FOR THE CHIEF

Essays in Honor of Luther S. Cressman

Editors: Fred W. Vogt and Robert L. Stephenson

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FOR THE CHIEF

ESSAYS IN HONOR OF LUTHER S. CRESSMAN

by some of his students

Fred W. Voget

Robert L. Stephenson

Editors

Foreword by Theodore Stern

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Luther Cressman and followers, Fort Rock, August 1970 (C.M. Aikens photo)
THE CHIEF

The papers brought together here are offered in warm tribute and recollection of a teacher, at once demanding and paternal, who shaped the early growth of these contributors in the anthropological tradition. Luther Sheeleigh Cressman, the teacher, was at the same time the major architect in developing anthropology at the University of Oregon, together with his long-term colleague, Homer C. Barnett; the breadth of their work is attested by the department they built, which at the time of Luther's retirement was to be judged among a score of the best in the country. It is shown as well in the Museum of Natural History, which he founded as a common meeting place for the field sciences and the general public. In addition, it is revealed in the multi-disciplinary character of his research, in which so many of his students became immersed to their great profit, and the breadth of which is revealed in the papers in this volume.

Fortunately, we may postpone a detailed accounting of these accomplishments, for Luther Cressman is still active among us--his students and colleagues--giving lectures, putting into final shape a comprehensive manuscript on the prehistory of the Pacific Northwest, and receiving due honors. Yet a teacher imparts much of himself, and in this collection are acknowledged some of those things which, over thirty-five years, have been learned from him.

First, there is his warmth toward his students, a warmth which his wife, Cecilia, has done so much to amplify. More than once they took into their home a student too out of pocket to afford quarters; and for long, until the department became too large, they entertained staff and students together. More than ten years ago they established the L. S. and D. C. Cressman Prize Essay Contest for students in the department. As a teacher, Luther adhered to the conviction that the freshman, equally with the graduate student, deserves access to the senior minds in the field. In that belief, he taught an introductory course to the time of his retirement. He has never been prouder of any product than of the students who emerged to become successful professional and colleagues. He was particularly proud that the son of his first M.A. in anthropology came in turn to receive his first advanced degree in the same department.

To Luther's own research, which served as a field introduction to so many, he brought unusual breadth. He is by training a sociologist, who took collateral work with Boas while studying under Ogilvie at Columbia, and it was more by accident than design that he was first drawn into archeology. Once there, he rapidly unfolded the strategy of research which he was thereafter to follow, and invited the
cooperation of colleagues in the related natural sciences. Yet, although the archaeological scientist, he never lost sight of the bearing his data had upon cultural anthropology and upon the humanities.

That research also taught a lesson in integrity. Through his work in eastern Oregon early in his career, he became convinced of the antiquity of man in the Great Basin. Standing fast against the prejudices of his archaeological peers, he was vindicated only with the advent of the radiocarbon method of age determination.

Teacher and scientist—we all acknowledge finally his sense of service. It has deep roots, in the example of his father, a country doctor in the Pennsylvania Dutch country around Pottstown; it shows in his service during World War I, and afterwards when a student for the Episcopal clergy. As an anthropologist he affirmed that it was no more than common decency to make returns to the people who are studied, and he served with government task forces active in the modern reevaluation of the rights of native Americans.

It is to a teacher who introduced so many to the freemasonry of research, who has taught by his example the responsibility of the scientist toward his data and toward their application, that this volume is dedicated by his students. May he long continue to participate in the growth of anthropology in their company.

Theodore Stern
THE NATURE OF CASTE SYSTEMS

by

Gerald D. Berreman

Debate over whether the term "caste" can or should be used to describe systems of social stratification outside of Hindu India has intensified in recent years with increased knowledge and understanding of the Hindu caste system (Barber 1968; Beteille 1969; Srinivas 1962, 1966). Among social scientists who have worked in India there are basically two views: (1) that the caste system is to be defined in terms of its Hindu attributes and rationale and therefore is unique to India or at least to South Asia (Dumont 1961, 1970; Leach 1960); (2) that the caste system is to be defined in terms of social structural features which are found not only in Hindu India but in a number of non-Hindu societies as well (Bailey 1959, 1963; Barth 1960; Berreman 1960a, 1966, 1972). Obviously, either of these positions is tenable and which is preferable depends upon one's interests and purposes. For the purposes of comparative social science and in the interest of deriving generalizations, I prefer to define caste organization so that it will be applicable cross-culturally. From such a definition we may be able to derive insights into concomitants of caste systems so defined--structural, functional, cultural and psychological concomitants.

This is not to claim that all caste systems are identical, but simply that there are forms of social organization commonly termed "caste" which exhibit significant similarities along with their differences and that these similarities may form the basis for productive comparisons leading to greater understanding of human social organization and behavior.

My purpose, then, is to define caste systems in a way which has comparative utility and to point out some of the features of such systems. This is not an unprecedented undertaking. Kroeber (1930) briefly addressed this problem with considerable insight. Gould (1960) has presented an account emphasizing the social and cultural conditions under which caste organization has arisen. Bailey (1963) has examined meanings of the term caste with reference to India and has discussed it in broader perspective as well.
Definition

In an earlier article comparing caste in India with race relations in the southern United States, I defined a caste system as comprising "a hierarchy of endogamous divisions, in which membership is hereditary and permanent" (Berreman 1960).

I have revised this to read: a hierarchy of groups in a society, membership in which is determined by birth. This definition and its implications demand some explanation, particularly as they contrast to the earlier definition. I shall begin by elaborating the components of the definition.

Hierarchy: The most conspicuous feature of any caste system is the notion of hierarchy or rank—the differential evaluation of its constituent groups and individuals in terms of their intrinsic worth on a scale of superiority-inferiority. Those who deny cross-cultural validity to the caste concept often focus on the culturally specific idiom in which the hierarchy is expressed. Thus, in Hindu India it is the religiously based purity-pollution continuum which is the rationale for ranking, and rank is identifiable by ancestry, usually discernible by dress, manner of speech, occupation and other culturally-defined attributes (see Stevenson 1954). In Swat, northwest Pakistan, the idiom for ranking is one of privilege and shame (Barth 1960). In the United States race differences are expressed primarily as alleged differences in morality, character and intelligence, identified by and associated with skin color. The common feature in all of these systems is, however, that the people who comprise the hierarchically-ranked groups are conceived of as being of differential intrinsic worth regardless of the idiom in which it is expressed or the symbols by which it is identified.

Although the specific bases for ranking differ from culture to culture, in each instance the bases are highly salient and highly valued in the society. Caste systems are systems of institutionalized inequality. They are not simply theoretical or ideal systems. They have very immediate and practical implications for those who live them because differential intrinsic worth is associated with differential access to good, services, and esteem, and with differential life chances. The social, psychological and physical consequences of this fact are amply documented in the instance of American race relations and are evidently similar in other societies.

Groups: In caste systems, the ranked entities are self-aware, publicly recognized, named, bounded, and are comprised of people who interact, either actually, putatively, or ideally. That is, they are groups rather than simply categories. There is in any caste system a strong element of corporateness which is lacking in many other systems of social stratification wherein the ranked entities are loosely defined aggregates of people or are simply individuals. In
a caste society every person who is considered to be a member of
the group shares the status of that group. Individual prestige
and esteem exist, of course, but in those respects in which group
status is important every member shares that status. Even when
individuals patently fail to exhibit the symbols of group status,
they still share that status, so long as they are considered to be
group members. Thus, an individual of the untouchable shoemaker caste
may fail to conform to the behaviors which are used to justify his
caste's low status or to identify people of his caste status. He
may do this by refusing to touch dead animals or to work with
animal skins, by refusing to eat meat, by practicing orthodox Hinduism,
by attaining education and becoming, for example, a schoolteacher,
a politician, or a businessman. Yet he will remain of shoemaker
caste and remain an untouchable (see Isaacs 1964). Similarly, a black
in the southern United States may have skin lighter than that of some
of his Caucasian neighbors, and he may become a physician. Yet so
long as he is identified as a black, he will be accorded the status
of black in those contexts where this status is relevant. That such
a black might pass as white, that such a shoemaker might successfully
conceal his caste status, does not alter the fact that caste rank is
group rank, for such exceptions are evasions or perversions of the
system, not exemplifications of it. Thus it is inherited intrinsic
worth, not external symbols thereof, which is crucial in a caste system.

Within society: A caste system is exactly that—a system.
The ranked groups which comprise it are interacting groups. They
are to some degree functionally interdependent. This may take the
form of economic, social or ritual interdependence. The essential
fact is that they participate in a single, functional social system.
Indianists have been hard pressed to distinguish clearly between
castes and other ethnic groups in India. This distinction has been
especially difficult with regard to "tribes" and castes (Bailey 1961). One
of several critical variables that is useful here is that of
participation in a single social system. Castes are components of
such a system. A tribe comprises a relatively independent and homo-
genous system of its own.

Membership in which is determined by birth: Most discussions
of caste, including my own earlier one, cited above, specify endogamy
as a defining characteristic of castes. I have omitted this criterion
here for what seem to be very good reasons.

The crucial feature of a caste system is that membership is
determined by birth and, as a consequence, is unalterable. Endogamy
is the most widespread mechanism for determining the group identity
of the newborn in caste systems. People are married within the group
and their children are automatically of the group. There are, however,
other mechanisms for birth ascription of caste membership. In South
Asia hypergamy is well known and hypogamy exists, but less commonly
(both generally occur less frequently in those groups in which they are
allowed than does marriage within the group). Both are an embarrassment to any definition of caste which requires endogamy, for both involve marriage out of the caste. In the first instance the offspring are assigned to the caste of the high-ranking father, in the second, to the caste of the high-ranking mother. In Swat, Barth reports that caste status is determined patrilineally while among the Nayar of south India, caste status is that of the mother. In the region of my research in the mountains of north India, when inter-caste marriage occurred, the offspring were assigned the caste of the lower-ranking parent, regardless of which parent this might be (Berro-Man 1963: 155, 157). It is widely reported, though rarely observed in India, that people of some castes can derive from parents of two other castes: an individual of caste C has parents of castes A and B (Furer-Haimendorf 1957). In such cases, endogamy is the more usual rule, with children inheriting their caste affiliation bilaterally, but the rule just described is also operative. Thus, as in the case of kin groups, membership in hereditary status groups may be determined in a wide variety of ways without introducing any ambiguity. Caste endogamy is a simple, consistent and by far the most common mechanism, but as the evidence shows, other unambiguous methods of birth ascription work to the same effect.

This definition of caste organization promises to be useful in cross-cultural comparison in that it describes a principle of social organization which appears in a variety of societies, manifest in a variety of ways.

Caste and Other Principles of Social Organization

For purposes of comparison it is worthwhile to contrast caste with some other widespread principles of social organization. Three come immediately to mind as complementary and contrastive without being mutually exclusive. In fact, all three occur in societies which have caste systems as well as in those which do not. These principles may be identified as "class," "kinship," and "community." Each will be briefly characterized and contrasted to caste.

Class: Class, like caste, implies a hierarchy of divisions of society. Classes are ranked categories of individuals defined by the fact that they share certain attributes, notably income, or occupation, education and style of life. They differ from castes in that membership is not determined by birth but is instead acquired as a result of attributes which are theoretically, at least, independent of birth. People are often in the same class as their parents, their spouses, and their children, but this is at best a probability, not a prescription. It is due to the unlikelihood that a person of one socio-economic milieu will move to another—rather than to status ascription by birth.
Classes vary from society to society in the degree to which they are self-aware, sharply defined, or corporate groups. Generally they are much less so than castes. Characteristically there are individuals whose class membership is marginal or debatable, and individuals can move from one class to another. Caste membership is never of this nature. Caste hierarchies are in their nature completely discontinuous; class hierarchies are not. Caste mobility is mobility of the entire group; class mobility is individual or family mobility.

Societies also exist wherein rank itself is almost entirely on an individual basis. In such instances the hierarchy may be divided into artificial but analytically useful categories by social analysts according to any appropriate criterion such as income or occupations. These strata are neither castes nor classes as these terms are used here.

Kin: Consanguineal kinship (the type to be referred to here) is a matter of birth ascription. People are consanguineal kin because of their birth, and the relationship is, like caste, unalterable. Some kin comprise groups (e.g., a sib, or as it is commonly called, a clan) (see Berreman 1962). Others comprise categories (e.g., "uncles" in English-speaking countries). For the purposes of this comparative analysis, consanguineal kin groups are most useful; groups such as lineages, sibas and phratries. Membership in these is determined by birth, they are groups, and they are generally unranked.

Communities: Local groupings, membership in which is defined by residence, are communities. Occasionally they are comprised exclusively of one kin group or of one caste, but more generally they comprise several or many such groups, interacting with one another. The village is a characteristic type of community, as is a neighborhood. Bands, tribes, or other political entities are described as communities in some contexts. Generally, membership is by residence, not birth, and such groupings are not often ranked relative to one another.

Other Characteristics of Caste Systems

In addition to the defining characteristics of caste systems listed above, a number of features are widely or universally associated with caste. Some of the most prominent of these bear mention here for their utility in analyzing caste cross-culturally.

As has been suggested, a caste hierarchy is a hierarchy of groups, based on differential evaluation of their members' intrinsic worth. It is perhaps obvious that in such a system everyone belongs to a caste and no one belongs to more than one caste. That is, a caste system is both exhaustive and exclusive (Bailey 1963: 109; Nadel 1954). The hierarchy in a caste system is, then, a discontinuous one. Castes are discrete entities. In contrast to some other systems of social stratification wherein the hierarchies are continuous, in a caste system there are no marginal individuals, no gradual transitions
between the ranks.

A caste system is an "echelon" system, to use a term which has been applied to the rank system of "total institutions" by Goffman. Many of the characteristics of echelon relations described by Goffman are found in caste systems outside of total institutions (or perhaps caste systems are, in a sense, total institutions). In an echelon system, "Any member of the staff class has certain rights to discipline any member of the inmate class. . . . (This arrangement, it may be noted, is similar to the one that gives any adult in some small American towns certain rights to correct any child not in the immediate presence of his parents and to demand small services from him)" (Goffman 1961: 42). In both India and the southern United States, low status groups are treated in a similar manner, and are even addressed and referred to in a fashion otherwise reserved for children.

A caste system is also an "involute" system (Nadel 1957: 68 ff.; cf. Barth 1960: 144); the castes are characterized by what Barth has termed "status summation" (Barth 1960: 113 ff., 138 ff.; Nadel 1957: 63 ff.). That is, the various roles that an individual plays are consistently ranked, and the various criteria by which rank is ascertained are consistent in any one individual. "Groups of compatible part statuses are associated together and these form a single, stereotyped social person for each caste" (Barth 1960: 142). Groups and individuals of high social esteem also tend to be of high economic, political and ritual rank. It is probably universally the case that when incongruities appear in this regard, there is a tendency to rectify them. This is explicable in terms of Festinger's concept of "cognitive dissonance," first applied to Indian status striving by Rowe (1960; see also Festinger 1957). Instances in which inconsistencies among roles, between status and attributes, or between subjective and accorded statuses have been rectified are well documented in the literature on Indian caste. 

In India, caste mobility is generally effected through a mechanism of planned status incompatibility. Members of a relatively low-ranking caste adopt behavior and other attributes inconsistent with their low rank, at the same time claiming higher rank. If the behaviors can be sustained in the face of the powerful sanctions which are sure to be brought to bear, the higher rank is likely to be accorded them. Tribal groups in India are normally incorporated into the caste system near the bottom of the hierarchy. Some few tribal groups whose members were landholders have been incorporated near the top (e.g., the Raj Gonds), even though their attributes and behavior in other respects would make a low rank seem more appropriate (and even though other segments of their tribe whose members did not hold land were incorporated near the bottom of the hierarchy). Pressure has then arisen for them to alter their behavior to accord with their high status. In some southern cities in the United States in the 1930's, the few blacks who owned automobiles wore chauffeur's caps when driving in order not to offend whites who saw automobile ownership as a symbol of high status,
intolerable in a black. A black who displayed the symbol openly was likely to have the status inconsistency removed by the expedient of destroying the symbol, if not its owner. Similar mechanisms are common in India. Thus, one may alter the inconsistency by altering the status or by altering the attributes.

Individual castes seem always to be culturally distinct. This is expectable in view of the fact that culture is learned, shared and transmitted. Caste members interact more intensively, extensively and frequently with one another than they do with members of other castes. They do so on a status-equal basis, which is the way that results in truly effective communication. As a result of such interaction, they learn, share and transmit behaviors, beliefs and attitudes within the group more than with members of other groups, with the result that they share elements of culture which are distinctive. Often these are exaggerated and enforced as a result of the desire for group identity and loyalty or by the desire on the part of the caste itself or other higher ranking castes to maintain hierarchical distance. Gumperz (1958) has demonstrated that castes in India often show distinctive linguistic features and I have elsewhere (Berreman 1960b) discussed other kinds of cultural differences between castes.

Barth (1960: 139) has noted the importance of distinguishing between the criteria of rank and the idiom in which rank differences are expressed in a caste system. Thus, the criteria of rank may include wealth, political power, ritual purity, or honor, whereas the rank may be expressed in a variety of symbolic ways such as dress, style of life, manner of interacting with other castes. I would emphasize that a distinction must also be made between the criteria by which a caste has allegedly been assigned its rank and that by which its members' rank is judged. Thus, the shoemaker caste is untouchable because its members' traditional occupation is skinning dead animals and they engage in other kinds of polluting activities, but individuals within it are untouchable because they are of shoemaker caste regardless of their individual behavior. This is one aspect of the fact that castes are ranked corporately and that all members share in this corporate ranking. The idiom in which caste differences are expressed is essential as affirmation and validation of the system by those within it. It is therefore rigidly enforced. Gallagher (1938: 95) notes that a "pragmatic axiom of the caste system is the importance of etiquette in preserving the system. Observance of the etiquette (of intercaste relations) implies acceptance of caste status."

