

CULTURAL AND SOCIAL
DIFFERENTIALS IN ACCEPTANCE OF
HEALTH AND SANITATION
PRACTICES IN RU, SIERRA LEONE.

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1962

CULTURAL AND SOCIAL DIFFERENTIALS IN ACCEPTANCE
OF HEALTH AND SANITATION PRACTICES
IN BO, SIERRA LEONE

by

George Owen Roberts, M. A.

A Dissertation Submitted to the Faculty of the School of
Social Science of The Catholic University of America
in Partial Fulfillment of the Requirements for the
Degree of Doctor of Philosophy

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This dissertation was directed by C. J. Nuesse,
associate professor of sociology, and approved by Regina
F. Herzfeld, professor of anthropology, and Thomas J. Harte,
C.S.S.R., associate professor of sociology, as readers.

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CHAPTER I

THE CHALLENGE TO HEALTH ENGINEERING IN WEST AFRICA

Introduction

The health of a people always has been of grave concern to its leaders, as the history of medicine itself reveals. Improvements have not always been easily instituted, however, nor have they always met with ready acceptance by those for whom they were designed. Whether for economic, social, or environmental reasons, history provides uncounted examples of dedicated scientists frustrated by uninterested citizens; at times, persecution has augmented mere resistance. In Africa, as the Honorable Frances P. Bolton, among others, has pointed out,¹ health and education are two interrelated problems of the greatest magnitude. Individual survival and public health depend upon the spread of understanding of basic health practices and the utilization of scientific knowledge. This situation, of course, holds true in other continents, even in parts of North America. There is, therefore, a general need for public health research of high standards based upon principles derived from a variety of approaches, including the cultural and social.²

The present study is an attempt to reveal some aspects of the challenge to health engineering in Africa. It is devoted to findings of "westernization" in a particular community in the interior of Sierra Leone, Bo, the first

¹Committee on Foreign Affairs, Report of the Special Study Mission to Africa (Washington: Government Printing Office, 1956), 119.

²Milbank Memorial Fund, Research in Public Health (New York: Milbank Memorial Fund, 1952), 12.

municipality in the former protectorate. The field investigation was a search for cultural and social differentials in practices and preferences relating maternity care, diet, sanitation, and prevention and treatment of disease. Such differentials are derived both from the traditional cultures which are represented in Ro and from accessibility to modern facilities through urbanization. The design of the research will be explained later in this chapter after a review of some more general considerations.

There is a rapidly growing interest in the problem in Africa. Under the leadership of the United Nations Educational, Scientific and Cultural Organization, several studies have been compiled which deal with the impact of urbanization and technology upon previously non-industrialized communities. These emphasize the multifarious problems relating to social organization and cultural contact.³ Several research agencies have also shown interest in the area of culture contact and technology.⁴ In addition, a few important meetings have been convened for discussion of some very valuable papers. Resulting publications provide insights into political, economic, and social relations in Africa and into the problems which have resulted from the contacts between traditional and western cultures.⁵

One aspect of the problem involves the analysis and manipulation of

³Entitled the "Tensions and Technology Series," they include, International African Institute, Social Implications of Industrialization and Urbanization in Africa South of the Sahara (Paris: UNESCO, 1956).

⁴Among the important ones may be mentioned the Research Center in Economic Development and Cultural Change, University of Chicago; the Human Relations Area Files, Yale University; the Institute of East Asiatic Studies, University of California; the African Research and Studies Program, Boston University; and the East African Institute of Social and Economic Research, Kampala.

⁵Examples may be found in Calvin Stillman (ed.), Africa in the Modern World (Chicago: University of Chicago Press, 1955), and C. G. Haines (ed.), Africa Today (Baltimore: Johns Hopkins Press, 1955).

traditional forces in order to support programs which are seen to be essential to sound community health. Medical skill and services are required for the maintenance of any society; but the inherent benefits of such skill and services are properly realized only when the existing or introduced pattern of health engineering allows for the inevitable evolution of societies and their ideas relating to diseases and well-being.⁶ Unfortunately, the needs of societies or of communities have not always provided free rein for health engineering. There have been obstacles in one form or other. Thus, recent "discoveries" of cultural impediments in regions of South America, Asia, and Africa are merely manifestations of the gradualness with which any culture usually receives foreign introductions. This phenomenon may even be observed in the civilized West, notwithstanding its elaborate and efficient system of communication. A case in point is the prevalent emphasis upon such a principle as the following:

. . . any realistic program for raising the level of information . . . must be concerned with the deep-seated traditional beliefs and practices of people. In other words, not only must the facts be presented but they must be presented in such a way that they will be acceptable. This means educational programs must be planned with a full appreciation of the cultural patterns and mentality of the population.⁷

It is encouraging to note that, although cultural differences and deficiencies in education have continued to impede progress in health engineering, more and more attention is being directed to making health workers realize the intensive and extensive efforts needed to control their impact. At a recent professional meeting, Dr. Gaylord Anderson, of the Mayo School of Public

⁶Francis R. Allen, et al., Technology and Social Change (New York: Appleton-Century-Crofts, 1957), 388 ff.

⁷Alvin Bertrand and Clarence Storla, Jr., Lay knowledge and Opinion about Heart Disease (Baton Rouge: Louisiana State University, 1955), ix. Cf. E. H. Spicer (ed.), Human Problems in Technological Change (New York: Russell Sage Foundation, 1952); Joseph DeYoung, Village Life in Modern Thailand (Berkeley: University of California, 1955).

Health, observed that

. . . unless we have health education commensurate with the needs of the people and with the growth of regulatory programs, we shall see such programs fail of their accomplishments and the people left in their present unfortunate condition solely because they do not understand the reason for and the need of measures which are being adopted for their protection.

. . . it is essential that in each country the program be adapted to the mores, to the customs, to the culture of these people. It is essential that we avoid the temptation to try to superimpose upon them something that appears to be useful simply because we have found it to be good.⁸

The numerous obstacles confronting health programs include those arising from uneasiness in doctor-patient relationships;⁹ those that are due to socio-cultural factors;¹⁰ and those arising from the unconscious rivalry of "teamed" disciplines. On this last point the observation has been made that,

It is taking much longer . . . for the physician to accept the sociologist as a co-worker than it did for him to recognize the need for sociological research. Until recently, sociologists have operated 'sub rosa' in the medical setting. On occasion, sociologists still have to disguise themselves as biostatisticians, psychologists, social workers, and public health specialists. All Ph.D.'s who work among M.D.'s seem to have a continual battle to prevent their relegation to a subordinate status . . . Few physicians are acquainted with sociological concepts or research techniques, and communication is frequently difficult.¹¹

The future, nevertheless, holds hope for a solution to these problems. Numerous research efforts may be said to have provided the theoretical foundation necessary

⁸"Health Education -- A One-World Challenge," American Journal of Public Health, L (February, 1960), 127-33.

⁹See E. L. Koos, "Metropolis -- What People Think of Their Medical Services," American Journal of Public Health, XLV (1955), 1551-58; and T. R. Ford and D. D. Stephenson, Institutional Nurses (University: University of Alabama Press, 1954).

¹⁰Odin W. Anderson, Infant Mortality and Social and Cultural Factors (Washington: Health, Education and Welfare, 1952).

¹¹H. E. Freeman and Leo G. Reeder, "Medical Sociology: A Review of the Literature," American Sociological Review, XXII (1957), 73-74. Cf. George G. Reeder and Mary E. W. Goss, "The Sociology of Medicine," in Robert K. Merton et al (eds.), Sociology Today (New York: Basic Books, Inc., 1959), 242-46.

for the development of cooperation characterized by understanding and mutual respect between medical and social scientists, and genuine effort is being made to apply the knowledge which is available.

In studies which have sought to analyze the impact of cultural differences upon health engineering, consideration has been given to uniformities and variations in cultural patterns, as well as to health needs and programs adapted to specific areas or situations. Because of a greater awareness of health problems and an improved system of communication among "specialized" innovators, it has become possible to build programs upon previous experiences by making adjustments to suit variations in economic, social and political conditions. No longer does an innovator have to start with nothing. A knowledge of the precursors and course of a syndrome, for instance, must be accompanied by knowledge of a society's system of values and the relative importance of the value-impregnated objects within that system.

Unfortunately, health engineering in Africa, in the majority of instances, has yet to effect satisfactory applications of existing knowledge about health in general. Ethnocentrism, complacency, and paucity of resources have all contributed toward the creation of barriers which have, in turn, hindered the establishment of health standards that experience in other countries has shown to be necessary and possible.¹² It is common knowledge, for instance, that persons afflicted with such contagious diseases as tuberculosis and smallpox should be isolated and treated in order to promote sound health in a community. Nevertheless, the effort expended in this direction has remained inadequate or ineffective. Fortunately, health officials show a greater awareness

¹²See Lord Hailey, An African Survey (London: Oxford University Press, 1957), 1102-32; cf. Report on the Medical and Health Services, 1956 (Freetown: Government Printing Department, 1958), 14-17.

of the problem, especially of the need for integrating the work of the various preventive and curative health agencies.

Chronic failures in health engineering on the African continent have not resulted in total abandonment; instead failure has kept the problem of health in the limelight and forced the question of why the problem of health has remained relatively unsolved for so long.¹³ Some of the obstacles to health in Africa may be attributed to colonialism and exploitation by independent self-interest groups, even when it is conceded that the presence of "colonials" has usually meant the establishment of a "better" health environment. Often, however, such an environment has included -- apart from hospitals, health regulations, and formalized community sanitation -- blighted housing, inadequate wages and diet, increased consumption of imported alcoholic beverages, and a decrease in informal sanctions. It is questionable whether the wages offered by western operations compensate sufficiently for the disruption visited upon people who require some time to adjust to the lack of informal controls to which they have been accustomed.

Although it is true that the development of African communities has remained until recently under the predominant determination and influence of European governments, these governments have seldom interfered with the individual policies and orientations -- at times contradictory -- of private groups. Hence, most communities have been invaded simultaneously by commercial interests emphasizing rugged individualism and maximum return on investment, on the one hand, and by missionaries emphasizing high standards of morality and charity --

¹³See, for example, J. C. Carothers, The African Mind in Health and Disease (Geneva: World Health Organization, 1953); Clement C. Chesterman, Tropical Dispensary Handbook (London: United Society for Christian Literature, 1946); and E. Hellman, Roodhard, A Sociological Study of an Urban Slum (Capetown: Oxford University Press, 1948).

attributes not always observed in the overt behavior of non-missionary Europeans -- on the other. Neither group, while engaged in winning the African's soul or his physical and social resources, bothers to evaluate the impact of its activities upon the equilibrium of the host culture.¹⁴ Thus polygamy must cease because it is immoral, although the ramifications to those who practise it may be very complicated; and no wage, it is felt, can be too low for people who never had any cash income, in spite of their separation from an environment which had made existence possible without cash.

The International Institute of African Languages and Cultures, which came into existence in 1926, promised a remedy to the lag that had been observed in efforts to improve the health standard in African communities. The first decade of the Institute's existence witnessed the publication of several relevant articles. These articles focused on such matters as diet, land tenure, native administration, education, and religion, and were prepared by missionaries, administrative officials, and scientists. Although little was achieved, it may be said that a frame of reference was established for discussing the "African" question, especially by pointing out that solutions to problems were best attained by cooperation on all fronts among a variety of experts.¹⁵

It is no surprise that programs relating to health were not very successful, since certain prerequisite knowledge was not always available or considered essential by innovators. The matter of what was to be seen as "vital," for instance, remained ill-defined, and no significance was attached to the

¹⁴Cf. F. D. Lurard, The Dual Mandate in British Tropical Africa (London: William Blackwood, 1929); E. Hellman, Handbook on Race Relations in South Africa (New York: Oxford University Press, 1949); and W. H. Macmillan, Africa Emergent (London: Pelican Books, 1949).

¹⁵Cf. Hailey, op. cit., 50-67, and Volumes III, IV, and X of Africa (London: Oxford University Press, 1928--).

necessity of fitting introductions within existing patterns. Besides, programs which could succeed only with the aid of a strong central government had to struggle along without such support in situations where the nature of the culture contact had been determined by political pressure or military conquest.¹⁶

Despite serious set-backs in the past, interest in the area of health engineering and problems accruing from culture contact in Africa is no longer slight, for the problems are now being reviewed under all possible aspects and with the active support of such agencies as the Ford Foundation, UNESCO, and the East African Institute of Social Research.¹⁷ A commendable aspect of most of the recent studies on Africa is their recognition of the complex nature of cultural and health problems, their awareness of the need for analysis in terms of specific situations, and their production by various experts willing to cooperate in the attainment of a common objective. Of still greater importance is the fact that there is more field activity today than in the past. Such agencies as the International Cooperation Administration and the World Health Organization permit their actions to be guided not only by lessons learned from the past,¹⁸ but by the formulations of a variety of disciplines and professions brought together in teams.

An agency seeking to promote and accelerate a change which is deemed necessary to the well-being of a community need no longer work with a philosophy

¹⁶See Benjamin Paul, Health, Culture and Community (New York: Russell Sage Foundation, 1955), 119-53; cf. Lyle Saunders, Cultural Difference and Medical Care (New York: Russell Sage Foundation, 1954).

¹⁷Encouraging results include W. C. Hallenbeck, The Bau-Marville Community (Durban: University of Natal, 1955), and M. R. Smith, Babo of Karb (New York: Philosophical Library, 1955).

¹⁸Cf. E. Castle, Billions, Blunders and Baloney (New York: Devin-Adair, 1954), and J. B. Bingham, Shirt-Sleeve Diplomacy (New York: John Day, 1954), for negative views of these efforts.

peculiar to itself. As the foregoing review has attempted to suggest, there is now available to those in charge of programs concerned with culture contact and health a wide range of knowledge and experience. An innovator who finds himself at a loss can attempt a modification of any of several combined experiences to fit into his specific situation and problem. It should no longer require argument to stress the importance of understanding clearly that which is to be modified, or of the promotion and maintenance of interpersonal and intercultural respect.

The State of Public Health in Sierra Leone

Studies of health conditions in West Africa are rare but it is well known that, in Sierra Leone especially, health officials have been engaged in a continuous struggle with nutritional deficiencies, the high infant mortality rate, and such diseases as dysentery, malaria, and yaws. This struggle has been going on for years, but the available statistics indicate that success is possible.

Infant mortality in Freetown, for instance, gradually decreased from a rate of 182 per 1,000 in the year 1947 to a low of 110 in the year 1954. The rate for 1956, however, increased to 133.¹⁹ (See Table 1). The reason for this fluctuation is not easy to determine. When the question was raised at a session of the House of Representatives in 1958 the reply given by the Chief Minister was that the government was not aware of a fluctuation and, therefore, had no corrective measure under consideration. Despite such political evasion, it should be stated that health officials are concerned and are taking steps to correct the situation, such as engaging female physicians for more extensive maternity welfare. It may also be that what statistically appears to be an

¹⁹See Sierra Leone Government, Annual Medical Report (Freetown: Government Printing Department, 1949-1958).

increase in mortality is merely an illusion resulting from improved recording of births and deaths and from greater enforcement of and compliance with registration requirements.

TABLE 1
INFANT MORTALITY RATES FOR
FREETOWN, 1947-57

Year	Rate
1947	182
1948	159
1949	158
1950	148
1951	119
1952	143
1953	116
1954	110
1955	125
1956	133
1957	141

Source: Sierra Leone Annual Medical Reports for 1947 to 1957

Statistics also show an increase in the number of patients treated in hospitals and clinics (See Table 2). On the other hand, there has been a dramatic decline in the incidence of yaws and trypanosomiasis and, except for an epidemic in 1956, smallpox. The effective work of the Endemic Disease Control Unit, under the sponsorship of the World Health Organization and the

United Nations Children's Fund, has been mainly responsible for the latter decline, but part of the success — including the increase in hospital and clinic attendances — can be credited to recognition of the effectiveness of health facilities by an increasing number of people, to the increase in income created by the diamond boom, and to a more vigorous promotional campaign by health officials.²⁰

TABLE 2
NUMBER OF PATIENTS TREATED IN MEDICAL CENTERS FOR VARIOUS DISEASES,
SIERRA LEONE, 1947-56

Year	Treatment Categories							
	Dental ailment	Dysentery	Malaria	Mental Illness	Smallpox	Tuber- culosis	Venereal Diseases	Yaws and Trypanoso- miasis
1947	7,221	814	13,125	152	465	294	4,960	50,828
1948	9,866	n.a.	29,309	176	200	n.a.	n.a.	n.a.
1949	10,008	817	29,598	189	157	258	9,916	31,320
1950	8,421	n.a.	n.a.	173	n.a.	n.a.	n.a.	n.a.
1951	9,399	n.a.	31,796	191	34	289	n.a.	n.a.
1952	10,909	2,341	38,003	186	36	343	13,019	34,736
1953	9,481	2,276	38,188	184	12	374	13,123	19,515
1954	7,675	3,020	21,201	193	5	406	9,235	12,736
1955	10,750	3,075	21,836	188	49	340	9,498	8,688
1956	11,558	2,709	24,381	203	946	472	11,335	7,851

Source: Sierra Leone Annual Medical Reports for 1947-1956.

20

See, for example, E. C. Cummings, "Danger of Infectious Diseases in Freetown," The Weekly Bulletin, January, 1957, p. 3.

While there has been an increase in the number of patients seeking medical care, the matter of staff inadequacy has remained a serious problem. The result is that while the government continues to expand physical facilities, by constructing new hospitals and health centers, it finds itself unable to provide the staff necessary to make efficient service possible.²¹ Efforts are now being intensified to attack the problem of staffing: training centers are being established in principal towns of Sierra Leone; scholarships are being awarded to recruit new physicians as well as to stimulate post-graduate work in medicine and public health; and salary scales have been revised to attract Sierra Leoneans trained abroad.

In addition to the problems of disease and difficulties of staffing there are shortages of medical supplies and problems of staff conduct. The general state of under-development which is characteristic of Sierra Leone may be held responsible for the recurrent shortages in medical supplies. In districts outside the metropolitan areas of Freetown and Bo, medical supplies often have to be dispensed cautiously because the demand for them usually exceeds the supply on hand. Common items such as bandages, cotton wool, and rubbing alcohol easily become scarce commodities, due in part to the highly inadequate and inefficient system of transportation and communication.²²

In this writer's opinion, staff neglect or misconduct maximizes the obstacles to success in health and medical programs. Administrators in the various health centers and hospitals were found to agree that supplies are at times misappropriated and misused by junior staff personnel, and there have

²¹ Report on the Medical and Health Services, 1956, p. 1.

²² The writer was able to render assistance on occasion by furnishing medical supplies from those he had brought into the country as part of his "field equipment."

been instances when patients have been deprived of medications because of unethical conduct on the part of some members of the staff.²³

The problems of health under consideration must be placed within the context of a new urbanism which is sweeping Sierra Leone. Not only is Freetown becoming increasingly populated by natives from the predominantly rural and homogeneous hinterland, where traditional institutions have provided effective sanctions for group behavior, but more and more of the smaller towns are reported as beginning to lose the influence of traditional controls because of the concentration in them of diverse cultural groups. In Freetown, the predominant Creole group, which numbered close to 18,000 in 1891, was estimated at 19,000 in 1953, but during the same period groups from rural areas — such as the Mende, Temme, and Limba — increased tremendously. Mende settlers in Freetown increased from 1,000 to 11,000, Temme from 13,000 to 20,000, Limba from 700 to 9,000.²⁴ Creoles have increasingly taken up residence in areas outside Freetown and have been replaced in Freetown by the tribal groups among whom they have gone to settle.

This exchange, while providing for cultural diffusion and thus for increased acceptance of western education and health practices, has nevertheless given rise to problems of over-crowding and slum conditions. This is

²³Ibid., 3. Only one of 30 questionnaires returned by officials and community leaders (Appendix III) denied the charge of corrupt practice by health personnel. Incidents observed personally included theft of syringe, failure to respond to patients' calls, lack of adequate accounting for use of medical supplies, and favoritism in the treatment of patients. An unpublished report by E. M. Richardson and G. R. Collins, entitled "Economic and Social Survey of the Rural Areas of the Colony of Sierra Leone," apparently contains a similar conclusion. See Michael Banton, West African City (London: Oxford University Press, 1957), 103.

²⁴Sierra Leone Census Reports; also Michael Banton, "Adaptation and Integration in the Social System of Temme Immigrants in Freetown," Africa, XXVI (October, 1956), 355.

especially true of Freetown and of the diamond-mining areas where housing shortages, instability, confusion in group expectations, and inflation have made the maintenance of sanitation a grave problem. In the midst of this heterogeneous and concentrated population, there has also been observed a high incidence of poverty, ignorance and superstition.²⁵ All these factors have operated to produce apathy toward community sanitation, especially in instances where the unsanitary conditions themselves have been the result of diffusion and culture contact.

The extension of the franchise since 1951 has brought political prominence to people who, if required to assume urban residence, have nevertheless retained rural or traditional patterns of living. These new politicians and their aides — together with other kinsmen under their influence — have migrated to Freetown with their large, extended families which, although suited to village living, result in overcrowding under urban conditions. It would seem that, with only thirty-six seats in the legislature for politicians representing tribes, there should not be any serious influence upon population density. But the numerical and "majority" power of the tribal representatives far transcends their thirty-six seats. Not only do these representatives control the government cabinet, but many of the non-tribal representatives — who comprise the minority — are beginning to accept the political expediency of identifying themselves in some way with the prevailing trend of tribal affiliation and supremacy.²⁶ Related to the political changes are increased nepotism at the

²⁵ 1955 Report on the Medical and Health Services, 9-11.

²⁶ The present Leader of the Opposition, the Hon. C. B. Rogers Wright, contested for a seat in a constituency predominantly tribal, even though he has always been regarded as a Creole or non-tribal citizen. In the 1958 by-election for the seat of the disqualified representative, Rev. Paul Dunbar, a Creole contested at Sefadu, a constituency predominantly tribal. Since the defeat at the polls of the National Council, a political party which advocated Creole supremacy at the expense of tribal representation, most politicians and citizens have acquiesced in the leadership of the Sierra Leone People's Party, and are no longer ashamed to be identified with it.

expense of efficiency, decreased activities in agriculture, and inflation in prices for staple commodities. Wood fuel now costs more than imported petroleum products in many towns, and rice has had to be imported to offset the shortage that has come about from the current trend toward a highly shifting population.

Cultural Challenges to Health Engineering

Cultural and social obstacles to continued or consistent progress in health and sanitation programs are the focus of the present study. Western medical techniques are foreign imports into a culture which already has traditional provisions for health, inefficient as they may be when judged by western standards. Whenever attempts are made either to replace or to modify traditional provisions, the acceptance of innovations will presumably depend upon the extent to which the new elements fit into the traditional cultural pattern, or upon the extent to which individuals or groups are ready to deviate from traditional expectations and standards. In the former instance, acceptance will be facilitated by such factors as the innovator's prior understanding of the traditional culture and familiarity with the functions of the basic traditional institutions, especially those influential in effecting change. The feasibility of solving indirectly related problems in the order of their precedence or importance is also an obvious consideration. If, for example, a hospital were to be built to care for the sick for miles around, this purpose would hardly be achieved unless it were first ascertained that the system of communication would be adequate to bring patients to the hospital, and that the economic situation of prospective patients would encourage use of the needed health facility.

Deviance from traditional standards is greatly influenced by the extent of individual or group enculturation in foreign cultures. Through the activities

of missionaries and developmental activities of the central and local governments, many communities throughout Sierra Leone have had opportunity to evaluate the merits and demerits of both traditional and foreign patterns of behavior. The existing patterns of enculturation have at times seemed to lack definition, however, especially in providing ideas to support the more overt material elements. This is evident both in instances when innovations are attempted without prior consideration of the traditional values or meanings attached to elements to be replaced or modified, and in instances where elements are borrowed without their attached values. The Limba winetapper appears silly in a discarded winter coat of the European and shows that he does not know that this garment should be worn under specific weather conditions. The European, on the other hand, contributes to more serious dysfunctions when, in good faith, he advises the replacement of the traditional pattern of shifting cultivation — a pattern around which family and community activities ordinarily revolve — by cultivation of cash crops only.

It goes without saying that elements which are meaningful will be easily adapted. New patterns of behavior, such as monogamy or the filtration of drinking water, need not meet with resistance if presented in a way which reveals their advantages and feasibility within the prevailing culture complex. Equipped with a foreign education and other foreign elements, and conscious of the accompanying demands and meanings of foreign introductions, an enculturated individual accepts readily the practices conducive to sound health, in contrast to his kinsman who has not allowed himself to be influenced by foreign elements or patterns of behavior, and, therefore, does not understand why a change is in order.

If health engineering is to be effective, it must be conducted with full awareness of the challenges and obstacles posed by culture. There must first of

all be respect for all cultures as having the capacity to satisfy the needs of specific situations. Comparatively speaking, one culture may be found wanting in its provisions for group welfare and survival; at the same time, it must be realized that such a culture emerged through the unconscious or deliberate support it received from the society which it is serving. It should be equally evident that innovations will meet with resistance, especially where they are not directly concerned with vital matters. The determination of what is considered vital should be given priority, while at the same time support is given to introductions -- such as immunization and the recording of vital statistics -- which require the support of government or of the larger society.

Plan of the Field Investigation

The decision to investigate a problem relating to West Africa was arrived at in June, 1956. An application for financial assistance was submitted four months later to the National Institutes of Health, Education and Welfare. In this application it was proposed to investigate the "reasons why a public health system fails or succeeds in fulfilling its objective of beneficial service," with special focus upon "existing habits, how these habits are linked to one another, what functions they perform, and what they mean to those who practise them."

The period from October, 1956 to July, 1957 was used to prepare a research design. The aid of experts on Africa was sought as a supplement to guidance received at the Catholic University of America. Attendance at seminars conducted by Professor Franklin Frazier and his staff of the Program of African Studies, Howard University, was begun in the fall of 1956. At the same time, several trips were made to Boston, primarily to discuss the problems with Professor William Brown, Director of the African Research and Studies Program at

Boston University, and Mr. Arthur Porter, Senior Lecturer of Fourah Bay College, Sierra Leone, who was then studying under Dr. Brown. The benefits derived from these discussions were further supplemented by correspondence with Professor Kenneth Little of the University of Edinburgh. A conference with Dr. Little was arranged during a subsequent visit to England by the investigator. Five weeks were spent as a participant in the program on "Africa — The Continent of Tomorrow," conducted during the summer of 1957 by the International Affairs Institute, University of Wyoming.

It was decided to study problems of social and cultural obstacles comparatively in a universe comprising several cultural groups. Freetown, the capital of Sierra Leone, was first chosen for study. Influences associated with educational attainment, occupation, tribal origin and affiliation, identification with secret societies, and religious affiliation seemed to provide the most important differential factors. Furthermore, the possibility of comparing the findings of the present study with others was kept in view, especially with regard to the relation of socio-economic conditions and ill-health,²⁷ the need for making interpretations in the common and popular vernacular,²⁸ and marginalism resulting from adaptive efforts in situations of cultural conflict.²⁹ It was also considered worthwhile to check on the impact of poor housing and overcrowding in order to determine their significance

²⁷See Marion Ratigan, A Sociological Survey of Disease (Washington: Catholic University of America Press, 1946).

²⁸Cf. C. V. Akin, "The Present Status of Public Health Education," American Journal of Public Health, XXX (1940), 1435-42.

²⁹Cf. Mary E. Walsh, "Cultural Disorganization of the Negro Family," American Catholic Sociological Review, VII (1946), 96-106, and Vincent Harlow, "Tribalism in Africa," Journal of African Administration, VII (1955), 17-20.

as factors in health engineering.³⁰

The investigator embarked for London on July 31st, 1957. While there, he conferred with officials of the Sierra Leone Office, the Colonial Office Social Science Research Council, and Dr. Kenneth Little. The project was discussed at the various conferences and suggestions relating to possible modifications in the design were taken into consideration. It should be mentioned that the Social Science Research Council in London acted as a "screening" agency and undertook a review of the research design before expressing a willingness to request the authorities in Sierra Leone to put their facilities at the disposal of the investigator. Unfortunately, not only did the investigator find upon his arrival in Sierra Leone that no directive had been received from the Colonial Office, but such important officials as the Director of Medical Services and the Minister of Health expressed complete ignorance of the project, in spite of the fact that the writer himself had sent courtesy letters informing them of the project and requesting their cooperation.

The use of Freetown as the universe proved to be inadvisable, mainly because of the limited time available for the investigation and the rapid changes which were observed to be taking place in Freetown at the time the field work was begun. Changes in the political machinery which began in 1951 were still affecting stability. Not only were many of the officials in key positions unsettled or unfamiliar with their new assignments and responsibilities, but the mass of the citizenry seemed to be fully involved in the pattern of

³⁰Cf. Kenneth L. Little, *Negroes in Britain* (London: Kegan Paul, Trench, Trubner, 1948); and Sister M. Redempta Forestall, "Trends in Housing, Delinquency and Health" (unpublished M. A. dissertation, School of Social Science, Catholic University of America, 1938).

social mobility which had been set in motion. Indeed, patterns of stratification and their supporting elements became significantly more ambiguous in the constitutional process that created the House of Representatives in 1957.³¹ Some persons wished to preserve chieftaincy and other traditional positions of prestige, while others saw in the elimination of such traditional positions an improvement in opportunities for those hitherto underprivileged. Many who became active in politics used their offices or those of relatives to promote their self-interest, even at the risk of encouraging incompetence and improprieties in government.

Heeding the advice of Professor Kenneth Little against attempting to carry out a study of Freetown in only twelve months, the investigator accepted the expedience of using a substitute community. A smaller urban community in the hinterland was selected. This town, Bo, provided the diversity of cultures which the research design demanded, with no apparent sign of complexity or instability that could not be handled. Although as an urban community Bo was also experiencing some disorganization, its proximity to the traditional tribal institutions and systems of control helped to strengthen the folkways and mores. In the matter of personal disorganization, for instance, solutions based upon punitive or preventive measures were not solely the concern of a formalized legal system; Bo still afforded individuals or families the power of sanctioning deviants, with the result that unacceptable behavior was less prevalent and less serious than in Freetown.

The investigator arrived in Freetown on August 26, 1957, and spent his first month checking with the Ministry of Health and arranging for the establishment of headquarters in Bo. No official help was received during this period;

³¹See Colonial Office, Sierra Leone 1957 (London: Her Majesty's Stationery Office, 1959), 110. Cf. Roy Lewis, Sierra Leone (London: Her Majesty's Stationery Office, 1954), 226-35.

either there was extreme difficulty in making appointments with officials or the latter were found to be either ignorant of or uninterested in research in health engineering. In fact, it was not until December 8th that the investigator succeeded in obtaining authoritative cooperation from the Medical Department (See Appendix I for letter of introduction).

The first two months in Bo were spent in observing the total situation, in establishing rapport with officials and members of the community, and in collecting background data. Apart from frequent visits to the Bo Hospital and other hospitals and clinics in other communities, the investigator spent two weeks as a "visiting instructor" at one of the secondary schools in Bo. Familiarity with the pupils of the school later provided valuable introductions to homes which were reluctant to grant interviews. The investigator accepted invitations to athletic and civic events and "socials" and participated under a variety of roles and, sometimes, under contradictory situations. He was an active member of the cricket club; he had access to both the African and the European clubs as a full-fledged member; he sat on the tribunals and "native courts" dealing with "bush and woman palaver"; he lectured to a variety of voluntary associations; and he frequented the "night-clubs" of Bo. The outcome of all this participation was that the investigator had to entertain, at his home, callers and guests from all ethnic groups and classes in the Bo community. He even was asked to serve as toastmaster at a Lebanese birthday party.

Collecting background data entailed interviews and examination of records. The major departments through which this was done included those for medicine, health, education, social welfare, labour, native administration, provincial administration, and the municipal council. One difficulty encountered in all these departments was that most of the records were considered confidential;

furthermore, the method of recording was found to be inefficient, and a great deal of time was required to locate relevant data.

Apart from the preliminary observations made in Bo, a questionnaire was mailed to officials and community leaders throughout Sierra Leone to estimate their knowledge and opinions relating to problems of Sierra Leone (See Appendix II). The response to this questionnaire was rather disappointing, for only thirty out of one hundred were returned, and this despite repeated reminders by the investigator. On the basis of the returned questionnaires, however, it was observed that foreign officials were more cooperative than were indigenous officials, in spite of the fact that a majority of the latter were considered personal friends of the investigator.

An interview guide was used in a pilot study conducted in households in Freetown, Makeni, Matru, and Sefadu. The results pointed out needed modifications which had to precede a further pretest carried out among the residents of Moforni village, a section of Bo. The final schedule was used in four schools and as an interview guide for a sample of households in Bo (See Appendix III). The households were chosen from a list of dwellings furnished by the Bo Town Council. In the interviews the writer had the assistance of two men who were sufficiently conversant with the language to avoid difficulties in communication. From the total of 1,627 houses, the investigator, using a table of random numbers, selected 326 to serve as a 20 per cent sample. Only 301 houses were satisfactorily interviewed, and only data from these are included in the analysis of household respondents.

