

## Chapter 9 -- Anthropology

### ANTHROPOLOGY AND CORAL ATOLL FIELD RESEARCH

by Alexander Spoehr

I. Introduction. The examination in the field of the relationship between man and his atoll environment can be focussed on the man (including his culture) term, or on the environment term in this relationship. In either case, it is understood that the relationship between the two terms is the important thing, but as a matter of field procedure it may be necessary first to concentrate on the terms themselves and then investigate the nature of their relationship. In the organization of the work of an ecological field team the anthropologist will necessarily play a primary role when the nature of the cultural adaptation of man to his environment is under consideration. When the focus of interest shifts to the ways in which man's presence has affected the environment, the anthropologist will play a supporting though nevertheless essential role in assisting his colleagues in understanding the factors involved in man's behavior in altering his environment.

In the ecological approach to the anthropology of coral atolls, it is a reflection of the immaturity of our science that we do not yet know those specific questions to ask whose investigation will bring us greatest returns. One phase of atoll research necessarily revolves around formulation of future problems for empirical investigation. This is true of any vigorous discipline, of course, but in human ecology we are still not very far from our starting point.

However, we can delineate the framework within which anthropological field-work on coral atolls should proceed. It is my feeling that such field observation should (a) Focus on the present rather than the aboriginal past at the inception of any period of field observation, (b) As the work progresses, elucidate processes involved rather than static patterns, which may mean dredging up as much relevant historical data as possible, (c) Operate with a set of problems suitable for comparative investigation, for in atoll research comparison must be substituted very largely for experiment.

II. Problem areas. Rather than attempt to outline a series of questions applicable primarily to a given atoll, it is perhaps preferable to indicate a number of problem areas within which field research will be fruitful. It should be emphasized that field research should in the end center on relationships rather than terms alone -- as on the relationship of technology to the amount and characteristics of natural resources rather than technology alone or resources alone. Problem areas follow:

- A. Population size and density in relation to food resources, given a particular type of technology. In view of the probable future population pressure on atoll resources generally, this forms an important field of investigation, which leads naturally to diet and nutrition studies.

- B. Technology in relation to the amount and character of natural resources available and used. Description of tools, in the familiar context of material culture studies, are not as important in this connection as the determination of the over-all characteristics of the technology under examination--skills in relation to technical processes; time and energy expended in particular technical processes in relation to productivity, the total tool system, etc. There is also a need for re-orienting studies of technology to the modern scene rather than to the aboriginal past.
- C. Technology, economic organization and utilized resources. Here it may be possible to consider economics under the conventional headings of production, distribution, exchange, and consumption to determine how the organization of human activities in these areas is related to the technology, and to the utilized resources. On the other hand, an entirely different approach may be more useful. Fieldwork in economics is very time-consuming, however, a factor that must be taken into account. An important question is the mechanics of social control of atoll resources in relation to the organization of production, distribution, and consumption.
- D. Social organization in relation to technology, economics, and utilized resources. Some of the most productive field research in American Indian social organization has utilized an ecological approach, such as the work done by Steward in the Great Basin, and by Hallowell and others among Algonkin hunting groups in the northeast. Comparable results should be obtained when a similar approach is applied to the study of the social structures of atoll peoples. In this regard, it is important to determine the essential differences in social organization between populations on atolls differing in the abundance and variety of their resources. As a preliminary hypothesis, it is suggested that stratification, elaboration of the functions of corporate kinship groups and complexity of local organization will be more highly developed on atolls with abundant resources than on those with scarce resources. Hypotheses of this sort need to be formulated and tested.

III. Planning. A fundamental problem in the planning of atoll field research is the need for selection of the kinds of data to be collected in order that a relatively brief period of fieldwork be of maximum value. It is suggested that the anthropologist who is able to spend only several months on an atoll concentrate his work on a few problems rather than to diffuse his effort more widely. The type of problem envisaged by an ecological approach demands the examination of functional relationships between variable factors. This type of problem requires more than superficial observation and there is a real danger that the fieldworker may diffuse his effort to the detriment of his over-all results. There is a distinct need for concentration of effort on a limited number of objectives.