

Paul T. Baker, Joel M. Hanna, and Thelma S. Baker, *The Changing Samoans: Behavior and Health in Transition*. New York: Oxford University Press, 1986. Pp. 482, maps, tables, references, index. \$49.95.

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This is an important book, one that I have been waiting to see published since 1976 when I had the good fortune of enjoying the company of several of its contributors while doing fieldwork in American Samoa. *The Changing Samoans: Behavior and Health in Transition* is the report of the Samoan Studies Project, which was initiated by Paul T. Baker (Pennsylvania State University) and Joel M. Hanna (University of Hawaii) in 1975 as part of the international Man and Biosphere effort "to examine how Samoan utilization of the natural and social environment related to their current socioeconomic behavior and biological characteristics" (pp. 12-13).

The research team for this project consisted of some two dozen field investigators, most of whom were Pennsylvania State University doctoral students, but it also utilized the talents of colleagues in the biomedical sciences and anthropology from the University of California, Riverside and San Francisco, and from the Australian National University, Christchurch Hospital in New Zealand, the University of the South Pacific, and Oxford University.

The Samoan Studies Project was designed to investigate what happens biologically and behaviorally in a population undergoing rapid cultural change brought on by modernization and out-migration. The Samoan people were selected as subjects because (a) the Samoan archipelago represented a relatively self-contained unit; (b) there was abundant literature available to document the demographic, geographic, and ethnographic characteristics of the traditional setting and to provide a chronicle of change; and (c) it was apparent that a large number of Samoans today find themselves in a variety of modern cultural settings as a result of drastic economic change in American Samoa or as a result of the heavy volume of out-migration from all of the islands in the Samoan chain.

Few, if any, other populations have undergone the intense scrutiny experienced by the several Samoan subpopulations, and there is something for everyone in this study. While the concentration is largely on biomedical data, there is also an abundance of information on Samoan life history, socialization and enculturation patterns, coping strategies,

concepts of happiness and distress, work patterns and work capacities, and emotional stress as related to life-style adjustments required in modernized environments.

In a chapter dealing with research design, Baker tells us that the Samoan Studies Project was embarked upon with the following assumptions: (1) that the population was best adapted to the natural and cultural traditions of Samoa, however the researchers assumed a greater geographical, genetic, and cultural homogeneity than actually existed; (2) that there would be an increase in longevity with modernization; (3) that there would be more adverse health effects in a situation involving rapid change, as in the case of migration; (4) that there would be fewer health problems for the young than the old; and (5) that the most serious effects would occur early in the process of change. As the summary chapter "Perspectives on Health and Behavior of Samoans" reveals, not all of the researchers' assumptions were correct, but they did facilitate the collection of a valuable body of data on health modifications within a context of modernization.

This very comprehensive and holistic project was carried out in two phases. From 1975 to 1978 fieldworkers investigated Samoans living in Hawaii and in American Samoa, including the relatively traditional Manu'a group villages. Utilizing questionnaires, interview schedules, and observation, data were collected on fertility, migration, education, genealogy, occupation, and household socioeconomic phenomena. The *Cornell Medical Index* (translated into Samoan), anthropometry, and dietary analysis provided health data. The researchers were also fortunate to have the full cooperation of the U.S. Public Health Service and other departments at the Lyndon B. Johnson Tropical Medical Center on Tutuila in the collection of biomedical information.

The second phase of the project spanned the years 1979 to 1983 and involved the extension of the study to Western Samoa. The data from this area, along with that from the Manu'a group, served as a traditional baseline from which they measured biological and cultural change. It was also during this phase that a study of migrant Samoans living in the San Francisco Bay area was initiated and a program to examine change-related psychological stress in American Samoa was designed.

Some idea of the broad scope of this book and the rich treasure of information it offers can be gained by analyzing the basic structure of the volume, which is built around three themes.

Chapters 2 through 5 deal with the question of how, over time, the Samoans' use of their environment changed along with the changes in

social settings and demographic characteristics. The chapters deal with such specific subjects as "Environment and Exploitation," "Social Settings of Contemporary Samoans," "The Demography of Samoan Populations," and "Mortality Patterns and Some Biological Predictors."

The second theme, involving chapters 6 through 9, addresses the issue of how Samoans respond socially and psychologically to change, with particular emphasis on psychological and physiological stress. Here the chapters are titled "Life Histories," "Changing Socialization Patterns of Contemporary Samoans," "Samoans Talk about Happiness, Distress and Other Life Experiences," and "Hormonal Measures of Stress."

In chapters 10 through 15 the contributors examine the biological changes that have taken place in Samoan subpopulations with varying degrees of modernity. These chapters focus on "Growth and Body Composition," "The Morphological Characteristics of Samoan Adults," "The Diet and Nutrition of Contemporary Samoans," "Work in Contemporary and Traditional Samoa," "Blood Lipid Studies," and "Blood Pressure of Samoans." This is followed, in the opinion of this cultural anthropologist and Samoa specialist, by one of the most interesting chapters of the book--" Samoan Coping Behavior."

As much of the book indicates, Samoans as a group are being forced in varying degrees to cope with an increasingly complex social and cultural environment--one that is a confusing blend of things Samoan and Western. To understand how Samoans are meeting this challenge, it is important to explore the nature of Samoan modal personality and to review the traditional cultural resource upon which they draw-- *fa'a-Samoa*, which involves a particular pattern of kinship rights and obligations as well as specific concepts of authority, status, and reciprocity.