The school pupils, comprising 360 respondents, were drawn from four selected schools. Letters were sent to the principals of Bo Government School, Fourah Bay College, Harford School for Girls, and Wjala Training College for permission to use their pupils in the study, and all the administrators responded

favorably and gave their full cooperation. These schools were chosen because of their heterogeneity and as an added possibility for testing the major hypothesis. The investigator stayed for a few days in each locality in order to observe the health facilities and practices unique to each of the schools, as well as to conduct formal and informal interviews. The showing of filmstrips on the United States aided the establishment of rapport. Unfortunately, lack of funds has prevented an adequate analysis of the data on these schools, even though it had been hoped that generational differences could thereby be evaluated. Perhaps a separate report in the future may be advisable.

Fourah Bay College, Freetown, is the only institution in Sierra Leone which confers a bachelor's degree and provides for participation in the best British educational tradition. All major tribal groups are to be found attending Fourah Bay but local Creoles predominate. Representing the "native" are the Bo Government School and the Harford School, both of which afford patterns of western culture. The Njala Training College, on the other hand, serves boys who lack the intellect or social background necessary for admission to Fourah Bay or the pensionable staff of the civil service. Graduates of Njala usually get posted in the protectorate as agricultural instructors or elementary school teachers; recently, some of the Njala graduates have been awarded scholarships to colleges in the United Kingdom, while others have been attached to District Councils as extension workers.

It should be mentioned that neither the problem nor the people in this study were new to the investigator. He was born into the Mende tribal group of Sierra Leone and had the unique advantage of informal participation in group and community affairs. Through his formal training in Sierra Leone he was exposed to patterns of behavior in other ethnic groups. As a ward of Creoles in Freetown during the period when he received his elementary and secondary

education, he was exposed to the major Creole sub-groups -- to the ways of the "old families" in the central and west wards of Freetown; of the hardy and primitive "villagers" of Hasings, Gloucester, and Murray Town; and of the polygamous Moslems and Akus of Fourah Bay and Fula Town. For a while the investigator also lived in the Lebanese section of Freetown along East Street and Little East Street. During his studies at the Wjala Training College, and later as Principal of the Mabang Agricultural Academy, the investigator had the opportunity to associate with and to learn about some of the other tribal groups -- Temme, Limba, Mandingo, Susu, Sherbro, and Fula. Relationships with members of these tribes varied with those who were his colleagues, those who were his pupils or parents of his pupils and colleagues, and those who were engaged in the farming and commercial enterprises of his family.

Exposure to different peoples resulted in participation in different religious practices. Not only did the investigator at one time practise Islam with its characteristic piety, fasting, and feasting, but he participated in rituals characteristic of Catholicism, Protestantism, Evangelical religion, and tribal "fetishism," including the peculiar rites and ceremonies relating to the observance or celebration of births, marriages, and deaths.

All these experiences presumably helped to increase the accuracy of the investigator's perceptions and to enhance the establishment of rapport with respondents during the field investigation. Of course, there were disadvantages to this "beneficial" experience as well; some "big" men found it difficult to recognize the investigator as a research scientist, especially because their previous contacts with such people, if any, had been with total strangers. Another disadvantage was that the cooperation of government officials was readily available, even where cooperation had been promised by correspondence, since these officials were equally unaccustomed to discussing or making

"confidential files" available to native-born investigators. Where native-born investigators had participated in research, they had done so as members of government "commissions" and not independently.

In the pages that follow, an attempt has been made to present a description of the community as well as an adequate analysis of factors relevant to the problem of health. Chapter 2 deals with the geography, history, ecology, and demography of Bo and gives an account of cultural and social differentials. Chapter 3 presents an account of health facilities, especially as they relate to traditional and western practices and norms. Chapter 4 deals with the hypothesis and research instruments, and the population samples and differentials to which they were applied. Chapter 5 presents a statistical analysis of the influence of the selected differentials upon health practices relating to maternity care, sanitation and disease prevention, and the treatment of disease. Chapter 6 treats primarily the interrelatedness and persistence of education and occupation, as well as the relative importance of the other differentials, in the observed trend toward acceptance of western health practices. The concluding section of this chapter also gives an interpretation of the observed practices and preferences, and makes recommendations relevant to recent economic development and urbanization in the country of Sierra Leone.

CHAPTER II

THE BO COMMUNITY

Geography

There are studies which are detailed in their treatment of various aspects of Sierra Leone, but none which provides more than a scanty description of Bo or of any other local community.¹ A fairly thorough search in offices and in the notebooks of students failed to reveal any systematic and satisfactory essay on Bo. Fragmentary reports on a variety of subjects and information obtained from some of the old residents have made the present account possible. It is hoped that the description which follows may serve as a stimulus for a more detailed work.

The location of Bo may be visualized by drawing a horizontal line across the Atlantic ocean from the country of Venezuela. This line will touch the coast of West Africa at a point roughly 8 degrees North of the equator, and will continue inland for about 150 miles to Bo (See Figure 1). This is a zone of tropical rain forest with two seasons, a hot and dry season lasting from November to April, and a hot and wet season from May to October. The temperature range is from 68 to 94 degrees Fahrenheit, with a mean annual temperature of 80 degrees; the heaviest annual rainfall is about 126 inches, the months of July and August being the heaviest period of rainfall.

¹Cf. Michael Banton, West African City (London: Oxford University Press, 1957), and H. R. Jarrett, Geography of Sierra Leone and Gambia (London: Longmans, Green, Ltd., 1954).

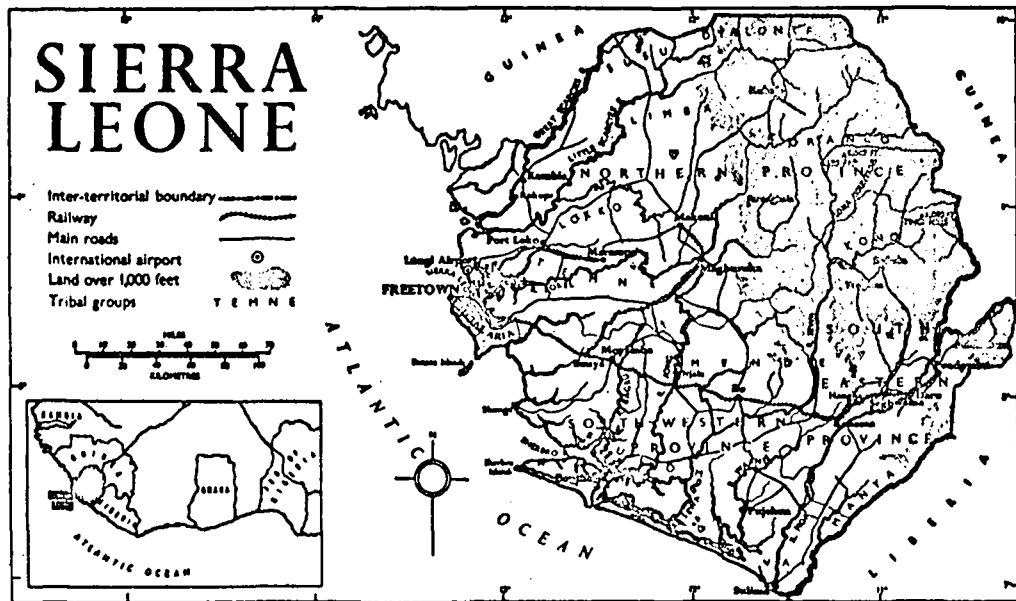


FIGURE 1. Map of Sierra Leone.
 Source: British Information Service, Sierra Leone: The Making of a Nation, 1960.

Bo is situated 136 miles by railway and 158 miles by road from the coastal capital city of Freetown. This town occupies an area of approximately five square miles and has a population estimated by government officials to be between 15,000 and 30,000 persons. Both the railway and the "highways" continue eastward to the Sierra Leone border and to such important towns as Kailahun, Pendembu, and Sefadu. This strategic position of Bo has given it a reputation as the center of Sierra Leone, even though Magburaka, a town about 50 miles north, would be more truly the spatial center. Transportation between Freetown and Bo is not as speedy as the mileage might suggest; indeed, it is rather slow, as is transportation throughout Sierra Leone. Under normal conditions, Bo can be reached in an hour by air from Freetown, in five hours by road, and in ten hours by rail.

The average altitude of Bo is approximately 334 feet above sea level, making it a part of the elevated plateau that separates the low coastlands to the west from the highlands on the eastern part of Sierra Leone. The physical environment of Bo is characterized by rolling forests, shallow creeks and swamps.² About 20 miles northeast are to be found elevations of 1,000 feet or more near the towns of Dambara and Mongheri, from which flow the two principal sources of water -- the Sewa river, flowing approximately 8 miles southeast of Bo, with a total length of 130 miles; and the Tabe river, flowing about 16 miles southwest of Bo, and 40 miles long. The soil in and around Bo is mainly laterite and red quartz sand, and the only known mineral deposits in the area are the alluvial diamonds along the banks of the Sewa river. The area, however, serves as a producing and marketing center for such agricultural

²Efforts were made to secure a better and more scientific geographical description of Bo from the Department of Lands and Surveys but without success. The map offered by the Department was not too helpful since it was found to be out-of-date and inadequately labeled.

products as rice, oil palm, ginger, kola nut, coffee, pepper, piassava, and livestock. Imported goods such as petroleum, textiles, provisions, tobacco and spirits, medical supplies, building materials, and hardware are likewise available.

Settlement

The history of Bo cannot be fully comprehended without some knowledge of the influences which originated outside the town itself. The plans which are formulated in Bo and in Freetown -- as administrative seats of the central government -- are usually concerned with the country as a whole, and the conditions which are observed to exist in certain sections of Sierra Leone are generally conceded to be the special concern of Bo. Bo is the principal link between Freetown and the rest of the country, and has become important mainly because the central government in Freetown planned it this way, although it must be conceded that other factors contributed to its emergence as an administrative and trade center. A brief history of Freetown is necessary, therefore, as an introduction to that of Bo.

Freetown is a coastal city of about 80,000 people, and the capital of Sierra Leone. The original settlers are unknown, but records show that the Temne had possession of the area during the early sixteenth century.³ Trading in slaves was quite common in this area at the time,⁴ but this subject will be ignored while attention is directed to the establishment of "Free Town," or what Granville Sharp, one of the founders, called the "Province of Freedom."

³See T. N. Goddard, The Handbook of Sierra Leone (London: Grant Richards, 1925), 12; also F. A. J. Utting, The Story of Sierra Leone (London: Longmans, Green, 1931), 34.

⁴See the account in J. D. Fage, Introduction to the History of West Africa (London: Cambridge University Press, 1955), 77-87.

Sharp first became actively interested in the issue of slavery in 1765, the year in which he accidentally encountered a sick and starving Negro who had been abandoned to the sidewalks of London by an English plantation-owner from the West Indies. With the help of his brother, a surgeon, he revived the slave and secured a job for him, but it was not long after that the master appeared to claim his slave. A legal suit ensued, resulting in the 1772 decision of Lord Mansfield that all slaves, upon setting foot on the British Isles, automatically won their freedom. This decision was soon to be regretted, for by the year 1786 there were found on the streets of London about 15,000 starving and freezing ex-slaves who had made good their escape from plantations in the Americas. They were "friendless and despised, on account of their complexion, and . . . incapable of any useful occupation."⁵ Out of sympathy for these sufferers, Sharp rallied a few of his friends to secure the support of the government in founding a settlement with an ideal climate and soil for farming.

In May, 1787, three hundred settlers disembarked in 'Free Town.' These original settlers were joined shortly after by three sets of liberated slaves -- 1,100 "Settlers" from Nova Scotia in the year 1792; 500 "Maroons" from Jamaica, via Nova Scotia, in 1800; and several thousand "Liberated Africans" who were released from slave ships captured by the British Navy during the years 1808 through 1819.⁶ With the steady growth of Free Town, the administration was taken out of the control of the chartered companies in which it was first vested, and a crown colony was proclaimed in 1808.

⁵Quoted in R. R. Kuczynski, Demographic Survey of the British Colonial Empire, I (London: Oxford University Press, 1948), 40.

⁶Banton, op. cit., 4.

By the middle of the nineteenth century Freetown had become a fairly stable community. But the fertile soil which had been promised the settlers was never found due to an apparent error on the part of a highly optimistic soil chemist whose advice was sought before the initial settlement was undertaken. Trade with the hinterland had to be established to provide food, and this brought about a new merchant class and an influx of missionaries to convert the newly-discovered "heathens" with whom the people from Freetown conducted a vigorous trade in food products and other commodities.⁷ With the advance of trade went the militia and, ultimately, there was needed a better system of communication and a system of taxation to support general development. Reluctantly, Britain undertook the administration of the undeveloped interior and, in time, Bo was established to make the task efficient and comfortable. Demanding immediate attention were the needs for better communication, the annexation of new territories, and the suppression of slavery and other disapproved practices.

A convenient starting point for the history of Bo is the year 1890 when a treaty between Chief Hotagua and the British Commissioner was signed. It is alleged that Britain was not particularly keen on burdening herself with the care of new territories, but because of pressure from the French, who were at the time rapidly colonizing the countries southward from the Sahara, the government was forced in 1896 into proclaiming a "protectorate" over all of Sierra Leone. Later developments in the administration of the protectorate

⁷See C. H. Fyfe, "European and Creole Influence in the Hinterland of Sierra Leone before 1896," *Sierra Leone Studies*, II (June, 1956), 113-23. It should also be noted that three important missionary institutions had been established in Freetown by 1850: Fourah Bay College in 1827, C. M. S. Grammar School in 1845, and the Annie Walsh Memorial School in 1847.

soon replaced with subjugation the friendship previously established by treaties.

Administering a country lacking so many "European" facilities was not an easy task, and help, physical and financial, had to be sought from the various communities comprising the new protectorate. All went well until an attempt was made to enforce universal taxation in 1898, at which time there ensued the bloodiest conflict in the history of Sierra Leone.⁸ Bo found herself deeply involved in the Hut Tax War! This war, generally thought to have begun because of the decision of the British colonial administration to tax its new "friends," had more non-material motivations than the name would suggest. Among causes that have been mentioned in various reports were the discourtesy and ruthlessness of the protecting militia — comprising "war refugees and men who were ex-slaves from the very districts of which they were put in charge"⁹ — and administrative methods which gave the impression that the government, under the guise of protection, aimed at undermining the traditional patterns of group behavior. The mere imposition of taxation, argues Professor Little, could not have been sufficient aggravation for war:

For taxation itself, there was precedent in the native system, if the exaction of tribute by the conqueror from the conquered is taken into account. Broadly speaking, it was an assertion of sovereignty, and its payment an acknowledgement on the part of the conquered of their submission. It also indicated the right of the conqueror to a part, if not the whole, of his vassal's property, if he so desired. But for payment or exaction of tribute without any demonstration of military superiority there was no precedent, and the idea, in the European sense, of taxation for administrative purposes was quite unknown.¹⁰

⁸See D. W. Scotland, "Notes on Bai Bureh of 1898 Fame," Sierra Leone Studies, I (December, 1955), 11-19.

⁹Kenneth L. Little, The Mende of Sierra Leone (London: Routledge and Kegan Paul, 1951), 56.

¹⁰Ibid., 57.

Furthermore,

The Mende chiefs, who had signed treaties, apparently did not fully realize that the proclamation of the Protectorate altered their relationship with the British crown to any undue extent. In accepting, as in some of these treaties, the Governor's arbitration in their local disputes, they acknowledged the paternal interest of a powerful neighbour, but without subordination. They knew of only one precedent by which one people could claim the right to dominate and regulate the affairs of another — by military conquest.¹¹

By 1899, the British had established themselves as superior in combat, with the result that hostility from the traditional rulers ceased. Taxation became acceptable and was paid through the chiefs who, in turn, received a rebate of five per cent. With territorial boundaries now clearly defined between the competing colonial powers in the area, and overt hostility successfully contained, the government directed its attention to internal development and administration. The railway which had started from Freetown in 1898 was given higher priority,¹² and by 1905 the tracks had progressed sufficiently inland to warrant the establishment of a railway terminus at Bo. With the terminus came a supply depot — with construction materials and workers — and a medical dispensary to provide care for officials and workers who were now too far removed from the center of Freetown. Thus, with a railway station and a dispensary began the ultimate growth of a relatively insignificant tribal town.

An institution which was later to become highly influential was established in 1906 as the Bo Government School, intended to train future leaders so that the misunderstanding, hostility, and bloodshed of 1898 would not again strain the relationship between Britain and her new protectorate of Sierra Leone.

¹¹Ibid., 56.

¹²See Lewis, op. cit., 65. Cf. Hailey, op. cit., 1563.

Perhaps the Bo School accomplished the major purpose for which it was established, since no violence against the colonial government has taken place because of dissatisfaction relating to administration. Instead, the school has turned out men who may be found playing important roles throughout the country, as officials of the central or local governments and as independent and influential businessmen. Bo school graduates have contributed to the accelerated alleviation of tribal problems, but of greater importance is the fact that training has afforded eligibility for better government jobs to the people of the protectorate, thus reducing the one-time monopoly of the Creoles of Freetown.¹³

Except for the establishment of the Methodist Church and the Church of England, nothing outstanding seems to have taken place in Bo until the 1920's. During that decade there occurred the rearrangement of administrative divisions, which made Bo a part of the Railway District in 1920 and of the Kenema District in 1930.¹⁴ A separate Bo District, with the town of Bo as headquarters, was not established until 1931¹⁵ but it can be presumed that the enlargement of the Bo dispensary in 1928 brought sufficient prestige as well as the increase in population needed to justify the arrangement.¹⁶ The Sierra Leone Census of 1931 listed Bo as the second largest town in the protectorate with a population of 2,200.

¹³Cf. Banton, op. cit., 103.

¹⁴A "district" is a unit of several chiefdoms under a "District Commissioner." The whole protectorate is divided into three "provinces," made up of districts.

¹⁵From records in the office of the Commissioner of the Southwestern Province, courtesy of Mr. Martin Page.

¹⁶It must not be understood that the mere presence of a dispensary brings about an increase in population. That this occurs is due to the fact that administrative centers established by the government, as was Bo, usually offer employment opportunities to attract new settlers.

Important events outside can be used to suggest possible trends in Bo during the period following the completion of the railway to Pendembu. One can surmise that the railway "pulled" many peasants away from village farming to provide unskilled laborers required for its construction; in turn, camps of wage-earners began to emerge in Bo and other communities along the railway. Imports and exports, with an increase in volume, required storage facilities pending distribution, and this called for a variety of artisans to build and operate needed service facilities.¹⁷ The government, meanwhile, increased staff and other provisions for the task of developing the hinterland, while the volume of traders, artisans and laborers from tribes outside Mendeland increased.

Not only was the number of Creoles in the civil service and missions increased, but more Creoles appeared as store managers and traders. The Mandingo, Fula, and Susu took over the cattle trade as well as the practice of native medicine; the Tamne and Sherbro became active in the marketing of fish and other commodities, while the Limba, Loko, Kono, and Kissi, along with some of the Mande, became unskilled laborers and craftsmen. Two groups came from outside the borders of Sierra Leone, the Lebanese and Syrians who controlled the larger shops, and the Hausa and Aku who travelled about selling cloths and other handicrafts from Nigeria, the Gold Coast (now Ghana), and the other West African territories. It should be mentioned, however, that some members of the other tribes, especially the Fula, Susu, and Mandingo, also came from tribal homelands contiguous with those within the political boundaries of

¹⁷Cf. T. S. Ashton, "The Standard of Life of the Workers in England," in F. A. Hayek (ed.), Capitalism and the Historians (Chicago: University of Chicago Press, 1954), 127-59.

Sierra Leone.

The future of Bo did not, of course, depend entirely upon trade or the development program of the government. The Paramount Chief of Bo himself showed interest in making his state great by contracting for "mystical services" to achieve this end. A letter found in one of the official files indicates that one such arrangement could have been made in the year 1928, and the letter is self-explanatory:

I beg to introduce myself as the oldest resident Foulah in this town, having come to Bo through the persuasion and auspices of the late Hon. P. C. Kamanda-Bongay, who actually brought me here for rendering certain services though mystical in character yet pertaining to the well-being and establishment of Bo town, principally to cause the removal of the District Headquarters and Court Messengers' Barracks from Sumbuya to Bo and to make Bo a sort of Metropolis of the Protectorate of Sierra Leone.¹⁸

No doubt, Chief Bongay found this "mori-man" valuable,¹⁹ because Bo became the headquarters of a newly-created Bo District in 1931. But this was the only one of the aims mentioned in the letter accomplished prior to the chief's death in 1934.

In the year 1940, Bo became the administrative headquarters for the whole protectorate; in 1946, it was selected as the site for the inaugural and subsequent annual meetings of the Protectorate Assembly, a body of tribal rulers and leaders established to advise the government in formulating plans for development; in 1947, the Bo hospital was expanded and provided with

¹⁸ From records in the office of the District Commissioner, courtesy of Mr. Dennis Kirby, M.B.E.

¹⁹ A "mori-man" is one trained in Islam and the teachings of the Qur'an, who spends his time in teaching and praying. All mori-men give counsel, advice or "prescriptions" to persons who consult them in exchange for a fee. While the fee may be stipulated by the mori-man, often it is the "client" who decides whether to show his gratitude by offering livestock, grain, or cash. The word mori could originally have been moli, meaning "to ask," or "the question." The moli-man would thus be the person to whom questions are put.

facilities previously found only in the hospital in Freetown.

There are those who believe that only the intercessions of mori-men brought about these developments. Nevertheless, the influence of other forces, more direct in their impact, should not be ignored. The "Cameroon War" of 1914-18 absorbed men from Bo and the vicinity and produced "veterans" who returned with new ideas, as did those who returned from Burma and other campaigns after World War II. As a principal communications center, Bo found herself exposed to events that went unnoticed in the more remote areas of the country. Trade expanded, the population increased to 10,000 by 1948, and traditional social controls and tribal cohesion became weaker in a community that was gradually becoming cosmopolitan. In view of these conditions it could be said that the government showed wisdom in selecting Bo to become the "experimental station" for the foreign, but beneficial, programs that were yet to be introduced.

The railway, which had served the country well during the early stages of development, had become inadequate by 1930, when foreign prospectors became interested in mineral potentials in the country. In 1934, a monopoly over all diamond deposits in Sierra Leone was granted to the Sierra Leone Selection Trust. The headquarters of this mining company was about 150 miles from Bo, but, as terminus of the railway, Bo felt the pressure of the new arm of the country's economic activity. It was quite an achievement when a highway was completed in 1940 to link Bo with Freetown. It became possible to have a more efficient and expanded economy by providing communications with the diamond area of Yengema and the other important centers of agricultural products -- Matru, Bonthe, Pujehun, Sulima, Kailahun, Makeni, and Kabala. Garages were soon established to serve the increasing number of automobiles and trucks which passed through Bo.

Several important introductions into Bo were made after World War II, both by the government and by private enterprises. Several of the discharged soldiers, for instance, used their bonuses to establish new businesses. Some established small shops to handle general merchandise or to dispense liquor and entertainment, others went into real estate or transportation. Such a capital investment had to be based upon the assurance that Bo and her settlers would make it profitable to operate an electrical station. There were already many Lebanese merchants in the community and numerous government offices and housing projects to make electrification feasible, but these were not the only subscribers, and it was not long after that the government had to supplement its original capacity and output to meet the increasing demand for electricity. Another major investment on the part of the government was the introduction of a piped water system which brought in water from the Sewa river to serve the growing community. Bo had come of age as a city of rate-payers, for neither electricity nor water supply suffered from non-patronage.

Hand in hand with other introductions, the government in 1945 established in Bo a school for the training of personnel needed to cope with the problems of staff shortage and demand for an expanded health program. Under the supervision of the Bo hospital, the school became responsible for training nurses and midwives, thereby supplementing the effort of the old training center in Freetown. One advantage of the Bo training school was that it made it possible to accept candidates whose educational attainment was below that of students in Freetown. Furthermore, the school offered a partial solution to the problem of adjustment normally encountered by students socialized in an environment predominantly tribal and rural. The training of personnel in health was further enhanced by the subsequent establishment in Bo of a school for health inspectors, as well as a registry for births and deaths.

As for general education, the government and missionary organizations improved their existing facilities. The Bo Government School added more science courses and a higher level of studies, and new dormitories were built to accommodate the increasing number of students. In 1954, a new high school, St. Andrew's Secondary School, was opened by the United Council of Churches (Protestant), while the Catholic Mission opened the Catholic Training College to meet the increasing demand for elementary school teachers. At the same time, the Evangelical United Brethren Mission began operating -- apart from an elementary school which had been previously established -- a Bible Institute to train and provide retreat facilities for lay church workers (See Table 3).

TABLE 3
NUMBER OF PUPILS ENROLLED IN BO SCHOOLS, 1957

School	Males	Females	Totals
<u>College level</u>			
Catholic Training College	150	—	150
<u>Secondary level</u>			
Bo Government School	338	—	338
Christ the King College	n.a.	n.a.	n.a.
St. Andrew's School	174	12	186
<u>Elementary level</u>			
Ahmadiyya Mission	165	56	221
Bo Model School	220	—	220
Evangelical United Brethren	305	165	470
Holy Rosary School	—	408	408
Methodist School	305	92	397
St. Francis School	555	—	555
Seventh Day Adventist	225	89	314
Sierra Leone Church School	117	61	178
United Brethren of America	59	34	93

Source: Provincial Education Office, Bo.

In the year 1954 Bo became the headquarters of the newly expanded police jurisdiction for the southwestern province; in 1955, the Bo Town Council was created, making Bo the first municipality in the protectorate; and, in 1958, Bo became a terminus of the newly-established internal Sierra Leone Airways, which provided weekly return flights between Freetown and Bo.

There is yet to be mentioned the greatest contribution, perhaps, which Bo has made to all Sierra Leone, Sir Milton Margai, presently Premier of Sierra Leone. It was in Bo that Sir Milton emerged as a political leader. He had served the government as medical officer for 22 years when he retired in 1950, and for once he was free to do as he pleased. He immediately took up residence in Bo and began a private practice at his newly-established Margai Nursing Home. But a popular and busy hospital was evidently not completely satisfying, for his next move was to found a political party that could be used in achieving for Sierra Leoneans greater participation in the administration of their internal affairs. The Sierra Leone People's Party thus became a reality, and emerged as the principal party in Sierra Leone politics in 1951, a position which it has held ever since. This is not the place to undertake a critique of the accomplishments and failures of Dr. Margai and his party; suffice it to say that no one before him had ever undertaken or succeeded in diminishing tribal or ethnic rivalry and, as a result, in creating a feeling of unity and oneness in the majority of Sierra Leoneans. It would have been an added advantage if the newspaper which Dr. Margai founded in Bo -- the Sierra Leone Observer, the first in the protectorate though now defunct -- had developed into an effective medium for teaching the humility, patience, and integrity which mark its founder, and which have been instrumental in keeping his leadership intact.

Ecological Pattern

Bo is a center for a region which extends roughly fifty miles from the heart of the city in all directions. The relatively dense population shows increasing concentration, whereas the presence of banks, wholesalers, and transportation terminals indicates centralization. The economic and cultural control which Bo has over the region as a whole, even where such control remains incomplete, arises from its ability to attract products into Bo for storage, exchange, and distribution. This attraction is found in such factors as a relatively abundant supply of labor, easy access to markets, and the presence of economic institutions promoting exchange. Strictly speaking, the central position of Bo is based largely upon its potential development rather than upon actuality. On the one hand, there is a well-developed transportation and communication system, although there is no large-scale manufacturing or extractive industry in Bo; on the other hand, the production of local foodstuffs and the accumulation of these as well as such commodities as diamonds, kola, piassava, and imported manufactured goods may be said to compensate for this lack.

A line which runs from west to east divides the community into halves -- the northern half constituting the North Ward, and the southern half constituting the West Ward and the East Ward (See accompanying Map 2). This west-east line forms the streets of Baiima Road, Bojon Street, Fenton Road, and Ngarlu Road, while a north-south line forms the streets of Fenton Road, Dambara Road, Bo Bye Pass, and New Sewa Road, and provides the boundary between the West and East wards. The area adjacent to the three wards comprises the central business district and contains the main shopping district, the market place, the trucking terminal, the police station, the prison and courthouse, most of the government offices, the hospital and Bo Government School.

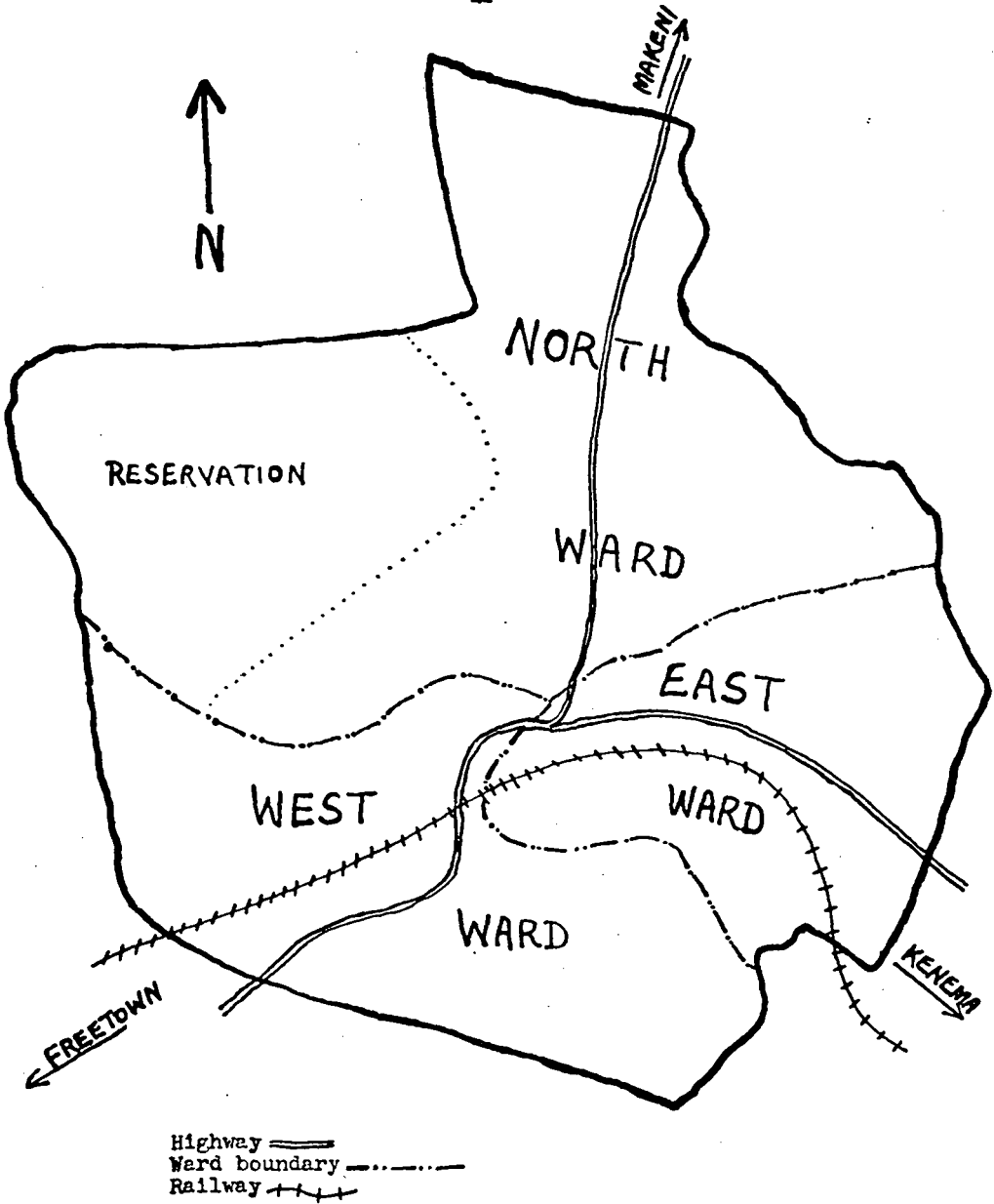


FIGURE 2. Political divisions and transportation facilities of Bo. (Area is approximately 5 square miles.)

The North Ward is the largest of the political divisions, although not the most populous. The outskirts of this ward contain the residential area which, until recently, was restricted to European officials. This section is still called the "reservation," but now includes resident Africans in the "senior service" of the government. Appropriate for its "upper-class" residents is the physical beauty of the reservation. Not only are its houses of superior quality and lavishly furnished, but the area has been properly landscaped with shade trees, shrubbery, and lawns to enhance the beauty of the winding roads leading to the official "mansions" behind the trees.

A survey by the Bo Town Council revealed 516 houses in this ward, with 140 of them sparsely distributed in about half the total land area. The remainder may be found clustered within a space of about one square mile. All the major tribes, except the Kono and Loko, were found among the residents of this ward. The other wards are equally mixed, although lacking the concentration of Europeans which characterizes the North Ward.

The West Ward has the least number of houses, that is, about 448 of the total of 1,627 houses estimated by the Bo Town Council. Nevertheless, this ward is the most important economically. Large European "department stores" and the well-stocked Lebanese and Syrian shops are to be found in the area, dealing in commodities which range from trucks to pins. The Diamond Corporation and the Bank of West Africa are also located in this ward, but so too are the "slum" settlements of immigrant laborers.

