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## The Determinants of Human Behavior

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ONE of the most confusing aspects of anthropology for both student and instructor in the social sciences is a lack of clear discrimination among the most basic and frequently used concepts. In particular, "social" and "cultural" are often employed as though they were close synonyms which might as well be used interchangeably, or replaced simply by "sociocultural" (e.g., Kroeber 1948:7-10). The fact that "social structure" and "social system" refer in most texts to cultural constructs for group behavior plays no small part in maintaining the confusion. The continued general use of "social" for both concepts, even by some anthropologists, is reenforced by, and adds to, general vagueness. The attempt to be more precise, however, must be more than a mere reification of the historical interests of somewhat artificial departments. Precision should increase both the explanatory power and the objective independence of the categories. In this paper, then, a critical consideration of one of the most recent attempts to distinguish these concepts will be followed by a discussion of a possibly more useful set of distinctions.

The distinction between culture and society agreed upon by Kroeber and Parsons (1958) seems currently accepted by many anthropologists. They feel that "culture" should be confined in meaning: ". . . restricting its reference to transmitted and created content and patterns of values, ideas, and other symbolic meaningful systems of factors in the shaping of human behavior and the artifacts produced through behavior." On the other hand they propose: ". . . *society*—or more generally, *social system*—be used to designate the specifically relational system of interaction among individuals or collectivities." But there is more hidden than exposed here. First, this definition includes implicitly the opinion of many sociologists and "structuralists" who see culture as referring only to the ideal patterns of behavior and not to the objective behavior itself (e.g., Williams 1951:33-34); and, secondly, the definition implies that culture is learned, while actual objective behavior is primarily biosocial, instinctive adaptation which, given a few variables, can be universalistically described. In this respect it is significant that Kroeber and Parsons go on to say: "One indication of the independence of the two [culture and society] is the existence of highly organized insect societies with at best a minimal rudimentary component of culture in our present narrower sense." Yet as Count (1958:1051-53, 1073-75) points out, insect societies are not at all of the same nature as vertebrate societies—the first consisting of physiologically defined complementary roles and the other primarily of *learned* complementary roles. For human beings, physiological differences in role determination seem confined to a rela-

tively small compass.<sup>1</sup> However, the importance of instinct in human behavior is beside the point of our discussion. What is important is that the concept of "social factors" given in Kroeber-Parsons fails to keep learned behavior conceptually distinct from biological and primarily unlearned biosocial behavioral tendencies. Human beings learn most of their adaptations to one another.

It would seem more rewarding to see all learned patterns of behavior as properly in the sphere of culture.

In our opinion . . . culture includes *both* modalities of actual behavior *and* a group's conscious, partly conscious, and unconscious designs for living. More precisely, there are at least three different classes of data: 1) a people's notions of the way things ought to be; 2) their *conceptions* of the way their groups actually behave; 3) what does in fact occur, as objectively determined . . . (Kroeber and Kluckhohn 1952:162.)

The concept of system in culture is predicated on the idea of a relationship among these three levels of culture, and among the several complexes operating on these levels, in such a way that changes in one area will reverberate to some extent through the rest of the configuration. Most important among these interrelationships have been those described among forms of kinship, economic and political behavior, and ideological systems.<sup>2</sup>

