New Light on the Peoples of Micronesia

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MICRONESIA—a geographical and cultural area in the Pacific comparable to Polynesia, Melanesia, and Indonesia—comprises the Gilbert, Marshall, Caroline, and Marianas archipelagoes, which stretch east and west approximately 3,000 miles. Except for the Gilberts and the phosphate island of Nauru, which are British, the entire area is administered by the United States. Guam has been subject to American rule since 1898. The rest of the Marianas and all of the Carolines and Marshalls, which formerly constituted the Japanese Mandated Islands, have been administered under the United Nations since World War II as the Trust Territory of the Pacific.

The far-flung islands of the Trust Territory have a total land surface of less than 850 square miles, on which live about 70,000 native inhabitants. Prior to the last war, scientific knowledge of these people depended primarily upon a German expedition in 1908–10, supplemented by early explorers' accounts, scattered missionary reports, and a few leakages through the "copper curtain" imposed by Japan. The available information was as inadequate for military and administrative as for scientific purposes. This vacuum in knowledge has, within half a decade, yielded to an abundance of detailed information perhaps unparalleled for any comparable area in the world. How this has been accomplished is a story of cooperation between civilian anthropologists and the U. S. Navy, charged first with the conduct of war and then with administrative responsibilities in the area, which might well serve as a model for the collaboration of lay scientists and government agencies in a political democracy.

The first chapter in this story begins in 1943, when the Navy Department called upon a group of anthropologists associated with the Cross-Cultural Survey at Yale University to assemble and organize all available information on the area. With access to classified as well as to published sources, and with full clerical assistance and an adequate staff of Japanese translators, this group prepared a complete and organized file of all the information available, and between August 1943 and April 1944 issued 5 book-sized handbooks summarizing the material in a form readily usable by military government officers. These Civil Affairs Handbooks (OpNav 50E-1,4,5,6,7) are still the most satisfactory and accessible sources of information about the islands prior to the American occupation.

The second chapter begins after the close of the war, when the Navy found it necessary to replace reserve officers trained in military government with regular officers in administrative positions in the islands. It turned to Felix M. Keesing, professor of anthropology at Stanford University, for assistance in organizing and conducting a School of Naval Administration at that institution. Through this admirably planned school have passed nearly all the officers who have subsequently been assigned to administrative posts in the Trust Territory. On the research side, the staff of the School has organized the information coming in from official reports and other sources and has incorporated it in revised editions of the Civil Affairs Handbooks, shortly to be issued.

The third chapter opens with the awareness by the Navy, in 1946, that existing information was insufficient for administrative purposes, particularly for the projected program of economic reconstruction. The U. S. Commercial Company, an RFC subsidiary, was asked to conduct an Economic Survey of the area. This was done under the direction of Douglas L. Oliver, an anthropologist, with a field staff which included a number of anthropologists—Leonard Mason, of the University of Hawaii, in the Marshalls; William Bascom, of Northwestern University, in Ponape; Edward Hall, of the University of Denver, in Truk; and John Useem, of the University of Wisconsin, in Palau and Yap. The Survey staff spent two months in the field and produced a number of voluminous reports which, though largely unpublished, added appreciably to scientific knowledge and proved of great value to administrators.

The fourth chapter—the last one thus far written—reflects the ultimate recognition by responsible naval officers, notably Adm. Chester W. Nimitz, Rear Adm. Carleton H. Wright, and Capt. William F. Jennings, that a fully satisfactory administration of the Trust Territory can be achieved only with complete knowledge of the peoples of the area. The National Research Council was asked to set up, through its Pacific Science Board, a Coordinated Investigation of Micronesian Anthropology (CIMA) and to invite the participation of American anthropologists in a large-scale program of field research. The Office of Naval

Research made a generous contractual appropriation, supplemented by a grant from the Viking Fund, Inc., and by contributions from various participating institutions, and, in addition, the Navy provided transportation to and from the islands, abundant supplies from war surpluses, and maximum local facilities and assistance.