The East Ward is the newest of the divisions and contains relatively well-planned city blocks. Here reside a majority of the new-rich and recent arrivals into Bo -- cattle dealers, diamond dealers, truck owners, bar or saloon keepers, and real estate "tycoons." In this ward are also to be found most of the new institutions that have been introduced into Bo, the slaughter

house, the Roman Catholic Mission, the Margal Nursing Home, the Bunumbu Press, and facilities for a broadcasting studio.

It takes only a walk through the streets of Bo to realize the cosmopolitan character which it has assumed. Although Bo is in the homeland of the Mende, its location is neither distant nor isolated from the lands of the Temne and Sherbro who, in turn, have taken advantage of existing urban benefits by establishing residences in Bo. Members of tribes in more distant regions have taken similar steps.

In spite of the rapid process of urbanization which has been going on, Bo has managed to retain certain aspects of the old. The establishment of a municipality has not destroyed or subdued to any marked degree the influence of traditional personalities and politics. Many of the residents still recognize and respect the authority of the chief and tribal functionaries, and often consider themselves primarily as residents of particular "sections" within Bo, subject to "sectional" directives, rather than as members of the municipality at large.²⁰ There is still lacking the degree of community consciousness necessary for the introduction and maintenance of programs and devices essential to urban living. While primary group sanctions can serve to promote the welfare of the members of a simple community, impersonal sanctions through relatively formal channels have to be depended upon to protect the welfare of the majority from infringements by peculiarities in ways and interests of the

²⁰Observation revealed at least 23 such tribal sections to which people grant their primary allegiance. Some of the sections, each with a recognized chief (with literal meanings of the names) are: — Borma (on soft ground), Bunumbu (near the "Gboni" tree), Hotagua Town (town of the tall stranger, named after the late Paramount Chief Hotagua), Korwana (site of huge, fallen trees), Messima (town of Madam Messie), Woforni (town of Mr. Forni), Nikibu (under the breadnut tree), Njagboima (by the red water), Tolobu (under the kola tree), Moriba Town (town of Mr. Moriba), Kissi Town (town of the Kissi tribesmen, originally entertainers to the Paramount Chief), and Komende (town of the "upper" Mende).

various minorities composing the aggregate in an urban community. The complex demands of urban living necessitate the extension of institutional influence; only through such extension and its acceptance by all citizens can needed uniformities in standards relating to housing, communications, and social control be attained. Problems cannot but persist if sectionalism and ethnic loyalty continue to influence the cooperation expected of all citizens in matters concerning the whole community. If a centralized police force and court can better preserve law and order where complexity has replaced simplicity, then sectional or tribal provisions must be subordinated.

Population

No attempt at an actual enumeration of the population of Bo has ever been made, although approximations have been released from time to time. The best figure available is that based upon returns of tax-payers and compiled by the District Commissioner. An estimate can be derived by multiplying the number of tax-payers by five, which is the factor chosen to represent the average number of persons per tax-payer in Bo District.²¹ Using this factor, the investigator derived an estimate of 20,575, on the basis of 4,115 tax-payers.²² The estimate of the Bo Town Council, on the other hand, shows a figure of 21,151, derived from 1,627 houses and a factor of 13 persons per house. A decade earlier Little used a factor of 8 persons per house.²³

²¹See Chief Commissioner, "Sierra Leone Protectorate Handbook 1957" (Chief Commissioner's Office, Bo, March, 1957), 1 (Mimeographed). Cf. estimate of "20,000-30,000" in Colonial Office, Sierra Leone 1957 (London: Her Majesty's Stationery Office, 1959), 12.

²²Derived by counting tax receipts recorded in the offices of the District Commissioner and the Native Administration, Kakua Chiefdom.

²³Op. cit., 66.

An attempt was made to estimate the total number of persons comprising each of the ethnic or tribal groups in Bo. Both the European and Lebanese population were determined by a complete count,²⁴ but estimates for the other groups were derived from the sample of households interviewed (See Table 4). It should be pointed out that these are very crude estimates. Information on the size of households was obtained during the course of interviews conducted in 20 per cent of the houses in Bo; however, only 301 interviews were completed from the original sample of 326 houses. Table 4 shows the frequency distribution within each ethnic group, as well as an average of from 5 to 14 persons per household for each category. By use of this distribution and the counts mentioned above, the population for Bo was estimated to be 16,118, well below the estimates cited (See Table 5).

The fact that no accurate census of the Bo population exists is a serious handicap, in view of the reality and ultimate impact of the on-going process of urbanization in Bo. The traditional method of shifting cultivation, which was the basis for sustenance as well as the core of tribal organization, is becoming less significant as more people turn toward the emerging industrial economy for support. Personal taxation is now being calculated in terms of so many days wages or so much currency, while fewer and fewer continue their calculations on the basis of crop yields. The citizen of Bo, at least, has begun to see the incompatibility between the traditional system of land tenure and its accompanying characteristic of long-term dependence and paternalism,

²⁴The writer acknowledges the assistance given by Mr. Khalil Garnem in counting the Lebanese, and by Mr. John N'Jai, Rest House and Inventory Keeper, in counting the Europeans. Grateful acknowledgement is also made to District Commissioner Kirby for his letter of introduction which secured for the investigator the ultimate cooperation of junior personnel in the several offices of the government.

TABLE 4

ESTIMATED POPULATION DISTRIBUTION BASED ON OBSERVED SIZES OF HOUSEHOLDS IN SAMPLE, BY STOCKS OF ORIGIN

Category	Number of respondents by size of household					Total number of households in sample	Average number of persons per house	Total number in sample households	Estimated total in population
	Under 5 persons	5-7 persons	8-10 persons	11-14 persons	Over 14 persons				
Creole	11	16	8	1	-	36	6	223	1,205
Fula	-	1	1	2	3	7	13	91	492
Hausa	7	-	3	-	-	10	4	39	211
Kissi	-	1	3	3	4	11	15	160	865
Kono	1	2	4	1	-	8	8	62	335
Lebanese	8	8	3	-	-	19	5	96	519
Limba	3	2	2	3	1	11	8	89	481
Loko	1	1	2	2	3	9	11	97	524
Mandingo	3	11	4	5	7	30	10	288	1,557
Mende	3	15	39	16	18	91	11	1,018	5,503
Sherbro	5	5	2	1	3	16	8	127	686
Teane	7	13	16	6	1	43	8	335	1,811
Total	49	76	90	43	43	301	9	2,738	14,800

and the independence which an industrial economy affords. To the average Bo citizen, the system of land tenure is not merely obsolete; it is blamed for imposing checks upon individual initiative while at the same time serving as an obstacle to community-wide development.²⁵

TABLE 5
ESTIMATED POPULATION OF BO

Estimated population represented in sample	14,800 ^a
Residents of educational institutions (including dependents)	650 ^b
Junior civil servants in "clerks quarters"	405 ^c
African officials on reservation (including dependents)	94
European officials	94
Servants boarding on reservation	60
Indians	16
Total	16,119

^aBased on sample of 301 households

^bBased on observation and records of Education Office

^cBased on count of 81 houses and sample survey

The method of land allocation by the head of the traditional extended family served well as long as farming was inevitably limited and families barely

²⁵According to the Protectorate Lands Ordinance of 1927, "all land in the Protectorate is vested in the Tribal Authorities, who hold such land for and on behalf of the native communities concerned." In subsequent amendments, the ordinance granted land concessions to non-Africans if, in the discretion of the Governor, such concessions would prove beneficial to the citizens of the locale or of the country as a whole. With regard to Africans who ordinarily are not "natives" of the area the provision is that such "strangers" could use land only with the assent of the Tribal Authority on a temporary lease not to exceed 50 years (See Little, op. cit., 82-95; and Hailey, op. cit., 741-42).

succeeded in growing enough to feed themselves. With urbanization has come a reduction in farming activity, at least in the vicinity of Bo. The demand for land is now not for cultivation of crops, but for building homes. Many "strangers" or in-migrants complain about restrictions placed upon their willingness to improve their holdings because the land upon which their houses stand remains subject to periodic litigation among individuals vying for control of this or that family "bush."

Cultural and Social Differentials

Among the people of Sierra Leone it is possible to observe prestige differentials based upon age, sex, ethnic or tribal origin, religion, occupation, and education. These are described here in general terms and used in the analysis of data presented in subsequent chapters.

Under the impact of western culture, age is gradually losing the importance accorded it in traditional social organization as a means of determining which individual or group is given ascendancy and which subordination. While the reckoning of age is not done by using discrete numerals, the traditional pattern provides major occurrences by which a person may be categorized. Peer groups are recognized very early in the life of the individual and remain significant throughout the life span, helping to determine the relative position of the person as a child, an adolescent, an adult, or an elder. The importance of age in traditional social organization is further emphasized through proper or expected forms of address: the younger uses the term ngoh (big brother or big-sister) to address even non-relatives older than himself; the term mbaa (companion) is used in referring to one's contemporaries; and the term kerya (uncle) is used to refer to persons who are a generation older. The term maada (grandfather) is used for old or very important persons such as a

chief.

Although there is no difference in status associated with sex of children, adulthood brings with it the reminder that the female is expected to show deference to the male. This rule may be modified only when the female is an older person. The initiation rites by which persons are accorded adult status are performed for males and for females of the same age group. But whereas the female assumes the status of a wife right after "graduation," the male begins a more intensive period of apprenticeship under his father or guardian which lasts until he secures a wife. The result is that the wife, in the majority of instances, is much younger than the husband. This may explain the social expectation that a wife humble herself in the presence of her husband and his peer group. Etiquette further demands that women eat their meals separately and only after serving the men. Men and women may not walk side by side in public; rather the female follows the lead of the male. The superior status of the male is further strengthened in a variety of ways. The male is served the choice cuts of meat; the female is expected to act as the porter, and may be assisted only when the baggage is too much for her alone; in public conveyances, the male has first choice in seating accommodation; and it is the male child who is first chosen to enjoy the "luxury" of formal schooling.

Tribal or ethnic differentiation may be used to determine prestige. Generally speaking, all Creoles — the descendants of freed slaves who settled in Freetown — are accorded a higher status than "natives" or members of the tribes of the protectorate. The Creole has always had better facilities at his disposal, whether such facilities relate to education, health, diet, or other community services. The native, on the other hand, has had his own cultural provisions as distinct from the western patterns which have been part and parcel of Creole culture. In health and sanitation, for example, the

Creole has a tradition of the use of European health facilities and techniques -- hospitals, clinics, and preventive measures -- in contrast to the "mori-man" and the other traditional provisions of the native.²⁶ The earlier contact of the Creole with the white man may be held partly responsible for the overall superiority accorded this group. The people of the colony, the Creoles, were from the beginning indoctrinated in western culture, and the superior facilities at their disposal -- schools, churches, and European manners -- enabled them to treat the natives with contempt to the point of open condemnation. Not only has the superiority of the Creoles been maintained by access to schooling and other western amenities, but the fact that Creoles are often seen performing roles as colleagues of or substitutes for Europeans has lent support to their superiority and prestige. Until relatively recently, functions pertaining to health, central administration, commerce, law, and communication were performed by a very insignificant number of non-Creoles, at least at the executive or influential levels.

With the gradual spread of western culture into the protectorate and increasing mobility among the natives, a more complex pattern of stratification has developed. The Mende group, which comprises almost one-third of the total population of Sierra Leone, is generally given a higher status, whereas the Limba and Fula are placed in the lowest stratum. Although personal accomplishments in terms of education, occupation, and material possessions are recognized,

²⁶Through interaction, sometimes through intermarriage, the Creoles have served to mediate western techniques among tribal members. One device by which this has been possible has been through the "ward-ship" system whereby children of "natives" are sent to live with Creoles or are adopted by Creoles. The advantage to the native along with socialization into the Creole way of life, is that the child is sent to school, whereas the Creole guardian secures free child labor in performing numerous household chores. Chores include fetching water from the public pump, washing clothes, splitting wood for fuel, threshing rice, shopping, and running errands.

the ranking of tribal groups is discernible. Hence, between the top stratum of such groups as the Creole, Mende, and Lebanese because of economic superiority, and the lowest stratum of Limba, Kono and Fula, there is a less defined middle stratum of Teane, Mandingo, Sherbro, Susu, and Hausa.

The high status accorded the Mende may be due to the relatively high level of literacy found among them and to the relatively superior facilities available to them as compared to the other tribal groups; that of the Lebanese, on the other hand, may be due to their success in commerce.²⁷ Furthermore, the recent changes in politics which extended voting for national representatives into the protectorate for the first time have added greatly to the prestige of the tribal groups, at the expense of the Creoles. Ten years ago, only Creoles were allowed to elect representatives to the legislature; today, the tribal members comprise about three-fourths of the total membership of the legislature and, through their numerical superiority, have grasped the reins of national leadership and control from the hands of the Creoles. The material advantages once enjoyed exclusively by Creoles, in the form of better jobs, better schools, better hospitals, and better roads, are now being extended to natives throughout the protectorate.

Membership in secret societies is another significant attribute because it is a major instrument of social control within the traditional social organization. These societies may be found among all the tribes in

²⁷The Lebanese have maintained their primacy in commerce, partly because of the highly favorable credit rating they have received from European firms and banks. Although they have displayed a high degree of adaptability by adjusting to the relatively "primitive" living conditions in communities needing their stores and from which they could collect produce for export, the Lebanese have retained their foreign identity. Outside of commercial relationships and instances of common-law marriages entered into with the indigenous groups, the Lebanese restrict their social activities to other Lebanese.

Sierra Leone. Even the Creoles have their "hunting society." Since no data are available on the secret societies based in Freetown and the colony peninsula, and especially because these societies do not wield too great an influence upon social organization outside of the protectorate, the present discussion will be restricted to the tribal societies about which information is available.

The Poro is a secret society for males and is highly esteemed by all the tribes in the protectorate. Through its tribunal, it wields an influence greater even than that of the chief. Its decisions and provisions relating to social behavior and the use of natural resources are for the most part indisputable. A debtor, for example, may avail himself of the Poro's protection and escape prosecution by a non-member creditor, but the society remains in a position to use its influence in seeing that the debt is paid ultimately, and that justice is maintained. In the traditional society, a male becomes a "man" and acquires adult privileges and rights only after he has been initiated into Poro, and his prestige in the community may later be influenced by the rank he attains within the secret society.

The Sande, sometimes called "Bundu," is the female equivalent of the Poro. Here again the female acquires adult privileges, including that of marriage, only after she has been initiated, and she "graduates" with a new name which may not be mentioned by those who have yet to become members of Sande. Basically, the function of this society is to prepare for womanhood within the community by teaching the ideals and practices essential and peculiar to the total tribal culture. Details of this and other secret societies and their organization are difficult to obtain since they are taboo to males and should not be discussed with females. Foreign writers seem to have been more fortunate in getting data, but the present writer is not in a

position to evaluate the veracity of their reports. A book written by Pearce Cervis considers clitoridectomy to be a feature of the initiation ceremony, and he has described the operation as one designed to "reduce sexual desire in women and make them more faithful to their husbands."²⁸ The observed complications of child birth among a great proportion of women would suggest the operation to be a fact, although not for the reason suggested by Cervis. Otherwise, how explain the frequent litigation in the courts over "woman palaver"?

Another attribute which influences prestige is religion. In Sierra Leone, two religious importations have taken place and now have supplanted or supplemented the native religion which formed an integral part of the total tribal culture. Religion, in the tribal sense, was a part of daily living and lacked a distinctively religious formalism which would demand a fixed time and place for worship. There was a belief in the supernatural and the awareness of the powers of numerous gods of evil and of good. This permitted an individual to call upon a specific god, sometimes with the aid of a mori-man, when circumstances warranted. A god might be called upon to heap vengeance upon someone who had done a wrong deed, or a god might be called upon to bless the crops or someone who had extended kindness. Christianity and Islam, in contrast, are monotheistic and require faith in a Supreme Being. With their introduction, worship ceased to be strictly personal; it became necessary to congregate at a church or mosque and to observe a specific set of rituals and ceremonies. Before trying to rank the two religions, Islam and Christianity, in terms of the prestige accorded their adherents, it may

²⁸Sierra Leone Story (London: Cassell & Co., 1952), 226-33. Cf. Little, *op. cit.*, 12-13; and Max Gorvie, *Old and New in Sierra Leone* (London: United Society for Christian Literature, 1945), 28-48.

be helpful to outline their similarities and contrasts in terms of the traditional cultures which the two serve.²⁹

Christianity is identified with western culture, especially with its elements of formal education and salaried occupations. When one attends school, it is usually to receive instruction from Christian missionaries whose regulations ultimately produce either voluntary converts or practitioners who really had nothing to give up. The western style of dress is soon accepted without difficulty, since the average pupil begins his schooling without any mode of dress to be biased about. Under the tutelage of missionaries, marriage and family organization is presented in a manner that makes the traditional pattern of polygamy taboo. Furthermore, the economic advantage which education affords through salaried occupations is better enjoyed by practising Christians whose work-week does not include Sunday, the day set aside for religious worship.

With Islam, on the other hand, Friday is the day set aside for congregational worship; besides, a devout Muslim is expected to go through an elaborate ritual of worship several times during each working day. But Islam allows the practice of polygamy except for restricting the maximum number of wives to four per man. The mode of dress encouraged by Islam is in contrast to that of Christians, being more distinctive and elaborate. Another feature of Islam is that it maintains the subordinate role and status which has been traditional with native or tribal women. Not only do women not worship with the men, but they are encouraged to be voluntarily submissive to the men.

This brief review explains in part why Christians are held in higher

²⁹Since the censuses have never sought information on religion what proportion is Christian, Muslim, or pagan would be any one's guess. Hailey, however, has estimated the Muslim proportion as 11 per cent. Op. cit., 36.

esteem than are Muslims. After all, Islam has offered relatively little to general community progress. While it did introduce a more elaborate set of rituals, Islam remained very close to the traditional, encouraging the persistence of polygamy and superstition, while leaving the matter of health, for instance, to chance. The mori-men who formed an integral part of Islam served as intermediaries in ascerting or guiding the hands of fate, by using their ability to "communicate" with the geni of good and of evil. Christianity, on the other hand, did not stop with ritual; it provided education and its accompanying facilities for promoting community progress and a higher level of living.

Education is highly significant in social mobility and prestige, and is an attribute which is capable of modifying the importance of other social and cultural characteristics, especially those based upon membership in secret societies and ethnic affiliation. Illiteracy is still prevalent in Sierra Leone and a literacy campaign has been in progress to promote adult education. More schools are being built and maintained under subsidies from the central and local governments. Meanwhile, educated persons constitute an important minority, especially in the absence of free or compulsory education. Although complete statistics are lacking, it may be stated that about 90 per cent of Sierra Leoneans are illiterate, and that only about 10 per cent of children who are of elementary school age are actually in school.

A rough estimate suggests that there are between 375,000 and 400,000 children of school age in the territory of whom perhaps 10 per cent attend some sort of school. There is a very great discrepancy between the Colony and the Protectorate in this respect, for while it is estimated that in the Colony with its 130,000 inhabitants, there are school places for between 60 per cent and 70 per cent of the children (some would place it between 50 per cent and 60 per cent), in the Protectorate with a population of 1,875,000 the figure is put at as low as 5 per cent.³⁰

³⁰ John S. Fulton, et al., Report of the Sierra Leone Education Commission (Freetown: Government Printer, 1954), 5.

Such an extremely high rate of illiteracy is due in part to the inadequacy of schools and their relative expense. There are neither sufficient schools nor are they equally accessible to all children throughout the country; many parents who would send their children to school, especially in communities where tribal culture no longer presents obstacles, find themselves unable to meet the costs.

The Sierra Leone population can be grouped into the following educational categories for purposes of analysis: those who have had no schooling; those who have had only elementary school training; those who entered secondary school, but dropped out before completing the required course of study; and those who have completed secondary school and, perhaps, entered college.

There is a high correlation between education and occupation. A job in the government offering a decent salary and tenure requires the completion of secondary school work; a position in the "senior service" requires a college degree or equivalent experience; a person with no formal schooling, on the other hand, can be given only a menial job, except where he possesses a specific skill or engages in private business. In short, as elsewhere, the more years of schooling received by an individual, the more likely he is to be in an occupation accorded high prestige; his superior income, in turn, enables him to acquire and to maintain such material possessions and symbols as will point this out to the public.

Occupations may be grouped into those that are traditional and those that are western, that is, those requiring formal schooling or special skills. In the first category are to be found chieftaincy, native administration and law, farming, and tribal skills, such as weaving, woodcutting, hunting and

fishing, metalcrafts, food processing, entertainment, and native medicine. The western category comprises public administration, medicine, law, engineering and mechanics, social welfare, commerce, communications and transportation, and clerical work.

Current Economic Changes

In spite of the proximity of Bo to forests and to traditional institutions, urbanization and a money economy have gradually taken root. With the very recent stimulus from an expanded trade in diamonds, the population and the cost of living have grown at an increasing pace. On the other hand, the farms which were once depended upon to provide sustenance are being neglected or being deserted for the lucrative and more immediate economic returns that the diamonds along the banks of the Sewa river seem to promise. It is now realized that one does not have to be attached to the land as a farmer or farmer's dependent in order to secure the basic necessities of life. With money one can acquire these, as well as such luxuries as whiskey, gramophones, radios, and automobiles. The resulting independence and freedom from strict tribal sanctions have permitted the emergence of phenomena which have no place in a well-integrated tribal culture complex -- bars, restaurants, commercial hotels, burglary, and prostitution.

Now that a branch of the Diamond Corporation, buying rough and uncut stones, has been established in Bo to serve the new group of independent, native miners, Bo has become a boom town of inflationary prices and a very lucrative black-market for diamonds. Taxis have been ushered in, as have more carpenters, bricklayers, saloon operators, and pick-pockets. The legitimate bankers, in turn, have shown their awareness of the increased circulation of currency in Bo and its environs. The Bank of West Africa,

which was established in Bo in 1949 and, until recently, carried the name of Bank of British West Africa, enlarged its building and expanded its operations in 1957, while a rival bank, Barclays, opened a new branch along Kissy Town Road.

The legal machinery and the traditional methods of social control have not escaped the effects of urbanization. The paramount chief no longer reigns supreme in his domain, and it may well be asked whether Bo is under his jurisdiction or that of the Bo Town Council or that of the Chief Commissioner. Bo is indeed in flux, with emerging new problems of unemployment, juvenile delinquency, housing shortage, sanitation, and public safety. Not many citizens of Bo are aware of this, and those who are have remained complacent in their apathy.

Since the completion of this investigation, a new paramount chief for Bo has been elected to succeed Chief Hotagua who died in the fall of 1958. P. C. Bainba III, the present chief, has had varied and valuable experiences; he has travelled widely in Liberia and the United States, and he should be capable of affording Bo the sound leadership needed at a time when so many heads and hands are assuming responsibility for political affairs. After all, Bo has remained politically unique; although a municipality was established in 1955, there resulted no adequate co-ordination of powers, nor any significant assumption of the jurisdiction of prior administrative agencies. Bo still has, in addition to a mayor and city councillors, a paramount chief and his native administration, the administration of the District Commissioner, and the administrations of both the Provincial Commissioner and the Secretary for Protectorate Affairs.¹¹ This political complexity did not exist when the

¹¹See W. J. Brooke, Native Court System (Freetown: Government Printer, 1953), and Sierra Leone Government, Annual Report on the Administration of the Provinces, 1946 to 1957.

community got its name, but one meaning of "Bo" seems significant in the current situation: Biwo, "your own to do in as you please!"³²

³²Another meaning is "potter's clay," cited by Lewis, op. cit., 62.

CHAPTER III

HEALTH FACILITIES IN BO

Introduction

In Bo, as in the majority of communities throughout the country, the provision of professional health services is chiefly the responsibility of the central government. This responsibility has been extended not only to the point of establishing health centers in strategic locations throughout Sierra Leone, but to the point of subsidizing private hospitals as well.¹ The inadequacy of funds and of personnel, however, has served as a check upon the extent to which health services are made available, with the result that needy communities still remain to be served. In some communities, this inadequacy has even imposed a limitation upon the range of services as well as upon the number and types of citizens who can be served. Added to this is the impact of cultural and social differentials in determining who derives the benefit of available health services. Together, these factors have supported the retention of health facilities which may be grouped into two categories: the traditional and the western.

The burden of governmental responsibility for health services in Sierra Leone has been especially great. The programs and services promoted and sponsored by the government are of foreign origin, since the techniques and personnel are derivations of western culture. Even where traditional

¹Sierra Leone 1957, 68.

resources have been used, whether social or physical, these have been molded in such a manner as to satisfy the desire to import European institutions, at least those relating to health, into Sierra Leone. With such an aspiration as a guide, the task of providing health services has been undertaken with hardly any consideration for the possible adaptation of "imports" to facilitate acceptance or to prevent conflict with traditional or non-western health services and facilities. The selection and training of personnel, for example, provides an aspect in which the failure to consider the traditional may have retarded acceptance of western health services. Not only have Europeans and Sierra Leoneans lacking in adequate knowledge of indigenous culture assumed most of the responsibility of providing and maintaining these services, but obstacles to the success of health services have been allowed to persist. The perennial problem of kwashiorkor, an often fatal deficiency in children resulting from a diet abnormally high in carbohydrates and low in protein, might have been reduced if attention had been directed to providing sources of health education suitable in a situation with a high rate of illiteracy, and if there had been developed in each locality the necessary sources of animal protein.²

The determination of which health facilities and practices are traditional and which are western depends upon cultural identification and development. The concept of health within the traditional culture teaches that a supernatural force holds the key to ill-health or sound health, and that the state the individual finds himself in is often an indication of his status or

²See J. R. Rose, "Kwashiorkor in the South-Eastern Province of Sierra Leone," Sierra Leone Studies, II (December, 1956), 136. That this oversight exists elsewhere has been pointed out by observations of health engineering in other under-developed countries; cf. Bingham, op. cit., 89-91, and Halley, op. cit., 1070-72.

moral standing in the eyes of the supernatural. Showing reverence for or pleasing this force, then, is considered the most appropriate way of ascertaining that one will remain healthy or get his just reward. If ill-health ensues, in spite of compliance with prescribed patterns and rituals, this must be accepted as the will of the supernatural. In contrast is the rational western concept "rooted in a precise knowledge of cause and effect relationships and a critical attitude toward both practices and results."³ The contrast between traditional and western health facilities does not end with concept; it continues into the other institutional aspects of structure. The traditional makes no provision for an approved "place of business" or for the standardization of apparatus, nor does it require health practitioners to meet a minimum set of standards. The western, on the other hand, encourages the establishment of a center under the supervision of personnel who have completed a prescribed course of training and have been licensed to practise. The characteristics which distinguish traditional from western facilities may, therefore, be said to comprise differences in the training of personnel, in apparatus and equipment, and in methods of diagnosis and treatment.

Training of personnel is highly formal and specialized in western but informal in traditional society, with trial and error techniques undertaken at the expense of patients instead of the scientific experimentation characteristic of the west. Western personnel include those who have received formal training in medicine and public health, or training which is ancillary to such services. They hold such titles as doctor, pharmacist, nurse, midwife, and health inspector. The traditional personnel, in contrast, comprises persons whose "training" is based upon sacred personality, subjective confidence,

³Saunders, op. cit., 116.

and community ascription of status as a medicine-man. Recognition and continued consultation is based upon the proportion of successes to failures in treatment, as well as upon the intensity of superstition and fatalism within the clientele. Traditional personnel bear the titles of hale-moi and mori-moi. The two terms are related, since both the medicine-man (hale-moi), and the prayer-man (mori-man), may use their "talents" either to prevent or to inflict punishment taking the form of sickness or death, but Little has furnished a distinction between the two which is worth noting:

Broadly speaking, a medicine man is simply a professional worker of medicine, and the term is elastic enough to include the 'mori-man.' As the latter term denotes, however, the 'mori-man' is a person professing Islam who purports to work by means of various Islamic paraphernalia, such as inscriptions in Arabic writing, beads, verses from the Qur'an, etc. He also employs the aid of numerous charms and talismans associated with the occult side of Islam. Largely through his professed connection with that religion, the mori-man enjoys greater prestige than other ('medical') practitioners in many communities.⁴

Apparatus in western society enables service to be dispensed in "sanitized" buildings where personnel use standardized equipment, drugs, and techniques, except in cases of emergency or home visits; traditional methods, on the other hand, give no deliberate consideration to the value of making buildings, drugs, and equipment aseptic or antiseptic. Under western facilities, pills, tablets, and liquid drugs are provided in standardized packages through the commercial drug store; in contrast, the traditional society has recognized and developed the use of a variety of roots and herbs, some of which are rubbed externally or taken internally; these include "bitter leaf," "bush needle," "igbo leaf," "sour sour," "sass wood," "patmange," and "lemon grass." These may be found displayed on side-walk "drug stores" or at open stalls in the

⁴Op. cit., 229.

market place.⁵

Traditional Practices

Traditional practices relating to health can be better understood by taking into consideration the relationship believed to exist between phenomena which are natural or physical and those which are supernatural. Under conditions of uncertainty and hardship, a way of life has been developed whereby individuals and groups can accept their inability or limitations in attempts to curb or manipulate the dangers characteristic of the physical environment. This conditioning has, in turn, encouraged the development of and reliance upon an "intercessionary institution" with the primary objective of handling the unpredictable, mysterious, and painful manifestations of the supernatural.⁶ The charter under which this intercessionary institution operates, as well as its other components,⁷ are part of the culture of the society. Specifically, supernatural manipulation for promoting both individual and group welfare is carried out under a set of norms which recognizes a varying distribution and use of power; hence, a varying degree of influence and efficacy within the supernatural structure itself. Three levels of divinity have been recognized: the Supreme Being; the Earth, "wife" of the Supreme Being; and Spirits who link the natural with the supernatural.⁸ The latter comprise ancestral dead,

⁵See E. P. Nichol, "Notes on Some African Vegetables in Sierra Leone," *Sierra Leone Studies*, II (June, 1956), 66-70.

⁶*Cf.* Paul Radin, *Primitive Religion* (New York: Viking Press, 1937); Hutton Webster, *Magic: A Sociological Study* (Stanford: Stanford University Press, 1948); and J. Milton Yinger, *Religion, Society and the Individual* (New York: Macmillan Company, 1957).

⁷See J. O. Hertzler, *Society in Action* (New York: The Dryden Press, 1954), 196-99.

⁸See Little, *op. cit.*, 216-28.

secret society spirits, and various genii which serve as media for communicating with the Supreme Being. It is through these media, by using the "proper" and specific rituals, that traditional practices relating to health become meaningful and purposive.

Sickness is seen as a constant threat to physical well-being within the traditional social organization and is further recognized as a sign associated with the inevitability of death. One is taught to accept this inevitability of sickness and of death, but there is at the same time the inherent desire to stay alive, as well as the expectation that the effort will be made to prevent or combat sickness and forestall death. Hence, not only does the culture maintain mechanisms, such as the personnel and apparatus existing for the proper manipulation of the various spirits, whereby the proper techniques and practices can be disseminated, but the process of socialization itself -- including the various rites of passage -- serves the same purpose of teaching members what to do.

The whole life cycle, from conception to death, is characterized by rituals and practices designed to promote sound health or to tackle sickness. During pregnancy, for example, the expectant mother must live away from her husband, since sexual intimacy during this period might bring ill-health to any of the parties concerned. The spirits must be courted and appeased to grant their added protection, and strict compliance with the various rituals must be observed. Furthermore, the individual character and the assortment of spirits afford freedom as to the choice of medium, apparatus, and personnel. Experience is left to teach where confidence should be put, and to what extent. The result is that whereas one medicine-man or secret society may be successful in curing tuberculosis, another may have the reputation of protecting one from witchcraft.

As to more specific practices relating to health under traditional provisions, mention can be made of the extensive use of charms ranging from strings tied around a baby's neck, wrist, waist, or ankle, to elaborate "packages" hung on doors or put under pillows or mattresses. Occasionally, these charms may be "rejuvenated" by consulting a medicine-man or the appropriate secret society. Another practice involves the protection of one's faeces, hair and blood, for it is believed that one can be injured, afflicted with sickness, or bewitched if these personal elements fall into "wrong hands." Specifically, then, one avoids being afflicted with the ailment of another by refusing to cooperate in blood transfusions, while one also discards hair or faeces carefully so that these can never be recovered or at least cannot be positively identified as belonging to a particular individual.

Apart from the preventive and curative measures for which the mori-man and other traditional practitioners are consulted, there are local herbs whose medicinal value has undergone the test of generations and has now become general knowledge; there are also herbs or compounds known only to certain practitioners or families, and these are kept in strict secrecy and taught to few proteges within each succeeding generation.⁹ As for the common herbs, they may be boiled or pounded and then taken internally or used externally. It is difficult to evaluate the usefulness of these "drugs" as treatments for such diseases as mental illness, venereal disease, rheumatism, smallpox, epilepsy; suffice it to say that such diagnoses are made and patients have been known to report satisfaction with the techniques and drugs prescribed.

