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Anthropological Horizons

Report on a Symposium Organized and Chaired by Professor A. L. Kroeber

- Anthropological Horizons: A Symposium
- September 19-24, 1960, at Burg Wartenstein, Austria.
- Sponsored by the Wenner-Gren Foundation for Anthropological Research.
- Organizing Chairman: A. L. Kroeber, Professor Emeritus of Anthropology, University of California at Berkeley, Berkeley, California, U.S.A.

Participants:

- JAMES S. ACKERMAN, Princeton University, Princeton, New Jersey.
- IGNACIO BERNAL, Instituto Nacional de Antropología e Historia, Mexico D. F.
- RUSHTON COULBORN, Department of History, Atlanta University, Atlanta, Georgia.
- JOHN W. DODDS, Special Program in Humanities, Stanford University, Stanford, California.
- C. VON FÜRER-HAIMENDORF, School of Oriental and African Studies, University of London, London W.C. 1, England.

Components and Holism of Anthropology

The first session was devoted to a discussion of the different kinds of study which compose anthropology and to anthropology as a whole, or as wholes. The different kinds of study considered were chiefly natural science and social science, but some attention was given also to physical science, and there was also a review of "applied anthropology," which is to say, the use of anthropological knowledge in political or economic administration and reform. "Holism" was used chiefly in its strict meaning as the discernment of wholes and the relatedness of their parts-this in various anthropological operations. The discussion was logically complementary to the analysis of anthropology into different kinds of study or practice.

A good deal of the first session was given to discussion of the natural science and the social science aspects of anthropology and to finding distinctions and relationships between the two. Anthropology began as a natural science or even as natural history. Neither Frazer nor Tylor nor Bachhofen was a social scientist—although it might be con-

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- Rapporteur: Rushton Coulborn.
- Preparation: The Chairman prepared in advance and distributed to all par-

tended that Tylor had some connection, through the statistical studies in England in the 1830's, with the English 18th-century social science tradition. On the other hand, Tylor's correlations between physiology and psychology can perhaps be considered an early foreshadowing of the anthropologist's present interest in psychological matters. They show a certain affinity with biology, an affinity which anthropology has not lost. The present association between anthropology and psychology became possible when psychology escaped from the tutelage of philosophy and became a science of its own, and the relation of culture with the mind, or with personality, has now become an important part of anthropology. Another relationship which shows anthropology in its character as a natural science is its affinity with linguistics although that affinity may also be considered to have both a social science and a humanistic character, since linguistics has itself both these aspects.

The empirical and inductive side of anthropology gives an affiliation with sociology, as Singer pointed out, and so tends to make it a social science. This tendency was adumbrated early, but it ticipants a preliminary "Agenda." After incorporating the comments received he distributed a "Revised Agenda" (pages 94–97) which served as the basis for discussion.

Discussion:

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This report of the discussion will be its only publication. The Symposium met in 12 sessions, reported below:

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was not until Malinowski that real social science in anthropology appeared. One of anthropology's chief distinctions as a social science is that it can be comparative, that it can make use of the comparative method. Kroeber had experienced the growth of the social science side of anthropology in his own lifetime. It remains, however, rather a special kind of social science, concerned with patterns [Gestalten] much more than with causality—there are not, in fact, any actual "laws" in anthropology. Again, testing of hypotheses has only recently come into anthropology.

Archaeology came in for a good deal of discussion. The Conference was disposed definitely to claim it as a part of anthropology. It was thought to be closely akin to ethnology, its data often to be used together with ethnological data. Most members of the Conference regarded it primarily as a natural science, but it was agreed also that it has close affiliation with history and with the social sciences. By reason of its affiliation with history and because its best "finds" may be regarded as objets d'art, it may be said also to be in the humanities. If this is sound, then anthropology extends itself both into the

natural sciences and the social sciences and into the humanities. Kroeber was even disposed to think that both archaeology and ethnology had to be classed as natural sciences in a physical sense since they employ physical things, that is to say, artifacts, and that these can be classified on a purely physical basis.

In practice, archaeology may be said to be of two different kinds, although this is not much more than a historical accident. New World archaeology is regarded as akin to ethnology, as is shown by the museums in which its materials arc stored-for example, the Peabody at Cambridge. The remains found by Old World archaeologists belong to an earlier era and are found stored in different places, such as, at Cambridge, the Fogg Art Museum, which rarely has anything much to do with the Peabody. Bernal pointed out that New World prehistoric remains had recently made the grade as ancient art in the Louvre.

Lévi-Strauss called attention to two different aspects in art as well as language, i.e. code and message. When a work of art belongs to our own civilization or to a comparable one, it is assumed that the code is known and the interest is entirely focused on the particular message conveyed by a particular artist in a particular work of art. In such cases, the object concerned ends up in an "art museum." On the other hand, when the work of art comes from wholly different cultures, such as the so-called "primitive" ones, not only the message but also the code is unknown and the interest is first of all focused on the structure of the code which must be deciphered in order to understand the message. However, should this first step be successfully achieved, it will only put before us the evidence that the message was not intended for us. In this case, the object ends up in the anthropological museum.

Classical archaeology, as von Fürer-Haimendorf remarked, is on yet another basis. It is clearly in the "art and archaeology" class, but, owing to the wealth of written record which goes with it in the composition of classical history, or of treatises on other matters concerned with Greece and Rome, archaeology occupies rather a secondary place in the evidence. Unlike some other social sciences, notably economics, political science, and sociology, anthropology did not start off with an application to actual social life. Applied anthropology is in fact a very recent thing, which began only after the start of the Second World War. Applied anthropology is chiefly a study of non-Western peoples undergoing Westernization; hence its large growth during and especially since the last war. There has been some suspicion of the applied anthropologist

on the part of other reformers, such as administrators setting up new systems of education or sanitation and the like. This has chiefly been because the anthropologist was frequently sympathetic with the administered and much less sympathetic with the administrators. More and more, however, the administrators themselves are non-Westerners, and, consequently, the moral problem of the anthropologist himself tends to diminish and, accordingly, the suspicion of him on the part of the administrator. The government of India now employs quite a number of anthropologists in administrative capacities, Fürer-Haimendorf said. But the difficulties were not all of others' making: there have been a number of anthropologists who felt that applied anthropology was not quite a pure science and should not be countenanced. In some places, however, this trouble never arose; in Mexico, for example, anthropologists have always been ready and anxious to work upon practical problems.

There was some discussion as to just what the anthropologist can do to facilitate the Westernization of non-Western peoples. The Conference felt that his main work should be preliminary, substantive changes being the business of others, that the anthropologist could impart general wisdom and a sharpened sense of realities, rather than draw up or influence specific policies.

The Conference then moved on to its last subject of this session, anthropology as a whole or, as it was also put, holism in anthropology. Kroeber and Lévi-Strauss were firmly of the opinion that anthropology should hold together as a total science and not be dispersed into specialties. Most of the Conference agreed with them, but there was a minority opinion, perhaps not very firmly held, that there are at least difficulties in holding the entire science together and that to do so may jeopardize some of its valuable special results. Anthropologists have little difficulty in doing a small community study in a holistic manner, that is to say, seeing its ethnological, its archaeological, its linguistic, economic, political and all other aspects, and putting the lot of them together. This is how anthropology began and that is why there are so many different aspects of it. When, however, the anthropologist comes to confront largescale civilized societies, as he does increasingly frequently nowadays, great difficulties arise. These are, of course, the difficulties of not being able to know so large and complex a society sufficiently fully. But there is an obvious solution to this: the anthropologist must borrow the work of other scholars -of the political historian, the art historian, and of other anthropologistsand so make his synthesis. The material does not all present itself to him in direct perception, but, as Singer said, it can readily be made to present itself to the mind's eye and so be seen and understood as a whole.

Personality & Culture

The discussion opened with a short review of the history of the study of personality and culture by Singer. He distinguished three phases:

1. An early phase when it was not quite clear what use an anthropologist might make of personality study. An aim emerged, however, of finding some scientific substitute in terms of culture for the raw concept of human nature. These studies began in the early 1920's. Earlier anthropological interest in psychology, as early interests in psychology generally, were in problems of cognition and perception; this interest later yielded to an interest in motivation and personality organization.

2. About 1935, a second kind of problem arose, the search for a modern version of the idea of national character.

3. The problem of the relation of the individual personality to culture, one of the original problems of the field, has begun to be worked on very recently. This is the most important problem, but little has yet been done about it (Singer 1960).

The work of psychologists has a bearing on all personality problems, and the anthropologist must decide whether he will use psychologists' materials or will not. A number of attempts have been made to use them, but there are anthropologists who have not used them or have used them only in an incidental or rather an amateurish manner, somewhat as historians have done.

MacRae suggested that in all social investigation there must be an ad hoc psychology; he believed it was not invariably necessary to define it and that it might even be advantageous not to do so. The anthropologist, however, finds it easier than the historian does to be scientific with psychologists' data if he chooses to use it.

Use of psychological data and of the aid of psychologists have varied to some extent in the three stages of the development of personality and culture studies outlined by Singer. In the first stage, there was not really very much psychological influence, although the importance of Freud loomed up in the background. Mead and Benedict, especially Mead in her South Sea studies, endeavored to show that there was not one human nature but several human natures, the implication being that we of Western culture must not measure peoples of other cultures by the conception of human nature rooted in our own

culture. Neither Mead nor Benedict, nor Malinowski, who had somewhat similar aims, made use of formal psychological concepts although Benedict can be found using such psychological terms as "paranoia" and "megalomania." Kroeber showed that although neither Mead nor Benedict used technical psychological conceptions, both were psychologically perceptive, and both used this faculty in doing their work, which, however, remained essentially ethnographic. Their problems did not appear to them essentially psychological, nor even concerned with individual personalities; instead they were cultural and collective. Lévi-Strauss cited as important and analogous Sartre's discussion of American culture and personality studies in his Critique de la Raison dialetique.

The second stage of personality studies, which sought to find a group personality of peoples, was essentially a modern substitute for the idea of national character, or group character. In these studies, the psychologists were brought in in force, and even the psychiatrists came along. Attempts were made to set up collective personality structures. There were cases in which joint studies occurred, the anthropologist producing the data and the psychologist seeking to work the data into concepts. Kluckhohn and the Leightons attempted to do this, and Kroeber did something rather similar in introducing Erickson to the study of the Yurok. Some anthropologists wished to use psychological instruments alone for this purpose, believing them to be more scientific than anything available in ethnography itself. Singer finds, however, that these "blind interpretations" are scarcely possible in reality; the psychologist can hardly make them without initial hints from the ethnographer. Both ethnographer and psychologist could, in fact, often use much the same data, but the two kinds of scientists had respectively different frameworks of assumption and so were apt to interpret the data in quite different ways. This might not be a bad thing, for the contrasting interpretations could very well be complementary or supplementary.

In the third phase of personality studies, psychology remains important. These are the studies of the influence of the individual personality on the culture and vice versa, but they have so far produced so little that it is hard to say how far psychological instruments can be employed in doing them.

Personality and culture studies have been, so far, an American undertaking. The British have shown little interest, possibly a certain amount of suspicion. Nevertheless, Evans-Pritchard has shown some psychological interest in the relation of the Nuer to their cattle. and Fortes a similar interest in his conception of the "domestic cycle," In these cases, however, the use is somewhat like that of the historian, not technically psychological. Lévi-Strauss said that Durkheim and Tarde were opposed to the use of psychological material, but that Mauss foresaw that it would be necessary to anthropology. At present in France there is some fear lest personality studies lead to the discovery of deep-seated differences between persons or groups which could conceivably stimulate political troubles analogous to those based on racist theory. In Germany little interest has arisen so far in the use of psychology as an aid in anthropology. The value of culture and personality studies is probably to show what the possibilities for development of personality are within a given culture. Kroeber accepted this as a definition of what he means when he says that the study of personality can impart depth to ethnological studies.

Creativity

In the discussion of this subject the extreme difficulty of treating it in a scientific manner was agreed upon. It was also agreed, however, that the subject is of enormous interest and that it cannot be evaded by anthropology. The fact that the subject is accessible only with difficulty to science inevitably restricted the treatment of it to opinions, even to guesses. Most existing opinions were expressed, but little, if anything, new was said.

MacRae introduced a distinction between creativity and mere innovation; the latter may be mistaken for the former and the opposite error has also been made.

To distinguish between the two is, however, an exceedingly difficult thing, and Kroeber suggested that the anthropologist has nothing in his training to enable him to make this distinction; he must proceed on the basis of intuition. There is a premium upon innovation in the present-day Western society; novelty is accorded high value. Much of this novelty, however, is quite worthless from an aesthetic point of view, and it may well be that there is so much of it that it inhibits actual creativity. We insist upon novelty even within a given style; we insist upon it within a given form. But we like it best when it ruptures style and form and is utterlyit may be said, devastatingly-new. Neither in older civilized societies nor in primitive societies was this so, and it may be suggested that in civilized societies essential differences are found at different stages in their development;

as the societies reach high development, novelty is demanded more and more until it becomes almost a craze. In a primitive society a given style may last for a thousand years and more, but this need not inhibit the creativity of the artists who work within the style. It is also true that in a civilized society a given style may last a long time. The artistic styles of ancient Egypt are not now believed to have remained always the same; the extent of innovation in them was, however, rarely great. But that by no means prevented creativityor, as we sometimes say, originality. It has long been a commonplace in art criticism that the creative artist uses the conventions or rules of his art, presumably rules of style or form, as an actual opportunity for creation. It would seem that here we have a clear distinction between innovation as the production of mere novelty and true creativity.