For a caste system to function there must be not only criteria for determining rank, and idioms for its expression, but also unambiguous and fairly reliable indicators (signs or symbols) for determining individuals' caste affiliation. Interaction would be impossible if this were not the case. As Bailey (1963) suggests, a caste system functions best, perhaps, in a small scale society where individuals are
sufficiently well known to one another that their caste credentials are never in doubt. In large scale societies without overt indicators of caste affiliation, anonymity would lead to chaos in that no one could be sure of a stranger's status. It is possible to have caste relations in any society, however, if there are indicators of caste affiliation which are relatively obvious and unalterable. Skin color has worked quite effectively for this purpose in some societies including that of the United States. Speech, occupation, dress, social behavior, and many other cultural features, not the least of which is self-definition, have worked elsewhere (e.g., among the Burakumin of Japan). In each instance, the indicator is simply that--it indicates more or less reliably one's ancestry and hence one's status. No indicator works perfectly. Passing occurs in every caste society, but it is always difficult and dangerous (DeVos and Wagatsuma 1966: 145, 241-252; Isaacs 1964: 143-149). The caste system functions efficiently to the extent that the indicators are accurate and reliable.

Caste and Pariah Status

There is a difference between use of the term "caste" in India and the way that term has often been used when applied outside of India. The difference has caused confusion and therefore needs to be pointed out. Within India caste refers to a great number of social groups, some of which are quite close to one another in rank—that is, in social evaluation or what I have called intrinsic worth—but which are socially distinct. These groups (castes or jatis) are regionally delimited and do not extend over very large areas.

When the term "caste" has been applied outside of India, it has often been applied to a major dichotomous division in a society between people who might be described as pariahs and the rest of the members of the society. Passin (1955; cf. DeVos and Wagatsuma 1966) has described what he terms "untouchability" in Tibet, Korea and Japan, and Maquet (1961) describes the tripartite caste system of Ruanda. Obviously the Burakumin of Japan and the blacks in America are in positions of this sort with reference to the rest of the populations of those societies, and they have frequently been so described, as have blacksmiths in some parts of North Africa and the Middle East. Weber comments that the phenomenon of "pariah" peoples is found all over the world (Gerth and Mille 1946: 189). Pariahs are stigmatized people whose stigma is derived from their birth-ascribed group membership and is shared throughout their group (Goffman 1963: 4 ff.).

This distinction is also found in India. It is intrinsic in the classic Varna system of Hindu society, the modern form of which comprises four major groupings of castes which are considered to be ritually clean, and one major grouping, the so-called "untouchables" or "Harijans"—which are considered to be ritually polluted and hence
severely stigmatized, although few of them are literally untouchable. Bailey (1957: 8, 13) refers to the boundary between these untouchable or pariah groups and the rest of society as the line or barrier of pollution.

To fail to distinguish between castes or a caste system in general and the special caste phenomenon which is pariah status, is likely to lead to confusion in any discussion such as the present one. The general or universal characteristics of pariahs in their relations with non-pariahs may be quite different—or at least may be only part of the picture—when compared with the characteristics of castes where the pollution barrier is not a factor; where, for example, there are two or more interacting castes which are of high status. Pariah castes and pariah-non-pariah relations are widespread and interesting phenomena within the category of caste organization, but care must be exercised not to attribute the characteristics of these phenomena to all caste societies, to all inter-caste relations, or to assume that they are diagnostic of caste organization.

This is at the heart of many Indianists' objection to usage of the term "caste" outside of India. They mean by a caste system a system of hierarchically ranked groups whose membership is determined by birth and is permanent, but the instance which comes to their mind is not only one which is Hindu in its rationale and expression, but one which also involves a great number of interacting groups, some of which are quite close to one another in rank. Since it was Indian society to which the term caste was first applied, and to which it is still most widely applied, and which constitutes in most peoples' minds the ideal-typical model of a caste society, it would be most illogical to exclude from the meaning of the term, even by implication, many of the ranked groups which comprise the caste system in India—and this would be the effect of adopting "caste" to mean "pariah" or "untouchable," or to refer exclusively to the pariah-non-pariah relationship. A more specific term such as "pariah" is preferable to designate the intrinsically polluted, stigmatized, denigrated, excluded caste status found in many societies.

Conclusion

It is possible to define the term caste in such a way as to make it useful for cross-cultural comparisons. I have done so by identifying caste systems as hierarchies of groups within a society, membership in which is determined by birth. Within this definition fall a wide variety of social systems, but it is my belief that they all exhibit significant common features. Perhaps an ideal-type definition will prove to be most productive. If so, the ideal-type of "caste"--the caste end of the continuum--would be defined in terms of ranking of groups and birth ascription plus the associated features listed above, and particular societies would be arranged on the continuum as they approached conformity to these criteria.
Group rank and ascription seem to be the most useful and productive criteria for definition of caste in comparative studies. They are also significant from a psychological and social psychological point of view. There are undoubtedly general and discoverable consequences of individuals being born into a group as a result of which they are inescapably assigned a particular intrinsic worth which they share with others of their group and as a result of which they have preordained life chances. These consequences would vary by the status level of the group in each instance and would be accompanied, I suspect, by common behaviors and common social and psychological mechanisms in response to a common status.

The personal and social consequences of caste and specifically of pariah caste status have been inadequately studied, but they surely include many of the responses described for blacks and whites in the United States (see Allport 1958; Cash 1954; Hyman 1942; Kardiner and Ovesey 1962; Pettigrew 1964; Smith 1963). Anyone familiar with untouchable status in India will recognize in Kardiner and Ovessey's and in Pettigrew's discussions of American Negro personality, low caste people he has known in India. Those who know the American scene will see similarities to the Indian situation in such accounts of untouchability as the novel by Anand (1956), the autobiography by Hazari (1951), and the recent account of mobile, educated untouchables by Isaacs (1964).

Low castes commonly respond to their status by denying its validity and seeking to escape from its most disturbing implications. Escape is sought through upward mobility, emigration, passing, retreat into caste-exempt religious roles, adherence to anti-caste social groups and social ideologies. Other reactions include passive accommodation accompanied by self-hatred, in-group aggression and fantasy. Overt resistance or out-group aggression often occurs when considerations of relative power make this feasible.

High castes react to their status by exhibiting feelings of social superiority and prejudice. They enforce their status superiority by applying sanctions against their social inferiors. Gallagher (1938: 109) has described a situation which seems to be universal in high-low caste relations, in his comment regarding the southern United States, that "by the attitudes of mingled fear, hostility, deprecation, discrimination, amused patronage, friendly domination, and rigid authoritarianism, the white caste generates opposite and complementary attitudes in the Negro caste. It is a touch of consummate irony that the dominant group should then argue that the characteristics which exhibit themselves in the submerged group are 'natural' or 'racial.'"

Intergroup relations, mobility patterns, rationalizations of status, mechanisms to maintain, undermine or alter the system, conceptions of self and others; these and many others are fruitful areas of inquiry in the investigation of caste systems. It is in the investigation of such features as these that cross-cultural studies of
caste can be expected to be most productive. I would expect many striking similarities to be discovered in the concomitants and consequences of caste organization, even among societies otherwise quite different.

It is perhaps not inappropriate to repeat the closing sentence of my earlier article (Berreman 1960a: 127): "By comparing caste situations...it should be possible to derive further insight, not only into caste in India, but into a widespread type of relations between groups--insight which is obscured if we insist on treating Indian caste as entirely unique."

Notes

1 This paper was presented before the East Asia Society at the University of Oregon, November 6, 1964. It is published here, revised, in honor of Professor Luther Cressman, one of my first teachers in anthropology.

2 A Nayar woman may have a child legitimately by a Brahman "husband" and the child is a Nayar like its mother. The situation is actually more complicated than this since each woman has a Nayar "husband" of a different type (i.e., a ritual husband) as well who is necessary in order for her to have any legitimate children at all, although he is unlikely to be the biological father of any of them or to play any role approximating that of social father as it is known in other societies (see Gough 1959).

3 Here I make use of Hyman's important distinction between subjective status (one's own conception of his own position, as it is or as it ought to be), accorded status (the way other people view one's status), and objective status (determined on the basis of objective criteria) (Hyman 1942).

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AN ECOLOGICAL INTERPRETATION OF THE
DIFFERENTIAL RESPONSES OF CHINA AND JAPAN TO CONTACT WITH THE WEST SINCE ABOUT A.D. 1600

by

Robin A. Drews

Introduction

A rather challenging historical oddity is the virtually identical lengths of the spans in years of the last "native" regimes in the two largest nations of East Asia. The Manchu, Ch'ing, dynasty came into being in China in 1644 and lasted until 1911, and the Tokugawa Shogunate came into power in Japan in 1600 and continued in control until 1868. Considering the fact that the Tokugawas only finally established their absolute right to rule by vanquishing in battle the son of Hideyoshi in 1615, and that the entire first Manchu reign--that of Shun Chih, which lasted for seventeen years--was spent consolidating dynastic control, the similarities in a temporal sense are remarkable.

The striking similarity in the time span of these two regimes is taken here to be coincidental. The patterns of Chinese and Japanese reaction to the West during this period differed greatly, but each showed a considerable degree of internal consistency. These different patterns of reaction to a similar set of stimuli are seen as closely related to the set of ecological factors which have influenced human behavior in each country since ancient times. The general view of what happened in East Asia during the high tide of western imperialism throughout the world, has always incorporated some recognition of ecological factors, although they seldom have been identified as such. China's size, economic wealth and cultural supremacy in Eastern Asia have normally been contrasted with Japan's weaknesses, in discussions of historical developments in the two countries. The way this contrast usually has been expressed during the late nineteenth and the twentieth centuries has been by surprise at Japan's rise to national greatness in the twentieth century, while China continued to wallow in disarray and despair. It is the hope of the writer that an analysis based on an ecological evaluation of the situation in East Asia from A.D. 1600 to the present may provide some explanations for the contrasting behavior of China and Japan during the earlier episodes of contact with the West, as well as in more recent times.
Ecological and Historical Interpretations:  
A Clarification

Ecology is the study of the interrelationships of organisms with their physical environments. Thus, the ecology of the jewel-like kingfisher of North China involves not only ascertaining what, when, where and under what conditions it hunts for food, but, in addition, the nature of its enemies and what is required for it to survive in its natural habitat, the physical environment to which it has adapted.

The ecology of the human animal is also a proper subject for study. Yet it is far more difficult to examine, since man, of all organisms, has culture. And culture enters into and alters man's relationship with his physical environment. The fact that man through culture has a relationship with his natural habitat that other animals do not have does not alter the fact that human societies exist in physical environments that exert influences on their histories.

To illustrate differences between an ecological interpretation and a more usual historical interpretation, recent examples may be used. Thus, when the Chinese withdrew their troops from North Korea soon after the armistice was signed in 1953, those who knew the history of China were able to regard this as consistent with historical Chinese behavior. China has used diplomacy, economic persuasion, and cultural blandishments more frequently than naked force, in contrast to many other nations in their international relations.

Mencius (500 B.C.) in his dealings with the Hsiung Nu; Hsuan Tsung (A.D. 712-756), T'ang Dynasty emperor whose generals aided Kashmir and Kashgar against the Moslems; and Yung Lo (1403-1424), the Ming Dynasty emperor whose admiral led diplomatic naval mission after naval mission to Indonesia, Ceylon and beyond, are all part of this story (Latourette 1947: 104-108, 186-88, 287-88). The overpowering might of the mother culture of Eastern Asia frequently meant that China did not need to resort to military force to win its way; gentler means, as with a parent, could be effective.

For the Japanese, historians could cite the consistency of the invasion of the continent in 1932 as just one more effort on the part of an island people to secure a foothold on the adjacent land. After all, they already had incorporated Korea into their nation and Manchuria was a logical next step. Even before formal history began in Yamato Japan, an Empress Jingko is reputed to have led an army into southern Korea and to have established there the colony of Kaya or Mimana, which continued to exist from the fourth century to its conquest by Silla in A.D. 562 (Reischauer and Fairbank 1960: 406). Later, during the Momoyama era (1562-1598), under Hideyoshi the Japanese again invaded Korea in a grandiose effort to conquer both that country and China, a campaign that was given up on the death of the dictator in 1598 (Reischauer and Fairbank 1960: 589-90). Interestingly enough, the magnanimous aid provided lavishly by the
Ming dynasty for their beleaguered vassal, Korea, following the historical pattern, undermined the weakening Chinese dynasty significantly, and undoubtedly hastened its demise although, typically, that was not to come until seventy years later (Reischauer and Fairbank 1960: 333).

An ecological interpretation of these events would not deny the historical interpretation but would supplement such explanations by recognizing environmental factors more clearly. Thus, China could act in a magnanimous fashion toward neighboring nations because her gigantic size, wealth, cultural richness and antiquity, quite apart from her military power, gave her an unassailable position of superiority to the daughter states around her. In similar fashion Japan, limited to her islands, struggling for centuries to drive the aboriginal inhabitants, the Ainu, northward and thus to enlarge her base, tried time and again to secure a foothold on the adjacent continent. The island people were continually aware of the limitations of their small homeland, and sought to increase their resources by trade or by conquest almost continuously in their long history from the fourth century to the present. Even during the Seclusion Era of the Tokugawa Shogunate (1639-1854), extensive trade still continued with the Chinese, the Koreans and the Dutch, although under rigid controls (Reischauer and Fairbank 1960: 599-600). Although the Japanese like the Chinese did follow historical patterns of behavior in the examples given above, the underlying factors motivating this behavior were as clearly of an ecological nature as they were in the case of China.

It is well to remember that in contrast to all other animals, man is influenced not only by factors related to his physical environment but also by those related to his intellectual environment. Typically, both of these sets of ecological factors played significant roles in bringing about the events in which this study is interested. There is little to be gained by efforts to assess which set has primacy at a particular time. Human beings in social contexts are being studied, and both sets of ecological factors must be accorded positions of significance.

During the period indicated, both China and Japan had rather extensive experiences with the West. In fact, the influence of these contacts on the Japanese were so profound and frightening that they were in large part responsible for the famous policy of exclusion adopted by the Tokugawas between A.D. 1639 and 1854 (Sansom 1950: 131-177). No similar response on the part of the Chinese resulted. Neither society was really open to the West during the long duration of either the Ch'ing or Tokugawa regimes. However, the reaction of the Chinese, being so much less extreme, provides a clue to the general effect of ecological differences.

Since the physical environment is so much easier to analyze than the symbolic environment of man, factors related to that aspect
of Eastern Asiatic national behavior will provide us with a point of departure.

The Middle Kingdom

In reference to area within national boundaries, China is now more than twenty times as large as Japan, and has been of that order of size for most of her history. Further, in terms of resources significant to a pre-industrial economy as well as those vital to modern development, China has been exceptionally rich in a remarkably wide range of resources, whereas Japan is more meagerly endowed. Coal, oil, fiber, food, metalliferous ores, pottery clays and many other resources are disproportionately found in Chinese territory in contrast to those available in Japan, in many cases far beyond the differences related to size. The population of China is probably over eight hundred million, making it the world's largest—a position it may well have occupied during almost the entire span of human history. The population of Japan is large and would be impressive anywhere but in Asia. However, its present one hundred million, and the thirty millions during the Tokugawa regime, have always been relatively insignificant in contrast to the population of its giant neighbor. In terms of resources, area and population, China overawed, not only Japan, but all the European nations that came in contact with her. So immense is her manpower, so large her area, so rich her resources for technological development that, even at present, in this day of supersonic planes, ICBM's and nuclear warfare, both the Americans and the Russians must treat China—somewhat reluctantly, it is true—as one of the world's truly great powers. No other under-developed nation is accorded anything like this status.

The net effect of millennia of experience with giant size, vast resources and man's most consistent example of cultural supremacy, placed China in a very different position in reference to the West than was Japan. The result, complicated further by the presence of the partially-Sinicized Manchu or Ch'ing dynasty on the Dragon Throne, was centuries of disregard of the newest threat to the sovereignty of China. Western economic, social, and political imperialism had arrived in Eastern Asia. In adjusting to new pressures, China's Manchu rulers chose to use time-honored techniques which had certainly served the nation well in the past. Yet for the Ch'ing dynasty to arrive in this fashion at a solution that furthered its needs and those of the Chinese people was not likely since the new element of advanced technology, which China's ethnocentrism forced her to discount, tipped the balance in favor of her antagonists.

The factor mentioned above—namely, continuing efforts at the replacement of the foreign dynasty of the Manchus by another regime, preferably native in origin—is exceedingly important in understanding Chinese behavior during this period. The Ming Dynasty (A.D. 1368-1644) fell through a successful rebellion that was subsequently put down by a general still loyal to the dead emperor, and who had received help from the Manchu nation north of the Great Wall.
Loyal in turn to his new allies, this general was a key person during the short, consolidating reign that followed and that brought peace to China. The new emperor was K'ang Hsi (1661-1722), one of the world's truly great rulers, who, with his grandson, Ch'ien Lung (1736-1796)—also a remarkable potentate—ruled China for more than one hundred and twenty years. The zenith of Manchu fortunes had already passed in the old age of Ch'ien Lung. Rebellions among his Chinese subjects became endemic and were to wax and wane in severity until the end of the dynasty more than a century later.

Continuous domination by this concern with foreign intrusion that had no counterpart in an island nation like Japan—for all intents and purposes, a single people—is seldom given the significance it deserves in explaining China's behavior in the nineteenth and twentieth centuries. In an ecological analysis of national developments, however, it does deserve discussion since foreign domination of the Chinese people has been a recurrent fact in its history. This domination has nearly always seen the agricultural society of the Chinese heartland overrun and ruled for a period by pastoral peoples from the grasslands to the north or west.

The very beginnings of history in China disclose the significance of the pressure from the restless nomadic peoples on the settled Chinese population as it was to recur time and time again. Thus the success of Ch'in Shih Huang Ti (221 B.C.) in creating unity out of the anarchy of late Chou times (403-221 B.C.) is traditionally based on the Ch'in principalities' experience in successfully repelling the Hsiung Nu nomads who were their neighbors. Both Former Han (206 B.C.-A.D. 8) and Later Han (A.D. 25-220) governments sent military forces deep into Central Asia seeking security against the depredations of the same peoples. During the Six Dynasties (A.D. 222-589) period of anarchy that followed Later Han, major portions of northern and western China were in the hands of tribal nomadic groups. These nomadic peoples played a major role in the brief, reconsolidating dynasty of the Sui (A.D. 581-589), and again in the glorious T'ang Dynasty (A.D. 618-906); they fought continuously against the Sung (A.D. 960-1279) first as Khitans, then as Jurchens; finally, as the Mongols, they seized all of China. Later, after the Ming restoration, the semi-nomadic Manchus brought about the last complete subjugation of the Chinese by an outside people (A.D. 1644-1911) (Reischauer and Fairbank 1960: 85ff).