Turning to anthropology let us note two recent examples from the *American Anthropologist* of the application of the Kroeber-Parsons type of formulation, noting how these cases might be reformulated in terms of the general theory of culture. Geertz (1957) believes that change results primarily from the imbalance of "social" and "cultural" processes. He believes his distinction is between: ". . . the fabric of meanings in terms of which human beings interpret their experience and guide their actions; [and] . . . the form that action takes, the actually existing network of social relations (p. 33)." Geertz describes a funeral where incoming peasants living together in a district of a new city gather in a meeting (*slametan*), but are unable to carry through the funeral at first because 1) they were not only neighbors on the village pattern, but also members of two different politico-religious movements, and 2) there was no accepted way to hold a funeral for members of the movement to which the deceased belonged. Strangely, Geertz concludes that the problem is one of a discontinuity between the social structural dimension and the cultural; that is, the folk religion's slametan adapted to a rural peasant setting does not fit into the ideologically rather than spatially organized city where one is no longer dependent on his neighbors. As one reads the article, however, it would appear as more fruitful to see the conflict as between 1) two cultural systems, Javanese rural and Javanese urban, which involve, among other things, different definitions of the meaning of the slametan (as a religious occasion, a meeting of neighbors, a political meeting), and 2) conflicts of and with new roles and role definitions, conflicts which have not yet been resolved into a more stable system of expectations. Alternatively, one could see the primary difficulty as a cultural lag in the funeral complex of the *abangan* subculture.

Vogt (1960) suggests essentially the same imbalance of "social" and

“cultural” factors as the explanation of processes of change among the Navaho. Elaborate ceremonialism is derived as follows:

I have in mind the following sequence of events: the adoption of agriculture and sheep husbandry by a simple hunting and gathering society led to an increase in the food supply and to an expanding population. There followed in Navaho society the proliferation of forms of social structure: matrilineal extended families, clans, linked clans, and so on. . . .

My hypothesis is that the tension and incongruity between a social system composed of more complex matrilineal structures and cultural beliefs and practices stemming from an earlier hunting and gathering phase of Navaho society generated a process of elaboration of ceremonials which assembled and coordinated the activities of larger and larger groups of people—up to nine nights of coordinated ceremonial activity (pp. 27–28).

In terms of this paper, however, we find the following changes: (A) in the cultural system of economics; (B) in the kinship organization; (C) in the degree of elaboration of the ceremonial system. Vogt adds the resultant changing situational factors of (D) increased population—more and more varied interaction, and (E) more food. (These in turn are related to change in the material culture and reflected in new kinds of cultural expectancies about people. While I may choose to regard population and food here as situational factors, they could be conceptualized as biosocial factors, if one is postulating or testing for a universal tendency of changes in population densities or food supplies which limit directions of cultural variation. At any rate, Vogt does not describe population increase as either a biosocial or cultural factor.) However, the basic cultural value emphasis upon health (F) and the basic pattern of ceremonialism (G) did not change. Increased complexity in the ceremonial system (C) is, therefore, interrelated with the changes in A, B, D, and E at the same time that sectors F and G remained stable. One could either see this as a proof of a certain kind of interrelation of cultural variables A, B, F, and G; or else make change in C a resultant of the adaptation of the system to the new situational factors D and E; or more generally hypothesize that given A, B, F, and G in the presence of situational changes D and E, “biosocial” factor X (see below) will inevitably produce a tendency toward C. These would seem more useful ways of viewing the possible determinants of this change than seeing simply an opposition between vague areas labeled “social structure” and “culture.”

It is true, as both Vogt and Geertz assert, that certain aspects of a culture, such as its “values system,” are of great importance; but this is only true in day-to-day behavior insofar as the values system is interrelated with the expectancies of individuals in a cultural group, and expressed on the level of the behavioral culture of the group. To the extent that these expectations are rewarded there is a feedback stabilizing (or changing) the values system of the culture. The existence and stability of the “social system” (in the Parsonian sense) is, of course, established in the same way. In most of the cultural universe this is the only type of integration there is, the “causal-functional,” although subjectively to observer or participant the system may or may not appear “logico-meaningful” (Geertz 1957:33; Vogt 1960:24; Sorokin 1947:334 *passim*) like the caste system of India, a beautiful view, or the farming system

of the Hopi. The "style" exhibited by the Zuni "pattern of culture" grew from the continual interadaptations of complexes in Zuni culture over time, not primarily out of the rationalizations of Zuni thinkers.

