

## ANTHROPOLOGY AND THE NATURE OF MAN

by David A. Baerreis

Each fresh start on the never-ending quest of *Man as he ought to be* has been the response of theory to fresh facts about *Man as he is*. And, meanwhile, the dreams and speculations of one thinker after another—even dreams and speculations which have moved nations and precipitated revolutions—have ceased to command men's reason, when they ceased to accord with their knowledge.

. . . We have seen the very questions which philosophers have asked, the very questions which perplexed them, no less than the solutions which they proposed, melt away and vanish, as *problems*, when the perspective of anthropology shifted and the standpoint of observation advanced. This is not new experience; nor is it peculiar either to anthropology among the natural sciences, or to political science among the aspects of the study of man. It is the common law of the mind's growth, which all science manifests, and all philosophy.<sup>1</sup>

## BIOLOGICAL MAN AND HIS CULTURE

Within the discipline of anthropology, three basic approaches provide an understanding of the nature of man: physical anthropology, through his biological development and characteristics; archaeology, whose concern is with the development of man's culture over time; and ethnology, deriving some understanding from a comparison of living societies and cultures. While it may seem that we have begun by moving away from any basic conception as to the nature of man by introducing such concepts as culture and society, this is far from the truth. Indeed, we may flatly assert that insofar as man is human, he is truly to be distinguished from the remainder of the animal kingdom *only* because of his develop-

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ment of a complex culture. Stated in its essential simplicity, this might seem to indicate that the distinctions between man and his close animal relatives are of but slight import. This notion must also be quickly dispelled, for not only are we completely dependent upon our culture, but the possession of a culture and the gradual evolution of more complex cultures have guided or acted upon the biological evolution of man. Thus the species *Homo sapiens*, as we observe it today, is the product of a long line of biological evolution in which the major selective force has been culture. These premises are of profound importance and stated in a different manner what they involve is a conception of biological man and his culture as one inextricable whole—we cannot conceive of man without his culture or of culture without man. And further, from an operational point of view, it also implies that when we speak of the perfectibility of man we are speaking of the perfectibility of our culture. This may be a much easier task, though the extent to which the values of a culture are internalized and the time required for changes to affect the individual require attention. Without jumping ahead further in a consideration of the implications of these premises, their importance requires some review to establish how firmly they may be accepted.

In recent decades, South and East Africa have produced a series of spectacular new finds demonstrating the antiquity of man and his culture. Not only have a large number of individuals been recovered, permitting the attainment of a considerable degree of certainty as to the details of the biological facets of man's evolution, but there have also been found living areas and a more wide-ranging selection of bone and stone tools than has hitherto been available. Neither the details of the biological nor the cultural evolution are of particular importance here, but it is relevant that age determinations made at the Department of Geology, University of California, Berkeley, using potassium-argon techniques have indicated that the earliest cultural and hominid layers at Olduvai Gorge have an antiquity of approximately 1,750,000 years. This date is of a layer in which we have evidence of Australopithecines as tool user, tool maker, and hunter of animals that required group cooperation and mutual assistance. One may, as several recent writers have done, stress the similarities or kinship of man with his close animal relatives and the thinness of civilization's veneer. But are these studies simply designed to titillate the reader or to gain a reputation for the author as an iconoclast? They run counter to the weight of sound anthropological evidence and modern interpretation. Nearly two million years of life as a tool user, as a participant in a cooperative pattern of

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life—for cultures cannot survive without group cooperation—have placed an indelible stamp upon mankind. Man is not just another animal or even just another ape.

Stress upon this immense time span is essential if we are to appreciate how fundamental culture and sociocultural life are to man. At the same time, we should not feel that suddenly man achieved a complex cultural adaptation nearly two million years ago. Recent archaeological research has added further evidence that reinforces an older interpretation that man's cultural developments were initially at a very slow rate with growth changing to an exponential rate in recent years. Throughout the Lower and Middle Paleolithic, a long time span lasting until approximately thirty-five thousand years ago, there is but a slow and gradual improvement in the form and techniques of manufacturing tools. A few discoveries of substantial importance, such as control of fire, were made, but evidences of achievements of profound importance are very few in number. It has been argued that, while the early forms of man during this long developmental period possessed a rudimentary language, elaboration in language occurred only toward the close of the Middle Paleolithic and at the beginning of the Upper Paleolithic. At this time, not only do changes begin to occur with great rapidity, but these include highly specialized tools, the emergence of a complex visual art, and a concern about the disposal of the dead. The equipping of the latter with tools and food in their carefully prepared graves as well as the construction of shrines, such as those formed of the skulls of cave bears, indicate the growth of concepts about the nature of death and human and animal spirits.