It was while placating, trading, or dominating these mobile people, as well as others that caused them much less concern, that the Chinese perfected the techniques they tried to employ in their confrontation with the West. One aspect of this long-continuing exchange, uniquely significant for China prior to its last phase, was that Chinese cultural supremacy had never been seriously challenged. Even in national defeat, the Chinese culture soon triumphed over Tibetan, Mongol or Manchu conquerors of the Chinese population.
Faced with the vital matter of dynastic succession, the Chinese nation found itself incapable of taking the West very seriously. The Manchus, as was usual for the foreign regimes that have dominated China, were thoroughly Sinoized during their centuries of control (Reischauer and Fairbank 1960: 373). With the traditional insecurity of the newly arrived, they became in many ways more conservatively Chinese than the Chinese themselves. Being properly Chinese in a cultural sense was a tool of great utility to the Manchu rulers. It is interesting to note that the dominating quality of Chinese culture of which this is an example is, perhaps, only matched in human history by that of the culture of the West based on modern science and technology. How does one contrast a cultural impact that has prevailed over vast areas and many peoples for more than two millennia, with a recent phenomenon like the hegemony of the West?

Before going on to discuss other aspects of this matter, a brief comment on the supremacy of Chinese culture in Eastern Asia is appropriate. One should not think of this supremacy as based necessarily on an absolute cultural superiority, although it is probably true that at the time of early contacts Chinese culture was in most ways actually much superior to that native to peoples such as the Japanese, Korean, and Annamese. Also, the contributions that the Chinese people continually made to the totality of East Asian culture, no matter how that may be defined, was impressive, although perhaps not out of proportion to their numerical dominance of the huge area. Nonetheless, for thousands of years the Chinese have made substantial additions across the whole range of world culture from religion to ceramics (Needham 1956). The sterility of Chinese culture is a self-serving myth properly coupled with another Western figment, that of the ageless, unchanging quality of the mother culture of Eastern Asia.

China under the Manchus chose to disregard the Western threat, supporting her actions with reasons based on ecological premises that were sound within her experience. One might even point out that although China suffered greater infringement of her sovereignty than did the Japanese during the late nineteenth and early twentieth centuries, she managed to evade complete control by the West just as did her lesser neighbor. Hence, by resorting to hindsight, it is possible to say that once more China was able to outwait an adversary, biding her time until her own position had strengthened and that of the opposition had weakened. Of all of China's multitude of adversaries from the recent past, only the U.S.S.R. is still a major threat, and the Russians have such concern for the capabilities of the Chinese millions that they continue to hesitate to start military actions that they seemingly consider to be inevitable. Under the cold light of military reasoning, a preemptive strike understandably has much appeal to the U.S.S.R. There are those who predict that China will be the greatest power in the world by the end
of the century. Whether or not that is true is less significant, however, than the fact that China's world position gives some considerable evidence of becoming more secure with every passing year.

**Chinese Influence in Early Japan**

In this matter of reaction to the West, Japan has behaved in a fashion strikingly different from that employed by China. The primary factors responsible for this may not be totally ecological, but a good case can be made for ecological influences having played a very significant role in motivating Japanese behavior, as well as the Chinese behavior already commented on. The Japanese became acutely aware of their giant neighbor first in the sixth century. From this time the Chinese nation has always been of extreme importance to Japan. Even during the days of World War II, Japan's military involvement in China probably came close to equaling her total involvement with all the other nations with whom she was fighting. Ecological factors go far to explain this continuous concern with China. Coupled with geographic proximity are the matters of size, population and resources mentioned before, which have so vastly favored China, and which have tended to encourage Japan to seek friendly relations with her rich and dynamic neighbor whenever it seemed possible and not overly dangerous to do so.

Already in the Han Dynasty (202 B.C. to A.D. 220), there is the first evidence that the Chinese and Japanese peoples were to some extent aware of each other. However, it was not until the splendid T'ang Dynasty (A.D. 618 to 906) half a millennium later, that relations between the two countries became intimate for an extended period. First Nara (A.D. 710 to 784) and then Kyoto (A.D. 794 to 1185) were modeled after Ch'angan, the T'ang capital. But this simply made patent what had been going on for a century or so, as the Japanese openly and eagerly copied everything that they could learn of in China that could be transferred to their own country. Language, literature, religion, dress, building construction and a multitude of other cultural items were thrust willy-nilly into the fabric of Japanese culture. Many artifacts from China were brought in and accepted in toto such as the written language, forms of poetry, temple architecture and many other things. Some were rejected outright such as the unacceptably revolutionary views of Mencius or the really democratic principle underlying the recruitment for the Chinese bureaucracies. No matter what was accepted, however, soon it inevitably showed the effects of the dynamic nature of Japan's own native culture. Elements of Chinese culture, with few exceptions, were entering no vacuum in reaching Japan.
Japanese and Korean Behavior: A Contrast

This eager emulation of a neighbor whom she could seldom hope to match, laid an appropriate foundation for Japan's contacts with the West at a much later date. Secure in her islands from even the Mongols against whom no people open to attack were able to successfully defend themselves, the Japanese were privileged to be selective about what they were willing to accept from the mother culture. Their adulation of China did not reach the mimetic quality of that of Korea and, almost surely as a consequence, their reaction to the difficulties China suffered at the hands of the West during the nineteenth century took a very different form. The Koreans regularly had strong contacts with the Chinese, weaker ones with Japan, and virtually none with their non-Sinicized neighbors to the west and north. Like the sometime conquerors of China, they became so converted to the Chinese model that they ended in being more protective of the old forms than even their mentors. The Japanese, on the other hand, had been a far-ranging seafaring people prior to the ascension of the Tokugawas and, even after the advent of a complete seclusion policy, maintained effective contacts abroad via the Chinese and the Dutch, which enabled them to keep abreast of world developments.

The Seclusion Episode, An Ecological Solution

The closing of Japan to external contacts during the long period of seclusion promulgated by the Tokugawa Shogunate (A.D. 1600 to 1868) was not simply the result of the operation of ecological factors bringing pressure on an island nation. Of even greater influence was a factor related to the unlimited ambition of the Tokugawas to establish a closed society that they could dominate indefinitely by terror and police-state methods. Nonetheless, once closed, Japan immediately entered a national situation in which its large population and very limited physical resources established a relationship that to remain viable had to be manipulated with great care. With the pruning effect of war abolished to further provide for the security of the Shogun and his feudal allies, new Draconian methods were employed. Abortion, infanticide approaching seventy thousand annually in one area (deBary 1965: 571), and (remarkably for a Confucian regime, but there are persistent tales) perhaps even occasional exposure of the aged, all were resorted to for the preservation of the ecological balance regarded as vital by the Tokugawas. Since there were no major technological developments that materially affected the Japanese economy beneficially during this long period, there was, of necessity, continual careful scrutiny of this vital balance of population and resources.

The Japanese were almost surely more aware of actual world conditions during the latter portion of the nineteenth century than either the Chinese or the Koreans. Yet their actual peril was considerably less. Looked at from the vantage point of the recent, it is
absurd to think of any nineteenth-century European nation or combination of nations seizing Japan and making it a colony. The Tokugawas had under their ultimate command a relatively enormous force of fine warriors, traditionally preferring their own excellent steel but already familiar with firearms. In addition, the unity of Japan had already developed into a state of advanced chauvinism whereas, for both China and Korea at that time, unity was expressed in terms far less "useful" for nationalism. The total mobilization of the nation under Hideyoshi's control during the invasion of Korea at the end of the 16th century, is an illustrative example of Japanese military potencies. An organized military force of about one hundred and fifty thousand men was kept in the field overseas for several years until Hideyoshi's death brought the campaigns to a close. Not until the days of Napoleon was Europe able to match this scale of military enterprise. Of course, mere size of military forces is not the point here, since forces available to Chinese emperors were in total proportions vastly greater than any the Japanese could place in the field. In China, armies in the feudal era of the Warring States (403-220 B.C.) were enormous, as war became a way of life at the close of the long Chou Dynasty (1122-220 B.C.).

As Japanese leaders, both before and after the Meiji Restoration of 1868, observed the troubles of China, they increasingly moved toward a third major cultural force for assisting them in solving their own burgeoning international insecurities. Due to their location and their history, the Japanese had had virtually but two sources—namely, China or themselves—to which they had been able to turn for solutions to new problems. This was, of course, prior to the emergence of a threat from the West to the sovereignty of the nations of Eastern Asia, made cogent by the part the West seemed to be playing in the apparent death throes of China. In the past, native and Chinese sources had been richly fruitful in providing solutions; in the present, Western models seemed far more promising.

Due to the environmental factor of having islands as their home, the Tokugawa leaders were far more keenly aware of the nature of the foreign threat than China could be at this time. Most foreign activity in China had been limited to Canton, if commercial, or to the national capital (Ch'ang-an, Peking, Hangchow or Nanking), if of a diplomatic or religious nature. To the official contact areas for Tokugawa Japan provided by the port of Nagasaki, and by Naha, in Okinawa, must be added dozens of other localities to which whalers, sealers, ordinary commercial, exploring, and military vessels arrived from time to time seeking trade, refuge from storms and various other forms of intercourse and sanctuary. The properly fearful Tokugawas were rendered constantly uneasy by the technological superiority of the Westerners with whom their traditional enemies, the Outside Lords—in whose area Nagasaki was located—seemed to have better relations than they did. It was readily understood in Edo, however, that a step toward modernization would surely undermine the shogunate. For this reason, the
Tokugawas found it necessary to adhere to time-honored practices almost as fervently as the dissolving dynasties in China or Korea. In a very real way this provided an advantage to the forces of reform since they could identify themselves with the West along with the restoration to power of the long-moribund institution of the Emperor.

China, the former splendid model, had been humiliated by the West, which increasingly emerged as the new model that a non-Western nation must emulate to survive. Japan was now participating willy-nilly in a world-wide environment, not one limited to Eastern Asia as before. A new ecological reshuffling of the old factors was inevitable for Japan following the Restoration in 1868. One of the frightening problems the new regime faced almost at once, was the permanent loss of the nation's capabilities for supporting the population on the basis of the time-honored rice economy, utilizing solely the land resources of the kingdom. The Tokugawa Shogunate had seen clearly that Seclusion (A.D. 1639 to 1854) could only be made to work by keeping the population at or below the survival level of about thirty million that was imposed by the nature of Japan's technological development. This they accomplished with brilliant ruthlessness at great human cost. At the end of the shogunate, however, so close was the margin that there had been many times during those three centuries when famines due to epidemics, typhoons and other causes of crop failure aided them in the pruning process. It early became crystal clear to the Meiji Era leaders (A.D. 1868-1912) that the ways of the West, both technological and imperial, might well provide a successful escape from the nation's predicament.

This view, with a clear ecological base, guided the leaders of the modernizing nation from the arrival of the "Black Ships" at Uraga Bay in 1853. Reliance on modern technology, supported by a well-educated, carefully motivated population, and led brilliantly by a passionately chauvinistic military-industrial complex, served remarkably well to extend Japan's control over distant resources and markets. With the close of the Second World War the end came to this tragic, Western-inspired dream. A population grown permanently far beyond the nation's internal capacity to provide, cast an ominous pall over the defeated people in spite of the nation's previous long-continuing and very real economic progress.

What was true formerly is still true. Japan has an ecological problem of grave proportions since she can support perhaps forty millions of people in her own area and on her own resources without a drop in the standard of living to the starvation stage. She is today living by her wits, as she has been since the Meiji Restoration in 1868 displaced the Tokugawas and their ruthlessly effective measures of population control. In this, of course, she is not alone, since no modern nation is self-sufficient and some---such as the Netherlands, Great Britain or Denmark---although probably little more sound ecologically than Japan, yet show little indication of imminent disaster.
Japan's insecurities, largely of an ecological nature, seemingly laid the foundation for the brilliant conversion of a rice-economy to a modern technological one. It is abundantly apparent now that Japan's only hope at this stage lies in more of the same, coupled with an ecologically-motivated, stringent approach to population control. Perhaps because of their previous successful experience with population control, coupled, of course, with widespread internal concern for their present situation, the Japanese had by 1970 almost stabilized their population. Since the death rate is low, as is typical for a developed nation, and the birth rate extremely low (at least for an Eastern Asian Society), the population has a disproportionately large group of non-productive older persons within it. Interestingly enough, some Japanese, concerned with the nature of the national labor force, are now advocating a return to a more expansive population policy to supply larger numbers of workers for future industrial needs. Hazardous as such an approach might seem the history of the growth of the nation's economy for the last twenty years provides some assurance that such a change might not end in immediate disaster.

China is much less dependent upon the cooperation of the rest of the world to survive than is Japan. If China's population total were as great proportionately as that of her island neighbor, more than two and a half billion (based on Japan's 721 persons per square mile in 1970, China's population would be in 1970 2,660,571,221), would occupy an area better endowed to meet their needs on the basis of national resources than is that of Japan in terms of its present population. Japan meets none of her major industrial needs on the basis of her own resources with the exception of electric power, water and pottery clay. China is endowed with major resources of coal, and relatively abundant resources of oil, major metal ores, strategic rarer metal ores, water power, and many others certainly adequate for industry well into the future, or until a rising standard of living multiplied by her population creates new pressures. The truculent independence of Communist China, whatever the reasons may be for this behavior, is a national posture and chauvinistic luxury absolutely denied twentieth century Japan. In reference to the vital relationship between her population and her food-producing resources, China currently is almost exactly where Japan was during the mid-Meiji period toward the close of the nineteenth century. The "miracle" grains may even produce briefly for her a capacity for a food grain surplus. In the late nineteenth century Japan passed through the point-of-no-return beyond which her island resources could no longer supply the growing population with virtually all of its food requirements. China is approaching that position, but is not there as yet.

Japan chose the Western path, adopting both the industrialization and much of the way of life of the West, thus vastly complicating her problem while creating short-term solutions. China does not have to go this route. Indeed, she may be quite incapable for a number of reasons of doing so. Certainly the Communist Chinese show
little interest in modelling themselves except selectively in a
technological sense after the West. China may be able to evade the
twin traps of over-emphasis on the significance of a continually
rising standard-of-living, and crippling military expenditures.
Further, she may succeed in encouraging her population to level off
at some figure not too much greater than that of the present. If
these unlikely prospects materialize, and some believe they could,
China's future, even within a culturally-imposed pattern of relative
self-sufficiency, looks not unpromising. There are some who have
predicted that China may well be the world's leading nation during
the twenty-first century. Her ecological limitations are not so
overwhelming as to make that development impossible. Some, too, by
observing the trend line for the rising Japanese Gross National
Product predict that that nation might well surpass both the Soviet
Union and the United States before the end of the century. I am an
"old China hand" and may be showing my prejudices, but I would be
inclined to expect that in the year 2000 the number-one nation in
Gross National Product will be China, rather than Japan.

Notes

1A recent estimate of 827 million is given in the Encyclopedia
Britannica Book of the Year (1971, p. 189). An early census, regarded
as more reliable than most, gives 59,594,978 for Early Han in A.D. 2
(Reischauer and Fairbank 1960: 95). According to one intelligent
estimate, the population of the Sung Dynasty (A.D. 960-1279) never
dropped below 100 million, even when (as after A.D. 1127) the Chinese
nation was limited to south China (Reischauer and Fairbank 1960: 212).
The Ming Dynasty (A.D. 1368-1644) is believed to have begun with a
population reduced to 100 million by rebellion against the Mongols,
and to have ended with perhaps 200 million (Reischauer and Fairbank
1960: 290). This sampling clearly indicates the huge size of the
Chinese population. Europe did not reach a total population of 100
million until after A.D. 1600, yet with an area perhaps twice that of
Ming China (see the 1969 Encyclopedia Britannica, vol. 8, p. 874).

2The population is reported to have dropped by a million from
A.D. 1780 to 1790 due to an epidemic, while a serious famine in 1834
is reported to have reduced the figure to that of the previous century
(Sansom 1950: 225).

3This is clearly borne out by recent figures for mineral pro-
duction in China and Japan. Even as a developing nation China supplied
40 million metric tons of iron ore for its own needs, whereas Japan,
a truly developed nation, produced only 1,9 million metric tons. Pro-
duction of bauxite is striking too, with 450,000 metric tons produced
by China and none by Japan. Coal, gas and petroleum reveal the same
pattern, with China substantially out-producing Japan (see Encyclopedia
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THE ALASKA PENINSULA IN ALASKAN PREHISTORY

by

D. E. Dumond

Opinions regarding the importance of southwestern Alaska and the Alaska Peninsula to the understanding of the prehistory of Alaska have been scarcely wanting. At the extreme, southwestern Alaska has been said to be the probable home of origin of almost all known Alaskan Eskimo cultural manifestations within the past three millennia (Bandi 1969). Somewhat more conservatively, southwestern Alaska and in particular the Alaska Peninsula have been held important because it is there that speakers of Eskimo and speakers of Aleut lived side by side—hence it is there that the deepest cleavage within the Eskaleutian linguistic stock appears, and such linguistic cleavage is often taken to indicate ancient residence. Furthermore, one linguist (Hammerich 1960) has suggested that the marked divergence between Aleut and Eskimo may indicate that there was for a long a wedge of alien speech—presumably Indian—between them, so that the Aleut-Eskimo divergence points to an even greater ethnic diversity in the past.

In 1960, a program of archaeological research was initiated on the Peninsula by the University of Oregon, under the impulse of L.S. Cressman, specifically to test hypotheses derived from work by Cressman in Oregon. Based on the appearance at Fivemile Rapids and elsewhere in Oregon of certain type of twined basketry, of atlatl with hooks, of certain antler tools, of stone bolas, notched pebble sinkers, burins, and struck blades, Cressman hypothesized that similar "complexes of the culture of Southwestern Alaska and elsewhere in the Arctic were eventually derived from the Columbia River in Oregon" (Cressman and Dumond 1962: 1; see also Cressman 1960: 73f.). But it shortly became apparent that such a hypothesis could be neither accepted nor rejected on the basis of the information being recovered in the initial seasons of research. Whether it can now be accepted or rejected will be taken up later.

