are sound, in any future development of the social sciences which we can foresee.

For, to summarize, it is very rarely possible to discover in social statistics correlations which are universal, such as science in the strict sense demands. The social phenomena which we can measure by the statistical method are historical illuminating study about this "quantitative obsession" of a great many social scientists, psychologists, and educators of the first third of the twentieth century, tell how such a belief became a vogue, how social investigators tried to measure every thing; how thousands of thousands of papers and research bulletins were filled with tables, figures, and coefficients; and how thousands of persons found in measurement and computation a substitute for real thought" (*Journal of Political Economy*, XLI [April, 1933], 196).

cultural products which often vary independently from day to day and place to place. They can, therefore, be rightly interpreted only when viewed in the light of cultural and historical development. Statistics are indispensable to show existing social tendencies; but if they are taken in the social sciences as revealing rigid and universal correlations, or "laws," they lead to grave sociological fallacies. While we need better statistical measurements of social movements, we need more philosophical and historical insight in interpreting them.

CHAPTER VIII
SOCIOLOGY, HISTORY, ECONOMICS,
AND CULTURAL ANTHROPOLOGY¹

THE relations of the social sciences to one another continue to be the subject of much discussion. If the various workers in the social sciences, however, would each consider what he himself is doing and the relation of his work to that of other specialists, there should not be much difficulty about the matter. This, then, is also a question of method. Let us take a concrete field of social study, namely, American society in all the aspects of its past development and present condition, to make this clear.

It is evident that the history of the people of the United States is unique. It is not the history, for example, of Canada, Australia, or any other English speaking people. One might almost say that the history of the people of the United States and the histories of the other English speaking countries were each so distinct that a single page would serve to identify the history of one rather than of another. In other words, the events in the development of each of the English speaking peoples

¹ Compare again what was said about the historical method in chapt. V.

have been so unique and peculiar that there is no difficulty in identifying them as belonging to one people rather than another. The conditions which led up to these events, however, would show more similarity, while the institutions of the various English speaking peoples would show very close similarity; in some cases, practical identity. Now, if written history deals with the events, conditions, and institutions of a people's past, it is evident that, even though there may be similarities, the history of each people will be distinctive, unique, and "particular," as we say.

On the other hand, the economics of the various English speaking peoples would present very little that is unique, distinctive, and "particular." Certain economic facts, of course, might be so, but economics as a theoretical science would be chiefly interested, not in facts concerning the English speaking peoples, but in the generalizations from these facts. Consequently, there would be very little difference in the economics of the various English speaking peoples. The theoretical generalizations in every case would be the same and for the most part the lines of reasoning employed to reach these generalizations would be practically the same. Hence, the economics of the people of Canada and of the people of the United States would have little to distinguish one from the other. This would be even more true if Canada had about the same population, the same large cities, and the same industrial civilization as the

United States. Their histories, however, as histories would still retain the same distinctiveness.

It is evident that economics as a science aims at universal generalizations. It is not interested especially in the unique and particular except as it can be brought under some universal principle. On the other hand, it is evident that history is always interested in the unique and particular. If it did not exalt the unique and the particular it would lose its identity *as history* and become merged in the theoretical social studies. Economics, on the other hand, as a theoretical social study so emphasizes the general and the universal that the economics of one people differs very slightly from the economics of another people in the same general stage of industrial development. Indeed, it is the ambition of economics to reach such general and universal truths that they will apply to all peoples in all stages of development. It may have to depend upon many historical facts and many preliminary historical generalizations to reach such universal truths. But universal truth is the aim of all theoretical science, and of the sciences of society not less than the sciences of the physical world.

Now, what I have said regarding economics manifestly applies equally to sociology. The sociology of the people of the United States and of Canada, for example, differs very little, so little that a textbook in sociology written with social conditions in the United States as background

serves very well for a textbook in sociology in Canada. On the other hand, a history of the United States cannot take the place of the history of Canada at all. There are, of course, certain distinctive and peculiar problems existing in American society and certain distinctive and peculiar problems existing in Canadian society. But sociology would minimize these differences, due to the character and number of the population, geographical position and resources, differences in the size of the cities, differences in industrial and political development, etc. Sociology would rather be interested in the more general social facts, such as that both the United States and Canada were colonial, English speaking societies, that both had the same general traditions of Western civilization, and that both had the same fundamental social conditions and problems. The sociology of Canada and the sociology of the United States would be so nearly identical that whole pages and chapters of the one might be substituted for the other. Even when a general social study like sociology is forced to deal with particulars, it deals with them from the standpoint of the universal, and its emphasis is upon the universal rather than upon the particular.

Both the economics of the people of the United States and the sociology of the people of the United States, however, deal with universals. How, then, shall we distinguish the one from the other? The distinction is not any more difficult

than the distinction between history and sociology. It is evident that economics is a special social study concerned with a particular section or aspect of our social life, namely, its industrial and business side. Economics is a specialism which aims at universal truths concerning markets, business, and industry. It takes, therefore, from both history and sociology the things which are of interest to it, namely, those things which have to do with industrial development. The facts and values which it studies are not *all* of historical, and social life, but are rather economic facts and values, which are differentiated from the general social by having to do with the development of the material life. It is practically the same, of course, with political science or the science of the state and government. It pays attention again to but one particular line of facts, although it aims at universal generalizations regarding these.

To sociology is left the more general and universal aspects of the social life, such as those which concern *the fundamentals of civilization*, as traditions, customs, the relations of institutions, their origin, development, and functioning, the relations of social groups, their origin, development, and functioning, the social mind, public opinion, the mechanism of social inter-communication and of social change. All of these sociology deals with *in the most general way*, utilizing concrete historical facts either as an inductive basis

for the building up of universal principles or as illustrating the working of such principles.

When it comes to cultural or social anthropology, it is even more obvious that there is little difference between the cultural anthropology of one people in the same general stage of civilization and of another people. There might be some things to distinguish at times the sociology of the people of the United States from the sociology of the people of Canada, but there would be practically nothing to distinguish the cultural anthropology of the Canadian people from those of the United States. Indeed, it seems absurd at once to attempt any such distinction. We may define cultural or social anthropology as the science of social and cultural origins. As such, it deals with matters so remote from the present, mainly in prehistoric times, that the cultural anthropology of all the European peoples is practically the same.

Such a science of social origins would have little to do with the actual concrete history of the people. But, on the other hand, it would be invaluable for the *interpretation* of a people's life. It would give a background and help in the understanding of the whole course of human history, and so of the history of any particular people. It would give not only a general idea of where a people were located in their social and cultural evolution, but it would also show the existence of many survivals from very primitive times in existing social life. All of this, of course, is equal

to saying that cultural anthropology must be in one sense more the starting point for sociology than for concrete written history. The general theory of social origins illuminates the whole course and theory of social evolution and even of existing social conditions. Sociology is, therefore, more closely related to cultural anthropology than is history. Indeed, it is impossible to say where cultural anthropology leaves off and sociology begins.²

It is not possible to regard history as a specialism. On the contrary, like sociology, it is a study which deals conceivably with everything that has occurred in human society from the earliest beginnings until now. But it is evident that history and sociology are sciences of a different order. History belongs to the order of studies which we may call "descriptive." It is concrete and it does not aim at the generalization of laws and principles, not at least *as history*; but it does aim at the mental reconstruction of the past—at furnishing a faithful picture and understanding of past

² Compare Professor Kimball Young's statement (*Social Psychology*, p. 9): "There is no difference in point of view or in method between what is commonly called cultural anthropology and sociology. Any differences are in the objects of scientific attention rather than in fundamental points of view and method of approach to the data. These two sciences are concerned essentially with the cultural processes, the patterns, and the institutional precipitates of group life." Some anthropologists have recently expressed a similar view.

It should be added that a simple division of labor has grown up historically between cultural anthropology and sociology; namely, the former studies social origins and early development, the latter social evolution and present social structure and functioning.

events, conditions, and institutions. Sociology, on the other hand, belongs to the class of studies which we call pure, or theoretical. It is abstract and aims at universal generalizations which may be called laws or principles. It does not aim to give a mental picture of social reality, but rather to give an understanding of the technique or mechanism of social processes. Since historical processes are social processes, it illuminates these as well as existing social processes.

Science, however, is essentially inductive in spirit; that is, it proceeds from facts to theory rather than from theory to facts, from particulars to universal rather than from universal to particulars. Where, then, shall sociology get its facts? Manifestly from three sources: first, from anthropology and ethnology, both physical and cultural. The facts which anthropology has gathered regarding the physique, the social life, and the institutions of uncivilized peoples are of unique value to the sociologist because, with the general theory of organic evolution, it gives him a background and a starting point for social evolution. The second source of facts for sociology is written history. These facts enable one to see with a high degree of accuracy the actual work of social development among certain peoples for a limited period of time. Where the history of the people is full and all-sided, rather than unilateral, and where it is reliable, it affords sociology a mine of facts which are invaluable, and *it helps more*

than any other auxiliary study to keep sociology inductive, "with both feet upon the ground," so to speak. A third source of facts for sociology, however, is the observation and collection of the facts in existing communities. We have already discussed such observation and colligation of social facts regarding existing societies under the heading of "social surveys." The facts which may be gathered by social surveys, like historical facts, are exceedingly valuable for helping to make and keep sociology inductive. Moreover, in accordance with the general scientific principle that the scientific value of a fact is usually in proportion to its nearness to an observer, the facts furnished by the survey method are of great value to the sociologists, and indeed to all scientific students of social conditions of any sort.

Hence, we may roughly say that sociology gets its facts from anthropological material, from historical material, and from "social survey" material. On the whole, the historical material is perhaps at the present time more abundant and better verified than the other two classes of materials. The dependence of the sociologist upon the historian must be therefore very great. Auguste Comte, the founder of sociology, insisted that the historical method must be the peculiar method of sociology and of all the social studies. In his day, of course, the anthropological method and the social survey method were not well developed. It still remains true, however, that even yet the

main reliance of the sociologist must be upon written history, that is, upon the work of the historian.

To use again the illustration with which we started, namely, the sociology of the people of the United States: surely, if one should attempt to construct a sociology of the people of the United States simply upon census returns and the returns of the surveys of local communities, the basis would be very inadequate. It would be still more inadequate, of course, if only the data of the physical and cultural anthropology of the people of the United States were used. After all, it is the written history of the people of the United States which alone makes possible anything like an adequate scientific treatment of their social problems, whether these problems be dealt with in sociology, political science, or economics. For the present, therefore, at least, *scientifically written history furnishes the most important concrete material for theoretical social studies.*

This may be further illustrated if we take some special institution or group like the family for scientific study. The sociology of the family will utilize, of course, anthropological material, on the one hand, and statistical and demographical material, on the other. But, after all, the written history of the family furnishes on the whole the most valuable source of facts which we have regarding the family as an institution. We see again from this illustration, too, the plain distinction between history and sociology. The history of the family

since written records began covers only a part of the facts which the sociologist wishes to know, thought it may be they are the most valuable facts. The sociology of the family in terms of scientific law and principle is obviously, too, something very different from the history of the family.

But there is something else besides history which must be utilized as a background for the theoretical social studies, and that is biology and psychology. These antecedent sciences are so important in furnishing principles which may be taken from them deductively and utilized to interpret social facts that the tendency has been to overemphasize them in such theoretical studies as sociology and economics. Just at the present time, however, the limitations of an exclusively psychological method in those studies are beginning to be perceived and emphasized. There is now a reaction in the social sciences in favor of a more extensive use of the historical method. The limitations of the method of psychological analysis are now so clearly perceived by some sociologists that there is a tendency to discredit the psychological method altogether. This is most pronounced among the extreme "objectivists" in sociology, but even many sociologists who would not call themselves objectivists would now throw the emphasis upon the historical method.

Certainly we may agree that sociology cannot content itself with being merely an illustrated and applied psychology; it must also be, at least, in its

final development, analyzed and compared history. But is there any such antagonism between the historical method and the psychological method as the partisans of each would seem to imply? Rather, it would seem that these two methods supplement one another and naturally go along together. A too exclusive use of the method of psychological analysis in the social sciences, however, is bound to lead to many errors; for the human mind, as we know it, is itself very largely an historical product. The mind of the individual, in other words, is created very largely by the historic social tradition into which it is born. History, therefore, shows us even better than psychology the motives in concrete human behavior. From this point of view psychology, of course, becomes dependent upon history, or at least upon an understanding of the historical environment in which the individual lives and moves and has his being. To study human institutions from an exclusively psychological standpoint is, therefore, a grievous blunder. Human institutions are historical even more than they are psychological products, and, to be understood, their concrete historical development must be known.

