

10. THE INTERPRETATIONS OF CULTURE

Ever since the time when the study of human cultures was recognized as a problem, attempts have been made to interpret it as a unit phenomenon even before anything like a fair amount of material had been collected. Society was considered as an organism, and its various functions were explained in the same way as the organs of the body. Under the influences of Darwinism its changing forms were viewed as the evolution of an organism, the driving force of its development being rational thought. The mental activities of primitive man have been compared to those of children and *vice versa*, so that the development of the child's mind has been looked at as a recapitulation of the development of the mind of mankind. The child's mind, it is believed, can thus explain to us the primitive mind. In recent times primitive mind is being compared with the minds of mentally unsound, as though the mental activities of perfectly normal people of foreign cultures could be explained by the mentally affected of our own culture.

Rather recent are attempts to understand primitive culture as a phenomenon that requires painstaking analysis before a generally valid theory is accepted.

Only a few of the points of view just referred to are relevant to our problem. Suggested analogy with an organism will not help us to clear up the behavior of primitive man. The analogy with the mental life of the child is difficult to apply because the culture of child life in Europe and the life of the adult in primitive society are not comparable. We ought at least to compare the adult primitive with the

child in his own culture. Children of all races undoubtedly exhibit analogies of development dependent upon the development of the body, and differences according to the demands made by their gradual initiation into the culture in which they live. The only question could be whether one culture tends to develop qualities which another one neglects.

The comparison of forms of psychoses and primitive life seems still more unfortunate. The manifestation of mental disturbances must necessarily depend upon the culture in which people live and it must be of great value to the psychiatrist to study the expression of forms of psychoses in different cultures, but an attempt to parallel forms of healthy primitive life and those of disturbances in our civilization is not based on any tangible analogy. The megalomaniac boasting and acting of the Northwest Coast Indians does not make them act like a megalomaniac insane, but their culture probably gives a particular form to that type of insanity. Particularly Freud's (2) comparison of primitive culture and the psychoanalytic interpretations of European behavior seem to lack a scientific background. They appear to me as fancies in which neither the aspect of primitive life nor that of civilized life is sustained by tangible evidence. The attempt to conceive every mental state or performance as determined by discoverable causes confuses the concepts of causality and predictability. Of course, every event has a cause, but the causes do not hang together so that they represent a single thread. Innumerable accidental causes intervene which cannot be predicted and which also can not be reconstructed as determining the course of the past.

We must pay more detailed attention to the attempts to see cultural life developing from primitive forms to modern civilization, either as a single evolutionary line or

in a small number of separate lines. The question may be asked whether without regard to race, time and space, we may recognize a series of stages of culture which represent for the whole of humanity an historical sequence, so that certain ones may be identified as types belonging to an early period, others as recent.

The investigations of Tylor, Bachofen, Morgan and Spencer fixed the attention upon the data of anthropology as illustrating the gradual development and rise of civilization. The development of this side of anthropology was stimulated by the work of Darwin and his successors, and the underlying ideas can be understood only as an application to mental phenomena of the theory of biological evolution. The conception that the manifestations of ethnic life represent a time series, which from simple beginnings has progressed in a single line to the complex type of modern civilization, has been the underlying thought of this aspect of anthropological science.

The arguments in support of this theory are based on the similarities of types of culture found in distinct races the world over, and on the occurrence of peculiar customs in our own civilization, which can be understood only as survivals of older customs that had a deeper significance at an earlier time, and which are still found in full vigor among primitive people.¹

An excellent example of the general theory of evolution of civilization is found in the theory of the development of agriculture and of the domestication of animals as outlined by Otis T. Mason, W J McGee and Eduard Hahn (1, 2). They point out how, in the earliest beginnings of social life, animals, plants and man lived together in a common environment and how the conditions of life brought it about that certain plants multiplied in the

¹ Tylor, I, p. 16.

neighborhood of the human camp to the exclusion of others, and certain animals were suffered as camp followers. Through this condition of mutual sufferance and promotion of mutual interests, if I may use this term, a closer association between plants, animals, and man developed, which ultimately led to the beginnings of agriculture and to the actual domestication of animals.