Since that beginning, two separate archaeological sequences have been developed—one apparently representative of the southern coast of the Bering Sea, the other of the Pacific coast of the Alaska Peninsula. In addition, in 1966 work was extended to Knik Arm, where a survey was made in an attempt to discover how long the Athapascan Tanaina of that area—-inhabitants since the time of contact—-had lived on the coast. The aim of this paper is to summarize the results of the Oregon research to date, to indicate the apparent implications of those results for the prehistory of Alaska as a whole, and to outline the major questions that appear to remain.
I first indicate the distribution of ethnic groups in the area during the nineteenth-century occupation by the Russians. I then describe briefly the archaeological sequences obtained, and attempt to relate them on the one hand to other archaeological materials, and on the other hand to aboriginal ethnic groups. Finally I summarize the implications for Alaskan prehistory.

The Distribution of Peoples

The distribution of ethnic groups in the nineteenth century is indicated in Figure 1, based particularly upon the vital statistics records of the Alaska Russian Church archives (Alaska Russian Church 1816-1936).

All Eskimos of the area spoke dialects of Western Eskimo (Yupik). Of these, Hammerich (1958) has said that most of the Bristol Bay coast of the Peninsula belonged in a dialect area extending northward beyond the Kuskokwim River, whereas the Pacific coast of the Peninsula belonged dialectally with Kodiak Island, and that speech of the two areas was scarcely mutually intelligible. But study of the ethnic identifications in the Russian Church archives suggests that the situation was more complex than this, with people of the upper portion of the Naknek drainage and of communities on the Ugashik River and Port Heiden also related closely to people of the Pacific coast (all here called Peninsula Eskimos), whereas people only at the mouths of the Naknek and Egegik Rivers (Aglegmiut) were closely related toward the north (Alaska Russian Church 1816-1936; cf. Oswalt 1967: 8).

Furthermore, occupation by northerners was the result of a late movement of Aglegmiut to the Bering Sea coast of the Peninsula, apparently after A.D. 1800 (Wrangell 1839: 121ff.; see also Oswalt 1967: 4), and therefore may not be reflected in the archaeological record. Although Hammerich (1958) indicated that speech on the two sides of the Peninsula was scarcely mutually intelligible, other information from the area is not in accord. I have previously suggested that all adjacent dialects of Western Eskimo were mutually intelligible (Dumond 1965b: 1236, with references). Unfortunately, no new linguistic research has been done in the area.

In sum, and as indicated in Figure 1, the ethnic groups present in the nineteenth century near the area of the Oregon research included four groups: Eskimos that may be divided roughly between those of the Bering Sea coast and those of the Pacific coast; Aleuts, west of 159° W. longitude; and Athapaskans around the northern edge of Iliamna Lake.
Figure 1. Southwestern Alaska, with locations mentioned in the text (drawn by Carol Steichen Dumond).
Archaeological Results

Bering Sea Coast

Excavations on the northwest side of the Peninsula were confined to the Naknek Lake and River drainage system. The first two season's work has been reported in some detail (Cressman and Dumond 1962; Dumond 1962, 1963); work of later seasons has been summarized (Dumond 1968, 1969a, 1969b, 1971a). Although most of the work was concentrated at Brooks River, in the upper portion of the drainage, survey results indicate that at least most of the results are applicable to the lower portions of the drainage as well (Dumond 1964b), and examination of other collections from the area—in both private and public hands—suggests the results are probably applicable to the entire area from Tliamna Lake to the Ugashik River, and from the crest of the Aleutian Range to Bering Sea.

Sites excavated include a few permanent habitations and numerous seasonal camps. Brooks River, in particular, was obviously popular with early people because of the easy availability both of migrating salmon and of caribou. The sequence consists of eight cultural phases, which represent a time that may be most economically described by means of four cultural periods. Dating is supported by thirty-one radiocarbon determinations relevant to cultural materials. The sequence is here described by period, beginning with the earliest.

Kittevick period (2500 - 1900 B.C.).—This consists of the time covered by what is now described as a single cultural phase, designated B. R. Strand. Artifacts include chipped scraping implements and side-notched, stemmed, and leaf-shaped knives similar to implements of about the same time from northern sites with a predominantly interior orientation, such as the Palisades II complex of Onion Portage (Anderson 1968). Presumably such tools were chiefly used by ethnic groups other than Eskimos. In addition to these, however, the major thrusting implements of the Strand phase were of polished slate, virtually identical to those in use at the same time on the Pacific coast (in the T. Birch phase, to be mentioned later); and use was made of open stone lamps in which it is presumed that sea-mammal oil was burned. Two interpretations seem possible: either these people were a group originally from the Pacific coast, who moved inland and were acculturated in the direction of other residents in the interior; or—and this is the interpretation presently favored—they were an interior, non-Eskimo group who had lived in the vicinity of the Pacific long enough to develop some coastal habits, but who still retained artifactual evidence of their origins.

Gomer period (1900 - 1000 B.C.).—This period consists of the time represented by the B. R. Gravels phase. Artifacts are predominantly chipped tools of chalcedony, including double-pointed end blades, microblades, and burins. There are no oil lamps and
virtually no ground stone. Affiliation with the Arctic Small Tool tradition is obvious (Dumond 1965b, with references). In view of the distribution of materials of this tradition, these people are believed to have arrived from the north; they apparently replaced the earlier Strand phase people completely and quickly. During this period there are almost no signs of contact between people of the Naknek drainage and their contemporaries of the Pacific coast. After 1000 B.C. there ensued a period when Brooks River was not inhabited; whether the entire drainage was abandoned is not known, but it seems unlikely.

Brooks River period (200 B.C. - A.D. 1000).--This period consists of the time represented by three sequential phases developmentally related to one another. Spread throughout the drainage, the earliest remains of the period include check-stamped pottery from the north. Some of the early stone tools show obvious similarities with those of the earlier Gomer period, and there is a steady evolution thereafter. Stone lamps are in use. Polished slate becomes steadily more popular as the period progresses. Affiliation of people of this time with those of the northern Norton cultural horizon is unmistakable (Dumond 1965b: 1246, with references).

Naknek period (A.D. 1000 - 1900).--This period also includes the time represented by three sequential phases, the last of which was concurrent with the nineteenth century European occupation. With the first of the phases there appears a major reliance upon the polishing of slate, and the earlier fiber-tempered pottery is replaced by that with heavy gravel temper, some of it impressed with concentric-circle decorations. Implements of this period relate clearly to those of late prehistoric Eskimos of the north, of what may be called the Thule horizon.

In actual fact, absolute continuity between cultural manifestations of the Arctic Small Tool tradition, such as those that appeared during the Gomer period in the Naknek drainage, and those of the Norton tradition, has nowhere been shown. Everywhere they have appeared in Alaska, people of the Small Tool tradition have been succeeded by a period of very light occupation, or by none at all. Nevertheless, because of the remarkable identity of major geographical distribution, of a few evident continuities in tool types, and because people of the Arctic Small Tool tradition were clearly directly ancestral to people of the Dorset culture of the eastern Arctic, who in the interests of parsimony must on the basis of present evidence be considered Eskimos, it is now common to regard the Small Tool people, however tentatively, as ancestral Eskimos. Thus, from the beginning of the Gomer period the Naknek drainage sequence is taken to pertain to Eskimos—to speakers of an ancestral Eskimoan language that developed in situ into the Western Eskimo speech of recent times. Whoever the previous inhabitants—of the B.R. Strand phase—may have been, they were not Eskimos (see Dumond 1971b).
Intensive excavations have been conducted at two sites—Takli Island and Kukak Bay—and additional survey has indicated that the sequence developed there may reasonably be taken to pertain at least to the mainland coast of Shelikof Strait (Dumond 1965a); unfortunately it is not yet possible to suggest whether it may be extended even farther along the Peninsula. Some excavations at Takli Island have been reported by C. H. Clark (1968), and some at Kukak Bay by Gehr (1970). Other excavation results have been given in summary (Dumond 1968, 1969a, 1971a).

The sequence is divided into five phases, the divisions being less fine than those in the Naknek drainage because less work has been done. Dating is based especially upon twelve radiocarbon determinations. Phases will be characterized briefly, proceeding from early to late.

**T. Alder phase (6000 – 3000 B.C.).**—Implements include chipped stone tools of basalt, in the form of projectile blades and leaf-shaped knives, and of chalcedony, especially in projectile blades in which the stem has a triangular cross-section. There is virtually no polished stone. The phase is clearly related to that designated Ocean Bay I on Kodiak Island (D.W. Clark 1966). Elsewhere, it has been proposed (Dumond 1970, 1971a) that these materials may be also related to those from Kruglo Point on Agattu Island in the Aleutians, published by Sapulding (1962). More specifically the two collections were found closely comparable in the presence of those triangular-sectioned stems on projectile blades, in a high incidence of similar large leaf-shaped and ellipsoid bifaces, as well as in gross proportions of classes of implements; in all of these characteristics they diverge mutually from all other collections known from the intervening areas of the Aleutians. Even though the Kruglo Point collection as so far known may with security be dated no earlier than about 600 B.C., this set of resemblances is far more systematic than any that has yet been adduced between any prehistoric collection from the Aleutians and any prehistoric collection from the area of modern Eskimo speech. This point will be returned to.

**T. Birch phase (2200 – 800 B.C.).**—Clearly descended of people of the preceding Alder phase, bearers of this culture were apparently related also to people of the same date of Kodiak Island, makers of implements of the Ocean Bay II assemblage (D. W. Clark 1966), and to contemporary inhabitants of the northern portion of Iliamna Lake, at Pedro Bay (Townsend 1970). Slate polishing had been taken up and was used for ulus, large knives, and thrusting implements. Oil lamps were used. As indicated earlier, practices of people of this phase were reflected in those of their early contemporaries of the B. R. Strand phase of the Naknek drainage. No contact is evident, however, between slightly later people of this same Birch phase and their Naknek drainage contemporaries of the Gomer period. Similarly, artifacts of this phase are distinctively different from those of
the chipped stone industry of early Chaluka on Unmak Island in the Aleutians, the products of other relative contemporaries.

T. Cottonwood phase (A.D. 200 - 500).--Resembling the Birch phase in most ways, pottery appears for the first time on the Pacific coast in a form identical to that of the middle Brooks River period of the Naknek drainage, and an increase in the use of small chipped chalcedony projectile blades is another apparent reflection of Naknek drainage practice, suggesting that contact was underway between the two areas. At the same time less resemblance is evidenced between materials of the T. Cottonwood phase and contemporary materials from Kodiak Island, suggesting that increased contact with the Bering Sea was accompanied by a decreased contact with Kodiak.

K. Beach phase (A.D. 500 - 1000).--A nearly exact contemporary of the third of the three phases of the Brooks River period of the Naknek drainage, this phase is so similar to that of the Bering Sea that one must conclude that people of the two areas were in intimate social contact; that is, it appears that people of the Naknek drainage (or at least of the Bering Sea coast) had actually begun to reside on the Pacific. Although the polishing of slate decreased from that still evident in the Cottonwood phase, and the manufacture both of pottery and of small projectile blades of chalcedony increased still further, the fact that similar pottery and chipped implements were present in collections of the Cottonwood phase argues that there was no complete break in continuity between the Cottonwood and Beach phases, and hence that there was no total population replacement. Rather, it is tentatively concluded that people of the Naknek drainage and people of the Pacific coast lived literally side by side at this time at Kukak Bay. Again, there appears to be no substantial contact between these people and those of Kodiak Island.

K. Mound phase (A.D. 1000 - 1500).--This phase is a contemporary and a virtually perfect duplicate of the first of the three Naknek period phases of the Naknek drainage. Not only is it clear that a single people now lived on both sides of the Aleutian Range, but collections both from Kukak Bay and from the Naknek drainage show marked similarities to collections both from elsewhere on Bering Sea and from Kodiak Island. At this time pottery--thick Naknek-like ware with gravel temper--appears first on Kodiak Island; and slate polishing, in some of the forms forecast in the Ocean Bay II complex of Kodiak Island and in the T. Birch phase, are of extreme importance throughout coastal Alaska. One must conclude that by A.D. 1000 communication across the Alaska Peninsula in both directions was more open than it had ever been. It was at this same time that far to the north people of Thule tradition moved across Arctic America from Alaska to Greenland, displacing and absorbing their presumed cousins of Dorset Eskimo culture.
It has already been argued (Dumond 1964a, 1965b, 1969a, 1971a) that this time of trans-Peninsula contact in the Christian era is the time in which Western Eskimo speech was transported to the Pacific by people of Bering Sea. Thus the acculturation evident in the material culture of the sites of the Alaska Peninsula is taken to be evidence of what might be called the Eskimization of people of the Pacific coast. Furthermore, on the basis of the similarities between collections of the T. Alder phase and those of Agattu Island far to the west at the end of the Aleutian Island chain, it has been concluded—albeit tentatively—that the pre-Western Eskimo speech of the Pacific coast was probably a form of Eskaleutian that no longer exists, but one that was probably closer in form to Aleut than to Eskimo (Dumond 1969a, 1970, 1971a).

According to this interpretation, then, by 6000 B.C. the Pacific coast of the Aleaska Peninsula and at least a portion of the Aleutian Islands were inhabited by a single group of speakers of ancestral Aleutian. By 2500 B.C.—roughly the beginning of the T. Birch phase and Ocean Bay II—people of Kodiak and the Peninsula Pacific coast had diverged significantly from their cousins of the Aleutian Islands. Presumably, both groups spoke languages descended from proto-Aleut. By shortly after 2000 B.C., ancestral Eskimo speakers appeared on the Bering Sea coast of the Alaska Peninsula (in the Gomer period). And beginning with the Christian era their descendants exerted pressure on people of the Pacific, an area which they began to colonize shortly after. By the end of the first millennium A.D. Western Eskimo was the language of the north Pacific, and the "Pacific Eskimo" of modern times was in existence.

Knik Arm

As the interpretations indicated so briefly above began to be developed in the course of the research, it became desirable to ascertain the degree of influence on developments of the Pacific coast that might have been exercised by ancestors of the modern Tanaina Athapaskans now living as far southeast as Iliamna Lake, and who at the time of the earliest European contact were probably living on at least the north side of Cook Inlet. Accordingly, in 1966 a survey of the north shore of Knik Arm was conducted by A.C. Spaulding, with the aim of locating sites that would provide information regarding the length of time the Athapaskans have resided on the coast. The results of this survey have been reported (Dumond and Mace 1968).

No sites worth extended excavation were found; nevertheless, the aim of the survey was accomplished. In brief, houses of the form ethnographically known to pertain to the Tanaina were found to yield post-contact material. The only clearly prehistoric site encountered—one at Fish Creek that had been tested in the early 1930's by de Laguna (1934)—produced materials, including pottery, identical to those in use in the Pacific Eskimo areas early in the second millennium.
A.D. Inasmuch as it seems unlikely (with reference to ethnography) that the course of development of Indian coastal residents would have been from Eskimo-like to non-Eskimo-like culture, the best interpretation of the data appears to be that the Tanaina arrived on the coast only concurrently with or very slightly before the first European contact (i.e., no earlier than the mid-eighteenth century), and that previous seasonal occupants of the area had been Pacific Eskimos. It was thus concluded that the ancestral Tanaina had no significant influence upon the development of the culture of the Peninsula and Kodiak Island.

Implications for the Prehistory of Modern Ethnic Groups

In the preceding discussions, tentative identifications of archaeological assemblages with the ancestors of ethnic groups known from recent times have been made. Clearly, all such identifications are tentative, and all are made with full realization of the possibility of misinterpretation. In no case is language presumed to accompany a few specific artifact types. Rather, the identifications are made only with a consideration of the apparent developments and relationships of whole artifact assemblages, and in consideration of available linguistic data (cf. Dumond 1965b). The rationale, of course, is that prehistory is finally valid and valuable only when it can relate to real people.

In this section those identifications are summarized, reiterated, and drawn on for further development, as the modern ethnic groups are treated one by one. The broad reconstruction arrived at is presented diagrammatically in Figure 2.

Bering Sea Eskimos

As anticipated, there is no archaeological evidence now at hand of the arrival of the Aglegmiut Eskimos at the mouth of the Naknek River in the early nineteenth century. They are thus excluded from discussion hereafter.

I conclude that among the ancestors of the Peninsula Eskimos of the Bering Sea drainage were those people who inhabited the Naknek system during the Gomer, Brooks River, and Naknek periods. This interpretation may conceivably have to be modified when more is known of the hiatus between the apparently genetically related phases of the Gomer period on the one hand, and the Brooks River period on the other, but the interpretation seems justified on the basis of present knowledge.

Regardless of whether the people of the Kittewick period—that is, as represented by the B. R. Strand phase—were a Pacific coastal people acculturated to interior ways, or an interior people acculturated
Figure 2. Cultural relationships in prehistoric southwestern Alaska (adapted from Duffield 1969a). Solid lines between periods or regions indicate an absence of cultural transmission; dashed lines indicate intermittent contact; the absence of lines indicates unrestricted cultural transmission. Dotted arrows designate the geographic extent of the major ethnic groups and cultural horizons.
to coastal ways (as have been Alaskan Indian groups of the recent past), the most reasonable interpretation at present is that they were not ancestral Eskimos, as that term is used here to pertain to the direct ancestors of peoples now speaking a form of Eskimoan.

**Athapaskans**

I conclude that the direct ancestors of modern Tanaina arrived at the coast (along upper Cook Inlet) only slightly before A.D. 1750. Thus they are marginal to the prehistoric matters of principal interest here. On the other hand, the possibility of a genetic relationship between these Athapaskans and the people of the Naknek drainage during the Kittewick period of 2500 to 1900 B.C. may well be considered.