The historian, however, is himself becoming more and more psychological in his attempts to delineate past events, conditions, and institutions. History and psychology should work hand in hand at the task of understanding the complex of our civilization. This they are doing more and more.

But the psychology which the historian finds to be of most use is, after all, the same psychology which the sociologist finds to be of most use, namely, the psychology of collective behavior or "social psychology." But collective behavior, like individual behavior, is rooted in historical circumstances. Social psychology may, of course, be regarded as a part either of sociology or of psychology, but, in either case, it is dependent upon concrete history.

Hence, we come to the conclusion, which might have been foreseen at the beginning, that all social studies or social sciences are interdependent both in their content and methods. If sociologists should become more historically minded, historians have equal need of becoming more sociologically minded. This the most progressive historians are rapidly doing. The best work in the field of history at the present time, in my opinion, closely approaches what might be called illustrated sociology. Illustrated psychology doubtless it is also, but *in so far as it deals with groups rather than with individuals, it is sociological rather than psychological*. Individualistic history is past or passing, and the future of history seems to be as a social study.

The very close relation not only in logical theory, but in practical work, of all the social sciences, including history, and the dependence of all of these upon history has now been demonstrated. It is to be hoped that the future will

witness less bickering between the students of the social sciences and a closer drawing together of them in their work. Coöperation, many sociologists agree, is the key word to social progress in general. May it not also be the key word to progress in the social sciences?

CHAPTER IX

THE SOCIOLOGICAL BASIS OF ETHICS

IN undertaking the discussion of the methodological relations of sociology and ethics, it will be well to define again what we mean by these subjects. By sociology we understand the general science which deals with the origin and development, structure and functioning of human societies. Its problems are, on the one hand, those of the order or organization of society, including both structural and functional aspects; on the other, those of social origin and development, that is, of social evolution in the broad sense of the orderly changes in the social life. This is sociology in the strict sense, its chief problem being that of social evolution. Sociology is, however, sometimes used in a broad sense as a collective name for all of the social sciences—the sciences that have directly to do in any way with the phenomena of man's collective life, such as economics and politics. It is believed that it will lead to no confusion if in the discussion of our topic "sociology" or "sociological" is sometimes used in this broader sense as referring to the entire body of organized knowledge about human society.

By ethics the writer understands the science of

right and wrong conduct, whether for the individual or for a group of individuals. Ethics, according to this view, would be, of course, a science of moral values, of moral norms and ideals. It might, therefore, be properly called, as it often has been, "a normative science," since it seeks to establish norms or standards for human conduct. This is not, of course, denying that ethics has descriptive portions, but these descriptive portions are strictly subordinated to its normative aspects, because the real problems of ethics are normative. Ethics, as a science, may be properly considered to include a discussion of the origin and development of moral ideas and ideals, but such a descriptive ethics is but one of the many social sciences which deal with man's collective life. Beyond these descriptive portions of ethics, then, are the questions of the nature and validity of moral ideals, the ends of action, the norms by which conduct is to be judged, and the like. These normative problems are usually considered to be the central problems of ethics; and ethics in this sense is evidently not dealing with a special aspect or phase of man's collective life, but rather with the ideal for individual and social life generally. Ethics, in its normative aspect, presents itself, therefore, not so much as a special social or historical science, but as a science lying beyond all of the positive sciences of human society, and to which all of them lead up.

The writer is well aware that there are those

who declare that there can be no such thing as a normative science, that this involves a contradiction in terms, because science can only be concerned with judgments of fact, not with judgments of value, or because all norms and standards, or ideals, rest upon arbitrary appreciations of the individual, or, as Mr. Bertrand Russell would say, upon "the dogma of personality." Of course, if this is true, philosophical thinkers of every sort should renounce the attempt to establish a *science* of ethics.¹

¹ Even Professor Lévy-Bruhl has said that ethics "cannot be a science in so far as it is normative" (quoted by W. G. Elliott in *Methods in Social Science*, p. 70). This is a prevalent attitude among social scientists. For example, Professor Howard Becker declares (*Systematic Sociology*, p. 7): "Science as such has no room for value-judgments." For the opposite point of view, that all scientific work implies value-judgments, see Bayet's *La morale de la science*. The opposition to the idea of normative science sometimes is based upon the assumption that "subjective values cannot be measured," but it is a question whether moral values are any more subjective than are sanitary or economic values. Opposition also arises from the assumption that moral values claim a priori validity, but this is so only in some metaphysical systems. Westermarck curiously enough in his recently published *Ethical Relativity* holds that all moral ideas or judgments are wholly subjective or emotional, and therefore cannot be called "true" or "false," or be made scientific. A sufficient answer to him will be found in Bernard's *Transition to an Objective Standard of Social Control*.

It is noteworthy that while Professor Sorokin once held that value-judgments could not be made scientific, he has recently changed his attitude. In a personal letter to the writer he says: "It is a curious thing that in working over some of the problems of Social Dynamics, particularly Epicurean and Stoic cultures, I have come to some conclusions which, in a way, go far beyond your standpoint as regards the moralizing and evaluating disciplines. In an Epicurean culture they are and must be different from science, and have to play a secondary rôle. In what I call Stoic culture they become the foundation of the whole system of truth, and the usual sciences play the part of a handmaid to them. That is one of the results to which I have come unexpectedly." My

But such a position as this is essentially at variance with all that we know of human nature and of human knowledge. All knowledge, in a certain sense, as we shall endeavor to show later, is busy establishing norms or standards by which processes may be measured or judged. It would be strange if the norms established upon the basis of our knowledge of human nature and human society should be so much less trustworthy than the norms obtained by the physical sciences. It is true that such norms established through scientific knowledge afford no adequate sanction for conduct; for sanction must ever involve a subjective and individual element, resting upon feeling. Because a scientific norm fails to furnish a particular individual with an adequate sanction or imperative for his action is, therefore, no indication that scientific norms and normative science are impossible. A man may drink water containing typhoid germs because the germ theory of disease has appealed to him as nonsense, yet the standards established by the normative science of hygiene retain their scientific validity in spite of that particular individual's rejection of them. So, too, a man may decide that because alcoholic beverages do him no harm he sees no reason why their use should be discountenanced in the mass of men. Nevertheless, a standard of scientific validity for

colleague, Professor Howard E. Jensen, holds a similar view, that the separation of ethics from science has been due to hedonistic ideals and development of ethical hedonism. See his Introduction to this book.

the relation of the mass of men to alcohol may be reached regardless of whether any particular individual accepts it or not. An individual may even commit suicide or murder and argue that from his point of view his act is justifiable, but the judgment of such an individual in no way impairs the validity of a scientific judgment as to the danger of such acts to society, any more than the arbitrary judgment of a man concerning impure water will invalidate the judgment of scientific hygiene as to the relation between bodily health and pure water. *The various arguments that are used, therefore, to deny the existence of scientific norms or standards in all aspects of the life process would destroy the possibility of all scientific knowledge.* While normative sciences are not concerned with establishing laws of a mechanical character, they are concerned with establishing principles and standards by which activity may be judged and controlled. The normative sciences are, therefore, indispensable links between the pure sciences, the sciences of pure theory on the one hand, and the applied sciences, the sciences immediately connected with practical arts, on the other.

Now, if ethics, the normative science of human conduct, is not to base itself upon a priori assumption or metaphysics primarily, then the question becomes, upon which of the pure sciences will it base itself? No one would contend that ethics can find any adequate basis in chemistry or physics. The question, therefore, reduces itself to whether

ethics as a science of moral values should be based upon biology, psychology, or sociology, using all of these terms in their broad sense.

Scientific ethics must, indeed, rest to some extent upon biology. A part of our ethical valuations are unquestionably closely connected with those which are furnished by personal, public, and racial hygiene. All that we would claim is that biology does not furnish an adequate basis for ethics, and that in so far as it furnishes the basis at all, it is on the side of the biology of the collective life process, not biology in its individual aspects. The inadequacy of biology as a basis for establishing norms of conduct is so generally recognized that the point need not be argued at length. The consideration of such simple elementary immoral acts as lying, stealing, disloyalty, all show that the ground for the reprobation of these acts is only remotely, if it is at all, biological.

Psychology has, of recent years, been brought forward as the chief claimant to be the basis of the scientific theory of morals, and if psychology were used in a broad enough sense, perhaps there would be little reason to object to the claim; but psychology as it has come to be defined by the professional psychologists, means the science of the forms and processes of consciousness and of individual behavior; that is, psychology is the science of *immediate* experience, and as such necessarily becomes in practice a science of individual human behavior. The problems of psychology

are, in other words, problems of individual behavior and of individual consciousness. It is not concerned, primarily at least, with the interrelations of individuals. As the science of individual human nature and experience psychology, of course, can throw light upon the origin and development of moral ideas and ideals and especially upon the sense of oughtness or obligation which frequently accompanies moral acts. The instincts, for example, as has often been insisted, are without doubt sources of crude moral judgments. But the instinctive tendencies of man, anthropology shows, are always mediated by culture even among the most primitive peoples, and in our complex culture they are dominated by the pattern of action approved by our social world.

Much also is said about the essentially "inner nature" of morality; but this cannot mean that morality is wholly subjective in its nature, or that moral ideals are genetically developed by purely individual processes. If morality has an "inner" nature, it has equally a "social" nature. Psychology cannot possibly explain the grounds upon which ideals are evaluated without reference to the collective life. It is only when psychology turns from the individual to the mass of individuals and attempts to explain the collective life process that it becomes capable of explaining the origin of concrete moral values; but such psychology is sociology.

Sociology, then, must furnish the immediate

positive foundation for a science of ethics. As has just been implied, moral values no more than other values, are a creation of the individual consciousness. All values that are socially recognized are undoubtedly products of the collective consciousness, that is, they are products of the interaction of many individual experiences. Just as socially prevalent economic values are formed, not upon the basis of individual utility, but upon the basis of collective utilities, so prevalent moral values are formed not upon the basis of private judgment of the individual, but upon the basis of collective judgments. We cannot explain our system of moral values, in other words, without going over from individual psychology to social psychology. All values, then, that are generally accepted are an outcome of collective life processes, not merely of individual experience.

This is shown in another way through the fact that it is impossible to study those collective processes without perceiving the implicit values.² It is impossible, for example, to study social organization without perceiving social maladjustments or possible economies not realized. It is impossible to study social changes without seeing advantageous and disadvantageous adjustments. It is impossible also to study the various types of social organization without indicating the superiority

² It should be noted that the argument of this chapter is not that sociology is a normative science, but that through the implicit social values which it reveals it furnishes the basis for a science of social aims—ethics.

and inferiority of the various types, or to formulate a theory of social progress without implications of social obligation. This is not saying that it is mere social knowledge itself which leads to perceiving social maladjustments or economies not realized, but it is saying that, given the constitution of the human mind as it is, there immediately spring from our knowledge of social conditions certain perceptions of betterment, amelioration, or ideals; and these perceptions of improvement are not different in character from the perceptions of improvement which a physical scientist may get when he is studying a machine like a steam engine. Given, in other words, the ordinarily accepted ends of activity such as survival, harmony, and efficiency, which the common sense view of the world leads practically all men to accept, then there springs from social knowledge a perception of social ideals; that is, a system of ethics tends to grow spontaneously out of a system of sociology.³ The human mind being constructed as it is, the attempt to exclude ethical implications from sociology is, therefore, neither possible nor desirable. It is the business of sociology to furnish a foundation for scientific ethics, and on the other hand, it is the business of ethics to take the ethical implications which a scientific knowledge of human society affords, develop them, criticize and harmonize them. An ethics worked out upon the

³ As Comte confessed, "The elaboration of 'morals' is spontaneously mingled with the construction of sociology."

basis of the knowledge furnished by the sciences will make a larger use, therefore, of sociological knowledge than of any other form of scientific knowledge.