The development of art has been reconstructed by similar methods. Since the earliest traces of art represent animals and other objects and geometric forms follow, it has been inferred that all geometrical motives have developed from representative designs.

In a similar way religion has been inferred to be the result of speculation in regard to nature.

The essential method has been to bring the observed phenomena into order according to imputed principles and to interpret this as a chronological order.

We must try to understand more clearly what the theory of a unilinear cultural development implies. It means that different groups of mankind started at a very early time from a general condition of lack of culture; and, owing to the unity of the human mind and the consequent similar response to outer and inner stimuli, developed everywhere approximately along the same lines, making similar inventions and developing similar customs and beliefs. It also involves a correlation between industrial and social development, and therefore a definite sequence of inventions as well as of forms of organization and belief.

In the absence of historical data in regard to the earliest history of primitive man the world over, we have only three sources of historical proof for this assumption—the evidence contained in the earliest history of the civilized people of the Old World, survivals in modern civilization

and archaeology. The last-named is the only method by means of which we can approach the problem in regard to people that have no history.

While it is certainly true that analogues can be found between the types of culture represented by primitive people and those conditions which prevailed among the ancestors of the present civilized peoples at the dawn of history, and that these analogues are supported by the evidence furnished by survivals, the evidence of archaeology does not support the complete generalization. The theory of parallel development, if it is to have any significance, would require that among all branches of mankind the steps of invention should have followed, at least approximately, in the same order, and that no important gaps should be found. The facts, so far as known at the present time, are entirely contrary to this view.

The example of the development of agriculture and herding will illustrate some of the objections that may be raised against the general theory. Under the simple conditions of primitive life the food supply of the family is procured by both sexes. The women collect plants and animals that are stationary or that cannot move about rapidly such as larvae and worms. This must be due to the hindrance imposed upon them by childbearing and the care of young children. The men obtain the fleet game, birds and fish. They hunt and fish. The attempt to systematize the life forms of primitive people induces us to place those who gather food and hunt at the beginning of the scale. Next will be placed others who are farther advanced in the technical means of obtaining a livelihood, or who have attained a closer connection with the vegetable world by developing property rights in regard to plants growing near their place of abode. These relations all center around the life of women and her occupation

with plants and we reach, without any serious gap, the condition of earliest agriculture. The psychological reason for accepting this arrangement as having a chronological value, lies in the conviction of the continuity of technical advance and on the other important fact that we are dealing right along with the occupations of the same part of the population, namely, the women. The chronological interpretation is supported by the observation that the beginnings of agriculture are generally supported by the gathering of wild plants; that while gathering of plants occurs without agriculture, the opposite condition is unknown.

The activities of men related primarily to animals. The transition from hunting to herding cannot be shown as easily as that from the gathering of plants to agriculture. Still it is at least plausible that the domestication of animals—which are almost exclusively gregarious animals—is based on the relation of the hunter to the wild herd. As soon as the hunter began to obtain his food supply from the same herd and prevented its being scattered by killing the animals that pursued it, conditions developed similar to those found among the Chukchee and Koryak in Siberia. Since in this case also the same part of the population, namely the men, were concerned in the relation between man and animal a continued development is possible.

These considerations are supported by archaeological evidence. If our views are correct, the cultivated plants must have originated from the wild plants with which man was familiar. This transition has been shown for native European plants. According to our theory we should expect frequent crossings between wild and domesticated forms. This has been made plausible for early European forms. In domesticated animals similar conditions may

still be observed in the reindeer of Siberia and the dog of the Eskimo.

With this we are led to a question of fundamental importance for the theory of a unilinear evolution: What is the chronological relation between agriculture and herding? When we approach this question from a psychological viewpoint the difficulty arises that we are no longer dealing with one single type of occupation carried on by the same group, but that we have two occupations, distinct in technique and carried on by distinct groups. The activities leading to the domestication of animals have nothing in common with those leading to the cultivation of plants. There is no bond that makes plausible a connection between the chronological development of these two occupations. It is missing because the persons involved are not the same and because the occupations are quite distinct. From a psychological point of view there is nothing that would help us to establish a time sequence for agriculture and herding.