In view of the recent divergence from one another of the Athapaskan languages, and of Athapaskan from Eyak, it is unlikely that the Kittewick period people, even if Indians, could properly be considered proto-Athapaskans. But if the relationship of Athapaskan-Eyak to other languages of the postulated Na-Dene group is accepted, it is possible that the Kittewick period people of the Naknek drainage, as well as others of the Alaskan interior of the same period, were speakers of ancestral Na-Dene (see Dumond 1969c for references and further discussion). On the other hand, if the Kittewick period people were an originally coastal people, their degree of cultural divergence from their contemporary coastal brethren suggests that an interior people—presumably Indian, possibly ancestral Na-Dene—was present somewhere nearby.

Thus the evidence available from the Alaska Peninsula and its vicinity suggests that although the immediate ancestors of Tanaina were not important to Peninsula prehistory, some slight influence may have been exerted by much earlier Indian groups, perhaps Na-Dene who were ancestral to all Athapaskans.

**Pacific Eskimos**

I conclude that Eskimo speech directly ancestral to the modern Pacific coastal dialect of Western Eskimo was imported from Bering Sea after the beginning of the Christian era, during the time in which it is evident that in material culture the Pacific coastal people of the Peninsula were undergoing acculturation in the direction of the people of the Bering Sea. Elsewhere, I have argued that a movement of Bering Sea people to the Pacific at this time was based upon their adoption of techniques of sea-mammal hunting in open water (Dumond 1969a). Such a movement is in excellent accord with linguistic evidence (see Dumond 1964a, 1965b, for further discussion and references), and I take it that the relatively uniform group of Peninsula Eskimos, of Figure 1, came into being as the direct acculturative result.
I further conclude that the people of the Pacific coast before the beginning of the Christian era were not ancestral Eskimos, in a linguistic sense, but were descendants of proto-Aleuts, and cousins of their Aleut contemporaries, from whom they diverged culturally and probably linguistically by about 2500 B.C.

**Aleuts**

Although these people now live completely outside the area of research, the apparent resemblances between the early collection from Takli Island and the probably later collection from Krugloï Point on Agattu Island has made it possible to hypothesize ancestral affinity at around 4000 B.C. I have thus provisionally concluded that ancestral Aleuts were the progenitors both of modern Aleuts and of early people of the Pacific Eskimo area, and that until the Christian era the latter people spoke a language derived directly from proto-Aleut, a language now completely extinct.

Thus the position of the Alaska Peninsula may be summarized as follows:

1. It has always been relatively marginal to the affairs of the Na-Dene.
2. Its southern coast has been the heart of the Pacific Eskimo-Aleut maritime area.
3. Its northern coast formed the southern edge of a northern Alaskan coastal culture area of which the Bering Sea was an integral part, until the people of the area developed or adopted techniques for hunting in open water, at which time the Peninsula became central to those developments and to Western Eskimo distribution.

**The Peninsula in Further Research**

Nowhere in this discussion has appeared the matter of the apparently deep relationship between Eskimos on the one hand, and Aleuts on the other; yet the fact of their clear linguistic relationship suggests that there must at one time have existed a single social unit ancestral both to modern Aleuts and to modern Eskimos. So strong is this expectation, that it was once specifically hypothesized that evidence of such a common ancestor would be found at, or somewhat before, 4000 B.C. (Dumond 1965b: 1251).

The recent results from the work on the Pacific coast, summarized above, have caused a modification of that expectation. Accepting for the moment the present reconstruction, it would now be expected that the common ancestor existed considerably earlier than 4000 B.C., in circumstances that would provide for the development of two distinct subsistence patterns—one for exploiting the open coast of the Pacific, under development by 4000 B.C., by ancestral Aleuts; the other for exploiting the
tundra-covered territory adjacent to coastlines that freeze in winter, in evidence by 2500 B.C. with ancestral Eskimos (Dumond 1969a). Of that common progenitor the research discussed here has provided no evidence.

Is, perhaps, the present reconstruction wrong? Do we have evidence of that common ancestor that we have not recognized? Is another reconstruction reasonably possible? These questions lead to an examination of a major problem, indicated above but discussed only briefly: the origin of the Norton tradition. For this, the following two points must be considered:

1. The direct antecedents of Norton culture are unknown. As mentioned above, the time following the decline of the Arctic Small Tool tradition is marked everywhere by a hiatus. North of Bering Strait, people of Choris culture moved to the coastline after this occupational gap (Giddings 1967: 275), and shortly before the advent of people of Norton culture, to whom they bequeathed, apparently, the earliest form of Alaskan pottery (see Dumond 1969b), a form derived with little doubt from Siberia; they were not, however, influential in the rest of Norton material culture, which owes an obviously greater debt to the Arctic Small Tool tradition itself. South of Bering Strait, where there is no Choris occupation, people of Norton culture followed directly after this period of sparse population (cf. Giddings 1964).4

2. Important elements of Norton culture are southern in derivation. Specifically, these include the steadily increasing reliance upon polished slate, and the use of oil lamps—both characteristic of the much earlier T. Birch phase and related manifestations of the Pacific coastal zone. Furthermore, as mentioned above, it was with the Norton horizon that there began the increased northern Eskimo use of the coastline—with hunting in open water, and the use of the whaling harpoon (Dumond 1969a). Like the oil lamp and polished slate, this subsistence pattern too was characteristic of the Pacific coast. It is possible that these southern elements might have been derived from southern areas in Asia; but it seems more economical, in view of the obvious Eskimo bias toward life in America, rather than in Asia, to hypothesize that these elements were derived from the neighborhood of the Pacific coast of the Alaska Peninsula.

Thus two logically possible, but mutually exclusive, hypotheses may be developed:

1. After 1000 B.C., people of the Arctic Small Tool tradition took from people of the south coast of the Alaska Peninsula the use of polished slate, the oil lamp, and the hunting of sea mammals in open water, and transmitted these techniques northward; there, when pottery was adopted from people of Choris culture, Norton culture as now conceived appeared.
This meeting of Small Tool people and those of the coastal area of the Pacific did not occur through the Naknek drainage (Dumond 1968). It is clearly possible, however, that such a meeting took place farther southwest along the Alaska Peninsula, perhaps in the vicinity of Ugashik. At least, there is nothing to preclude this possibility in the state of present knowledge. In addition, some apparently "Norton" characteristics in stone implements have been reported from Chirikof Island, unfortunately from undated contexts (Workman 1966a). And at least some similarities in chipped stone implements are evident between the earliest Brooks River period phase of the Naknek drainage and material from the site at Port Moller (Workman 1966b), although dissimilarities are also strikingly evident. Further, the Port Moller collection is almost completely without polished slate.

If the above hypothesis were borne out, it would involve no change in the reconstruction presented here, and one could continue to seek the ultimate Eskaleutian ancestor on an early time level. Indeed, under these circumstances it is distinctly possible that Eskaleutian speech was brought to the New World in two separate population movements, an earlier one of ancestral Aleuts, perhaps concurrent with the flooding of the Bering Platform (cf. Laughlin 1967), the other of the Small Tool people around 3000 B.C. (cf. Dumond 1969a, 1970). Thus the ancestral Eskaleut may not have lived in the New World at all.

2. Direct ancestors of people of Norton culture were not related to people of the Arctic Small Tool tradition, but were Aleut-related residents of the tip of the Alaska Peninsula, who moved northward along the Alaskan coast in the first millennium B.C., obtaining pottery from their Choris predecessors of the north.

Because of the apparent linguistic depth of cleavage between Aleutian and Eskimoan—as much as 6000 years in some glottochronological estimates—this hypothesis seems unlikely. Furthermore, it creates difficulties in the interpretation of the prehistory of the eastern Arctic, where the most economical explanation at present is that the Small-Tool-derived people of Dorset culture were Eskimo in speech; indeed, it leaves the Arctic Small Tool people completely unaccounted for. Nevertheless, in view of the post-Small Tool horizon hiatus and other considerations, it must be considered a logical possibility. One advantage in the direction of economy is that it provides for the advent of the Eskaleutians to the New World, whenever it occurred, as a single event.

The acceptance of either of these alternatives would be filled with significance for the prehistory of coastal Alaska and the Eskimos. It is clear that a choice between them—or, for that matter, the rejection of both of them—can be made only after further research on the Alaska Peninsula. This research is now being planned.
The Original Hypothesis Reconsidered

But what of Cressman's original hypothesis—"that certain complexes of the culture of Southwestern Alaska and elsewhere in the Arctic were eventually derived from the Columbia River in Oregon"? Can it now be finally accepted or rejected?

The answer still must be that it cannot. Certainly it is clear that important, indeed vital, impulses from the north have been felt on the Alaska Peninsula for the past four thousand years, impulses that led to the Eskimization of the Pacific coast of the Peninsula more than a millennium ago. And the first of these northern impulses, in the second millennium B.C., brought blades and diminutive burins, two implements included in Cressman's hypothesized complex, thus arguing against a southern introduction of those traits. On the other hand, notched and grooved stones are apparently earlier on the Pacific coast of the Peninsula than on its Bering Sea side, suggesting that some of the traits may indeed have been southern in origin. The deterrent to a test of the hypothesis as specifically stated, however, is simply that the cultural sequences nowhere in southwestern Alaska penetrate sufficiently into the past to permit a complete assessment.

But whatever the case with specific classes of artifacts, the crucial element in the development of coastal Alaskan culture seems now to have been the effective exploitation of unfrozen coast lines. In this connection Borden (e.g., 1962) has argued that the polishing of slate and other elements of "Eskimo" technology—and these presume a measure of open water hunting—were derived from non-Eskimos to the south, such as the early people evident on the coast of British Columbia. And clearly the adaptation to open water, the adaptation to littoral resources that was somewhere taken up and developed by people of Norton culture in a bit of ecological innovation that made later Eskimo culture possible, is obviously and substantially earlier on the Pacific coast of the Peninsula than on Bering Sea.

A still earlier adaptation to littoral resources seems indicated by evidence from The Dalles, Oregon, on the Columbia River (Cressman 1960: 71). Thus the original conception still retains vitality. Indeed, the research now planned into Norton origins is based squarely upon its spirit.

Notes

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Where two or more cultural phases were defined from excavations in one restricted area, the geographic designator within the phase name is abbreviated: Brooks River becomes B.R., Kudak Bay becomes K., and Tekli Island becomes T.

In 1971, a team from the University of Arkansas recovered similar material from a site located near the tip of the Alaska Peninsula, on the Bering Sea side and approximately due west of Cold Bay (Allen P. McCarney, personal communication). The area was apparently again under Aleut use by A.D. 1800. This find is taken to be additional (and expectable) evidence of the expansion of Thule tradition peoples around the end of the first millennium A.D.

A tangential test of this observation was made possible through National Science Foundation grant GS-1412 (Principal Investigators, Michael Nowak and D.E. Dumond) to The Colorado College, for a survey of Nunivak Island in 1967. Field work performed by Nowak, and carried on since that date by him independently, has so far indicated a major Norton culture component to represent the earliest people on the island.

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EDUCATION IN A SOUTH AFRICAN PEASANT COMMUNITY

by

Brian M. du Toit

I

A century and a half has passed since the first pioneer families groped their way northward across the unfamiliar and inhospitable Karoo. While the majority of these early migrants returned to the protectively lush coastal region, others banded together and in time formed a series of population movements known as the Great Trek. This paper deals with neither of these categories of persons but with a number of families who ventured across the harsh Karoo and then literally stumbled into the Gamkaskloof. This is a fertile green valley in the Swartberg range which is surrounded by the desolate Karoo. The valley, actually no more than a large fissure formed by massive faulting in the mountain range, is fourteen miles in length and reaches a maximum width of six hundred yards. The surrounding mountains extend to an altitude of at least two thousand feet above the floor of the valley.

During the early years of the 19th Century this beautiful lush valley was "discovered" by a man following his cattle, and he applied for landholding rights. Before these could be granted he migrated northward with one of the pioneer wagon trains, selling his rights to the tract in the valley. By 1830 a number of families had settled, and there gradually emerged a community. While the population in the valley hardly ever exceeded one hundred and thirty the inhabitants were effectively cut off from the outside world by the mountain walls. The valley is oriented from east to west and divided into two stretches of equal size by the Gamka River which cuts through the surrounding mountains leaving two tremendous passes. The only way persons could enter or leave the valley, for trading, preaching, or maintaining law and order, was by walking through one of these passes. This involved at least a seven mile hike while fording the river a number of times. The closest village was 22 miles from the spot where the pass emerges into the Karoo plains.

Due in part to the requirements of time and energy in reaching the outside and in part to increasingly fewer social contacts, the isolation of the valley community became more pronounced. Members of the community turned to their own resources for subsistence, social interaction, leisure activities, amusement, and education. In time, too, a degree of intermarriage took place within the community. While the Karoo and South Africa generally was entering the industrial era with mines, factories, mass media and scientific development, the people of the valley increasingly turned away from the "Outside" and the "outsiders" who were becoming more markedly different, wore smart
clothes, drove automobiles, spoke a language which differed from the regional dialect of the valley, and lacked the common frame of reference. Children at this time did not have formal instruction and they were educated with an eye to their continuing residence in the valley. This cultural and intellectual inbreeding coupled with minimal contacts outside the valley produced in time a regional agrarian society surrounded on all sides by a fast moving industrial society. On the whole the people of the valley, clinging to the bucolic virtues and nearly an arcane way of life, live by standards which characterized an earlier phase of most South African communities.

II

"Peasant," the equivalent of the older term "folk," is used in the title of this paper because the term avoids the confusion which grew out of the earlier usage and because it is gaining common usage among social scientists. We have to see the people of the valley in terms of Kroeber's "part-societies with part-cultures" (Kroeber 1948;284) definition. We have to see them in terms of Foster's statement that "the larger society of which peasants are a part, then, is urban society, the civilization of an entire region that is carried by the religious, political, commercial, and intellectual elite groups" (Foster 1967:5). The people of the valley must be considered in terms of their geographical position in South Africa where they have varying contacts with neighboring villages for trade and the purchase of material wants, for marriage partners, for church and legal business, and occasionally for social or kin relations. They are passive members of national and international church organizations, they are ineffective members of national political parties, they are objective onlookers to a judicial system over which they have no control, they are subjects of a school system which they cannot influence, and many of them live on land which belongs to the Government. By material standards applied outside the valley, they are poor. Living in a country which is heralded as democratic, they are powerless. With the first of these last two statements they would not agree, while being totally unconcerned about the second. For all intents and purposes they are introverted, finding satisfaction in and among themselves and looking with suspicion on the "Outside."

During the past three or four decades they have been drawn from their isolation to an increasing extent. At first a road was constructed which led from the little village to the entrance of the pass. From here there was a footpath which wound for seven miles through the mountains to the valley. A one room school house was constructed and a retired teacher posted to the valley; the Dutch Reformed Church took note of the people, inscribing their names on the church roles and promptly forgetting about them; a trader wandered into the valley buying up the goat herds at ridiculously low prices and selling his wares at a slight mark-up. In 1963 a road leading into the valley was
constructed by the Provincial Administration and so the people of the valley were able to get out more easily, to get some of their older children to secondary school, and to enter the market economy as they traded and marketed their products in a neighboring village.² This road has had two results, diametrically opposed to each other; it has allowed the people to participate in life beyond the valley walls, and it has also laid them bare. "Peasants are always doomed to be old-fashioned," says Foster (1967:11), and so the "Outsiders" have come, and looked, and stared, causing the people of the valley to turn themselves away from the road and to treat the "Outsiders" correctly but coldly, or to just avoid them.

III

Speaking of childhood in a small French-Canadian parish, Horace Miner (1963:180) states that "a sharp distinction is made between 'education' and 'instruction.' The former designates the social and moral integration of the child into society; the latter refers to the learning of certain factual material useful in life. The primary responsibility for the education of children rests with the parents... Instruction rests with the school... " This same distinction applies to the people of the valley who speak of "opvoeding" and "onderwys," or education and schooling. The first takes place basically within the domestic group occupying one household, while the children are sent to the little school down the valley for the second. In the brief discussion which follows I will consider education as it finds expression in the community of Gankaskloof. Firstly folklore, and particularly the riddle, is seen as an agent of education; we then turn to the role of the school and its potential contradiction of locally held values and premises; and lastly we see the way in which these two combine so that the child expresses traditional prototypes and accepted frames of reference through the medium provided in school.

Education is aimed primarily at generational replacement based on imitation and, therefore, is sex bound. The child spends the greater part of his first three years with or close to his mother. From this time on he starts playing independently, assisting father to get the goats in the kraal made of thorn branches, collecting eggs in the shrubs where the hens nest, gathering wild fruits, and increasingly drifting further and further from the house and yard. The greater part of the day girls will be close to or in fact assisting the mother. Boys follow the steps and imitate older boys, and in time fathers. Both boys and girls start and end each day in the close personal confines of the family dwelling with parents and siblings. This is one group among whom the basic personality and role differentiation takes place. The longer the time a child spends in these same socio-cultural environs, the greater the likelihood of his growing up like his parents and seniors. The child in Gankaskloof with only a few years of schooling, will in effect remain and become a miniature adult of Gankaskloof. He gradually develops the physical abilities to imitate even further his father and uncles and so replaces them when they are no longer there.
The girls in even a greater degree imitate their seniors, for females leave the valley less frequently; and, in the past at least, they were less subject to changing influences and thus became the conservative element of the community.

It should be kept in mind that the situation which we are discussing here depicts current conditions in the valley. This situation reflects an ever widening scope in which social and psychological barriers are being removed at an increasing rate. Reverend du Toit, a Dutch Reformed Church minister who served this region in the late thirties, points out that in 1937 only one child had come out of the valley to attend secondary school. This child quite clearly was unhappy for on the second night at the village school he disappeared from the dormitory. A day later he arrived home and refused to leave the valley again. Shortly after this boy had run away from school, a second boy was coaxed into attending the industrial school in a town close by. These are major changes which occurred less than thirty years before this study was conducted.

IV

While adults might not have had much in the line of schooling, there is a value placed on knowledge and quick-wittedness. To substitute for the lack of instruction, yet serve the needs of intellectual stimulation, there gradually emerged as a part of the pattern of education, the institutionalized riddling session. This required a person to be quick-witted, to know his environment, to interpret his knowledge, and also to know Biblical data.