⁹The more common treatments include sprinkling salt over a cut to stop bleeding; using "bitter leaf" to scrub craw-craw and other skin infections; applying hot bread-poltice to boils; applying a hot stone to a foot which has been injured by glass or nail; serving "tea" made from "teabush" or "lemon grass" in case of fever; drinking "agbo" or purge about once every two weeks to "clean out the bowel"; applying a leaf paste to heal wounds or to relieve body aches and pains.

Western Facilities

Western facilities for health are those whose identification and development have grown out of research and practice of medicine and sanitation by European and European-trained scientists, medical practitioners and health engineers. Such facilities are usually found in an ordered system identifiable as a hospital, health center, or clinic, with a set of "standard operating procedures." In the absence of these overt institutional structures, however, western health facilities may be found in the form of drugs distributed by commercial firms and the accompanying knowledge of the availability and use of these drugs.

Any consideration of western facilities, especially in situations where inadequate finances and personnel prevent the establishment of hospitals in most of the needy communities, cannot ignore the usefulness or relationship of commercial facilities -- that is, agencies whose primary concern is not the promotion of health per se, but the stocking and distribution of medical and sanitation supplies. All stores in Bo, including some of the very petty traders, sell one product or another designed specifically for medicinal or health use. Such products as toilet soap, dentrifices, powdered milk, ointments, liniments, and a variety of tablets to combat rheumatism, malaria, constipation, or gonorrhoea can be bought rather easily. Some of the larger stores even stock insect sprays and water filters. The most specialized in medical and health supplies, however, is the West African Drug Company, a chain store which operates in most of the large cities throughout West Africa. The branch in Bo is managed by a salesman who has an adequate knowledge of pharmaceuticals but undertakes no professional diagnosis of "patients" who come to his store; his principal obligation is to sell to people, upon their request and according to their specifications, whatever drug or medicinal

product he may have in stock. The filling of prescriptions from physicians is hardly ever necessary, since the physicians would normally do their own compounding if they operate in private establishments or the government dispensary would do the compounding for drugs prescribed by government physicians.

The more satisfactory western facilities which are characterized by professional training and regulation may be put into two categories: facilities which are owned and operated by private individuals as private enterprises, and facilities which are owned and operated by the government for the general public. The personnel administering the latter are all salaried, and the facilities themselves are nonprofit, in contrast to those operated as private facilities. It is necessary to point out, of course, that government personnel are not prohibited from maintaining "private practice" which does not make use of government facilities.

The question of "private practice" by public officials is somewhat confusing, especially when the practice takes place on the government premises, and with the use of government equipment and drugs. Although the hospital or health center may be equally accessible to all classes of people, except for preferential provisions made for certain categories of civil servants, not all persons comply equally with the standard operating procedures. A general patient is expected to register, then await his turn for diagnosis, and then await his turn again at having his prescription filled at the adjacent dispensary. Some patients were allowed to by-pass some or all of these preliminaries, leaving one to wonder whether in so doing they were enjoying the expensive privileges of private patients or merely the universal rewards of nepotism. Whichever the case may be, the observations of this investigator showed that all levels of medical personnel were involved. Interviews further

revealed that factors promoting this type of "violation" included overcrowding, lack of provision for privacy and consequent embarrassment, distrust of druggists who were suspected of not always following the exact specifications of prescriptions, and feelings of importance associated with the "right" to preferential service.

Nevertheless, there are facilities in Bo which are strictly private. These include two maternity centers operated by professionally-trained midwives and two dispensaries operated by qualified and registered druggists. One of the druggists is now in semi-retirement, but the Dorprince Pharmacy remains quite busy, in spite of its inferiority to the government dispensary. The clientele of this pharmacy is comprised mostly of women and children suffering from worm infestation, malaria, cough, diarrhea, and deficiency diseases.

As for the maternity centers, their main concern is with providing maternity care, especially supervision at the time of delivery. On the basis of interviews with the midwives, as well as examination of the records of the Registrar of Births and Deaths, the clientele was observed to comprise mainly the relatively wealthy people of Bo and the surrounding communities. The proportion of total deliveries made by these centers is still a small one (See Table 6).

Public health and sanitation programs are formulated and executed by the Ministry of Health and its principal agency, the Department of Medical and Health Services. The main activities of this agency were confined to the Freetown area until about fifteen years ago. Today a very expansive program serves all of Sierra Leone. Each year since the beginning of this expanded service, the department has been fortunate in receiving generous financial grants from the Colonial Development and Welfare Fund (supported by

TABLE 6

DELIVERIES IN BO, BY MATERNITY AGENCIES AND STOCK OF ORIGIN OF PARENT, 1955-57

Parental stock	Government maternity center			Private maternity center			At home			Total number of deliveries		
	1955	1956	1957	1955	1956	1957	1955	1956	1957	1955	1956	1957
Creole	11	22	18	-	-	2	3	6	16	14	28	36
Hausa	2	9	14	-	-	-	4	1	4	6	10	18
Kono and Kissi	4	8	7	-	-	2	3	1	1	7	9	10
Lebanese and Syrian	11	30	20	-	-	5	3	2	4	14	32	29
Lisba and Loko	4	12	30	-	-	-	1	2	4	5	14	34
Mandingo, Fula, and Susu	22	59	100	2	2	18	11	28	13	35	89	131
Mende and Sherbro	61	124	217	1	3	5	28	50	34	90	177	256
Temne	14	32	52	-	1	-	4	5	7	18	38	59
Total	129	296	458	3	6	32	57	95	83	189	397	573

Source: Register of Births in Bo, 1955-1957.

tax-payers in the United Kingdom), and substantial allocations in the annual budgets of the Sierra Leone government. These funds have been used to build more hospitals and health centers, to recruit more and better qualified personnel — through hiring, local training, or through scholarships in European universities — and to improve the quality of existing facilities.

In Bo, the most important and basic health facility is the hospital with its several wards, clinics, and ancillary departments. It does not serve the Bo community alone, however. The hospital, the only public hospital outside of Freetown that is adequately equipped and staffed, serves as a referral station for several of the smaller hospitals (each staffed by only one physician) located in the various district headquarters. In all, there are twelve such hospitals, having an average of 36 beds, compared to the Bo Hospital with 110 beds, and the Connaught Hospital in Freetown with about 200 beds.¹⁰ The central location of Bo provides an added advantage in bringing superior health services to communities in need but too far away from Freetown to benefit from the facilities available there. Besides, only the Bo hospital, with the exception of the one in Freetown and hospitals privately operated by mining companies, has a full time surgeon and surgery, an X-ray unit, a pathological laboratory, and a dental clinic. Nevertheless, the Bo hospital is handicapped like the others by the chronic problem of inadequate staff which is and has been characteristic of the Sierra Leone health and sanitation program.¹¹ Observation further revealed that physicians and junior personnel

¹⁰ See Sierra Leone 1957, 73.

¹¹ See Report on the Medical and Health Service 1956, 1; and 1955 Report on the Administration of the Provinces, 26. Also compare statistics for Africa South of the Sahara, with an average of one bed per 500 people, against the average for Sierra Leone of one bed per 2,000. World Health, XII (November-December, 1959), 12-13.

were equally over-worked, and that staff shortage and some incompetence have left certain important areas of health unattended, or hindered by inefficient execution.¹²

Health services are rendered through the various out-patient clinics and the seven wards of the hospital. The staff which operates the hospital comprises a senior medical officer, a surgeon, two physicians, a dental surgeon, a senior nursing sister and two other nursing sisters, a radiographer, a chief dispenser and three assistants, and eight senior or staff nurses. The work of these highly qualified persons is assisted by a long list of less qualified, semi-skilled, and unskilled workers: nurses (male and female), midwives, clerks, porters and orderlies, dieticians and stewards, tailors and launderers, chauffeurs, laboratory assistants, and guards.

The out-patient clinic is open for service on all days except Sundays when the skeleton emergency staff, otherwise maintained at night, functions in its place. On duty at the clinic are usually two physicians or medical officers, assisted by one or two nursing sisters, staff nurses, or male nurses. A patient appearing for consultation is required to register by paying a fee of one shilling (fourteen cents). Then he remains in the waiting room until he is called into the consultation room to be examined by the official on duty — physician, dispenser, or nurse. The patient is then given a prescription which he takes to the adjacent dispensary, except where it is found

¹² In spite of the optimism about the increase in physical facilities, expressed in the Annual Medical Report for 1957 observation revealed the need for finding solutions to the problems of shortage of drugs and supplies at health centers as well as the poverty of many patients who find it impossible to follow sound instructions which involve expenses. One dispenser, for instance, complained shortage of supplies on poor communication and transportation; some parents reported that they could not afford the cost of powdered milk or vitamins prescribed to relieve their children of deficiency diseases; and some patients, when referred to the Bo hospital by a visiting physician, found it inconvenient to go either because of the expense or their reluctance to go away from home.

necessary to have him admitted into a ward. Special referrals are at times made to the senior medical officer who has his own special clinic to serve senior civil servants. If a patient is observed to require more detailed diagnosis or tests, he is directed to the appropriate department of the hospital -- the radiographer, pathological laboratory, surgery, or dental clinic. Patients observed as having tuberculosis or other contagious diseases are given immediate confinement whenever this is possible. There is a small-pox camp on the outskirts of Bo, maintained by the hospital, and there is a special ward for tuberculosis patients into which admissions are made when bed vacancies permit or when there is no objection from the patient. It happens at times that some patients who ought to be confined are not, either because hospital facilities are lacking or inadequate, or because the patient or his relatives prefer to take the case somewhere else.¹³

The period from 1945 through 1957 witnessed an increased use of the hospital (See Tables 7 and 8). That the Bo hospital was kept so busy might have been partly the result of population growth and an improved communication system. With more money in circulation, thanks to increased activity in diamond mining, people found it convenient and possible to come from their distant communities in order to avail themselves of the superior medical services at Bo. Even those who were not convinced of this superiority found it convenient to give the hospital a try in cases of emergency or for cases where traditional facilities had failed in providing relief.

¹³One patient whose X-ray indicated tuberculosis refused to be admitted because he had only requested leave from his employer, 36 miles away, to attend the clinic and "not to be put to bed." In another case, a mother withdrew her child from the ward because a mori-man had told her that the "witch can only be pulled out of the child in the village." The child, unfortunately, died a few hours after reaching the village.

TABLE 7
 PATIENTS RECEIVED IN BO HOSPITAL, 1945-57

Year	In-patients	Out-patients		
		New Cases	Subsequent attendances	Total
1945	908	8,689	65,674	74,363
1946	1,269	11,019	38,671	49,690
1947	1,160	12,451	54,819	67,270
1948	1,400	15,974	19,478	35,452
1949	1,595	16,819	59,911	76,730
1950	1,461	15,415	70,569	85,984
1951	1,388	15,411	81,622	97,033
1952	1,805	17,755	91,127	108,882
1953	2,026	17,230	95,705	112,935
1954	2,263	19,059	61,785	80,844
1955	2,277	21,055	81,249	102,304
1956	2,545	28,196	69,017	97,213
1957	3,099	30,074	n.a.	n.a.

Sources: Report on the Medical and Health Services, 1945-1956,
 and records of Bo Hospital.

TABLE 8

CASES OF GENERAL DISEASES TREATED AT BO HOSPITAL DURING 1957

Disease	Number of Cases
Malaria	7,014
Ulcers	1,959
Lacerations and open wounds	1,833
Gonococcal infections	1,197
Acute upper respiratory infections	1,154
Diseases of genito-urinary system	663
Bronchitis	421
Yaws	245
Accident (machinery)	333
Total	<hr/> 14,819

Source: Records of Bo Hospital.

The maternity clinic is second only to the general clinic in popularity. Under the supervision of a nursing sister and her assistants, this clinic is open on Wednesdays and Thursdays and provides specialized care relating to pre-natal, post-natal, and infant welfare. Apart from the routine of taking weights, prescribing diets, and arranging for confinement at the time of delivery or for cases demanding in-patient care, the maternity clinic also doles out powdered milk supplied by UNICEF. Supplementing the work of the clinic is a maternity wing containing 10 beds as well as a cubicle for orphans and babies requiring special or prolonged care. This maternity center is one of the newer additions to the Bo hospital, but the volume of attendance has shown a gradual increase since it began operations in 1952 (See Table 9). Whether this increase in attendance is the result of an increasing acceptance

of the services it renders is debatable, in view of the increase in population and the significant number of births occurring at home, but then this latter phenomenon could be due to lack of space for all who might need the facilities. Unfortunately, statistics are not available to aid in an analysis of trends and factors influencing attendance.

TABLE 9
ATTENDANCE AT BO MATERNITY AND INFANT WELFARE CLINICS, 1952-57

Year	Pre-natal Clinic		Infant Welfare Clinic	
	New cases	Subsequent attendance	New cases	Subsequent attendances
1952	559	1,198	456	1,266
1953	669	2,842	513	2,050
1954	831	2,563	778	3,530
1955	942	4,019	801	3,958
1956	1,356	3,321	977	4,120
1957	1,825	5,755	1,514	4,268

Source: Report on the Medical and Health Services, 1954-1956,
and records of Bo Hospital.

The dental clinic is another of the specialized services provided by the Bo hospital. Supervised by a dentist and two assistants, this clinic has filled a need of long standing. Prior to its introduction, patients needing dental care had no recourse but to use native balms, or submit to the rugged pliers of a physician willing to act as an amateur dentist. A few who could afford to do so made special trips to Freetown or endured their discomforts until they had more important reasons for going to Freetown. Records of dental

service in Bo show that since the clinic was established in 1954 the great majority of patients have had extractions while only a small proportion have received benefit of fillings (See Table 10).

TABLE 10

ATTENDANCE AT BO DENTAL CLINIC, 1954-57

Year	Number of Attendances	Services Provided		
		Fillings	Extractions	Other
1954	1,541*	223	1,077	862
1955	2,176	246	1,148	782
1956	1,775	200	1,555	—
1957	3,226	236	1,788	1,202

*The number of services does not agree with the total, but these are the figures published in the report for 1954 (page 21). Since there is a similar discrepancy in the figures published for Freetown it is probable that some patients received service more than once without being registered as new patients upon subsequent visits. Source: Report on the Medical and Health Services, 1954-56, and records of the Bo Hospital.

The Bo hospital has a surgical operations department, known officially and locally as the "surgery." The surgery functions on Tuesdays and Thursdays only, except in cases of grave emergency. Other days are used to conduct diagnoses and prepare a schedule of operations, as well as to examine the progress of patients who have already undergone operations. Apart from patients referred to the surgery by the clinics of the Bo hospital, patients also come in from the smaller hospitals within a radius of 100 miles and as referrals from the several health centers and dispensaries which are visited periodically

by the Bo physicians. (Even the dentist closes his clinic once a month in order to take his services to other towns where they are needed).

An added facility of the Bo hospital is its training school. At this school, students in training receive practical experience in nursing and midwifery, in addition to classroom lectures by the medical officers and professional personnel of the hospital. Also trained under this program are illiterate women who return to their villages or towns to add competence and a western "style" in maternity care. An itinerant health sister or midwife supervises the activities of these village maternity aides and sees that they are supplied with drugs and other necessities. The midwives, in turn, are required to submit reports on their village activities to the supervisor in Bo.

Another unique feature of the Bo hospital is its ambulance service. Because communication by telephone is seldom possible -- the only public booth observed was at the telephone office building about 200 yards from the hospital -- requests for ambulance service do not necessarily receive prompt and speedy attention. Besides, since the ambulance also serves at times as a general delivery truck, there is not always the guarantee that immediate service will be granted as needed. To complicate matters further, drivers were observed to sulk when told to answer emergency calls, as well as to argue over which driver's turn it was to go on the call. Apart from instances when drivers, who are usually in charge, refused to assist in "loading" and unloading patients, relatives were observed attempting to board the ambulance and accompany patients to the hospital.

Today Bo is benefitting from the greater emphasis which environmental health is receiving. The recognition that the "physical, mental and social well-being of Africans can be improved only as a higher standard of physical

well-being is achieved,"¹⁴ is becoming more and more widespread, and Bo now boasts of two health agencies whose primary function is to control the influence of the environment upon man and to prevent diseases. The first of these agencies is the Special Health Authority, an advisory and regulatory agency comprising the District Commissioner, the Senior Medical Officer of Health, the Paramount Chief, and an appointed member. This agency is responsible for making plans and regulations which promote better community health in all its aspects. The members meet once each month to discuss problems on their agenda and to approve or condemn building plans, deteriorated housing, and other matters submitted for consideration, especially those relating to road construction, water supply, and epidemics. Since this agency is not itself an executive body, its suggestions and decisions are relayed to the various complementary and functional agencies.

The principal agency responsible for environmental health is the Health Department, whose chief executive is the Senior Medical Officer of Health. The personnel of this agency includes a Health Development Officer, a Health Superintendent, two Health Inspectors, thirty-four health inspectors-in-training, and several sanitary laborers. Routine activities of the staff include the disposal of refuse, the inspection of residences and the enforcement of sanitary codes, malaria control, and immunization of persons against epidemic diseases. According to the laws of Sierra Leone,¹⁵ the agency is empowered to carry out the following functions:

¹⁴P. C. G. Isaac, "Environmental Sanitation in Africa," Chronicle of the World Health Organization, X (August, 1956), 239. Cf. E. Staley, The Future of Underdeveloped Countries (New York: Harper & Brothers, 1954), 201-34.

¹⁵Laws of Sierra Leone, 1946, Vols. II & III, Chapter 191.

1. Enforce regulations governing the building, drainage and maintenance in a sanitary condition of houses and compounds.
2. Enforce regulations governing the repair or alteration of existing buildings, the demolition or alteration, the erection and position of new buildings.
3. Enforce regulations governing the prevention of overcrowding in houses or rooms, and the fixing of the maximum number of persons who may occupy any particular house or room.
4. Enforce regulations governing the construction, drainage, and maintenance of roads.
5. Enforce regulations governing the disposal of refuse, cesspits, ashpits, and latrines.
6. Enforce regulations governing the selection, protection, and maintenance of water supplies.
7. Control over markets, slaughterhouses, and the inspection and sale of food and the disposal of food which shall be condemned as being unsound.
8. Control over premises used for the preparation of food for sale, and premises used by the public for washing clothes.
9. Control over the keeping of cattle and other domestic animals as not to be a nuisance or injurious to the public health.
10. Regulations governing the prevention, treatment, and cure of epidemic and epizootic diseases, including malaria and other insect borne diseases.

The observations of this investigator have indicated that the health department has not followed its mandate in many instances, and that in certain areas it has been either ineffective or inefficient. Many dwellings that fail to meet the standards have not been demolished, and the overcrowded condition of many of these dwellings would indicate that there has been neglect or oversight. The same may be said of refuse disposal, water supply, and food inspection. It must be mentioned, on the other hand, that these shortcomings are not necessarily due to staff incompetence and inefficiency. In a situation such as that of Bo, where major environmental health programs have been initiated without benefit of popular request and cooperation, obstacles may be expected to arise from the political, economic, social, and physical peculiarities.

CHAPTER IV

CULTURAL AND SOCIAL FACTORS IN THE HEALTH OF BO

Hypothesis

The present analysis of the influence of cultural and social factors upon health and sanitation programs is centered around the general hypothesis that in a cross-cultural situation people will participate in or adopt changes in a degree proportionate to their need and understanding of the basic elements involved. If changes are originated by introduction of alien components, the reaction to such changes cannot be expected to be wholly favorable. If, on the other hand, these components are based upon or related to patterns that are already familiar, one can expect compliance.¹

In the development of programs relating to health and sanitation, as well as in the promotion of such programs, certain cultural and social factors need to be given cognizance. Age and sex, for example, may not be of the same importance universally, but they are sufficiently significant to influence the course of events relating to health in Sierra Leone. To stress academic proficiency in the training of an innovator without adequate instruction in the values attached to age and to sex by those who are expected to accept the innovations, might prove to be one way of making the whole operation ineffective.

¹See Spicer, *op. cit.* Cf. Margaret Mead (ed.), Cultural Patterns and Technical Change (New York: Columbia University Press, 1954); W. F. Ogburn, Social Change (New York: The Viking Press, 1950); Ralph Linton, The Study of Man (New York: D. Appleton-Century Co., 1936); and Hornell Hart, The Technique of Social Progress (New York: Henry Holt & Co., 1931).

The same principle applies for such attributes as ethnic origin and affiliation, primary and secondary group identifications, religious beliefs and degree of participation, educational attainment, and occupation. These attributes in varying combinations determine recognized statuses and, in turn, the deference is given in specific instances of interaction.

Varying group expectations and resources have created alternatives in practices and attitudes relating to health and sanitation. Although force of habit may promote compliance with traditional customs, the lack of or ignorance of facilities which offer alternative patterns may likewise bring about varying compliance. Such compliance may, in turn, vary in intensity and extensity toward traditional and non-traditional expectations relating to health and sanitation. In the determination of whether practices and attitudes concerning maternity care are favorable or not, for example, consideration should be given to the knowledge and availability of alternatives.

Three areas have been selected as significantly revealing in the analysis of health practices and attitudes; they are maternity care, diet and home sanitation, and care of the sick. Under maternity care, such indices as hospital or maternity deliveries as against parturitions occurring at home, or professional pre-natal and post-natal care as against care by relatives or untrained personnel, indicate the quality of practices and of attitudes. It is considered more western for respondents to have been born in a hospital, and a respondent whose child was born in a hospital is also seen as more western than one whose child was born at home. Maternity care, therefore, has been evaluated on the basis of such indices as place of birth of respondent and of respondent's offspring; number of offspring receiving the benefit of professional maternity care; and the use made of professional facilities

before, during, and after parturition.

Evaluation of attitudes and practices relating to diet and home sanitation has been based upon the use of dentrifice, whether toothpaste and brush, or "chewing stick," wood ash, or salt; the use of such protein sources as milk, eggs, and meat; the use of eating utensils; the source and quality of drinking water, whether well, tap or spring water, and whether boiled or filtered; and the method of rubbish disposal.

Indices relating to care of the sick include the specific agency consulted for the treatment of such diseases as tuberculosis, smallpox, gonorrhoea, dysentery, malaria, malnutrition, mental illness, and yaws; acceptance of hospital deaths as unavoidable or as due to staff incompetence; evaluation of professional care as good or bad, identification of specific areas needing improvement; priorities among treatment agencies indicating whether the hospital receives first consideration or is resorted to only when all hope is gone; services demanded of the dental clinic; and conditions under which a blood bank would be given support.

As has already been stated, social and cultural differentials used in the present analysis include age, sex, ethnic identification, religion, occupation, place of birth, and education. Each of these factors provides a basis of stratification which reveals the quality of compliance with health and sanitation programs, as well as the ultimate impact of such compliance upon the general situation. Within a tribal setting, for instance, where age begets respect, programs which receive the support of the old may generally receive the support of the young. In like manner, programs expected to be supported by females as a result of specific instructions from males will ordinarily receive the necessary compliance.

Population Samples

The population sample used in the study contained representatives of all the tribes and ethnic groups living in Sierra Leone. For purposes of analysis, some of these groups have been combined on the basis of their similarities in status, such similarities being due to language, education, occupation, and material possessions (See Table 11). The Hausa group, for instance, comprises West Africans who were born outside of Sierra Leone; all its members are engaged in private enterprise ranging from the sale of imported Aku cloth to the "stuffing" of sack and grass mattresses. Others in this group deal in "native" jewelry of gold and silver. The Lebanese group, on the other hand, includes Syrians and other Semites, all of whom own and operate shops; although cotton goods are the predominant wares in these shops, most of them may be classified as "general purpose." The Indian and Pakistani merchants are also included in this group, although their shops are branches of firms with headquarters in Freetown or London. No member of the Hausa or the Lebanese group was found to be in the employ of the government.

The Limba and Loko are combined, since members of both groups are equally engaged as unskilled laborers, live in the blighted areas of Bo, and possess external characteristics which are similar. Members of the Kono and Kissi tribes have likewise been combined because they share similarities which other tribal or ethnic groups have used in ascribing to them a lower status.

The Mandingo, Fula, and Susu are combined. One characteristic of these three tribes is that they are staunch Muslims, relatively wealthy, and self-employed. Some of them have had the benefit of western education and occupy civil service positions, but display greater pride in their knowledge of

the Qur'an. The independent members of these tribes may be found actively engaged as mori-men, cattle-dealers, and diamond-dealers. Along with their lucrative professions, a few have gone into real-estate from which they derive an enviable income. A significant number of the impressive buildings in Bo are owned by Mandingoes, Fulas, and Susus.

TABLE 11
COMPOSITION OF POPULATIONS OF STUDY BY STOCK OR
ETHNIC ORIGIN OF RESPONDENTS*

Stock	Populations of Study				
	Bo Households Sample	Bo Government School	Fourah Bay College	Harford School	Njala College
Totals	301	173	54	89	44
Creole	36	4	29	4	2
Hausa**	10	5	3	7	1
Kono and Kissi	19	17	1	3	-
Lebanese and Syrian	19	-	1	-	-
Limba and Loko	20	7	-	2	-
Mandingo, Fula, and Susu	47	21	3	6	2
Mende	91	81	7	29	30
Sherbro	16	12	5	19	6
Temne	43	26	5	19	3

*A respondent is a person who was interviewed either because he had been identified as the head of a household in the sample or because other household members had referred the investigator to him.

**Includes Africans from other countries.

The population distribution, based on the sample, shows that the most populous groups in Bo are the Mende, Mandingo, Temne, and Creole; the majority of pupils in the schools, on the other hand, belong to Creole, Mende, Sherbro, and Temne groups.

Enrollment in the four schools sampled provides an index for evaluating the relative status of the various tribal and ethnic groups, on the assumption that formal schooling to a large extent determines occupation, income, and level of living. There are proportionately large numbers of Creoles at Fourah Bay College and large numbers of Mendes in Bo School, Harford School, and Njala Training College. The location of these schools is certainly a determining factor, but differential contact with European schools and other institutions may explain why fewer children from other tribes are represented in the schools in question. The wealthy Mandingo, for example, can afford to educate more children than can the Mende, but the Mende will more willingly send a daughter to school than will the Mandingo.

The place of birth of respondents in all samples is presented in Table 12. A respondent as used in this report, refers to the person who was interviewed and furnished information for a household in the Bo sample.

TABLE 12
COMPOSITION OF POPULATION OF STUDY BY
PLACE OF BIRTH OF RESPONDENTS

Place of Birth	Populations of Study				
	Bo Households Sample	Bo Government School	Fourah Bay College	Harford School	Njala College
Total	301	173	54	89	44
Freetown	43	7	26	5	4
Bo	37	13	2	3	-
Colony village	15	3	3	3	-
Protectorate town	65	47	8	22	6
Protectorate village	111	93	8	44	32
Foreign country	30	1	6	2	2
Unknown	-	9	1	10	-

The head of each household was the person sought for the interview, but there were instances when another person was used because the household head could not be reached. Among those in the Bo sample, about one-third of the 301 respondents interviewed were born in a protectorate village, the type of community farthest removed from European contact and possessing the fewest western facilities. In contrast to the protectorate village is the city of Freetown with the highest number and greatest variety of facilities. These two extremes of westernized and tribal communities of origin are represented in the population of Bo, highly urbanized, but surrounded by and accessible to numerous tribal villages and towns; colony villages within a radius of twenty miles from Freetown; and protectorate towns having a population of from 500 upwards, serving as chiefdom capitals. About 10 per cent of the Bo respondents were born in foreign countries -- Nigeria, Ghana, Europe, and Palestine; about 20 per cent were born in protectorate towns having shops and a hospital or health center; about five per cent were born in colony villages lacking European facilities but within the metropolitan zone of Freetown. The 33 per cent of respondents who were born in protectorate villages would have had only minimum use of such facilities as schools and health centers, since these are generally lacking in such communities, but they could have migrated to more "developed" communities early in their childhood or youth. The fact of place of birth, then, although providing an indication of degree of familiarity and contact with the European facilities, must be qualified in terms of subsequent residence of respondents in other communities (See Table 13). Thus, whereas only 14 per cent of the respondents were born in the superior environment of Freetown, roughly 66 per cent had experienced a period of residence in Freetown.

TABLE 13
COMPOSITION OF BO HOUSEHOLDS SAMPLE BY PLACES OF RESIDENCE
WITHIN PREVIOUS TEN YEARS

Place of residence	Number reporting			
	10 years ago	5 years ago	3 years ago	1 year ago
Freetown	116	94	43	20
Bo	94	100	163	212
Colony village	1	4	1	1
Protectorate town	41	52	35	33
Protectorate village	34	40	53	32
Foreign country	13	10	6	3
Unknown	2	1	-	-

The composition of the population samples on the basis of sex, religion, and membership in secret societies appears in Table 14. The fact that more of the Bo respondents were male is due mainly to the reluctance of females to assume what is considered to be the role of head of household. Except where there was no adult male member as head of the household, females consistently referred the investigator to a male member, some of whom were not easily reached or contacted.

Islam is much more popular in Bo than it is among the school respondents, perhaps because the school personnel and policy are oriented toward a Christian philosophy of life. Pupils who have been raised as Muslims at home might allow themselves to be numbered with the dominant group of Christians at school. Hence they would attend or participate in religious ceremonies which might be

included in the over-all school program with no overt objection.

TABLE 14
COMPOSITION OF POPULATIONS OF STUDY BY SEX, RELIGION,
AND MEMBERSHIP IN SECRET SOCIETIES

Category	Populations of Study				
	Bo Households Sample	Bo Government School	Fourah Bay College	Harford School	Njala College
Total	301	173	54	89	44
<u>By sex</u>					
Male	220	173	16	—	44
Female	81	—	38	89	—
<u>By religion</u>					
Christian	139	103	49	76	25
Muslim	147	65	3	6	15
No response	15	5	2	7	3
<u>By membership in secret societies</u>					
Member	183	108	9	47	35
Non-member	92	29	20	10	5
No response	26	36	25	32	4

The majority of respondents in the Bo sample were in the 30-39 years age-group; about 81 per cent were between 20 and 49 years, with only 5 per cent being 60 years old and over (See Table 15). The existence of such a "young" group of household heads in Bo is in contrast to the situation in tribal households where older people are the recognized heads.² One possible explanation for this may be found in the fact that Bo is urban and does not encourage dependence upon land and "land-partitioners" exclusively. Since the city affords

²See Little, *op. cit.*, 96-101.

employment to men who are willing to work, the possibility to establish their own households exists for those who at home would have to remain dependent upon the old patriarch.

TABLE 15
COMPOSITION OF BO HOUSEHOLDS SAMPLE BY AGE OF RESPONDENTS

Age Category*	Number	Per cent
Under 20 years	11	3.6
20-29 years	60	19.9
30-39 years	112	37.2
40-49 years	73	24.3
50-59 years	27	9.0
60 years and over	15	5.0
Unknown	3	1.0
Total	301	100.0

*The writer, with the aid of respondents, was able to determine the age-group of those who could not be specific about their age. The unknown category comprises those for whom it was impossible to make a fair estimate.

With regard to years of schooling received by the respondents, it was observed that only about two per cent of the respondents had completed secondary school³ (See Table 16). Of the remainder, 37 per cent had had no formal schooling, 32 per cent had had less than nine years of schooling, and 23 per cent had entered secondary school but had withdrawn before completing all the grades.

³Sample does not include civil servants living in government housing projects, most of whom are secondary school graduates.

A few students, 15 in number, had been students of the Qur'an and were considered educated according to Muslim standards.

TABLE 16
COMPOSITION OF BO HOUSEHOLDS SAMPLE BY YEARS
OF SCHOOLING OF RESPONDENTS

Years of Schooling	Number	Per cent
None	113	37.5
1-4 years	10	3.3
5-8 years	86	28.6
9-12 years	69	22.9
Over 12 years	6	2.0
Qur'an student	15	5.0
Unknown	2	.7
Total	301	100.0

The composition of the Bo sample on the basis of occupation appears in Table 17. In the category of "business," which contains one-third of the total sample, activities range from the ownership of large shops to the operation of house-veranda "shops." In the latter the goods are set out daily and put back into the house at night. The complexity of this occupational category pertaining to internal trade may be seen from the fact that goods include, in addition to imported consumer goods, locally grown foodstuffs, fruits and vegetables.⁴ In the category of trades and crafts are included respondents

⁴See N. A. Cox-George, Report on African Participation in the Commerce of Sierra Leone (Freetown: Government Printer, 1958), 23-26.

who are self-employed, as well as skilled government workers; activities include carpentry, machinery, masonry, tailoring, and the operating of trains and trucks. Farming, on the other hand, is engaged in by only 3 per cent of the respondents.

TABLE 17

COMPOSITION OF BO HOUSEHOLDS SAMPLE BY OCCUPATION'S OF RESPONDENTS

Occupation	Number	Per cent
Business	91	30.2
Trades and crafts	72	23.9
Professional or clerical	57	18.9
Unskilled laborer	28	9.3
Housewife	31	10.3
Farming	10	3.3
Tribal administration	8	2.7
Student	2	0.7
Unemployed (indigent)	2	0.7
Total	301	100.0

The modal monthly income of the Bo respondents was found to be between \$28 and \$42. Only three per cent earned \$56 or more monthly (See Table 18).