With this support, the Pacific Science Board has been able to send into the Trust Territory during 1947 and 1948 more than 40 competent physical and cultural anthropologists, linguists, and geographers from 22 major institutions.[1] These scientists have worked intensively, for periods of from 3 to 12 months each, on 14 different islands: Guam, Ifalik, Kapingamarangi, Kusaie, Majuro, Mokil, Nomoi, Palau, Ponape, Saipan, Tinian, Truk, Ulithi, and Yap. The expedition is certainly the largest, and probably the best equipped, in the history of anthropology. It will shortly result in the most complete, comprehensive, and up-to-date scientific coverage of the people of any cultural or geographical area of the world.

In accordance with the policy of the Office of Naval Research, the results will be written up as contributions to pure science, which will become the basis for future administrative programs. Specific recommendations for local governmental changes have been invited in interim reports from the field, but final reports are to be neither censored nor oriented toward administrative objectives. The attitude and support of the naval personnel in Washington, Pearl Harbor, and Guam, and for the most part also in the field, have been scientifically unexceptionable as well as wholehearted and cordial.

The receptiveness of naval administrators to recommendations of the scientists for practical administrative changes has exceeded all expectations, as may be illustrated by a few of the experiences of the author and his associates on Truk. Restrictions on the importation of clothing, imposed on the assumption that the demand reflected missionary pressure to adopt European garb, were removed when it was pointed out that the natives require upper garments to prevent sunburn and to satisfy their own traditional concepts of decency. Superior chiefs were divested of their authority over marriage and divorce when it was shown that they were abusing it, and control was returned to the clans concerned as of old. The inhabitants of two native villages, who had been moved from their homes near the naval base, were allowed to return when the resulting complications under the aboriginal system of land tenure were pointed out, thus removing a major source of irritation. The native political hierarchy, which has been complicated by increasing the number of levels from 3 to 6, creating difficulties in official communication and increased opportunities for petty tyranny and corruption, is currently being simplified to accord better with needs and prior custom. To institute further reforms and adjustments, one of the anthropologists, Thomas F. Gladwin, was retained for an additional year as adviser to the island administration. (Similar posts have subsequently been created in Palau and the Marshalls.)

In consequence of this record of cooperation between the Navy and civilian anthropologists, Americans may feel reassured that their obligations to the United Nations are being satisfactorily carried out on the local level in the Trust Territory. The principal danger is that comparable relations with social scientists may not be maintained in Washington by Congress and its advisers in the preparation of legislation for the future government of the islands.

Despite good will and intelligence on higher and lower echelons, maladministration is likely to result if legislation ignores certain fundamental facts about the area. The most important of these are enumerated below in the hope that they may receive wider recognition.

(1) The Guamanians and the Chamorros of the other Marianas Islands form an indivisible cultural unit. That our administrative authority over them derives from different sources does not justify imposing serious restrictions upon communications, travel, and migration between them.

(2) The inhabitants of the Marianas have had intimate contact with European civilization for some 300 years, and have attained a level of culture comparable to that of the Filipinos. They are therefore ready for a maximum measure of self-government.

(3) The inhabitants of the Caroline and Marshall Islands are still primitive peoples in all essential respects. They are far, indeed, from being ready to accept our own complex legal and political institutions and make them work satisfactorily. Their traditional governments still operate reasonably well and can be transformed into democracies in the modern sense only through a long evolutionary process.

(4) The Caroline and Marshall Islanders are by no means homogeneous, but fall into a number of diverse cultural and linguistic groups with very different needs and attitudes. The Palauans are progressive and eager to adopt Western ways. The Yapese are ultraconservative and deeply suspicious of foreigners. The Trukese desire material advantages but are satisfied

[1] These included the American Museum of Natural History, the Bernice P. Bishop Museum, the Chicago Natural History Museum, the Milwaukee Public Museum, the Institute of Ethnic Affairs, and the following universities: California, Chicago, Clark, Columbia, Connecticut, Harvard, Hawaii, Indiana, Michigan, Northwestern, Oregon, Pennsylvania, Southern California, Stanford, Sydney, Wisconsin, and Yale.

with their traditional social structure. The Ponapeans, the Kusaians, the Marshallese, and the Polynesian inhabitants of Kapingamarangi and Nukuoro reveal equally distinct and divergent attitudes and local cultures. An attempt to administer these varied groups according to a single inflexible formula would invite disaster. Legislation respecting them should be confined to establishing a neutral and humane overall policy, allowing great latitude to local administrators in adapting it to variable needs and conditions.