I think this example illustrates one of the principal doubts that must be raised against a systematic, all-embracing application of a theory of evolution of culture. The steps of development must relate to an aspect of culture in which the same group of people are involved and in which the same kind of activity persists. A constant relation between loosely connected or entirely disconnected aspects of culture is improbable when the differences between the activities are great and different groups of individuals participate in the activities involved. In all these cases chronological data must be based on other sources.

Safe conclusions can be based only on archaeological evidence. Besides this, certain conditions among primitives may serve as guides. If it can be shown that certain industries occur exclusively in connection with other sim-

pler ones and the latter alone, the former never without the simpler ones, it seems likely that the simple type of work is the earlier. If this should not occur with absolute regularity, still with sufficient frequency, we might speak of recognizable tendencies of development.

Geographical distribution may also serve as a help, for wherever there is a continuous distribution of industry it is possible, although not necessary, that the one most widely spread is the oldest. It is doubtful whether this argument can be applied outside of the domain of technique.

The more distinct the various phenomena the less they are correlated, so that finally notwithstanding the tendency to historical development in single phases of culture no harmonious scheme for the whole of culture that would be valid everywhere is found (Thomas).

Thus it does not seem to be certain that every people in an advanced stage of civilization must have passed through all the stages of development, which we may gather by an investigation of all the types of culture which occur all over the world.

Similar objections may be raised against the general validity of the theory of the development of the family. It has been claimed that the organization of the family began with irregular and shifting relations between the sexes, that later on mother and children formed the family unit which remained attached to that of the mother's parents, brothers and sisters and that only much later developed a form in which the father was the head of the family which was attached to his parents, brothers and sisters. If the evolution of culture had proceeded in a single line the simplest forms of the family would be associated with the simplest types of culture. This is not the case, for a comparative study discloses the most irregular distribution. Some very primitive tribes, like the Eskimo

and the Indian tribes of the northwest plateaus of North America, count relationship bilaterally, through father and mother; other tribes with highly developed culture recognize the maternal line alone, while still others whose economic and industrial life is of a simpler type, recognize the paternal line (Swanton). The data are contradictory and do not permit us to conclude that economic life and family organization are intimately related in regard to their inner form.

Theoretical considerations suggest that customs do not by any means necessarily develop in one way only. The relation between incest and totemism may serve as an example. Incest groups vary according to the prevalent system of relationship and associated ideas. Frequently the incest group is believed to stand in intimate relation to some animal, plant or other object, its totem. In other cases there is no such relation. In anthropological theory totemism has been described as an early stage of society from which later forms have been developed. The concept of incest is so universal that it must either have belonged to man before his dispersion or it must have developed independently in a very early period. Wherever an incest group exists a development is possible in two directions. The group while increasing in number may remain a whole, or it may break up in a number of separate groups. A conceptual unity of the group must exist, otherwise subgroups will lose consciousness of their earlier relationship when they are separated from other subgroups. The conceptualization may be brought about by naming the whole group, by common, recognizable customs or functions, or by a terminology of relationship which will differentiate members from non-members. Such a terminology may include very large numbers of individuals, because by reference to some known intermediary even

distant members may be identified. It follows from this that when no conceptualization of unity exists totemism of the whole group cannot develop. The only form that is favorable to it is the one in which a group is characterized by a name or by common customs.

If, as is illustrated by this example, different customs may develop from a single source we have not the right to assume that every people that has reached a high stage of development must have passed through all the stages found among tribes of primitive culture.

A still more serious objection is based on another observation. The validity of the general sameness of the evolution of mankind is based on the assumption that the same cultural features must always have developed from the same, single causes, and that a logical or psychological sequence of steps represents also a chronological sequence.¹ We have pointed out that in special fields, when the identical social groups carry on certain occupations uninterruptedly there may be a reason for upholding this theory. Not so when these conditions are not given. Thus the inference that maternal institutions precede paternal ones, to which I referred before, is based on the generalization that because in a number of cases paternal families have developed from maternal ones, therefore all paternal families have developed in the same way. There is no proof showing that the history of family organization is controlled by a single set of specific conditions, that the man's or the woman's family or any other group exerted a controlling influence, nor that there is any inherent reason that one type must have preceded the other one. We may, therefore, just as well conclude that paternal families have in some cases arisen from maternal institutions, in other cases in other ways.