TABLE 18

COMPOSITION OF 80 HOUSEHOLDS SAMPLE BY MONTHLY INCOME OF RESPONDENTS

Income Category in pounds sterling*	Number	Per cent
Under 5 pounds	8	2.7
5-9.0 pounds	43	14.3
10-14.99 pounds	84	27.9
15-19.99 pounds	32	10.6
20 pounds or more	50	16.6
Unknown	84	27.9
Total	301	100.0

*A pound sterling is equivalent to 2.80 dollars.

Examples of Variations in Health-Related Practices

The observations of the investigator, as well as the statistics, indicate the difference between the more intensive process of acculturation and that of culture change in which there is a significant transfer of cultural forms without a concomitant transfer of meanings.⁵ Among some of the respondents emulations are based upon the need for self-identification, while others merely adopt or acquire introductions for their known and immediate benefits only.⁶ Thus, a particular behavior pattern which would be quite "normal" for an acculturated Creole, would be considered by a tribal Mende to be merely a temporary and

⁵See Journal of Social Issues, XIV (No. 4, 1958).

⁶Cf. Charles C. Hughes, "The Patterning of Recent Cultural Change in a Siberian Eskimo Village," ibid., 30-34.

specific means to achieve a goal defined within the context of the tribal culture. A few examples are given below in support of the great variation observable in the acceptance, modification, and maintenance of practices and meanings relating to diet, health, and sanitation.

Among all the indigenous tribes, eggs are not considered a dietary item; usually eggs are left to be incubated and hatched into baby chicks which, when grown into chickens, may be consumed only on very special occasions -- for ceremonials, as gifts to important visitors, or as food when no other meat is available. Contact with western culture, however, has gradually modified the traditional point of view relating to poultry products. Some of the tribes found out long ago that foreigners would buy chickens and eggs. A poultry market on a substantial scale has since existed with tribal salesmen from the hinterland bringing fowl to sell to Europeans, Lebanese, and well-to-do Creole and Mandingo.

It should be pointed out that among the Mandingo, Susu, and Fula, the use of milk does not indicate enculturation since the use of milk is a part of the tribal process of socialization. The cattle breeders or "herdsmen" belong to these three tribes, and with cattle breeding and management as their principal pursuit these herdsmen and their families consume milk from their cows. This has remained no secret to the other tribes to whom they sell the beef they raise. The non-cattle raising tribes, on the other hand, have never attempted to enter this occupation and even when some of their members have undertaken to establish herds in their own communities they have always hired the traditional herdsmen to range them. As for using any milk from cows, the prevailing notion is that such milk causes ill-health; this notion receives added support from the observed emaciated condition of the herdsmen. It is, in fact, possible that tuberculosis, which is only now being checked by

the government on a substantial scale, is contracted from the consumption of the unpasteurized milk.

A greater use of cutlery by males runs true to form since it is customary -- even among the Creole -- to give males preferential treatment. Ordinarily, the meal is dished out in the kitchen and sent to a table, or to a mat on the floor, which has been especially "set" for the husband or head of the household. The best dishes and cutlery are offered to the husband, as well as to other male adults who may be members of the household; the "lady" of the house and other females, on the other hand, eat separately, in the kitchen or on the porch, while remaining "on wait" if the males should need any further service. When cutlery is used in eating, the male more often than the female will be found doing so.

With regard to drinking water, some of the respondents indicated that they preferred water from the stream, rather than from the pump, because stream water appeared cleaner and tasted better. To these respondents treatment with chemicals, which reduces the bacteria content, appeared to be a minor benefit for which they were unwilling to give up the "wholesome" taste and appearance of water to which they were accustomed. The fact remains that water from the stream in the "pure" state may be infectious, and this is supported, in part, by the high incidence of intestinal disorders observed by health authorities. Clothes are washed at the same source where drinking water is obtained. To further make the water unsanitary, the possibility exists of having human faeces contaminate the stream, since many dwellings still have no latrines.

The majority of Lebanese and Creole boil or filter their drinking water because their superior income makes it possible for them to own filters. Besides, their longer contact with health and sanitation programs, all of which

have originated in Freetown, has made them realize the desirability of purifying drinking water, especially under the relatively primitive conditions in Bo and the rest of the protectorate. The greater incidence of water purification among those with superior education and "white-collar" occupations may be explained by their closer association with European "bosses" whom they try to emulate; but this may also be due to the security derived from an income which makes the acquisition of a filter and the relatively high cost of boiling water insignificant threats to the general budget.

The use of the "dirty box" for the disposal of rubbish was observed to be rather widespread; yet many were also observed using the roadside or the back yards of houses. In fact, the investigator was directly involved in having the residents of a section of Bo dissuaded from using the side of the road as a refuse dump. The outcome of the effort was that the health department posted a sign, "Do Not Dump Rubbish, Violators Will Be Prosecuted!" with the assurance that people would comply. All that happened, however, was that a new heap was started on the other side of the road, and directly opposite the old heap marked by the sign. Most of the dirty boxes that have been erected are to be found in the central section of town where the more "civilized" citizens reside. In areas which lack a well-planned system of intersecting streets -- the strongholds of the tribal members of the protectorate -- it has not been possible for trucks to collect rubbish piled in heaps along the inaccessible streets. It would appear, then, that further planning and improvement will have to be undertaken if dumps accessible to trucks are to be provided to satisfy the need throughout Bo.

Another point deserving mention is the seeming indifference of the junior health personnel. They display a tendency toward laxity, as well as inefficiency in the execution of their duties -- perhaps because the majority

of them are not far removed from the influence of the traditional and hence cannot fully comprehend the necessity for a rigid health program. These junior staff members require constant supervision, but staff shortages lead to their promotion and they become supervisors over subordinates from whom they are but a mere notch removed educationally and culturally.

Only one-third of the total number of respondents thought that the health department served effectively to promote sound health in the community; another third considered the department useless, either because of personal grievance or actual ignorance of the existence and activities of the health department. That the Lebanese and Creole express more favorable opinions about the health department may be due to the fact that members of these groups are sometimes given preferential treatment, accidentally or deliberately; accidentally when efficient service results by virtue of the location of their homes in sections with more health facilities, such as refuse receptacles, and with paved streets which receive more frequent attention; and deliberately when, upon orders of their colleagues or friends in influential positions in the department, special or priority services are rendered to their neighborhoods. The majority of the tribal members, on the other hand, reside in what can be termed slum districts with few latrines and other sanitary facilities. With houses in clusters and with no private yards to protect against "trespassers," there is less of an incentive to show pride in keeping one's own yard clean, without the possibility of having it littered or trampled upon by people who are in the habit of using such "yards" as thoroughfares. It would seem normal reaction for respondents confronted with constant "squalor" to consider the health department a "do-nothing" department.

Similar variations can be observed in attitudes toward disease and treatment. Mental illness, for instance, is not considered to be a serious

problem in Sierra Leone; its incidence is not considered high, and people do not consider the afflicted as a menace to the community. One may even say that the government shares this point of view since most communities, including Freetown, have a few mentally-ill persons roaming the streets. Such patients may include the mentally retarded, persons afflicted with schizophrenia and paranoia, and persons afflicted with epilepsy. This state of affairs should not be taken to mean that nothing has been done, in spite of the fact that most tribal people consider such patients to be primarily the responsibility of their families. The government maintains a special institution for the mentally-ill, but because of staff inadequacy and non-cooperation of families involved, the work of this institution has not been particularly successful. The recovery of admitted patients has been rare, perhaps unavoidably so, but this fact has caused the institution to become known as a mere prison camp whose main prescription for treatment is brutality. The majority of the people, even while admitting that the institution has latent benefits, see a greater advantage in the personal attention and access to relatives available to patients who are put under the care of a mori-man. At least, the latter situation affords the opportunity for sporadic sanity and periodic release.

This investigator observed a mental patient whose affliction had become pronounced while serving as an official of the government in a town other than his own. It is alleged that the patient in question had had sexual relations with the wife of an influential mori-man, and that the latter had "worked medicine" which made the young man insane. Shortly after the alleged incident, the young man began a wandering spree, and would be found several miles from his home, bruised, hungry, and filthy. At times he would become extremely violent, and he was known to have given his own relatives, including his father, many a sound beating. Subsequently, it became necessary to keep

him chained at home, while he received treatment from a "reliable and competent" mori-man. His behavior during treatment continued to range from absolute quietude to extreme violence for several months. With no improvement resulting from the treatment prescribed by the mori-man, the parents were prevailed upon to seek treatment from the Bo Hospital. Unfortunately, the young man could not be helped. After a few weeks of observation and treatment, he was released by the hospital and returned to his government job. But, again, he resumed his violent behavior. The latest report is that the young man is now permanently settled in a secluded village and in chains.

In regard to malaria, the majority of respondents indicated the hospital as the best source of treatment. Malaria remains an endemic disease, but one to which immunity may be acquired from repeated attacks. Most people are able to overcome the serious consequences of the disease without having to rely upon a frequent or daily dosage of anti-malarials. But malaria remains a constant threat to sound health and vitality, and succeeds in afflicting the "immune" from time to time. People, nevertheless, tend to take the shortest possible course in order to treat it. Although going to the hospital would aid the detection and proper treatment for the more serious forms of malaria, the majority know that the usual prescription is quinine, paludrine, or some other anti-malarial which can be easily purchased from the local drug store. It does not seem necessary, then, to waste one's time standing in line at the hospital, only to be given a handful of tablets.

With regard to diarrhea and dysentery, some of the respondents indicated that these were diseases for which no cure was available; others stated that the only effective cure is that prescribed by owners of special native drugs which are kept secret for family use, and prescribed only as special favors to non-relatives.

Regardless of whether change is far-reaching or slight, rapid or slow, the fact remains that contacting cultures do have attributes which determine the degree of resistance or acceptance that ultimately characterizes the process of diffusion.

The Influence of Social Differentials

Education. -- The influence of education upon all aspects of health and sanitation has not been clearly consistent. For most of the services, however, it has been possible to observe the ameliorating effect of education and to find a positive correlation between education and intensity and consistency of practices and attitudes. In providing knowledge and a basis for fuller understanding, education breaks down some of the obstacles posed by traditional culture. Of further significance is the power of education to reduce the incidence of blind loyalty which results from a high degree of individual dependence upon the group. With the acquisition of the independence encouraged by formal education -- especially the material gains it affords -- the individual can risk being different by adopting practices not promoted in his socialization. This becomes essential not only to "consuming" participants, but to the important segment of "distributing" participants as well. Hence it is possible to observe that the quality and success of health programs have been influenced by the quality of education of the individual staff members, especially at the "grass roots" level where conscientiousness, courtesy, and efficiency are highly significant. The same is true for the clientele: the more education they have had, the more they understand that miracles cannot be expected of a health program that has developed out of a predominantly scientific view toward human well-being.

Educational facilities are not and have never been equally available

to all segments of the population. The spread of these facilities has been restrictive, both accidentally and deliberately. The fact that schools, with varying attainment levels, have been longer established in some communities and among certain ethnic groups than among others is largely accidental. While physical features and topography may have influenced the location of schools, the early missionaries who first undertook the responsibility would have been pleased with any community of "pagans" in any section of the "African jungle." It is only after the initial location of facilities that "deliberate" restrictions come into play. Hence, establishing a school does not necessarily end the operation of a "double standard" in a culture which permits boys but not girls to attend school. Similarly, if there are prerequisites to be met, such as the payment of entrance fees, benefits from the institution will remain unattainable to those lacking in means. If economic progress is to precede or to be realized simultaneously with educational progress, or vice versa, the establishment of facilities must indicate an awareness of this complementary relationship.

A generation ago western health facilities were very much restricted to Freetown. Even the towns and villages within a radius of twenty miles lacked the facilities they enjoy today, as did most of the communities in the protectorate. It would seem appropriate to conclude, therefore, that the respondents who indicated that their parents had used maternity facilities, for example, had reference to facilities in Freetown or to the comparatively inferior services then offered by the few government and missionary hospitals and health centers. Other parents who did not use these facilities probably were aware of their superiority to home services by relatives and friends, but found themselves living under circumstances that prevented them from using what they would have preferred.

The use of health facilities by respondents themselves gives a clearer indication of the influence of education. It must, however, be pointed out that in some instances the influence of education was checked by other factors. Some male respondents who were well educated could not prevail upon their wives or female relatives to change from traditional to western practices since they had themselves remained subject to traditional patterns of behavior, among which was the restriction of maternity affairs to women. (Educational accomplishment in such cases had been regarded essentially as a means to a "good job with good pay," with no obligation to change the traditional way of living.) Not only were men not expected to interfere in such affairs, but those who had been assigned to serve professionally in the communities, being predominantly males, found their influence restricted on account of their sex. The larger Freetown area used most of the educated women who became professional nurses, an insignificant number of whom were really protectorate or "native" girls, while the under-developed condition of communities in the protectorate made it difficult to recruit women willing to serve there. Fortunately, this obstacle to the influence of education in maternity care is gradually being removed by the training center for the nurses and midwives, but female doctors are now regarded as an essential segment of the staff structure necessary to carry out an effective health program.

The use of the hospital ward for the delivery of babies has not been particularly great, even among those with a high level of educational attainment. That this is so is due partly to the inadequacy of facilities, since there are not sufficient beds to accommodate all those who may require confinement. On the other hand, there is the intolerance of "educational superiority" which prompts some prospective parents to object to services rendered or dispensed by personnel considered to be educationally inferior.

Until the minimum standard of general education, apart from further acquisition of technical knowledge, rises to a level which will reduce the superior-inferior dichotomy in educational attainment, there will continue to be those who will find it difficult to expect competence at the hands of their "inferiors." Unfortunately, this problem may persist for several years; the demand for educated people, even at the secondary school level, far exceeds the supply, and health programs, like other development programs, will have to continue to recruit some personnel from among those who, lacking the necessary education, cannot grasp the significance of their "menial" tasks for the total health program. Meanwhile, some nurses will continue to overlook the importance of sterilization, for example, and see no harm in injecting several patients without changing or sterilizing needles between patients; other nurses and staff members will continue to demand closer supervision if they are to actually follow even the seemingly unimportant details in the standard operating procedures of health programs.

Occupation. — The "primary" character of traditional society and culture in Sierra Leone has promoted the evaluation of occupations as expected patterns of behavior essential to societal and cultural maintenance. Work, with its distribution of rudimentary and complex activities, becomes a part of living with and for the group. Occupation, thus viewed, is a calling, a pursuit, or a vocation, but not "employment" which denotes serving another merely to obtain one's own means for survival. When this primary viewpoint is replaced by the individualistic and secondary view which introduces a new concept of "employment" for the primary or sole benefit of the individual — and this is the notion that is gradually being introduced into Bo by the forces of urbanization — then the once-firm grip of society and culture upon the individual begins to loosen. The individual, in turn, becomes relatively

receptive to elements advantageous to himself per se, now that group welfare and identification have receded into comparative obscurity.

Occupational categories have undergone tremendous changes during the last generation. Except for residents in the Freetown area, the majority of people, other than the small number of those engaged in government, missionary and commercial activities, were attached to the land as units of family activity groups. There was always a segment of artisans — blacksmiths, goldsmiths, silversmiths, weavers, and other craftsmen — but even these engaged in farming whenever the demands of society and of the traditional culture undertook to remind them that individual pursuits or vocations must never take precedence over the more important activity of group farming.

In group farming, carried out on land appropriated each year by the patriarch of extended families, every member of the family performs duties which have been defined and handed down by tradition; the men do the clearing of the bush intended for cultivation as well as tasks demanding extreme physical exertion; the women and children, with no schools to interrupt the routine, do the minor jobs of weeding, collecting, and processing of materials for food and clothing; and the boys, when not helping the men, have the special tasks of trapping, fishing, and protecting the crops. A look at a typical calendar of activities centered around the important occupation of rice farming throughout the protectorate reveals these major operations:⁷

January — inspection of land-holdings, determination of ideal farm sites on the basis of natural soil fertility, initial clearing operations; harvesting, processing, and marketing of oil palm, ginger, yam and other subsidiary crops; secret society initiations in progress.

February — bush clearing and harvesting, processing and marketing of crops continue; secret society initiations.

⁷E. A. Waldock, et al., Soil Conservation and Land Use in Sierra Leone (Freetown: Government Printer, 1951), 48-50.

March -- completion of bush clearing and commencement of burning; processing and marketing of produce continue; secret society initiations.

April -- collection of fire-wood from burnt farm site; planting of ginger, groundnut, sweet potato, and yam; processing and marketing of produce continue; secret society initiations.

May -- planting of rice, guinea corn, beniseed, ginger, and cassava; harvesting previous year's cassava crop; processing and marketing of produce continue; secret society initiations end.

June -- general planning; staking of yam vines.

July -- general weeding of crops; cracking of palm kernel.

August -- weeding and nut-cracking continue; harvesting of groundnut.

September -- re-ridging of yam plots and continuation of nut cracking.

October -- harvesting of rice crop.

November -- opening of season for secret society initiations; completion of rice harvesting; harvesting of cassava and sweet potato; building construction and repairs.

December -- visits to secret society "schools" in the bush, harvesting of guinea corn, beniseed, groundnut, yam, cassava, and ginger; processing and marketing of produce; building construction and repairs continue.

Only a small proportion of the Bo community participate in the occupational pattern described above; the majority who do so are now engaged in it only on a part-time basis, since the activity itself no longer carries the year-round determinism of individual and group activities as hitherto. In place of farming and its sub-functions there have arisen a variety of wage and salary positions which are characterized by secondary relationships between employer and employee.

Occupation and education have operated in a complementary manner to influence maternity and other health practices. Since the majority of the new jobs have required varying levels of educational attainment, whether concerned with operations of the government, missionary institutions, or commercial firms, persons have occupied the positions which, in the majority

of cases, were commensurate with their levels of schooling. Hence, a laborer in most cases will be a person with little schooling, if any, whereas an executive or administrator or supervisor -- except within the structure of the native administration of chiefs, tribal authorities, and lesser functionaries -- will be one with many years of schooling, if he is not a secondary school or college graduate. With this stratification of occupations, based upon education, there has emerged a similar stratification of income, except that persons engaged in business or commerce, depending upon the scarcity of the commodities or services in which they deal, can derive a much higher income than is in keeping with the scale ordinarily derived from the interplay of education and occupation. Examples may be found among those privately engaged in the diamond trade, in transportation, in building construction, in real estate, and in bar-room operation. A significant number of persons engaged in such activities from the Lebanese, Mandingo, Creole, and Mende groups can be seen living at a high material level which is in contrast with their low level of educational attainment. Such persons need not be limited in their use of health facilities on account of their ethnic and educational "inferiority," since they could, if they wished, pay for "preferential" consideration.

The relatively greater use of maternity facilities by families in "superior" occupations may be due to their higher incomes and their ability to meet whatever extra charges are involved in the use of these facilities. On the other hand, this greater use may be the result of their achieved educational status as well as their ascribed occupational prestige, as determined both by the values of the larger community and those of the specialized group responsible for the allocation of such services. A laborer may be refused treatment or access to services merely because of failure to pay a few cents, whereas a person with a better job and a higher prestige may get services costing much

more without being asked to pay even a cent.

Stock and tribal origin. — Since "tribal" usually refers to the indigenous tribes, the term "stock" has been adopted to furnish a more inclusive category. All tribes of the protectorate today share cultural patterns that are similar, especially with regard to basic customs relating to birth, marriage, and death. It may further be stated that the similarity in culture extends even to those patterns dealing with economic, political, educational, and family needs. Certain forces have, over a period of time, brought about this similarity; the stronger tribes of Mende and Temne, through their numerical superiority, have dominated the lesser tribes by intermingling and by leaving imprints of their culture upon them; Moslem influence, on the other hand, has made itself felt in the numerous communities where "missionaries" have settled; and, finally, European contacts — through the slave trade and through subsequent missionary activities — have promoted similar changes or adaptations. The observation made by Gorvie has become more pertinent:

Due to the promiscuous life of the peoples of the Protectorate social conditions are similar and the culture of one group approximated to that of another, but by a tacit consensus of opinion tribal society seems to be undergoing a sifting process to determine just the kind of life that is best suited to every community. With slight variations due to circumstances of environment, tribal life and customs as found in the Protectorate are the same everywhere.⁸

A more recent observation supports this view on cultural similarity:

Although falling linguistically into two distinct groups, the peoples of Sierra Leone Protectorate have today many cultural features in common. Factors which have led to this uniformity include long association with Mohammedan Fula and Mandinka, who, while possessing no corporate territorial rights, have settled throughout the Protectorate; the dominating influence of the larger tribes, especially the Mende and Temne, on their smaller neighbours; and, more recently, contact with Europeans.⁹

⁸Op. cit., 13.

⁹M. McCulloch, *Peoples of the Sierra Leone Protectorate* (London: International African Institute, 1950), 1. Cf. Barton, op. cit., 128-29.

Nevertheless, certain differences may still be observed, not only between the two principal ethnic divisions, Creole, on the one hand, and all the protectorate tribes taken together, on the other, but among the individual tribes themselves.

Several factors are responsible for these differences. The persistence of what could be termed cultural "alternatives" or "specialties" may be explained on the basis of variations in environment and in degree of European contact. In areas where natural resources and a favorable system of communication and transportation have improved the level of living, "useful" material and cultural introductions have been encouraged and adopted. Soil fertility has meant greater crop yields among some tribes, while other tribes have been found to maintain a subsistence level of living. The ability to engage in internal trade or in overseas commerce has meant improved transportation facilities for others, accompanied by the ability to support such foreign institutions as schools, hospitals, and department stores or firms. There has, however, been one exception to this "normal" course of events. In Konoland, there are to be found vast deposits of diamonds. These were discovered about three decades ago and mining operations have continued at a very profitable pace since. But the Kono, through their present institutions and level of living, have as yet to indicate that they have derived any benefit from the "gift of nature." Most observers agree that the tribe has remained the most backward, and the poorest in material possessions, and that it has the least developed communities. Even the government has come to realize this discrepancy, although only after migration into the area by other tribes wanting to exploit the recently opened diamond fields showed dissatisfaction with the highly underdeveloped conditions. An official desire to give immediate attention to road construction and other community services has recently

been expressed.

As to the slightly lower use made of health facilities by Mende and Kono who were interviewed, a possible reason could be the relative backwardness and poverty of the Kono, whereas in the case of the Mende this could be due to their proximity to tribal patterns of behavior which express them more directly to the expectation that expectant mothers will go to reside in their mothers' homes before the children are born and remain under such care until the infants are weaned. This is equally expected of other tribal members who, because of greater distances separating them from their tribal homelands, can escape pressures from their groups.

Tribal origin was not observed to be highly influential in the consistent use of all health facilities (see Chapter V). It seems surprising, however, that a large proportion of Creoles should have displayed inconsistency in regard to the number of their children who were born in a hospital. One possible explanation could be the separation from the sanctioning power of the group with which the individual is identified. Although exceptions may be found in some of the colony villages, the Creole culture ordinarily imposes the use of western maternity facilities. In Bo, however, the Creole migrants — most of whom serve as representatives of the government or commercial firms, and are subject to periodic transfers — sometimes assume "native" patterns of behavior and do things they would not do in Freetown, among their peers. Some of these "visiting" Creoles may be observed living with "wives" to whom they are not married, even when meeting tribal requirements. In such cases it is common not to interfere with the custom of having the baby born at home, especially since one can thereby escape possible ostracism from other Creoles occupying the more important positions at the hospital.

Membership in secret societies. — Non-members of secret societies find it easier to stay away from the sometimes conflicting influences of these societies. Membership not only delimits the degree of individual initiative and participation in programs of foreign origin, but it influences the rate of change as well as the circumstances under which such change can take place. Being very secret, these societies have not provided much encouragement to the introduction of western facilities compatible with their expected patterns of behavior. Even the significant work done by Dr. Margai with members of Sande to improve the situation has not produced lasting results; it would seem that the personality of Dr. Margai himself was primarily responsible for the measure of success attained during his direct supervision of the project.¹⁰ Leaders of Sande, the female secret society, still preach the superiority of the tribal methods relating to maternity and other health practices. As long as such leaders continue to influence the training for womanhood, and remain protected from observation and criticism by non-members, membership in secret societies will continue as a major obstacle to easy or adequate and consistent acceptance of western health practices. Furthermore, the practices surrounding childbirth, stillbirth, and abortion -- as well as the alleged practice of clitoridectomy -- remain fairly prevalent, in spite of indications that such practices are not harmonious with maternity welfare.

Religion. — The impact of Islam upon tribal life has been of longer duration than has that of Christianity,¹¹ and the former has sponsored changes which are more closely related to tribal culture than those of Christianity.

¹⁰ See "Welfare Work in a Secret Society," African Affairs, XLVII (March, 1948).

¹¹ Gorvie, op. cit., 56-62; cf. Little, op. cit., 273-75.

Patterns of behavior relating to marriage, education, and health clearly reveal these differences, as well as the degree of strangeness between the customs of the "converts" and the teachings of Islam and of Christianity. The inherent similarities and dissimilarities to tribal patterns have already been dealt with.¹² It has been pointed out, for instance, that although Islam has made few contributions, if any, to community progress, it has introduced an elaborate set of rituals and observances quite compatible with tribal customs and practices.

Sex. -- The conception of male superiority which tribal culture has upheld, as well as the exclusion of men from intimate feminine affairs, have influenced the persistence of traditional practices and the degree to which western health practices have been adopted. This is especially true in the matter of maternity care and infant welfare. It has already been pointed out that the male, by virtue of his educational superiority, could understand more fully the relative advantages of the two types of practices. But lacking the cultural permission to discuss maternity affairs, for instance -- while at the same time retaining the power to initiate measures for the welfare of his female dependents -- the male has not been too influential. His knowledge of affairs and his superior status may be seen as latent advantages as yet to be exploited for the promotion of better health practices, especially among women and children who lack the special attention provided by men in most of the occupations.

Place of birth. -- The significance of this differential is in its influence upon the degree of socialization in western or tribal culture. Being born in Freetown, rather than in a village or a protectorate town, in most cases, would provide an initial and prolonged exposure to western elements,

¹²Supra. 54-56.

especially those relating to medical and health practices. This situation would result because most babies born in Freetown would be born to parents who are domiciled there, or to parents who possess an awareness of its advantageous maternity facilities to warrant their going away to Freetown for their period of confinement and delivery. Such an awareness would, in turn, become a part of the socializing process of offspring, regardless of whether or not parents subsequently returned to communities with health and medical standards inferior to those of Freetown.

Three categories relating to place of birth are used in this study: "urban" refers to Freetown which has the most of western facilities, both in quantity and quality; "rural" refers to villages in the protectorate where western facilities are at a minimum and relatively inaccessible; and "rurban" refers to all other communities which afford access to a significant measure of both western and traditional facilities (See Table 12).

In the chapter that follows an attempt has been made to analyze the influence of the various differentials, social and cultural, upon practices in the three areas of maternity care, sanitation and disease prevention, and treatment of diseases.

CHAPTER V

DIFFERENTIALS IN SELECTED HEALTH PRACTICES IN BO HOUSEHOLDS

Maternity Care

This chapter applies the selected social and cultural differentials in the analysis of maternity care, sanitation, prevention of disease, and treatment of disease. These areas were selected for investigation because of the special attention which they have received in both traditional and western health ideals and policies. Inasmuch as events relating to maternity and disease are inevitable characteristics of the life process, no culture has ignored the need for establishing facilities for care on such occasions, however inadequate such facilities may seem in given instances on grounds of health or esthetic standards. Practices which become acceptable norms in the three areas may be said to depend upon the accumulated knowledge and experience characteristic of the specific culture or society.

Maternity care, in this study, was investigated first on the basis of place of delivery: at home, at private maternity centers (locally known as "nursing homes"), and at hospital maternity wards. Types of supervision accompanying delivery, as well as prenatal and post-natal welfare were also investigated, to distinguish supervision by relatives without training in western techniques; by persons with professional training, such as midwives and physicians, serving as private practitioners; and by officials of the hospital, particularly by those responsible for the program of maternity welfare.

In addition to the above, questions were asked to determine motives for adoption of practices and attitudes relating to western maternity care. Did respondents consider the program and facilities to be superior to the traditional facilities in providing other than immediate benefits which ultimately show themselves in mortality and morbidity trends? Or did they participate in the program because of unrelated fringe benefits -- as might some of the "restricted" housewives who consider visits to the clinic as opportunities to put on nice clothes and to "socialize" with other women?

The analysis which follows has been made within the frame of reference of the specific points of inquiry just reviewed and the attributes of education, occupation, tribal or stock affiliation, membership in secret societies, sex, and place of birth. Chi squares have been used where appropriate to determine the significance of the variables studied; and they are cited in the footnotes when variables have proved significant. It should be recalled that the term "respondent" has reference to a person representing a household in the Bo sample who agreed to be interviewed by the investigator, either because he had been identified as the "head" or because other household members had referred the investigator to him. The information given by each respondent had reference to his family of orientation, consanguine and conjugal, as applicable and relevant. Both male and female respondents are contained in the Bo sample, but only one of either sex was chosen for each household.

The trend in maternity care, on the basis of inadequate official reports, indicates growing acceptance of western in place of traditional practices. Comparison of increasing attendance at maternity clinics (Table 21) with the fluctuating infant mortality rate might nevertheless prevent one from making a definite statement that the preferable and beneficial western facilities

have become unquestionably acceptable.¹ On the basis of the sample used in this study, it can be stated that there has been an increasing use of western maternity care. Whereas 80 per cent of the respondents were themselves born under conditions lacking benefit of western care, only 8 per cent of their children were born under similar conditions (Tables 19, 20).

TABLE 19
COMPOSITION OF 80 HOUSEHOLDS SAMPLE BY
PLACE OF DELIVERY OF RESPONDENTS

Place of Delivery	Number	Per cent
At home	242	80.4
Private maternity center	20	6.6
Hospital ward	37	12.3
Unknown	2	.7
Total	301	100.0

Supporting this shift in maternity practice is the fact that only 5 per cent of the respondents indicated a preference for having their babies delivered at home, where the availability of western care would be almost negligible as compared to the care provided at the hospital or private maternity centers. These findings are consistent with the official tabulations showing increased use of the hospital as the place of delivery (See Table 23). All categories of respondents, when grouped according to differences in education, occupation, stock of origin, and other differentials, indicated a preference for western

¹ Although an ordinance making the registration of births and deaths compulsory in the Protectorate was passed in 1948, such records have been kept only since 1955.

maternity care to a degree that did not seem to be influenced by the attributes selected for consideration. In practice, however, considering where the children of respondents were actually born and the use made of the hospital for the purpose of child delivery, some of these differentials appear worth investigation. Another area in which respondents showed almost perfect agreement was that relating to other benefits offered by the maternity clinic; all but 2 per cent indicated that the clinic provided services for combating sterility and for promoting the general well-being of infants.

TABLE 20
COMPOSITION OF 60 HOUSEHOLDS SAMPLE BY SOURCES
OF ASSISTANCE AT DELIVERY OF RESPONDENTS

Assistant at Delivery	Number	Per cent
Relatives	220	73.1
Professional midwife	28	9.3
Physician	50	16.6
Unknown	3	1.0
Total	301	100.0

The analysis of maternity care data which follows shows the degree to which the various differentials were observed to be statistically significant.² The frequency distribution for each item appears in Tables 24 and 25; the first showing numerical and the second percentage distributions in each case.

²Differentials based on "age" and "previous residence" have been omitted deliberately. Computations according to age categories of the sample appeared statistically insignificant in all areas; data on previous residence contained ambiguities which could not be reconciled adequately to warrant a valid analysis.

TABLE 21

AGENCIES CONSULTED FOR NATAL CARE BY BO RESPONDENTS

Agency Consulted	Pre-natal Care		Post-natal Care	
	Number	Per cent	Number	Per cent
Relative	19	6.3	24	8.0
Private midwife	6	2.0	6	2.0
Clinic	133	44.2	126	41.9
Physician	139	46.2	141	46.8
Unknown	4	1.3	4	1.3
Total	301	100.0	301	100.0

TABLE 22

PREFERENCES OF BO RESPONDENTS FOR PLACES OF DELIVERY OF BABIES

Preferred Place for Delivery	Respondents	
	Number	Per cent
At home	15	5.0
Private maternity center	32	10.6
Hospital ward	248	82.4
Unknown	6	2.0
Total	301	100.0

TABLE 23
PLACES OF DELIVERY OF RECORDED BIRTHS IN BO, 1955-57

Place of Delivery	1955		1956		1957	
	Number	Per cent	Number	Per cent	Number	Per cent
Hospital	129	68.3	296	74.6	458	79.9
Private Maternity Clinic	3	1.6	6	1.5	32	5.6
At Home	57	30.1	95	23.9	83	14.5
Total	189	100.0	397	100.0	573	100.0

Source: Register of Births in Bo, 1955-1957.