This came to us strongly almost as soon as we arrived for research. After setting up camp on the banks of the Cunka River, we crossed the river to introduce ourselves and meet Martiens Snyman and his family. The head of the household was not in and I spoke to his wife. As I left the house through the kitchen door, Martiens was squatting against a loose rock some ten yards away. He viewed me quizzically for a few seconds as I approached, and without moving he said, "With those glasses on you look like a doctor. Tell me, whom should a person marry to be his own grandfather?" After introducing ourselves and talking for some time, I asked for a solution to his problem. He refused this, stating that since we were going to be in the valley for a couple of weeks we should solve the problem ourselves. On different occasions and in a variety of settings we met with similar and more formally structured riddles. While talking about the history of the valley a person would interject a riddle dealing with history; while walking through fields, riddles dealing with nature would arise; or while discussing religion the riddles would deal with material and persons from the Bible. It soon became evident that there was a great wealth of riddles, most of which applied specifically to the culture, environment, and history of these people.
Elsewhere (du Toit 1966c) this informal and impromptu riddling has been equated with what Goldstein (1963) calls incidental riddling situations. While the riddles are all patterned and follow a prescribed form, they lack a structured setting. They enter into the conversation, may be solved, and the discussions return to their normal course. Many of these riddles, it seemed, were composed then and there by the speaker for the particular situation but nevertheless they follow the form of other riddles. On the whole these riddles were used for amusement, to focus attention on some detail, or even as mild intellectual stimulus. They were, however, transitory within a topic of discussion which received primary emphasis and attention. In this way a person might ask, "Which rock is under the water?" and the answer of course is, "A wet rock." Some appreciation is shown by laughing or by a comment, upon which the other person might look about, asking, "What is the difference between an aloe and a Jew?" Some humorous analogies are proposed before the correct answer is arrived at - an aloe ages from the bottom, while a Jew ages from the top.3

On other occasions a group of people, usually kinsmen and possibly neighbors, may gather in some person’s home for an evening of riddling. Here we are dealing with a different setting and a highly structured gathering. One person will start off this riddling session by posing a riddle which the audience must solve. This is the distinguishing feature, namely that the riddle must be solved. At the first of these sessions I attended, it became clear why Smyman had insisted at our first meeting that we solve the riddle irrespective of the amount of time required. This riddling session, Goldstein states, "is nowadays normally found only in those folk societies in which traditions remain vital as a means of rural entertainment" (Goldstein 1964:330, italics mine). In Cankaskloof the entertainment seems to be incidental while the primary function is one of intellectual stimulation and even education.

Such riddling sessions may be attended by adults and young people and those which we observed included members of both sexes and various age groups. There does not seem to be any regularity or frequency with which these sessions take place. They are to a certain extent an excuse to have kinsmen or neighbors over for coffee. The setting is an informal one. If the gathering takes place in the evening, people will assemble in the living room of the host’s house, the women being on the kitchen side where the fire glows red and the water for coffee is kept at boiling point. In earlier days, though it is still the practice of Ouma Hester Mostert4, people used to "sit in does." This means that when it is cold they would sit in the hearth which forms a kind of anteroom out of the kitchen. The fire would be made on the platform of this anteroom as it would on the sand outside. Other gatherings take place in the afternoon when people relax and the major activities of the day have been taken care of. Since they had gathered for a riddling session the riddler would lead off with his riddle after everybody had exchanged pleasantries and remarked on the weather and their health. In other cases the session may in fact develop out of such a gathering of people without any previously
agreed program. In both cases the session follows the same pattern.

The person acting as riddler at a particular time -- or on a particular evening -- occupies an accepted status position which sets him off from the members of the audience. He not only occupies this position but must also try to maintain his status. After posing his riddle, he sits back observing the members of the audience, responding to every attempt they make to solve the riddle by smiling, shaking his head, or looking ahead placidly. It was obvious that he was enjoying himself. It frequently happens, informants stated, that a riddling session like this might last for three or more evenings during which the audience might change but the riddler continues to occupy his position until the riddle is solved. On the other hand, should somebody solve a riddle too soon the riddler could act immediately to reaffirm his position. It was almost like a hand of bridge in which a person had a trump card which he could play when needed. The riddler in many cases had such a "trump up his sleeve" and could use it when the situation arose.

To illustrate this point the proceedings at one of these riddling sessions will be described. Unfortunately much of the linguistic play and phonetic variation which are important in riddles will be lost because examples have to be translated from their regional dialect of Afrikaans into English. The session under discussion took place at the home of Henk Mostert. He opened by asking,

"Where does a crow fly when it is six years old?"

Without any trouble and with hardly any time elapsing, his seventeen year old daughter, Hester, replied,

"To his seventh year."

Instantaneously, while she was finishing the last words of her sentence, he responded with his trump card. This was the riddle which would reaffirm his status. He asked,

"What walks on its head and what sits on its tail?"

Hester and a number of other persons attempted to solve the riddle, but when their attempts produced no solution, the riddler was requested to disclose the answer of his riddle. He smiled and three times in succession he responded to this request by saying,

"Look, I asked where a crow flies when it is six years old and you replied to his seventh year. Now I ask you what walks on its head and what sits on its tail?"

Finally he agreed to disclose the answer (and this was due partly to our presence and uncertainty whether we would form part of the audience the next day) and explained that a bootnail walks on its head and a dog sits on its tail. The fact that there is very little relationship between the two parts of this riddle were not criticized because it allowed the riddler to reaffirm his status.
This same pattern emerged at a number of meetings and when people were asked about riddling, it was explained that in the Voortyd this was an important uniting factor. It drew people together, it produced social interaction, and it was a way in which people could test knowledge and quick-wittedness. On such evenings the young people would also be present and by participating they could acquire knowledge, show off skills and intellectual abilities.

Some of the most beautiful riddles deal with nature, describing the glowing embers of a fire, the stars, fruit and vegetables, or animals. The valley floor and surrounding mountains are covered by numerous aloes. During the winter months it is one of the most beautiful views imaginable to look across the valley and see great numbers of these aloes, standing eight feet high with a strong stem, the dried leaves at the base, dark green leaves near the top, and finally the long strand of flaming red flowers piercing the blue sky like some brightly burning candle. And so the people in the valley ask, "I have a Hottentot who is dressed in rags but he always wears a new hat." Or they ask, "What is always young on top but old underneath?"

As is usual elsewhere, a number of riddles are present which require the audience to be quick in detecting the flaw in the question: "How long did Moses spend in the ark?" (Moses wasn't in the ark). "Why does the baboon go across the mountain?" (because he can't go through it).

A number of these riddles deal with objects which we would classify as cultural-historical objects or even antiques. Such objects include the old coffee grinder, the brandy kettle, the must vat, and the old outside earth oven. It was significant that in this community, which at the time of this study numbered 75 persons who could participate in these sessions, more than 200 riddles were recorded. Compared to similar riddles in the rest of South Africa one finds an absence of certain categories -- for example, those dealing with the Bantu, radios, postal service, photography, town and farm names and similar topics -- which fall outside the field of experience of the people of the valley. These are not part of their culture and are not included in their riddles. One does find a large percentage of riddles dealing with plants, animals, the household, and the human body, namely a total of 124 out of 158 which were tabulated (du Toit 1965:52-53).

In the light of their use and the structured institutionalized setting in which they occur I suggest that they serve a function. Since the community under discussion lacks other means of social interaction and intellectual stimulus, the riddling session was evolved as a means of supplying such opportunities. While the riddle does in fact serve other needs, such as amusement and education (religious riddles, for example, which were not discussed here), it is suggested that the primary function in this case is one of substituting as intellectual stimulus for people removed from the main stream of social interaction and cultural growth (du Toit 1966c:474).
It has already been suggested that young people frequently meet in these riddling sessions and in similar social gatherings. The persons may include, in addition to kinsmen, those who are courting, who, as explained by the adults in the valley, rarely spend an evening wasting time or "making out." Usually each of these young people brought his handsteen (literally, "hand stone") or hand-mill and the evening was spent grinding wheat. The operation of this hand-mill rests on the same principle as the watermill but human energy replaces the driving force of water.

This reminds one of the custom reported from rural Wales in which the young man who goes courting has to spend his evening whittling at a piece of wood, and finally presents his girlfriend with a wooden spoon. This spooning seems related to what here we might call grinding. An element of competition might enter in by seeing who could grind wheat the finest or in the shortest period of time. While the activities had economic value, they were basically of social significance.

V

The introduction of a school into Gamkaskloof is relatively recent. During 1926 a small one-roomed building was opened for the purpose. This was located in the extreme west of the valley and many children became boarders at various houses in this part of the valley. This was unsatisfactory with the result that some years later a second school was built which was geographically and demographically more centrally located. Due to a lack of pupils the first school had to close down and the second school, still functioning, became the school.

The school in the valley is a primary school, offering instruction through the seventh grade and under the Department of Education of the Cape Province. This Department is obliged to supply one teacher, and in the past this has usually been a single person. Reverend du Toit (personal communication) explains that during his visit in 1937 both schools were still functioning. The one was served by a retired widower while the other teacher was married. These schools obviously were not both needed, with the result that the young man and his wife left, leaving the old man, who boarded with the family named Marais. He spent ten years in the valley before being replaced by a female who apparently could outtalk, outtalk, outfight, and outdrink most of the young men in the valley. Some years ago a small house with two bedrooms was built next to the school building and when the road was opened the present teacher arrived. He is young, having just finished his diploma for primary school teaching, and lives in the house with his wife and a baby.

Formal instruction is in Afrikaans, but English is taught as a subject. We got the impression that the child learns little English, other than to phonetically reproduce the mispronunciation of the teacher. Other subjects taught include a superficial coverage of history,
geography, arithmetic, hygiene, and Biblical studies. None of these prepares the child for secondary school. Little stimulation for learning exists. The parents, on the whole, had little or no formal schooling and do not feel that it is of primary importance for their children. Exceptions are present and in these cases children are praised for their intellectual endeavors while the attendance of secondary school in the village is held out as an ideal to work for.

The point which will not escape the reader is, of course, that there is a basic incompatibility between the ideals which are enculturated and the values which are taught in school. The enculturative process places emphasis on being like the parent and adapting to the ecology of the valley. Children should be satisfied with their lives and work at making a success of the valley conditions and their relations with members of the community. The school widens their horizon, it teaches them about people, places, and things outside the valley and in fact emphasizes the need for more instruction. The latter can only be attained by going to the neighboring village or one of the neighboring towns, thus starting the process which finally ends in their settling outside the valley. While the school serves a valuable purpose in offering the basic skills in instruction, it is antithetical to the enculturative process. Very few children who attended the secondary school outside the valley have returned to settle in their home environment. At the time of this study there were only two persons who had recently completed schooling. One is a young fellow of eighteen who dropped out of school and was preparing to settle down, while the other is a very attractive girl of the same age who has twice been treated for schizophrenic tendencies.

The school statistics seem fairly stable. In 1952 there were 17 children in the one-room school (Joubert n.d.) while there were 18 during our first study period. Shortly before my second visit to the valley (when the demographic figures were compiled), a large family departed the valley, leaving only 15 children in school. No facilities or institutions exist for extra-curricular activities such as athletic sports, debating societies, or art and music classes. This could be explained as primarily due to the dispersed settlement in which some children live as far as five miles from the school. No form of school feeding exists to supplement necessary vitamins and proteins to a restricted diet. On more than one occasion I enjoyed a meal with a family where the basic course consisted of starch and stewed dried fruit substituted for meat.

The five hours of formal schoolroom instruction is often the only contact with academics that these children have. In recent years a number of people have subscribed to popular magazines and a few have battery operated radios on which soap-box operas and serialized stories offer relaxation. Many of the older generation had little or no schooling and in this context cannot offer stimulation to their children.

Education should be viewed as including all those mechanisms which operate to make the child familiar with the culture of the group
into which he is born. It rests, in a community such as this, on the immediate social group -- the household. As the child grows older and becomes more independent, he interacts with an ever-growing social circle. Obviously this process operates from early morning to bedtime, in fact it is in operation at all times. What happens when children have already received much of their enculturation and education in the home, and then go to a school for instruction and a widening of their scope?

VI

During visits to the valley I visited every house on a number of occasions and also spent evenings with various families. In addition, the teacher was asked to permit all the pupils in school to write an essay as well as a letter to a friend telling him what games they play, what stories they hear, what songs they sing, and similar topics. An integration of observations and these responses produced some interesting leads on the role of folklore in enculturation, as well as the influence of ecological factors on the folklore.

Magdalena Cordier, a girl of twelve, started her essay with the following words: "Here in Camkaskloof the old people like to tell stories to us children, because it is no longer as it was in the past..." On the whole these "old people" turn out to be the father, mother, grandfather, and uncle (in order in which they are mentioned most frequently). The stories they tell deal with a variety of subjects, many of them being local adaptations of folktales (and other oral forms) from the European tradition. In this way it is related that Little Red Riding Hood met a leopard and not a wolf when she was on her way to her grandmother. Till Eulenspiegel is adapted to the culture of the valley. He was very fond of donkeys, the story goes, and when walking through the valley he passed a field with a great number of pumpkins. Obviously he thought these to be donkey eggs and took one to hatch a small donkey for himself. After days of sitting on the pumpkin he needed some food and while he was gone a rabbit arrived and ate a hole in the pumpkin. At that moment Till returned, saw the hole and the rabbit, which ran off. "Hey, wait!" he called after it, "I'm your mommy!" These and other stories refer to leopards and baboons, both of which were present in great numbers during earlier years and harassed the flocks and the fields belonging to the people of the valley. Some stories deal with actual encounters with leopards and baboons. It is pointed out that a leopard is scared of menfolk (using colloquial form mensmens) but can't stand womenfolk (vroumens). It is particularly dangerous, they relate, for women who are menstruating to go into the mountains or through the Poort because leopards can smell them. These two statements might in fact be related, the second leading to the first generalization.

Many of these tales are associated with particular people; an encounter with a leopard which Grandfather shot, selling the skin
for 50 cents; a grandfather meeting a troop of baboons and not being able to shoot because "in those days there were no cartridges." Many of the stories recount the meetings of fox and wolf (Jakkals en Wolf), the tricksters in South African folklore, while others fall in that universal category of ghost tales which tell of hair-raising encounters with spooks, ghosts, and devils. As in many other cases these are favorite bedtime stories, told in most cases by the father. Pampoenkloof is the favorite hang-out for these ethereal beings but if you happen to be traveling by donkey or can locate a donkey, stand behind it while looking over its head, between the ears, and curse as loudly and wildly as you know how. The spooks will take the cue and disappear.

Three of the stories mentioned in their essays deserve special reference. One tells of a little child who spent a whole afternoon lying on his stomach observing a colony of ants, telling of their activities, their characteristics, and their appearance. This is a recurrent feature: the close association between man and his environment, and the detailed knowledge man has in this valley where he lives so close to nature.

The second tells of an old woman who came to the home of a number of sisters, requesting some bread. They refused, saying that they did not have a sufficient supply for all of them, but as soon as the old woman left they prepared the dough for a new batch of bread and cakes. While they were in the kitchen the bread started to rise and rise and rise until it filled the whole house and suffocated the sisters. The moral attached is one of sharing, for here again is one of the prime characteristics of these people, living in isolation as they do. Coffee is always served when a visitor arrives, with the question "what about something to eat?" The visitor is invited to partake of a meal, to share in whatever has been prepared even though he was not expected and the food may not be sufficient. Camping in the valley during the research we were subject to the sympathy of every mother in the valley and rarely could we leave a house after a visit without a few oranges, some cookies, a loaf of fresh bread, a small bottle of preserves and similar gifts. Partly this is practical, based on the maxim of share while you can for tomorrow you might be in need of help, but partly it is the atmosphere in the valley -- the knowledge that others might need or will appreciate and since we have enough I might as well be a good neighbor.

The last of these stories relates the tale of a father who had three daughters. Since he was going into town on that day he went to their room before leaving, asking each one what he could bring her. The eldest wanted a beautiful brooch, the second a shiny necklace, and the youngest said that all she wanted was a rose. On his way back from town the father was traveling through the rain and he picked a beautiful rose "and he was so very proud of her and he bequeathed his whole inheritance to her." This touches on a subject not discussed in this paper, namely that daughters may inherit land, but that the eldest does not necessarily inherit the finest or the largest tract. It re-emphasizes that sex and age categories, which are criteria for certain
associations and activities, are not of prime importance in all. Most children, both boys and girls, have their own little gardens where they plant potatoes and other vegetables and occasionally a grape vine or fruit tree. They are taught to cultivate the soil and handle the plants; in return the products are theirs and they are free to use or dispose of them. Six of the children spoken to had already sold some of their produce to their parents.

One of the tongue twisters which a child has to repeat rapidly a number of times goes,

"Martiens Mostert maal mielie meel mooi" (Martiens Mostert grinds corn meal well).

A second states,

"My meul maal mooi meel mooi meel maal my meul" (my mill grinds fine meal, fine meal is ground by my mill).

Because the Mostert family is one of the oldest in the valley, and the mill (both varieties) is of such importance to the people, these rhymes gain in significance. One should keep in mind that the handmill was usually operated in a social context, when a man went courting or when people sat talking. These were also the ideal situations for testing others with tongue twisters, riddles and the like.

I have already alluded to the fact that many of these stories dealt with people and their actual encounters with animals. In this way the history of the valley is told, not as a chronological ordering of events but rather as a recollection of outstanding events centered around different persons in the valley. One could really say different characters in the valley, for they are clearly described, and after hearing a number of the stories about "the wild Cordiers" they emerge as living, but idiosyncratic, characters.

With the history of the valley, the ecological setting, and these activities as focal point, it will be understood why the child's field of experience and knowledge is so limited. Story subjects are leopards, donkeys, baboons, or goats. These stories take place in the valley or a similar setting, they deal with people who are known or resemble the latter. One little story tells of a mouse that ran away from home and got lost in the mountain pass. The emphasis is placed on how tired he got, how sore his feet were, how he longed for a rest. The same is true of children's responses to a number of questions;

1. Why do you like or dislike the school? A number of children stated that if they were to go to school in the neighboring villages they could only come to Gamkaskloof on some weekends. Others felt that there were too many teachers at the other school. Gamkaskloof had only one and they knew him.
2. What would you do if you picked up R100 (approximately $140)? Eleven out of fifteen would buy a bicycle, while some of the others wanted watches, and the girls wanted clothes. Two boys wanted rifles, while Ella Marais wanted a horse. Paging through the essay books of these children at the school, one finds repeated mention of bicycles to cover the long distances in the valley, and rifles to be like Grandfather, Father and Uncle.