¹ See pp. 174, 178.

In the same way it is inferred that because many conceptions of the future life have evidently developed from dreams and hallucinations, all notions of this character have had the same origin. This is true only if it can be shown that no other causes could possibly lead to the same ideas.

To give another example. It has been claimed that among the Indians of Arizona, pottery developed from basketry, and it has been inferred that all pottery must therefore be later in the cultural development of mankind than basketry. Evidently this conclusion cannot be defended, for pottery may develop in other ways.

As a matter of fact, quite a number of cases can be given in which convergent evolution, beginning from distinct beginnings, has led to the same results. I have referred before to the instance of primitive art, and have mentioned the theory that geometrical form develops from realistic representations, which lead through symbolic conventionalism to purely aesthetic motives. If this were true a great diversity of objects might in this way have given rise to the same decorative motives, so that the surviving motive would not have had the same realistic origin; but more important than this, geometrical motives of the same type have developed from the tendency of the artist to play with his technique as the virtuoso plays on his instrument; that the expert basket-weaver, by varying the arrangement of her weave, was led to the development of geometrical designs of the same form as those that were developed in other places from realistic representations. We may even go a step farther and recognize that geometrical forms developed from the technique suggested animal forms, and were modified so as to assume realistic forms; so that in the case of decorative art the same forms may just as well stand at the beginning of a series of development as at the end (Boas 13).

A serious objection to the reasoning of those who try to establish lines of evolution of cultures lies in the frequent lack of comparability of the data with which we are dealing. Attention is directed essentially to the similarity of ethnic phenomena, while the individual variations are disregarded. As soon as we turn our attention to these we notice that the sameness of ethnic phenomena is more superficial than essential, more apparent than real. The unexpected similarities have attracted our attention to such an extent that we have disregarded differences. In the study of the physical traits of distinct social groups, the reverse mental attitude manifests itself. The similarity of the main features of the human form being self-evident, our attention is directed to the minute differences of structure.

Instances of such lack of comparability can easily be given. When we speak of life after death as one of the ideas which develop in human society as a psychological necessity, we are dealing with a most complex group of data. One people believes that the soul continues to exist in the form that the person had at the time of death, without any possibility of change; another one that the soul will be reborn at a later time as a child of the same family; a third one that the souls will enter the bodies of animals; and still others that the shadows continue our human pursuits, waiting to be led back to our world in a distant future. The emotional and rationalistic elements which enter into these various concepts are entirely distinct; and we perceive that the various forms of the idea of a future life have come into existence by psychological processes that are not at all comparable. In one case the similarities between children and their deceased relatives, in other cases the memory of the deceased as he lived during the last days of his life, in still other cases the longing for the beloved child or parent, and again the fear of

death—may all have contributed to the development of the idea of life after death, the one here, the other there.

Another instance will corroborate this point of view. We have already referred to “totemism”—the form of a society in which certain social groups consider themselves as related in some way to a certain species of animals or to a class of objects. This is the generally accepted definition of “totemism”; but I am convinced that in this form the phenomenon is not a single problem, but embraces the most diverse psychological elements. In some cases the people believe themselves to be descendants of the animal whose protection they enjoy. In others an animal or some other object has appeared to an ancestor of the social group and promised to become his protector, and the friendship between the animal and the ancestor was then transmitted to his descendants. In still other cases a certain social group in a tribe is believed to have the power of securing by magical means and with great ease a certain kind of animal or of increasing its numbers, and a supernatural relation is established in this way. It will be recognized that here again the anthropological phenomena which are in outward appearances alike are, psychologically speaking, entirely distinct, and that consequently psychological laws covering all of them cannot be deduced from them (Goldenweiser).