A variety of other observations and opinions were put forward. Ackerman, for example, pointed out that there can be good and bad repetitive products. While Muller thought it always possible to know the great works of the past, there were several others who doubted this, and Wolf said that, however great the Parthenon may be, in its heyday it was painted in gaudy colors and was full of trivial statues. Bernal said that the archaeologist is often surprised to find objects of great aesthetic value in positions of no importance, whereas in important positions, that is to say, in prominent places in great public buildings, he often finds trash. Lévi-Strauss felt some doubt of the excessive novelty of recent Western art, suggesting that this may be no more than a matter of appearance, depending on how close to the phenomenon the observer is. Von Fürer-Haimendorf held that the influence of religion is of great importance; it has been a very powerful incentive to artistic creativity, more powerful often than purely aesthetic enjoyment of art.

In the closing exchanges, Kroeber suggested that anthropologists are not equipped to do the art critic's work which, indeed, the art critic does adequately; he felt able to see Beethoven as a point of evolution in a historic style, but felt unsure in making an absolute assessment of Beethoven's achievement. Ackerman added that critics have said much about the development of style, but that anthropologists could possibly contribute something of their own; since critics have never done comparative studies and anthropologists are well equipped to supply these, they may contribute

something very important. Hymes suggested that creativity or creative vitality (as distinct from innovation) might be characterized as *innovation at need* within a tradition, a criterion which Kroeber thought would go part of the way.

Anthropology & Religion

The session was opened by Kroeber, in the Chair, with a statement about recent changes in religion. He thought it possible to discern the beginning of "secularization" in Europe as far back as the 13th century; it was a trend implicit in the intellectual quickening which started then. The anthropologist's interest in religion became strong with Frazer, and Frazer's comparative study of religions had also had widespread and powerful, but unintended, influence outside the scholarly world in liberating many minds from belief. This latter had strengthened and accelerated the process of secularization so that fewer and fewer persons felt the emotional core of religion with the passage of each decade. The process had passed beyond the Western world, as Western culture impinged upon other cultures, and was, and is, in operation upon other societies and their religions.

Kroeber cited Julian Huxley's advocacy of a new religion of his own—Huxley's—invention as a sign of the times. It showed the void left by the failure of traditional religion, and the failure appeared to be confirmed by the impunity with which Huxley was able to propound his doctrine.

The discussion which followed this opening fell into two parts. The first was concerned with the facts—whether religion is weaker than it was and, if so, how, or whether it has changed in some other way. The second part of the discussion was analytical: in it the Conference sought to show the components of religion, their historical development, and their social functions.

Lévi-Strauss called attention to the work of Gabriel Le Bras (1955)² upon the changing practice of religion in France; in Le Bras' work techniques are devised for describing the changes quantitatively. Von Fürer-Haimendorf and Bernal offered instances of contemporary strength of religion. There had been an undoubted resurgence of Buddhism in Ceylon after achievement of political independence, Fürer-Haimendorf said, among educated people, as well as among others. He thought something analogous had happened in India although the evidence for India was less clear. In Russia, he had found that there is an increase in numbers baptized

even though few churches are open. Censuses taken at Oxford and Cambridge show an increasing interest and activity in religion on the part both of graduates and undergraduates.

Bernal thought that in Mexico and elsewhere in Latin America the vitality of religion was shown in the late 20's and early 30's by the resistance of the people to state persecution of the church. In Mexico City more churches have been built since the Revolution than during the whole colonial period, and the building has been done by popular subscription and support; the church is not now supported by the state or by gifts from large corporations or other wealthy donors, as in the United States.

Others were doubtful of the meaning and validity of statistics on religious observance, church membership, etc., or they suspected a sharp difference between professed belief and practice. Will Herberg's book, Protestant, Catholic, Jew, (1955) was cited as showing a substantial difference in the U.S. between contemporary and traditional religion. Some doubt was expressed that such a thing as secularization really has occurred, but Bernal and Singer believed that it has a real existence as an ideology, Singer citing Comte and identifying the secularist outlook with Comte's positivism. Singer went on to say that he thought considerable changes were occurring in a number of places both in belief and in manner of observance in religion today. He instanced the researches of Father Fichter (1954) in New Orleans, which have shown considerable change in the states of mind of Catholic parishioners. Singer found, further, a shift away from traditional observances in Southern India, the reason being that there is not enough time for all of them under modern social conditions: celebration of festivals has become perfunctory, but, in compensation, there is a kind of revivalism, for example, in meetings once a week to sing devotional songs and the like. This is not a rejection of religion; rather, it is an enforced change of practice, but a manifestation at the same time of an urge to hold to tradition. Something different, but perhaps not wholly different, was reported from Russia by Fürer-Haimendorf, namely, the belief that the "just society," that is to say, the Communist society, will really come; this belief amounts to eschatology and is often held with a firm moral conviction by quite simple people.

There was some discussion of the tolerance of the present day as compared with the past. Kroeber pointed out that Socrates, in enlightened Athens, nevertheless drank the hemlock. Julian Huxley's new religion came in for further consideration, Kroeber saying that there was little reaction against it, whereas there could be no doubt what would have happened to Huxley in l4thcentury Europe, or even in Calvin's Geneva. Fürer-Haimendorf found much tolerance of all religions in India, and Coulborn thought that India has made a special achievement of this kind so that in recent centuries almost anybody who has something to say on "spiritual" matters will have a hearing.

Perhaps the most important subject raised in this part of the session was whether nationalism or something connected with it can be a substitute for religion; if so, this might be considered a revival of the old function of religion, perhaps its original function, of binding a society or community together. Milke thought that Hitler had certainly established a new religion in Germany. and that toward the end of the last war many had believed in it and had even been ready to die for it. He thought that something similar was true in some Communist countries. While he thought that traditional religion will still last a long time, it was his opinion that, if a really great religious leader should arise, there would be a chance of a religious revival on a vast scale. He quoted in support the number of sects which arise from time to time, showing the obvious readiness of people to accept a new revelation. Ackerman put forward Israel as a country in which national and religious feeling are interestingly and perhaps confusingly related. It appeared to him too that, outside Israel, Iudaism both in its more orthodox and its less orthodox forms has considerable tenacity.

During the airing of these opinions, there was mention from time to time of the supernatural as an element in religious beliefs. This now led Lévi-Strauss to offer an analysis of religion, which introduced the second part of the discussion. He distinguished three elements in religion, mythical thought, the holding of a series of fixed beliefs, and the practice of cult. Mythical thought he regarded as something intellectual, a way of explaining things, which seeks to overcome ignorance not by a causal but by a structural explanation; mythical thought does not, like scientific thought, explain by abstract generalization; it explains by organizing and interpreting practical experience. Beliefs have their relation to myth, but they are something crystallized out or inherited from another source and they are established and fixed, often backed by authority; though fixed, however, any belief may be changed by strengthening or weakening and it might even, in theory at least, cease altogether. The practice of cults is a mat-

² See also the journal Archives de Sociologie des Religions.

ter of ceremony, the rehearsal of rituals, an exercise which sustains conformity. He believed that myth held a place of great importance, was usually founded upon events which had happened in the past, and, as subsequently developed, offered a way of making the influence of the past effective in the present.

Coulborn cited Henri Frankfort's "mythopoeic thought," a historical concept, which, however, Frankfort himself had misapplied rather badly: he had cast all thought, both in civilized and primitive societies, before the Greeks into the mythopoeic category and had credited the Greeks with effecting an intellectual revolution, since which time thought has been scientific. Instead, the truth seems to be that every civilized society has begun its career with a long period in which myth has been paramount in thought. Even in that early time critical reasoning begins to be applied to the substance of the myth and empirical knowledge is collected. Consequently, as time passes, the knowledge of any civilized society becomes larger and its beliefs are based more and more upon empirically ascertained fact. It would, however, be idle to think that even the most successful of civilized societies ever escapes completely from myth; even our Western society today probably includes a good deal of myth in its science. Historical process is not only intellectual; it is also emotional. In the early days of a civilized society the enthusiasm and courage necessary to the creation of something new are based upon belief in the myth, a belief which is made possible by ignorance-more logically, by previous ignorance since myth is itself knowledge. This sort of enthusiasm and the courage founded upon it are lessened as inroads are made in the myth by empirical and critical thinking. Revivals, when faith and hope are renewed, can occur and they are well known in history. The depressing evidence of history is, however, that the more we come to face the hard realities of our existence, the less ready we become to support such an existence and the society which is necessary to it or seems to be necessary to it.

A discussion of the relation of scientific and mythological thought then followed. Lévi-Strauss would not draw a sharp distinction between the mythical and the rational, for both of them accomplish explanation, but the former operates with images, the latter with concepts; scientific thought explains abstractly; mythological thought organizes practical experience. Kroeber thought myth included also an aesthetic element, and Lévi-Strauss suggested that it is akin to art, which also draws upon practical experience by looking at the world and trying to use what it sees. Vedanta and scholastic philosophy were put forward as two examples of the combination of myth with reason, both of them being attempts to explain systematically and to form doctrine. A recent example of myth-making, by an individual, is the work of Father Teilhard de Chardin, which shows a Catholic priest forming a myth out of his own experience—one which happens to be acceptable neither to the church nor to scholars.

Then followed a discussion of the conflict between science and religion in the West. Singer felt that originally this conflict was essentially parochial to the West and that nothing quite of the kind had arisen in other societies. In Hinduism, for example, sacred literature is knowledge and all knowledge has remained one. But the West, from the 15th century on, produced a vast body of scientific knowledge which is now being passed on to other societies with the result that they have to reconcile their beliefs to it, something which is very difficult for them. It appears that in the West, religion constantly retreats before science, but, since the majority of people frequently understand rather little science, the conflict is mitigated and may perhaps never come to a conclusion. There remains the function of religion in binding a society together. The continuing reality of that function is shown by the desire of many individuals to be part of a large group. This has been understood since Durkheim studied the Australians, and religious organizations are often built upon this basis. All, or almost all, people like to belong to a large group, but not all like to do so to the same extent. There always seems to be a kind of spectrum of involvement both in the group and in religion from very much to very littleand the group in this sense includes the nation. There always have been and presumably there always will be skeptics of limited belief, who seek also to limit their involvement.

Linguistic Anthropology as an Emergent

Dodds, in the Chair, asked Hymes to make an opening statement. Linguistics, Hymes said, is necessarily important to anthropologists, as a practical tool, for empirical results, and for the theory of culture and of human nature. There must be a linguistic anthropology not governed by the limits which the linguistics of a certain time and place may set itself, but seeking to answer questions posed by the problems of anthropology. Linguistic anthropol-

ogy can be defined simply as the study of language (and speech) within the context of anthropology. Meaning and its systematic study, semantics, are always important to anthropologists, but for most linguists recently they have remained largely in the background, although this seems to be changing. An important use to anthropologists of linguistic material is for historical purposes, tracing relationships historically by means of language and discovering principles of change. Most such work has been done on the Indo-European languages, but in other language areas there remains much ignorance. The development of the comparative method over the decades was somewhat haphazard and unformalized in Indo-European linguistics, although there is now a tendency to idealize comparative linguistic studies in that area. On the part of Indo-Europeanists themselves there is a good deal of resistance to the search for deeper genetic relationships; they prefer to refine already established relationships. A large part of the recent development in methods and results for genetic classification has come from anthropology. In broadest historical terms, anthropology must permanently be concerned with the classification and interpretation of four sorts of resemblances among languages: generic resemblances common to all languages and serving to place language among other forms of communication; and specific resemblances, due to convergence and classified typologically, or due to diffusion and classified in terms of linguistic areas, or, best known, due to retention from a common ancestor and classified in terms of linguistic families. It is important to note that Kroeber's work has always shown interest in all of these.

For a period a divorce was felt between historical and descriptive linguistics in some quarters, with descriptivists treating language in terms of function and structure, but historical linguists treating language in terms of individual traits. N. S. Troubetzkoy and Roman Jakobson challenged this, and both they and Hoenigswald have made structural analyses of historical data.

The sounds which constitute the data of descriptive linguistics are treated as units which are discrete ("digital"), but they are not spoken discretely; in speech they come out as continuous. The development of certain machines toward the end of the last war led linguists to hope that a device such as the sound spectograph would help them all to agree on the phonemic analysis of languages, but this did not happen. The spectograph showed, not a succession of discrete phonemes, but a continuum of great complexity. This contrast between a continuously varying medium and a code of qualitative units is an important clue from linguistics to the nature of man's symbolic activity.

