A CURRICULUM GUIDE OUTLINES THE MAJOR CONCEPTS, STRUCTURE, AND METHODS OF ANTHROPOLOGY FOR GRADES K-6. THE FOLLOWING UNIT AREAS ARE INCLUDED--(1) NEEDS AND NEED SATISFACTION, (2) HUMAN PERSONALITY, (3) SOCIAL GROUPS, (4) SOCIAL NETWORKS, (5) HUMAN CULTURE, (6) CHANGE AND EVOLUTION, AND (7) CURRENT CULTURAL CHANGES. A SUMMARY CHART PRESENTS A FLOW DIAGRAM OF THE FUNDAMENTAL IDEAS OF ANTHROPOLOGY. MAN IS AN ANIMAL THAT IS MAMMALIAN, SOCIAL, AND CULTURAL. HE HAS NEEDS WHICH ARE SATISFIED THROUGH SOCIAL STRUCTURE. SOCIAL STRUCTURE GENERATES ITS OWN NEEDS WHICH ARE SERVED BY OTHER INDIVIDUALS AND OTHER SOCIAL GROUPS. THE COMPLEX OF SOCIAL STRUCTURES OPERATES IN THE MEDIUM OF TRADITION. CHANGES IN TRADITION ARE ACHIEVED BY INNOVATION (INVENTION AND BORROWING), WHICH LEADS TO SIMPLIFICATION OR COMPLICATION. COMPLICATION IS RESOLVED BY FURTHER INNOVATION WHILE SIMPLIFICATION, IF IRREVERSIBLE, LEADS TO EVOLUTION OF CULTURE. THIS PAPER WAS WRITTEN AS PART OF THE SOCIAL SCIENCE EDUCATION CONSORTIUM, A CURRICULUM PROJECT DESIGNED TO OUTLINE THE CONCEPTS, METHODS, AND STRUCTURE OF SEVERAL OF THE SOCIAL SCIENCES FOR USE BY TEACHERS AND CURRICULUM WORKERS AT ALL GRADE LEVELS. (TC)
ANTHROPOLOGY
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FOREWORD

Professor Bohannon's paper, Anthropology, was written as part of a curriculum project supported by a developmental contract of the United States Office of Education, made with Purdue University for the Social Science Education Consortium. This project was directed by Lawrence Senesh, Professor of Economic Education at Purdue.

The purpose of the project was to outline the major concepts, structure and methods of several of the social sciences in a way that will be useful to persons concerned with either teaching or constructing new curriculum approaches and materials in which one or more social science disciplines has a prominent place. Papers similar to this one on anthropology have been written for sociology, economics, geography, and political science.

Professor Senesh's immediate concern was to construct a broad curriculum outline for Grades K-6. However, the materials on the disciplines should be useful to teachers and curriculum workers at all levels.

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The Relation of Anthropology to the Social Sciences

Anthropology is less a subject than a holding company. There is no part of its theory or outlook that is not shared with some other discipline; yet it does not hold a controlling interest in any discipline—it has, to round off the metaphor, a balanced portfolio.

Claude Levi-Strauss, the well known French anthropologist, has noted (1963) that anthropology deals with the "unconscious" structuring of social and cultural life, through the conscious processes that are history. There are two fundamental types of the socio-cultural "unconscious": one is the way in which social and cultural systems work from day to day, and the other is the way in which evolution works and changes the individual and his institutions. The two are, at one level, a single process, but they can profitably be disconnected for purposes of analysis. To give examples, the "economy" as a social phenomenon was discovered as a system of regularities in social and cultural life in the 18th century. The "society" was discovered later, first as a residual category of "economy." The polity (which goes back to the Greeks) was eroded by removal of "economy" and "society." The idea of "culture" came late—in the latter part of the 19th century, from Germany via Mathew Arnold and E. B. Tylor (Stocking 1963). All of these discoveries were comparable to the "unconscious" structures in a language—phonemics and grammar. A speaker of a language does not have to know the grammar of it to speak it "correctly." But a linguist has to know about grammar and phonemics in order sensibly to analyze language and communication, and thus to know one important aspect of the human condition.

All social sciences are seeking the secrets of the "unconscious" structuring of human life. Some are like grammarians, some are like phonologists, some are like transformationalists (to maintain the metaphor); but the anthropologist is a linguist. He must take all these other topics into consideration; he is interested in the ways that they influence one another, and in the totality of human life, society, and culture.
Obviously, one cannot be interested in "everything," but one can be interested in the processes and structures that are involved in and lead to everything human.

Anthropology is thus constantly in touch with the other disciplines. And yet it is ironic that anthropology's greatest contributions have arisen through superseding the insights of other disciplines, and thereby changing them to a degree. Anthropology has been a 'source discipline' for most of the behavioral sciences; present-day academic psychology, as opposed to psychiatry, is the obvious exception. Anthropology has also borrowed from the other disciplines, but not as much as they have borrowed from anthropology. To put it another way, anthropological discoveries and insights are constantly and rapidly diffused into other disciplines. The changes that they work there are then fed back. Sociology would be vastly different today had Linton (1936) not formalized status-and-role theory. Indeed, I have seen sociology defined in a sociology textbook as the science of culture, and it is fairly common for sociologists to start with value orientations, a branch of the subject heavily influenced by anthropology. Many respected anthropologists and historians have indicated in one way or another that anthropology and history are the same thing, seen from slightly different angles. (Kroeber 1944; Evans-Pritchard 1950; Levi-Strauss 1963; Bloch 1953; Carr 1961.)

Within our own time, when economics has made major commitments to the theory of economic development, the interest in and knowledge of anthropological matters among economists has grown apace, and with economic historians (read "economic anthropologists") such as Karl Polanyi (1944; 1957; 1966), these two disciplines find more and more areas in common. The nature of political science was very considerably changed in the years during and following World War II, when political scientists discovered the 'field' and began to do their field work in a more or less anthropological way. Many departments of political science in America today employ part-time or full-time anthropologists; there are, in many political science texts and readers, chapters dealing with political matters among non-Western peoples, and these lean heavily on anthropological insights.

Psychiatry owes to anthropology a concern with cultural variation and ethnocentrism. The whole idea of patterned growth and development that Freud began has, through Erickson (1950) and other anthropologically sophisticated men, grown to a new form. Conversely, the anthropological theory of personality
is almost wholly psychiatric--indeed, Freudian, with the greatest influence coming, perhaps, from Sullivan.

Biology is one of the precursors of modern anthropology (along with history and museology). Today, anthropologists know more about comparative primatology than anyone else; they have made important contributions to serology, dentition, growth theory, and human evolution and genetics. Geography today leans as heavily on anthropology as on meteorology and geology.

Thus anthropology occupies a key position in the behavioral sciences and in the humanities. I am not saying that anthropology is the "queen science," for there is no such subject. What I am saying is that anthropology provides a broad view of human behavior, that it is necessarily eclectic, and that it is a holding company of ideas and theories shared with many disciplines.

