

MAN IN THE CULTURE-ENVIRONMENT RELATIONSHIP

Coral atoll research may be related to the problems of human existence in a practical sense or in a theoretical sense. The practical approach is concerned with short-term studies of specific island communities under stress conditions which, in the Pacific, may be due to (1) the need for rehabilitation in areas disrupted by the war, (2) the limitations of food and other resources where populations are increasing beyond the capacity of the local environment to support them, and (3) the changing cultural and environmental conditions as provoked by the encroachment of Western civilization. The theoretical approach may result in significant contributions to a more complete understanding of the interaction and interrelationships which exist between man, his culture, and his natural environment. Some general principles may be formulated about the processes and dynamics of human adjustment to environmental conditions.

Coral atolls are notoriously small in land area and poor in natural resources. A delicate balance between man and nature must exist inevitably in such marginal regions. In order to recommend changes in stress situations, it is essential to understand the factors which operate to produce imbalance, and the processes whereby harmonious adjustment between human populations and their environments can be achieved. In coral atolls, the environmental conditions are relatively simple and comprehensible, and because of their relative isolation lend themselves better to study and analysis of operative factors for adjustment. A series of coral atoll studies in different regions and with different populations could well provide the laboratory conditions desired by scientists for controlled studies of culture-environment interrelationships. Anthropologists have long denied the dictatorial role of natural environment in the shaping of cultures. There is need, however, for reexamination of basic similarities where they occur in cultural adjustments to a given environment. There is need also for cooperative scientific research in the various disciplines to supplement the anthropogeographic investigations which in themselves cannot explain the human situation in its total environmental framework.

In specific situations, such as Arno Atoll and its Marshallese inhabitants, specific data were required in anticipation of administrative measures to be undertaken in the interests of the islanders' welfare. The 1950 Arno expedition resulted in a general, though still somewhat superficial, understanding of the major problems in cultural adjustment of Arnoese to their environment. With more time available in the future, local differences within the atoll can be studied more intensively, as can also the more exact relationships between Arnoese individuals and communities and the various components of their environment. Recommendations have been made for ameliorative measures in the case of the Arnoese, but there is need for further research at Arno to study the efficacy of such measures as may have been enacted, and the accuracy of the observations on the basis of which these measures were recommended. Other short-term studies are required of coral atoll situations in the Carolines, the Gilberts, and the Tuamotus, in order that more can be learned about the use and adaptation of local beliefs, attitudes, habits, and institutions for improving the welfare of island peoples in these surroundings. Suggested focal points for investigation by teams of scientists from various disciplines are:

the relation between population dynamics and the functioning of land tenure systems;
land use in relation to spatial factors and the presence of various types of island resources;
conservation of food resources in anticipation of seasonal shortages and famine periods;
regulation of population growth in relation to current technological utilization of resources; and
cultural changes as reflected in changes in the natural environment.

Proposed agenda:

1. Short-term, practical research: - Areas in need of attention due to stress conditions.
- Manner of making recommendations of specific measures to ameliorate conditions of stress.
- Follow-up on efficacy of measures enacted.
2. Long-term, theoretical research:- Standardization of field procedures and topics for investigation, for comparative purposes, in any series of coral atoll studies.
- Representative atolls which might be studied.
- Theoretical problems to be investigated within the framework of culture-environment relationships.
3. Cooperative research techniques and methods.

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