Another example may not be amiss. In a general review of moral standards we observe that with increasing civilization a gradual change in the valuation of actions takes place. Among primitive man, human life has little value, and is sacrificed on the slightest provocation. The social group among whose members altruistic obligations are binding is small; and outside of the group any action that may result in personal gain is not only permitted, but approved. From this starting-point on we find an ever-

increasing valuation of human life and an extension of the size of the group among whose members altruistic obligations are binding. The modern relations of nations show that this evolution has not yet reached its final stage. It might seem, therefore, that a study of the social conscience in relation to crimes like murder might be of psychological value, and lead to important results, clearing up the origin of ethical values. From an ethnological point of view murder cannot be considered as a single phenomenon. Unity is established by introducing our juridical concept of murder. As an act murder must be considered as the result of a situation in which the usual respect for human life is superseded by stronger motives. It can be considered as a unit only in regard to the reaction of society to murder which is expressed in the permission of revenge, the payment of compensation or punishment. The person who slays an enemy in revenge for wrongs done, a youth who kills his father before he gets decrepit in order to enable him to continue a vigorous life in the world to come, a father who kills his child as a sacrifice for the welfare of his people, act from such entirely different motives, that psychologically a comparison of their actions does not seem permissible. It would seem much more proper to compare the murder of an enemy in revenge with destruction of his property for the same purpose; or to compare the sacrifice of a child on behalf of the tribe with any other action performed on account of strong altruistic motives, than to base our comparison on the common concept of murder (Westermarck).

These few data may suffice to show that the same ethnic phenomenon may develop from different sources; and we may infer that the simpler the observed fact, the more likely it is that it may have developed from one source here, from another there.

When we base our study on these observations, it appears that serious objections may be made against the assumption of the occurrence of a general sequence of cultural stages among all the races of man; that rather we recognize both a tendency of diverse customs and beliefs to converge towards similar forms, and a development of customs in divergent directions. In order to interpret correctly these similarities in form, it is necessary to investigate their historical development; and only when the historical development in different areas is the same, will it be admissible to consider the phenomena in question as equivalent. From this point of view the facts of cultural contact assume a new importance (see p. 169).

Culture has also been interpreted in other ways. Geographers try to explain forms of culture as a necessary result of geographical environment.

It is not difficult to illustrate the important influence of geographical environment. The whole economic life of man is limited by the resources of the country in which he lives. The location of villages and their size depends upon the available food-supply; communication upon available trails or waterways. Environmental influences are evident in the territorial limits of tribes and peoples; seasonal changes of food-supply may condition seasonal migrations. The variety of habitations used by tribes of different areas demonstrate its influence. The snow house of the Eskimo, the bark wigwam of the Indian, the cave dwelling of the tribes of the desert, may serve as illustrations of the way in which in accordance with the available materials protection against exposure is attained. Scarcity of food may condition a nomadic life, and the necessity of carrying household goods on the back favors the use of skin receptacles and baskets as substitutes for pottery.

The special forms of utensils may be modified by geographic conditions. Thus the complex bow of the Eskimo which is related to Asiatic forms takes a peculiar form owing to the lack of long, elastic material for bow staves. Even in the more complex forms of the mental life, the influence of environment may be found; as in nature myths explaining the activity of volcanoes or the presence of curious land forms, or in beliefs and customs relating to the local characterization of the seasons.

However, geographical conditions have only the power to modify culture. By themselves they are not creative. This is clearest wherever the nature of the country limits the development of culture. A tribe, living without foreign trade in a given environment is limited to the resources of his home country. The Eskimo has no vegetable food supplies to speak of; the Polynesian who lives on an atoll has no stone and no skins of large mammals; the people of the desert have no rivers furnishing fish or offering means of travel. These self-evident limitations are often of great importance.

It is another question whether external conditions are the immediate cause of new inventions. We can understand that a fertile soil will induce an agricultural people whose numbers are increasing rapidly to improve its technique of agriculture, but not, how it could be the cause of the invention of agriculture. However rich in ore a country may be, it does not create techniques of handling metals; however rich in animals that might be domesticated, it will not lead to the development of herding if the people are entirely unfamiliar with the uses of domesticated animals.