**Anthropology in the Schools**

The relation of anthropology to other social sciences is of importance in the educational world because anthropology--at least, its subject matter--is already in the schools. Students in all but the most backward and deprived schools learn somewhere about Eskimos, Pygmies, Indians, and Orientals. Many also learn, if there is no religious or bigoted objection, about the development of early man. Indeed, Louis S. B. Leakey has become a hero to much of the fifth grade population of the United States.

Anthropologists interested in elementary and secondary school education need not so much introduce a subject as improve the material that is there and, even more important, improve the use made of this material by teachers.

Teachers of elementary and secondary schools often use anthropological materials for ends that actually pervert the subject. One misguided end is a sort of jingoistic Westernism: primitive man becomes a sort of measure of scale, in terms of which we can congratulate ourselves; stated boldly, "only we have 'culture.'" In the hands of a teacher who doesn't take care, or doesn't know, anthropology can become the instrument for promoting the very ethnocentrism it seeks to eliminate.

It is also possible to lean too far backwards: it is a pity, but it is nevertheless true, that moral relativism is not contradictory to ethnocentrism. Anthropology has long stood for what its practitioners have called by the not-very-satisfactory name of "cultural relativism." By this they
meant that in order to make a judgment about a cultural institution, a custom, or an individual, it is necessary to assume premises that are, necessarily, culture-bound. The interpretation of that viewpoint by liberals who lack adequate training in anthropology is too often that "their way" is as "good" as "our way." Such is the misunderstanding. The word "good" is the problem; students must be taught to make intellectual commitments to their culture instead of merely emotional commitments. In the process they must be taught that other ways are not better, worse, or anything of the sort, but rather that all mankind is involved in the task of improving the quality of social and cultural life, and that we had better pool our discoveries and stop calling names. There will never occur a single culture throughout all the peoples of the earth. There will always be differences of opinion and different ways of experiencing life. And it is out of these very differences that change, progress, and greater comfort emerge. Resolution of conflict is the very essence of human achievement.

Anthropology is also a way of looking at things. Although not just a methodology, anthropology is nevertheless a way of viewing phenomena and men. Anthropology is interested in the variety of ways that human beings live; in the many ways of being human; and in the range of possible behavior and culture that allow men to survive under a variety of conditions. The similarities or universals of human behavior are of somewhat less interest than are the differences. The universals, once they are known, provide only a better framework on which the anthropologist can pin his questions about the differences.

Anthropology finds the theories and methods of all the other social sciences more or less inadequate, principally because of the ethnocentrism inherent in most explanations of human situations that are not cross-cultural. Nevertheless, it does not needlessly contradict the other social sciences; and because of its close relationship to all of them, it is a good underpinning for social studies and history in the schools. It is vital to geography at the elementary level, and it can be included with profit in first grade studies about families, second grade studies about communities, and in most of the other social studies topics. It can also be taught as an independent subject; one school I know has had a successful sixth grade course in anthropology for years.
In liberal education of the nineteenth century, the study of the classics gave students a view of cultures other than their own. Today anthropology plays a similar role. By giving students accurate and extensive information about other cultures, it stretches their experiences by putting them into a more nearly total context.

An Anthropological View of Man

Anthropologists must, of course, have opinions and views about man—his qualities and abilities. So, of course, must every man who lives in society. That fact sometimes fosters the impression that every man is his own specialist. But every man is likely to confuse his own experience with the experience of mankind, and therefore his view of man is limited by himself. There is, springing from the same source, a common criticism of anthropology and other social sciences that "terms should be defined" and that "social scientists should sit down together and be sure that they are all talking about the same thing." Such critical statements miss the point. We actually have the greater part of our view of man in common, but in so complex a subject there are many places to begin and many emphases that can appear as differences. Some of my colleagues would begin in different places or take different perspectives. But we would, I think, be at one in assuring the general reader that, far from being a stumbling block, this kind of diversity is the very stuff of social science. Therefore, every view is "one man's view" and to attempt anything else would be to water down the substance.

If anthropology is to live up to its name, its subject matter must necessarily accord with the qualities of the human beings that are its object matter. The more good anthropology is done, the better these qualities are understood. Therefore, the very success of anthropologists ultimately refines and changes the nature of the conceptions about the creature being studied, and so changes the nature of the subject.

Anthropology must concern itself with at least four aspects of the nature of the human animal, and with the requisite conditions that must be fulfilled if that animal is to continue to exist as an organism and to survive as a phylum. These four aspects are the biotic, the psychic, the social, and

*The word "phylum" is used here in a non-technical sense to mean the "chain" of human descent, and the "network" of shared descent.
the cultural. The four aspects appear in two modes: one in association with contemporary or historical individuals, the other in association with the phylum of mankind and its place in the development of terrestrial life. Anthropologists must have information concerning and theories about the human soma, the human personality, human society and human culture. They must, equally importantly, have information and theories about the evolution of man, the development of his sensory capacities, his developing social organizations, and his evolving culture.

To repeat in different words, we must know man's physical capacities and dimensions; his psychic realization of his organism and its surroundings; his associations with other creatures of his species; and his modes of communication and interaction with those others and with the environment. We must also know the evolution of man's physical and external capacities; the development through generations of his perceptions; the principles on which he has organized; and the growth of his culture and of his capacity for culture.

I shall begin with the position known in anthropology as functionalism and shall go on to evolutionary theory; it is a major achievement of the last decade for anthropologists to discover that these two theories are of a piece. Functional theory proceeds from the proposition that the human organism has certain needs that must be met if it is to survive. The very meeting of those needs creates social groups, which themselves have needs (usually called "requisites") if they are to survive, and so on to the entirety of the human phylum. All these needs, of the individual, the social group, and the phylum, are met by culture. Personality is (among other things) the culture of the individual; the "tradition" is what I shall call the culture of any definite social group, and "cultural evolution" is the experience of the phylum.

(1) Human beings are mammals. Chemical and genetic processes are essential to the creation and maintenance of human life. These processes are of two sorts: those attributes that are necessary to every living individual and, therefore, necessary to the phylum of mankind, and those that are dispensible in some individuals but necessary to the phylum. Those processes that are requirements for the continued existence of the individual are experienced as needs. Those that are necessary for the continued existence of the phylum and not necessarily of the individual, are experienced as forces some of which can be called "drives."
In the individual, chemical and genetic processes result in euphoria if the organism is well and healthy. Conversely, the presence of physical or mental disease causes these processes to be felt as pain (including anxiety). This euphoria also relies on life processes that proceed under definite, extremely limited environmental conditions such as regular intake of food, maintenance of equable temperature, absence of parasites, limited range of radiation, adequate sleep and dreams, adequate social orbit, and satisfying cultural tradition.

(2) Human beings are social animals. All animals are social to the extent that their survival is furthered by a social system. As a sexually reproducing animal, the individual is necessarily social to a degree sufficient to permit sexual relations and the necessary minimal care of the young.

In addition, the more an individual's existence depends on chemical interaction (as in ants) or on learning (as in human beings), the greater will be the degree of sociality. Interaction with others satisfies individual needs and phyletic drives. Ultimately, the satisfactions derived from the social situation give rise to a "stable" social system, almost as an epiphenomenon.