In response to a question by Dodds, Hymes said that anthropologists are interested in the origin of language; up until recently there had been a period when this was not considered a permissible or interesting question, but now it is considered so again, and some scholars are interested in communication among gibbons and among chimpanzees. Little is yet known about these matters.

Discussion began between Hymes, Kroeber, and Singer about histories of language and passed from there to theory. It appeared that linguistic studies tend to pass through alternating periods, first of textbook and handbook writing and then of special studies, as has also happened in social anthropology. As Kroeber remarked, there are special studies of pronouns and other parts of speech, but few general histories of any language; it would, in fact, be difficult to write general histories outside the Indo-European field, and even in it there are rather serious gaps in knowledge. As to relations between linguistic and general anthropological theory, Hymes mentioned Martinet's (1955) structural-functional analysis of change in phonemic systems. There has been debate in social anthropology as to whether a structural-functional theory could handle change, but Martinet has already shown that it can. The general theory assumes a tension between the asymmetry of the vocal organs and the tendency toward symmetry of the phonemic system.

Kroeber turned the discussion of change in the direction of cause, asking whether cause is always internal; Hymes did not think so, adding that linguists have the habit of using pigeonholes such as "prestige" in their explanations of change. Kroeber also raised the question whether diffusion has had much influence on the development of language, and Hymes replied that it has had an influence, but that linguists do not usually study the question why there has been diffusion-they do not concern themselves with culture contacts at all; all they do is to note the occurrence of loans, but not why the loans have occurred. Singer remarked that Hoenigswald had raised the question why words concerned with horses have dropped out of language, giving the answer that the automobile has rendered them obsolete; he and Hymes agreed that this was rather a simple ad hoc argument.

Hymes described the techniques of

linguistics as "a particular example of a certain kind of mathematics." An interest of the linguist is to find out systematically why language has developed as it has. Lévi-Strauss gave examples of other subjects being treated in the same manner. For example, Jean-Claude Gardin (1958) has used a system of punch cards to classify different kinds of bronze tools; the same system has been applied to vases and to Babylonian seals. The characters of these objects and the relationships between them are thus completely classified, so far as surviving specimens will permit. It is now possible to turn up at the same time all known cases of a particular device on a seal for comparison or for any other purpose. Bernal added that Zimmermann and other German scholars have done the same things for Maya glyphs. Hymes thought it problematical whether these procedures are identical with those followed for language. They seem, in Pike's (1954) terms, "etic" rather than "emic" classifications. Linguistic anthropologists, he said, begin with a phonetic alphabet, but they end with a phonemic system.

Interest moved to classification when Lévi-Strauss remarked that differences in languages exist on an unconscious level. Singer said that the Indians (Hindus) classify such differences by drawing the differences out from the unconscious or subconscious level, denoting them by a system of signs and then studying them in their contexts. They have done this with hand gestures in the contexts of the dance and of Yoga; the dance contexts are of two kinds, religious and secular, although the differences between the two are comparatively small, consisting in whether deities or human beings are addressed and such matters. And the Indians have also done this with music. Ackerman added that they have done it with architecture and von Fürer-Haimendorf added that they have not done it with painting. Singer thought that just this sort of thing should be done much more systematically in linguistics than it has been done. Kroeber said that the Indians have done this with grammar in their own special system of linguistics. He went on to suggest that this faculty for classification is something very special, that the Indians have it highly developed, and that it is antithetic to the historical outlook. Fürer-Haimendorf and Singer agreed with this opinion, and Fürer-Haimendorf said that the caste system is a characteristic product of a people who think classificatorily, tending as it does to eliminate historical considerations in social matters. Singer added that it is not at all surprising that the Indians very early developed mathematics and logic. He added

that the Indians have classified change itself in the system of Yugas.

Hymes thought the study of language and speech in their cultural context to be extremely important and to be something which the linguists alone cannot adequately study; linguists can set up a good grammar, but very rarely do they touch meaning and use in context. Some day, he thought, linguistic anthropologists should be able to define the functions of speech in terms of their crosscultural variation and revolutionary development. So far, ethnographic studies have scarcely yet found out such things as when people speak, when they do not speak, who speaks to whom and how, etc.; this is the immediate context of the use of language. It is necessary to go out into the community and find what goes on in these ways. Most people assume that the functions of language in society are always the same, but this is not so. The Mohave think that a newborn child can understand language. Generally, speech enters very differently into the socialization of children in different societies, but very little is known about this and work should be done on it. It is remarkable that some peoples hold fast to their language and some abandon it quite readily, the latter maintaining their identity by other means. In some instances, attachment to language is a religious matter; in others it is not at all. The verbal instruction of children in their acquisition of skills occurs very little in some societies and very much in our own society, but, again, anthropologists have not worked on this matter and linguists will not work on it. He regarded it as dangerous to isolate language too much; it is always a part of culture and should be so understood.

These remarks by Hymes somewhat broadened out the last matters discussed. The relations of language and culture took the place of the mere consideration of linguistic anthropology in its context. A number of questions were raised to begin with. Fürer-Haimendorf wanted to know why there should have developed a whole special vocabulary relating to eating, dressing, etc., among the Rana aristocracy in Nepal. He also wanted to know what governed differences in forms of address: in German some people are addressed as "Du" and some as "Sie," but in English, even though English society is highly stratified, everybody addresses everybody else as "you." MacRae put in that, although English society is highly stratified, it is very mobile and that this might have something to do with the matter.8 A

^a See Brown and Gilman 1960. MacRae mentioned a forthcoming work by Bernstein on differences of class speech in England.

few other questions were asked, but could not be answered. Fürer-Haimendorf asked why in some Western countries the educated use one language among themselves, but a different one or a different dialect or a different accent in speaking to outsiders; he thought such "talking down" limited to a few regions. As a parallel, Singer instanced the tradition in India that in Sanskrit drama women and servants spoke one dialect but that men, especially upper-class men, always spoke Sanskrit. Kroeber closed this part of the discussion by remarking that even persons concerned with language cannot always communicate with one another very easily. In the previous symposium at Burg Wartenstein on Comparative Aspects of Human Communication (CA II: 141) it was extremely difficult for the linguists and the engineers concerned with recording, broadcasting, etc. to understand one another's discourse. Only the presence of the Swedish phonetician, Fant, effected adequate communication; whereas the linguists treated speech as discrete, in phonemes, morphemes, etc., and the engineers saw it as continuous, Fant could see it both ways and so enabled the two parties to conduct their exchanges.

Singer now raised for discussion the Sapir-Whorf hypothesis that language influences not only the peoples' speech but also their thought, perception, and behavior. He asked whether anybody had anything new to contribute to this subject. Lévi-Strauss illustrated it by saying that Benveniste has shown that the categories of Aristotelian logic are merely those of Greek grammar; Fürer-Haimendorf added that some Indians say they can only think in English on some subjects. Kroeber, however, thought that we are not yet in a position to settle the issues brought up by Whorf.

Fürer-Haimendorf wanted to know why some people change their language and what happens when that occurs. He thought it had some effect on the thinking of the people in question. He also wanted to know why some languages spread—in particular, why some languages become linguae francae and some do not: why, for example, has Nepali been the lingua franca of Nepal in the last two hundred years, since the Gurkha conquest. Newari, the language of the Newars, who were the authors of most of the art of the region, never achieved the status of the lingua franca.

The session closed with a short discussion of bilingualism. MacRae, who is himself bilingual in English and Gaelic, said that when he moved from one language to the other he also moved from one culture to the other. He found no particular strain in this, perhaps because he had done it so often. Others thought, however, that the change-over from one language to another often does involve strain for those who have to do it. Singer thought strain affected a good many peoples of Asia who have to do that nowadays for professional, scientific, or political purposes.

The Future of Ethnology

Kroeber, in the Chair, introduced the subject. He thought that ethnology has a rather limited future but that there will be for a long time to come some descriptive work to be done on primitive non-literates, which will be a diminishingly important function of the anthropologist. Many primitives are rapidly becoming "imitation civilized" people so that the problem of getting to know about them will become a more and more difficult problem of deducing from their actual condition what their pristine condition was, without the aid of direct informants. There is today a very considerable accumulation of descriptive literature about primitives, the product of past ethnological work, and this can be used for information about them to far greater effect than it has been yet. Also archaeology will always remain a source of new information about primitives, and it is to be noted that the methods and scope of archaeology are in process now of being extended and will certainly be extended more; the art and science of deducing such things as religious and general social conditions from material finds will be greatly developed. The use of early written records will become important-those, for example, of Julius Caesar or Herodotus. Similarly, writings of missionaries and others, already in use now, will become still more useful and more such records will be discovered in libraries. There may be a fair amount of ethnographic material in other documents, especially in archives. It can be assumed that the codification and compilation of factual knowledge item by item, as pursued, for example, by Murdock at Yale, will become widespread, and so will make existing knowledge more accessible and usable. At the University of California some fifteen ethnographers have collected about 500,000 items of fact. The collection is not large enough, but it is valuable. It looks rather like a paradigm or a dictionary.

Kroeber closed his introductory remarks with a description of Elmendorf's work on the Twana, a small remnant of a people living near Puget Sound, and of his own comparison between the Twana and the Yurok (Elmendorf 1960) -an example of how a comparative study between fairly closely similar peoples can be done.

The discussion followed the argument of Kroeber's introduction. It opened with a series of demurrers to his view that the future of ethnology is a limited one, but the differences were about where the limits lie and not as to whether there are, in fact, limits. Wolf offered a list of several younger anthropologists who would be counted as firstrate ethnographers. Hymes seconded him, noting a new trend in ethnography inspired by structural description in language (Goodenough 1957). Von Fürer-Haimendorf thought European anthropologists-in-training would always want to do field work on primitive peoples. He saw large continuing opportunities for ethnological field work in Asia, especially in southeast Asia. He said that the impact of the Asiatic civilizations on tribal peoples has been different-in fact, much weaker-than the impact of technology-ridden Western civilization; thus, a good number of primitives englobed within Indian or Chinese civilization have not been greatly changed by that civilization and have been somewhat shielded from the West. Such peoples are to be found in Indonesia and on the northeast frontier of India. Bernal added that ethnological studies are still quite largely necessary in Latin America. Lévi-Strauss supported Fürer-Haimendorf's opinions about Asiatic peoples and recalled that in 1908 Frazer had foreseen the end of ethnology and had given regions where work still could be done which were much the same regions Fürer-Haimendorf had just mentioned.

Lévi-Strauss did not see the diminishing importance, or even an eventual cessation of field ethnography, as the ruin of anthropology. He thought anthropology a far larger matter than ethnography. It is, he said, the third wave of humanistic study—the study of man. The first wave had been the study of the Greeks, the second the study of the Chinese and the Indians; now the study of man becomes the study of all kinds of men. Kroeber gave his support to this view.

Then the Conference settled down to discuss comparative studies in ethnology and afterward moved on to other matters of method. It was generally agreed that comparative studies, as Kroeber had said, have been rather poor, even dull. They have largely been limited to different peoples within the same culture area. Singer thought this too timid, believing that cross-cultural comparisons can often be made of peoples far distant and apparently little connected with one another. Kroeber agreed with this but thought that the "daily work" of the comparative ethnologist should be with nearby and similar peoples and that larger comparisons should then follow. Fürer-Haimendorf distinguished between comparative studies of two, three, or more, societies as wholes and comparative studies of aspects of societies, for example, of marriage, of African political systems, etc. A good deal of largescale comparative study had been done some thirty years ago, or more; it has been done hastily and for that reason comparison has become somewhat unpopular. Wolf thought that older comparisons were mostly concerned with "arrangements in space" or "arrangements in time," but that a good deal of better work is now being done by Driver. Singer added Eggan. Wolf hoped it might some day become possible to say what parts of culture can and what parts cannot become subject to change; little, if anything, has been done about this yet.

Singer thought that there has been a disproportion between the accumulation of ethnographical data and their interpretation, the latter having now become extremely important quite irrespective of whether there are a few or many primitives left to be studied. He believed that the collection of data and their interpretation interact closely; that, as interpretation proceeds, new subjects in ethnology arise; and that collection of new data is required for the new subjects. There was general agreement that much more classificatory work is needed. Some fear was expressed that classificatory work lacks prestige and that some anthropologists therefore do not wish to do it. Kroeber thought that a science which neglects its humbler activities is in trouble, but that there is not really much danger in anthropology.

Two other matters were briefly noticed. One was the new needs which arise from the ethnologist's work on civilized societies; in a great society, such as India, many quasi-primitive units survive, and this cannot be ruled out even in the Western society whose material operations are so penetrating as largely to eliminate the primitive, at least as far as material matters are concerned. Since civilized societies are always in a process of development, there cannot be much distinction between ethnological and culture-historical study of them. This was Kroeber's opinion, and it was supported by Fürer-Haimendorf, who thought that in field work there is no fundamental difference as to the means to be used for ethnological and historical study. Hymes added to this the view that ethnological work is very much needed upon civilized societies, especially in their highest cultural developments, for on such matters the scholars of the society have often set up images based on the society's traditions, which may be to some extent wrong; China is a good case in point.