The chapter discusses various kinds of dilemmas Samoans must deal with: coping with poverty and unemployment, coping with illness and crises, coping with language. The most interesting discussion, however, because of the recent controversy involving Margaret Mead's and Derek Freeman's divergent views on Samoan aggressiveness, is that which examines coping with anger. Since I am among those who believe along with Margaret Mead that Samoans tend to be a gentle and emotionally bland people, some explanation must be made for the reputation of Samoans as a violent people in places like Hawaii and California and the alarming rise, during the last fifteen to twenty years, in the incidence of rape, homicide, and suicide in American Samoa and the United States. While Freeman would see their violent behavior as a manifestation of an inherent aggressive nature, some explanation must be made concerning variations in its manifestations through time. Alan

Howard, who authored the chapter, suggests that an answer might lie in the conclusion drawn by Eleanor Gerber. Thus he writes that the problem modern Samoans may have in coping with anger

is that when Samoans migrate the structure of supports for authority, including parental authority, is eroded, leaving the burden of controls on the individual. But to the extent that the individual has been trained to rely on external authority and social submission, the appropriate channeling of underlying anger may not occur. The result is an increased variability in ways of handling anger and a greater frequency of socially inappropriate outbursts of hostility. (P. 414)

The material which I found of questionable value in this otherwise excellent book was in the chapter that deals with Samoan perceptions of happiness and distress-- subjects that I believe are very difficult to study cross-culturally. Fortunately, the reader is warned (but not until the end of the chapter) "that the data in this chapter must be treated with caution" (p. 200). Having fallen on my face too many times myself trying to modify devices like the "life events scale" for use in data collection in Samoa, I question the validity of the findings of J. C. Scheder's study in **Ta'ū** village. In several years of working with the people of this village on four separate field trips, I find them very stoical and am not sure that they have "extremely strong" reactions at all, certainly not to the birth of a child or to a child leaving home, since children leave home all the time to reside within the households of other branches of the family, often for extended periods of time. Nor do I think that **Ta'ū** villagers would normally conceive of ranking some life experiences as more or less satisfying than others unless they were forced by an investigator.

I also question the data on economic variables and happiness gathered in Salamumu village, Western Samoa. I am not sure that I know what it means to be "happy" in my own culture, let alone trying to understand if members of another are happy. Is it really possible to depend on Samoan informants to make accurate and meaningful differentiations concerning whether a certain event in their lives makes them feel "very happy," "pretty happy," or "not too happy" or even "very happy," "happy," or "not so happy"? I believe the investigator was himself troubled with all this happy business since after his first try he stated that "either Salamumu is the happiest place on earth or the survey question didn't work too well" (p. 198). I would be inclined to select the second possibility.

The discoveries of the Samoan Studies Project researchers regarding the health ramifications associated with modernization were anticipated in some cases; for example, a decline in death rate from infectious diseases, a rise in the rate due to degenerative diseases, and a relative rise in blood pressure as we proceed along a continuum toward modernization. But in a number of cases data produced unexpected results. The following are examples.

When traditional people move in the direction of modernization, fertility usually declines as education and employment opportunities are increased for women. This has not been true in Samoa, where the stable nature of the traditional family (*aiga*) has encouraged large families and has provided the child care that makes them possible.

While the modified diets associated with modernization usually result in weight increases for traditional peoples, the Samoans appear to have surpassed everyone else in the world in their capacity to achieve massive weight gains. We are told that this is probably less a matter of modified diet, however, than it is a matter of a reduction in daily energy expenditure. These weight gains also result in decreased work capacity for Samoans in Tutuila and Hawaii, but strangely enough, this excessive weight does not seem to be associated with cardiovascular-related mortality as it does among American blacks and whites. This problem of obesity would seem to be inevitable and irreparable considering the association of corpulence with high status and the importance of food and feasting socially and ceremonially.

It was also found that Samoans do not follow the normal pattern of traditional populations as they modernize in experiencing increases in growth rates and stature and an earlier onset of puberty. Despite the fact that they have improved nutrition, better control of infectious disease, and the elimination of parasites, the Samoan inhabitants of Hawaii and California are atypical.

Other unexpected findings concern nutrition and blood lipids. While traditional populations practicing subsistence agriculture normally have a diet that is low in fat and protein intake and this intake can be expected to increase with modern diets, it was found that all the Samoan subpopulations investigated, regardless of degree of modernity, have much the same relative caloric intake from fat, protein, and carbohydrates. Nor can it be said that there has been the anticipated rise in cholesterol and triglyceride levels that usually accompanies modernization. While cholesterol levels were found to be somewhat higher in Tutuila and in Hawaii than in the more traditional populations of Western Samoa, values everywhere were below United States levels despite

the fact that Samoans are often eating a United States-type diet, have high levels of body fat, and have a relatively low physical fitness index.

Emotional stress is the price that all preindustrial peoples pay for progress, and Samoans are no exception. Both life history data and studies of hormone excretion document the presence of extreme stress for Samoan islanders living in modern urban areas, and some of the aggressive behavior associated with migrants in such places may be directly related to this problem. It seems appropriate, therefore, that the project directors, when pinpointing areas for future research, call for more sophisticated examinations of how corticosteroid hormones relate to the stresses associated with modernization, particularly in women since subjects studied to date in regard to this problem have all been male.

*The Changing Samoans: Behavior and Health in Transition* is a book that should be in every anthropologist's library regardless of his or her area interest, because it deals with basic behavioral and biological ramifications of modernization that must be taken into consideration in any analysis of non-Western cultures today. And the book should be recognized as an indispensable tool for any Pacific specialist, as it presents demographic and biomedical data on Samoans that have been unavailable up to now. Moreover, any college or public library that does not proceed with utmost haste to acquire this volume will be depriving its patrons of a major anthropological source on a Polynesian people in transition.