3. What would you like to be when you are grown up? Most of the boys stated that they wanted to be farmers while defining explicitly that this had to be in Gamkaskloof.10 The reasons most frequently given were that the valley had such a lot of water and that they did not know anybody outside. Girls on the whole wanted to be farmer's wives, usually in the valley. One boy and one girl (both of which have close relatives who had recently left the valley) wanted to live outside.

It is significant that those children whose horizons have been expanding through relatives or experiences outside, thought beyond the confines of the valley. The majority, however, still saw the valley and its people as the primary social and psychological wrapping. Not only do we find the emphasis on the familiar setting and recounting of past events, but associated with it is the ideal of being alike. The ideals and activities of the older generation become the guiding force in personality development. These ideals and values are not only inculcated in the young, but are emphasized among peer-group members.

Notes

1. The research on which this chapter is based was conducted during April and July, 1965, at which time I was on the faculty of the University of Stellenbosch. My appreciation is expressed to those who permitted free time and provided financial support which facilitated this research.

I would like to use this opportunity to thank the editors of this volume for inviting this contribution. It allows me the only formal way to express a very deep and sincere debt toward Professor Cressman. As a foreign student I was lost when my wife and I arrived in Oregon and he made us feel at home, incorporated me into American life and academics, and before graduation he gave me something by which I have organized my life: he spoke of a future in academics and research and said, "Remember, when you're satisfied, you're done."

2. Elsewhere (du Toit 1969) this change has been discussed in detail and the effects of the road on the community analyzed. Here motor vehicles are substituted psychologically and functionally for the traditional modes of donkey transport. Today the people of the valley buy automobiles whether they can drive or not.
3. During earlier days in South Africa, and even today in outlying districts, the Jew was the peddler, the migrant trader, and the trade store owner. He traded and bought anything from hides and bones, to a fat goat or some surplus wheat. He was frequently poor, or at least he seldom showed his wealth, but reputedly he always got the best of a deal. Partly due to this image and partly due to a certain degree of suspicion with which he was considered, "the Jew" figures in numerous old Afrikaans riddles and jokes.

4. The Afrikaner kinship terms are frequently attached to the first name as standard form of address and reference. Thus "oom" and "tante" are commonly used when addressing someone older than the speaker. Most readers will be familiar with the common referent of "oom Paul" when speaking of President Paul Kruger. Addressing persons in the second ascending generation, the peer group of "grandfather" and "grandmother," these latter terms are commonly used. Thus we speak of "Ouma Hester," the oldest person in the valley, who arrived as a bride at sixteen years of age shortly after the turn of the century.

5. Literally this translates as "time before." It is a commonly used phrase in this valley to refer to anything which happened in the past, but very specifically in the time before the road was constructed. The implication quite clearly is that it refers to a time when the people of the valley lived by their own devices and before the influx of hikers, campers, and tourists.

6. Speaking of the schools in Wales and the opportunities offered, Emmett states, "To climb... means to step out of the rural world which still has a culture worth belonging to" (Emmett 1964:78-79).

7. Children are taught to depend on nature and natural products also as regards medicinal treatment. During the research, 109 medical prescriptions were collected (du Toit 1966a) and of this total only seven were to be obtained from the pharmacist, and only nine from the trade store. It was especially enlightening that 79 were obtained directly from nature and a further 14 were mixtures with a distinctively herbal base.

8. The watermill, operating horizontally as a Norse mill (Forbes 1955:87) rather than vertically has been described elsewhere (du Toit 1966 b). This is the only mill of its kind still standing in the valley, and, as far as could be ascertained, the only one of its kind still in existence in South Africa.

9. Numerous similarities between the people of the valley and other rural peoples present themselves, particularly with those of the same cultural-historical background. Welsh rural values show strong similarities to those of the people in Gawkaskloof. "The heroes of a Llanel child are not those who went to a university and made their way in the world, but men who cut the hay in David's field in one morning with a scythe, built that high curved drystone wall by the mill, carried 150 lbs. up the mountain side to Gelli without a pause" (Emmett 1964:13). These are the kinds of persons in Gawkaskloof who
would be admired and imitated. They are the kinds of persons who are remembered.

10. Discussing the young people in a Balkan village, Irwin Sanders (1949;274) explains the same point: "I could not get a single peasant to answer one simple question: If you were not a farmer, what would you most prefer to be? It was inconceivable to them that they should be anything other than farmers."

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CONTEMPORARY ANTHROPOLOGY AND SOCIAL PLANNING:
"APPLIED FUTURISTICS" AND "DEVELOPMENTAL CHANGE"
IN MODERN SOCIETY

by

Donald Lee Hochstrasser

Introduction

This paper is based on materials and data gathered as part of an interdisciplinary research project on the future of government and society in the United States for the year 2000, which was carried out during 1969 by a team of researchers from the social and health sciences working with the School of Public Health at the University of California, Berkeley. The question within this broad area that is selected for special attention here is the place of anthropology in contemporary social planning. More specifically, the focus is on cultural dynamics viewed from the standpoint of the emerging new field generally known as "futurism" or "futuristics" (Seabury 1969; Shubik 1969). The matter of what might be called "applied futuristics" and "developmental change" in modern society will be of particular interest.

Although it cannot be dealt with directly or at length, due recognition must be given in any such discussion to the crisis of change now facing us, and the need it evokes for rational planning at all levels and phases, national and international. Within this overall setting, social planning becomes a means for dealing with the many facets of human transition and disruption presented by the current situation. Indeed, it gains even more in importance as a potentially effective cultural instrument for controlling and hopefully overcoming the many trials and tribulations posed by our modern way of life. This is most definitely the case as it bears upon policy and action regarding deliberate intervention in the molding of man's society and, thereby, his present and future.

Our primary aim here is to examine the subject of futurism in development as it relates to and involves long-range planning, particularly at the level of the whole country. Analysis and discussion of this topic covers some selected aspects of futuristics with respect to its suggested importance for understanding and handling the most critical of the many complex problems challenging society today (Bell 1969; Chase 1968). The underlying assumptions and general implications of such a central role for futurism in shaping the fate of mankind, especially as it concerns guided cultural change (Gallagher 1968), are assessed. The broad framework for this assessment is that of the nature and function of science and social science in the modern world.
Context and Nature of Social Planning

Perhaps the best way of launching such an effort, at least for our purposes, is through a brief review of some of the basic ideas and issues surrounding social planning. Of special concern is the relationship between planning and development, that is, between prognostication of the future on the one hand and social change on the other.

Our first step, then, is to consider the context and nature of social planning from two somewhat different but related points of reference. The first has to do with futurism as a field of study and its potential relation to development. The second concerns the relative merits of applied futuristics and developmental change as strategies for programs of intervention, especially those aimed at directed social change. In its broadest dimensions, this is a matter of what might most appropriately be termed social engineering—or, that is, the selection and implementation of action designed to bring about a series of events that are expected to lead to certain conditions of either stability or change in a given social situation.

Futurism and Development

Futurism usually is described as a "new focus of intellectual and scientific activity!" (Seabury 1969:58) which seeks to lay rational foundations for long-range prognostication of the future. It is concerned primarily, therefore, with the theory and method of "foretelling" (i.e., predicting or forecasting) coming events as objectively and accurately as possible (Helmer 1966; Jantsch 1967; Rescher 1969). This endeavor is carried on largely by a "new breed of professionals called 'futurists' that has come into being...in the last few years, because of the needs of the present" (Shubik 1969:1257). The "needs of the present," referred to by Shubik (1969), have to do mainly with the vast array of ecological ills and human difficulties that now afflict and undoubtedly will continue for some time to affect the great bulk of mankind in our modern world.

It would appear, then, that futurism has grown out of the various problems of modern society. While this may well be true so far as it goes, it is certainly not the whole story. Indeed, one of the more salient concerns of this "new breed of professionals" also seems to be that of determining what futuristics is or should be as a subject of study and an object of scientific or professional work (Ayres 1969; Bell 1969b; Madden 1970; Snow 1969). This concern of futuristics with itself appears to stem from a deep involvement with its own future, especially in terms of whether it can--and, in fact, is, will, or should--proceed along scholarly pathways to the intellectual status of a "discipline" or "interdisciplinary specialty" among the other sciences and professions, all of which remains pretty much in doubt. Consequently,
as of now, futurism is viewed by some as an exciting "new science" and by others as merely a latter day brand of modern prophecy (Madden 1969; Moore 1968; Rescher 1969; Seabury 1969).

Regardless, however, of whether futurism is taken as science or prophecy, the fact remains that a substantial amount of intellectual energy and of scholarly resources are being channeled into it. When the fruits of this labor are scrutinized, one thing comes quickly, clearly, and rather impressively to the fore: Besides the task of establishing futuristics as a field of study per se, another one of the major and certainly more profound preoccupations in this work has been the pursuit of a wide and far-reaching assortment of considerations centering on the possible application of futurism to the many complex societal needs being generated, seemingly at an ever accelerating pace, by the rapidly changing conditions of man and nature in our modern world (Crowe 1969; Hardin 1968; Platt 1969). In following this bent of their enterprise, the futurists give considerable emphasis to the contribution it might make as a helpful tool in the broad field of development--especially when it is conceived and carried out as a way of meeting this current dilemma of 20th century humanity. It is the use of futuristics in development that we take here to mean "applied futuristics" (Bell 1969a; Schuster 1962).

This general situation raises the question of just what particular function futuristics is said to play in development. By the same token, it also poses the issue of how and to what degree, if any, it may relate to and prove of value in the forging of a rational or scientifically grounded approach to planning when it is viewed as an essential element and part of development. The first thing to note in this regard is that the basic theoretical and methodological relation between the fields of futurism and development is commonly considered to lie in a linkage between forecasting and planning--or what might better be called the business of foretelling the future on the one hand, and the job of designing the future on the other hand. The relationship may be viewed, then, as being primarily one in which futuristics is to prognostication or the process of foretelling more or less what planning is to intervention or the process of development.

In working this relationship through and presenting its theoretical foundations, most discussions and considerations by the futurologists fall back upon an underlying rationale that follows a rather traditional or naturalistic-mechanistic philosophy of science, including social science. The tendency is to sort futuristics out as a separate discipline upon which development, via the avenue of planning, is ultimately dependent--at least if (as according to this view) it is to be as accurate and successful as humanly possible. Consequently, the interest in the future, which is necessarily shared implicitly by both futurism and development as intellectual endeavors, is subtly but definitely converted into something quite different and much more crucial. Instead of this common concern, the scientific and operational liaison between the two becomes one which assumes the existence of a necessary linear (i.e.,
cause-effect or dependent-independent) connection between them, whereby 
prognostication becomes the basis for planning. More precisely, the 
relation is such that foretelling of the future serves as the guiding 
principle in planning for the future.

In this formulation, futuristics as a field of study provides 
the basic framework for foretelling the future; this serves, in turn, 
as the underpinning for planning aimed at intervention to be implemented 
via the vehicle of development. As a part of this larger scheme, social 
prognostication logically takes its place as a key element in social 
planning for directed change, as well as other forms of social action. 
This, then, is the reason usually put forth for the need of futurism in 
development. As a rule, those futurists especially interested in the 
applied aspects of futurism subscribe to this thesis. Consequently, they 
tend to devote a great deal of their attention and effort to the role 
of futuristics vis-a-vis planning. This includes especially deliberations 
concerning the place of the various means of foretelling the future 
(forecasting, predicting, anticipating, conjecturing, etc.) in the 
decision-making and policy-forming phases of long-range planning (Ayres 
1969; Baier and Reacher 1969).

Developmental Change: The Challenge of Applied Futuristics

The overall context within which we have been exploring the nature 
of social planning may perhaps best be characterized as one which brings 
planning and development together into a unified process of deliberate 
and directed cultural development—or what might better be termed social 
planning for the purpose of social engineering. Our particular focus 
is upon the essential elements and workings of this process, and 
especially the question of the role of futurism in such development. 
The findings thus far suggest the need for some further consideration 
regarding the comparative worth of "applied futuristics" and "developmental 
change" as the most scientifically valid and humanly advantageous 
strategy for such social planning. This calls, in turn, for a brief 
review and comment on the notion of developmental change itself.

Developmental change, as both the subject of intellectual interest 
and the object of scholarly endeavor, is usually taken to embrace 
research and action having to do with planned and guided change directed 
toward chosen goals. The primary concern, therefore, whether considered 
in terms of ideology, study, or both, is "one of directed change with 
implications of deliberate, planned, and purposive social action" 
(Gallaher 1968:4). Developmental change is essentially a matter of 
interdisciplinary work, which implies "a need for collaboration between 
and among various disciplines as a necessary aspect of scientifically 
based planning and effective implementation of change" (Pearsall 1968:ix). 
Viewed in this way, developmental change "is social planning" since it 
encompasses not merely the setting "of goals, but also of process and 
of strategies for attaining goals" (Gallaher 1968:4). All strategies
of social planning, and related approaches to directed change, involve a number of considerations, therefore, regarding future goals and future courses of action. Rational decisions about the future must sort out the worth of one alternative as against another in the light of the resources and energy required to attain each. In short, a choice must be made among a series of possible means-ends or policy-action sets. This "process of rational decision making" (Webber 1967:654), which underlies all planning operations, has been described by Banfield (1955:314) as comprising the following steps:

1. the decision-maker considers all of the alternatives (courses of action) open to him; i.e., he considers what courses of action are possible within the conditions of the situation and in the light of the ends he seeks to attain;
2. he identifies and evaluates all of the consequences which would follow from the adoption of each alternative; i.e., he predicts how the total situation would be changed by each course of action he might adopt; and 3. he selects that alternative the probable consequence of which would be preferable in terms of his most valued ends.

Of particular importance here is Banfield's indication that planning by its very nature not only assumes but, in fact, necessarily incorporates what might be called a concern for the future in the sense of selected actions and chosen ends having to do with coming events, situations, and periods of time.

This means that while in any given instance, the planning and development process may or may not consciously and deliberately concern itself with a foretelling of the future as such, it nevertheless does, and indeed must, contain some selection of goals to be aimed at together with actions to be pursued during some predetermined future period--whether a year, a decade, or more. The basic activity is essentially one of evaluation involving a choice from among what are for some reasons conceived to be not only possible but also feasible alternatives for the future. Judgments of this sort in planning are generally spelled out, therefore, in terms of not only recommended aims but also means for best achieving these goals.

It would appear, then, that regardless of the theories in which they are grounded and the procedures by which they are linked, planning and development always involve a basic perspective which looks toward the future. They are both concerned with coming events and conditions in the form of selected "courses of actions" and "valued ends" which can only take place during some following period and come to fruition at some later date (Banfield 1955). In this sense they do have an integral stake in the future, which may be said to give them something in common with futurism. That is to say, they could be construed to
incorporate on a very limited level an element of futurism in the broadest understanding of this term.

On this basis, it might also, therefore, seem fairly obvious and sensible, especially for the futurists, to go one step further and postulate a necessary connection between applied futuristics and developmental change whereby the two are not only isomorphic, but the latter is also essentially dependent on the former. This, of course, is just what has occurred. There are, however, several basic aspects of the sort of futurism implicated in the planning and development process which strongly militate against and, indeed, go far to completely invalidate this notion. First, in contrast to its generally accepted meaning in the parlance of the futurists, the prognostic perspective in social planning is primarily one of future orientation rather than future prediction. It is essentially a matter of making decisions about the future in terms of what it can or should be instead of what it will or must be.

As Webber (1967:647) has put it, the view is that of "open, self-regulating systems" rather than closed, mechanistically-determined systems or, in other words, humanistic as opposed to deterministic systems. Consequently, attention is usually centered upon information and judgments pertaining to the most desirable instead of the most probable of the possible futures open to mankind. In other words, emphasis is shifted away from a preoccupation with predicting or deciding on the most probable future via the 'science' of futuristics to a consideration of achieving or bringing about the most desirable future through the social instrument or cultural vehicle of developmental change. This basic difference in outlook is of great significance to the whole meaning and attitude with which one addresses the questions of social change and social planning.

The modern field of futuristics appears, for example, to be founded upon a general school of thought which holds that it is necessary to predict the future before it is possible to rationally plan for it. The evaluation and judgments in this futuristic approach rest primarily upon what could be called decisions about the future that are of a projective-deterministic type made in a scientific framework. As such they are mainly statements which spell out by various means of extrapolation those future states and events that are taken to be certain or likely to occur, together with what is wanted to cope with them. This strategy places primary emphasis upon an expected future instead of a desired future. Consequently, the greatest concern and effort is given over to the matter of knowing about the future so as to decide and plan what is needed to meet it. This is quite a different thing, both philosophically and practically, from that of deciding the shape the future should take, so as to plan what is needed to attain it.

It is, then, in this broad realm of how we perceive and handle the future that applied futuristics presents the greatest challenge to developmental change, especially when the latter is conceived as social
planning—or at least as the primary focus of such planning. In these terms the situation poses a basic argument regarding the nature of the planning and development process. Its importance as a contemporary issue is perhaps most clearly and prominently demonstrated by what many see as a current ideological battle going on today, and recently described by the economist Alex Christakis as "a two way tug-of-war between the extrapolative people, who simply project the future upon the knowns of the past, and those who say the future is not predetermined but can be manipulated and changed. The question is how" (Keiman 1971).

Approaches to the Future

A fundamental distinction separating applied futuristics and developmental change, which we are attempting to bring out here, is one that fits more or less into this "two way tug-of-war." Basically, it concerns a difference between what we have elected to term respectively the extrapolative and the normative strategies of social planning. In a larger sense, they represent not only planning strategies, but approaches to the future. One approach—the extrapolative—sees the problem as essentially that of working to find methods for determining what the future will be, regardless of whether or not it is wanted or needed. It tries to predict the future in order to use the present to prepare for the future (i.e., what is expected and anticipated). The other—or normative approach—views the problem as being primarily quite a different one of trying to establish means for deciding what the future should be, regardless of whether or not it is expected or anticipated. It hopes to direct the present in order to use it to bring about the future (i.e., what is wanted or needed).