Muller raised the question of causality; he wanted to know how far the anthropologist will use the concept. The response was that the anthropologist does not use it very much but cannot avoid it altogether and must be prepared on occasion to use it. Kroeber said that it is easier for the anthropologist to see things in terms of pattern than of cause. Some discussion of different kinds of cause followed, Aristotle being called in as a point of departure. The notion of "efficient cause" was agreed to be out of date, but MacRae and Coulborn thought that it had useful aspects; Kroeber suggested use of the term "triggering cause," and with that suggestion the discussion came to an end.

Anthropology, Sociology, and Social Anthropology

The topic was introduced by Lévi-Strauss. He thought that the distinctions covered by the topic are to some extent accidental, but that there is nevertheless a significant difference between the approaches to society and culture of the anthropologist and the sociologist. Thus, an anthropologist might think that the problems treated by the sociologist are abstract and that they are chiefly limited to dealing with present actuality. The anthropologist himself is concerned only with certain types of social phenomenon-only, in fact, with those which arise in what may be called "authentic" societies. Not all human groups are societies; the French Railway System, for example, is not, as was pointed out about 1900 by Espinas, whose view it was that a society should have a biological basis. A society is, "total, concrete and highly joined together." We therefore study "levels of authenticity," that is to say, the extent to which any particular human group is a society. Primitive societies give the greatest authenticity and it is on primitive societies that anthropologists first worked. Some primitive societies go back for very long periods of time. There are, of course, some units in civilized societies which also give a fairly high degree of authenticity.

By "levels of authenticity," Lévi-Strauss added that he meant those levels in society where individuals are linked together, not only in the abstract (through laws, social controls, and institutions), but also in a concrete way, i.e. through personal and mutual acquaintance or through a network of relationships conceived on a personal basis. To illustrate, common citizenship is inauthentic, while the fact of belonging to a small community where everybody knows everybody implies common citizenship and adds concreteness to it. His contention was that levels of authenticity permeate throughout primitive cultures, while in modern societies they still exist, but under a more and more disjoint form.

Several contributions to the distinction between anthropology and sociology were made later during the discussion. Thus, it was agreed that what the anthropologist does may be called a natural history of societies. He is likely to rely on his personal intuition in carrying out his investigation, while the sociologist is concerned chiefly with the application of a particular method. He functions as a scientist concerned with phenomena as seen externally; the anthropologist, on the contrary, sees his data rather internally-his interest is, as Lévi-Strauss put it, "in getting inside the life of his subject." Thus, Kroeber thought that both the sociologist and the anthropologist are interested in religion, the sociologist rather in its institutions, in the part it would play in society as compared with the state; the anthropologist, however, would be more likely to be interested in doctrine and ritual, things which would not be of interest to the sociologist, although the anthropologist might ultimately be interested in the relation of church and state also. Perhaps the reason for this distinction is that the sociologist has traditionally worked on his own society and is therefore inclined to take it as known and not requiring internal experience before description and analysis; the anthropologist, on the other hand, has traditionally worked with alien societies and, consequently, has needed just that internal experience of them which the sociologist is apt to take for granted in his own society. The society which the anthropologist has usually studied has been a small society, not too difficult to see from the inside experientially-or "existentially," as Lévi-Strauss preferred to describe it.

Kroeber drew attention to the origin of sociology as a movement to improve society, an ameliorationist movement. The sociologist now will not call that kind of sociology scientific. Since the time when Max Weber insisted on a distinction between value-judgments of society and observations and description, sociologists seem to have rejected the function of judging as unscientific and have required that their work should be value-free. MacRae thought that, in spite of this endeavor, sociology remains potentially ameliorative, for the sociologist distinguishes between the functional and the dysfunctional;

Von Fürer-Haimendorf, as an instance of the abstractionist bent of sociologists, gave their interest in caste: they are not satisfied to study caste as it is in India; they want complete generality-"laws" applicable to caste wherever it may occur. For himself, as an anthropologist, this watered-down the conception of caste too much, and it thereupon lost its meaning. But it is not to be supposed that the sociologist is concerned exclusively with theory and the anthropologist with descriptive fact. By means of questionnaires the sociologist can get at novel factual matter. Conversely, the anthropologist, though initially concerned with the collection of factual information, usually by questioning individuals, may ultimately proceed to construct theory. The anthropologist discovers culture, said Kroeber, which begins as something concrete, for example, newspapers or other products of humanity, but thereafter may become abstract-traditional practices, ideas, states of mind. Culture is, in fact, "exosomatic" in all its manifestations. This is not true of society which must be considered to include the somatathe persons. Fürer-Haimendorf formulated the distinction: a society consists of individuals who stand in various relations to one another; but their culture may be shared by another group or groups not in any social or political relation to the first group. It is thus possible to study the culture of the Islamic Middle East, but within that region there are many different societies, which may or may not be in some sort of relation. In some operations "society" and "culture" may be used interchangeably; in other operations they may not be. A couple of years ago, Kroeber and Talcott Parsons wrote a note together (Kroeber and Parsons 1958) 4 in which they discussed the relations of culture and society, urged their agreement upon the two professions, and suggested that the two methods might be considered complementary. The relation of the two methods was now discussed, and some difficulty arose in deciding how they might be combined. "Social anthropology" may be considered, in one of the uses of the term, to result from combining the two methods. There are, however, a good many variant uses of the term. In Britain and France, social anthropology and sociology are very closely related and may even be taken sometimes as the same thing. In the United States, and sometimes in Britain and France, social anthropology is the study of largescale societies (modern communities) by

⁴See also Ogles (1959), Levy (1959), and Parsons (1959).

anthropological methods. Redfield's folk society might be considered to fall into this category. The Lynds' Middletown studies were certainly done by the use of anthropological methods on sociological materials.

Singer said that, when anthropological methods are applied in dealing with quasi-primitive units englobed within a civilized society like India or a nation like France, there has to be some modification. The anthropologist has plenty of experience in dealing with simple and homogeneous groups more or less isolated from outside influences, but when the groups are no longer "social isolates," immune to outside influences, the problem becomes a new one. It may become necessary, though difficult, to study the relation between the small community and the larger one of which it is a part. Sometimes these relations are so numerous, indeed usually they are, that sampling is necessary. And at sampling anthropologists are not very sophisticated; they should improve their methods. MacRae at this point objected that this is not really a matter of sampling, but rather one of selection, and that it is not decided how selection should be done. Singer, continuing his remarks, thought it very profitable for the anthropologist, when dealing with anything happening within large civilized societies, to resort to historical methods. Where documents survive, such as family archives. the anthropologist may be able to push his inquiry back through quite a long period of time and, in so doing, is likely to find information on relations of the small community to the large one containing it. MacRae added that some of his younger colleagues feel they have affiliations with social historians, but that he does not feel that himself. The study of peasants living in a large civilized society is of special significance since in the past the study of peasantries has usually fallen outside the scope both of anthropologists and of sociologists. This is a particularly regrettable omission since the majority of mankind actually consists of peasants of this sort.

Lévi-Strauss told the Conference that it had been agreed between a body of French social scientists and the French government that studies of the French peasantry should now be undertaken at government expense. This was the first time that the French government had been prepared to finance research of this kind and there had been at first a difference of opinion as to what would be of sufficient national importance for the government to back. But, on the subject of peasants, the difference of opinion was resolved.

A matter discussed toward the end of the session was which came first, society or culture. There were some differences of opinion about this. Kroeber said that societies were formed very early among lower animals, but that culture arose with man alone; thus, it might be said that society is primary and culture secondary. Muller, however, thought that where there is society there must be some culture; Kroeber said it might be so, but urged that the evidence for culture in early human societies is very slender. MacRae said that the apes have society but not culture, whereupon Hymes suggested that the great apes may have culture as well. Finally, Kroeber said that he thought the distinction might be different for different phyla. For example, some birds sing instinctively, but others have to learn their song, or learn it in part, and must therefore have traditions.

The Use of Mathematical Techniques in Anthropology

Discussion of this topic was opened with a statement by Milke as follows:

This subject, somewhat new in anthropology is of two kinds. The first kind consists in the application of statistical tests to hypotheses which are not themselves of a mathematical character, and the second of hypotheses which are in mathematical terms. Hypotheses of the first kind arise directly out of anthropological operations and they make use of almost any kind of reasoning, or indeed, in some cases, of no reasoning at all. During the last twenty years a small but significant number of anthropological studies of this kind has been made. By far the best known is Murdock's Social Structure (1949). He deduced his hypotheses by ordinary, common logic from certain basic assumptions and tested them by an association coefficient and by chi-square, Although Murdock's sampling and his manner of defining his categories have both been criticized, the work remains useful and its results have been largely corroborated in recent studies by Driver (Driver 1956; Driver and Massey 1957).

The statistical testing of hypotheses should be done much more often than it has been even during the last decade. But one must beware that hypotheses can never be *proved* by statistical tests. In some cases the hypothesis can be shown to account for all the data or at least for the major part of them. In other cases, there is a statistically relevant discrepancy between data and hypothesis. In the latter cases we may take the hypothesis as refuted, but in the former we can give it only provisional credit, that is to say, until new data have been found to confirm or refute it, or until somebody devises a better hypothesis. This is a very elementary lesson, but we all tend to forget it.

Now the second kind of hypotheses are those which are themselves formed in terms of mathematical theory. There are a variety of different kinds of mathematical models which may or may not be applicable to anthropological problems. The problem in most cases is to decide what model is applicable to a particular problem and how far it is applicable.

First come the purely statistical models, that is to say, models built upon chance only. The work of George Zipf and his numerous followers belongs here. Twenty years ago, the British statistician, Yule, proved that the very interesting and sometimes mysterious relations which Zipf had found in the distribution of phonemes, syllables, and words in a given body of speech or literature and which he tried to explain by the principle of least effort, can be accounted for by sheer chance; this appears in Poisson's Law, which is also known as the Law of Small Numbers. It applies where the probability of a given event is very small. Yule's explanation does not detract at all from the value of Zipf's discoveries, but instead gives them a sound base. Some people, however, seem to be unhappy about it and have tried to save the principle of least effort by introducing definitions from information theory.

There is one observation to be made about information theory; physicists who use it have defined their terms in a way which may be very convenient and useful to them, but which is considerably different from ordinary use and is hardly likely to be suitable for anthropology. The anthropologist needs to work out his own use and conventions in the application of information theory.

The second set of models are those which deal with chance or probability, but make the probability a function of some independent factor. Lexicostatistics and some work on cultural similarity by the speaker (Milke) are to be located here. Lexicostatistics takes the probability of retention of certain lexical items to be a function only of time, and the retention shared by two languages also as an exponential function of time. But there can also be two independent functions, for example, time and space. The speaker's first study in cultural similarity took only spatial distance into account. Some years ago, having become acquainted with the work of Swadesh, he devised a more comprehensive model, extremely complicated, where both spatial and temporal factors were taken into account.

Quite a number of studies in lexicostatistics have appeared during the last ten years. Hymes (1960) has given an excellent survey of them in CURRENT AN-THROPOLOGY, to which the following general remarks may be added:

1. Lexicostatistics is still in its infancy and it is to be hoped that it will not die before it gets to maturity.

2. It is a pity, but also a truth, that many people are not interested in lexicostatistics as such but only in its results; they regard lexicostatistics much as they regard C—14 dating. The objections to mechanical application of lexicostatistics are very serious because even its basic assumptions are in need of proof, especially the assumption of a uniform rate of lexical decay per millennium.

3. More basic research should be done in lexicostatistics, especially within the Indo-European family of languages, where data are best under control.

4. Every one working in lexicostatistics should publish his total evidence. Only then can a correct evaluation of the results be made.

5. Comparisons of languages where phonemic correspondence cannot be stated with any certainty should not be published at all.

Milke then turned to consideration of mathematical models for the interior working of culture or society, beginning with Driver's paper mentioned above. The paper contains a table giving the correlation coefficient of about twenty categories of Indian (American) culture. It becomes clear upon close inspection that there is much in the table which is not accounted for by Murdock's hypotheses. Factor analysis may be applied to deal with this problem-Milke himself had in fact by this means reduced Driver's table to a set of three factors. He issued a warning, however, about the use of factor analysis: it is such a powerful tool that factors will be found in all circumstances, even if the original table contains quite arbitrary numbers. Factor analysis should only be applied, therefore, when it is clear that the factors work in the way that factor analysis requires them to work. Nobody has yet found a way of making them do this for either culture or society.

Milke continued that in the last twenty years procedures called "theory of games" and "operations research" have been developed; the two overlap to some extent. He himself had only a limited experience of these techniques, namely, in the matter of linear programming, which has sometimes been classed with theory of games and sometimes operations research. His opinion was that linear programming was little appropriate for anthropology. Possibly it could be applied to the little community. Potlatch might be treated by the theory of games, and queuing theory might also be used. In principle it should be possible also to use servomechanism theory.