In his own more empirically oriented work Parsons seems little concerned with his distinction of the activities of anthropologists and sociologists. In fact the terms "social," "society," and "culture" are often used as synonyms for the same things. The strains considered seem most often to be those engendered by "disequilibrium" among cultural systems, both societal and non-societal, between ideal and behavioral cultures, and between cultural expectations and situational factors. And, as in most analyses in social science, the basic variables in terms of which cultural forms grow and change are the biological and biosocial divisions, abilities, and tendencies of men (cf. Parsons 1942, 1951). Perhaps the best example of the recent use of Parsonian conceptual categories in sociology is the excellent work of Neil Smelser on the Industrial Revolution (Smelser 1959). But it is instructive to note that here also there is no tension between culture and social structure. Following Parsons' empirical work, Smelser tends to identify rather than distinguish concepts of culture and society. Nearly all of what the anthropologist normally deals with as culture is included in the concept of the "social system." Theoretically, cultural explanation is dismissed by: "In a cultural system the units are value-orientations, beliefs, expressive symbols, and the like" (1959:10). Apparently more concrete "values" are also "cultural" (superstructural?) for this area is thought of as "stable during a sequence of structural differentiations" and serving primarily as "legitimatizing" social action (1959:33-34 *passim*). Significantly the words "culture" or "cultural" do not appear in the "Summary of Analysis" (1959:402-08).

Since the Kroeber-Parsons distinction seems neither very objective or productive, let us reconsider what factors one might want to distinguish by the terms "social" and "cultural." If we focus on its use to describe causes of human behavior, "social" seems to refer to at least four different kinds of factors. It may refer to the general influence of the facts of group living upon men over generations or millennia. In universal terms we speak thus of men becoming "socialized" or "civilized." Or in this same sense one might look for "uniformities of social behavior," *laws* of "social evolution" or of small group formation. The focus is upon what happens or has happened when men interact. Secondly, "social" may be the tag applied to the particular customs and mores which influence, directly or indirectly, the actions of men in particular groups. Thirdly, "social factors" may be, in this latter sense, restricted to refer to only those customs which define interactional roles in such areas as kinship, economic, or political organization. Finally, one may wish to refer to the what and how of actual interaction in a particular situation. "Social" facts in this sense are descriptive facts: How is this mob organized? What percentage of Americans are Negroes? Clearly the second sense of "social" can be translated into what is normally meant by "cultural" in anthropology. The third usage is as clearly a subdivision, by whatever name, of the "cultural," since role defini-

tion is always intimately bound up with the more "ideological" aspects of culture. Often aspects of the latter exist only by inference from the former. But the first and last senses of "social" seem to stand separately from both one another and the cultural meanings.

"Cultural influences on behavior" may likewise refer to several different sorts of influences. Aside from humanistic definitions, the first dichotomy is between the psychologicistic and superorganic definitions of culture. Though the latter meaning is certainly important, and culture outside of man can be indirectly influential on behavior, this paper will ignore the superorganic definition by focusing on direct determinants which must, thereby, have entered into the psychological functioning of individuals. The next dichotomy is between "culture" and "cultures." While both of these aspects of reality may be conceived of as existing only in minds, cultural facts in terms of the former are ascribed to "levels of culture" about which the scientist may postulate certain cultural *laws* of the probable associations of traits and directions of change. In terms of "cultures," cultural factors are those which cause an average bearer of a culture to act with statistical predictability in one way rather than another.

To resolve the ambiguities which we have discussed, a more fundamental analytical scheme would seem to be required. Using the determinants of human behavior as a conceptual field (cf. Weisgerber 1950:7-30, 1954; Öhman 1953), this paper attempts to construct a small set of primary and secondary categories or subdivisions within that field which can be consistently and more or less unambiguously used in social science. It is hoped that the discussion will demonstrate the extent to which these categories usefully group and separate factors behind behavior, while at the same time allowing several varieties of explanation to be compared within the same conceptual framework. As a general scheme the determinants are explained in static terms, existing prior to an action, but the categories will be seen to be equally applicable in the explanation of change.