It is evident from what has been said that judgments of fact and judgments of value cannot be separated in any such way as some writers have maintained. Knowledge of values grows directly out of knowledge of facts, and all generally accepted valuations, as has just been said, are collective judgments having reference to the totality of life conditions. *It is impossible to have knowledge of facts without judgments of value becoming more or less attached to those facts.* In other words, judgments of value inevitably mediate between action, on the one hand, and pure or theoretical knowledge, on the other. *The normative sciences are necessary links between the pure and the applied sciences.* Judgments of moral values are not so distinct, either, from judgments of other sorts of value. A judgment that expresses social maladjustment (a "pathological" social condition) with reference to a certain type of social organization is not clearly separable from a judgment of moral evil. The social and the moral are, indeed, so closely related that they cannot be separated. The moral springs not only directly out of the social, that is, out of the interrelations between individuals, but it has reference to the social in that the moral functions to bring about a new and higher type of the social. The

moral is, therefore, inseparable from the social, and moral values and norms cannot be understood except as they are understood as social values and norms. Moral values, therefore, mediate between social knowledge and social activity, and ethics as a science is midway between the practical social sciences and the pure, or theoretical social sciences.

All science is busy establishing implicit norms; thus the biological sciences are continually establishing norms with reference to survival; physical anthropology, for example, shows certain limits of stature for man beyond which he cannot vary and survive. It has been established inductively that individuals under four feet and over six feet seven inches are incapable of surviving as types because they are sterile. If some one says that adult individuals of three feet six inches are normal, the biologists will simply laugh at him. And if again some one declared that his ideal was individuals seven feet in height, the biologists might well regard him as either lacking in knowledge or in common sense. The limits of normality as regards heights for adult individuals are then, between four feet and six feet seven inches. Variations beyond these limits the biologist does not hesitate to call abnormal, but within the limits of four feet, on the one hand, and six feet seven inches on the other, judgments might well differ as to what the ideal height of an individual should be. Some might say six feet, some five and one-half feet,

and biology probably could not decide between these ideals, although it might exclude, possibly, certain statures which approach the limits of normality on either side. Therefore, the ideal must lie within the limits of the normal, so far as normality is measured by the test of species survival, and this is the test which the biological sciences are coming more and more to apply in determining the normal.

Now, the bearing of all of these things upon the science of ethics is manifestly this, that the sciences, whether we like it or not, are establishing certain standards of normality for their own purposes; especially are biology, psychology, and sociology doing this; but these implied norms do not themselves constitute a science of ethics. They must rather be taken and worked over, criticized, and harmonized by a distinct discipline, an independent science, ethics. But one can see at once that the norms and ideals which ethics finally works out cannot be something entirely different from what the other sciences have furnished it as its raw material to work over. The moral ideal must lie, as has been well said, within the limits of the socially possible; moreover, it must also lie within the limits of social normality, for the advance of social knowledge is continually showing that certain social types can survive only under certain conditions and that under other conditions they are distinctly abnormal. With reference to the test of ultimate social survival, then, sociology

conceivably can deliver judgments as unquestionable as any now delivered by the biological sciences. The moral ideal must fall somewhere within the limits which sociology determines as conducive to ultimate social survival. In practice no one rejects this. The age is gone by when we can argue for the morality of things which evidently conduce to social deterioration and extinction, but it may well be that within the limits of the socially normal there are possible several ideals, and if this is possible, then it is the function of ethics to evaluate these several ideals. The socially normal may not, therefore, exactly coincide with the socially ideal, although normality may be itself a relative social ideal.

Ethics, therefore, presents itself as a normative discipline based upon all of the social sciences. Inasmuch as all knowledge exists for the sake of activity, then all social knowledge exists for the sake of social action, but between social action and social knowledge must come an evaluating process which we call ethics. Ethics is not, therefore, as a science, simply one of the social sciences or subordinated in any way to the social sciences in general. On the contrary, the social sciences exist for the sake of furnishing the raw material for ethics. They all lead up to, and are in a sense subordinate to, ethics, though this is not saying that ethics should dictate their methods or state their problems, for pure science in order to obtain knowledge of facts and their relations must be

untrammelled by practical considerations. This, however, does not mean that the knowledge of facts and their relations when once discovered will not be of the highest practical value.

This view of ethics makes the connection between the social and moral life simple and explicit. The moral, indeed, becomes simply the normative aspect of the social; and the moral virtues become, not abstract personal qualities, but concrete social values. The virtues according to this view are intimately associated with social and even with institutional life. They are what fit and bind men together in harmonious relations. Accordingly, each form of association, and especially each institution, has its appropriate virtues, and these virtues are not mere abstractions, but are concrete realities in the social life. The family, for example, has its appropriate virtues. We cannot conceive such a virtue as chastity existing apart from such an institution as the family. While this virtue may have certain metaphysical implications, yet practically, chastity exists for the sake of the family and not merely as an abstract virtue in itself. Of course, all the virtues are projections into the ideal, of actual concrete relationships as we find them in the social life, and their full content and implications cannot be made out without the criticism of ethics.

When we say that the business of ethics is to develop, criticize, and harmonize the normative implications of the social sciences, the metaphysi-

cian may reply at once that such a task could not be carried out except upon the basis of metaphysics. We have not denied, at any time, that metaphysics must be the court of last resort for ethics as for all the sciences, and the very statement that ethics must criticize the normative implications of other sciences implies, of course, that there is a work for metaphysics to do in ethics; but criticism need not be upon the basis of an absolute logic, and accordingly the critical work of ethics need not be necessarily of an ultimate or absolute character. It would seem indeed that the wisest course in the development of scientific ethics would be to develop and criticize the ethical implications of other sciences without appeal to metaphysical principles until the resources of other methods had been exhausted. The critical method which is used more or less by all sciences that attempt to establish standards is not necessarily, then, metaphysical, although it becomes such, of course, when pushed to its final outcome. It is, then, not because ethics does not naturally lead into metaphysics that one would counsel the development of a non-metaphysical ethics, but because absolutistic or metaphysical ethics is, apparently, a final development in the construction of the science of ethics, which is naturally preceded by the construction of a relative ethics based upon the natural sciences of biology, psychology, and sociology.

We have spoken above of the tendency of all

sciences, especially of the social sciences, to establish norms, or standards, which it is the business of ethics to develop, criticize, and harmonize. What standards, then, have the social sciences developed which can be of use to ethics? While these standards are perhaps numerous and more or less conflicting at the present time, it may be said that the general trend of the development of the scientific knowledge of human society is to establish three standards or norms, all of which have ethical implications: social survival, social development, and social harmony. Of these three, social survival is, perhaps, the most important in the social sciences, just as species survival is the most important in the biological sciences. The sociologists generally tend more and more to judge a social type, or a species of social organization, high or low in the scale of social development according to whether it conduces to ultimate survival of the type or not. Thus the sociologist is working out a scale of social forms, some of which are ill-adapted to survival under certain circumstances, and some of which are conceivably better adapted. However incomplete this work may be at the present time, it is certainly conceivably possible that sociological research will be able to show limits of survival for different types under certain circumstances. While some social forms survive and are conducive to survival under conditions of savagery, these same social forms, of course, may be but poorly adapted to the more complex condi-

tions of life. Thus the sociologists are busy working out the by no means impossible problem of what types of social relationship, or forms of association, will conduce to the survival of a people in the long run. Certainly the ideals which ethics establishes must be within the limits of what sociology determines as conducive to ultimate survival. When any form of association can be shown to be ill-adapted to the survival of the group that accepts it, then certainly that form of association cannot be accepted as the ethical ideal. Thus celibacy as a type of social relationship, no matter whether it be shown to be in accord with certain abstract metaphysical concepts or not, cannot be accepted as a moral ideal for the mass of mankind, or even for any national group, because celibacy as a general social practice is a form of association which dooms those who practice it to extinction. Celibacy as a general practice is socially possible for any particular generation, but it is not within the limits of social survival, and cannot, therefore, possibly be accepted by ethics.

It is conceivably possible, then, that sociological investigation will even in the near future mark out with a distinctness and clearness that cannot be dismissed, the conditions of social survival, of social development, and of social harmony; but it would be a mistake, in the writer's opinion, to consider that these determinations would of themselves constitute a science of ethics. No doubt, moral ideals may be tested by these standards of

social normality, but the moral ideals which social ethics seeks to set forth are evidently not necessarily identical with the conditions of social survival, development, and harmony, but must be within these limits.

In pointing out the conditions of social survival, social development, and social harmony, sociology, of course, has nothing to say about these as obligations. Its point of view remains purely the social science point of view, and if these are accepted as obligations, it must be because they appear naturally desirable. However, speaking from the standpoint of ethics, one might well contend that ethical ideals could certainly not be at variance with such natural social norms. Our ethical ideals must lie within the limits of the social survival, social development, and social harmony of humanity, and not outside of them, if ethics is to be a science of the good for man. Ethical ideals, as has already been shown, are derived genetically from the social life and they must fall, moreover, within certain limits which the scientific knowledge of human society imposes. Therefore, it is not too much to say that ethical ideals are to be derived from social knowledge by processes of insight and criticism. This criticism, as we have already pointed out, may become metaphysical if pushed to its ultimate limits, or it may be simply a relative criticism. In any case, if sociology is the missing key for the development of the special social sciences, then it is also the missing key for

the development of ethics as a science of social ideals. Ethics from this view, we repeat, presents itself as a great normative science lying beyond the pure or theoretical social sciences, and to which they all lead up. Indeed, ethics is not so much the handmaid of these sciences as these sciences are handmaids of ethics.

In this view there would seem to be but little to which the most enthusiastic champion of the position of ethics among the sciences could object. Yet it is strange that we have even at the present time certain ethical thinkers who strenuously object to basing ethics in any sense upon sociology or the social sciences. Thus, Dr. Felix Adler, for example, in his address before the International Congress of Arts and Science at St. Louis, in 1904,⁴ took the position not only that the social sciences cannot furnish ethical imperatives, but also that ethics should remain essentially independent of the social sciences. He argued, in other words, for the development of a subjectivistic ethics, an ethics resting primarily upon the criticism of the moral judgments of the individual. While what he said does not show clearly whether he would make this criticism a metaphysical one, there can be no question but that he argued for the essentially "inner" nature of morality and denied that moral theories might be in any degree safely based upon objective social

⁴ *Proceedings of Congress of Art and Science, St. Louis Exposition, Vol. VII.*

knowledge. Nevertheless, in his excellent little book on *Marriage and Divorce*, Dr. Adler accepts very clearly the sociological basis of morality. His argument in defense of the family and against free divorce is very manifestly a social argument. The criterion which he lays down when he says that "the highest end of marriage is to perpetuate, promote and enhance the spiritual life of the world," is manifestly a social criterion. Indeed, it is very difficult to distinguish this criterion from the criterion of social survival as used by the best sociologists. Dr. Adler might reply that this "highest end" is not derived from the social sciences, but is simply an arbitrary a priori principle which he accepts as an individual but which any individual has likewise a right to reject. If this is true in a totally unconditional sense, then there is manifestly no place for a science of ethics. Dr. Adler, however, is not the only moral individualist who has been inconsistent in insisting upon a subjective criterion for morality and then later adopting practically an objective one. It is notorious that Kant, the greatest of all the moral individualists, did the same thing, insisting, on the one hand, on the inner nature of morality, while in his maxim of the Practical Reason he set up as a moral criterion a social principle.⁵

Indeed, every moral individualist who attempts to base ethics entirely upon purely subjective fac-

⁵ See Kant, *Critique of Practical Reason* (Abbott's edition), p. 119.

tors finds himself in the same difficulty. Thus no one can discuss a practical moral question without reference, as we have already seen, to social criteria. If one argues for the existence of the family as an institution today, he can scarcely do so in terms of abstract principles and concepts, but finds himself forced to argue in social terms. Indeed, the existence of the family as an institution must first find social justification before it finds metaphysical justification. Unless we can show, in other words, that the family is necessary for the survival of our present complex societies, and all types more complex, our metaphysical arguments for the continuance of the family as an institution will avail but little. If, on the other hand, those who are in favor of the abolition of the private family can show that the family is not necessary but a hindrance to the survival and efficiency of complex societies, then the argument for the abolition of the family in the minds of many would be practically validated. This is not denying, of course, that there remains to metaphysics a question of determining why we should prefer the survival of one sort of social type, such as the complex society of the present, to another sort of social type, such as the simple societies of primitive savagery.

It is hardly necessary to say that a large and growing school of ethical writers take substantially the position adhered to in this chapter. More and more, indeed, moral individualism as

the basis of scientific ethics is being given up; and this implies that more largely than ever before the intimate relations of the social and moral are recognized and that social knowledge is perceived to be requisite for a scientific discussion of ethical problems. The personal interest, however, of most ethicists in furthering the development of the social sciences and particularly of sociology seems to the writer lamentably small. If the development of ethics as a science depends upon the development of sociology, then the scientific ethicist and the scientific sociologist should work hand in hand, for they are both ultimately working at the same problem—human welfare; the ethicist directly, the sociologist indirectly.