If we should claim that geographical environment is the sole determinant that acts upon the mind assumed to be the same in all races of mankind, we should be necessarily

led to the conclusion that the same environment will produce the same cultural results everywhere.

This is obviously not true, for often the forms of cultures of peoples living in the same kind of environment show marked differences. I do not need to illustrate this by comparing the American settler with the North American Indian, or the successive races of people that have settled in England, and have developed from the Stone Age to the modern English. It may, however, be desirable to show that among primitive tribes, geographical environment alone does not by any means determine the type of culture. Proof of this may be found in the mode of life of the hunting and fishing Eskimo and the reindeer-breeding Chukchee (Bogoras, Boas 3); the African pastoral Hottentot and the hunting Bushmen in their older, wider distribution (Schultze); the Negrito and the Malay of southeastern Asia (Martin).

Environment always acts upon a preexisting culture, not on an hypothetical cultureless group. Therefore it is important only insofar as it limits or favors activities. It may even be shown that ancient customs, that may have been in harmony with a certain type of environment, tend to survive under new conditions, where they are of disadvantage rather than of advantage to the people. An example of this kind, taken from our own civilization, is our failure to utilize unfamiliar kinds of food that may be found in newly settled countries. Another example is presented by the reindeer-breeding Chukchee, who carry about in their nomadic life a tent of most complicated structure, which corresponds in its type to the older permanent house of the coast dwellers, and contrasts in the most marked way with the simplicity and light weight of the Eskimo tent.¹ Even among the Eskimo, who have so

¹ Bogoras, pp. 177 et seq.; Boas 3: p. 551.

marvelously well succeeded in adapting themselves to their geographical environment, customs like the taboo on the promiscuous use of caribou and seal prevent the fullest use of the opportunities offered by the country.

Thus it would seem that environment has an important effect upon the customs and beliefs of man, but only insofar as it helps to determine the special forms of customs and beliefs. These are, however, based primarily on cultural conditions, which in themselves are due to other causes.

At this point the students of anthropo-geography who attempt to explain the whole cultural development on the basis of geographical environmental conditions are wont to claim that these causes themselves are founded on earlier conditions, in which they have originated under the stress of environment. This claim is inadmissible because the investigation of every single cultural feature demonstrates that the influence of environment brings about a certain degree of adjustment between environment and social life, but that a complete explanation of the prevailing conditions, based on the action of environment alone, is never possible. We must remember, that, no matter how great an influence we may ascribe to environment, that influence can become active only by being exerted upon the mind; so that the characteristics of the mind must enter into the resultant forms of social activity. It is just as little conceivable that mental life can be explained satisfactorily by environment alone, as that environment can be explained by the influence of the people upon nature, which, as we all know, has brought about changes of watercourses, the destruction of forests and changes of fauna. In other words, it seems entirely arbitrary to disregard the part that psychical or social elements play in determining the forms of activities and

beliefs which occur with great frequency all over the world.

The theory of economic determinism of culture is no more adequate than that of geographic determinism. It is more attractive because economic life is an integral part of culture and intimately connected with all its phases, while geographical conditions always remain an external element. Still, there is no reason to call all other phases of culture a superstructure on an economic basis, for economic conditions always act on a preexisting culture and are themselves dependent upon other aspects of culture. It is no more justifiable to say that social structure is determined by economic forms than to claim the reverse, for a preexisting social structure will influence economic conditions and *vice versa*, and no people has ever been observed that has no social structure and that is not subject to economic conditions. The claim that economic stresses preceded every other manifestation of cultural life and exerted their influences on a group without any cultural traits cannot be maintained. Cultural life is always economically conditioned and economics are always culturally conditioned.

The similarity of cultural elements regardless of race, environment and economic conditions may also be explained as a result of parallel development based on the similarity of the psychic structure of man the world over.