(3) Human beings interact by means of culture. In the process of satisfying individual needs, human beings have come to specialize in the learning process as a mode of survival. All animals learn, but learning has in man led to the hyperdevelopment of the brain and the central nervous system. Development of the brain has, in processes of natural selection, given the advantage to more intelligent creatures. Intelligence, as a capacity to learn, grows in accordance with the capacity to communicate, which communication changes the quality of social interaction.

As the human capacity for learning developed, culture "grew." Learning and evolutionary specialization form a spiral: the more man depends on learning, the more he is free of other evolutionary forces; and at the same time, the more dependent he becomes on learning the mass of object matter that allows successful social interaction.

The individual, through the learning process, must acquire a specific cultural tradition in order to achieve predictability in the satisfaction of his needs. He will perceive this tradition (a) as a set of "values" in terms of which to judge his own behavior and that of others, and (b) as a set
of techniques by means of which the future can be more or less assured. The greater the amount of tradition to be learned, the greater will be the degree of "division of tasks," and therefore of "specialization," occurring within a social group. The student of anthropology sees such a tradition as a specific and systematized set of "patterns of culture." Human beings thus learn a tradition (a few may learn more than one), and their behavior in terms of it is culture.

It is convenient to use the word "tradition" for a particular set of manifestations of culture, with particular boundaries that refer to a social group or a particular time; the term "culture" will be used more generally to refer to the whole set of phenomena, including all the traditions. Similarly, we shall refer to a "social group" as a particular subset or subgroup of all the phenomena included in "society."

Culture supersedes any specific set of human beings, while any tradition of it can be given manifest reality only in their activity. Culture is thus superorganic in the sense that it is independent of any particular individuals. It is "organic" because it is, as tradition, dependent for its manifestations on some individuals. This "fertile dilemma" is one of the vital sources of anthropological thinking.

Each human individual, with his particular genetic and somatic endowment, is subjected to a unique series of events, while simultaneously undergoing physical maturation and training in a necessarily limited tradition. This fact (together with physical endowment) results in the individual having his own distinct personality while simultaneously holding many personality features in common with others. Any tradition that is learned by many human individuals becomes subdivided so that no single individual learns all of the single tradition, thus increasing the dependence of all individuals on social relationships.

As human beings evolved, physical and cultural evolution became so inter-twined as to form a single continuing process. It is only recently that man has grasped the concept of the physical-cultural evolution of the phylum. Even more recent is man's awareness that he may have some power over the course of that evolutionary process—determining in a degree the immediate course of physical-cultural evolution—even, perhaps, determining whether the phylum will survive.
Needs and Need Satisfaction

These statements about the nature of man, society, and culture can be redrawn as a set of individual and phyletic needs that must be met if human life is to continue—a "functionalist" position. Functionalism means two things: every piece of a tradition, and hence all culture, is a need-fulfilling apparatus and every piece of any given tradition is in a systematic state of interdependence with other pieces of that tradition.

I am unimpressed with arguments attacking the "mere" functionalist position on the ground either that it excludes such areas of human life as art, play and language, or on the ground that one item in a tradition is not causally related to some other item of that tradition at a superficial level. New theories of dreaming arising from studies in dream deprivation may ultimately lead us to see even more clearly that societies must have play in order to survive; and Levi-Strauss' suggestions that the structure of culture is "unconscious" and that we are only just beginning to learn about it have already taken care of the "causal" argument.

It may, on the other hand, be true that functionalism alone—like any single theory alone—is inadequate to all problems in social science. But it is not wrong in any; no view of man, society and culture yet devised can ignore functionalist premises.

It might be appropriate to consider more closely some human activities that, in the past, have been difficult to understand or even to justify in terms of a need theory. These activities center around decoration, something done in every tradition of the world. The term "decoration" includes art and the universal human activity of play. The American tradition is perhaps less well equipped to examine the needs for art and play than are other traditions because we have long valued and glorified "work" and "progress" while simultaneously denigrating play and calling art a "luxury" that has no "economic" value. These attitudes are disappearing, but are still found in high concentrations.

It seems, however, that one need go no further than Sullivan's psychiatry to see that these needs are as fundamentally human as are any other. The need to decorate is an expression of the need to communicate to significant others and to find pleasure and individuality in the things that are extensions of self. Sullivan's insights and later laboratory research have proved con-
clusively that human beings must dream in order to survive, and that dreaming is obviously a way of fulfilling certain psychic needs that are not fulfilled in waking life, because of the very adjustment that one makes to the milieu in which one finds oneself. It seems worth investigating the proposition that play stands to social adjustment in somewhat the same relationship that dreams to psychic adjustment. Art is a mode of communication expressing the unfulfilled or the joy of fulfillment; play is a mode of establishing positions and human contacts that are impossible in the more complex and uncharted world of reality.

Another important point about needs will emerge quickly in any empirical context: the very satisfaction of human needs requires conditions that themselves have needs. Satisfaction of these "derived needs" produces still more needs, in a never-ending process. For example, if it is the function of economics to study the choices men make to satisfy needs, it is the function of anthropologists to point out that their very choices create new needs in a never-ending process of expansion of individual needs and derivative social requisites.

We are now prepared to consider a more exact listing of needs. Of course, any specific list will be inadequate for some purposes. Classifying needs is something like classifying races: it can be done only on the basis of prototypes—or, indeed, of stereotypes—each of which exhibits a range that merges into all the others. Classifying needs is difficult or unrewarding only if the classifier thinks in terms of boundaries between exclusive categories. If he looks at central types there is no problem. The fact that one specific listing or classification of needs differs from another is thus not so important as the fact that they will cover the same ground. Obviously, it is possible to correlate and classify needs in any way that a specific investigator sees fit in the light of his problem; it is possible to add needs, subdivide them, coalesce them, etc. No list of human needs or social requisites can be definitive except in the light of a specific problem.

In the following list, it should be noted that institutions which fulfill needs usually fulfill several; human beings use existing institutions for as many purposes as possible.

(1) Human beings need food and the means of maintaining an equable temperature. They need sleep. Fulfilling these needs and those of the
institutions connected with these needs requires an economic system.

(2) Human beings—at least a significant number in any population—need sexual activity and must breed. The cultural response has been to create a family system, or some substitute, which controls sexuality and insures procreation.

(3) Human beings are born helpless and, therefore, must be given an opportunity to learn. This demands the establishment of educational or socialization systems and a teachable cultural tradition.

(4) Human beings need other human beings in order to satisfy their requirements; they must have a social system.

(5) Human beings need learnable and understandable symbols in terms of which they can communicate with "significant others" in the social system. Consequently, systems of language and art arise.

(6) Human beings need predictability in social relationships and in the non-human environment. This need is met by rank or status systems, as well as family and kinship systems. They also develop political systems to control power in social relationships, and systems of science and religion to investigate the regularities of the non-human as well as human world.

(7) Human beings need overt goals—including rewards, or lack of punishment—in order to find ways of satisfying their own needs. This gives rise to value systems.

(8) Human beings need security; they must be able to express their feelings to at least a minimal degree, and they must have means of conquering fears. This leads to the creation of an overall philosophy, overt or covert, which organizes and makes sense of the other systems. The analyst sees this as an "ethos."