CHAPTER X

THE SOCIOLOGICAL BASIS OF LAW AND GOVERNMENT

IT is perhaps time to reëmphasize that the foundations of the sciences of law and government must be laid in a general knowledge of human society, and especially in a knowledge of the principles of its organization, development, and function. Has the time not come when the study of law and of government should be freed from superficiality and isolation, and be based upon knowledge of their nature, function, and purpose in human society? For law and government are not something apart from the rest of our social life, but rather that aspect of it which expresses organized public control over the whole. In other words, law and government have to do with the organization and functioning of human society, and it is for the sake of maintaining a given social order and social welfare that they exist. Now, sociology is the science which deals with the principles of social organization, development, and function. Therefore, it deals with the foundations of legal and political science, since we cannot understand any given system of law and govern-

ment unless we understand the social order which gave rise to it.

When we study, for example, legal codes we discover that they always presuppose some theory of society. Thus the very earliest Roman law presupposed the religious view of social organization which was inherent in ancestor worship and the patriarchal family. Later Roman law, on the other hand, rested on the assumption that social order was a matter of "contract"; and this "contract theory" has dominated the bulk of legal and political thinking down to recent times, although through the influence of the Church in the Middle Ages the supernatural theory of society and the conception of law as a divine command for a time again dominated.

The very definition of law, as all the better legal writers have discovered, involves some theory of social organization; and definitions of law consequently vary according to the writer's conception of the nature of social order. Corresponding to the supernatural conception of society, we find the conception of law as a divine command, or the expression of divine will. To the contract theory of society corresponds the conception of law as an agreement or rule by which the majority "covenant" to regulate their relations to one another, leaving questions to be decided by some commonly selected authority. Answering to the theory that social organization is a result of force, or the rule of the strong over the weak, is the conception that

law is, to use the Sophists' phrase, "the rule of the stronger." All of these theories of society, however, on which the legal and political theories and systems of the past have been based, are somewhat antiquated today; and only within very recent years do we find any legal and political theory based upon the newer cultural and psychological conceptions of human society. These illustrations make it evident that a sound theory of the nature and functions of law and government must rest on sound views of human society.

Law antedates the state as we understand that word, and government, so far from being the original source of law, is simply the means of enforcing law. Law and government are coördinate expressions of the tendency of all social groups to regulate the conduct of their members in order to preserve their organization and their efficiency. The science of government and the science of law must both accordingly rest upon a knowledge of the nature of social organization. As to the claims of ethics to be considered the science fundamental to law and politics, it need only be said that ethics, as the science of right conduct or of right living together, itself presupposes sociology; for we cannot know the ideal in conduct until we know the remote consequences of conduct, and we cannot know these consequences unless we understand the laws of social life generally. What light then does sociology throw upon the foundations of law and government? The researches of legal his-

torians and sociologists alike have been shown that law undoubtedly had its origin in custom or social habit. Now, custom is so far from resting upon contract or mutual agreement that we can say in general that contract had very little to do with the origin of custom. Moreover, opinion also as a rule has little to do with its origin, especially with the primitive origins of custom. Opinion, whether past or present, usually comes in to support custom. Customs are simply collective habits which have been sanctioned by a group, and habit rests as much upon natural impulse as it does upon reasoned opinion. A course of conduct may be entered upon by an individual or a group, by a series of happy, accidental adjustments quite as often as by reasoned opinions. It is evident that natural impulses also have much to do in determining which of several courses of conduct will be entered upon. Reasoned opinion, therefore, has more to do with confirming custom or with modifying it in ways of social advantage than with its origin. Of course, this is saying in effect that rational opinion does play an increasingly important part in originating law as social evolution advances, but the point to be noticed is that the psychological order is law, then custom, then habit. The laws by which social groups seek to regulate the conduct of their members rest in the last analysis upon habits which have developed through ages of collective living, but the modifications of law which so rapidly go on in civilized

societies are wrought largely by reason and rational opinion, though of course "reason" must not be considered as necessarily opposed to human impulses and emotions.

If law rests upon customs, and "custom" is but another name for collective habit, then formal laws are merely social habits brought to consciousness for the sake of greater control over them. Indeed, from the standpoint of their activity, as Bentley says, laws are nothing but the "habitual activities of society, enforcing themselves upon the would-be variants." No society can continue to exist without uniform practices and habits of life. Group action, except perhaps in its simpler forms, is impossible without some degree of collective control. This means that social control is characteristic of all societies whatsoever. Consequently in human groups, with their self-conscious units, we get conscious and deliberate attempts to control the activities of the individual. Human society, therefore, from the first presents the phenomena of authority and of social discipline. If an individual varies too greatly from the standards of his group, if he refuses to coördinate his activities in harmonious ways with the members of his group, then the group to that extent suffers disorganization and impaired efficiency. Every social organization must be coercive, therefore, to the extent necessary for efficiency. This means that individual impulse must be subordinated to social needs; hence the indi-

vidual is surrounded from childhood to the grave with stimuli of all sorts, though chiefly in the way of rewards and penalties, to get him to coördinate his activities advantageously with his group. As Professor Giddings said, "The creation and perfecting of discipline, the standardizing of conduct and character by means of discipline, has been the work upon which society has directed its conscious efforts from the beginning."

Now, the bearing of all these simple sociological principles upon the law is evidently this: namely, that law is one of the chief means of social control of individual conduct. While it is not the only means, still perhaps it must be regarded as the most important means because it deals with the overt acts of the individual, and has back of it the whole force of society. We have law in society, in other words, because society feels the need of controlling individual conduct in order to preserve its organization and collective welfare.

Every group must, therefore, exercise constraint upon its individual members; and the need of this constraint becomes greater the larger and more complex the group is, because in complex societies there is greater opportunity for individual variation between the habits of different individuals. Therefore, social constraint becomes increasingly necessary to carry on an increasingly complex collective life. Instead of law lessening with social evolution, then, it is bound to increase in amount and also in relative importance to the

life of the group. As each new condition in the social life arises, some means of social regulation and control has to be found, and usually the most simple and direct means is through the law. Thus, when modern industrial evolution produced the "trust," because this new form of association had to be controlled in its conduct in the larger social unity, law was at once invoked to regulate the trust—that is, to make it conform its activities advantageously to the life of the whole group.

The coercive character of law, therefore, does not spring from the fact that it is the imposition of the will of a strong individual or class upon a weak individual or class, but rather it springs directly from the coercive and compelling nature of all social organization. Every social organization must be coercive in some degree if it is to assure the welfare and survival of its members. Social groups, being a mass of self-conscious individuals carrying on a common life together, enter therefore upon deliberate policies to prescribe and control individual conduct in ways of social advantage. In very large social groups, of course, there are always individuals who vary in their habits beyond the limits which are judged essential to group safety. In primitive groups such anti-social conduct was punished by the spontaneous resentment of their members, but as government became organized more and more the work of maintaining social habits or customs judged necessary for group safety was turned over to it.

Hence the law became the conscious instrument by which society enforced its will upon its individual members; but it is evident that law even in its most evolved forms is closely connected with the forms of social constraint and social control which we find even in the most primitive groups of men.

The insufficiency of the "contract theory" of law and of society must now be manifest. The contract theory presupposes that every individual is an independent, self-sufficient unit in society, and that he regulates his relations to others by contract, that is, by agreement to do or not to do certain things. This theory presupposes that practically all conduct is reasoned out, and so it presupposes a much higher degree of intellectual development than what we find in human societies. Again, it supposes that human nature is much simpler than it really is, and is made up quite entirely of intellectual elements. The word "contract" in its broadest sense is evidently quite inadequate to express the actual relations which we find between individuals, whether in civilized or in primitive society. These relations for the most part are on a basis of habit and instinct rather than that of conscious agreement. There is, therefore, no social compact or social contract at the basis of law or any other social institution.

Law and government as we have already noticed are among the chief means by which society maintains its unity and solidarity. Consequently law has come to be used in recent times largely as

a means of coercing a variant social minority to coördinate its activities with those of the majority. Where the new law represents the habits of thinking and acting of an undoubtedly clear majority of a given group, there is usually little difficulty in securing its enforcement. On the other hand, laws which represent only the habits of a minority of population, it follows, are not easily enforced—at least not in democratic communities where popular will and public sentiment are the chief means of coercion. Law should follow, therefore, and not precede, changes in social conditions—that is, in the ways of thinking and acting of a majority of the population. Laws which outstrip popular will and public sentiment are notoriously powerless to better permanently social conditions, and in general it may be said that law is a relatively clumsy instrument of effecting social reforms. All that has been said implies that radical social adjustment must be made through the influence of education and public opinion, and that law at the most can come in only to enforce the new habits which have already been sanctioned in popular consciousness. Moreover, it follows from all this that law can never represent the moral ideal; for the moral ideal stands for the maximum which society is aiming at, while the law aims simply to maintain the minimum of morality in conduct which is necessary for the safety of society at any given time.

Law is established, then, in its statutory and

common law forms for the sake of effecting a higher degree of social control and of constraining individuals that vary from the standards which are recognized as necessary to carry on a collective life. The civil law and the criminal law may consequently be considered as two great props which sustain the social order in any nation. Nothing can be socially more demoralizing than when one of these props is weakened. The weakness of the criminal law in the United States and the general disrespect for law which we find widespread in our population is, therefore, one of the gravest signs of social disintegration which confronts the American people. While the social situation in the United States is undoubtedly responsible for the present inefficiency in the administration of our criminal law and for the decline of respect for the law generally, yet the question may be raised whether the legal profession in the United States, through inadequate training and through commercialization, has not had something to do with all this.

If we have law in order to preserve a given social order, we have changes in the law in order to bring about adjustments to new social conditions. Therefore, those whose business it is to change the laws, or to reinterpret the old ones in order to meet new social conditions, should have the fullest possible knowledge of those conditions. We are still without a system of law that is adapted to our new and complex civilization. Be-

cause the legal profession has often failed to see the social character of law, they have sometimes made the mistake of considering law as something given for all time, and hence, instead of studying the new habits and conditions of society, they have often attempted to apply rigidly old systems of law with disastrous consequences. For example, the old English common law was adapted, as everybody knows, to a much simpler civilization than our own, yet we have had jurists, even down to the present time, attempt to apply that law to our modern complex society. To amend or reinterpret the common law so as to meet the needs of the day evidently requires extensive knowledge of the present society. Again, the old criminal law, or as criminologists call it, the classical criminal law, brought about by the reforms at the beginning of the nineteenth century, has proved quite ineffective to protect modern society from crime. This is doubtless not only because modern society is more complex, but because the classical criminal law rested upon an unscientific analysis of the problem of crime; yet only in recent years have radical alterations been introduced into our criminal law, and there are still lawyers who regard the old criminal law as quite adequate. It is evident that a scientific criminal procedure and criminal jurisprudence must rest upon a scientific criminal sociology. Inasmuch as it is evident that laws need constant change to meet changed social conditions, as long as the bulk of this work of chang-

ing laws falls to the legal profession, it is the duty of the legal profession to equip itself for this function by an extensive knowledge, not only of social conditions, but of the principles which underlie social organization and social change.

CHAPTER XI

THE SOCIOLOGICAL BASIS OF SOCIAL WORK

LONG ago a great pioneer social worker, Dr. Frederick Howard Wines, emphasized the importance and necessity of a close correlation between sociology and scientific social work. He was pleading for the thorough grounding of all of our social workers in scientific sociology. He said: "The sociologist and the philanthropist can be of the greatest possible service—indeed they are indispensable—to each other. . . . The corrective for each is found in the union of the two, of the scientific acid with the philanthropic alkali, thus producing a neutral salt of positive value to the social *materia medica*."

Nevertheless too little recognition is still given to theoretical sociology in the training of social workers. It is the purpose of this chapter to make clear if possible the dependence of scientific social work upon theoretical sociology and to show the importance of sociology in the training of social workers.