Kluckhohn and Kelly (Kroeber and Kluckhohn 1952:90) have suggested: ". . . there are four variables in the determination of human action: man's biological equipment, his social environment, his physical environment, and his culture." Kluckhohn and Murray (1953:55-62) speak of four classes of determinants in personality formation: constitutional, group membership, role, and situational. The author has built on these foundations but not followed closely the definitions of either formulation.

Focusing primarily upon the factors which may determine a behavior, one can differentiate four kinds of variables with two dimensions to each. 1) Human *biological factors* include tendencies and abilities common to all men, to all men of a certain sex or age, or confined to specific individuals. These factors operate both directly upon individual behaviors in situations, and indirectly through the partial determination of the cultures and histories of societies and individuals. 2) For the purpose of anthropological investigation we may isolate those biological forces which bring people together, which both make possible and help to determine learning traditions (cf. Count 1958).

These *biosocial* factors affect directly the individual behaviors of persons interrelating in group situations and indirectly affect the cultures and histories of societies and individuals. Both "cultural universals" and "social laws" belong here. 3) *Cultural* tendencies result from individuals learning in terms of one tradition rather than another. They influence the behavior of individuals in situations directly, and indirectly help to form the nature of present situations through fostering or inhibiting antecedent historical situations. 4) From the point of view of the study of cultures, then, all other factors are labeled *situational*. Here the focus is on the particular nature of the concrete event, including such factors as the personalities involved, their momentary relations to one another, the health of these persons, the problems they face, or the state of the weather. As has been indicated above these categories of variables have both *historical* and *ahistorical* (present-time) dimensions. This is especially true when we consider the effects of past situations on the structures of present biologies, cultures, and situations. These four classes of factors may be conceived of as *both* four different classes of variables involved in the causation of any human action *and* four different levels of the analysis of that action. For certain purposes each level can be seen as derived from the one before it, just as the ahistorical is derived from the historical. Generalizations about pan-human behavior rest upon assumptions about levels one and two related to certain type-situations. The particularities of behavior rest upon biological individuality, culture, situation, and ultimately their historical dimensions.

Under the *biological* heading environmental factors, which are here considered situational, should not be confused with the organismic needs and abilities which are within actors. Biological factors include physiological reflexes, needs, drives, taxes, potentialities for pleasure and pain, and the degree of mutability of these. They include physiological abilities both of gross structure and the nervous system. It is in particular the structure of the brain which determines many of the potentialities of man, leading through its interconnections to many of the similarities of behavior, and through its independences to many of the apparently willful variations of behavior. Finally, biological factors include individual or group biological variations of both needs and abilities due to differences in age, sex, nutrition, or heredity.

But we do not have biological man alone in many observable behaviors. Biological factors are usually conditioned by particular learning traditions of more or less isolated groups of people which we call *cultural* tendencies. Probably the greatest contribution of anthropology to social science has been the insistence upon the fact that because one is, for example, Navaho by culture he can be expected statistically to act differently in a wide variety of ways from a Zuni or Zulu. Although this discovery has often been carried too far through a denial of the obvious influence of universal relationships involving evolution, environment, and psychology, nevertheless social scientists will continue to explore the limits of this kind of variability and its influence upon human behavior. To be clear about what is meant by cultural behavior, however, we must be sure that we include only the nonuniversal and group-specific aspects

of behavior. While all direct or indirect learning by virtue of being in contact with one tradition rather than another leads to an unending welter of possible "cultures" or "subcultures," depending on the purpose of the investigator, all learning experiences and all aspects of any learning experience are not necessarily cultural, but rather may be personal (situational) or universal (biosocial).