From this point on, the rate at which changes take place is indeed impressive. Basic to the new evolutionary developments is an economic transformation from the life of a hunter and gatherer to control of the food supply through the domestication of plants and animals. The earlier economic systems must necessarily have limited population density and doubtless, as a consequence, the size and complexity of the societies that might emerge. The "Neolithic Revolution," as the British prehistorian V. Gordon Childe designated it, led to a sedentary pattern of life with the accompanying development of local industries such as weaving, potting, carpentry, and elaboration in house construction. Just as the recent archaeological research in South and East Africa has pushed back the time of emergence of man as a culture-creating animal, so recent research has pushed backward the initial time of domestication and the development of communities of substantial size. Working in Tehuacan Valley, Mexico, at the southern border of the state of

Puebla, Richard S. MacNeish has developed a cultural sequence in which the first domesticated plants of the New World (squash and chile) appear between 6800 and 5000 B.C. The terminal date marks the appearance of domesticated corn or maize, the great staple food of New World civilizations. While it is difficult to point to a precise, dated location where domesticated plants have been found at an earlier time in the Old World, it now seems probable that the appearance of Old World domesticates exceeds 7000 B.C. Not only do we have early evidence for plant domestication, but sites of very substantial size, such as Çatal Hüyük, with its thirty-two acres, make their appearance around 6500 B.C. Domestication was closely followed by its potentialities in terms of development of communities of substantial size and the appearance of the arts and industries of civilized life.

This brief outline of the main characteristics of man's biocultural evolution permits us to derive several basic concepts about the nature of man, some of which were enunciated in the introductory comments. For the sake of clarity, however, let us recapitulate them here: (1) a distinguishing feature of man in relation to the animal kingdom as a whole is his development of a culture, a culture which is learned as a member of society and not transmitted in the germ plasm; (2) the initial development of a culture was attained such a long period ago (approximately 1,750,000 years) that man's culture has become his chief means of survival and adaptation; in other words, effective utilization and operation within a cultural system has been the major selective force operating on man, and, consequently, this has shaped the direction and character of his biological evolution; (3) the pattern of biocultural evolution has been one of exceedingly slow and gradual change for a long stretch of time until around thirty-five thousand years ago when the rate changed sharply, the changes accelerating ever since that period; (4) it has been postulated that the change in the rate is a consequence of effective systems of communication—languages capable of transmitting abstract thought—at about this same time.

#### MAN'S POTENTIALS FOR MODIFICATION IN BEHAVIOR

Man's distinctive characteristic, then, has been the development of a cultural system which every new generation must learn from its elders. We may ask, then, has this been an effective adaptation on man's part? Viewed from a biological perspective, the answer is clearly yes. During the time period we have been considering, man has moved from a relatively rare species, that any cosmic zoo would have been delighted to add to its collection, to a pest that is everywhere underfoot. Graham

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Clark has estimated that the population of England and Wales was two hundred fifty persons during the Upper Paleolithic period. In 1964, this same area supported about forty-six million. Not only has there been this frightening increase in total population, there has also been a marked shift in the span of life. During the Paleolithic, only between 2 and 3 percent of the population could be expected to survive beyond the age of fifty, and none beyond the age of sixty. By the Bronze Age (ca. 1700–1500 B.C.), 7–8 percent of the population (an estimate also based on the prehistoric populations of Europe) lived beyond the age of sixty. Much of this change is doubtless due to better nutritional factors, the same factors that lead to the frequently measured Harvard students being taller or more robust than their parental groups.

Biologically, there has been this clear success, but our concern, of course, is not with such a simple measure. Are we not today more concerned with the quality of life than with its simple preservation? It is true that there has been a concern as to whether technological developments like the atomic bomb might indeed threaten the very survival of man or whether the sheer momentum of population increase might not drastically affect the quality of life. But what else can we conclude about the nature of man, examining this cultural side of human development?

Because of man's culture and the development of complex languages which doubtless made conceptual thought possible, man is probably the only creature who is aware that he has a past, that he is evolving, and, consequently, that he has a future. Awareness of the continuum of change over considerable spans of time creates the potentiality for deliberate and intentional changes in aspects that have their impact on the future. What limitations are there on such developments? How plastic is man? How much is he affected by his animal nature, inherited from his remote ancestry? These are real questions of great import, for is not a common answer to frequent attempts to eliminate war, for example, a reference to the fact that man is *naturally* aggressive, or some similar phrasing?

data on cultural evolution to throw any direct light upon such a question as to the nature of man. But this is not the only methodological approach that might be used. It is also possible to draw some inferences from a comparative approach, utilizing different cultures as they exist and have existed in various parts of the world in recent years. Margaret Mead's classic study, *Coming of Age in Samoa*,<sup>2</sup> illustrates the methodology very well. At the time the study was initiated, it was generally

accepted that the stressful period of adolescence was a natural and inevitable part of growing up. It was thought that the physiological changes at puberty inevitably created these problems and that they hence were a part of man's inborn biological heritage. Mead postulated, to the contrary, that the emotional disturbances of this time period in the life of an individual were a reaction to the specific stresses of American and European cultures. To demonstrate the validity of this alternative interpretation, it was necessary to find a different culture in which the adolescents lacked such disturbances and, to the contrary, were able to achieve an easy transition from childhood to adult life. Using Samoa as her laboratory or test case, Mead was able to demonstrate that in Samoan culture the transition from childhood to adulthood was indeed an easy one. It follows, then, that adolescent behavior is culturally determined rather than biologically determined despite the focus upon a physiological landmark.