The body of mathematical practices known as "group theory," "set theory," and "topology," cannot be taken over literally by anthropology from mathematics; they may be used in a somewhat analogical manner. "Isomorphism" is a useful concept if the members of one set can be unequivocally transformed into the members of another, as Lévi-Strauss has tried to do in his treatment of myths. But it is difficult to find unequivocal relations. Finally, Milke thought it improbable that symbolic logic-once thought by the Wienerkreis to be able to solve the riddle of the universewould be widely used in anthropology. He thought that some illumination can be derived by studying symbolic logic, but that symbolic notation itself is largely superfluous for anthropology. The matters for which it might be used can usually be written down quite simply.

The chairman, Kroeber, asked Milke for more information about his use of distance analysis. He replied that he classed this with lexicostatistics but that distance was the independent factor in it.

Kroeber then exhibited a graph made by Milke of the distribution of a number of groups or bands of California Indians of the Northwest culture, showing their relative positions and locating the core of the culture in a hill region; the central groups were very close together, others being more widespread, finally abutting on groups of another culture, namely, the Central California culture. Milke said that the computations necessary for the graph which Kroeber had just explained are very similar to the computations necessary for factor analysis, but that the basic assumptions are different; as with all factor analysis, it is necessary to keep the factors very clearly in mind and to make sure that they behave in fact in the way in which they are supposed to behave in the technique of factor analvsis.

The discussion which followed Milke's statement was not a long one. The Conference, for the most part, was receptive to his opinions and to the use of mathematical techniques in anthropology in general. Lévi-Strauss, in particular, made his support clear and gave a number of examples of successful use of mathematical procedures in anthropology. He thought information theory was probably a more promising tool than Milke had implied, and he pointed out that what is needed in a number of techniques is unequivocal answers to the questions raised. It appeared that the definiteness or definability of anthropological data is of crucial importance to their use in mathematical techniques. There were a number of suggestions of traits whose variation and distribution might be suitable to mathematical treatment. The discussion closed with a short consideration of the difficulty anthropologists experience through a lack of knowledge of necessary mathematics. It was agreed that for the United States and Britain this lack is at present rather serious.

Culture History

Kroeber, in the Chair, introduced the subject. He began with its content, which he conceived would include "total" history, that is to say, the history of all cultures, primitive and civilized. Culture history is an affair of the future, something which has only just begun. From the definition just given, it follows that it would include the whole body of existing ethnological knowledge and any new ethnological knowledge to be discovered in the future. Similarly, it will cover the entire present and future knowledge of civilized societies, both those which exist at present and those which are now extinct. Even from political history much information is to be got about the development of culture. Kroeber (1952) quoted some remarks of Coulborn in which culture was described as what the historian takes for granted-what appears not to change as against the episodic, outstanding events with which the historian does concern himself. But culture does change; it develops gradually and, to the historian at least, imperceptively. Much can, in fact, be discovered from history about culture, whether culture be considered statically or dynamically.

Kroeber then proposed four possible approaches to culture history:

1. The evolutionary approach, as advocated by Leslie White, but Kroeber knew least about this and did not wish to discuss it at any length.

2. The analytic approach, consisting of the definition of natural systems which form parts of culture and the tracing of them and their context in time and space. Such systems are agriculture with the plow, Semitic Ianguages, the alphabet, etc. Each of them has a phylogeny which cuts across the great historical units which we denote by such terms as India, the Classical World, etc.

3. These large units themselves, the civilizations and the "societies" which bear the civilizations. These are usually considered to be units, and indeed they

are units. Nevertheless, each civilization or civilized society is something very complex. It is composite, consisting of many currents, most of them having come into the society by diffusion, and so derived from many sources.

4. But a civilization has pattern, and pattern itself is another important approach. Patterns have structures, or they are structures, and they develop. They may be seen synchronically or diachronically. A synchronic pattern, or the synchronic aspect of a pattern, is relatively easy to discern, but a "thoroughly diachronic pattern," or diachronic aspect of a developing pattern, is always a difficult thing to discern, and there is perhaps some question as to what it is.

The discussion began with a number of questions seeking closer definition of the concepts Kroeber had put forward. Kroeber found that the natural systems existing in culture are analogous to those existing in biology, but have as yet been little defined; they need defining. Most natural systems are of the sort previously mentioned, the alphabet, etc., things which are quite specific and limited, but Kroeber agreed that such large units as Egypt, or the Egyptian civilization, might become natural systems, especially if they are isolated and to the extent that they are isolated. Such a large matter as religion sans terme is not a system, but a particular religion might be one, or it might, by division, be several.

The main discussion fell into three parts: the first was an insistence on the common ground of archaeology, anthropology, and history; the second, a consideration of cultural relativism in culture history; the third, whether all present civilizations will merge into a single world civilization.

The first theme arose after Kroeber's remark about the great difficulty of perceiving pattern diachronically and from von Fürer-Haimendorf's consequent insistence on the distinction between the job of the historian and the job of the anthropologist. He thought that, if the anthropologist ventured into history at all, his history might be no more than conjectural, though a combination of archaeological, anthropological, and linguistic findings might lead to the establishment of local sequences of considerable probability. The Kulturkreis anthropologists had thought they could establish world-wide time sequences between their different Kreise, but this had not proved possible. There was substantial opposition to Fürer-Haimendorf's view, and Mac-Rae defended conjectural history, saying that the conjectural historian could help fix the limits of probability within

which certain kinds of social organization could have existed. Singer thought that the anthropologist might make it his special duty to develop a pattern through time; he might make a pointfor-point diachronic comparison of at least two periods of the history of a civilized society. Singer and Hymes would bring the specialists in regional studies, for example, of the Classical civilization and of the Far East, into the pooling of efforts which culture history demands. There was discussion also of the position of the archaeologist in relation both to the anthropologist and the historian: the archaeologist is more or less bound to have a time sequence in his classificatory work so that he shares data with the anthropologist and chronology with the historian.

The discussion moved to cultural relativism when Muller proposed an evolutionary approach to solve the difficulties of brigading anthropology and history together. He suggested that all the higher religions emerged at about the same time in history. Coulborn objected to a distinction between higher religions and other religions in civilized societies and took a relativist position about all religions and their societies. The position was in the main rejected by others, but Singer thought there was something to be said for not making judgments until there was enough evidence on which to judge, and Lévi-Strauss pointed out that the biologists had been through phases of evolutionism and relativism and today were to be found trying to translate their data into a historical sequence; he thought that the anthropologists should accept history at once and make it a part of their material. The upshot of this argument was that we do make judgments both aesthetic and moral all the time,5 and that, if we do not recognize this, we deceive ourselves. We often make such judgments in the light of the values of our own particular society. This had been well illustrated at the International Congress of Ethnological and Anthropological Sciences in 1956 at which the Russians wished to discuss progress and the Westerners could not understand how any scholar could still be interested in such a subject. That such judgments are made, often unconsciously, seemed to be generally accepted; at least, opposition to the idea was not vocal.

Singer's question whether a merging of the various world cultures at the present time might eliminate differences in value judgments led to the last

⁵ See "Art and the Anthropological Sciences," below.

episode in the discussion of this topic, whether a world civilization is likely to emerge from the present mixture of cultures or not. There were different opinions about this and perhaps the most useful opinion was given by MacRae in the closing remarks of the session: he argued that the present merging of cultures is primarily and perhaps exclusively of the material cultures, that material culture is not the whole of culture, and that in fact different civilizations have existed on the same material basis; he therefore did not expect to see a single world civilization.

Art & the Anthropological Sciences

The session was opened by Bernal whose statement emphasized the difficulties the scholar has in dealing scientifically with the products of art. Art, he thought, is subjective, difficult to define. Each object produced is something unique; it is not really a product of a culture, but of the great artist, although he is obviously the product of a culture. But he is "in advance" and we know how frequently he-or his group-are only understood much later. Both artist and public are conditioned by their society but at a different moment; they seem to have a different present. So the whole culture lags behind real art: the creative one. Even simple material products are hardly products of a culture as such, but of minor artists, good or bad. Moreover, we tend to be ethnocentric; we have great difficulty in judging the aesthetic products of societies other than our own. And, our judgments are changeable in time: we (of the West) once liked very much the products of Islamic art-that was in the early 20th century-and now we think that prehistoric arts of Mexico and Peru are very good. For instance, it might be thought that a Mexican may be able to do better than others with the products of prehistoric Mexican art, but those products are not in fact the products of his own contemporary culture, and the appreciation has come more from the outside. Bernal drew special attention to the difficulties of the archaeologist. He recalled that archaeology began as a search for beautiful objects, but then began to search rather for the strange and the different. Only in the 20th century has archaeology gained serious scientific intentions. And in gaining them it has had to abandon aesthetic criteria. This has not meant that the advance of scientific archaeology has been rapid; especially in the Americas has it been slow. Yet today the archaeologist is fairly ready to make technical judgments, while he finds himself almost deprived of an aesthetic apparatus which can be used in classification. On the other hand art

is—in a way—the main problem of the archaeologist. It is, after all, an essential means of differentiating periods and cultures and its understanding is indissolubly linked to the understanding of the past culture the archaeologist studies.

Opposing opinions as to whether the anthropologist or archaeologist should or should not give aesthetic judgments of his materials were given in response to Bernal's statement. Kroeber led those who thought that judgments should be made;6 he thought that anthropologists were at least as well able to make judgments as others and advocated that such judgments should be considered provisional. Lévi-Strauss announced a 'golden rule," that everything that has been considered beautiful at any time should be accepted as beautiful and that it is the scholar's business to find out why. This implies that the scholar is not without means of making aesthetic judgments in some sort of regular manner. Muller thought in fact that our own judgments are formed in the light of judgments made in the past. Singer was bothered by the suggestion that an anthropologist who tries to study the art of another people is merely projecting his own taste on to that people's products. Von Fürer-Haimendorf saw no conflict between science and aesthetics. On the other hand. Hymes and Wolf were both troubled by the prospect of the scholar making lighthearted value judgments and feared that this would lead others into temptation.

Ackerman gave a somewhat special point of view and a policy based upon it. He quoted Malraux as saying that the aesthetic is a dialogue between the observer and the object; his own opinion was that judgment is "psychocentric"-it is resident in the individual, and it is the individual who accords aesthetic quality to an object.7 We may think beautiful what the maker did not intend to be so. While Ackerman agreed with Kroeber that we might as well make our judgments of things, he did not believe that art can be scientifically judged. He declared firmly that he believed in making aesthetic judgments and that, in making them, he was projecting the judgments of his own society and times on to the products of other societies and times, but that he believed this to be the best practice and taught his students to do so-something with which the majority of his professional colleagues disagreed. He did not mean that judgments should be made

7 See Gombich 1960.

frivolously; on the contrary, we must study to discover what we like and what we do not like. He felt it rather futile to do anything else, for there is a constant danger of making unconscious value judgments when seeking to evade a consciously felt one.

Toward the end of this part of the discussion, MacRae interjected a different view from those which had been expressed. He felt depressed by the desire of anthropologists to be scientific; he did not think that there was any such city of strength as science; let anthropologists be rigorous and scholarly—but science, he asked, who cares? Hymes, however, declared himself in favor of science.

On Saturday morning, Kroeber, in the Chair, reopened the discussion with the following observations. Something analogous to the arts exists among the lower animals, more particularly in connection with procreation. They make bodily exhibitions for this purpose which seem to be largely instinctual. In human societies the arts seem to flourish best when economic, political, and other activities are functioning well, and when they fit well with one another. This, however, is only a speculation; the conditions necessary for creativity are largely unexplored and anthropologists have evaded the problem because it can scarcely be treated scientifically.8 The achievements of the arts in their relatively short periods of clustering are not cumulative; that is to say, after the major achievement is over, a new school takes little from it and starts from a low level to rise to a new climax. Intellectual achievement seems to be much the same as aesthetic achievement in that it proceeds to high points of clustering, but it differs in that the achievements are, at any rate to some extent, cumulative; what has been learned at one apex of achievement can be passed on to a fairly large extent to the next phase of thought. But these matters have not yet been fully explored and are in need of more study.

Kroeber drew attention to the variable relationship between art and religion. Some arts of all kinds have had close relations with religion and have sometimes clearly been reinforced by those associations. On the other hand, there have been arts which have only reached high development when they were liberated from the influence of religion. In Islam religious influences definitely suppressed the visual arts, while favoring certain verbal arts. This irregularity may explain in part why the occurrence and the attainments of the different arts have varied so much different civilizations. Flinders in Petrie's hypothesis that an art enters ⁸ See "Personality and Culture," above.

CURRENT ANTHROPOLOGY

⁶ Cf. Kroeber's opinion (p. 81) that the anthropologist has nothing in his training to enable him to make aesthetic judgments; he must proceed on the basis of intuition.

upon its period of culmination when it is liberated from the influence of archaism seems to be a sound insight. It is worth noticing that liberation from archaism may also be liberation from the domination of religion.