It would seem to be axiomatic that all wise social work must rest upon a deep understanding of the social life in all its aspects. To be sure, some

scientific social work may develop by purely empirical or "trial and error" methods up to a certain point. But all development beyond this empirical stage must rest upon the deeper understanding of the principles, laws, and forces which make and shape man's collective life. There can be, therefore, between social theory and social practice no divorce without disaster. Just as the greater achievements in the physical sciences have followed the clear working out of physical and chemical theories, so the greater achievements which are to come in scientific social work must follow the development of a general theoretical knowledge of the forces which make the social life. As Professor Cooley says, "We live in a system, and to achieve right ends, or any rational ends whatever, we must learn to understand that system." In other words to achieve the highest results in practical social work, we must have a clear and profound understanding of the collective life process itself.

Popularly, of course, there has long been much confusion of sociology with scientific social work. To many people sociology has meant simply the science of social betterment. They have seen only the applied side of sociology and particularly its application to the depressed classes in our social life. The discovery that theoretical sociology, aiming chiefly at understanding the laws and principles of social organization and evolution, was something quite different from scientific social

work has led naturally to a reaction, and the relation of the two has now in the minds of many become uncertain and obscure. While there can be no question as to the need of the division of labor between the theoretical sociologist and the student of social work, yet, as we have just said, such a division of labor should not lead to the obscuring of the very close and essential relations between the general theoretical science of human society and the science which may rightly claim to be its chief application, philanthropy.

Sociology, as a theoretical or pure science is, of course, more fundamental and comprehensive than social work. Necessarily it must deal with the whole of human association both in its biological and psychological and in its static and dynamic aspects. It seeks to understand the laws governing the interrelations of men, and to study the organization of human society and the changes that are constantly taking place in it, both those of a progressive and of a retrogressive nature. Everything that affects human interaction, both within and without man, is, therefore, in its relation to society, a concern of sociology. To use a formal definition, sociology is, then, the study of the origin, development, structure, and function of the forms of human association. While as a pure science it cannot concern itself with the application of the results of such study, yet an applied science which utilizes the results of such study manifestly bears the closest relation to sociology.

Social work should be manifestly *applied science*, dealing with the adjustment of the socially weak to society. Everything that concerns the genesis, social treatment, and prevention of the depressed classes is proper subject matter for the science of social work. It has, of course, numerous subdivisions according to the particular class or particular problem dealt with. Charitology is the name which has been proposed for that phase which deals with the social treatment of the dependent classes, while penology has been given to that division which deals with the social treatment of the delinquent classes. If the chief problem of social work is to adjust these socially depressed classes to society and to render them normal, it is evident that it must utilize the knowledge which the science of sociology gives concerning normal social life and the adjustment of the individual to society. The laws and principles of social organization and development must be constantly kept in view if social work for any class in society is to become scientific.

The relation of sociology to social work has often been happily compared to the relation of biology to medicine. That medical science which does not rest upon the general laws and principles of organic life, we regard today as essentially empirical, if not unscientific. Only the physician who understands the laws of heredity, variation, nutrition, reproduction, and the like, is fitted to render the best scientific services as a medical

practitioner. More and more, therefore, training in general biology is being insisted upon as a prerequisite for training in the medical sciences. The relation of the theories of organic evolution, heredity, and variation to the practical problems of the physician are now seen to be not as remote as they were once imagined. On the contrary, the greatest progress in medical science has of recent years been stimulated through the progress of general biology; and, on the other hand, not a little progress in general biology has come from experiments and observations in medical science. So, too, we shall attempt to show that the general laws of the origin, development, structure, and function of the forms of human association are not so remote from the practical problems of the social worker as they are sometimes supposed to be, but that on the contrary, we may reasonably expect more rapid advance in solving these practical problems when such general laws are understood.

Now, problems of social work may be approached by the social worker from three different scientific standpoints. First, they may be approached from the standpoint of biology, or that of physical heredity. Secondly, they may be approached from the standpoint of personal character, or that of individual psychical adjustment. Thirdly, they may be approached from the standpoint of social conditions, or that of defective social organization and development. I shall try to show that from whatever standpoint the social

worker may approach his problems he has need of the guidance of sociological knowledge, and that the most fruitful approach to his problems is from the third standpoint or directly through scientific sociology.

When the social worker takes up problems in philanthropy in which physical heredity plays an important part, he should have a knowledge of the whole bearing of physical heredity upon social conditions and development. We know that through intermarriage congenital defects, or degenerate tendencies, may be scattered broadcast in a population. We also know that complex societies are dependent for their survival upon the equipment for life, both physical and mental, of their members, and that if this equipment is inherently inferior, only an inferior type of social life can result. The spreading, therefore, of hereditary defects in society must be regarded as a very serious matter. Now, sociology is forced to take into account at every step in dealing with the general laws of social life the social effects of heredity. The philanthropy of the past has often made very serious blunders by assuming that no great social consequences follow from the presence of defective heredity, but the researches of investigators have pretty conclusively shown that deterioration in the hereditary elements of a population has played some part, perhaps a very great part, in the decline of nations in the past. The sociological knowledge of the bearing of heredity

upon social conditions, as a factor in our social life, is, therefore, of great importance in the training of the social worker.

What has been said regarding the importance of understanding the bearing of heredity upon problems of social work emphasizes the importance of biological selection in human social life generally. It has often been argued by biologists who have known little of practical social work that philanthropy in all its forms is a needless interference with the natural processes of selection in society. Sociology, however, has long since refuted this charge, and the philanthropy which is most scientific today rightly puts forward the claim that it can and does improve upon processes of natural selection in society, by substituting for more or less blind natural selection enlightened rational selection. Probably no policy of scientific social work has more adequate scientific foundations than the policy of permanently segregating the hopelessly unfit in institutions. The scientific social worker needs to understand the scientific basis of this policy. He needs to understand the relation of the policy of segregation to the general social welfare, and to understand this he must know so thoroughly the doctrines of heredity and selection in their bearing upon human social life, that he will be able to persuade the taxpayer to provide the institutions which are necessary to carry out the policy of segregating the hopelessly unfit.

It has often been claimed that biological sociology sanctions the extermination of the hopelessly weak and degenerate elements in society; but it must be replied that this plan has come, not from the sociologists who take into full account all that affects man's collective life, but from biologists, physicians, and others, who see only the physical aspect of the matter. Sociology, on the contrary, leads one to see that no such policy of exterminating the weak, or of "euthanasia," could be entered upon by any social group without injuring those finer sentiments and feelings which bind society together and make the higher forms of coöperation and of civilization possible. Any such policy, sociology shows, would inevitably weaken all social bonds, tend to destroy the sentiment of social solidarity, and put a stop to the possibility of all further advances in society based upon the higher altruistic feelings. The inevitable conclusion from a sociological point of view, then, is that society must care for, in the most kindly and humane way possible, its hopelessly weak and degenerate elements, but care for them in such a way that they will not pollute the stream of life and burden future generations with defectives like themselves. Sociology, then, so far from endorsing the policy of destroying the weak would emphasize the necessity of permanently caring for them in the most humane manner, if they cannot be reclaimed to normal social life.

The sociological knowledge of the importance

of heredity and selection in social life and progress leads at once to the perception of a new and higher type of preventive social work which shall aim at securing a sound physical heredity for every child that is born. This, to be sure, is in part guaranteed by the elimination of the hopelessly weak and degenerate elements from society, but this negative selection, it is now perceived, should be supplanted by educational and other influences which would tend to secure proper marriages between the normal elements of a population and the proper control of heredity. Eugenics, as the new science of controlling heredity in ways of social advantage has been called, is logically a phase of preventive social work, its aim being not to produce any special type of man, but to secure a normal physical heredity for all who are born. The program of scientific eugenics in bringing about changes in education, in custom, and in law that favor such a selective process in human society, is certainly one which must be taken up by all scientific social workers, and one which can only be appreciated by those who have a full knowledge of the biological aspects of human social life, which should be furnished by biological sociology.

The social worker who approaches his problems from the standpoint of individual character and adjustment has no less need of sociology. Defective human character is, indeed, what the social worker who has personal relations with individ-

uals of the depressed classes must constantly deal with. But this defective character can only be properly viewed and judged from the social point of view. A person may have a sound physical heredity and be living in a relatively favorable social environment and yet lack along many lines proper psychological adjustment to that environment; that is, the person has failed, for one reason or another, to develop his character so that his activities shall be coördinated harmoniously and advantageously with those of his group. The lack of adjustment may be along religious or moral or intellectual lines. It has usually been thought that psychological sociology is the most useless discipline in the world to the practical social worker; but psychological sociology deals with this very question of the adjustment of individuals to each other in the collective life process. The normal relationships of individuals to one another; the ways in which their activities may be advantageously and effectively coördinated, the ways in which defective adjustments may best be overcome can scarcely be understood without a knowledge of human society on the side of the psychological adjustments and relationships of individuals to one another. Of this knowledge, the friendly visitor in the charity organization must make use when she attempts to get a depressed family again properly adjusted, coördinated with the life of the community in which it lives. So, too, those who are dealing with dependent chil-

dren must continually make use of the principles of social psychology in planning the social salvation of the child. All who deal with defective character, or character under the influence of adverse circumstances, must have a clear knowledge of what constitutes right adjustments of individuals to their social environment and what constitutes faulty adjustment. They must understand the laws and principles which underlie the normal adjustment of individuals in society, and these laws and principles are what the psychological sociologists are attempting to work out, and have in part successfully worked out.

Many other illustrations might be given of the utility of sociology in bringing about normal psychological adjustments of individuals to their social environment. However, enough has already been said to emphasize the point that it is only under the guidance of sociological knowledge, although the social worker may not acknowledge or even be aware of it, that social work can see its way clear to render normal the psychological adjustments of individuals whose social adjustment is imperfect.

A person's physical heredity may be normal and he may have few or no defects in his personal character, yet he may fall into the depressed classes because of adverse social conditions. Social conditions, indeed, play a part, the exact extent of which is still not accurately known, in producing defective heredity and defective indi-

vidual character. In a sense, therefore, defective social conditions may be regarded as the great, though not exclusive source, of social maladjustment. At any rate, through changes in social conditions it is conceivable that personal heredity and personal character may be largely controlled. Therefore, the view that every society has the abnormal persons that it deserves is not far from correct. Now, inasmuch as sociology deals with the whole problem of the organization and development of normal society, it follows that the social worker needs to know all that scientific sociology can tell him about social conditions and development both normal and abnormal. The social worker who is adjusted to his task in the twentieth century will certainly have more and more to say and to do about social conditions that produce abnormal individuals and classes. This being so, he must have some sound principles to guide him in his proposals for social reconstruction or betterment. Many of these principles, perhaps, it would be replied, could be gained empirically or through common sense. But social changes of even the most imperceptible sort, as has repeatedly been shown by scientific investigation, have often important remote consequences. The social worker who proposes a social change should be able to understand what the remote social consequences of such a change might be.

Then again the social worker is not primarily seeking to redeem an individual here and there.

Rather, if he understands his work aright, he is seeking to lift all society and all social classes. Hence he must attack the defective conditions in society which depress men. If the cost of living is increasing, the value of money decreasing, and wages remaining practically stationary, there is little use of the philanthropic worker attempting to combat poverty and dependence through securing better psychological adjustment of the individual to his social surroundings, because the problem is manifestly one beyond the psychological adjustment of any particular individual, and because for every individual redeemed by remedying defects in his character, a half-dozen may be depressed below the poverty line. The social worker is, therefore, compelled to go out into the broader field of social reconstruction or of constructive philanthropy. He must deal with such questions as the labor of women and children, with unemployment, with low wages, with the sanitary and moral conditions which surround various occupations, with the questions of long working hours, unjust rents, proper sanitation and proper housing; but these questions must not be dealt with simply either from economic or political standpoints, but they must be dealt with from the standpoint of the whole organization and evolution of human society, that is, from the standpoint of general social welfare.

Moreover, scientific social work today is actually attacking all of these problems of social re-

construction as being within the proper domain of its activities. If the work which scientific social work is doing along these lines does not rest upon the fullest knowledge of the constitution of human society, it is certainly doomed to be discredited, and more radical and revolutionary measures will gain in popularity. It is for this very reason, it may be suggested, that certain social workers occasionally become social revolutionaries. They see the inadequacy of dealing merely with the defective character of the individual, and the necessity of more comprehensive means of social regeneration; but not understanding the laws of social organization and evolution, they propose impatiently to accomplish their ends by overthrowing the existing order of things and attempting experiments which are yet without sanction from the standpoint of our scientific knowledge of social development. It may be suggested, therefore, that a careful training in sociology, which shall include the study of the whole of human society in its present organization and in its past development, and both in its biological and psychological aspects, is necessary to prevent the social worker from championing untested schemes of social reorganization, and even from becoming a social revolutionist.