Education. — The use of the hospital by parents of respondents at all educational levels was low, judging by the actual number of deliveries that took place in hospitals or specialized maternity centers. About 80 per cent of the respondents stated that they had been born at home with the assistance of relatives.³ (See Tables 19 and 20). The present generation of parents, in contrast, indicated an increased use of the hospital for the delivery of babies and for pre-natal and post-natal services (See Table 21). Education as a differential did not seem influential, since approximately 90 per cent of respondents with over five years of schooling and 86 per cent with no schooling indicated a preference for the maternity facilities of the clinic over services

³It must not be inferred that the previous generation of parents opposed hospitalization since many of them had no access to or knowledge of institutionalized maternity care. It must be understood also that the relatives who gave assistance during deliveries had been "trained" in "tribal midwifery" and sometimes included women recognized as "experts" in their communities. A serious objection to tribal midwifery, of course, would be its lack of adequate aseptic procedures.

provided by tribal agencies. It should be noted, however, that this high level of acceptance was not supported by the statistics relating to the actual number of respondents' children born at the hospital, which indicate past practices and also the fact that attitudes do not necessarily determine actual practice (See Tables 24-25). In this respect, the differential of education proved to be statistically significant in regard to whether respondents had all, some, or none of their children delivered in a hospital.⁴

Occupation. -- According to occupational groupings, it was observed that use of the hospital for the delivery of babies varied directly with the security, stability, and "superiority" of the occupation of the respondent. Those in "inferior" occupations showed a higher degree of inconsistency, except in situations where hospitalization was provided as a fringe benefit to workers.⁵

Stock. -- Greater use of the hospital for the delivery of babies was indicated by respondents of the Creole, Lebanese, Mandingo, and Temne groups.⁶ Least use was indicated by Sherbro, Hausa, and Mende. It was also observed that a surprisingly large proportion of the Creoles had not used the hospital. A possible explanation could be that, considering themselves entitled to better treatment than is afforded by the maternity facilities of the hospital, some Creoles chose to consult private practitioners instead. Furthermore, there

⁴ $\chi^2 = 24.72$, $P = .001$, D.F. = 4, when grouped into (a) 9 or more years, (b) 8 or less years, (c) no schooling, and compared as to number reporting all children born in a hospital, some children born in a hospital, and none born in a hospital.

⁵ $\chi^2 = 9.76$, $P = .02-.05$, D.F. = 3, when grouped into (a) professional, clerical, or business, (b) trades and crafts or unskilled, and compared as to number reporting all children born in a hospital, some children born in a hospital, and none born in a hospital.

⁶ $\chi^2 = 10.28$, $P = .02-.05$, D.F. = 4, when grouped as (a) Creole, Hausa and Lebanese, (b) Mandingo, (c) Mende, (d) Sherbro and Temne, (e) Limba and Kono, and compared as to number reporting all or some children born in a hospital, and number reporting none born in a hospital or not responding.

TABLE 24

NUMBER OF BO RESPONDENTS TO WHOM CHILDREN WERE BORN IN A HOSPITAL

Categories of Respondents	Distribution by number of children born in a hospital			
	All	Some	None	Totals
<u>All respondents</u>	52	112	137	301
<u>By education</u>				
9 or more years	23	25	27	75
8 or less years	15	45	36	96
No schooling	12	36	65	113
Qur'an and others	2	6	9	17
<u>By occupation</u>				
Professional-clerical	16	19	22	57
Business	16	42	33	91
Trades and crafts	12	29	31	72
Unskilled	1	9	18	28
Housewife and others	7	13	33	53
<u>By stock</u>				
Creole	8	13	15	36
Hausa	-	5	5	10
Kono	3	7	9	19
Lebanese	6	8	5	19
Limba	3	8	9	20
Mandingo	9	22	16	47
Mende	10	28	53	91
Sherbro	3	2	11	16
Temne	10	19	14	43
<u>By membership in secret societies</u>				
Members	24	67	92	183
Non-members	24	36	32	92
No response	4	9	13	26
<u>By religion</u>				
Christian	32	45	62	139
Muslim	19	62	66	147
No response	1	5	9	15
<u>By sex</u>				
Male	37	91	92	220
Female	15	21	45	81
<u>By place of birth</u>				
Urban	19	26	27	72
Rurban	19	51	49	119
Rural	14	35	61	110

TABLE 25

PERCENTAGES OF RESPONDENTS TO WHOM CHILDREN WERE BORN IN A HOSPITAL

Categories of Respondents	Distribution by number of children born in hospital		
	All	Some	None
<u>All respondents</u>	17.3	37.2	45.5
<u>By education</u>			
9 or more years	30.7	33.3	36.0
8 or less years	15.6	46.9	37.5
No schooling	10.6	31.9	57.5
<u>By occupation</u>			
Professional-clerical	28.1	33.3	38.6
Business	17.6	46.1	36.3
Trades and crafts	16.7	40.3	43.0
Unskilled	3.6	32.1	64.3
<u>By stock</u>			
Creole	22.2	36.1	41.7
Hausa	0.0	50.0	50.0
Kono	15.8	36.8	47.4
Lebanese	31.6	42.1	26.3
Limba	15.0	40.0	45.0
Mandingo	19.2	46.8	34.0
Mende	11.0	30.8	58.2
Sherbro	18.7	12.5	68.8
Temne	23.3	44.2	32.5
<u>By membership in secret societies</u>			
Members	13.1	36.6	50.3
Non-members	26.1	39.1	34.8
<u>By religion</u>			
Christian	23.0	32.4	44.6
Muslim	12.9	43.2	44.9
<u>By sex</u>			
Male	16.8	41.4	41.8
Female	18.5	26.0	55.5
<u>By place of birth</u>			
Urban	26.4	36.1	37.5
Rurban	16.0	42.9	41.1
Rural	12.7	31.8	55.5

exists the attitude of superiority manifested toward members of the protectorate tribes which keeps mingling with them to a minimum. The Lebanese, for that matter, might not patronize the hospital as much as they do if it were not for the fact that they are granted access to a ward set aside for high government officials and those in a position to pay the extra charges demanded.

Other differentials. — Membership in secret societies was observed to be statistically significant, with more non-members making use of the hospital.⁷ Religion was not found to be significant, although a higher percentage of Christians indicated that all their children had been born in a hospital.⁸ Place of birth was found to be statistically significant, based on urban, rural, and rural groupings.⁹

On the basis of the author's observations and the statistics for the sample, it can be said that western practices in maternity care have been widely accepted, although differentials were observed as having some influence upon the degree of acceptance of such practices. It should be noted, however, that inconsistencies in the use of the hospital have continued. Three deaths, for example, occurred on occasions when expectant mothers refused to go to the hospital, in spite of advice from relatives that they do so. One husband indicated that he had only started for the hospital after his wife had become unconscious, because the wife had insisted on using "tribal" techniques.

Another evidence of inconsistency was observed among babies brought to

$\chi^2 = 13.27$, $P = .001-.01$, D.F. = 2, when grouped as (a) members, (b) non-members, and compared as to respondents reporting all, some, and none born in a hospital.

$\chi^2 = 5.97$, $P = .10-.05$, D.F. = 2, when grouped as (a) Christian, (b) Muslim, and compared as above.

$\chi^2 = 10.01$, $P = .05-.02$, D.F. = 4, compared as above.

the infant welfare clinic. No less than 50 per cent were seen wearing charms around the neck, wrist, or ankle, in spite of contrary instructions from hospital personnel.¹⁰ On another occasion, a mother whose breast-milk had been diagnosed as responsible for her baby's upset stomach could not be convinced to substitute bottle feeding, which she thought would merely starve the child. Similar are mothers who refuse to entrust the care of their children completely to the nurses in charge. Not only would these mothers overcrowd the children's ward, already overcrowded with patients, by sleeping or sitting around the cots, but they would disrupt the plan of treatment by introducing foods and medicines not prescribed by or known to the professional staff. It would seem, therefore, that mere attendance figures cannot be regarded as sufficient criteria for assessing the degree of acceptance or the quality of attitudes held toward western maternity care.

Sanitation and Disease Prevention

According to the hypothesis of this study, sanitary and preventive programs which are elements of western culture are considered objectively more effective than traditional provisions. This assumption does not preclude the recognition of cleanliness as a necessary precursor of general sanitation and prevention, both within the context of western culture and within traditional and non-western cultures.¹¹ It can, therefore, be considered sanitary when the

¹⁰The main objection to these charms or amulets -- dispensed by mori-men to "protect" the owner against witchcraft, sickness, poverty, or death -- is that they accumulate dirt through excessive handling and perspiration which not only irritates and produces rashes on the skin, but affords babies something filthy to suck or to choke on.

¹¹Baths have not always been considered necessary in the West, and there were aristocrats who felt that sweat kept a man clean and that bathing would expose one to kindred diseases. See Charles Wilson, The History of Unilever, I (London: Cassell, 1954), 4-6.

Mende or any other stock is observed to prescribe or expect its members to take a daily bath, or to sweep the rooms in the house daily, and this type of prescription is equally observable in western culture, even with its acceptance of special modifications. But such a prescription is hardly enough to promote the type of environmental sanitation that will enhance the general well-being of a population. That it is inadequate is indicated, for Sierra Leone, by a life expectancy that is much lower than that attainable in western countries, by a relatively high mortality rate, especially among infants, and by a high incidence and variety of epidemic and debilitating diseases.¹² Observations have further revealed that, in spite of the hardships and obstacles imposed by the natural environment, conditions could be improved by correcting the prevailing errors or inadequacies relating to such important matters as diet, refuse disposal, and water supply. To make these corrections, on the other hand, would necessitate an evaluation and modification of the social environment as well, inclusive of patterns of behavior which have emerged or persisted under the impact of educational, tribal, religious, occupational, and other differences.

The specific point selected for investigation included the diet, which has perennially been criticised as quite deficient in protein. It has been argued that such deficiency has contributed to the incidence of malnutrition and susceptibility to other endemic diseases.¹³ It was considered relevant, therefore, to assess the availability and use of meat, milk, and eggs. These food items were chosen to represent western dietary patterns, with the awareness of

¹²See Sierra Leone Annual Medical Reports; cf. L. D. Stamp, Africa. A Study in Tropical Development (New York: John Wiley, 1953), 164-81.

¹³See S. D. Onabsmiro, Food and Health (London: Penguin Books, 1953).

such traditional sources as rice, groundnut, beef, and dried and salted fish, which, nevertheless, did not seem to be used regularly and in sufficient quantity.

The question of meat might seem irrelevant since the traditional culture provides for meat in the average diet. Current conditions and process, however, have influenced the usual method of acquisition as well as the availability of meat. As long as farming flourished, wild game abounded for the professional or amateur hunter; even youngsters were able to set traps within the family farm and be assured of a catch which, in turn, furnished meat until the weekly or monthly supply of beef on the hoof could be brought into town by nomad herdsmen. With the growth of towns and a reduced dependence upon farming for sustenance, wild meat has become scarce. Bushes which once served as haven for deer, for instance, are now found to be several miles from the center of town, while the luscious young plants which lured the animals out of hiding are now hardly seen around. Of course, substitution has been attempted by supplying the larger communities with beef killed more frequently and with fish brought in on alternate days by refrigerated trucks. The fact remains that it takes money to buy these sources of protein, and many persons find it a hardship to pay prices affected by inflation.¹⁴

The circumstances which have influenced the availability and use of meat have had effects on poultry also. Paradoxically, members of indigenous stocks who seldom used poultry meat are now willing to do so in the larger towns, but the financial advantage from selling poultry and eggs, which have never been essential local dietary items, is being offset by the excessive loss

¹⁴See Report of the Labour Department, 1956 (Freetown: Government Printer, 1957), 13-14; cf. Report of the Commission on the Civil Service of Sierra Leone (Freetown: Government Printer, 1957), 11-12.

suffered by amateur poultry keepers at the hands of heavy traffic along streets where the birds have been left to "scratch" for most of their feed.¹⁵

Attention was also given to use of eating utensils. Traditionally, clean hands have been the acceptable mode of eating, but contact with western culture has brought about the introduction of spoons, forks, and knives into even the very remote villages. It, therefore, appeared necessary to find out to what extent imported utensils were being used, since in most cases where hands are not washed properly -- as under slum conditions in some of the larger towns -- disease contagion might occur, especially where people maintain the custom of eating together from the same dish or receptacle.

Another matter to which attention was given was the water supply, especially its source and quality. As a western introduction, a piped water system maintained by the government is available to all sections of the community and is supplied through public pumps located approximately two or three city blocks apart. Those who prefer private outlets can have them installed in their houses or compounds by paying a special fee, as well as an additional water rate. Still in use, on the other hand, are such traditional sources as wells, streams, and metal storage tanks which collect rain water. People who have to get their water some distance from their homes usually have large drums or earthenware pots in which to store water needed between trips to the stream or public pump. Recognizing the possible danger in the use of stream and well water, it seemed necessary to investigate practices which had been adopted to make such water safe for consumption. It was observed that some people made use of imported filters to purify their drinking water; others boiled the water before putting it in the filter, whereas some used special "country pots"

¹⁵Cf. 1955 Report of the Department of Agriculture (Freetown: Government Printer, 1957), 6-7.

which allowed sediment to "settle" at the bottom.

The disposal of rubbish or refuse was also investigated. In the strictly tribal community it is not usual to find centralized disposal units since the proximity of all dwellings to the "bush" prevents the matter of rubbish disposal from becoming a community problem. The western program of health, on the other hand, makes the disposal of refuse one of its major concerns and designates locations where refuse may or may not be deposited. An effort was made to determine the extent to which western practices or rubbish disposal have replaced the practice of dumping rubbish alongside the road (now that the bush has been cleared) or at the back of one's yard.

On the basis of the author's observations, it seemed as if some people were not aware of a sanitation program for the community. It was therefore decided to include a question pertaining to the purpose served by the Health Department, or to determine whether there was widespread knowledge of the existence and responsibility of the department.

The analysis which follows has been organized around the items discussed above. Under each item consideration is given to each differential, with special focus upon those observed to be statistically significant. The relevant distributions by item and by differential categories have been presented in Tables 26 through 37.

Inclusion of meat, milk, and eggs in diet. -- Only three respondents indicated no use of meat, milk, or eggs (See Tables 26 and 27). On the other hand, only 55 respondents (18 per cent) indicated inclusion of eggs as a dietary item. Attributes of sex and of religion were the only differentials that did not prove to be statistically significant; all the others, by differentiating the number reporting use of milk and eggs as well as meat and the number reporting use of meat only or of none of the items, proved to be statistically

TABLE 26

NUMBER OF BO RESPONDENTS INCLUDING MEAT, MILK, AND EGGS IN DAILY DIET

Categories of Respondents	Distribution by dietary item included				
	No meat, milk or eggs	Meat only	Meat and milk	Veat, milk and eggs	Totals
<u>All respondents</u>	3	96	147	55	301
<u>By education</u>					
9 or more years	1	17	40	17	75
8 or less years	-	14	60	22	96
No schooling	1	62	39	11	113
Gu'ran and others	1	3	8	5	17
<u>By occupation</u>					
Professional-clerical	1	11	37	8	57
Business	-	17	40	34	91
Trades and crafts	2	16	46	8	72
Unskilled	-	24	3	1	28
Housewife and others	-	28	21	4	53
<u>By stock</u>					
Creole	2	3	20	11	36
Hausa	-	1	5	4	10
Kono	-	6	13	-	19
Lebanese	-	1	-	18	19
Limba	-	17	3	-	20
Mandingo	-	8	29	10	47
Mende	-	47	36	8	91
Sherbro	-	3	11	2	16
Temne	1	10	30	2	43
<u>By membership in secret societies</u>					
Members	1	80	88	14	183
Non-members	2	11	46	33	92
No response	-	5	13	8	26
<u>By religion</u>					
Christian	2	33	75	29	139
Muslim	1	50	72	24	147
No response	-	13	-	2	15
<u>By sex</u>					
Male	3	67	111	39	220
Female	-	29	36	16	81
<u>By place of birth</u>					
Urban	1	4	31	36	72
Rurban	-	40	67	12	119
Rural	2	52	49	7	110

TABLE 27

PERCENTAGE OF 80 RESPONDENTS INCLUDING MEAT, MILK, AND EGGS IN DAILY DIET

Categories of Respondents	Distribution by dietary item included in diet			
	No meat, milk or eggs	Meat only	Meat and milk	Meat, milk and eggs
<u>All respondents</u>	1.0	31.9	48.8	18.3
<u>By education</u>				
9 or more years	1.3	22.7	53.3	22.7
8 or less years	-	14.6	62.5	22.9
No schooling	0.9	54.9	34.5	9.7
<u>By occupation</u>				
Professional-clerical	1.8	19.3	64.9	14.0
Business	-	18.6	44.0	37.4
Trades and crafts	2.8	22.2	63.9	11.1
Unskilled	-	85.7	10.7	3.6
<u>By stock</u>				
Creole	5.6	8.3	55.6	30.5
Hausa	-	10.0	50.0	40.0
Kono	-	31.6	68.4	-
Lebanese	-	5.3	-	94.7
Limba	-	85.0	15.0	-
Mandingo	-	17.0	61.7	21.3
Mende	-	51.6	39.6	8.8
Sherbro	-	18.8	68.7	12.5
Temne	2.3	23.3	69.8	4.6
<u>By membership in secret societies</u>				
Members	0.5	43.7	48.1	7.7
Non-members	2.2	12.0	50.0	35.8
<u>By religion</u>				
Christian	1.4	23.7	54.0	20.9
Muslim	0.7	34.0	49.0	16.3
<u>By sex</u>				
Male	1.4	30.5	50.4	17.7
Female	-	35.8	44.4	19.8
<u>By place of birth</u>				
Urban	1.4	5.6	43.0	50.0
Rurban	-	33.6	56.3	10.1
Rural	1.8	47.3	44.5	6.4

significant. Respondents with schooling indicated a greater use of milk and eggs than those without,¹⁶ as did those engaged in business and professional-clerical occupational categories.¹⁷ By stock, the Creole, Hausa, and the Lebanese (and the Mandingo and Sherbro to a lesser extent) indicated the use of milk and eggs.¹⁸ On the basis of membership in secret societies, non-members showed a greater use of these items,¹⁹ as did respondents who had been born in urban communities.²⁰

Extent to which cutlery is used in eating. — That the custom of eating with the fingers is still prevalent is supported by the observation that only 88 respondents (29 per cent) indicated the use of cutlery at all their meals (See Tables 28-29). Those who indicated the use of fingers at all meals, however, comprised only 49 respondents (16 per cent). Thus slightly more than 50 per cent indicated occasional use of cutlery. In spite of this, all differential factors proved to be statistically significant when grouped according to number reporting use of fingers always, use of cutlery at times, and use of cutlery at all meals. On the basis of education, the greatest use of cutlery was observed among respondents with 9 or more years of schooling;²¹ occupationally, the category of professional-clerical indicated the greatest use,²² whereas the Creole, Hausa, and Lebanese did so on the basis of stock differentiation.²³ On the basis of membership in secret societies, a direct relationship

$16\chi^2 = 43.59$, $P = .001$, D.F. = 2, when compared as stated.

$17\chi^2 = 14.65$, $P = .001$, D.F. = 1. $18\chi^2 = 48.54$, $P = .001$, D.F. = 4.

$19\chi^2 = 24.71$, $P = .001$, D.F. = 1. $20\chi^2 = 25.18$, $P = .001$, D.F. = 2.

$21\chi^2 = 52.83$, $P = .001$, D.F. = 4, when compared as stated.

$22\chi^2 = 11.16$, $P = .001$, D.F. = 2. $23\chi^2 = 49.67$, $P = .001$, D.F. = 8.

TABLE 28

TYPE AND FREQUENCY OF USE OF EATING UTENSILS USED BY
RESPONDENTS OF 80 HOUSEHOLDS (NUMBERS)

Categories of Respondents	Number reporting use of			
	Fingers always	Cutlery at times	Cutlery always	Totals
<u>All respondents</u>	49	164	88	301
<u>By education</u>				
9 or more years	-	42	33	75
8 or less years	6	60	30	96
No schooling	37	56	20	113
Qu'ran and others	6	6	5	17
<u>By occupation</u>				
Professional-clerical	-	28	29	57
Business	13	48	30	91
Trades and crafts	8	46	18	72
Unskilled	6	20	2	28
Housewife and others	22	22	9	53
<u>By stock</u>				
Creole	1	20	15	36
Hausa	-	3	7	10
Kono	-	18	1	19
Lebanese	-	8	11	19
Limba	6	11	3	20
Kandingo	6	30	11	47
Mende	30	33	28	91
Sherbro	3	10	3	16
Temne	3	31	9	43
<u>By membership in secret societies</u>				
Members	39	104	40	183
Non-members	8	45	39	92
No response	2	15	9	26
<u>By religion</u>				
Christian	12	70	57	139
Muslim	32	84	31	147
No response	5	10	-	15
<u>By sex</u>				
Male	16	129	75	220
Female	33	35	13	81
<u>By place of birth</u>				
Urban	2	28	42	72
Rurban	15	81	23	119
Rural	32	55	23	110

TABLE 29

TYPE AND FREQUENCY OF USE OF EATING UTENSILS BY
RESPONDENTS OF 60 HOUSEHOLDS (PER CENTS)

Categories of Respondents	Percentage reporting use of		
	Fingers always	Cutlery at times	Cutlery always
<u>All respondents</u>	16.3	54.5	29.2
<u>By education</u>			
9 or more years	-	56.0	44.0
8 or less years	6.3	62.5	31.2
No schooling	32.7	49.6	17.7
<u>By occupation</u>			
Professional-clerical	-	49.1	50.9
Business	14.3	52.7	33.0
Trades and crafts	11.1	63.9	25.0
Unskilled	21.4	71.4	7.1
<u>By stock</u>			
Creole	2.8	55.5	41.7
Hausa	-	30.0	70.0
Kono	-	94.7	5.3
Lebarese	-	42.1	57.9
Limba	30.0	55.0	15.0
Mandingo	12.8	63.8	23.4
Mende	33.0	36.3	30.7
Sherbro	18.7	62.5	18.8
Temne	7.0	72.1	20.9
<u>By membership in secret societies</u>			
Members	21.3	56.8	21.9
Non-members	8.7	48.9	42.4
<u>By religion</u>			
Christian	8.6	50.4	41.0
Muslim	21.8	57.1	21.1
<u>By sex</u>			
Male	7.3	58.6	34.1
Female	40.7	43.2	16.1
<u>By place of birth</u>			
Urban	2.8	38.8	53.3
Rurban	12.6	68.1	19.3
Rural	29.1	50.1	20.9

was observed between membership in such societies and the predominant use of fingers;²⁴ a similar observation was made for Muslims, with Christians indicating a greater use of cutlery.²⁵ Greater use of cutlery was also observed among the male respondents,²⁶ as well as among the respondents who gave Freetown (the urban category) as their place of birth.²⁷

Place where rubbish is dumped. — Three types of dumps were observed: enclosures constructed and maintained by the Health Department (such an enclosure is locally identified as "dirty box"); along the sides of roads, a few yards from the dwellings; and in the yard, at the back of dwellings. Although the majority of respondents indicated the use of the enclosures provided by the Health Department, 40 per cent were observed to use either the sides of roads or their own backyards (See Tables 30-31). Except for differentials based on stock of origin, religion, and sex, differentials proved to be statistically significant by differentiating categories according to number reporting use of "dirty box," and number reporting use of roadside or backyard. On the basis of education, the greatest use of roadsides and backyards was observed among respondents with no schooling, with a slight decrease among those with eight years or less of schooling.²⁸ The category of occupation showed a much more widespread use of the roadsides by respondents classified as unskilled.²⁹ Membership in secret societies proved significant, with greater use of roadsides and backyards by members of societies;³⁰ a similar observation was made for respondents born in rural communities as against those born in

$$24\chi^2 = 15.37, P = .001, D.F. = 2. \quad 25\chi^2 = 15.18, P = .001, D.F. = 2.$$

$$26\chi^2 = 38.16, P = .001, D.F. = 2. \quad 27\chi^2 = 55.24, P = .001, D.F. = 4.$$

$$28\chi^2 = 8.66, P = .02-.01, D.F. = 2, \text{ when compared as stated.}$$

$$29\chi^2 = 15.95, P = .001, D.F. = 1. \quad 30\chi^2 = 7.32, P = .01-.001, D.F. = 1.$$

TABLE 30

DISTRIBUTION OF RESPONDENTS OF 60 HOUSEHOLDS BY
LOCATION OF REFUSE DUMP (NUMBER)

Categories of Respondents	Number indicating location to be			
	Backyard	Roadside	Health Department enclosure	Totals
<u>All respondents</u>	34	94	173	301
<u>By education</u>				
9 or more years	2	19	54	75
8 or less years	14	30	52	96
No schooling	17	38	58	113
Qu'ran and others	1	7	9	17
<u>By occupation</u>				
Professional-clerical	2	11	44	57
Business	10	25	56	91
Trades and crafts	11	25	36	72
Unskilled	3	19	6	28
Housewife and others	8	14	31	53
<u>By stock</u>				
Creole	2	10	24	36
Hausa	1	1	8	10
Kono	-	11	8	19
Lebanese	2	4	13	19
Limba	-	11	9	20
Mandingo	2	16	29	47
Mende	22	20	49	91
Sherbro	3	3	10	16
Temne	2	18	23	43
<u>By membership in secret societies</u>				
Members	24	65	94	183
Non-members	8	21	63	92
No response	2	8	16	26
<u>By religion</u>				
Christian	18	33	88	139
Muslim	14	53	80	147
No response	2	8	5	15
<u>By sex</u>				
Male	17	75	128	220
Female	17	19	45	81
<u>By place of birth</u>				
Urban	3	17	52	72
Rurban	12	46	61	119
Rural	19	31	60	110

TABLE 31

DISTRIBUTION OF RESPONDENTS OF 60 HOUSEHOLDS BY
LOCATION OF REFUSE DUMP (PER CENTS)

Categories of Respondents	Percentage indicating location to be		
	Backyard	Roadside	Health Department enclosure
<u>All respondents</u>	11.3	31.2	57.5
<u>By education</u>			
9 or more years	2.7	25.3	72.0
8 or less years	14.6	31.2	69.3
No schooling	15.0	33.6	51.3
<u>By occupation</u>			
Professional-clerical	3.5	19.3	77.2
Business	11.0	27.4	61.5
Trades and crafts	15.3	34.7	50.0
Unskilled	10.7	67.8	21.4
<u>By stock</u>			
Creole	5.5	27.8	66.7
Hausa	10.0	10.0	80.0
Kono	-	57.9	42.1
Lebanese	10.5	21.0	68.4
Limba	-	55.0	45.0
Mandingo	4.2	34.0	61.7
Mende	24.2	22.0	53.8
Sherbro	18.7	18.7	62.5
Tenne	4.6	41.8	53.5
<u>By membership in secret societies</u>			
Members	13.1	35.5	51.4
Non-members	8.6	22.8	68.5
<u>By religion</u>			
Christian	12.9	23.7	63.3
Muslim	9.5	36.0	54.4
<u>By sex</u>			
Male	7.7	34.1	58.2
Female	21.0	23.4	55.5
<u>By place of birth</u>			
Urban	4.2	23.6	72.2
Rurban	10.1	38.7	51.2
Rural	17.3	28.2	54.5

³¹
Freetown.

Source of drinking water. — Four sources of water were observed: the piped system constructed and maintained by a department of Water Supply, and connected to a reservoir and the Sewa river, 8 miles away; privately-installed metal tanks which collect rain water; wells on private lots; and stream water held back in neighborhood "reservoirs" constructed by obstructing the normal flow of the stream with stones heaped along a shallow ditch, and cleaned periodically by members of the neighborhood. Only 19 respondents (6 per cent) indicated private tanks as their source of water; about 56 per cent cited the government pump, 23 per cent the stream, and 15 per cent wells as the source of drinking water (See Tables 32-33). In differentiating the number reporting the source as stream, well, tank, or pump, attributes based on stock of origin, religion, and sex did not prove to be statistically significant. By education, those with 9 or more years of schooling made greater use of the piped system, whereas about 50 per cent of respondents with 8 or less years of schooling, as well as those with no schooling, derived their drinking water from other sources.³² Occupationally, a great disparity was observed between respondents classified as unskilled and those classified as professional-clerical, compared with a less striking difference between the unskilled and the categories of business and trades and crafts.³³ On the basis of membership in secret societies, a striking difference was observed in the greater dependence on the stream by members, in contrast to a greater dependence on private tanks by non-members.³⁴ A similar situation was observed among respondents of rural origin as compared with those of urban origin.³⁵

$${}^{31}\chi^2 = 9.53, P = .01-.001, D.F. = 2.$$

$${}^{32}\chi^2 = 16.41, P = .02-.01, D.F. = 6, \text{ when compared as stated.}$$

$${}^{33}\chi^2 = 11.34, P = .02-.01, D.F. = 3. \quad {}^{34}\chi^2 = 38.21, P = .001, D.F. = 3.$$

$${}^{35}\chi^2 = 24.62, P = .001, D.F. = 6.$$

TABLE 32

SOURCES OF DRINKING WATER OF BO RESPONDENTS (NUMBER)

Categories of Respondents	Number indicating source of water as				Totals
	Stream	Well	Private tank	Government pump	
<u>All respondents</u>	68	45	19	169	301
<u>By education</u>					
9 or more years	10	5	7	53	75
8 or less years	23	16	9	48	96
No schooling	32	18	3	60	113
Qu'ran and others	3	6	-	8	17
<u>By occupation</u>					
Professional-clerical	6	7	5	39	57
Business	20	12	12	47	91
Trades and crafts	20	12	2	38	72
Unskilled	10	2	-	16	28
Housewife and others	12	12	-	29	53
<u>By stock</u>					
Creole	7	4	4	21	36
Hausa	2	1	-	7	10
Kono	8	-	1	10	19
Lebanese	-	-	8	11	19
Limba	4	2	-	14	20
Mandingo	10	9	4	24	47
Mende	25	23	-	43	91
Sherbro	2	4	1	9	16
Temne	10	2	1	30	43
<u>By membership in secret societies</u>					
Members	52	29	1	101	183
Non-members	9	12	16	55	92
No response	7	4	2	13	26
<u>By religion</u>					
Christian	27	24	11	77	139
Muslim	34	20	8	85	147
No response	7	1	-	7	15
<u>By sex</u>					
Male	50	31	13	126	220
Female	18	14	6	43	81
<u>By place of birth</u>					
Urban	11	6	12	43	72
Rurban	32	17	6	64	119
Rural	25	22	1	62	110

TABLE 33

SOURCES OF DRINKING WATER OF 80 RESPONDENTS (PER CENTS)

Categories of Respondents	Percentage indicating source as			
	Stream	Well	Private tank	Government pump
<u>All respondents</u>	22.6	14.9	6.3	56.1
<u>By education</u>				
9 or more years	13.3	6.7	9.3	70.7
8 or less years	24.7	16.7	9.4	50.0
No schooling	28.3	15.9	2.6	53.1
<u>By occupation</u>				
Professional-clerical	10.5	12.2	8.8	68.4
Business	22.0	13.2	13.2	51.6
Trades and crafts	27.8	16.6	2.8	52.8
Unskilled	35.7	7.1	-	57.1
<u>By stock</u>				
Creole	19.4	11.1	11.1	58.3
Hausa	22.0	10.0	-	70.0
Kono	42.1	-	5.2	52.6
Lebanese	-	-	42.1	57.9
Limba	20.0	10.0	-	70.0
Mandingo	21.2	19.1	8.5	51.1
Mende	27.4	25.3	-	47.2
Sherbro	12.5	25.0	6.3	56.2
Temne	23.2	4.6	2.3	69.8
<u>By membership in secret societies</u>				
Members	28.4	15.8	0.5	55.2
Non-members	9.8	13.0	17.4	59.8
<u>By religion</u>				
Christian	19.4	17.2	7.9	55.4
Muslim	23.1	13.6	5.4	57.8
<u>By sex</u>				
Male	22.7	14.1	5.9	57.2
Female	22.2	17.2	7.4	53.1
<u>By place of birth</u>				
Urban	15.3	8.3	16.7	59.7
Rurban	26.9	14.3	5.0	53.8
Rural	22.7	20.0	0.9	56.4

Methods used in purifying water. -- Observation revealed that the majority of respondents (74 per cent) made no attempt to modify the original state of their drinking water; the remaining 26 per cent, however, expressed an awareness of the need to purify or to improve the sanitary quality of the water. Some of the latter respondents indicated the use of imported water filters into which they put either "fresh" or boiled water; others indicated that they first boiled the water before drinking, although they used no filters (See Tables 34-35). In differentiating the number reporting the method of purification as boiling and/or filtering, and number reporting use of no method, only the differential of sex proved not to be statistically significant. On the basis of education, a direct relationship was observed between years of schooling and the extent of purifying; in other words, the majority of those who used their water "fresh" were found to be those with no schooling.³⁶ Occupationally, the greatest number of "fresh" water drinkers was observed among unskilled respondents.³⁷ By stock of origin, only the Lebanese were observed to make use of purifying methods extensively, although a difference was observed for the Creole and Hausa, on the one hand, and the indigenous tribes, on the other.³⁸ Membership in secret societies was observed to have an inverse relationship to boiling or filtering;³⁹ a similar, though less striking, relationship was observed between the degree of purification of water and profession of Muslim religion.⁴⁰ On the basis of place of birth, those who boiled or filtered their water were more likely to have been born in Freetown and least likely to have been born in rural communities.⁴¹

³⁶ $\chi^2 = 38.83, P = .001, D.F. = 2$, when compared as stated.

³⁷ $\chi^2 = 31.60, P = .001, D.F. = 1$. ³⁸ $\chi^2 = 41.37, P = .001, D.F. = 4$.