Food Prices in Palo Alto

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IN 1944 A REPORT ON FOOD PRICES in Palo Alto, California, was published in *Science* (August 11, pp. 124–125). These surveys, annual in character and initiated in 1939, have continued to be made. Since it is possible that the results of the survey may be of more than local interest, the later data are now presented for publication.

It might first of all be pointed out that Palo Alto is a small university town, now having a population of about 22,000. The town is a typical university community except for those engaged in business in San Francisco, some who are retired, and quite a small proportion of the whole who are employed by industries in Palo Alto and adjacent communities. Most of the residents, it may be concluded, are engaged in activities that center about Stanford University.

The survey of food prices referred to here has been made among the retail stores in Palo Alto, in all cases during the third or fourth week of May. Year by year the same items were priced. To give a proper weighting to the list, the quantities of various foodstuffs required for a "liberal" diet were used. The cost of such a diet was determined for one week's maintenance of an adult man engaged in moderate physical activity. It is recognized, of course, that many different "liberal" diets could be devised, though all would be characterized, according to present concepts, by being comparatively low in potatoes and highly processed cereals and comparatively rich in so-called high-quality protein foods. The particular diet that we have priced contains an abundance of dairy products, fresh fruits and vegetables, and high-quality proteins. It is not, however, a "luxury" diet. Differences in regional dietary practices or in availability of foodstuffs would permit many variations without serious trespass upon the limiting characteristics of a liberal diet. The particular foods about which these surveys have centered would provide, per day, approximately 3,100 Cal, 137 gm of fat, 318 gm of carbohydrate, 107 gm of protein, 1.36 gm of calcium, 2.04 gm of phosphorus, 20 mg of iron, 15,000 units of vitamin A or its equivalent, 160 mg of ascorbic acid, 370 units of vitamin D, 1.4 mg of thiamin, and 2.7 mg of riboflavin. These values refer to the food as purchased and should be reduced by probably 10% to reflect the values for food as consumed. The list of foods, per adult per week, is as follows:

Bread	1	lb	Sweet potatoes	1	lb
Oatmeal	½	"	Potatoes	3	"
Cornmeal	½	"	Cabbage	2	"
Sugar	1.2	"	Lettuce	½	"
Milk	3½	qts	Carrots	1	"
Cheese	¾	lb	Beets	1	"
Butter	½	"	Canned corn	½	"
Eggs (large, grade A)	1	"	Oranges	2	"
Lard	¼	"	Apples	1	"
Bacon	¼	"	Bananas	1	"
Beef chuck roast	2½	"	Dried prunes	½	"
Salmon	1	"	Canned peaches	½	"

Five stores were included in the 1939 survey, 6 in 1940, 7 in 1941, and 9 in 1942 and subsequent years. Three of the stores in the 1939 list and four in the subsequent lists are members of chains. A large cooperative store was included. All small stores were deliberately omitted as well as one or two stores which cater to luxury trade and are recognized as atypical with respect to distribution costs and retail prices.

In the case of canned goods, the cheapest brands were priced. It is believed that the nutritive qualities were reasonably comparable. To obtain maximum economies in purchasing, quantity prices (up to 10 lbs) were used whenever feasible as the basis for the calculations (see Table 1).

The increases reported since 1939 are not to be considered as indicative of the extent to which the cost of living has increased. This is because cost-of-living indices include many items other than food and also because "liberal" diets are low in cereal products (which have increased the least) and rich in fresh