Finally, the social worker needs training in theoretical sociology because he needs vision. He needs to see the relation of his work not simply to the few individuals that he may be helping, but

to the whole process of human progress through the ages. He needs to understand his work as an element or a factor in that social process of human development, which began in the unknown past and which is to continue into the unknown future. He needs to be conscious that both remedial and preventive philanthropy are attempts to master and control the social environment in the interests of a higher type of man and of human society. If he is conscious of this relation of his work to the whole process of social evolution, if he is conscious, furthermore, that society, and in some sense, humanity, is a unity, and that he is making a contribution to the perfect development of that unity, then he will go to his work in a different spirit. He will not lose heart when discouragements come, nor will he become a mere social revolutionist when he sees some seemingly insurmountable wall of difficulty ahead of him. He will have in short a larger vision, and therefore a larger faith in himself, in his work, and in humanity.

CHAPTER XII

THE SOCIOLOGICAL BASIS OF THE SCIENCE OF EDUCATION

FOR a long time educators have been gradually coming to the view that education is fundamentally a social matter. While this view is common, it is still rare that we find text books upon education approaching the subject matter of the new science from the standpoint of sociology. The dominant method of approach is still the psychological method, that is, the problems of education are approached from the standpoint of the nature of the individual. While this approach from the standpoint of individual psychology is entirely legitimate and is especially of use in solving the problems which confront the teacher in the class room, it is evident to all that this approach is much too narrow for the development of a true science of education. It is beginning to be perceived, in other words, that the educative process is simply a part or a phase of the whole social process, and that to be understood and properly guided, it must be understood and guided as a phase of the larger social process.

Education does not, strictly speaking, exist among the animals below man, though many of

them live in social groups; but in all human societies we find conscious efforts to train the young, to adapt them to the life of their group, and to initiate them into the group's ways of living. This is due to the differences between human nature and animal nature and between human societies and animal groups. Man's social life is based largely upon acquired habits rather than upon native or instinctive modes of action, and hence all human societies have a culture or ways of living which must be learned by the young. The vehicle of this culture is the language of the group, though suggestion and imitation also play a part in its transmission. Hence ways of social living have to be taught to the human young, and that is the reason why the education of the young is a necessary phase of human social life. Man's social life is a cultural life, that is to say, it is dominated by custom and tradition, and there is simply no other way of imparting the group's customs and traditions than through some form of education.

As human groups become more complex the difficulties of securing uniformity in habit and in belief in the group become greater and there are also greater possibilities of conflict between the individuals which make up the group; hence, the process of education or the training of the young becomes increasingly important as human social groups grow more complex, and increasing attention must be paid to it if social order is to be preserved. Education, therefore, as the means of

controlling habit and character in individuals, has its primary significance in the preservation of social order, a fact which has been rarely overlooked by rulers, but of which educators themselves have often seemed quite unconscious.

Social order is, however, but one aspect of human social life. The more important aspect is social change or evolution. Social order in the simpler human societies is not infrequently a matter of conscious concern. Social change or progress, however, does not become a matter of conscious concern until the latest stages of human development of which we have knowledge. The education of early peoples, as has often been pointed out, is therefore almost necessarily conservative in its tendencies. An education with progressive tendencies is something comparatively new in the world's history, and is even yet only partially established. In so far as human social groups are attempting to control progress, they are beginning to see that that can best be done through the educative process which controls the formation of habit and personality in the young. The functions of education are, therefore, at the present time changing rapidly. We are passing from a static education to a dynamic education, from an education which aims simply at conserving the social order, to an education which shall aim at the initiation and control of social progress. The educative process, in other words, is slowly becoming the conscious instrument of social re-

construction, and it is from this point of view that we wish to consider the sociological basis of the science of education.

Sociology is the science which deals on the one hand with the order or organization of society, and, on the other, with the progress or evolution of society. It deals, in other words, with the factors involved in the adjustment of individuals to one another in group behavior and group living, with harmonious social adjustments and with social maladjustments. It also deals with the factors involved in social changes of all sorts whether toward a higher social life, showing better adaptation to the requirements of existence, or toward a lower social life, showing less adaptation to the requirements of existence. The problems of social adjustment or maladjustment, of social harmony, of social efficiency, and of social survival, in other words, are properly regarded as problems in sociology.

Now, the science of education has evidently two chief problems, the problem of the aim of education and the problem of organizing a curriculum which shall be in harmony with that aim. It is the contention of this chapter that both of these problems are essentially problems in an applied sociology, and that the science of education, in so far as it concerns these two fundamental problems in education, is essentially an applied science resting upon sociology.

The science of education certainly cannot de-

termine what the aim of education should be regardless of the social life. As we have already pointed out, the educational process is essentially but a phase of the general social life process. The function of education, its purpose and meaning in human life is not to be determined, therefore, apart from the collective life to which the educational process must minister. An education which results in the faulty adaptation of the individual to his group must certainly result in either disaster to the individual or to the group. It must result, in other words, in such maladjustment between the individual and his group either that the individual falls into the socially depressed classes, or else that the individual successfully exploits the rest of the group to his own profit. In either case, the relation between the individual and the group is not one of social harmony, and certainly does not conduce to social survival. The development of the powers and capacities of the individual as such, in other words, not only does not assure a harmonious relationship of the individual to the group, but conceivably may be the greatest possible disintegrating force in the social life. Social efficiency cannot be secured altogether by the training of the individual as an individual. A social outlook in education is necessary if the individual is to be fitted for social life, not simply in the sense of becoming adapted to some existing social order, but in the higher sense of becoming fitted to add something to the total social life.

It is evident, therefore, that the aim of education must be within the limits of social survival, and to accomplish this it must aim at social harmony and social efficiency among the members of a group. The educational process cannot concern, then, the individual primarily, but is concerned rather with the efficiency and survival of the whole group and with the better adaptation of the whole group to the requirements of its life. Education, in other words, should regard itself as a sort of a self-conscious process of social evolution, concerned with the general advancement of humanity rather than with the fitting for a successful career of individuals. As Thomas Davidson long ago pointed out, education must be viewed as the last and highest method of social evolution. The lowest method of social evolution was by natural selection. The next to develop was the method of adaptation by organized authority, or social regulation by means of authority, that is, through governmental coercion. But these lower methods of social evolution are after all clumsy and inadequate in order to achieve the highest type of social life. We now see that human society can best be perfected through modifying the nature of the individual, and the most direct, the surest, and most easily controlled way to do this is through education.

The aim of education, then, must be social. Its aim must be to produce the efficient member of society, the good citizen, who shall be able not only

to take his place in the social group, but to add something to the life of the group. Certain refinements on this aim can and should be made by the science of ethics. The aim of education can be determined by sociology only as an aim falling within the limits of social harmony, social efficiency, and social survival, for any aim which falls outside of this standard would evidently put an end sooner or later to the educational process itself.

Now, the trouble with determining the aim of education upon the basis of individual psychology or even of metaphysical ethics is that such aims, it may be easily shown, are infrequently inconsistent with social survival, to say nothing of social progress. A little over a century ago, the view became popular that education should emancipate the individual and develop his powers and capacities as an individual. The view was freely advocated that by such means social progress would be assured in the highest degree, because, it was argued, the interests of the individual and society are necessarily harmonious and that therefore any development of the individual would secure the development of society. That this view is not the full truth is now evident, for we are beginning to see that individual development, regardless of social standards and social needs, may work in the very opposite direction from social harmony, social efficiency, and social survival. The individualistic and commercial education of

the latter years of the nineteenth century often failed to produce the good citizen, but on the contrary often produced the cultured free-booter of which our modern industry has afforded so many examples. The development of individual power and capacity must evidently be along lines best adapted to social interests and even the interests of humanity as a whole. The needs and requirements of social life must be constantly kept in view if education is to produce the good citizen.

On the other hand, there is much danger now of a reaction to the other extreme of standardizing our education, so that it will suppress individuality and tend to adapt merely to a static condition of things. The sociological view which foresees that society is undergoing incessant change and incessant adaptation to the requirements of life will correct this tendency also. The sociological outlook upon education would emphasize the necessity of a certain amount of free variation, that is, of freedom of personal development, in order that social evolution may go on. Education, in other words, if it is to conduce to social efficiency is not a matter of adaptation to a static order. It is rather power to carry on the work of society in accordance with the requirements of social existence. It is only through progressive adaptation to the requirements of life that social survival can be secured. Individuals, therefore, must be trained not only for helpful and harmonious relations with other individuals, but to carry

on effectively the social life, so that there shall be a progressive mastery over all external and internal factors in the life of society.

This has been, perhaps, a very indirect way of saying that the aim of education should be not individual power and success, but social service. That simple proposition, however, might have shocked the traditional view of some if it had been placed at the beginning of this chapter. I prefer the phrase "social service" to "social efficiency" in stating the aim of education, because "social service" indicates more clearly that the aim is outside of the individual, that it is in the life of the group or rather of humanity. To social efficiency as a phrase indicating the aim of education, of course, there can be no particular objection. I simply prefer social service as in line with our traditional ethical terminology, indicating more clearly the spiritual and social end of the educational process.

If the fitting of the individual for the highest social service should be the ideal of our educational system, then it ought not to be difficult to get a curriculum with this ideal. This ideal involves, of course, first of all such a development of the powers and capacities of the individual that he may serve effectively his group and humanity at large. It involves the cultivation and attainment, but with social purpose, of all of that power of thought and action which education has so long emphasized. It also involves the adjustment of the individual to the material or economic side of

life, the training of the hand and eye as well as of the intellect. The first requisite for good citizenship is perhaps that the individual be able to support and care for himself and not be a burden in any way upon others, but be able to add something to the material resources of the community. Industrial education, therefore, will have an ample place in any education for social service. Vocational education, as the larger application of the ideas involved in industrial education, would also, of course, have a large place.

It would be a mistake, however, to consider that vocational and industrial training was a socialized education. While social education will make ample room for vocational education, vocational education is not necessarily social education. It may, indeed, fall far short of it. The common assumption of some educators and of a portion of the public that good citizenship consists in being a good farmer, a good physician, a good engineer, or the like, is a serious error. A man may be an exceedingly good farmer or good engineer, and yet be a very poor citizen; so too with any other vocation which may be mentioned. The essence of good citizenship on its positive side is not in the successful pursuit of some vocation, but rather in harmonious and helpful relations with all the other members in one's group or community. To be a good citizen, in other words, one must be a good husband and father, a good friend and neighbor, and one taking an intelligent and help-

ful interest, though in a non-vocational way, in all of the institutional activities and life of his community. Education for social service must first of all be directed, therefore, to bringing about an intelligent and helpful coördination of the activities of the individual with his family, with his neighborhood, and ultimately with humanity. The essence of good citizenship, therefore, consists in the service of others through essentially non-vocational, rather than through vocational, activities.

This brings us to emphasize that in the scientific curriculum from the kindergarten up, social relationships and social service should be studied. Children, even of the tenderest years, should be taught their relations to other individuals and humanity at large, as well as their relations to things. The social sciences, so called, history, civics, social geography, public sanitation, household science, economics, ethics, and sociology, should receive more ample recognition in the curriculum than they have hitherto received, for these sciences aiming at the control of social conditions and of social progress emphasize the higher life of man and set before the student as the goal, not material achievement or individual success, but the service of man. The social sciences also are the best vehicle for the teaching of morality in our public schools. They show that no individual lives to himself and that his acts affect the whole of society. They, therefore, lead up easily and naturally to that explicit ethical instruction with-

out which no educational curriculum can claim in any sense to be scientific. While the social sciences cannot take the place of individual example and of other environmental influences in the moulding of moral character, they can do much to secure such character. They will especially fit the individual to render intelligent social service, because it is impossible that intelligent social service can exist without social knowledge.

The value of the social sciences for the teacher himself needs finally to be emphasized. If education is to become the great instrument of social progress, then the teacher must be a social leader and the teaching profession essentially a social service profession. The teacher needs to know, therefore, for his work far more concerning social conditions and the laws which underlie the order and progress of society than might be demanded merely from the standpoint of the theory of education. The teacher must recognize his work as essentially a social work and a part of the great movement for the improvement of human society, not a minor part of that movement, but its most fundamental and important part. The teacher who does his work with social vision will have more power to mould the social future even than the legislator. As much, if not more than the legislator, therefore, he needs social wisdom to guide his work. We now think, and think rightly, that for the work of the legislator too much social training cannot be required. Shall we not soon

come to think that the same is true for the work of the teacher? If the teacher is a student of social conditions and of social movements and is in touch with the real needs of the collective human life about him, there is no danger that we will develop static forms of education, and the danger of neglecting to fit the individual for real social service, for genuine good citizenship, will be reduced to a minimum.