The eight groups of needs that have just been described are fulfilled through various systems or social structures, some of which have been described along with the needs to which they are related. Within these social structures, individuals engage in repetitive behavior in the course of fulfilling these needs and there is much similarity of behavior among individuals. From the standpoint of the actor, such repetition assures predictable response and can be viewed as a set of habits. From the standpoint of the investigator, these same activities are the patterns of culture that we call traditions.

In summary, man is a mammal with important distinguishing characteristics.
He is also a social animal, as all mammals are social, at least to the extent of mating and rearing young. But man is a social animal with a difference: his sociality has come to depend on an intricate system of communication and of fulfillment of complex derived needs. He is a social mammal who has specialized, in the evolutionary sense, in learning and in the cultural survival that goes with it.

Having discussed the nature of man's needs, we turn now to a more detailed analysis of the consequences of man's efforts to fulfill these needs. We shall consider the principle ramifications of these efforts for the individual personality, for society, for culture.

**Human Personality**

Man, in the course of evolution, has specialized in refinement of the brain and central nervous system. Such a specialization requires cultural learning as the basic controlling factor of behavior rather than some simpler chemical reaction, as in ants, or some simpler form of learning, such as imprinting in birds. All behavior in any species probably includes a chemical base and some imprinting, but the mix of these elements is vastly different. For example, Wragge Morley, in experiments with Scottish brown ants, discovered that if the eggs of a colony are removed and the young ants brought up in isolation, they will be able to carry on, but that it takes three or four generations to get back the total complexity of the parent colony (lecture at Oxford, 1948). Human beings, or birds, could not carry on. Obviously, birds also learn. A few can even learn to "talk." Just as obviously, there is a chemistry behind human behavior, as drug experiments have so vividly demonstrated, and there is an element of imprinting in the learning of human infants and of oedipal-phase children—and perhaps in other stages. But every functioning human being must depend on primarily the kind of learning associated with culture, which means that he must learn a tradition. Man perishes if he is not taught a tradition.

Because of the biotic specialization that man has developed in the evolutionary process, he can be viewed as a creature thrust into the world untaught, and therefore helpless. His plasm lacks the ability to survive on the basis of mere chemical responses. Compared to other mammals, man is born at a comparatively early stage of his biotic development. A larger head, presumably, con-
taining a more developed brain, would interfere with the birth processes. Following an early birth, extra-uterine learning can start at a comparatively early stage, thus reinforcing the basic advantage.

Obviously, however, such a creature is helpless at birth—probably more nearly totally helpless than the young of any other mammal, save perhaps marsupials, who move from an internal to an external womb. Therefore, birth must turn a biotic relationship between dam and offspring into a social relationship between the needer and the provider. Man needs not only a tradition, but a teacher. The mother-child relationships, in short, is the prototype of the human relationship. Like all prototypes, it leaves its traces on all subsequent relationships.

In the first weeks and months of extra-uterine life, a child's needs are best fulfilled by a single individual—the "mother figure," who is usually, but obviously need not be, the biotic mother. In the process of receiving, of having needs assuaged, the child establishes habits that are formed by the particular ways in which his needs are fulfilled. At one level, these habits are a part of the tradition which he has begun to internalize, and will use throughout his life; at another level, they create and reinforce a set of derived demands that he will make on the world and on significant other persons in his world. The relationship with the mother-figure is of prime importance because it determines not only the content, but also the style or tone of fulfillment. The style and tone can be changed later in life, but only with difficulty and through highly refined processes of subsequent learning, of which psychoanalysis is a vivid example.

Also within the mother-child relationship another development takes place: the child must make demands if he is to be nurtured, but he must make concessions to the counter-demands of the nurturer. He experiences the feeling that arises from the latter situation as a need for love and acceptance. Therefore, the personality of the child is molded from a "mix": a need for self-assertion and a need for love and affection. The mother, particularly, controls this "mix," but at the same time the behavior of mothers is conditioned by the tradition, within limits that allow for survival of the child and its development at least to the point of becoming a parent. Actually, children are taught to be parents while they are still children, and in this way emotional tones enter cultural traditions, and the cycle of personality development and maintenance
continues through generations of cultured social life.

**Social Groups**

As we have seen, human needs must be satisfied with the help of other people. Stated another way, human beings engage in social relationships, and since no single relationship can for long fulfill all human needs, each person enters into many relationships, with many people. Although Robinson Crusoe is theoretically possible, it must be remembered that in Defoe's morality tale Crusoe grew up in a society in which he was loved; he was taught a tradition and was given a personality strong enough to endure the agony of solitude. Few human beings can survive for long when they are totally cut off from human society, even though many need a degree of privacy, which is quite a different matter.

Thus, social relationships, as the devices by which biological and derived needs are fulfilled, are played out with other human beings. If the social relationships work at all, a set of expectations about the nature of his own action and that of the "other" builds up in each of the persons engaged in the relationship. These expectations and their fulfillment, or partial fulfillment, however, lead to a new situation. In order for fulfillment to be achieved, the relationship itself has certain requisite conditions. Thus, ironically, the process starts all over again: relationships have needs that are analogous to the needs of people. Choices among needs create further needs.

The social relationship is a unit in the way that a person is a unit, but it is necessary to make a series of qualifications and explanations in order for this analogy to be fully appreciated. A human creature is a single biological organism encased in a skin; it is quite easy to tell where one human unit starts and another stops, because of this "skin-boundary."

A social relationship exists between one set of expectations and behavior on the part of one human being and a complementary set of expectations and behavior on the part of another. The relationship does not encompass all of the behavior, feelings, or potential of either of the individuals, but only a relatively small part of them.

This relatively small part of the total behavior of an individual, if it is repeated and hence patterned, and if it forms a set of expectations on the part of another person, can be called a "role." In any relationship, roles
must be at least partly complementary. These complementary roles, made up of expectations, join together to form a social relationship called a dyad, or two-group. The expectations that make up the roles of the dyad must be held in two minds. There must be a sufficient complementarity in the expectations to allow at least an adequate fulfillment of some of the needs of the two persons who play the roles in the two-group.

The two-group has several requirements for its existence which are analogous to, but different from, the needs of the single human organism. First of all, a two-group must always have a spatial location. Human animals are limited in the amount and kind of space through which they can communicate.

A two-group also requires predictability, of two different kinds. We have already noted that each role player holds in his mind certain expectations of his own as well as of the other person's behavior, and that if the complementarity decreases, predictability decreases with it so that the relationship flounders in misunderstanding. In addition, however, the expectations in the two-group must be a part of a larger predictable tradition, which gives the dyad the security its role-players need. Therefore, security in an enveloping social structure and tradition is a requirement for most dyadic relationships.

In a way much like that in which two-groups satisfy the needs of individuals and thereby create requisite conditions or needs for themselves to exist, so too these derivative requisites must be satisfied. They are in fact satisfied by the concatenation of several two-groups or individuals into larger social groups. To take the most obvious example: in the early months of a child's life, his needs are satisfied in the dyadic relationship with a mother-figure who might indeed be called the "general-purpose significant other." However, the mother's needs are not all satisfied by the child. In addition, the requirements of the mother-child relationship for the nurturing of the mother, and even for temperature and air demands of the child, as well as those for space and predictability, are satisfied outside this particular two-group.