Cultural influences on behavior may be subdivided analytically for each culture into "cultural subsystems" (aspects or areas). Thus we may speak of the "religious subsystem," the "kinship subsystem," the "legal subsystem," or the "language subsystem." Those subsystems in which human interaction is especially important may be called "societal subsystems," and the system of these latter systems the "societal structure." (The concept of "social structure" based on a particular theory as to the importance of certain cultural subsystems cannot be admitted as a basic subdivision in this framework.) "Society" is suggested as a convenient label for the group of culture bearers, the "cultural group" (but see the discussion of situational factors below.)

Cultural variability, however, operates within certain limits. Although one might think of situational limits on particular cultures, universally considered these limits must be seen as growing primarily out of the nature of biological man. If we put a hypothetical group of biological men in an area, a series of group-forming and group adjusting factors will begin to operate. These may be called *biosocial*. Certainly some of these, such as the relative dependence of the child on the mother, the menstrual cycle, the ability to develop emotional attachments, the advantages of specializations under certain economic conditions, are known. Most biosocial tendencies, however, are only inferable unknowns behind universals or relative universals. Language, for example, may be both a biosocial and a cultural phenomenon. For if, as has been suggested, human beings growing up together without language would create one not too different from those languages we know, given enough time (cf. Lenneberg 1958), then in this general sense language, as perhaps also the "family," is biosocially determined. The particular language developed, however, is a cultural determinant of the behavior of members of the cultural group. In a situation there may be an opposition among biosocial and cultural factors. In culture X the ideal cultural pattern may be absolute equality of all persons of a certain age and sex, and yet in certain concrete situations biosocial tendencies may lead repeatedly to a factual (in the eyes of the outsider) differentiation into leaders and led. Depending on the intensity of learning in this trait of equality and the frequency of situations where the survival value of the biosocial tendency is manifest, this ideal cultural trait may or may not change. In some cases biosocial tendencies may remain largely ineffectual in the face of intense, culturally determined perceptions and conceptualizations of human relations.

The most significant work, aside from studies of cultures, which has been carried on by students in sociology and anthropology, has been in the area of working out the probabilities of certain types of generalized, formal analyses



being applicable to behavior. The search for cultural uniformities by methods such as those suggested by Sheldon (1951:35-40) whereby one may say, "Given pattern X with actions a, b, c, then R does S to a statistically significant degree in any cultural group," is a search for biosocial factors limiting the free play of cultural variability. Biosocial tendencies, then, must be hypothesized behind the "universals" of both cultures and cultural change as these have been sought in the past by such different investigators as Kluckhohn (1953) and Sorokin (1937-41). Many social scientists, moreover, have written as though cultural factors were givens, or at least the functions of universal relationships of factors, especially in an evolutionary sense. The term "biosocial" as used in this paper is the area of their discourse.

In the determination of every behavior, there are certain less generalizable elements which are called *situational* factors. Since the human mind is not, however, restricted to an extremely narrow focus in time or space, we must include both immediate and general situations confronting actors. A tentative outline of such factors might be as follows:

- a. nonsocial situation in a relevant field
  - 1) general possibilities of the physical environment
  - 2) potentialities and impingements of the environment at the moment
- b. social situation in a relevant field
  - 1) population density and composition
  - 2) cultures of populations
  - 3) personalities of those in the situation at the moment
  - 4) the particular physiological states and mental sets of these persons at the moment
- c. personal situation
  - 1) personality of actor
  - 2) actor's physiological state and mental set at the moment.

We can note that a "social" factor is here defined as resulting from the impingement of people around actors upon their behavior. We can then distinguish, for example, between social pressures for conformity in the actor's behavior and cultural pressures. The latter must be exerted by the actor upon himself; i.e., must exist as a part of his own prior personality, either through internalization or objective knowledge of what others will expect him to do and their possible sanctions. Personalities are here seen as particular integrations of biological natures with learning experiences both common and idiosyncratic. The concept of the personality remains a viable analytical entity separate from culture, however, because the form of the integration of its constituent elements is characteristically different from that of a culture. In fact, the functional integration of a personality is surely much tighter than that of a culture. Yet cultures exist only in and through abstraction from aspects common to many personalities in a group. It was the idiosyncratic histories of many persons which built the cultural variability of today.