Hence we conclude that the science of education must be based upon the science of sociology, if the aim of education is to be rightly determined, and if education itself is to become socialized, an instrument of social progress, not a solvent of our social order.

CHAPTER XIII

THE EDUCATIONAL THEORY OF SOCIAL PROGRESS

THE question of supreme practical importance in the social sciences is the method of normal social progress, for upon knowledge of methods depends our power to control. It is the expansive power of steam which causes the steam engine to run; but the efficiency of the engine will depend upon the methods by which this natural force is controlled and applied in any particular case. So in human society the causes of progress may lie in the stimuli in the environment or in the nature of the human individual; but progress will depend upon control over the active, creative factors in the human social process.

It is the thesis of this chapter that the human social process is essentially educative and that the development and enrichment of the social process on its educative side is the normal method of human progress. The social heritage of human groups, which anthropologists and sociologists call "culture," and which consists of the knowledge, skills, and standards utilized by men in making tools, institutions, or customary behavior, can be transmitted only through essentially educative

processes, even though these processes may to some extent be unconscious; and it can be enriched and enhanced only through the learning of new adjustments. In other words, all the processes for the transmission and enrichment of culture are essentially educative and involve "learning" on the part of human groups.

Thus culture, or civilization, is essentially an acquired trait, and education is the normal method of its procedure. Civilization is built up through the accumulation of a mass of habits and ideas which are transmitted from generation to generation through custom and tradition. Each generation has, therefore, to acquire or *learn* this ever increasing mass of habits and ideas which make up human culture. So far as we know, biological selection can do nothing more than equip individuals with hereditary powers and capacities to acquire this mass of habits and ideas from their social environment. There is no evidence which would warrant us in believing that the children born in the most advanced civilization are inherently more civilized than the children born under the most primitive conditions. They are simply born in a more favorable environment in which social machinery aids them to take up, that is to *learn*, the habits, knowledge, standards, and values of the civilization which surrounds them. It follows from these simple statements that the methods of continuing and developing

human social life, so far as it is human, must be essentially of an educational nature.

Now, this fundamental identity of the human social process and the educative process is frequently overlooked by both educators and sociologists. Whole volumes have been written on social progress without any mention of education; and educationists have written of education without perceiving that the educative process has been developed as a control over the human social process for the sake of achieving social aims. On the other hand, the intimate connection of human culture with learning and education has been divined in popular speech and by popular educators, even though it has not always been perceived by scientific sociologists. While culture is the distinguishing mark of human society, it has all to be *learned* by the members of human groups. We have culture only when individuals *learn* to modify their conduct through what is communicated to them by other individuals. *Culture implies, therefore, a process of teaching and a process of learning even though these processes may not be highly conscious.* The essential fact to be perceived is that *human culture develops through a collective learning process*, and that all that we call progress has been achieved through processes of learning by human groups.

By education and the educative process we mean, of course, the whole process of controlling the formation of habits, of ways of thinking, and

ways of action, in individuals. Formal education may be only a very small part of this process. Conscious teaching may play only a small part. However, with social development there has been more and more a tendency to bring about conscious and intelligent control over all educative processes. When we discuss education as a method of social progress we have, therefore, a certain right to consider the process as conscious and intelligent. Nevertheless, it should not be forgotten that the more intelligent and highly conscious phases of the process have sprung out of less intelligent and less conscious phases of the same process in the course of social evolution. Education in this respect only illustrates what is true of all phases of human social life; namely, that there is an increasing tendency to bring them into consciousness and under the control of intelligence as social evolution advances. It should be needless to remark, therefore, that the school is not the only institution in which educative processes have been brought under a high degree of conscious control. The home, the church, the press, the public address, illustrate in hardly less degree conscious efforts at controlling habits and ideas, ways of thinking and of acting, in individuals. In a more narrow and specialized way, the same thing is true of other social institutions, such as the shop, the factory, and the market place. Wherever we have the use of artificial means of controlling the formation of habit and of opinion

in individuals, we have an educative process. The school, perhaps, has become in our civilization, the central institution concerned with the educative process; and in so far as it can succeed in coördinating and leading all the other educative agencies in human society, to that extent what we may say of education as a means of social progress will be true of the school also.

The idea of human progress being essentially a process of education is a very old one. We find it first, perhaps, clearly enunciated in Augustine's *City of God*. But it did not become a favorite way of looking at social development until the eighteenth century, when such writers as Turgot, Lessing, and Herder frequently set it forth. These writers are now usually represented to have developed merely an interesting analogy. They are represented as saying that history is the development of the species brought about through the course of instruction which nature affords! This, however, is an unfair representation of the thought of these writers. Rather it was more clearly expressed by Pascal, when he said "all the generations of men are like one man, ever living and ever learning." While the continuity between the generations is here represented to be much closer than it really is, still the meaning is clear enough. Human history is represented as a process of the accumulation of experience, which gradually leads to the development of humanity as a whole. It is a "learning" process, a process in

which experience is accumulated and consolidated in the social tradition, much as it is in the individual mind.

In Turgot's famous essay on "The Successive Advances of the Human Mind," progress is thus shown to be the organic principle of human history. Each generation accumulates experience and passes it on to the next in the form of knowledge, standards, and values. Thus, as experience is continually accumulated, and as the race learns through experience, even through mistakes and calamities, progress is bound to result. Just as the individual grows in wisdom and character through the experiences of life, so the race is bound to develop. Turgot recognized that there were times of moral and intellectual decay, but these he contended were not in contradiction with his general principle. They were times when the wisdom of the past was neglected, or when some new situation rendered it inadequate, and mistaken choices were made which resulted in temporary retrogression. Thus progress might be interrupted, but society was bound to learn from the very mistakes which it made, and in time these mistakes will be corrected, and thus progress resumed. From this Turgot drew the optimistic conclusion, later elaborated by Condorcet, that progress was an inherent principle in human history, and that it was destined to continue indefinitely in the future until human society became perfected.

Now the scientific sociologist recognizes such a theory of progress to be altogether too simple, and so inadequate from the standpoint of modern science. Nevertheless, there are elements of truth in this eighteenth century theory which make it well worthy of further consideration and development by the sociologists of today. Both the cultural evolution of the past and the social progress of the future must surely be considered to be essentially learning processes. They are processes which involve the accumulation of knowledge, standards, and values and the imparting of these through essentially educative processes to large masses of men.

The modern critic frequently sees nothing in Pascal's theory because the succession of generations, he says, cannot be likened to a single individual. It is a false analogy. Others say that the learning process is confined to individuals and hence there can be no learning by human collectivities.¹ A more or less unconscious motive for the discounting of this theory has been the prevalence of materialistic theories of social evolution. If human social evolution proceeds through

¹ See, for example, F. H. Allport's argument, *Methods in Social Science*, pp. 332, 333. The paragraphs that immediately follow are intended as a reply. But see further, my book, *Cultural Evolution*, whose theory of cultural development is that it proceeds through group learning. Looking at the process of group learning from the standpoint of the individual, Dr. G. Spiller has happily called it "inter-learning." Very rightly he contends that this process of *inter-learning*, of learning from others, is the basis of human cultural evolution and of all social progress. It is the *human* element in the social process. See his *Origin and Nature of Man* (1931).

collective learning, or even through individual processes of learning, then materialistic theories of social progress will have to be very radically revised or abandoned.

These critics of the theory that progress comes through collective learning forget that in language, or the web of intercommunication, we have a means of the external storage of the knowledge, ideas, and values developed by human society. Tradition in the social group has often been likened to memory in the individual. It at least serves in the social group to store up practically everything that the group values which has been learned by its individuals in the succession of generations. Moreover the social tradition diffuses to the whole group, though of course in an unequal way, all the knowledge, standards, and values which it has incorporated. The growth of the social tradition, let us also note, proceeds by accumulation and selection in much the same way that the individual mind grows by learning. Those who say that there is no collective learning process would do well to study language in its development, although any other human institution would serve almost equally well to show how the process of accumulation and selection by trial and error goes on. No one would claim, of course, that it goes on without interruption, even of the most serious sort. Turgot recognized this. The generations in a group are not like one individual, but rather resemble teachers and pupils in

the school, the elders being almost invariably the teachers, the young being almost invariably the pupils. But the whole process by which human relations, human institutions, and human values are developed is essentially a process of teaching and learning, an educational process. Culture is transmitted and developed through this process and that is the reason why culture is unlike anything else in the universe. It is also the reason why human society is incomparable to anything else that we know. The social process, as we have said, involves the accumulation and the imparting of knowledge, standards, and values through essentially educative processes in order to control adaptations and adjustments among individuals.

Careful study of past social evolution demonstrates the essentially educational nature of the process. If man were not an animal with a prolonged period of immaturity, with a prolonged plasticity which enables each individual to learn the requirements of the life of his group, human groups would never have been able to develop culture. This is only saying that human group life and human civilization depend upon the learning of the individual. The simplest beginnings of those artificial adjustments which we call "culture" are not possible until knowledge and skill can be transmitted from one individual to another. This is why any development of culture depends upon language. Bit by bit the groups of primitive men acquired knowledge and skill and then com-

municated them to their fellows and to succeeding generations. Any invention or discovery by any member of the group could thus profit, not only the whole group, but the whole series of generations to which it might be transmitted. This process of transmission is often represented as more unconscious and natural, as less artificial and formal, than we have a right to believe that it really was. For the most primitive groups which have survived today give formal instruction to their children in the making of tools, weapons, and of other technological processes, and even more in moral and religious matters. The teachers are the whole group of elders, the pupils the whole group of children. Even if the instruction is informal it is socially efficient. Moreover, it is not infrequently diversified to meet the needs of individuals as well as of the group. Usually skill in performing various social functions is kept up by instruction in a succession of individuals or of families who specialize in these directions. We have every right to conclude, therefore, that the continuity of human culture from the start was maintained largely by educative processes more or less deliberately undertaken as a means of preserving knowledge and habits which human groups found to be of value.

In transmitting the knowledge, standards, and values upon which their culture rested, primitive groups had, of course, no such formal institution as the school, although they did make use, to some

extent, of formal ceremonies, such as initiation rites and the like. But for the most part, the basic elements in their culture were imparted by the two primary human groups, the family and the horde, or the neighborhood group. These two groups have indeed been the chief bearers of cultural traditions in all ages. They are still the chief agencies for social education. The education which they impart is by no means to be thought of as like the habituation of the individual to his physical environment. On the contrary, there is constant pressure on the child, in both the family and neighborhood groups, whether in savagery or in civilization, to make him conform his habits, his ways of thinking and of acting, to those of his group. The process is really an educational one, though the methods are not so formal as those employed in the school. But there is the constant artificial control of the formation of habit and character, which, as we have already said, is the distinguishing mark of the educative process.

If continuity in social development was secured in human groups from the start largely by educative processes, it is no less true that changes have always been brought about also largely through such processes. The most significant changes for the better in human society have been undoubtedly due to the processes of invention and discovery. Conditions in the environment have been the stimuli for these inventions and discoveries, but the inventions and discoveries them-

selves must be considered the real means by which civilization has developed. Now, inventions and discoveries are notoriously the work of a relatively few individuals in human groups, and their utilization by the whole group is brought about by the other members of the group being taught how to make use of them. From the simplest stone implement to the latest automobile, most men have had to learn how to utilize or copy the inventions of the exceptional mind. The whole process of generalizing the use of an invention is, therefore, a process of education. But this is true, not merely in the material realm, but also in the realm of human relationships. New modes of associating and coöperating are invented as well as new tools and machines. Forms of government, law, magic, and religion are also, more or less, matters of invention. They have to be diffused also through educative processes, and this is largely the significance of many of the ceremonial usages which attach themselves to those institutions.