Thus two-groups cluster, and the needs of each are met by other two-groups. Just as the individual personality and the two-group are manifested in culture, larger social groups are also made manifest in culture.

Two-groups are, then, the basic device for the satisfaction of human needs. A two-group consists of two roles and those common understandings or characteristic parts of a tradition that are the basis for the complementary expectations.
But we have already seen that, except perhaps in earliest infancy, any specific role engages only a portion of the personal experience, capability, and needs of the person who is playing the role. Obviously, then, it can satisfy only a portion of the individual's total needs.

Thus, every individual must engage in more than one dyadic relationship. In fact, every individual becomes a node at which many two-groups meet; he plays many roles, with many different "others." In such a situation, some conditions must be met: one of them is that the roles which a person plays must not be so contradictory as to destroy the web of his personality. Much mental illness arises from insecurity and inactivity in the face of role conflict or contradiction. This does not mean that people cannot play roles that are contradictory, but only that the resulting conflict must not become too severe in any specific situation, or the contradiction destroy his personality integration. A person can switch from one role to another; he cannot, however, play two roles successfully at the same time if they are too blatantly contradictory. It is precisely the simultaneity of role playing that causes extended social groups to differ from two-groups. Extended social groups demand common understandings more abstract than those of complimentary expectations.

Interlocking two-groups form more complex social groups that are ultimately made up of large numbers of dyads. These dyads are like building blocks, fitted together in such a way that they can perform necessary functions without falling to pieces on the basis of role conflict. An analogy to molecular structure is tempting.

It is well to note here, before proceeding to larger social groups, that any individual may, of course, play two roles in which the significant others are not in direct contact with one another. Such patterns of roles hold social groups together and are vitally important in any macrocosmic view of the social network. However, we are more concerned at present with the microcosmic level of small-group formation and structure.

The simplest form of interlocked two-group is the triad, or three-group, of which the family is the most common form. This group is complicated by the addition of another person. A triad is composed of three individuals, six roles, and three two-groups. Each individual plays two roles—one in each of two two-groups. There is, however, in every three-group, a two-group of which each individual is not a part. Therefore, there are two roles in every three-
group which an individual perceives only indirectly; they are neither played by him nor are they "others" to roles that he does play. These are roles about which he does not hold complementary expectations or receive direct satisfactions. He may treat the dyad in which he plays no role as a role-player, or "other;" for example, a child may sometimes experience his parents as a single role-player. Usually, one holds a more abstract set of ideas about the dyad in which he plays no role, and notes that the two persons in that relationship get satisfactions from each other, often without him and sometimes even to his disadvantage. The "Oedipus complex" is a situation of this sort. All such situations can be seen as a desire for the individual to experience all of his world directly, the very while it is not possible to do so. Cultural knowledge in the form of "expectation" is experienced differently (and apparently more satisfactorily) than that cultural knowledge that applies to relationships beyond one's own expectations.

The great sociologist George Simmel (1908; translation 1950) was the first to investigate triadic systems successfully. He did it in terms of an almost untranslatable Latin phrase, the tertius gaudens, which I shall nevertheless translate as the "unpredictable third party" and sometimes refer to as a "joker" because it is "wild" in the sense that a joker can be played wild in poker, thereby interfering with expectations and changing formal structures.

The unpredictable or joker quality comes from the fact that each individual may try to manipulate the expectations in the third dyad, in which he does not participate. The only way that he can do this is to work on the individuals who play the roles in the "odd dyad." he tries, therefore, to influence the roles that he does play in his dyadic relationships with those individuals so that their roles in the odd dyad will be influenced. He may create role conflict for the persons of the three-group other than himself, and use that conflict as a weapon for his own aggrandizement.

We might say that individuals tend, consciously or unconsciously, to prefer two-groups in which they have at least some degree of direct control. An individual may try to make the odd dyad into a compound unity, playing a single role vis-a-vis himself, but he may find that to be more difficult than influencing the content of the odd dyad by his behavior in the dyads which he does, to a degree, control. Psychically, this problem may be felt as jealousy. Sullivan has noted that jealousy is psychologically to a three-group what envy is to a
two-group, and that jealousy is much more complex than envy, because jealousy always involves anxiety whereas envy, in some circumstances, may not. Jealousy seems to be associated with circumstances in which a person tries to assimilate and control the odd dyad of a three-group. In this way he deals with each of his others as joker in regard to their relationship with one another.

A four-person group would, at first, appear to be more complicated than a triad, but is usually simpler. Individual two-groups can themselves become role players in what might be called compound two-groups. Thus, in a family of husband, wife, one son and one daughter, these compound two-groups could evolve: the males vis-a-vis the females, the parents vis-a-vis the children, or the mother and son vis-a-vis the father and daughter. The compound dyad may, of course, also be made up of one individual and one triad, but that is emotionally more complicated.

Both dyads and triads may be used for constructive and destructive purposes in human relations. Dyads are constructive building tools because the persons or groups playing the roles perform necessary services for one another. They are destructive because either envy or the tendency to self-assertion and power on the part of one role-player may overweigh his need for affection or services and ultimately destroy the other role. It may, in the bargain, create the need for new relationships from which to derive satisfaction. A triad builds constructively because of the capacity of role-players to treat dyads as role-playing "significant others," reducing the joker element by means of the dyadic technique. Finally, the triad is destructive if, instead of treating the external dyad as a single role-player, the individual, moved by jealousy or other fear, tries to break it up by the techniques of the joker.

The dynamics of social integration can be seen as the steady state that is reached when the destructive tendencies in the dyad are offset by triadic joker activity that calls for cooperation in the dyad, and again when the destructive tendencies in the triad are offset by propensities toward simplification through compound dyads.

So far we have been concerned with the structure of social groups. Before we proceed from social groups to social networks, a summary is in order. The two-group is the most important mechanism by which the needs of individuals are met. The three-group or larger group is the mechanism by means of which the requisites of two-groups as well as the needs of individuals are satisfied.
Individuals can fulfill the requisites of their roles in the two-group only if their own needs are fulfilled, by this or other two-groups. If some needs are fulfilled in other two-groups, then there is a likelihood that some three-groups will be formed. The three-group is basically unstable because of the jealousy that each member may exhibit toward the two-group of which he is not a member. The cure for such jealousy—and the basis for all larger social grouping—is the compound two-group, made up of compound role-players.

As in the case of individuals and of two-groups, the larger group can satisfy the more fundamental needs of its component units only if its own requisites are met. The requisites of groups have two characteristics: they are the identifying aspects of the group activity on one hand, and on the other, they are the links to other social groups. We are, thus, led to consider the social network.

**Social Networks**

There are obviously some individuals who are members of dyads, the other members of which are not in a dyadic relationship with each other. Such clusters of roles played by a single individual become the nodes of social networks. The individual role player is, in such a situation, the point of juncture of groups that do not provide for one another's wants, even though they do provide the basis in which an individual can get the wherewithal to provide the wants for the others within each group. A good example is the man who leaves his family to go to work in order to support that family. Within the family, he has various roles, one of which is that of breadwinner. Within the firm, he also plays a cluster of roles, one of which is that of recipient of earnings. There is, however, no necessary and meaningful set of two-groups formed by other members of the family and other members of the firm. The firm gets its labor from the family's need. The family gets its subsistence from the firm's need.