One could call the roster of the world's varied cultures and examine all of the major institutional areas on which culture focuses and reach essentially the same conclusion as that in regard to the example of adolescence. Man in his infinite variety reflects a great plasticity, a great potentiality for modification in behavior as the dictates of each culture require. Does this mean that one needs simply to strip away the veneer of these varied cultural adaptations—demonstrated through a comparative approach that they are truly *cultural* adaptations—and thus reveal the true nature of man, man in his essential biological essence? In exploring a similar theme, Geertz reached a conclusion similar to that which I would assert—that there is no such thing as a human nature independent of culture:

Man without culture would not be the clever savages of Golding's *Lord of the Flies* thrown back upon the cruel wisdom of their animal instincts; nor would they be the nature's noblemen of Enlightenment primitivism or even, as classical anthropological theory would imply, intrinsically talented apes who had somehow failed to find themselves. They would be unworkable monstrosities with very few useful instincts, fewer recognizable sentiments, and no intellect: mental basket cases. As our central nervous system—and most particularly its crowning curse and glory, the neocortex—grew up in great part in interaction with culture, it is incapable of directing our behavior or organizing our experience without the guidance provided by systems of significant symbols. What happened to us in the Ice Age is that we were obliged to abandon the regularity and precision of detailed genetic control over our conduct for the flexibility and adaptability of a more generalized, though of course no less real, genetic control over it. To supply the additional information necessary to be able to act, we were forced, in turn, to rely more and more heavily on cultural sources—the accumulated fund of significant symbols. Such symbols

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are thus not mere expressions, instrumentalities, or correlates of our biological, psychological, and social existence; they are prerequisites of it. Without men, no culture, certainly; but equally, and more significantly, without culture, no men.<sup>3</sup>

It does not seem appropriate here to dwell upon man's perfectibility through culture, as revealed by anthropological investigations. The archaeological record clearly records the improvement in material culture but is more difficult to interpret in regard to the quality of life. There, aspects can best be appraised through the written, historical record and, indeed, in some of the events of not too distant years.

### TOWARD MAN'S PERFECTIBILITY

In summary, however, it may be stated again that the anthropological approaches do give a critical insight to the nature of man and hence to the question of the perfectibility of man. If, as has been argued, man's actions are largely shaped by his culture, then any improvement in man is to be attained through basic modifications in the culture and in the major institutions of which all cultures are composed. Just as in the repair of any complex machine, such as a modern automobile, knowing what has gone wrong or learning where the malfunction is located is the first step in restoring smooth operation again or in improving it. Our younger generation has a substantial element which has expressed its disenchantment with "the establishment" and, in so doing, has seen that the values, the goals, and the patterns of behavior produced by the leading institutions of the day are not ones that all thoughtful members of our society are ready to offer their allegiance to. Yet the remedy for this disenchantment is not withdrawal, for we obviously cannot withdraw from our culture and survive. Cultures and cultural institutions are the created product of man, made not to be accepted unthinkingly but shaped and refined in response to values and goals we can sincerely accept.

In this quest of *Man as he ought to be*, as Sir John Myres expressed it, religious institutions evolving in accord with knowledge have a key role to play. This role has been well expressed by another eminent anthropologist, the late Kluckhohn. He was arguing that to have democracy we must have personalities that are able to be free:

However, no scheme of socialization or formal education which makes for freedom of the personality can guarantee organisms which are free from the need to fear and the need to fight unless the social and economic structure makes these orientations realistically rewarding.

The internal change must arise from the development of a faith which should give meaning and purpose to living but which could be believed in

by a reasonable man familiar with what we have learned of our world by scientific methods. As wide an induction as anthropology can offer is that every society desperately needs morality in the sense of common standards, and religion in the sense of orientations toward such inescapable problems as death, individual responsibility, and other ultimate value attitudes. Religion in this sense is absolutely necessary to promote social solidarity and individual security by affirming and symbolically enacting a system of common purposes. In my opinion, a faith is required which would not force intellectual reservation or conflict or compartmentalization. Such a faith cannot today, I believe, successfully be based upon supernatural premises. It must needs be a secular religion.<sup>4</sup>

Clearly, religious institutions have a frighteningly important role to play so far as the destiny of mankind is concerned. It is a responsibility which must be accepted with courage and with whatever wisdom can be mustered if man is to have a future in which humane values are dominant.

#### NOTES

1. John L. Myres, "The Influence of Anthropology on the Course of Political Science," *University of California Publications in History* 4, no. 1 (1916):74-75.

2. Margaret Mead, *Coming of Age in Samoa: A Psychological Study of Primitive Youth for Western Civilization* (New York: W. Morrow & Co., 1928).

3. Clifford Geertz, "The Impact of the Concept of Culture on the Concept of Man," in *New Views of the Nature of Man*, ed. John R. Platt (Chicago: University of Chicago Press, 1965), p. 112.

4. Clyde Kluckhohn, *Mirror for Man* (New York: McGraw-Hill Book Co., 1949), p. 215.