A high degree of conscious purpose must not, of course, be attributed to those educative methods which are made use of to spread and perpetuate in social groups new inventions and discoveries, whether these be in the technological or in the more strictly social realm. In the case of those mass adjustments which are made by the group as a whole, however, a higher degree of consciousness enters. Collective conscious changes are made in human groups largely through proc-

esses of intercommunication, discussion of ideas, and the formation of group opinion. All of this may be justly characterized as a sort of reciprocal educative process conducted by the members of the group among one another. Discussion results in the group gradually discriminating the various factors involved in a situation, in an evaluation of those factors, and in the selection of some of them as a basis for a new adjustment. Social discussion, in other words, is largely a mutually educative process for a group. It brings forth, as Bagehot insisted, the best intelligence of the group and centers it upon the solution of the difficulty. In this way a group opinion is reached, that is, a more or less rational judgment which all the members of the group come to accept whether it represents their individual judgment or not. The power of the pressure of such a group opinion is a commonplace in all reflection upon social matters, and it is obvious that it also acts upon the individual in essentially an educational way.

Thus, it is evident that human social evolution in the past, so far as it has been brought in any degree under conscious control, has proceeded essentially by the method of education, and therefore there is good ground for holding that education is the last and highest method of evolution. Civilization itself is the production, transmission, and diffusion of the knowledge, ideas, and values by which men have learned to regulate their conduct. These can not be handed down from gen-

eration to generation without educational processes to preserve and transmit them; neither can they be greatly modified or changed for the better without such processes. All the generations of men have been accumulating the results of tested experience. Each succeeding generation has been able to do a little more than its predecessors because it has learned all that has resulted from the experience of the past and it is usually able to add a little to the store of tested experience. If conservation of past knowledge and values in human society were perfect, it is true, as Pascal said, that all the generations of men would be like one man ever learning.

It follows that it is the greater or less degree of failure of the educative process which is the immediate cause of periods of moral and intellectual decadence in human society. The failure of the educative process means the failure of the individuals to get proper adjustment to the social life. In every case disintegrative social processes are rooted in the failure to control habits, and so mental and moral character, in individuals. Of course, back of the failure of the educative process to socialize the individual always lie certain general conditions in society which may be regarded as the remoter causes of social disintegration. These are usually social disturbances, such as war, class strife, and the development of luxury. War and class strife directly interfere with the educative process, since they divert the energy of the

social group to the socially non-productive uses of conflict; while luxury undermines the educative process through relaxing social standards. The failure of the school in the higher phases of civilization to socialize the individual becomes an especially serious matter, since on account of the complexity of social conditions the education afforded by the primary social groups, the family and the neighborhood, is usually quite inadequate. In the higher phases of social life the work of differentiated and specialized educational institutions, therefore, becomes of supreme importance for progressive social evolution.

It is evident that the educative process lies at the heart of cultural evolution and so of human social development. It has been the means by which the civilization of the past has developed. It must be our main reliance for social progress in the future. Those who put faith in other means of social progress, such as revolutions, are destined to be grievously disappointed. Revolutions have swept away obstacles to social progress, but they have never succeeded in effecting permanent progress except as they have been preceded or followed by processes of education. It was the great merit of the late Professor Lester F. Ward that he demonstrated once for all that education is the initial means, and must remain our main reliance, for progress in human society.² Ward saw clearly

²In the famous chaps. X-XIV of his *Dynamic Sociology*, Vol. II.

that the social life of man is of the nature of a developing "social mind"; that to control action, we must control opinions, beliefs, ideas, and standards. Ward's conception of education, was, to be sure, narrow. He believed that the diffusion of information would in itself suffice to give rise to dynamic opinions, ideas, and actions; so that social progress would automatically result from the diffusion of knowledge. But we now see that while "knowledge is power," it is a power that may be used in many different ways; and that only as it is socially directed will progress result from it. Hence, a more socialized conception of education is necessary, to see clearly its power as a factor in progress, than that which Ward gave.

If we accept, however, the broader and more socialized definition of education worked out by scientific educationists, namely, that the process of education is always the artificial control of the formation of habits and personality in individuals in order to fit them to participate in the life of their groups, then we may agree with Ward that the key to progress lies in education. For social progress comes through coöperation which in turn is determined by the psychic adjustment of individuals, by the social attitudes which they maintain toward one another. Now the psychic adjustment of the individual to the social life, in so far as it is not a matter of heredity—and we have already seen that there is little warrant for believing that heredity furnishes anything more than

normal human powers and capacities—is obviously a result of his environment. We must have a properly controlled environment for the individual to develop in, therefore, if we wish to develop in him desirable social attitudes. If properly carried out, personal education should furnish to the developing individual such a properly controlled environment; and inasmuch as it furnishes such an environment at the plastic period of life, it is the most subtle and effective form of social control that can be devised. It can secure more difficult forms of social adjustment than can any other human agency. We mean by a properly controlled environment, of course, not simply a physical environment, but even more, a psychic environment of proper ideas, ideals, standards, and values. Even the most civilized nations of the earth have only just begun to use education in this sense, as an instrument of social progress. Let us see what it might do if radically carried out.

In the first place, it could make a normal individual many times more efficient socially than he is at the present time. It could not only give him information, knowledge, and skill which would make him a useful member of society in general and fit him for vocational excellence in some line for which he is found by his nature to be best fitted, but it could give him an entirely different attitude toward the institutions and agencies by which social order is maintained and social life

carried on. It could give him, for example, a positive and social view of his government, so that he would not look upon it as a mere repressive agency designed to curtail his individual liberty. It could give him a more constructive attitude toward the family, the school, and the neighborhood, so that he would more readily coöperate with others in seeking to bring about conditions favorable to social welfare. If the negative attitude of the individual toward such social institutions, which is perhaps prompted largely by his native egoism, could be overcome, that alone would make greatly toward increased social efficiency and progress.

In the second place, such an education could make much more harmonious the relations between individuals. It is just at this point, perhaps, that the education of the nineteenth century failed most completely. This was because it was so highly individualistic; it laid much more stress upon individual initiative and success than upon social service. We are now beginning to see that it may be possible for us to secure a higher degree of social service from the individual without sacrificing his individual initiative and success. If we make the individual more efficient in coöperating with his fellows, whether in the family, in the school, in the community, or in the nation at large, we need not thereby be subtracting anything from those personal qualities which make for individual initiative and successful performance of under-

takings. Rather, we are thereby simply transforming individual achievement into collective achievement, which is the substance of social progress. It is idle to say that moral education of the most idealistic sort cannot be given in the public school. The social values contained in our moral ideals can be as well taught in the public school, if our education is given a social direction, as any other part of the curriculum. That the ideal of justice, brotherhood, and the service of mankind can not be taught in our public schools as easily as the ideals of business efficiency, vocational excellence, or commercial success is absurd.

The one thing which is evidently needed to make our educational system an instrument of true social progress, is that it should be more thoroughly socialized. Social service must become the watchword of the school. The knowledge and training which it furnishes should be given a social direction. Education is simply an effective means for the social manipulation and control of ideas, standards, values, of habits of thinking and acting; but if all this is not done with a social end in view, it is quite evident that nothing could so easily destroy the social institutions which conserve civilization, and even civilization itself as education. It is just because education is such a power for either social good or social evil that we must see that it is rightly directed socially. Nor is there any danger that this will fasten a clamp upon individual development. For the

measure of socialization is how far an individual's ideas, habits, and character contribute to the increased harmony, efficiency, and happiness of mankind as a whole; and an individual development in any other direction than this will surely not profit either the individual or his group permanently. Education becomes a stumbling block to social progress, not when it is given a truly social, that is, a humanitarian direction, but when it is made an individualistic, class or group matter; when, in other words, it fails to inculcate social service in the broadest sense of that phrase.

But we are told that education can not change the mores; that rather it is the mores of a group which determine what education shall be. Such a conclusion, however, is utterly unwarranted from human experience. In all ages, education has been more or less successful in changing the mores. We need take only a single example for illustration from our own time. The temperance movement in modern society has been essentially an educational movement. Its success in its war against alcohol has been dependent upon more or less scientific instruction in our public schools, regarding the physiological and social effects of the use of alcoholic beverages. In other words, without any radical changes in external conditions, but simply through the inculcation in the young of standards and habits corresponding to scientific conclusions concerning the effects of alcohol, the most progressive modern societies seem about to

sweep away the use, if not of all, at least of the stronger alcoholic beverages, in spite of the fact that the mores connected with the use of such beverages were defended by privilege and by vested interests. Hundreds of similar illustrations of the social effects of education might easily be cited from the history of civilization.

The peculiarly encouraging thing suggested by this illustration, however, is that such social effects were brought about by *education based upon scientific knowledge*. So too, if we inculcate social ideals regarding government, law, sanitation, and morality, for example, upon the basis of scientific knowledge, we may surely expect them to have an equally great social effect. The trouble with much of the moral and social instruction in our schools in the past is that it has been divorced too much from the facts of our social life. But these facts are now accumulating, becoming scientifically organized and generalized, and there is good reason for believing that by focusing such scientific conclusions upon the mind of a developing generation, we can secure an era of social progress such as the world has hitherto scarcely dreamed of. The scientific program of accumulating and rationalizing knowledge, and then of socially organizing and directing the use of such knowledge, as a basis for furthering social progress, is not a chimerical one.

But several things will have to be done by our public schools before education can become the

powerful instrument of social progress which it should be. In the first place, the school as an agency for the transmission and enhancement of culture will have to undertake the education of the emotions as well as of the intelligence, so far as it is able successfully to do so. The values inculcated by the school, whether they be truth, beauty, goodness, public spirit, or the service of mankind, will hardly be sensed as values by the students unless they are given an emotional setting. An education which does not arouse some enthusiasm for these fundamental values of civilization is hardly worthy of the name. The school should pay more attention to the education of the emotions, particularly of the nobler emotions, as these are quite as important in the transmission of culture as critical intelligence. It is precisely at this point that the school has made its biggest failure. But the social studies show the way out. They can not only train the imagination, but also awaken emotion. If rightly taught, they can help the student, in imagination, to identify himself with any part of his human world. Thus sympathy is awakened. A sympathetic imagination is a socially efficient imagination. It is also a moral imagination. Proper social education will thus help to socialize the emotions and produce a better society.

In the second place, more attention will have to be given to the finding and training of social leaders than has yet been given. Nothing great is accomplished in human society without leader-

ship; and advances in a high civilization depend upon finding and training leaders along many lines. The higher institutions of education should be especially charged with this function. They are making a beginning, to be sure, in Western civilization in finding and training leaders along a number of lines; but the general field of social leadership they are still largely neglecting. They are producing experts in law and medicine, in agriculture and engineering, but experts in dealing with the larger problems of human living together very rarely; yet these latter are the ones most needed. The superior society of the future, in other words, must be produced just as we are to produce the superior engine. It must be produced by the trained, scientific mind that knows social facts and forces so that it can map out and plan a superior social organization. The superior individual and the superior society are not antitheses, but correlatives. Only our educational system must be brought to realize that social values are not carried by individuals alone or wholly wrapped up in the concept of personality, but that they are also carried by institutional forms and inhere in the larger social life. We must pay attention to the development of the individual and his personality; but we should do so remembering that that development is largely for the sake of society, that is to say, the larger life of humanity.

Another thing which will have to be done by our

public school system is to effect some sort of coördination between the school and other educational institutions. In the nature of things the school can furnish only a part of the education of the child. But it should be the center of his education and should set the standard. The home and the church are scarcely less important educational institutions, and some way should be found of coördinating them with the school. In the more specialized phases of education the work of other institutions, such as the farm and the factory, should also be coördinated with that of the school. The school, in brief, needs to come into more vital connection with all other phases of the social life.

Finally, the public school system will have to make larger provision for *adult* instruction regarding social matters, if it is to become an effective instrument for social progress. Social progress, after all, depends at bottom on awakening and rationalizing social consciousness. The progress of society, even more than the development of the individual, comes through the growth of self-knowledge. Accordingly, our universities should make more provision for research along social lines; and our colleges and secondary schools should give more instruction in the social sciences. We cannot have intelligent social service on the part of our citizens without their possessing social knowledge; and indeed they will lack even rational motive for such service without such knowledge. Social progress, then, obviously de-

pend upon the perfecting and diffusion of scientific knowledge of society; and this last depends largely upon our educational system.

These commonplaces of educational and social science show that the general theory of Ward that education is the proximate means of social progress is sound, and that the view of those eighteenth-century social philosophers who held that education is the method of social advance is much more nearly correct than some views which have had vogue during the last few decades. The work for rational and scientifically planned social progress lies all ahead. And socialized education is the key to such progress.