Finally, Kroeber gave his support to certain comments made by Hymes upon the agenda of the Symposium in which Hymes suggested that language might be considered as partly of an aesthetic character and that anthropologists might make a contribution to the understanding of art by promoting a really comparative study of world literature, in which language should be included.

The discussion which followed Kroeber's re-introduction inevitably repeated to some extent the second topic of the Symposium, Creativity, but it was rather more substantive. Lévi-Strauss thought that anthropology could contribute by helping to define the social setting in which individual creativity operates. It is not the same in all societies. In some societies, probably the majority, the artist is a very special individual, but in others every man is an artist. Kroeber thought that the physical basis of quality in art was more evident in music, in the harmonies and the melodic scale. Singer suggested that, for living cultures and civilizations, it is easier to get at the physical basis of the "performing arts"-music, dance, drama, ballad-recitation-than it is in the other arts. These matters have been studied to some extent, especially by Lomax (1959), who suggests a functional connection between the powers of the body in producing sound, in gesturing, and in posturing, on the one hand, and, on the other, forms of folk music and of social organization and of the attitude toward love and love relationships. Lomax's views seem a little simple, but the grammar of these things might ultimately be worked out.

There was some general discussion of the preconditions of artistic production, for example, of whether leisure has anything to do with it, whether it is a mere matter of chance, etc., but nothing positive came out of this, and Kroeber thought there must be a positive factor not known to us. There was also a discussion of the mutual relation between folk arts and sophisticated arts. It appeared from an exchange between Fürer-Haimendorf and MacRae that countries such as England, which have no peasants, lack one source of aesthetic themes. Some evidence was offered of peasants deriving their themes from higher levels in society, but this also did not lead to anything very novel.

Units, Patterns, and Styles

Discussion of this topic opened with an exchange of opinions between Kroe-

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ber, who was in the Chair, Lévi-Strauss, and Hymes as to whether culture could be described and analyzed in discrete units similar to those used in linguistics. Lévi-Strauss felt sure that this could be done, in fact, that any analogous operation could be done-for example, cooking could be subjected to structural analysis by "gustemes." He said that the units would be found on a level different from that of the units of language; they might be found on the level of nuclear and extended families, which seem to be rather paradigmatic; marriage rules give a kind of grammar. Having discerned the units, we should then ask their meaning. This can be given by the constituent elements in the structure of the cycle of change-something which is not to be seen directly, but exists below the empirical level. In the case of myths, on which Lévi-Strauss himself had worked, the process is similar to that in language, but on a higher level. He believed it possible to find a structure which would be isomorphic for other cultural matters, but on a much higher level. Language occupies a very special place in culture: it is culture, but it is also a medium of culture-somewhat like mathematics, a part of culture as well as a tool. It is distinctive in that it relies on only one kind of sense data, sound, for the phoneme. Hymes remarked that writing, which is not itself language, nevertheless shows up other features in a language than those shown by the spoken language; the written language and the spoken language may be very different. Kroeber agreed that discrete units could be found for culture, but that it had been shown in the previous symposium, No. 7, that, whereas language is discrete, the rest of culture is customarily treated as consisting of continuous, concrete things; while this remains the case, it is not very likely that discrete units will be found. Lévi-Strauss replied that long ago Sir D'Arcy Thompson (1942) showed that continuous growth can be demonstrated by parallels between species; Lévi-Strauss suggested that there are gaps between species and that this could result from their discreteness; he suggested that the same might be true for culture.

At this point, Singer expressed a different view; that the prior search for discrete units of culture is a blind alley. Lévi-Strauss, he said, had pointed out that the forms of kinship and of myth may be considered to be patterns. But Singer thought that these patterns can be analyzed without resorting to discreteness. The kinds of unit elements in the patterns are not in fact discovered independently of the patterning. The units are frequently defined *after* significant relations of patterns have been noted. The patterns may indeed be isomorphic between different parts of culture. If we will but give up being atomists, the problem disappears.

Kroeber remarked that linguists make use of discreteness, but engineers concerned with the study of language for recording, broadcasting, etc., consider it continuous. There seems to be no reason why anthropologists should not use both modes of analysis. Hymes considered this an extremely complicated problem, thinking that it is an oversimplification to say that the linguist finds structure and the ethnologist does not. The linguist does not in fact discover *a* phoneme; he finds patterns of phonemes. This is the precedent that the ethnologist should follow.

Kroeber closed the discussion of the relation of units and patterns with the observation that the essential thing about linguistic units is that they contrast within a pattern. No sufficient effort has been made to proceed in this way with culture; if it were made, new insights would be found.

Kroeber then turned the discussion to patterns considered for their own sake. He described patterns as sequences of related forms within which life is led; they occur at biological as well as at cultural and social levels, but scarcely at the inorganic level. At biological levels patterns are built-in, being evolutionary products, but it must be remembered that they are also the end products of histories. The course of biological patterns is based upon instinct, but in man, as Julian Huxley has said, instincts are heavily "truncated." This truncation of instincts is a precondition of culture and of cultural patterning. That is to say, man in his societies is guided by a cultural pattern, which is exosomatic and therefore variable. The patterns of a culture can be abstracted from history and viewed as systems functioning each in itself, much like a grammar or, again, somewhat like a physiology. Such an operation may be achieved by holding the human beings involved constant-by focusing them out of the picture. If, however, it is the behavior of persons which is in question, the culture patterns may be held constant or focused out of view. There is no point in quarreling as to which is the right level, that of the individual or that of the culture. Each is equally legitimate and the two are complementary to each other. Anthropologists should not be hostile to psychologists who are concerned with the individual.

Singer added to these remarks that the relation of individual to cultural pattern may readily be seen by doing first the one and then the other operation which Kroeber had just described. For example, it is possible to see an individual developing a religion and then to study the religion without reference to the individual who developed it.

There was then a short discussion of patterning at different levels of existence. In the course of this, Lévi-Strauss said that the movement of events in human affairs is relatively rapid, and the pattern consequently very much in evidence. If, by contrast, the development of a flower were studied, the course of events would be found to be relatively slow. In the solar system, at an inorganic level, events are still slower, but at any level of existence some change does occur and consequently there must be some pattern even if neither is perceptible to human observation.

Singer now asked whether some parts of culture may be considered more susceptible to patterning than others. Kroeber replied that some are more responsive to change than others, and that the change involved is essentially internal, not change imposed from the outside. Singer had recently seen war described as "a culture pattern," which seemed to render all discussion of abolishing war futile. He felt, therefore, that patterning raises the question of human as against cultural determinism. Kroeber said that he thought that patterns should be seen relativistically, that their existence should not be considered to rule out their change or even their abolition by human agency.

Then there was some criticism of the concept of pattern. Von Fürer-Haimendorf thought that pattern is not like grammar, which rules events; patterns do not. There are somewhat exceptional societies in which patterns may rule, but in most societies they do not. Hymes suggested that pattern is perhaps too "free-floating" an explanation of the development of culture. He mentioned Gearing's concept of "structural pose," according to which a society is organized sometimes for one purpose and sometimes for another. The cultural pattern for war is one thing; when, and where, it is called into play, another. Singer replied to this by saying that in any society there were social structure and social organization, the one for fixity, the other for action; it is the latter which varies. He said that pattern may be described as "an idealized description of past choices;" the action of the individual is influenced by this, whatever amount of freedom remains to him. Kroeber suggested that it is wise to be relativistic about relativism, that most of our knowledge of patterns we get by questioning native in-

valuable, and that it invariably influences the natives in action but is never the whole truth. Muller introduced the consideration of the difference between conscious and unconscious action within the culture. Singer quoted in reply Ruth Benedict, already mentioned by Fürer-Haimendorf, to the effect that by the study of a cultural pattern it is possible to control itto confront it and to consider changing it. The more conscious a person is, the more he is liberated from control of the culture. Thus, patterns are deterministic at an unconscious level; at a conscious level it may be possible to change them, but perhaps not easily. The argument appears to be analogous to Freud's psychoanalysis as a mode of liberation. In reply to a question from Dodds, Kroeber said that Ruth Benedict had overlooked the possibility of patterns changing, that Spengler had, in effect, said that they do not changethis being his kind of determinismand so had taken an essentially nonhistorical view of civilization. This Kroeber believed to be a stylistic matter applying to society and culture. Fürer-Haimendorf thought it possible for exceptional individuals to use more than one style in an art, but he further thought it was possible for different styles to exist within a whole civilization. With some reiteration of position taken by the various members of the Conference, the discussion of this topic came to an end.

formants, that what we get is always

Concluding Remarks

The Conference was addressed by Dr. Paul Fejos, Director of Research of the Wenner-Gren Foundation.

Dr. Fejos spoke about the future of anthropology, but the future as it might be, not necessarily as it will be. He thought that anthropology is at a point in its development similar to that of astronomy in the time of Kepler and Galileo, when the telescope opened new vistas of knowledge. Anthropology now has certain new tools, among them automation, which could make possible the processing of material by mechanical means and thereby revolutionize the clerical and procedural side of the science. The material collected in the HRAF files at Yale, based on Murdock's "Outline of Cultural Materials," could all be transferred to punch cards to go through machines which would sort it, classify it, and interrogate it in a very short space of time, as no human being nor team of human beings could possibly do.

Today anthropology is drowning in its own artifacts and mentifacts. It is to be hoped that the anthropologist will be saved all time-consuming analysis through automation and that a renaissance in anthropology will result. We cannot easily foresee the new directions of work, possibly even new subjects, which would arise from such a revolution, but it is obvious that many problems which are becoming too cumbersome for present means of study will become vastly more tractable, and so the energies of scholars will be liberated for other creative undertakings.

It is usually thought that prediction in anthropology is rather futile, but there is a chance that it may not remain so. As automation advances, prediction might become one of the normal functions of anthropologists. Applied anthropology would make great strides, becoming one of the important functions of the profession. Both government and industry would then come to the anthropologist for his aid. As things are at present, the time required by the anthropologist for his operations is usually too great to render his work useful to those who wish to be guided by it in administrative operations. It is also possible that a cleavage might come about between the special researcher and the practicing scientist, as, for example, in the medical profession.

The teaching of anthropology would certainly change with the use of new technical advances. Students would have to learn the handling of many electronic devices for recording, etc. This does not mean, however, that the anthropologist would need to become a technician, but would rather need a sophistication about the potentialities of tools.

Ethnography might become an entirely different science, making its records, for example, by images on tape--a device which is already a fact, even if very expensive at the moment---and the field could be brought into the laboratory, so to speak. The field-working "lone wolf" would then cease to be, since groups of observers could see material at first hand and correct biases which might innocently exist in the recorder's reports and interpretations.

With certain new tools, we might also be able to solve questions of origins. Serology, for example, is already well advanced, and this science may help in learning the origins of kinship, the family, or religion. From serological analyses of bones, we might even find when domestication by man began.

There may someday be such a thing as space anthropology. We already know that there is life elsewhere in the universe than on the earth. Someday, it may be the business of anthropologists to study this—especially, perhaps, the business of linguists and ethnographers.

Fejos concluded his remarks by mov-

ing from what might be to what he thought should be:

1. It is essential that the profession decrease the time elapsed between the discovery of new data and their entry into general professional knowledge; that is to say, publication must become far more rapid, easy and efficient.

2. There must be far more intercommunication between different scholarly disciplines. There are probably at present many questions to which one body of scholars already has a solution but does not realize its significance for another speciality and thus is not interested. Specialists should be made aware, by some system of communication, of the problems in another field in the event that they may themselves have a solution or clue to the solution of one of these problems outside their fields of knowledge.

3. The center of interest in anthropology should again become Man; Fejos felt that Man as the focus is rather disappearing from anthropology in favor of such specialized knowledge as typology per se, etc.

4. The profession should wholeheartedly accept its fullest responsibilities as members of the community of mankind and society.

Fejos' statement was followed by a short exchange between him, Kroeber, who was in the Chair, and Lévi-Strauss. Kroeber and Lévi-Strauss gave their support to the opinions Fejos had expressed. Kroeber emphasized the importance of abridging clerical work in ethnography since ethnography is due to become comparative and the clerical function in it could be greatly augmented. Thus the anthropologist would be liberated for more productive and imaginative labors. Lévi-Strauss mentioned that his laboratory in Paris has acquired a copy of Murdock's material and is in process of putting it all on punch cards. There is a center for this purpose in the Louvre. He drew attention to the great reluctance shown by his professional colleagues to use this material-which Fejos characterized as possibly fear of the unknown.

There followed a general discussion of the use of mechanical devices in anthropological study. It was agreed that this should be promoted and that any difficulties encountered were themselves primarily mechanical difficulties which could be overcome. The codification of existing knowledge was considered and recognized as such, a difficulty to be overcome. Fejos thought it might take a full decade to accomplish and would cost many millions. However, the reluctance of scholars to resort to the use of mechanical devices was thought the real obstacle to advance in this direction. Fejos remarked in this connection that the scholar sometimes, unfortunately, does not feel the process of hunting through many sources and running from book to book as a drudgery, but rather the main function of a scientist. Lévi-Strauss remarked that the fundamental requirement of anthropology is that it begin with a personal relation and end with a personal experience, but that in between there is room for plenty of computers.