³⁹ $\chi^2 = 28.16, P = .001, D.F. = 1$. ⁴⁰ $\chi^2 = 4.71, P = .05-.02, D.F. = 1$.

⁴¹ $\chi^2 = 37.23, P = .001, D.F. = 2$.

TABLE 34
DISTRIBUTION OF 80 RESPONDENTS BY METHOD
FOR PURIFYING DRINKING WATER (NUMBER)

Categories of Respondents	Number indicating method to be				Totals
	None	Boiling	Filtering	Boiling and filtering	
<u>All respondents</u>	224	24	19	34	301
<u>By education</u>					
9 or more years	36	13	12	14	75
8 or less years	76	6	3	11	96
No schooling	99	5	3	6	113
Qu'ran and others	13	-	1	3	17
<u>By occupation</u>					
Professional-clerical	31	13	6	7	57
Business	55	4	7	25	91
Trades and crafts	64	6	1	1	72
Unskilled	27	-	1	-	28
Housewife and others	47	1	4	1	53
<u>By stock</u>					
Creole	23	3	5	5	36
Hausa	6	-	-	4	10
Kono	18	1	-	-	19
Lebanese	1	-	1	17	19
Limba	18	1	1	-	20
Mandingo	36	4	1	6	47
Mende	79	5	7	-	91
Snerbro	14	1	1	-	16
Temne	29	9	3	2	43
<u>By membership in secret societies</u>					
Members	154	14	13	2	183
Non-members	50	9	3	30	92
No response	20	1	3	2	26
<u>By religion</u>					
Christian	95	14	14	16	139
Muslim	117	9	5	16	147
No response	12	1	-	2	15
<u>By sex</u>					
Male	161	20	11	28	220
Female	63	4	8	6	81
<u>By place of birth</u>					
Urban	34	6	4	28	72
Rurban	101	7	5	6	119
Rural	89	11	10	-	110

TABLE 35

DISTRIBUTION OF BO RESPONDENTS BY METHOD
FOR PURIFYING DRINKING WATER (PER CENTS)

Categories of Respondents	Percentage indicating method to be			
	None	Boiling	Filtering	Boiling and filtering
<u>All respondents</u>	74.4	8.0	6.3	11.3
<u>By education</u>				
9 or more years	48.0	17.3	16.0	18.6
8 or less years	79.2	6.2	3.1	11.4
No schooling	87.6	4.4	2.6	5.3
<u>By occupation</u>				
Professional-clerical	54.4	22.8	10.5	12.2
Business	60.4	4.4	7.7	27.4
Trades and crafts	88.8	8.3	1.4	1.4
Unskilled	96.4	-	3.6	-
<u>By stock</u>				
Creole	63.8	8.3	13.8	13.8
Hausa	60.0	-	-	40.0
Kono	94.7	5.2	-	-
Lebanese	5.2	-	5.2	89.4
Limba	90.0	5.0	5.0	-
Mandingo	76.6	8.5	2.1	12.8
Mende	86.8	5.5	7.6	-
Sherbro	87.5	6.2	6.2	-
Temne	67.4	20.9	7.0	4.6
<u>By membership in secret societies</u>				
Members	84.1	7.6	7.1	1.1
Non-members	54.3	9.8	3.2	32.6
<u>By religion</u>				
Christian	68.3	10.1	10.1	11.5
Muslim	79.6	6.1	3.4	10.8
<u>By sex</u>				
Male	73.2	9.1	5.0	12.7
Female	77.8	4.9	8.8	11.1
<u>By place of birth</u>				
Urban	47.2	8.3	5.6	38.9
Rurban	84.9	5.9	4.2	5.0
Rural	80.9	10.0	9.1	-

Usefulness of Health Department. -- Respondents appeared to be divided in their evaluation of the Health Department. About one-third conceded that the department was doing an adequate and comprehensive job of health promotion, slightly more than one-fourth condemned the department as useless, and about two-fifths indicated that the health promoting functions of the department were useful, but somewhat limited in scope (See Tables 36-37). All attributes, except for occupation and religion, proved to be statistically significant by differentiating the number reporting usefulness as general health promotion, number reporting usefulness as rubbish disposal and mosquito control, and number reporting no usefulness.⁴² On the basis of education, a direct relationship was observed between years of schooling and degree of usefulness credited to the Health Department; the highest proportion of respondents who indicated that the department was useless turned out to be those with no schooling.⁴³ By stock, on the other hand, the least impressed with the work of the department were the indigenous tribes, particularly the Mende. Although a significant proportion of the Creole considered the department useless, this evaluation was counteracted by the expressed recognition by a majority of Creoles of the general health promotion effort of the department.⁴⁴ By membership in secret societies, more of the non-members found the department useful;⁴⁵ by sex, a slightly higher proportion of males agreed that the department promoted general health, but a much higher proportion of females thought that the department was useless.⁴⁶ In regard to differentiation according to place of birth, a

⁴²See pp. 80-81 above for the wide responsibilities of the Health Department and the author's comments on the state of affairs.

⁴³ $\chi^2 = 66.42$, $P = .001$, D.F. = 4, when compared as stated.

⁴⁴ $\chi^2 = 34.68$, $P = .001$, D.F. = 8. ⁴⁵ $\chi^2 = 6.70$, $P = .05-.02$, D.F. = 2.

⁴⁶ $\chi^2 = 7.42$, $P = .05-.02$, D.F. = 2.

TABLE 36

DISTRIBUTION OF 60 RESPONDENTS BY OPINION OF USEFULNESS
OF HEALTH DEPARTMENT (NUMBER)

Categories of Respondents	Number indicating usefulness as				
	Nil	Rubbish disposal	Mosquito control	Health promotion	Totals
<u>All respondents</u>	81	52	68	100	301
<u>By education</u>					
9 or more years	5	3	21	46	75
8 or less years	24	24	22	26	96
No schooling	51	25	25	12	113
Qur'an and others	1	-	-	16	17
<u>By occupation</u>					
Professional-clerical	7	5	13	32	57
Business	22	17	28	24	91
Trades and crafts	21	13	15	23	72
Unskilled	4	12	2	10	28
Housewife and others	27	5	10	11	53
<u>By stock</u>					
Creole	10	2	6	18	36
Hausa	1	1	6	2	10
Kono	-	12	4	3	19
Lebanese	2	2	9	6	19
Limba	3	7	4	6	20
Mandingo	10	11	9	17	47
Mende	41	4	19	27	91
Sherbro	7	-	3	6	16
Temne	7	13	8	15	43
<u>By membership in secret societies</u>					
Members	58	36	38	51	183
Non-members	18	13	23	38	92
No response	5	3	7	11	26
<u>By religion</u>					
Christian	38	14	34	53	139
Muslim	38	33	32	44	147
No response	5	5	2	3	15
<u>By sex</u>					
Male	50	43	51	76	220
Female	31	9	17	24	81
<u>By place of birth</u>					
Urban	11	10	25	26	72
Rurban	30	21	24	44	119
Rural	40	21	19	30	110

TABLE 37

DISTRIBUTION OF 30 RESPONDENTS BY OPINION ON USEFULNESS
OF HEALTH DEPARTMENT (PER CENTS)

Categories of Respondents	Percentage indicating usefulness as			
	Nil	Rubbish disposal	Mosquito control	Health promotion
<u>All respondents</u>	26.9	17.2	22.6	33.2
<u>By education</u>				
9 or more years	6.6	4.0	28.0	61.3
8 or less years	25.0	25.0	22.9	27.1
No schooling	45.1	22.1	22.1	10.6
<u>By occupation</u>				
Professional-clerical	12.2	8.8	22.8	56.1
Business	24.2	18.6	30.8	26.4
Trades and crafts	29.2	42.8	20.8	31.9
Unskilled	14.2	42.8	7.1	35.7
<u>By stock</u>				
Creole	27.8	5.5	16.6	50.0
Hausa	10.0	10.0	60.0	20.0
Kono	-	63.1	21.0	15.8
Lebanese	10.5	10.5	47.4	31.6
Limba	15.0	35.0	20.0	30.0
Mandingo	21.2	23.4	19.1	36.2
Mende	45.0	4.4	20.8	29.7
Sherbro	43.7	-	18.7	37.5
Tenne	16.2	30.2	18.6	34.8
<u>By membership in secret societies</u>				
Members	31.7	19.6	20.8	27.8
Non-members	19.6	14.1	25.0	41.3
<u>By religion</u>				
Christian	27.3	10.1	24.4	38.1
Muslim	25.8	22.4	21.8	30.0
<u>By sex</u>				
Male	22.7	19.5	23.2	34.5
Female	38.2	11.1	21.0	29.6
<u>By place of birth</u>				
Urban	15.3	13.9	34.7	36.1
Rurban	25.2	17.6	20.2	36.0
Rural	36.4	19.1	17.3	27.2

higher proportion of those born in rural communities than those born in Freetown or other towns considered the department useless.⁴⁷

The practices observed as well as the attitudes revealed toward the various aspects of environmental health which were investigated pointed to the significance of the various differentials in most instances. Education proved statistically significant throughout. Occupation may be said to have determined the extent to which it became convenient to acquire education and material possessions which aided compliance with health standards and directives; where the income was adequate to provide other than necessities, self-protection was undertaken more willingly and with greater ease. Secret society membership, on the other hand, may be said to have induced opposition or indifference toward facilities and practices which were not sponsored or encouraged in the influential secret societies. Stock of origin, in most instances, like place of birth, influenced the degree of prior contact with western culture of facilities and, perhaps, the seriousness with which "foreign" introductions and expectations were regarded.

Treatment of Diseases

The treatment of diseases according to traditional provisions may be said to lack the institutional details provided in western patterns. As mentioned in a previous chapter, the concept of a hospital and trained personnel for all types of patients cannot be fully appreciated by a people who assume that the same medicine can be used both as a cure and as an agent for inflicting disease upon another.⁴⁸ Even where the health of the community is protected by specialized functions of secret societies, the traditional culture makes the

⁴⁷ $\chi^2 = 11.08, P = .02, D.F. = 4.$

⁴⁸Little, The Mende of Sierra Leone, Chap. II.

care of the sick a personal matter. It is left to an individual or his family to consult one mori-man or another, to use a medicine actually prescribed to effect a cure, or to depend upon the fasting, alms-giving, or intercessions of family members and ancestral spirits. Western medical technique, on the other hand, relies mainly upon accurate diagnoses and the application of scientific knowledge. The efficacy of drugs used in specific instances is usually known and can be normally relied upon to achieve specific results, in contrast to tribal medicines whose efficacy depends upon chance and the personality of the medicine man or tribal agency. Besides, if the prescription of the medicine man, as a tribal agent, fails to achieve its purpose, this failure is likely to be interpreted as the result of obstacles imposed by ancestral or other spirits who found reasons to look with disfavor upon the sick person or some member of his family.

Observation revealed that not everyone considered the hospital or western agencies the most appropriate in all instances for caring for the sick. The majority of those who were interviewed indicated that the hospital and its facilities were superior to traditional provisions, but such verbal opinion did not always coincide with the continued adherence to some of the tribal practices relating to the treatment of disease.

Respondents were asked to indicate whether they used or would use traditional or western facilities for the treatment of some of the common and endemic diseases. The diseases presented for consideration ranged from the common cold to mental illness, and included gonorrhoea, dysentery, leprosy, malaria, rheumatism, smallpox, and tuberculosis. The alternatives for treatment included the hospital and personnel who were trained in western techniques, on the one hand, and the mori-man and other traditional agencies on the other. For each disease, respondents were asked to indicate whether they would consult

the hospital, the mori-man, or whether they would administer — on their own initiative — western drugs or home remedies. In the case of contagious diseases, respondents were asked to indicate if they felt carriers of these diseases were to be confined at home — under the care of relatives or privately engaged practitioners — or at government sanitarium provided for such diseases.

Observation also revealed the need for a blood bank. Respondents were, therefore, asked to indicate whether they would make donations of their blood or not, and if they would, to indicate whether they would do so only for personal and immediate benefits, or for the welfare of the community.

Interviews conducted among people in various walks of life, as well as observations of the author, suggested the possibility of investigating some of the areas which, although not directly affecting the available medical facilities, influenced the degree to which they were relied upon and used. It was further considered possible that cultural and social differentials among the dispensers of health facilities and users of these facilities might determine which issues were taken seriously and which were considered insignificant grievances. Thus, respondents were asked to indicate their opinions on such matters as conditions in the hospital alleged to be unsatisfactory, care given patients who were admitted into wards of the hospital, causes of preventable deaths among hospital patients, and advantages derived from getting treatment privately instead of from the hospital and according to standard procedure. A question was also included to determine whether respondents had the habit of consulting the hospital only as a last resort and after other means had failed in effecting a cure; another question sought to determine whether there was a preference for a particular form of administration by injection, tablet, or liquid medicine.

Following is an analysis of the data on disease treatment, and according to the selected attributes. Although not all attributes proved to be statistically

significant in all the areas investigated, a brief reference to such items is presented together with the more detailed presentation of those areas which proved to be statistically significant. Distributions of the latter appear in Tables 38 through 49.

Kind of medicine preferred. — In response to this question, 84 per cent of the respondents indicated a preference for injections; only 11 per cent indicated a preference for pills or tablets, while only 2 per cent said that they would choose native drugs or home remedies when western drugs were equally accessible. The statistics further revealed a great dislike for liquid medicine, for only three of the 301 respondents indicated a preference for this type over other forms of medicine.

Opinions regarding mortality among in-patients. — Over half of the respondents felt that when deaths occurred among hospital patients they came about because of circumstances beyond the control of the hospital staff. Nevertheless, in comparison to the 51 per cent who so indicated, there were 38 per cent who felt that some of the deaths could be prevented by improving or by providing adequate facilities, and 10 per cent who indicated that staff incompetence and carelessness were contributing factors.

Reasons in support of private treatment. — The majority of the respondents, 71 per cent, indicated that private treatment — consultation outside of regular hospital procedure — provided the kind of service they needed. Others indicated that private treatment was preferred because it afforded more privacy than did regular hospital service, as well as faster service.

Evaluation of in-patient care. — Only 9 per cent of the respondents indicated that care received by in-patients of the hospital was poor, but 26 per cent also indicated that the food was not to their liking. Among those who thought the food situation was deplorable were 29 per cent in trades and

crafts, 31 per cent of those with 8 or less years of schooling, 38 per cent of the Mende respondents, 28 per cent of the members of secret societies, 32 per cent of Christians, 32 per cent of the female respondents, and 29 per cent of those respondents who were born in rural communities.

Use of local herbs and home remedies. — Only three respondents said that they did not use home remedies under any circumstances. The rest indicated their familiarity with and use of local herbs and home remedies, with 50 per cent commonly using "lemon grass" and "tea bush." Another 29 per cent indicated the use of remedies that were not as common, and some of these respondents told the investigator that they could not divulge names of those medicines which were deemed to be family secrets. The list of the medicines indicated was, nevertheless, very extensive.⁴⁹

Why hospital is consulted. — Only 8 per cent of the respondents indicated that they went to the hospital or clinic as a last resort, that is, after other efforts had proved unsatisfactory. On the other hand, 88 per cent indicated that they consulted these western facilities because of their superiority to the traditions.

Confinement of carriers of contagious diseases. — Only 2 per cent of all the respondents felt that persons afflicted with smallpox or tuberculosis should be cared for at home; the rest indicated that it would be better for such persons to be confined in special wards or sanitarium provided by the medical authorities.

Treatment of common cold and headache. — Most of the respondents

⁴⁹These medicines are derived from the leaves, roots, and barks of plants, and include the following: agbo, bitter leaf, broomstone, cratch leaf, gbangbaa, guava leaf, igbesi, kakatei, lime, ojuologbo, pear leaf, pongoi, taryawuli, yonibagboei, and yumbuyembei (Some of the terms are Creole, others are tribal. Cf. pp. 64 & 67 above).

indicated that the hospital was the best place to go in cases of this disease, but 28 per cent felt that it would be better to secure private treatment, especially to insure that the malady did not receive publicity. Those putting special emphasis upon strict privacy included about 30 per cent of those with 9 or more years of schooling, 35 per cent of those in business, 63 per cent of the Lebanese, 34 per cent of non-members of secret societies, and 33 per cent of male respondents.

Treatment of leprosy and yaws. -- Only 5 per cent of the respondents indicated that they would use native medicine for these diseases. This group included 8 per cent of those with no schooling, 10 per cent of those in trades and crafts, 13 per cent of the Sherbro and Mende, and 9 per cent of secret society members. The great majority, on the other hand, indicated that the hospital was the proper agency to consult.

Treatment for malnutrition. -- It was rather difficult to get the majority of the respondents to see a relationship between dietary deficiency and disease. Many insisted that witchcraft and poor hygiene were responsible, rather than the absence of essential elements in the diet. Nevertheless, 73 per cent of the respondents indicated that they would consult the hospital, compared with 10 per cent who said they would get patented drugs -- such as vitamin compounds, cod liver oil, and powdered milk -- and 7 per cent who said they would use native drugs. The latter included 14 per cent of those with no schooling, 23 per cent of housewives, 19 per cent of the Sherbro and Mende, and 12 per cent of those belonging to secret societies.

Treatment of diarrhea and dysentery. -- About 69 per cent of the respondents indicated that they would go to the hospital, 16 per cent would use native drugs, 10 per cent would use patented drugs, and 4 per cent would consult a member of the hospital staff privately. Education, stock of origin,

membership in secret societies, and place of birth proved to be statistically significant by differentiating categories according to number reporting that they would consult the hospital, and number reporting that they would consult other agencies (See Tables 38-39). On the basis of education, those with 8 years of schooling or less indicated a greater reliance upon native and patented medicines, whereas those with 9 or more years, and those with no schooling to a lesser degree, indicated a preference for the hospital.⁵⁰ By stock, the Kende, Kono, and Sherbro indicated greater reliance on agencies other than the hospital, whereas all the Lebanese respondents said they would consult the hospital.⁵¹ A direct relationship was observed between membership in secret societies and the consultation of agencies other than the hospital;⁵² a similar relationship obtained for respondents who were born in rural communities, with those born in Freetown indicating a greater reliance upon the hospital.⁵³

Treatment of malaria. — Slightly more than half of the respondents, 56 per cent, indicated that they would consult the hospital. Of the remainder, 26 per cent said they would get a remedy from the drug store; 8 per cent would use native medicine; and 8 per cent said they would consult a member of the hospital staff privately (See Tables 40-41). Except for differentials based on education and membership in secret societies, differentiating categories according to number reporting that they would consult the hospital and number selecting other agencies did not prove to be statistically significant. By

$$50\chi^2 = 18.63, P = .001, D.F. = 2, \text{ when compared as stated.}$$

$$51\chi^2 = 11.23, P = .02-.05, D.F. = 4.$$

$$52\chi^2 = 15.63, P = .001, D.F. = 1.$$

$$53\chi^2 = 14.69, P = .001, D.F. = 2.$$

TABLE 38

AGENCIES CONSULTED BY 80 RESPONDENTS FOR TREATING
DIARRHEA AND DYSENTERY (NUMBER)

Categories of Respondents	Number reporting agency as					Totals
	Native medicine	Drug store	Private nurse	Hospi- tal	Unknown	
<u>All respondents</u>	47	30	11	210	3	301
<u>By education</u>						
9 or more years	6	3	1	65	-	75
8 or less years	18	16	7	54	1	96
No schooling	17	11	3	80	2	113
Qu'ran and others	6	-	-	11	1	17
<u>By occupation</u>						
Professional-clerical	3	1	2	51	-	57
Business	15	11	4	60	1	91
Trades and crafts	13	10	1	48	-	72
Unskilled	5	4	1	18	-	28
Housewife and others	11	4	3	33	2	53
<u>By stock</u>						
Creole	4	2	1	29	-	36
Hausa	1	1	-	8	-	10
Kono	4	4	2	9	-	19
Lebanese	-	-	-	19	-	19
Limba	2	2	-	16	-	20
Mandingo	6	3	4	33	1	47
Mende	23	5	4	58	1	91
Sherbro	3	2	-	10	1	16
Temne	4	11	-	28	-	43
<u>By membership in secret societies</u>						
Members	37	23	6	115	2	183
Non-members	4	4	4	79	1	92
No response	6	3	1	16	-	26
<u>By religion</u>						
Christian	22	11	4	101	1	139
Muslim	22	17	6	101	1	147
No response	3	2	1	8	1	15
<u>By sex</u>						
Male	35	24	9	151	1	220
Female	12	6	2	59	2	81
<u>By place of birth</u>						
Urban	-	6	3	63	-	72
Rurban	29	6	4	79	1	119
Rural	18	18	4	68	2	110

TABLE 39

AGENCIES CONSULTED BY 60 RESPONDENTS FOR TREATING
DIARRHEA AND DYSENTERY (PER CENTS)

Categories of Respondents	Percentage reporting agency as				
	Native medicine	Drug store	Private nurse	Hos- pital	Unknown
<u>All respondents</u>	15.6	10.0	3.7	69.8	0.9
<u>By education</u>					
9 or more years	8.0	4.0	1.3	86.7	-
8 or less years	18.8	16.7	7.3	56.3	1.0
No schooling	15.0	9.7	2.7	70.7	1.8
<u>By occupation</u>					
Professional-clerical	5.3	1.8	3.5	89.5	-
Business	16.5	12.1	4.4	65.9	1.1
Trades and crafts	18.1	13.9	1.4	66.7	-
Unskilled	17.9	14.3	3.6	64.3	-
<u>By stock</u>					
Creole	11.1	5.6	2.8	80.5	-
Hausa	10.0	10.0	-	80.0	-
Kono	21.1	21.1	10.5	47.4	-
Lebanese	-	-	-	100.0	-
Limba	10.0	10.0	-	80.0	-
Mandingo	12.8	6.4	8.5	70.2	2.1
Mende	25.3	5.5	4.4	63.7	1.1
Sherbro	18.7	12.5	-	62.5	6.3
Temne	9.3	25.6	-	65.1	-
<u>By membership in secret societies</u>					
Members	20.2	12.6	3.3	62.8	1.1
Non-members	4.3	4.3	4.3	85.9	1.1
<u>By religion</u>					
Christian	15.8	7.9	2.9	72.7	0.8
Muslim	15.0	11.6	4.1	68.7	0.7
<u>By sex</u>					
Male	15.9	10.9	4.1	68.6	0.5
Female	14.8	7.4	2.5	72.8	2.5
<u>By place of birth</u>					
Urban	-	8.3	4.2	87.5	-
Urban	24.4	5.0	3.4	66.4	0.8
Rural	16.4	16.4	3.6	61.8	1.8

TABLE 40

AGENCIES CONSULTED BY 80 RESPONDENTS FOR TREATING MALARIA (NUMBER)

Categories of Respondents	Number reporting agency as					Totals
	Native medicine	Drug store	Private nurse	Hospital	Unknown	
<u>All respondents</u>	24	78	25	170	4	301
<u>By education</u>						
9 or more years	1	12	5	57	-	75
8 or less years	9	34	9	42	-	96
No schooling	11	28	11	61	2	113
Qur'an and others	3	4	-	10	-	17
<u>By occupation</u>						
Professional-clerical	1	9	5	42	-	57
Business	6	30	6	48	1	91
Trades and crafts	8	22	6	35	1	72
Unskilled	2	7	1	18	-	28
Housewife and others	7	10	7	27	2	53
<u>By stock</u>						
Creole	3	9	3	21	-	36
Hausa	-	2	2	6	-	10
Kono	-	8	2	9	-	19
Lebanese	-	2	-	17	-	19
Limba	1	2	-	15	2	20
Mandingo	2	13	4	28	-	47
Mende	18	11	10	50	2	91
Sherbro	-	3	3	10	-	16
Tempe	-	28	1	14	-	43
<u>By membership in secret societies</u>						
Members	20	49	16	94	4	183
Non-members	2	23	8	59	-	92
No response	2	6	1	17	-	26
<u>By religion</u>						
Christian	12	30	13	83	1	139
Muslim	10	44	11	80	2	147
No response	2	4	1	7	1	15
<u>By sex</u>						
Male	17	61	17	122	3	220
Female	7	17	8	48	1	81
<u>By place of birth</u>						
Urban	2	19	5	46	-	72
Rurban	14	31	9	63	2	119
Rural	8	28	11	61	2	110

TABLE 41

AGENCIES CONSULTED BY 80 RESPONDENTS FOR TREATING MALARIA (PER CENTS)

Categories of Respondents	Percentage reporting agency as				
	Native medicine	Drug store	Private nurse	Hospital	Unknown
<u>All respondents</u>	8.0	25.9	8.3	56.5	1.3
<u>By education</u>					
9 or more years	1.3	16.0	6.7	76.0	-
8 or less years	9.4	35.4	9.4	43.8	2.1
No schooling	9.7	24.8	9.7	54.0	1.8
<u>By occupation</u>					
Professional-clerical	1.8	15.8	8.7	73.7	-
Business	6.6	33.0	6.6	52.7	1.1
Trades and crafts	11.1	30.5	8.3	48.6	1.4
Unskilled	7.1	25.0	3.6	64.3	-
<u>By stock</u>					
Creole	8.3	25.0	8.3	58.3	-
Hausa	-	20.0	20.0	60.0	-
Kono	-	42.1	10.5	47.4	-
Lebanese	-	10.5	-	89.5	-
Limba	5.0	10.0	-	75.0	10.0
Mandingo	4.3	27.6	8.5	59.6	-
Mende	19.8	12.1	11.0	54.9	2.2
Sherbro	-	18.7	18.8	62.5	-
Tenne	-	65.1	2.3	32.6	-
<u>By membership in secret societies</u>					
Members	10.9	26.8	8.7	51.4	2.2
Non-members	2.2	25.0	8.7	64.1	-
<u>By religion</u>					
Christian	8.6	21.6	9.4	59.7	0.7
Muslim	6.8	29.9	7.5	54.4	1.4
<u>By sex</u>					
Male	7.7	27.7	7.7	55.5	1.4
Female	6.8	21.0	9.9	59.2	1.2
<u>By place of birth</u>					
Urban	2.8	26.4	6.9	63.9	-
Rurban	11.8	26.0	7.6	52.9	1.7
Rural	7.3	25.4	10.0	55.5	1.8

education, respondents with 9 or more years of schooling indicated the greatest reliance on the hospital;⁵⁴ by membership in secret societies, members showed less reliance on the hospital.⁵⁵

Treatment of mental illness. -- Respondents were about equally divided between those who would consult the hospital and those who indicated they would consult the mori-man (See Tables 42-43). Except for differentials based on occupation and sex, attributes proved to be statistically significant by differentiating numbers selecting the hospital and the mori-man. By education, greatest use of the hospital was observed among respondents with 9 or more years of schooling;⁵⁶ by stock, the Creole, Hausa, and Lebanese indicated the greatest use of the hospital;⁵⁷ by membership in secret societies, a direct relationship was observed between non-membership and use of the hospital;⁵⁸ by religion, Muslims indicated greater reliance on the mori-man,⁵⁹ as did respondents from protectorate towns and villages.⁶⁰

Circumstances under which blood would be donated. -- Out of the 301 respondents, 30 per cent indicated a willingness to support a blood bank by making voluntary contributions, even if none of their relatives or friends was in immediate need of blood. Only 5 respondents said they would make donations only for a fee, but of the remainder, 38 per cent indicated that they would contribute blood only to save someone's life; 11 per cent said they would give their blood only if it was needed by relatives; and 17 per cent said there were no circumstances that would make them want to donate their blood (See Tables 44-45).

$${}^{54}\chi^2 = 18.22, P = .001, D.F. = 2, \text{ when compared as stated.}$$

$${}^{55}\chi^2 = 4.03, P = .02-.05, D.F. = 1.$$

$${}^{56}\chi^2 = 22.80, P = .001, D.F. = 2, \text{ when compared as stated.}$$

$${}^{57}\chi^2 = 29.27, P = .001, D.F. = 4. \quad {}^{58}\chi^2 = 20.04, P = .001, D.F. = 1.$$

$${}^{59}\chi^2 = 10.15, P = .001-.01, D.F. = 1. \quad {}^{60}\chi^2 = 15.70, P = .001, D.F. = 2.$$

TABLE 42

AGENCY CONSULTED FOR TREATING MENTAL ILLNESS BY BO RESPONDENTS (NUMBER)

Categories of Respondents	Number reporting agency to be			
	Mori-man	Hospital	Unknown	Totals
<u>All respondents</u>	151	147	3	301
<u>By education</u>				
9 or more years	21	54	-	75
8 or less years	51	43	2	96
No schooling	70	42	1	113
Qu'ran and others	9	8	-	17
<u>By occupation</u>				
Professional-clerical	18	39	-	57
Business	44	47	-	91
Trades and crafts	37	33	2	72
Unskilled	15	13	-	28
Housewife and others	37	15	1	53
<u>By stock</u>				
Creole	11	25	-	36
Hausa	3	7	-	10
Kono	17	2	-	19
Lebanese	-	19	-	19
Limba	7	13	-	20
Mandingo	27	20	-	47
Mende	57	37	2	91
Sherbro	6	9	1	16
Temne	28	15	-	43
<u>By membership in secret societies</u>				
Members	109	71	3	183
Non-members	30	62	-	92
No response	12	14	-	26
<u>By religion</u>				
Christian	55	82	2	139
Muslim	87	59	1	147
No response	9	6	-	15
<u>By sex</u>				
Male	107	112	1	220
Female	44	35	2	81
<u>By place of birth</u>				
Urban	23	49	-	72
Rurban	72	46	1	119
Rural	56	52	2	110

TABLE 43

AGENCY CONSULTED FOR TREATING MENTAL ILLNESS BY 80 RESPONDENTS (PER CENTS)

Categories of Respondents	Percentage reporting agency to be		
	Mori-man	Hospital	Unknown
<u>All respondents</u>	50.2	48.2	1.0
<u>By education</u>			
9 or more years	28.0	72.0	-
8 or less years	53.1	44.8	2.1
No schooling	61.9	37.2	0.9
<u>By occupation</u>			
Professional-clerical	31.6	68.4	-
Business	48.4	51.6	-
Trades and crafts	51.4	45.8	2.8
Unskilled	53.6	46.4	-
<u>By stock</u>			
Creole	30.6	69.4	-
Hausa	30.0	70.0	-
Kono	89.5	10.5	-
Lebanese	-	100.0	-
Limba	35.0	65.0	-
Mandingo	57.4	42.6	-
Mende	57.1	40.7	2.2
Sherbro	37.5	56.3	6.2
Temne	65.1	34.9	-
<u>By membership in secret societies</u>			
Members	59.6	38.8	1.6
Non-members	32.6	67.4	-
<u>By religion</u>			
Christian	39.6	59.0	1.4
Muslim	59.2	40.1	0.7
<u>By sex</u>			
Male	48.6	50.9	0.5
Female	54.3	43.2	2.5
<u>By place of birth</u>			
Urban	31.9	68.1	-
Rurban	60.5	38.7	0.8
Rural	50.9	47.3	1.8

TABLE 44

CIRCUMSTANCES UNDER WHICH 80 RESPONDENTS WOULD MAKE BLOOD DONATIONS (NUMBER)

Categories of Respondents	Number indicating circumstance as						Totals
	None	Needy relative	Saving life	Being paid	Support of bank	Unknown	
<u>All respondents</u>	52	33	115	5	90	6	301
<u>By education</u>							
9 or more years	8	5	34	-	27	1	75
8 or less years	15	12	40	4	22	3	96
No schooling	25	13	37	1	35	2	113
Qur'an and others	4	3	4	-	6	-	17
<u>By occupation</u>							
Professional-clerical	6	5	21	1	23	1	57
Business	17	9	44	-	20	1	91
Trades and crafts	12	10	24	3	21	2	72
Unskilled	8	4	13	-	3	-	28
Housewife and others	9	5	13	1	23	2	53
<u>By stock</u>							
Creole	3	2	23	-	7	1	36
Hausa	1	2	3	-	4	-	10
Kono	2	-	10	-	7	-	19
Lebanese	1	4	10	-	4	-	19
Limba	7	1	8	-	3	1	20
Mandingo	8	6	22	-	11	-	47
Mende	22	10	15	3	38	3	91
Sherbro	3	3	5	2	2	1	16
Temne	5	5	19	-	14	-	43
<u>By membership in secret societies</u>							
Members	38	19	59	4	58	5	183
Non-members	7	11	43	1	29	1	92
No response	7	3	13	-	3	-	26
<u>By religion</u>							
Christian	21	14	49	4	47	4	139
Muslim	27	18	59	1	40	2	147
No response	4	1	7	-	3	-	15
<u>By sex</u>							
Male	34	27	88	5	62	4	220
Female	18	6	27	-	28	2	81
<u>By place of birth</u>							
Urban	6	11	35	-	19	1	72
Rurban	22	14	35	1	44	3	119
Rural	24	8	45	4	27	2	110

TABLE 45

CIRCUMSTANCES UNDER WHICH BO RESPONDENTS WOULD MAKE BLOOD DONATIONS (PER CENT)

Categories of Respondents	Percentage indicating circumstance as					
	None	Needy relative	Saving life	Being paid	Support of bank	Unknown
<u>All respondents</u>	17.3	11.0	38.2	1.7	29.9	2.0
<u>By education</u>						
9 or more years	10.7	6.7	45.3	-	36.0	1.3
8 or less years	15.6	12.5	41.7	4.2	22.9	3.1
No schooling	22.1	11.5	32.7	0.9	31.0	1.8
<u>By occupation</u>						
Professional-clerical	10.5	8.8	36.8	1.8	40.3	1.7
Business	18.7	9.9	48.4	-	22.0	1.1
Trades and crafts	16.7	13.9	33.3	4.2	29.2	1.4
Unskilled	28.6	14.3	46.4	-	10.7	-
<u>By stock</u>						
Creole	8.3	5.6	63.9	-	19.4	2.8
Hausa	10.0	20.0	30.0	-	40.0	-
Kono	10.5	-	52.6	-	36.8	-
Lebanese	5.3	21.1	52.6	-	21.0	-
Limba	35.0	5.0	40.0	-	15.0	5.0
Mandingo	17.0	12.8	46.8	-	23.4	-
Mende	24.2	11.0	16.5	3.3	41.8	3.3
Sherbro	18.7	18.7	31.3	12.5	12.5	6.3
Temze	11.6	11.6	44.2	-	32.6	-
<u>By membership in secret societies</u>						
Members	20.8	10.4	32.2	2.2	31.7	2.7
Non-members	7.6	12.0	46.7	1.1	31.5	1.1
<u>By religion</u>						
Christian	15.1	10.1	35.3	2.9	33.8	2.9
Muslim	18.4	12.2	40.1	0.7	27.2	1.4
<u>By sex</u>						
Male	15.5	12.3	40.0	2.3	28.2	1.8
Female	22.2	7.4	33.3	-	34.6	2.5
<u>By place of birth</u>						
Urban	8.3	15.3	48.6	-	26.4	1.4
Rurban	18.5	11.8	29.4	0.8	37.0	2.5
Rural	21.8	8.3	40.9	3.6	24.5	1.8

Those who would make voluntary contributions without deriving any personal benefit included 36 per cent of respondents with 9 or more years of schooling, compared with 23 per cent with 8 or less years of schooling, but differentiating the number reporting donations to support a blood bank or for a fee, the number reporting donations to save a life or to help a relative, and number reporting no donations or not responding proved not to be statistically significant. Only differentials based on stock of origin, membership in secret societies, and place of birth proved to be statistically significant; by stock, the highest degree of objection to blood donation was observed among the Limba and Mende;⁶¹ by membership in secret societies, the greatest objection came from members;⁶² by place of birth, the least objection came from respondents in the "rurban" category.⁶³

Hospital conditions considered unsatisfactory. -- About 49 per cent of the respondents indicated that drugs dispensed by the hospital were sub-standard, that is, they were either "too weak" or compounded incorrectly; another 20 per cent complained about the discourteous manner of members of the hospital staff; and 30 per cent complained about the overcrowded condition of the hospital (See Tables 46-47). All the differentials, except religion, proved to be statistically significant when grouped according to number reporting condition as inferior drugs, number reporting condition as staff discourtesy, and number reporting condition as overcrowding or not responding. By education, those with no schooling complained most about poor drugs, whereas those with 9 or more years of schooling complained about overcrowding;⁶⁴ by occupation,

⁶¹ $\chi^2 = 30.79$, $P = .001$, D.F. = 8, when compared as stated.