Thus, there are two types of social cement: the super-group, such as the extended family and the nation-state; and the network of social groups linked together by an unspoken contract to perform services for one another without the presence of an overriding institution. Individuals and compound groups, playing multiple roles, are the nodes of the social network, conjoining groups into more inclusive structures.
We can now summarize this view of social groups. Individuals turn to other individuals in order to satisfy needs, forming two-groups. No single two-group can satisfy all of an individual's needs; therefore, every individual participates in a number of dyads. Each of these dyads has certain requirements or needs if it is to carry out its task, and these needs are met by turning to other dyads, in the process of which a more complex social group is formed. Again, social groups develop needs in the process of satisfying the needs of dyads and of their component individuals; in order to satisfy these needs, they turn to other groups, and so on. This process goes on, from families, through firms and governments, to world organizations. If no superordinate institution appears, we have a social network; if a superordinate group materializes, we have an entity more tightly knit than a social network, which can itself enter dyads, triads and social networks.

**Human Culture**

We have seen that human personalities and human groups from the simplest dyad to the most complex social organization can be made manifest only in terms of culture. Culture, to quote Robert Redfield (1941), is a system of common understandings manifest in act and artifact. This definition deserves careful scrutiny, because it uses a more extensive and sophisticated approach to the attributes of culture than do other definitions. That culture consists of understandings means that it must be held in the minds of individuals. Since it must be held in the mind, it has a psychic dimension. That culture is common means that the understandings must be sufficiently alike in the minds of two or more people to permit communication and purposeful interaction. Culture, therefore, has a social dimension. It is both psychic and social. It is more, and less, than either.

That culture is, in Redfield's terms, a system means that its parts are functions of one another in the mathematical sense of function. We know that change in one part of culture is likely to lead to change in some or all other parts. Any specific cultural tradition may contain some astounding inconsistencies, but they must be inconsistencies that do not dictate contradictory behavior at a given point of time, space, or values. It is the systematic quality of the tradition, in which psyche and society come to expression, that allows prediction.
When Redfield said that culture was "manifest" he meant that it could be seen or otherwise sensed by the actors playing roles and by anthropologists. In his words, culture is manifest in terms of behavior (acts) and the material things (artifacts) that are made in the course of behavior and for the purpose of achieving goals.

A few qualities that have been included in some of the many other definitions and discussions of culture should also be mentioned. Kroeber called culture "superorganic." He meant that culture supersedes any group of human beings. A tradition exists before the individual is born and will remain after he is dead. For all that it needs human beings in order to be made or communicated, a tradition has an existence beyond particular human beings. The fact that a tradition is thus handed on from one cast of characters to the next has sometimes been confused with the fact that it must be held by many individuals at the same time. These are two distinct and necessary requisites of a tradition.

Since culture is both in the "minds" of people and is elicited in their interaction with one another, it is both necessary and possible to learn it. The specific ideas that are manifest in act and artifact; the way these ideas unite into systems; and the way to communicate so that common understanding is achieved—all must be learned by every human being. Learning one tradition, as the means by which one's needs and the needs of one's social groups are assuaged, means—obviously enough—that one has not learned some other tradition. It also means that personality is expressed in terms of that tradition, to the exclusion of others. In the past all this has too often been expressed by saying that "Culture molds the human being." Yes—and no. Paint forms a picture, too—but there is more to a picture than paint.

Anthropologists use the word "culture" in two senses, subtly distinct. We have tried, without being pedantic, to separate these usages by employing two terms: "Culture" is the human means for expressing personality and social relationships. "A tradition," sometimes called "a culture," is a set of interrelated ways of manifesting culture, limited to a part of the total field of culture. Culture is as extensive as the potential of human creatures in their expression and interaction; a tradition, like a language, is a selection that grows and changes over time, and is of a more limited range. Culture, to use the paint analogy again, is color; a tradition is a palette—limited ranges of colors, hues and intensities, applied in certain balances, for better or worse
effects. All people exhibit culture; but each person is, in a metaphorical sense at least, a product and practitioner of a particular tradition: his own.

Change and Evolution

We have talked about the personality, the social group and the tradition—about the individual, society, and culture—and the way that they are formed and maintained. Now, we shall deal more specifically with the forces of change, which may take place in individuals, in a society, or in a tradition. Individuals have "a life of their own;" similarly, a society has a life of its own; and, in a more profound sense, a tradition has a life of its own. It is true that human minds create innovations and social structures must adapt to them, adopt them, or reject them. But it is also true that there is a sort of basic, immutable sense to culture change, and that it always moves basically in one direction, despite the thousands of culs de sac that may arrest its movement.

Traditions change by (1) invention and (2) borrowing or diffusion. These two together are sometimes called "innovation" by anthropologists (Barnett 1953). They affect a tradition in much the same way: they either complicate it or they simplify it. (They can also presumably leave it unchanged, if there is mere replacement of one trait by another.)

Human culture grows by a process of constant complication, followed by simplification. Simplification is either the invention or discovery of new techniques and understandings. But, it is one of the fundamental insights of anthropology that a simplifying cultural idea or item, which eases or assists human thought or feeling, is seldom or never lost.

The human need for predictability means that the elements within any tradition have an interconnection, and that they have achieved a sort of consistency with one another. This does not mean that there are no contradictions, but only that the contradictions do not stand face to face in very many situations. Because of its inner consistency, a cultural tradition cannot change to just any new form; it must change in such a way that a modicum of consistency is retained within the total system.

The whole of culture change, or culture dynamics as some people prefer to call it, can be seen in analogy to the evolution of plants and animals. A certain number of culture traits (analogous to genes) are integrated into a
certain organic form, manifested in the individual and the society. In the process of learning by a new generation (analogous to inheritance) there are, in accordance with personal, social, and cultural pressures, significant changes (mutations) that may occur in the tradition.

Every creature in a given environment has certain limited potentials for doing things in new ways. Every tradition also has certain limited potentials for making changes, some of which may spread and become common understandings. When the tradition experiences and survives such a change, and the new trait is passed on by learning, then some of the potential changes in the old tradition may have been displaced. There are, moreover, new potentials for change in the new tradition, which were formerly not present. Thus every tradition is a poised system of common understandings, and it is potentially changeable by the human beings and by the social relationships that manifest it.

Now we can make the statement again, and in a new light, that human traditions are constantly being complicated by new discoveries, ideas, and techniques. These complexities are then reduced by the perception of simplifying ideas and mechanisms, and the process is repeated. Thus, culture grows.

A set of examples will make the idea clearer. When early man discovered the use of fire, he found a means not merely for enriching but also for simplifying his life. Fire, which is very simple from the cultural point of view, and which is readily available, so increases efficiency and so simplifies human activity that no tradition is without it, and no future tradition will be without it. Even the most primitive survivors of any world holocaust will, among their very first activities, kindle a fire. The idea, once present, is simple and comprehensive, doing without it complicates and disperses human energies. Fire, with all its uses, will not be lost from the cultural inventory.