Bastian¹ recognizes the great importance of geographical environment in modifying the analogous ethnic phenomena, but does not ascribe to them creative power. To him the sameness of the forms of thought found in regions wide apart suggested the existence of certain definite types of thought, no matter in what surroundings man

¹ See Achelis, pp. 189 et seq.

may live, and what may be his social relations. These fundamental forms of thought, "that develop with iron necessity wherever man lives," were called by him "elementary ideas." He denies that it is possible to discover the ultimate sources of inventions, ideas, customs and beliefs, which are of universal occurrence. They may have arisen from a variety of sources, they may be indigenous, they may be imported, but they are there. The human mind is so formed that it evolves them spontaneously, or accepts them whenever they are offered to it. The number of elementary ideas is limited. In primitive thought as well as in the speculations of philosophers the same ideas appear again and again in the special form given to them by the environment in which they find expression as "folk-ideas" (Völkergedanken).

The elementary ideas appear to him as metaphysical entities. No further thought can possibly unravel their origin, because we ourselves are compelled to think in the forms of these same elementary ideas.

In many cases a clear enunciation of the elementary idea gives us the psychological reason for its existence. To exemplify: The mere statement that primitive man considers the animals as gifted with all the qualities of man shows that the analogy between many of the qualities of animals and human qualities has led to the view that all the qualities of animals are human. The fact that the land of shadows is so often placed in the west suggests its localization at the place where the sun and the stars vanish. In other cases the causes are not so self-evident; for example, in the widespread customs of restrictions of marriage which have puzzled many investigators. The difficulty of this problem is proved by the multitude of hypotheses that have been invented to explain it in all its varied phases.

There is no reason why we should accept Bastian's renunciation. The dynamic forces that mould social life are the same now as those that moulded life thousands of years ago. We can follow the intellectual and emotional drives that actuate man at present and that shape his actions and thoughts. The application of these principles will clear up many of our problems.

Our previous considerations enable us also to evaluate the claim that the biological character of a race determines its culture. Let us admit for the moment that the genetic make-up of an individual determines his behavior. The actions of his glands, his basal metabolism and so on are elements that find expression in his personality. Personality in this sense means the biologically determined emotional, volitional and intellectual characteristics which determine the way in which an individual reacts to the culture in which he lives. The biological constitution does not make the culture. It influences the reactions of the individual to the culture. As little as geographical environment or economic conditions create a culture, just as little does the biological character of a race create a culture of a definite type. Experience has shown that members of most races placed in a certain culture can participate in it. In America men like Juárez, President of Mexico, or the highly educated Indians in North and South America are examples. In Asia the modern history of Japan and China; in America the successes of educated Negroes as scientists, physicians, lawyers, economists are ample proof showing that the racial position of an individual does not hinder his participation in modern civilization. Culture is rather the result of innumerable interacting factors and there is no evidence that the differences between human races, particularly not between the members of the White race

have any directive influence upon the course of development of culture. Individual types, ever since the glacial period, have always found an existing culture to which they reacted.

The range of individual differences that occur within a race has never been investigated in a satisfactory manner. We have shown that the variability of bodily form of individuals composing each race is great. We cannot yet give exact data regarding the variability of fundamental physiological traits, much less of more intangible features such as physiologically determined personality, but even qualitative observation shows that the variability in each racial unit is great. The almost insurmountable difficulty lies in the fact that physiological and psychological processes and particularly personality cannot be reduced to an absolute standard that is free of environmental elements. It is, therefore, gratuitous to claim that a race has a definite personality. We have seen that on account of the variability of individuals composing a race, differences between larger groups of slightly varying human types are much smaller than the differences between the individuals composing each group, so that any considerable influence of the biologically determined distribution of personalities upon the form of culture seems very unlikely. No proof has ever been given that a sufficiently large series of normal individuals of an identical social environment but representing different European types, perhaps the one group, blond, tall, longheaded, with large nose; the other darker, shorter, roundheaded, with smaller noses will behave differently. The opposite, that people of the same type—like the Germans in Bohemia and the Czechs—behave quite differently is much more easily given. The change of personality of the proud Indian of pre-White times to his degenerate offspring is another glaring example.