There followed some final remarks by some of the members of the conference. Kroeber thought it had been a very successful conference; he had gotten much out of it, and what he had gotten had varied from session to session though he could not quite see why. He had been a little disappointed in the discussion of religion; perhaps that was because his religion is really anthropology in the broadest sense. He thought that such a conference had very considerable value, for as a rule scholars become absorbed in the daily grind, and an assembly of this sort was a release and an inspiration." Among the other final observations, the need for co-operation between different disciplines was several times repeated, as was the general need for synthesis, and Dodds drew attention to the difference between broad synthesis within a single discipline and broader synthesis from several disciplines together. Ackerman said that he sensed a problem in the attempt to broaden out-a problem occasioned by the not-too-rigorous quality of American education. He feared that something will be lost or "given away," even though something else might be gained. He felt upon rather thin ground when he sought to broaden out his understanding of his own special subject and believed that many other younger scholars felt insecure.

Kroeber made a few closing remarks. He saw no ground for pessimism about the future of anthropology. The only risk he could discern was the risk of "setting our sights too low." The week, he said, had been for him a review of nearly 60 years of professional life. And so the Symposium came to an end.

Addendum

The following is a paraphrase of notes left by Dr. Kroeber, evidently intended as the basis of a general sum-* See also "Addendum," below. ming up of the results of the Symposium, in the event he did not give such a summing up:

The future general development of anthropology will probably be a continuation of present trends, some of them more important, some of them less. Ethnology has already begun comparative studies. It is possible that archaeology will reach the point of diminishing returns (actual or prospective). Linguistics has begun the return to (1) typology and classification, (2) semantics. The mathematical and numerical approach to anthropology will become more important; it will not supplant other procedures, but will add to them. (Ultimately, qualitative phenomena will also have quantitative expression. Absolute dating is developing and becoming more important.) The psychological approach is difficult, for psychology itself is refractory and poorly developed (backward). We must wait for more to be accomplished and possibly help in accomplishing it. As to wholly new fields in anthropology who can tell?

General qualities of the future anthropology:

- The various fields, while continuing to specialize, will also develop more interconnections than they now have.
- Control of the whole field of anthropology will increase. Boas was not the "last all-anthropologist"; there are now, naturally, some who prefer limited intensity, but some young men should aim at universal control of the several fields together.
- Compare the base of biology: e.g. Wells, Huxley, and Wells (1937); Simpson, Pittendrigh, and Tiffany (1957).
- The static, synchronic aspect of anthropology: this must be treated first, for it is undeveloped; structure, simple patterning.
- The diachronic, dynamic, historical aspect: Micro-history: close-up change; isolate areas and hold them constant; hypothesis testing; perhaps experiment. Macro-history is also needed: it emphasizes courses and results especially. Astronomy can be used as "guide" to this.
- The humanistic aspect of anthropology; to be treated, not as parochial, but as meta-parochial: Existentialist; in some cases also personal experience. Concrete, in some cases in addition to existentialist. Holistic.

All these aspects and qualities of anthropology will continue and will be expressed in new ways. This is a faith.

Agenda by A. L. Kroeber With Comments and Additions by Participants

1. THE PLACE OF ANTHROPOLOGY IN SCIENCE

I. Historical View

- Periods of Exploration and Missionization. First recognitions of ethnocentrism.
- 2. Incipient descriptive ethnology 1830/40 seq.
- "Classical" theorizing evolutionism after 1859. I 1-3. Pass over briefty-FH.
 - Yes. All of I was intended as background—AK.
- The second Classical wave centering on religion, and "psychic unity." Frazer; Durkheim?; Freud. Breadth of influence.
- 5. Critical, anti-speculative, empirical period. Boas.
- II. Components of Anthropology
 - Natural Science: human biology, archaeology, "material culture," technology. Direct measurement, statistical analysis, measures for dating. Museum activity.
 - Humanist-naturalist: Linguistics, aesthetic, often historical; "art and archaeology." Concerned with patterns.—Museum activity.

II 2. Surely archaeology has a humanistic dimension-CK.

So intended by phrase "art and archaeology"-AK.

- Social science. Mainly subsequent to preceding. Theoretical. Largely ahistorical or short-range diachronic. Concerned with "change," dynamics. Sociological associations and shared theory. Hypothesis testing. (Cf. Session 6)
- 4. Application. Late development, in U.S. only in late 1930's, whereas all other social sciences assumed practical application from outset.

II 4. Tylor, Boas were reformist-CK, DH.

But traditionally, anthropology was applied chiefly to reform of ideas and tastes-DH.

II 4. Problem: The role of applied anthropology in a post-colonial age?—FH.

III. Relations with Historiography

III. Transpose section III to session 5-CK.

- 1. Herodotus' combination of historiography and ethnography; the wide angle of interest subtended. III 1. Continuation of Herodotus' interest in Caesar, Tacitus, Manetho, Berossos. Marcus Aurelius and other Roman philosophers were sociologically (perhaps anthropologically) inclined. The Confucian school viewed society historically and ethnically, their aims were ethical and political, they grounded their ethics on an almost cultural basis-RC.
- With Thucydides, the scope narrows, the static description of culture drops off from historiography, emphasis is on events, sources are written.
- Only with XVIII C. Enlightenment does the view again become general (Voltaire, "philosophy of history," *Essai sur les Moeurs*, Herder, Gibbon on sects.) (Cf. Session 7)
- IV. The Holism of Anthropology
 - IV. Two possible senses of holism: (a) possible relevance of all data; (b) putting data together into large syntheses—DH.
 - Manifest in the insistence on covering both biological and sociocultural aspects. (Herder, Taylor, Boas, the universal U.S.A. assumption).
 - 2. Dealing both with abstracted principles and with generalized history. Durkheim, Radcliffe-Brown vs. Schmidt, Childe; Bastian vs. Ratzel.
 - 3. Attraction for philosophers: Levy-Bruhl, Marett,

U.S.A. moderns. Contrast philosophy's XIX C. relation to sociology.

IV 3. XVIII century was also attracted to anthropology, according to Bidney-DH.

 Specific fields of research tend to be holistic, from world ethnographies to tribal and "community studies."

IV 4. Holism can mean "healthy" (descriptive adequacy, taxonomic care, etc.). But this sense has been largely sidetracked for immediate relevance by standards set by others_DH.

Envisaging of phenomena in relation to their entire field is both "healthy" and "holistic" as against reduction of field in order to make given operational techniques more applicable—AK.

2. BALANCING EMPHASES ON MIND, PERSONS, SOCIETY, CULTURE

- I. Emphasis on Mind or Faculties
 - I. Much of this list hardly needs discussion. It was included as an aide-memoire for historical back-ground-AK.
 - 1. Kant's "Anthropologie" (the nature of man)
 - 2. v. Irwings Triebfedern leading to culture-cultivation
 - 3. Herder, books 4, 5, 6 (of 20 in Philosophy of History)
 - 4. Less developed in classic evolutionism (1860-90)
 - 5. Reemphasized in Frazer; also Brinton's psychic unity
 - 6. Boas recognized anthropological problems as ulti-
 - mately psychological, but did not grapple with them. 7. Wundt: Völkerpsychologie
 - 8. Durkheim (and R.-B.): autonomy of social facts (structure) against psychology
 - 9. Goldenweiser, History, Psychology, and Culture
 - 10. Malinowski's needs, integration
 - 11. Freud's foray into culture; Frazerian basis
 - 12. Personality concept. Freudian and other influences
 - 13. Sapir and Psychiatry
 - 14. Personality and Culture: aim at "depth"
 - I 14. Problem of the use of psychological tests vs. ethnographic observation-MS.
 - 15. Freudian aftermaths and trivia-toilet, weaning, etc.
 - 16. Honigman's text book
- II. Gradual Shift from Faculative Mind to Holistic Personality. Illustrated in last items above
- III. Social Psychology
 - 1. Tarde: "Laws" of "Imitation"
 - 2. Crowd or mob psychology; suggestibility
 - Formal social psychology (in U.S.A.) in both sociology and psychology. Opinion polls, propaganda, merchandising.
 - European counterparts

 II, III. Which psychological theories are most
 adequate for which anthropological problems?—EW.
- IV. Primary Emphasis on Special Social Phenomena Refer to Session 6
- V. Primary Emphasis on Culture
 - 1. Culture the last emergent, and the latest recognized
 - 2. Most nearly exclusively human
 - 3. Culture can be exosomatic; must it be so?
 - 4. The potential vastness of cultural systems V 4. Ultimate problem may be between the vastness of culture and the limitations and needs of men-cf. Sapir's "genuine" and "spurious" culture-DH.
 - 5. Accumulation, creativity, progress as features of culture

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V 5. Because of progressive accumulation, the problem also becomes one of selection. In the face of increasing cultural homogeneity, balance and resilience can come only from selection and integration-DH.

V 5. The term "creativity" carries a heavy emotional connotation, often anti-scientific; but the concept has evidently become necessary for fully understanding civilization. Can it be defined so as to be operationally productive in scientific anthropology?-AK.

3. ANTHROPOLOGY AND RELIGION

- I. Interest in religion of the Frazerian phase of "classical" anthropology. Shift of primary assumption from progressive evolution to spontaneity of developments out of human nature as a constant.
- II. Durkheim, Levy-Bruhl.
- III. The invasion of classical studies by anthropological concepts in England: G. Murray, J. Harrison, Graves. II, III. Add item on German ethnologist philosophers: Rohde, Usener, Dieterich-CK. And Vierkandt-AK.

III. Substitute E. R. Dodds for Graves-CK. Add Dodds to Graves-AK.

- IV. Frazer's comparative analysis of religions had as an unintended by-product a widespread dissolving away of established religion.
- V. This gears into the visibly accelerating secularization of the world.
- VI. First beginning of secularization in Christian civilization visible since XIII C. Now, with modernism and westernization, the drift is spreading to other religions.
- VII. Julian Huxley's avowed attitude.
- VIII. Are such programs oriented toward a new religion or to a surrogate? VIII. No new religion is expectable until our intel-

lectuals lose faith in their own knowledge. Pre-Han China and Graeco-Roman society are precedents-RC.

- IX. Does the complete autonomy and unrestricted sway of naturalistic science leave room for any supernaturalism? IX. Needful to guard against assumption that an intellectual decline causes a general decline. Could our science exhaust its patterns? Is there such a thing as "freezing" instead of "exhaustion" of patterns?-RG.
- X. What forms can a wholly non-supernaturalistic "religion" take and still fulfill the functions of religions of the past?
- XI. How far could either art or science function adequately as a surrogate for religion?
- XII. Is an "anthropological attitude" on these problems warranted or possible?

XII. If primitive societies decline, and anthropologists discover how and why, they might develop a reaction to decline, and the rise of religion, in Western and other large societies-RC.

Add XIII. Is there a specific anthropological approach to moral concepts?-FH.

Add XIV. Can one study moral systems as independent entities?-FH.

Add XV. The anthropological reaction to Teilhard's "The Phenomenon of Man"-FH.

Add XVI. What is distinctive about anthropological studies of religion vs. "history of religions" or "comparative religions"?-MS. EW.

Addendum. Session 3 was intended to consider the cross-cutting of two autonomous entities-AK.

4. ANTHROPOLOGICAL LINGUISTICS AS AN EMERGENT

I. Language and culture, or language in culture?

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- II. Linguistic attitude: form is grammar, language; content is lexicon, culture.
- III. Near-autonomy of language.
 - 1. Most specific function is communication.
 - 2. This makes (rest of) culture possible. III 1, 2. (Hymes has some points on "communication" which it is difficult to present in condensation -AK.)
 - 3. Forms are more definite but less conscious.
 - 4. The system of forms can be more readily and successfully abstracted ("grammars").
 - 5. The temporarily successful aim of modern linguistics is to extricate pure form from meaning-content as far as possible.
 - 6. In the phoneme and morpheme language has atomlike units that show no counterpart in culture.
- IV. Similarity of language and culture.
 - 1. While the first phylogenies established were linguistic (Indo-European 70 years before biological phylogenies!), it is becoming increasingly clear that divergence from common ancestral form will account for only part of the history and composition of any language, and that convergent processes corresponding to cultural diffusion (wave theory) have been more influential than heretofore believed.
 - 2. Part of the value of phylogenetic study of languages is in enhancing diachronic range, without which processes of change are difficult to discern.
- V. Anthropological linguistics.
 - 1. To the "pure" linguist, genetic language families or phyla are primarily a frame usually defining certain linguistic operations.
 - 2. To anthropologists, such families are historic entities and an important means of classification.
- VI. Some anthropological contributions to linguistic thought:
 - 1. Unconsciousness of language patterning (Boas).
 - 2. First non-normative, unethnocentric typological classification (Sapir).
 - 3. Lexicostatistics for (a) classification, (b) dating (Swadesh).
 - 4. Typological index for comparison (Greenberg). I-VI. I would like to propose "linguistic anthropology" as the label-DH. Add to VI: 5. Componential Analysis (Goodenough)

-MS. EW. 6. Influence of language on modes of thought and be-

havior (Whorf; "psycholinguistics")-MS. EW.