Since social planning must take the future into account and deal with it in one fashion or another, it is necessary to pursue this matter further—particularly as it involves these two somewhat different ways of handling the problem. We must give due consideration to their general value and validity in the light of what might be called the elements of "scientific prognostication." This is a very critical point since a great deal hinges upon the concept of prognostication or "foretelling" itself, and the meaning it is given and the way it is used. We are led, therefore, to the fact that if we follow the strict lexical meaning of the term, foretelling may be broadly defined in terms of a prediction, of a forecast, or of a prophecy. In other words, as a process, to foretell may designate an activity intended to predict, to forecast, or to prophesy the future, depending upon the kind of information and procedures utilized. There are, then, actually three basic and very different types of foretelling or prognostication—even in an intellectual or scholarly sense.2

Since they both aspire to the status of scholarly endeavors, applied futuristic and developmental change seek to construct their philosophy of foretelling within the larger philosophical framework of modern science. Consequently, they are similar in attempting to confine
their theory and method of prognostication to what can be predicted or anticipated (i.e., forecast) on the basis of objective knowledge derived from substantive experience in the sense of empirical observation and inference or, that is, the analysis and interpretation of factual data. It is extremely important to remember that this intellectual and scientific usage of the term also holds within the context of contemporary probability theory, since this is as much a matter of the phenomena and methods as the philosophy in question. Accordingly, foretelling as both an object and a subject of scholarly research and inquiry may be viewed, at least from the standpoint of the evidence or information involved, as approaching the validity of either a "certainty" or an "eventuality" in terms of both the possible and the probable. A prognosis may, therefore, reach the level of confidence to give it the probability status of being either virtually sure as in a prediction or only likely as in an anticipation or forecast.

It cannot be stressed too strongly in this regard that the application of futurism to development, as presently proposed and advocated by the futurologists, is usually formulated in terms of an extrapolative approach to the foretelling of the future for the purpose of planning, and especially long-range and wide-scale planning at the national and international levels. This, in turn, has a considerable bearing upon the credentials and merit of applied futuristics as a scientific endeavor. For the extrapolative approach, upon which the futurologists most often and heavily rely, has the effect of turning their mode of foretelling primarily and necessarily into that of forecasting. The future prognosis is generally made, therefore, in the form of a forecast.

But despite this fact, however, the statements concerning the future, as reported and issued by the futurists themselves, are frequently given some emphasis along an erroneously assumed continuum of "forecasting" from the supposedly more or less predictive to the merely anticipative or even speculative prognosis. This distinction usually depends, in turn, largely on the kind of extrapolation used to make the forecast.

Broadly speaking, there are two basic methods of extrapolation which actually serve as the foundation of most types of forecasting. These are generally referred to as projection or straight trending and simulation or model building (California Department of Finance 1968:1-4). Forecasting in the manner of trends is often treated in terms of a mistaken "apodictic" concept of prediction (Jantsch 1967:15), although it is actually imbedded both theoretically and methodologically in the probabilistic context of modern science (Helmer 1966:4-6). Forecasting in the guise of models is almost always, in contrast, viewed and formulated in a correct probabilistic fashion. But at the same time, however, the end results are frequently misconstrued in the role of a "prediction" rather than that of an "anticipation"--or, that is, the highly hypothetical and contingent likelihood which they actually
represent as a forecast in contrast to a bona fide prediction (Helmer 1966:6-10; Rescher 1969:104-5).3

There seems to be a rather strong tendency among many of the futurologists, in fact, to regard all forecasting based on extrapolation, whether in the form of trends or models, as providing us with "predictions" of the future (Bell 1969:328; Leontief 1969:332; Rescher 1969:104-08) even though this is really not the case at all. Indeed, it is rather far from the case, considering the fact that forecasting invariably depends upon a type of evidence which involves a degree of proof that in almost all instances can only give us anticipations and rarely, if ever, predictions. The main point here is that forecasting, at least in its strict or more technical usage, actually should be viewed as going together with predicting to make up the two main types of rationally based prognostication, ultimately founded upon probability theory. The distinction between the use of trends and models is essentially one of technique.

It is just this business of differences in method having to do with variation in the extent of precision and confirmation provided by the data and procedures employed, which finally distinguishes the forecast from the prediction. The various means of predicting and forecasting are themselves, in other words, elements within the general framework of science. Hence, prediction in the sense of "an apodictic (non-probabilistic) statement, on an absolute confidence level" (Jantsch 1967:15) is no longer considered to be a legitimate part of the language of modern science (Kuhn 1962:143-48).4 All forms of foretelling may be viewed, then, as giving us probabilistic statements about the future at various levels of confidence, depending upon the extent of corroboration underlying them. Forecasting differs from predicting in its confidence level. The validity and reliability of its results are generally such that they give us fairly contingent likelihoods regarding future events. The expectations of the future provided by forecasting usually comes cut, therefore, not as empirically based predictions but rather as extrapolatively grounded anticipations, which may vary from probable eventualities to very tentative or speculative possibilities.

In general, the range of confirmation in foretelling may vary from a relatively high confidence level, such as in the case of predicting where the future prognosis takes the form of a 'prediction' based on controlled observation or experimentation, to a relatively low or even unknown (i.e., "a yet undefined") confidence level (Jantsch 1967:15), such as in the case of the Delphi technique of forecasting where the resulting prognosis takes the form of a forecast backed up by little more in the way of substantive evidence than expert opinion or speculation (Rescher 1969:75-76). Since both of these basic approaches to scientific prognostication are ultimately founded upon various kinds of beliefs, inferences and assumptions involving what might be called knowledge of a speculative, or hypothetical, as well as an empirical or concrete nature, their end products or statements concerning the future may be viewed collectively as conjectures on the future.
They are, in other words, "educated guesses" which due to the different means and facts used in constructing them vary in terms of their level of confidence and, therefore, degree of validity and reliability. It is our view and contention here that such "guesstimates" regarding the future have a definite value and place in social planning, but only so long as they are openly made and judged on the basis of their true scientific worth, and used in accordance with a normative approach to the future.

"The Nation" as a Focus of Concern

Given the present state of the art in developmental change vis-a-vis the currently separate and largely competing fields of planning, development, and futurology, it is quite understandable that the forging of scientifically sound procedures for sorting out and dealing with "futures forecasting" in terms of large-scale social institutions, let alone modern states and countries, is only barely under way and still relatively unsophisticated. Indeed, the very notion of considering the future, as well as the present and past, of organizations, of societies, and particularly of huge complex nations is only beginning to take hold in the major social sciences. It is rare within the current context of either futuristics or the social sciences, therefore, to find any one set of comprehensive, unified and long-range forecasts for the changing nature and future status of the United States as a whole nation or total society. The usual situation instead is one of various scientists, scholars, professionals and other such experts—all well informed in their diverse specialties—providing forecasts of the future of comparatively small sectors within limited areas, as say for example a national government, which they anticipate for different (and often unspecified) periods of time (Bell 1969a; Frank 1969a; Kuhn and Wiener 1967; Moynihan 1969a; Reynolds 1965; Theobald 1968a).

Despite these present limitations and deficiencies, however, this general field of study is still gaining rapidly in both interest and importance for our contemporary world. Moreover, with few exceptions, the nation is taken as being an especially significant focus of concern in this regard. There are, of course, drawbacks and even dangers inherent in this concentration on the national society as the most relevant level and unit for social planning. One thinks immediately, for instance, of the age-old dilemma of nationalism vs. internationalism that still plagues us today. On the other hand, when this and other world problems—peace, atomic energy, population, resources, trade, etc.—are duly recognized and taken into account, the nation might serve as a meaningful cultural and social phenomenon with which to start.

At least it must be given a place of some weight in our hope and work of seeking and shaping a more rational future for ourselves and
the planet earth. We believe, in fact, that progress toward this end may well be possible, especially if we are willing to adopt the sort of balanced strategy of social planning which we attempted to outline in the previous section: an approach that takes both guided stability and directed change aimed at a more adaptive and better life for mankind as the ultimate goal of social engineering in modern society.

Conjectures on the Next Thirty Years

With this background in mind, we can turn to our own nation as a case in point for some further thoughts and considerations. Let us begin by way of a brief review of conjectures on the next several decades or so which may offer us some fairly sound indications for going about the business of directing the future of the nation and, thereby, our contemporary society via the route of rational planning and development. Admittedly, this will call for a bit of luck and the right analysis of the forecasts involved.

The first thing to remember in this regard is that the underlying bases for many of the available statements on the nation and its future often tend to be either vague and intuitive or largely deductive, implied, or unspecified rather than inductively and explicitly stated. In some cases, for example, solutions to expected future problems are offered with little if any attention given to 1) assumptions made about the underlying nature and circumstances of the problems under consideration, 2) likely future effects on the particular area and the larger society if the involved conditions or trends continued unaltered, or 3) pointing out that there might be other alternatives for both the prognosis and the remedy. Indeed, all too often the interpretations giving rise to predictions seem to be predominantly statements of preference stemming from an author's reaction to, rather than his analysis of, observations and information on past or present social-political events. The use of statistical techniques and substantive data to supply evidence in support of forecasts is very limited and confined to relatively crude social indicators (Etzioni and Lehman 1967; Gross and Springer 1967; Helmer 1966; Theobald 1968a).

What is needed now, then, is a way to assemble and piece together these various interpretations and their many diverse orientations so as to form a general view of the country's future reasonably consistent with what most authorities expect to develop by the year 2000. This is especially pertinent with regard to the social science input into developmental change at the national level. Our central interest in such an endeavor is neither in building a "theory" nor in devising an "approach" for social forecasting as such, although the resulting formulation may have implications for either or both. The primary intention rather is to suggest a conceptual framework into which we might place the existing body of forecasts in order to deal with them in some systematic fashion.
A major starting point toward this end is found in what could be called the basic theme and primary consensus of a large majority of the current forecasts for the year 2000, namely, that given the absence of any nationwide or worldwide holocausts, national government will probably retain its essential form and continue to play an important central role in the political and policy-decision-making processes of the country, even though it may well undergo considerable change in its more specific content and function. The main alternative, that the nation, state, and local levels of the federal system will interrelate and operate as more or less equal partners in the major policy-decision-making matters, is usually seen as a remote or at best not-very-probable future. Indeed, the few forecasts that consider this possibility seriously are generally well hedged with many "ifs," "buts," and "ands" (Adrian 1965; Benson 1965; Hart 1965; Moynihan 1969a).

Given the general forecast for continuance of the central role of the federal government into the year 2000, a number of additional considerations become very important in the construction of our conceptual framework. There is first the widespread agreement among most social scientists and political analysts that under the manifold impact of the sweeping and often fundamental changes in environment, population, economy, education, religion, communication, transportation, and so forth--brought about by the earlier agricultural-industrial and the current scientific-technologic revolutions--the country has reached or is rapidly approaching the state of being something of a national society, and that this trend will very likely also continue on into the year 2000--again given the assumption of no worldwide or nationwide holocausts. This existence or emergence of a national society has several implications regarding the dynamics of sociocultural change in the country and its government for both the present and the future (Bell 1969; Ehrlich 1968; Kahn and Wiener 1967; Kelso and Hetter 1968; Moynihan 1969a; Theobald 1968b; Zworykin 1965).

It becomes necessary to make explicit the underlying assumption that the basic conditions and problems giving rise to the large-scale changes now under way in our national society--as well as most of the world--have grown out of and will continue to derive from the increasing and accelerating development, expansion, and application of science and technology in modern life. This seems to be a most likely prospect, at least for the more immediate future. The basic premise, then, is that science and technology, taken in their fullest ecological and psychological dimensions, constitute the primary focus and initiating force of actual and potential change in contemporary society. The essential processes of cultural dynamics inherent in this interpretation are those of innovation and diffusion as they relate to the progress and advancement, the growth and spread, and the effect and impact of modern science and technology in the nation and the world.

Hence, given the dynamically accelerating nature of science and technology themselves, the trends, problems, and results intrinsic to this situation must be seen as bound to affect profoundly the future
of not only ourselves but all humanity. The profound effect is generally seen as operating either in conjunction with or, as some would have it, "over and above the several preferences and ideologies" of man (Chase 1969:xii). This stress upon the key role of science and technology in the shape of the future represents another important theme with more or less majority consensus running through the works of many scientists and other scholars concerned with the fate of mankind during the next several decades of this century. Indeed, it has become something of a fundamental principle for many futurists, as well as social scientists, which one author has preferred to call the "technological imperative" (Bronowski 1962; Calder 1965; Chase 1969:xii; Rabi 1965; Todd 1965).

The "Total Society": Concept and Reality

Given the existence of such a modern industrial, high-energy and developing national society, the concept of the "total society" and its study also can be incorporated into our conceptual framework to considerable advantage (Klausner 1967). This means further that the boundary and dimensions of any special problem area, such as government and politics, fit into and interface in various ways with those of the national society. A comprehensive and unified assessment of the national government or any other major institution of such a national society must take into account both its external and its internal orientations, and also, insofar as possible, their interconnections and interactions. Simply stated, this takes us into relationships, circumstances, events and influences involving the sphere of foreign affairs including international relations and the world-at-large on the one hand, and the realm of domestic affairs embracing intranational relations and the country-at-large on the other hand. In a word, this outward-inward axis gives us the total world.

At the same time, the concept and study of the total society make it necessary to treat any particular sector or aspect of the country, like the government, as an integral part of the larger national society. In this sense the national government, for example, could be viewed as a large-scale social organization, making up a total system in itself. This, in turn, allows us to sort out the essential elements of the national government as a basic social institution in human society and culture. First, there is the matter of the control of the government, which is centered in the political and electoral processes in our modern society. Second, there is the form, structure, and function of the government itself as a large-scale organization within the total society. Third, there is the role of the national government in the national society as it relates to other major sectors and institutions such as the economy, education, religion, etc. All of these fundamental aspects of the national government involve social grouping and cultural content (Harris 1968; Klausner 1967).
We now have a basic unit of study in the national society; a primary dynamic of sociocultural change in science and technology; a large-scale social organization or total system in the national government as a part of the total society; and a twofold perspective which embraces the total world—and takes us as it were both outward through the entire earth and mankind to the universe and inward through the whole country and society to the individual. These broad areas provide the substantive components and abstract dimensions of our formulation, and fit together by order of scale and magnitude into the three levels of phenomena which can be designated simply as total world; total society; total system. Finally, of course, there are some basic questions regarding the nature and the linkage of the concrete phenomena subsumed under the categories or broad areas and levels of the framework. But since these are essentially theoretical and methodological problems relating primarily to the use of this formulation as a research device, they will not be treated here in any significant detail.

We also should indicate, before going on to the next section, that the very coupling of such a broad and sweeping formulation with national planning must undoubtedly give us pause. This is especially true where such a procedure or connection relates to and involves the concept of the total society and its internal and external dimensions in terms of the total system and the total world respectively. Indeed, leaving aside the deficiencies and necessary restrictions of our own efforts in this direction, some serious doubts may well remain as to the fundamental credence of such broad and sweeping concepts. Even when presented, as here, in the vein of an intellectual exercise or abstract tool, their suggestion raises the basic issue of whether such global phenomena as "whole" social systems or "total" societies actually exist or have practical meaning. And, if so, whether the social and human sciences are at present adequately equipped to deal with such huge and complex entities in terms of either their locus of reality or their mode of operation (Klausner 1967; Wallace 1966).

Moreover, even if we have assurance of their concrete existence or actual relevance, together with some understanding of their structure and organization, there still are critical questions as to whether planning or development themselves can be rationally approached and effectively handled at such a global level of social theory and action, even in particular countries or, that is, national societies and their constituent populations or subsystems. The essential argument, then, is whether large-scale social planning of any kind, such as national planning or urban planning, through applied futuristics, developmental change, or any other means, has any actual advantage or makes any real sense. In this broad context, the matter is certainly one of scholarly endeavor and inquiry that goes far beyond the aims and scope of our discussion here (Rescher 1969; Webber 1967).
Some Further Reflections on Science and Society

There are, however, several additional general considerations regarding human knowledge and culture, which bear upon these questions and futurology as well, that might be briefly noted here. We are particularly interested in a number of questions concerning the theory and practice of science and what it may have to say about man's view and understanding of himself and the world, including his own nature and that of his society. This is, of course, very germane and basic to any discussion of the role contemporary social science, including anthropology, may play in helping to shape man's future.

Modern Science: Reality "Old" and "New"

Several basic philosophical issues center around the nature and role of the scientific enterprise itself, which eventually relate back to contemporary anthropology and social planning. Of particular importance in this respect is what some writers and scholars see as an overemphasis on a traditional mode of mechanistic and vertical thought regarding science as well as society, and the need, in turn, to shift to what they see as a more meaningful and appropriate type of process and lateral thought in our attempt to understand and deal effectively with the many vital challenges to the quality and survival of human life now facing mankind (DeBono 1968; Erasmus 1961; Frank 1969b).

Broadly speaking, this is essentially a matter of moving from the old to the new reality of modern science and philosophy as developed by Whitehead and others (Whitehead 1925, Wiener 1954, Kuhn 1962). There may well be, in other words, sociocultural factors and changes in contemporary society of considerable importance to the future of humanity during the latter part of the 20th Century which hinge upon a much wider and more effective adoption of the new reality as the foundation of our intellectual and life work. The basic element or requirement is one of transition from a "mechanistic" to an "organic" realism in our way of looking at and thinking about ourselves and the world around us. This becomes perhaps most urgent and relevant when we enter the biological and sociological realms of the life sciences. Indeed, it could be said to be virtually mandatory for anthropology and the other sciences focused on the study of man, which must of necessity include the ecological and psychological--that is, biocultural--systems built into his human way of life.

Of importance for our discussion here, as Webber (1967:647) has so aptly pointed out, is that those who would understand and "plan for such open, self-regulating systems must confront their tasks with quite different strategies than are appropriate to the design of mechanical systems." This means concomitantly, that the knowledge and "informational demands are also quite different." The advocates of this view usually stress the primacy of ongoing "evaluative" and "decision-aiding" processes or, that is, directive and cybernetic as against predictive