To skip many millennia, we can see the same thing in agriculture. The idea of planting and tending seeds is so simple, and the results are so vastly more efficient than any other mode of getting food, that our hypothetical survivors of a world holocaust will continue to cultivate the seeds of some sort of edible plant. They may not have machinery and they may not grind wheat into bread—but they will have agriculture. And it will probably be plow agriculture, because the plow, too, was another of those shatteringly efficient and simplifying discoveries.
Extra-human energy is still another example: it seems strange today to realize that, before the steam engine, the only extra-human sources of energy were the strength of domesticated animals, the energy of flowing water to turn mills and of wind to turn windmills and fill sails, and of fire for heating and cooking. Then with the energy revolution, a new set of ideas—simplifying ideas—emerged, and since they were simplifying, they endured. The precise devices—the gasoline engine, the atomic pile, and others—may be superseded or even lost. But the idea of mechanical and chemical energy is here to stay.

Human culture is, obviously, cumulative. That does not mean that a modern American has "more" culture than an Australian aborigine, but that the tradition of the modern American individual contains more simplifying abstractions. A "civilized" tradition must include an adequate organization for the division of social tasks. The totality of the culture in the tradition (as opposed to that handled by any individual) is increased; there is more culture in the American tradition than there is in the aboriginal Australian tradition, even though any single American may not master more cultural items or ideas than any single Australian.

In addition to invention, culture can change through borrowing. This can occur through the commingling of two traditions, or the impact of a social group with one tradition or another group with a different tradition. The example best known to Americans is the expansion of Europe into the rest of the world during and after the sixteenth century. This is by no means the first—and probably not the last—expansion, but it is the best recorded expansion of one society against others.

When Columbus stood on the shores of Hispaniola, and an American Indian stood facing him, two men confronted one another who had never before dreamed of one another's existence. They had to create a relationship: they occupied contiguous space and almost surely they were terribly afraid of this new and unpredictable situation. They had to begin a search for common understandings that would make a relationship between them even possible. These understandings might have been the minimal ones of hostility and war; they might, on the other hand, have been the more complex understandings that underlie trade, government, or even friendship. This new two-group—made up of the several score of men with Columbus and the several tens of thousands of men living in Hispaniola at that time—brought new social structures into being. New traditions had to be
forged.

It was the nature of the Spanish tradition of the 15th and 16th centuries to reward belligerent people. Their values and acts led to forceful tactlessness and vast power searches on the part of individuals. It was the nature of the Indian tradition of the same time not to show hostility. In the search for relationships and common understandings that followed their meeting, the Spanish forced a great deal of their viewpoint on the Indians. The resultant "common" understandings were of the colonial sort that we know. Personality factors, social factors, and traditions of both groups combined to produce a new society, a new set of personality types, and indeed a whole new tradition.

One of the most important factors in determining innovation and the acceptance of new culture is the size of population allowed by the previously-existing tradition. If an innovation permits an increase in population, such an increase probably will take place, thereby making untenable the very tradition that existed originally. For example, the agricultural revolution led to far greater security in subsistence than existed previously, and allowed a larger number of people adequately to exploit a defined area of land than was possible under a system of hunting and gathering. The new technology allowed for population growth, and the growth occurred. The presence of all these people meant that the fairly simple government forms of the former hunting and gathering peoples, which utilize the bonds and obligations of kinship and the laws of hospitality in order to maintain themselves, were no longer adequate. New forms of government organization and new principles of coordinating loyalties had to be discovered, and put to use.

In a similar way, the energy revolution that was unleashed by the Industrial Revolution has led to a vast population explosion. The subsequent rebound is a requirement for new modes of social control and government which our national states can no longer provide. Creation of institutions that can control the new technology and the vast populations living by its means, remains one of the most urgent problems of our time.

Thus, at the same time, that culture is manifested in the human personality, it is also manifested in social groups of all sizes from the dyad to the United Nations. Yet every human being is a product of the tradition he has learned, and of his own more or less free opportunity to manipulate it and change it. Every human group exhibits a tradition—a concatenation of its many culture traits, and
its more or less free opportunity to accept and institutionalize innovations. Every family has a tradition of its own. Much—indeed, most—of the understandings common to its members are also found in other families, but a few are not. Just so, every city government, every firm, every woman's club has its tradition. Every nation has its own tradition, too. Most of the understandings in a tradition are shared by other groups that are structurally and functionally similar to it; and these shared understandings are a part of the cultural tradition of the greater society and of the people in it.

Culture, then, is the medium of human interaction and human living. It grows through processes of creativity—increased efficiency in the fulfillment of human needs, and increase simplification by abstraction. It is expressed by human beings, but supersedes any specific set of human beings. Culture is, in short, a realm of the natural world. Just as life is a particular mode of chemical and physical processes, so culture is a particular mode of life.

One last point must be made. As culture grows concomitantly with the growth in the size and scale of society, greater and greater demands are placed on individual human beings. They do not have to learn more, but they do have to learn more abstract and complicated things. They also have to learn certain types of precision. To run a machine industry takes more precise timing on the part of workers and more fundamental organization and planning on the part of management than does a hand-tool industry. Therefore, the range of permissible behavior in some people—which is to say, the range of permissible expectations and demands in some roles—becomes narrower. In a primitive society, a few priests at most must learn such precision. But all industrial workers must learn to be on time, and to be responsible in some degree for their work. Punctuality and specific technical responsibility are less important in a peasant society, do not mean that peasants have fewer responsibilities, but only that they can approach them in a more leisurely and less precise way. Certainly, all social animals have some responsibilities, else they would cease to be social.

**Current Cultural Changes**

Today, we are struggling with two "new" types of culture which are entering our tradition: culture of international organization, and what has been called "mass culture." The problem in international relations is that, even when
peoples have the same ultimate goals, they are likely to have different ideas about the way those goals should be reached. The combination of these differing ideas and dissimilar linguistic behavior means that each group is likely to blame the other for failure. Strife in a two-group may be easier to play out than adjustment to unity if one has to change one's behavior significantly in order to achieve that unity.

Mass culture, on the other hand, is a phenomenon of a quite different sort. It is simplifying and comfortable culture that is taken into many groups, in many nations, but which is not really itself associated, as tradition, with any larger or inclusive group. Food habits, dress, taste in music—all have comparatively little to do with limiting the range of social structures in family or production groups. They are, in a sense, matters of style. Modern communication and technology have led, usually unwittingly, to the spread of mass culture which has been severely criticized by people whose sense of style is offended by it.

These new cultures are not less diversified than the old cultural traditions. It is merely that the varieties are no longer space-bound and geographically isolated as was the case a few centuries or even a few decades ago. Chinese food, sarongs, national states, and chemical fertilizer are found all over the world; so are French food, trousers, socialist parties, and sewing machines. The social groups associated with our tradition demand conformity in some matters: they also allow a far wider range of personality expression and psychic fulfillment than do most of the traditions of the world.