5. CULTURE HISTORY AND THE FATE OF ETHNOLOGY

- I. Ethnology as a constructive discipline. Most of its work has probably been accomplished, because of the melting away of "primitive" (traditional) life.
- II. Accomplishments.
 - 1. Preservation of a live record of historically obscure cultures important chiefly for comparative study and consequent breadth of base (analogously to inclusion of less developed phyla in biology). 2. The cultures of the "little societies" could reasonably
 - be encompassed by ethnographers as unit wholes, as was difficult for the great historic cultures. Properties of function, integration, total structure could consequently be better perceived.
 - 3. In addition to many pervasive similarities within the small cultures, a strikingly rich variety of cultural achievements on the unlettered level have been recorded and preserved.

4. Most future new ethnographic information will be acquired through the sister discipline of prehistoric archaeology, whose coverage of the body of cultures is necessarily more limited, but whose time and areal range are indefinitely great.

II 4. There still are young ethnographers with passion for ethnography as a descriptive science, who would be dismayed to have its work turned over to archaeology-DH.

III. Culture history is mainly still to be developed. It will include, or derive from, or draw upon:

1. Ethnography.

2. Disciplines concerned with the great historic units of culture (Sinology, Egyptology, etc.).

III 2. Much ethnographic information on advanced societies (China, India, Near East) can and should be collected. Their anthropological study has only be-gun-FH.

3. General history in the widest sense, especially as its cultural regularities emerge on abstraction from the irregularities of the stream of events.

III $\overline{3}$. Irregularities are as deserving of study as regularities—RC.

- IV. Culture-historical approaches.
 - 1. Analytic, by the (typological) definition and tracing of items and clusters (traits and systems) of cultural content, and their interaction, through time and space.
 - 2. Integrational, the review of the world's cultures as they have de facto segregated themselves out as historic units or entities.
 - Evolutionary, with emphasis on stages of development, and interest in viability, effectiveness, survival, and progress.

Archaeology will ultimately be involved in all three of these approaches, presumably.

III 3, IV. Are concerned closely with Sessions 7, 8, 9-RC.

IV. There will certainly be a value, indefinitely long, for skilled ethnographic work. With new ideas there will be new needs for cross-cultural study, and presumably for fresh field work-DH.

IV. Apart from new field work, the comparative exploitation of extant ethnographic data remains mostly undone-AK.

6. ANTHROPOLOGY, SOCIOLOGY, SOCIAL

ANTHROPOLOGY

I. Basic Theory

Can it be assumed that the general theory of sociology and anthropology is essentially shared and the same? Differences due to Terminology

- II. Differences due to Terminology
 - 1. "Social" the older word, "culture" evokes more resistance.

II 1. "Culture" and "society" are both abstractions. Their relation is not simple. For some purposes they can be used together (Parsons-but is culture derivative?). For other purposes their incidence differs and they may be used interchangeably-RC.

- 2. Comte's (and Spencer's) "sociology."
- 3. Durkheim's "social facts" include cultural ones.
- III. Intrinsic Differences of Scope
 - 1. Primacy of society in sociology, parity in anthropology. Parsons: culture derivative, extension of society III 1. Is the "derivativeness" parallel to primacy of rite over myth, of act over its rationalization?-DH.

2. Comte, Spencer, Sorokin accord full place to culture. IV. Differences of Range

- In U.S.A., sociology prevalently contemporary, nonhistoric. Exceptions: Sumner, Merton.
- 2. In Europe, M. and A. Weber. Pareto.

V. Differences of Motive

- Curiosity or Amelioration? V 1. Are these terms ("curiosity," "amelioration") apt for the contrast between Kluckhohn and Parsons?— DH.
- 2. Application to current problems. In England, France, Germany, Italy, U.S.
- VI. Social Anthropology
 - 1. A British (and French?) development.
 - 2. Separation from biology, archaeology, linguistics.
 - Malinowski and R.-B. both anhistoric. VI 3. Malinowski not wholly anhistoric—CK. Nor is Radcliffe-Brown; but he admits only speculative and annalistic history—AK.
 - 4. Intensity of field studies.

7. COMPARATIVE STUDY OF CIVILIZATION

- I. This flows from the 2nd or Integrational approach of culture history, discussed in Session 5.
- II. Going beyond historical recognition, it aims to determine such regularities as tend to recur through the natural (historic) civilizational units.
- III. This aim of course is not specifically anthropological. It has been held to also by philosophers, historians, sociologists, even biologists (Danilevsky).
- IV. Stewart's multilinear development with new levels of integration belongs partly here, partly in Evolutionism of culture; White's, wholly in the latter.

V. Toynbee's dilemma is the historian's in this field: looking for regularities in events, and the morality involved in these, he does not get the cultures into focus.
 V. Toynbee's trouble should hardly be attributed to

him as a historian-RC.

- VI. Spengler does focus on cultures, but stylistically, and therefore idiosyncratically, with which his alleged parallels or repetitive regularities fail to mesh.
- VII. There is confusion in this field between "cyclic" as regularly repetitive recurrence (of interval, event, or stage) and as merely (irregularly) intermittent. Add VIII. Redfield's program for systematic comparison of pervasive similarities and differences in "world view" and values-MS. EW.

Add IX. More segmental study (than in VIII) of comparative law, comparative politics, comparative history, comparative literature, etc.—MS. EW.

Add X. Nature and functioning of self-images of their culture by societies (Redfield, Singer)-AK.

8. ART AND ANTHROPOLOGY

- I. Art is used here in the sense of the aesthetic component, viz. all the creative arts.
- II. "Creativity" is perhaps best defined by the quality of its products.
 - II. On "creativity" see also comments in Session 2, V5.
- III. On the biological level, the manifestations most similar to it are usually connected with species reproduction (cf. Berenson's "life-enhancement").
- IV. In culture, aesthetic creativity seems to flourish most when certain other activities (economic, social, etc.) are functioning with sufficience or surplus, and possibly in an interacting balance also. But the whole problem of the preconditions of creativity has been speculated about rather than systematically explored.
- V. Intellectual creativity seems to agree with aesthetic in appearing mainly in irregular bursts; this in spite of the fact that intellectual activity tends to be cumulative through bursts, whereas aesthetic mainly starts fresh.
- VI. Religion and art show a variable interdependence. Some great arts-verbal, visual, musical, structuralhave had strong association with and reenforcement

from particular cults and myths. Some have culminated only as they shed religious dominance, but others have shallowed with secularization.

- VII. There seems considerable heuristic value in Flinders-Petrie's selection of the moment of "liberation from archaism" as the point in development at which the culmination of an art is likely to begin. This may also be the moment of liberation from religion.
- VIII. The interrelations of the several arts also vary greatly -cf. the dominance of verbal over representational art in Islam and its antecedents. But this again is unexplored terrain.

Add IX 1. Language might be viewed largely as an aesthetic product. It is the universally available aesthetic medium, requiring no special materials-DH.

Add IX 2. As at least part of the historical explanation of the grammatical apparatus and configuration of languages, what else is there but appeal to sense of form, pattern, congruence, etc.?-DH.

Add X. Perhaps anthropology has neglected the contribution it might make (partly via linguistics) to a truly comparative study of world literature-DH.

9. UNITS, PATTERNS, STYLE

I. Units

- 1. Units corresponding to the phonemes and morphemes of language—operationally validable and useful—have not been formulated for non-linguistic culture.
- I 1. "Role" seems closest of those formulated (as cultural units), but certainly is not sure as such-DH. I 1. Included might be Pike's -etic and -emic contrast-CK.
- 2. Basic social units are firm as far as they rest on biological definition (nuclear and extended family, lineage) but beyond that seemingly are about as shifting and elusive as in (non-linguistic) culture.
- 3. We seem to know no reason for this difference. It may rest on the psychological basis of language.
 - I 3. Are Lévi-Strauss' (1955) myth units relevant here?—CK.
- II. Patterns
 - Patterning seems to characterize historic products, patterns being sets of related forms within which life is led, Relation of natural patterns and context.

- 2. Biological forms are also patterned, but they are also the end products of a history; and their patterns are built in by selection and heredity.
- In man, built-in instincts are heavily truncated, which seems to be one precondition of cultural patterning, in fact of culture itself, which is exosomatic and therefore labile and variable.
- 4. The patterns of a culture can be abstracted and viewed as a system functioning per se-much like a grammar-or again somewhat like a physiology. Such a formulation is best achieved by holding the involved human beings constant-focussing them out of view.
- 5. Contrarily, if the interest is in the behavior of persons, the cultural patterns are held constant, or assumed, or focussed out of range.
- III. Style
 - Style, originally individual and aesthetic in reference, now perhaps is more often used socioculturally, and refers to a pervasive characteristic manner or quality which is apperceived by recognition, though it can also be secondarily defined. It is usually long-term and irreversible.
 - 2. Style must be present in creative art, and tends to appear in artifacts, dress, food preparation, etc.
 - 3. It can be frozen into repetitiveness, but normally changes gradually into greater saturation, and when exhausted, may be replaced by a new style. In dress fashion the emphasis is on the fact of change rather than its direction.
 - 4. National character or overall cultural bent can be seen as a kind of enlarged style or secondary integration of coexisting styles. Benedict's and Mead's totalculture patternings can be construed as a stylistic approach (Milke). Spengler's flair was for characterizing the styles of major cultures, though in a matrix of exaggeration and ahistoric mysticism.

Add to III: 5, "cognitive style" in description of languages-DH.

10. ANTHROPOLOGY AND THE FUTURE

It is suggested that in the final afternoon session each participant contribute an opinion on what the future of anthropology will be, ought to be, or might be.

References Cited

- BROWN, R., and GILMAN, A. 1960. The Pronouns of Power and Solidarity, in SE-BEOK, T. A. (ed.), *Style and language*. New York and London.
- DRIVER, H. E. 1956. An integration of functional, evolutionary, and historical theory by means of correlations. Memoir No. 12, supplementary to International Journal of American Linguistics, XXII (1956).
- DRIVER, H. E. and MASSEY, W. C. 1957. Comparative studies of North American Indians. Trans. Am. Philos. Soc., XLVII, Part 2: 421-39. Philadelphia.
- ELMENDORF, W. W. 1960. The structure of Twana Culture, with comparative notes on the structure of Yurok culture by A. L. Kroeber. Washington State University Research Studies, Monographic Supplement No. 2. Pullman, Washington.
- FICHTER, JOSEPH S. 1954. Social Relations in the Urban Parish. University of Chicago Press.
- GARDIN, JEAN-CL. 1958. Four codes for the

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description of artifacts; an essay in archaeological technique and theory. *American Anthropologist* 60 (1958): 335-57.

- GOMBRICH, E. H. 1960. Art and Illusion. New York.
- GOODENOUGH, WARD. Cultural anthropology and linguistics. Georgetown University, Monograph series on Languages and Linguistics, No. 9 (1957) M. 167–173.
- HERBERG, WILL. 1955. Protestant, Catholic, Jew. Garden City, New York.
- HYMES, D. H. 1960. Lexicostatistics So Far. Current Anthropology, 1 (1960): 3–44.
- KROEBER, A. L. 1952. Causes in Culture. American Anthropologist 54 (1952): 112-16.
- LE BRAS, GABRIEL. 1955. Etudes de la sociologie religieuse. Paris.
- LEVY, MARION J. 1959. Some Questions about "The Concepts of Culture and of Social System." American Sociological Review 24 (1959): 247-8.
- LOMAX, ALAN. 1959. Folk Song Style. American Anthropologist 61 (1959): 927-54.
- MARTINET, ANDRE. 1955. Economie des changements phonetiques. Bern.

MURDOCK, G. P. 1949. Social Structure. New York.

- Ocles, R. H. 1959. Comment on "The Concepts of Culture and of Social System." *American Sociological Review* 24 (1959): 246.
- PARSONS, TALCOTT. 1959. A Rejoinder to Ogles and Levy. American Sociological Review. 24 (1959): 248-50.
- PIKE, K. L. 1954. Language in relation to a unified theory of the structure of human behavior, Part 1. Glendale, California.
- SIMPSON, G. G., PITTENDRIGH, C. S., and TIFFANY, L. H. 1957. Life: an introduction to biology. New York.
- SINGER, M. B. 1960. Survey of personality and culture theory and research, in BERT KAPLAN, Studying Personality Crossculturally. Evanston, Illinois: Row, Peterson & Co.
- THOMPSON, D'ARCY W. 1942. On growth and form. 2nd. ed. Cambridge and New York.
- WELLS, H. G. HUXLEY, J., and WELLS, G. P. 1937. Biology of the Human Race, London.