Although this discussion does not attempt to establish the correct "weight-

ings" of any variable, it does bring into sharper relief some of the possible conflicts among segments of human life which might be analyzed for their part in changing or maintaining in dynamic equilibrium patterns of human behavior. First, there is conflict within the several broad categories or levels which have been mentioned. One biological drive is matched by another, and both must stand in a relation of tension with the ability of the organism to fulfill or control them. On the level of the personality many biological needs and abilities must conflict with culturally prescribed or personally learned patterns. Biosocial tendencies conflict with some of the more egoistic needs of biological man and control the variations of cultures. On the other hand, certain biosocial tendencies will conflict with others. Some aspects of every culture will clash with some other aspects of that culture. The inability of cultural subsystems to keep abreast of one another may well be called "cultural lag" regardless of which system is leading and which following (cf. the discussion of Vogt and Geertz above). Herein lies the explanatory nature of the equilibrium model.

Two crucial additions to this model may be made through the consideration of biosocial-cultural conflict and cultural-situational clash. Situations pose ever new problems to the cultural bearers (the society). Cultures may include societal and technological systems which will progressively alter the physical environment, thus altering the quality of the feedback from the environment. A cultural system which promotes population expansion may continually manufacture new problems leading to new sorts of adjustments in its component subsystems. The sheer situational variations in types of learning among individuals in the society, and the consequent reorganization and creative extension of this learning in the biological brains of thousands of people, especially those who attain role-positions of influence, is bound to give great variation, at least in detail, even on the same level of complexity. But more crucial is the fact that personality integrations are always at variance to some extent with cultural integrations. For while cultural integrations serve largely the general interests of the group, as a whole as its members have learned to perceive these, personal integrations must directly bring about a compromise of cultural learning with perceptions of personal interests which rest partly on biological desires of a most egoistic nature. It is this conflict of the interests of individuals and subgroups with the accepted canons or averages of behavior of the cultural group as a whole which is seen as the primary culture-forming and culture changing force by such men as Marx, Veblen, and Radin (or cf. Dahrendorf 1958). Finally, with the attainment of new levels of complexity, from whatever cause, new sorts of biosocial factors must begin to operate upon, or in conflict with, the cultural tradition. Degrees of specialization, for example, which were not adaptive on a simpler level now become adaptive.

This paper, then, has attempted to carry to a conclusion certain tendencies already found in many writings in the social sciences concerning the fundamental conceptual distinctions involved in the theory of culture. In particular the attempt was made to give the terms "social" and "cultural" more sharply defined and adequate meanings, without, at the same time, leaving what was

thereby excluded in a conceptual limbo. To accomplish this the semantic field of "factors behind behavior" was divided into four categories: *biological*, *bio-social*, *cultural*, and *situational*, each with historical and ahistorical dimensions. All, and only, learning in a particular tradition was seen as cultural learning, although these experiences may be artificially divided into interconnected cultural subsystems. The possible superiority of this way of conceptualizing cultural facts was suggested both through the discussion and reanalysis of some recent sociological and anthropological work and a consideration of some of the ways in which the analytical variables thus isolated may be seen through their mutual confrontation to be instrumental in the processes of cultural change. This is a sketch, with many problems and perhaps inconsistencies, but one which may be useful in taking the next. The particular terms used for conceptual distinctions may be inappropriate, while the distinctions may remain useful.

## NOTES

<sup>1</sup> I am indebted to Homer Barnett for the realization of the implications of the "insect society without culture" argument, as well as other suggestions. Kroeber himself has of course realized the difficulties with the insect analogy previously (1948:10). It is to Kroeber's own doubts about the distinction of society and culture that I owe my greatest intellectual debt (cf. also Kroeber 1959:401-02).

<sup>2</sup> This criticism of the artificial distinction of cultural and social systems was made in rather similar terms by Sheldon (1951:40-42).

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