This is not to say that all of the people who participate in the new culture "will be like us." Trying to achieve this would be ethnocentric busy-bodyism. But they will have the range of the world's cultural achievements from which to choose. And new sub-cultures—new traditions—are emerging every year. The geographical placement in space is different; the space they occupy may not be contiguous, and the groups to which one belongs (each with its peculiarities or sub-culture) may have their members spread across the globe. But that need not be seen as conformity. It can be seen as the richest field ever known to human beings from which societies and personalities can draw.

But there is also a range of problems that we are not facing. Human beings no longer have a life expectation of 45 years or less. It is now 75 years and may soon be 80.
The pace of modern technology has also produced complications. When culture becomes more technically complex or philosophically abstract as the scale of society gets larger, individuals must learn more in order to prepare themselves for a place in a social group. Just as economists have, until recently, computed the development of a society on the basis of the percentage of its workers involved in agriculture, so the criterion of development in the future may well be the proportion of the population involved in educational pursuits. All adequately functioning people learn, all their lives. But in modern society we are beginning to realize that not merely learning but also formal education itself must be a life-long affair. If we are to run the complex tradition and gigantic social structures to which we have rather suddenly fallen heir, then we must have people who are constantly retrained and kept aware of demands.

Today we have needs for new curricula in the primary schools, for new techniques in teaching languages and technology, and for solutions to the "drop-out" problems—those people who give up the struggle to become culturally more competent members of their social groups. We need a new approach to the utilization and training of part-time workers; we need new training for the under-privileged; and we need techniques for training the handicapped.

Yet, education, for all its advances, is still considered a young man's game. We have placed an accent on early adulthood, but forgotten education of the elderly. We have to educate retiring people for their retirement. We also overlook the fact that psychotherapy, family therapy, social work, and many of the other "helping disciplines" are basically educational in nature, and treat them as ameliorating rather than educating devices.

I know, of course, that I will be charged with wanting to make middle class citizens out of everybody on relief—and I accept the charge. Lower class culture, as it exists in America today, is not suitable for the kind of civilization, technology, and society that the rest of us are building. And, like tribal culture, it will go. It is being superseded by the very nature of man and his social and cultural propensities. In the trite proverb, you cannot make an omelette without breaking eggs. Many good and admirable qualities in the tradition of the lower class, as in the traditions of tribal peoples, will disappear. Many modes of beauty and many jokes and rituals will be gone. But to sentimentalize is reactionary. To try to reinterpret some of it for the new ranges and modes of society and culture is, on the other
hand, one of the major tasks of all anthropologists and, indeed, of all men of good will. Folk singing became a performing art, and then went back to the new masses. So did herbalism.

A Summary View

Many of the most important concepts and relationships of the preceding discussion can be reviewed by relating them to the summary chart showing "Fundamental ideas of Anthropology." Beginning at the top of the chart, we see that man is a mammalian, social and cultural animal, having needs that are satisfied through social relationships which, because they are repetitive, form a structure. A social structure generates its own needs, which are served by other individuals and by other social groups. The complex of social structures operates in the medium of a cultural tradition which must be learned by each human being, who, in the process, acquires a personality and becomes a member of many social groups and the practitioner of one or more traditions.

Every viable tradition makes it possible for man to fulfill his needs at least in minimal degree. However, no tradition fulfills all his needs, because the very fact of fulfilling needs creates new needs. Therefore, at a faster or slower pace, every tradition is changing, because of the unfulfilled needs that remain in the process of fulfilling needs.

Changes in a tradition are called "innovation" and take two main forms— invention and borrowing, the latter sometimes called "diffusion" of culture traits and ideas.

Changes in a tradition have two simultaneous effects; these two effects may seem at first to be contradictory, but they are not. Changes tend to complicate traditions, because of the tendency of culture to "grow"—indeed, to batten on itself. The greater the diversity in the cultural base, the greater the rate of complication. However, there must simultaneously appear a simplification in the cultural tradition. Complication can proceed only so far before the chaotic quality of the complexity demands some sort of overriding generalizations or simplifying discoveries. Some of these simplifying features so affect the way in which human beings interact that doing without them becomes unthinkable. Indeed, their very simplicity blots out the preceding complication. When such simplifying innovations occur, man cannot go backwards
FUNDAMENTAL IDEAS OF ANTHROPOLOGY

MAN is an animal that is
Mammalian Social Cultural
having . . .

Needs,
satisfied through

Social structure,
which generates its own . . .
and which operates in the medium of

Tradition,
which is . . .
in a process of
change,
through

Innovation
(Invention and borrowing),
which leads to . . .

Simplification.
If irreversible,
leads to . . .

Complication,
which is resolved by further . . .

Evolution of culture
to pre-existing conditions, because to do so would add to his burden while reducing his reward. Man will never do without the use of fire, the practice of agriculture, the concept of money or at least some of the various sources of extra-animal energy that he has tapped to do his work.

These simplifying discoveries, then, affect the basic nature of man, and by adding to the total store of man's traditions, affect the cultural aspects of the human being, allow new or different social forms and, ultimately, affect the very nature of the mammal itself. Man as a biological individual, man as a social creature, and man as a practitioner of culture, has changed; and the process starts again.

We have been concerned with explaining the principles of anthropology and with three ranges of phenomena: the somatic, the social, and the cultural. The idea of culture is anthropology's particular gift to modern culture. Anthropology, thus, must maintain contact with, and not contradict through ignorance, the principles of biology, psychology, and sociology. And these subjects, as well as all the social sciences including economics and political science, must deal with cultural phenomena in a way that does not needlessly contradict the anthropologist's findings and conceptions. I do not mean that one science should unthinkingly accept the pronouncement of another, but only that if the contradiction of refutation of one by another occurs, it should be done with full knowledge of the evidence.

The success of anthropology, like the success of any other single subject or of any group of subjects such as "social sciences," can be measured in the extent to which it permeates the entire culture of its place and time, and the extent to which it satisfies the needs and requirements of individuals and groups, and in so doing creates new needs, requisites, and demands.
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<td>The Historian's Craft</td>
<td>New York: Knopf</td>
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<td>Carr, E. H.</td>
<td>What is History?</td>
<td>New York: St. Martin's Press</td>
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<td>Nigeria: Background to Nationalism</td>
<td>Berkeley: University of California Press</td>
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<td>Childhood and Society</td>
<td>New York: Norton</td>
</tr>
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<td>Psychological Anthropology</td>
<td>Homewood, Illinois: Dorsey Press</td>
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<td>Kroeber, Alfred</td>
<td>Configurations of Culture Growth</td>
<td>Berkeley: University of California Press</td>
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<td>The Study of Man</td>
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<td>Polanyi, Karl</td>
<td>The Great Transformation</td>
<td>New York: Farrar and Rinehart</td>
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<td>Polanyi, Karl</td>
<td>Dahomey and the Slave Trade</td>
<td>Seattle: University of Washington Press</td>
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<tr>
<td>Redfield, Robert</td>
<td>The Folk Culture of the Yucatan</td>
<td>Chicago: University of Chicago Press</td>
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<tr>
<td>Simmel, George</td>
<td>The Sociology of George Simmel (Tr. by Kurt Wolff)</td>
<td>Glencoe, Illinois: The Free Press</td>
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