⁶² $\chi^2 = 10.55$, $P = .01-.001$, D.F. = 3.

⁶³ $\chi^2 = 11.90$, $P = .02-.01$, D.F. = 4.

⁶⁴ $\chi^2 = 16.62$, $P = .01-.001$, D.F. = 4, when compared as stated.

TABLE 46

UNSATISFACTORY CONDITIONS IN HOSPITAL AS REPORTED BY 80 RESPONDENTS (NUMBER)

Categories of Respondents	Number reporting condition as				
	Over-crowded	Discourtesy of staff	Poor drugs	Unknown	Totals
<u>All respondents</u>	91	59	117	4	301
<u>By education</u>					
9 or more years	29	24	22	-	75
8 or less years	26	17	50	3	96
No schooling	30	17	65	1	113
Qu'ran and others	6	1	10	-	17
<u>By occupation</u>					
Professional-clerical	25	16	15	-	57
Business	35	18	38	-	91
Trades and crafts	15	11	43	3	72
Unskilled	10	8	9	1	28
Housewife and others	6	6	41	-	53
<u>By stock</u>					
Creole	9	13	13	1	36
Hausa	5	1	4	-	10
Kono	12	5	2	-	19
Lebanese	10	4	5	-	19
Limba	8	7	4	1	20
Mandingo	19	10	18	-	47
Mende	10	7	73	1	91
Sherbro	4	1	10	1	16
Teeme	14	11	18	-	43
<u>By membership in secret societies</u>					
Members	48	32	101	2	183
Non-members	37	21	33	1	92
No response	6	6	13	1	26
<u>By religion</u>					
Christian	34	33	69	3	139
Muslim	52	23	71	1	147
No response	5	3	7	-	15
<u>By sex</u>					
Male	75	45	96	4	220
Female	16	14	51	-	81
<u>By place of birth</u>					
Urban	32	19	20	1	72
Rurban	33	25	60	1	119
Rural	26	15	67	2	110

TABLE 47

UNSATISFACTORY CONDITIONS IN HOSPITAL AS REPORTED BY 80 RESPONDENTS (PER CENTS)

Categories of Respondents	Percentage reporting condition as			
	Over-crowded	Discourtesy of staff	Poor drugs	Unknown
<u>All respondents</u>	30.2	19.6	48.8	1.3
<u>By education</u>				
9 or more years	38.7	32.0	29.3	-
8 or less years	27.1	17.7	52.1	3.1
No schooling	26.5	15.0	57.5	0.9
<u>By occupation</u>				
Professional-clerical	43.8	28.1	28.1	-
Business	38.5	19.8	41.7	-
Trades and crafts	20.8	15.3	59.7	4.2
Unskilled	35.7	28.6	32.1	3.6
<u>By stock</u>				
Creole	25.0	36.1	36.1	2.8
Hausa	50.0	10.0	40.0	-
Kono	63.2	26.3	10.5	-
Lebanese	52.6	21.1	26.3	-
Limba	40.0	35.0	20.0	5.0
Mandingo	40.4	21.3	38.3	-
Mende	11.0	7.7	80.2	2.2
Sherbro	25.0	6.3	62.5	6.3
Temne	32.5	25.6	41.9	-
<u>By membership in secret societies</u>				
Members	26.2	17.5	55.2	1.1
Non-members	40.2	22.8	35.9	1.1
<u>By religion</u>				
Christian	24.4	23.7	49.6	2.2
Muslim	44.4	15.6	48.3	0.7
<u>By sex</u>				
Male	34.1	20.5	43.6	1.8
Female	19.7	17.3	63.0	-
<u>By place of birth</u>				
Urban	44.4	26.4	27.8	1.4
Rurban	27.7	21.0	50.4	0.8
Rural	23.6	13.6	60.9	1.8

those in trades and crafts complained most about poor drugs, while the professional-clerical workers complained about overcrowding;⁶⁵ by stock, the Verde complained most about poor drugs;⁶⁶ by membership in secret societies, members complained most about poor drugs, whereas non-members complained about overcrowding;⁶⁷ by sex, females complained most about poor drugs as against the male complaint about overcrowding;⁶⁸ by place of birth, the major complaint by those born in rural communities was about poor drugs, with those born in Free-town complaining most about overcrowding.⁶⁹

Reasons for seeking dental care. — Only 24 per cent of the respondents said they would consult the dentist for a check-up, or when there was no apparent reason for doing so. About 45 per cent said they would go to the clinic for toothaches only, whereas 29 per cent indicated that they would consult the clinic to have dentures and fillings done also (See Tables 48-49). Except for education, all differentials proved to be statistically significant when compared according to number reporting reason as need for denture, filling, or check-up, and number reporting reason as toothache or not responding. By occupation, the majority of those in trades and crafts and those classified as unskilled would consult the dentist only for toothaches, whereas a greater proportion of those in business would consult him for other reasons.⁷⁰ By stock, more Creoles and Lebanese indicated that they would consult the dentist for

$$65\chi^2 = 6.02, P = .05-.02, D.F. = 2.$$

$$66\chi^2 = 61.93, P = .001, D.F. = 8.$$

$$67\chi^2 = 9.33, P = .01-.001, D.F. = 2.$$

$$68\chi^2 = 9.73, P = .01-.001, D.F. = 2.$$

$$69\chi^2 = 19.98, P = .001, D.F. = 4.$$

$$70\chi^2 = 11.38, P = .001, D.F. = 1, \text{ when compared as stated.}$$

TABLE 48

CIRCUMSTANCES UNDER WHICH RESPONDENTS WOULD CONSULT DENTIST (NUMBER)

Categories of Respondents	Number indicating they would consult dentist for				
	Toothache only	Fillings and dentures	Routine checkup	Unknown	Totals
<u>All respondents</u>	134	88	72	7	301
<u>By education</u>					
9 or more years	32	29	13	1	75
8 or less years	41	35	19	1	96
No schooling	57	15	36	5	113
Qu'ran and others	4	9	4	-	17
<u>By occupation</u>					
Professional-clerical	27	20	9	1	57
Business	30	43	18	-	91
Trades and crafts	36	13	22	1	72
Unskilled	23	2	2	1	28
Housewife and others	18	10	21	4	57
<u>By stock</u>					
Creole	13	15	7	1	36
Hausa	3	4	3	-	10
Kono	17	1	1	-	19
Lebanese	-	16	3	-	19
Limba	13	4	1	2	20
Mandingo	20	18	8	1	47
Wende	31	17	40	3	91
Sherbro	4	6	6	-	16
Tenne	33	7	3	-	43
<u>By membership in secret societies</u>					
Members	91	38	48	6	183
Non-members	31	40	21	-	92
No response	12	10	3	1	26
<u>By religion</u>					
Christian	49	51	36	3	139
Muslim	75	34	34	4	147
No response	10	3	2	-	15
<u>By sex</u>					
Male	112	61	43	4	220
Female	22	27	29		81
<u>By place of birth</u>					
Urban	21	40	10	1	72
Rurban	61	34	22	2	119
Rural	52	14	40	4	110

TABLE 49

CIRCUMSTANCES UNDER WHICH BO RESPONDENTS WOULD CONSULT DENTIST (PER CENTS)

Categories of Respondents	Percentage indicating they would consult for			
	Toothache only	Fillings and dentures	Routine check up	Unknown
<u>All respondents</u>	44.5	29.2	23.9	2.3
<u>By education</u>				
9 or more years	42.7	38.7	17.3	1.3
8 or less years	42.7	36.5	19.8	1.0
No schooling	50.4	13.3	31.9	4.4
<u>By occupation</u>				
Professional-clerical	47.4	35.1	15.8	1.8
Business	33.0	47.3	19.8	-
Trades and crafts	50.0	18.1	30.6	1.4
Unskilled	82.1	7.1	7.1	3.6
<u>By stock</u>				
Creole	36.1	41.7	19.4	2.8
Hausa	30.0	40.0	30.0	-
Kono	89.5	5.3	5.3	-
Lebanese	-	84.2	15.8	-
Limba	65.0	20.0	5.0	10.0
Mandingo	42.6	38.3	17.0	2.1
Mende	34.1	18.7	44.0	3.3
Sherbro	25.0	37.5	37.5	-
Temne	76.7	16.3	7.0	-
<u>By membership in secret societies</u>				
Members	49.7	20.8	26.2	3.3
Non-members	33.7	43.5	22.8	-
<u>By religion</u>				
Christian	35.3	36.7	25.9	2.1
Muslim	51.0	23.1	23.1	2.7
<u>By sex</u>				
Male	50.9	27.7	19.5	1.8
Female	27.2	33.3	35.8	3.7
<u>By place of birth</u>				
Urban	29.2	55.6	13.9	1.4
Rurban	51.3	28.6	18.5	1.7
Rural	47.3	12.7	36.4	3.6

cases other than toothaches; ⁷¹ a similar indication was given by non-members as against members of secret societies, ⁷² Christians as against Muslims, ⁷³ females as against males, ⁷⁴ and respondents born in Freetown as against those born elsewhere. ⁷⁵

The majority of respondents indicated that the hospital and its facilities provided the best means for treating most, if not all, of the prevalent diseases. Only for mental illness did there appear to be a lack of confidence in the hospital -- with a significant proportion of respondents in all categories choosing to consult the mori-man rather than the hospital. On the other hand, attitudes toward various aspects of the hospital and its facilities did not always seem favorable: a significant number of respondents indicated that general facilities were inadequate, that personnel were at times discourteous, and that some of the patients received improper care which, on occasion, resulted in deaths that could have been prevented. The fact that a preference for private treatment was so widely indicated could be regarded as the outcome of these recognized grievances rather than as an awareness of the inherent superiority of the available medical facilities. A logical conclusion, nevertheless, would be that education, secret society membership, and place of birth were highly significant in determining the degree to which western or traditional health practices were followed.

$${}^{71}\chi^2 = 39.93, P = .001, D.F. = 4.$$

$${}^{72}\chi^2 = 9.17, P = .01-.001, D.F. = 1.$$

$${}^{73}\chi^2 = 7.68, P = .01-.001, D.F. = 1.$$

$${}^{74}\chi^2 = 11.35, P = .001, D.F. = 1.$$

$${}^{75}\chi^2 = 10.19, P = .01-.001, D.F. = 2.$$

CHAPTER VI

CONCLUSION

The Trend toward Acceptance of Western Health Practices

The preceding chapters have revealed that acceptance of western health practices and preferences is already widespread in the Bo community. This conclusion is supported by official statistics and by data collected for this study.

Perhaps the most impressive indication of improvement in health standards is the decreasing infant mortality rate (Table 1), since this has long been regarded as a basic index of public health. Another useful indication is the increased use of hospital facilities (Tables 2, 7, and 8). This is particularly important in maternity care (Tables 6 and 9), in which data collected by the observer (Tables 19-25) reveal a virtually complete acceptance of hospitalization and professional care on the part of adults of Bo who were themselves born without such advantages. The change observed includes the acceptance of such types of preventive care as bottle feeding, powdered milk, commercial baby foods, and medication.

There is similar evidence of acceptance in other areas. Whether deliberately or accidentally, by choice or by necessity, those who would not have used meat, milk, and eggs are now doing so to an increasing extent (Tables 26-27); the use of eating utensils and food served in individual receptacles has become more evident (Tables 28-29); and compliance with municipal sanitary regulations, especially with reference to disposal of refuse, use of water, and

cooperation with sanitation personnel was observed to be favorable (Tables 30-37), as was reliance upon western facilities for the treatment of most of the endemic diseases (Tables 38-41). Contrary to expectations, the attitude toward supporting a blood bank -- a preventive and altruistic measure without any counterpart in the traditional orientation to health -- appeared to be in favor of participation in such a project (Tables 44-45). Although there was significant objection to the overcrowded condition of health facilities and the accompanying evils of favoritism and malfeasance, an impressive degree of satisfaction with the general services was observed, and the awareness of problems and circumstances limiting the provision and acquisition of services was itself a sign of new health orientations (Tables 45-47).

Historically, western practices and standards came to Bo through colonial institutions and Creole settlers and through recent economic development and accompanying urbanization (See Chapter II). The former colony was planned as a settlement for liberated slaves and provided with schools, churches, medical clinics, and hospitals. The former protectorate, on the other hand, was at first left with tribal groupings and institutions intact; innovations were introduced only when colonial policy indicated the necessity. In the development of the hinterland, for reasons either of commerce or security, the central government was at times forced to implant western facilities and to foster western norms in hitherto tribal environs. Cooperation of the indigenous peoples was required in the building of railways, roads, schools, health centers, and in the observance of policies relating to taxation and law and order. The Creoles, descendants of liberated slaves originally settled in Freetown, stood ready and able to aid in establishing the colonial order in the protectorate, both by decree and by example.

Apart from serving the government, the Creoles were also called upon to promote the interests of private groups, principally missionary organizations and commercial firms. These three major agencies — the central government, missionary organizations, and commercial firms — established and maintained various western facilities which, in turn, encouraged or forced tribal peoples to adopt western practices. They did so with Creoles as their primary agents. Some of the practices were accorded temporary compliance, while others were permanently enforced or developed into personal habits. The former included such practices as monogamy, formal schooling, and optional medical consultations for those not bound by contractual agreement; the latter included taxation, abolition of cannibalism and other forms of homicide, compulsory registration of births and deaths, and compliance with stipulated health and sanitary regulations, including submission to immunization and physical examination as demanded. Acceptance of western practices, by force or by choice, was initially and continues to be related directly to the extent and duration of involvement with colonial administration, missionary organizations, commercial firms, and Creoles. Still today, the Creoles occupy the most important positions, especially in the medical and health services.

More changes have been initiated during the last fifteen years, due to economic development and urbanization, than during any other period of contact between the "western" and the "traditional" elements in the country. Although colonial administration and commercial activities, by mining companies and other agencies engaged in the extraction and trade of the country's natural resources, had established some measure of a wage economy by 1940, Sierra Leone remained significantly agrarian. In fact, it continues to be described as an agricultural country in which most of the people are engaged in deriving a subsistence level of living from small, eroding, and infertile land holdings.

Nevertheless, the increasing impact of urbanization is being recognized in the growth of labor unions and in adverse effects upon agricultural output due to the counter-attractions of diamond mining and urban wage-earning employment. Increasing funds have been made available for development schemes relating to agricultural cooperatives; road and bridge construction; school, hospital, and housing construction; and the construction of electrical power plants and water supply systems in various communities. Such schemes have contributed to the development of urban patterns of living, especially by providing wages with which to secure available goods and services desired, and by providing some measure of freedom from traditional or tribal institutions and sanctions. Of significance to the acceptance of western health practices is the fact that wage-earning employment in most cases affords proximity to health measures and other western facilities, as well as some degree of free medical coverage, while at the same time demanding -- as a prerequisite for employment -- compliance with certain health practices. In due course of time, what was once a strange custom and practice, especially among those who do not really grasp the rational basis of western medical and health practice, becomes a part of a general pattern applicable to all members of a wage-earner's family.

Another contributing factor to acceptance is that the experiment, begun in 1936 by the central government, aimed at the development of responsible local government in communities where autocratic tribal authorities had prevailed, has begun to prove successful. More and more localities are assuming both financial and executive responsibility for their own welfare services, including schools and health centers, under the guidance and with the support of the appropriate agencies of the central government. Acceptance of health practices which, although western in origin, are self-administered is enhanced

by the possibility of regarding the practices themselves as a part and derivation of the local tradition.

Under the impact of urbanization, forces disruptive to traditional patterns of behavior are becoming more evident. Societies or groups which once emphasized or successfully encouraged relationships of cooperation and accommodation are now tolerant of competition and conflict. The resulting individualism may be considered beneficial to health programs, especially in regard to practices formerly resisted on grounds more often emotional and ethnocentric than rational and objective. There is also the accompanying process of nationalism which tends to promote a "directedness-vacuum." Characterized by contempt for colonialism and foreign domination, this brand of nationalism has not developed comparable awareness of the need to substitute "national" for "colonial" agencies. In short, various groups differing in status, tribal loyalty, religion, and in other attributes may combine to oust or destroy colonialism, but they often do not realize or agree that any resulting loss of services must be compensated to achieve a national purpose. The "confusion" of urbanization is reflected in health practices as traditional loyalties are modified and replaced either with nothing concrete or with receptiveness to previously alien patterns of behavior.

Although it was inevitable that enculturation in western health practices would take place, the pace at which this has occurred, the areas in which it has been pronounced, and the degree of resistance which has been manifested have all been influenced by various cultural and social differentials.

The Operation of Cultural and Social Differentials

Of all the differentiating factors, educational attainment was observed to be the most significant. This was of course no surprise since formal schooling

furnishes the best basis for understanding and for the acquisition of new technical knowledge. It is therefore encouraging to note the increasing interest on the part of the government for providing more and better educational centers throughout Sierra Leone. Respondents with more years of schooling, in most cases, revealed a higher degree of "westernization" in regard to health practices than did those with less or no schooling. This finding was statistically significant in all areas investigated, with the exception of those relating to blood donation, private medical treatment, and dental care. It was also noted that those with greater educational attainment appear less tolerant of and less willing to accept as unavoidable such problems as overcrowding and malfeasance.

Related to education in obvious ways are occupation and urban origin. Persons in white-collar occupations are ordinarily those with high educational attainment, as well as those entitled to health coverage and to incomes which provide superior standards of living. Such persons find it easier to maintain western health practices than blue-collar workers with lower levels of education and standards of living. Nevertheless, occupation as a differentiating factor was not found to be statistically significant either in practices relating to treatment of endemic diseases or in the evaluation of health services and personnel. The lack of significance in these areas may be the result of the extension of health coverage and other fringe benefits to even the lower levels of personnel in the various government and commercial agencies. Furthermore, the diamond boom has been of great benefit to the daring illiterates or partly schooled persons who are now able to secure, by their newly acquired wealth, services which were hitherto available only to those "covered" by their employers, or to undertake practices formerly regarded as fit only for the "privileged."

Only in two areas was urban origin, determined by place of birth, not found to be statistically significant as an index of westernization. These areas related to the evaluation of health services and personnel and to the treatment of malaria, against which most people consider themselves immune from fatality and for which they undertake self-administration of commercial drugs or home remedies. Western practices were nevertheless observed to the highest degree among those of urban origin and to the lowest extent among those of rural origin.

Specific membership or orientation in a tribe, secret society, and religious body was observed to be a factor in acceptance of or resistance to western health practices. Of the tribal or stock groupings, the Creoles were found to be the most westernized, along with the Lebanese. Intermediary between these and the least westernized Limbas and Mendes were the Mandingo, Sherbro, and Temne. As to specific practices, only the Mende showed a relatively high degree of use of traditional facilities for maternity care. It should be mentioned, however, that stock orientation was not found to be statistically significant in about one-third of the health areas examined, especially in matters relating to source of drinking water, rubbish disposal, and the evaluation of health services and personnel.

Non-members of secret societies were found to be much more receptive to western health practices than members. All health areas, apart from that relating to evaluation of services and personnel, revealed statistically significant differences, with members showing resistance toward western health practices.

Although differences associated with religion and sex were not found to be statistically significant, the data indicate the category of Christians to be more receptive than Muslims, and males to be more receptive than females.

However, females were found to be significantly more favorable than males in the areas of dental care and more likely to be satisfied with the overcrowded available health services, whereas males were more favorable toward the care received by in-patients of the hospital.

In spite of the trend toward the acceptance of western health practices, there remain certain categories of the population which continue to offer resistance. Women show particular resistance toward the use of eating utensils and toward acceptance of the Health Department as a useful agency, and show greater dissatisfaction with the care provided for in-patients of the hospital. Resistance in these areas probably derives from the tradition-directedness of women as a group and the low level of their educational attainment. Because of their inferior status vis-a-vis men, women are the least resistant to the traditional sanctions and the least enculturated. In the use of eating utensils, for instance, most women would not presume to seem like "educated or wage-earning folks." The reaction to the Health Department, on the other hand, may be due to the fact that it is the women who get first-hand experience with evidences of incompetence or inadequacy: most women have responsibility for maintaining sanitary conditions around their homes and protecting the daily well-being of their families. When rubbish dumps begin to overflow, when drinking water becomes a problem, and when health personnel become discourteous or negligent, the women are the first to experience these things intimately.

Population categories showing the greatest level of resistance were observed to be those with little or no formal schooling, those occupied as unskilled laborers, members of the Merde and Lirba tribes, members of secret societies, and those of rural origin. In a general way, the observed resistance in the various population categories may be ascribed to such factors as tradition-directedness, isolation from and relative ignorance of western health

practices, and prejudice and discrimination manifested in the "superior" attitudes of health personnel. Furthermore, these resistant population categories were found to show characteristics of an inferior standard of living with accompanying status inferiority and lack of privileges, the latter including provisions for health coverage, right to respect and courtesy, and access to adequate housing and other amenities. With such deprivations, there exists little opportunity or compulsion to question rigid attachment to traditional norms, or power to avoid subjugation to traditional institutions and sanctions. In contrast, acceptive population categories revealed the capacity and ability to become detached from traditional norms and manifested a high degree of individualism and non-subjection to traditional institutions and sanctions. In addition, these categories were characterized by a high level of enculturation in western culture, a superior standard of living with accompanying status superiority and indirect privileges, such as preferential treatment accorded by health personnel.

Recent economic development and urbanization have proved that differential factors making for resistance to western practices can be modified. As the pace of urbanization continues, more persons will find themselves released from obsolete and ineffective traditional norms and able to consider the adoption of "new patterns," even without an initial understanding of the full significance of such patterns.

Interpretation and Recommendations

The findings of this study support the generally-accepted hypothesis that people in cross-cultural situations participate in or adopt changes in a degree proportionate to their needs and understanding of the basic elements

involved.¹ In Bo, as in other communities in which similar investigations have been conducted, a relationship was found to exist between health practices and prevailing socio-economic conditions and sub-cultural differences. The trend toward acceptance of western health practices which was observed has been supported by changes in the attitudes and opinions of individuals and groups as well as in the conditions of communities. With regard to the latter, the mere establishment of western facilities, such as schools, churches, and hospitals, has been sufficient to arouse interest or curiosity and to encourage activities ranging from overt resistance to overt acceptance. The predispositions of individuals, families, groups, and communities, in turn, were observed to have been influenced in varying degrees by the impact of such differentials as education, occupation, stock of origin, secret society membership, religion, sex, and urban or rural orientation.

The continuation of the observed trend and further success in establishing and maintaining curative and preventive health programs will depend on the relationships between the health agencies, other agencies, and the ordinary people in need of their services. Experienced health engineers agree that a successful program depends essentially upon the acquiescence and cooperation of the community. These engineers have also pointed out that

The co-operation of the people can be realized through health education . . . to inculcate the principles of good health and hygiene, and to stimulate the demand for schemes of environmental control. Without the assistance of health education, satisfactory use and maintenance of sanitary installations are unlikely.

General experience shows that a most valuable approach for the health educator is through women and children, and through local

¹Cf. Morris Axelrod, "Urban Structure and Social Participation," American Sociological Review, XXI (February, 1956), 13-18; Leila C. Deasy, "Socio-economic Status and Participation," American Sociological Review, XII (April, 1956), 185-191; and Arthur T. Porter, "Religious Affiliation in Freetown," Africa, XXIII (January, 1953), 12.

organizations. Whoever may design the programmes of health education, the actual field work must be carried out by people as close as possible to those whom it is desired to effect. In this way the artificial barriers so often created can be avoided.

Since sick people are usually receptive to instruction concerning health principles, it is desirable to ensure that all those concerned with any phase of curative — as well as preventive — medicine play their part in health education.²

Unfortunately, "artificial barriers" to health programs in Po have not been avoided. Most of the influential "field workers" are strangers to the people among whom they work, and those who are "local people" and understand the traditional patterns and values lack the necessary training and power which could be used to promote integration between the old and the new. Furthermore, those who have the opportunity to contribute to health education, through frequent contacts with the sick, hardly do so.³ Existing traditional institutions have yet to be used as effectively as they can, and the lack of adequate understanding or dedication to the objective of environmental health remain factors of impediment.⁴

Basic to the problem of health in Sierra Leone is the need for research,

²Isaac, *op. cit.*, 241. Cf. E. J. Sady, "Community Development and Local Government," *Journal of African Administration*, XI (October, 1959), 179-186.

³During visits to the maternity clinic, this writer observed nurses dispensing powdered milk in filthy newspapers, bandanna, and rags, without advising patients about using clean receptacles. Many dwellings in Po are still without latrines, and some people continue to defecate in the open outdoors, even along the roadside at night.

⁴One official complained about "wrong attitude and insolence" on the part of field workers lacking a dedicated outlook. Such workers show a gruff manner to their clients and have to be closely supervised in order that they may execute their duties properly. Another official pointed out that the common practice of "shake-hand" (bribery), affects the proper execution of duties; even orderlies have been known to demand and accept "small fees" before granting patients the "privilege" of access to the consulting room of the physician. This type of behavior has been commented upon by Albert Schweitzer in his *On the Edge of the Primeval Forest* (London: A. C. Black, 1956), 86 (Fontana edition).

especially the kind which will reveal more clearly the patterns of social interaction and cultural imposition at the grass-roots level. At the same time, a more extensive program of health education must be put into operation so as to develop greater and more consistent awareness of the need for sound health and medical care, not only for the individual, but for the community as a whole. People must be made to realize that, in the matter of health, they are their brothers' keepers. Meanwhile, the need for raising the level of living, as well as the need for providing adequate, competent, and dedicated personnel must not be overlooked.

The responses derived from this field investigation indicate that the shortcomings which seem to exist in the area of public health cannot be blamed entirely upon the resistance of tribal peoples to change. In most of the areas examined, it was observed that changes had taken place, and that in others where this had not occurred, there were contributing factors other than obstacles directly imposed by the incompatibility of the contacting cultures. Often there were faulty evaluations with regard to the true nature of the host culture. A case in point is the pessimism expressed by some officials in regard to maintaining a successful blood bank. Since there is evidence that people in the area are reluctant to entrust an outsider with such vital personal effects as hair, faeces, and blood, it was easy to overlook the influence of social change, inclusive of aspects of change deliberately and diligently promoted, in making the "inevitably impossible" possible. Experience with programs in cross-cultural situations points out the need for promoting change only after the situation has been adequately appraised and plans for initiating the change have been devised. Even then, the innovator is advised to undertake further analysis of factors which may emerge to influence the

success or failure of programs in progress.⁵

It may prove fruitful for the agencies involved in the introduction and maintenance of public health programs to pay greater attention to the linkage and priority of elements within the cultures of the people involved. To do so would, of course, entail consciousness of the actual role being performed by the innovator, as well as the valuation of such a role by the expected "consumers."

This study has provided an evaluation of selected aspects of health conditions in Sierra Leone, particularly of those aspects which inadequate co-ordination and inefficient recording of official data have unconsciously concealed, or which have not been appreciated for their impact upon on-going programs for general development. It is hoped that the agencies concerned will undertake a re-evaluation of their activities and methods of operation in the light of differentials indicated as significant. Furthermore, the problems encountered in this study should provide insights into aspects needing further attention by students and planners whose decisions may be relevant to health programs in general, or to problems of under-developed areas, especially where cultural differences may be found to exist.

To the Sierra Leone government, this study serves as another reminder that plans can best be made when accurate statistics are available to enhance forecasting of trends. The government's indifference to the maintenance of a demographic agency is an obstacle to be overcome.

⁵See Spicer, *op. cit.*, 285-94. Cf. Program of African Studies of Northwestern University, United States Foreign Policy in Africa ("United States Senate Committee on Foreign Relations Studies"; Washington: Government Printing Office, 1959), 67-68.

APPENDICES

APPENDIX I

LETTERS OF INTRODUCTION

July 25, 1957

To whom it may concern:

This will introduce Mr. George Owen Roberts, a graduate student in the department of sociology at The Catholic University of America, Washington, D. C. Mr. Roberts is engaged in doctoral dissertation research on cultural and social factors affecting health and has a grant from the National Institutes of Health to support his project. He wishes to collect data on this problem in Sierra Leone during the year 1957-58. Any cooperation extended to him to forward successful completion of his study will be appreciated.

Signed

C. J. Nuesse, Dean

CJN:dlh

The Director of Medical Services

Medical Department

Sierra Leone

8th January, 1958

Mr. George Roberts is in Sierra Leone upon a study-project connected with public health. He has my permission to obtain any information concerning public health or statistics of sickness and other details of medical work, and I should be grateful if all members of the medical department, in hospitals, health centres, and elsewhere would give him every assistance and cooperation.

(Sgnd) T. P. Eddy

District Commissioner's Office

Bo

4th April, 1958

TO WHOM IT MAY CONCERN

The bearer is Mr. George ROBERTS M.A. B.Sc. from the Catholic University of America who is in Sierra Leone to study various aspects of social life especially as regards public health.

Mr. ROBERTS' studies are approved by the Government and I should be glad if you would give him any assistance you can in the furtherance of his work.

(Sgnd) D. Kirby
District Commissioner.

APPENDIX II

QUESTIONNAIRE TO OFFICIALS AND LEADERS

Instructions: Rank the suggested answers to each of the questions, where appropriate, by using "1" for the most important, "2" for the next important, and so on.

1. What should be done to improve the present state of public health?
 - () Expand educational facilities for all groups at all levels.
 - () Conduct research to find out where and what things are wrong.
 - () Encourage the adoption of western practices in place of tribal health practices.
 - () Encourage participation by all special-interest groups in the community.
 - () Hire more foreign medical and health personnel.
 - () Train more Sierra Leoneans for health work.

2. The promotion and maintenance of sound health in the community requires effective and adequate measures both for the treatment and prevention of diseases.
 - (a) How would you improve upon the existing facilities for treatment?
 - () Increase staff; () improve salaries and other working conditions;
 - () build more hospitals and clinics; () demand greater tolerance, honesty and efficiency of medical and health personnel.

 - (b) How would you improve upon the existing facilities for prevention?
 - () Lower the rate of illiteracy; () campaign against superstitious beliefs and check certain tribal practices; () strengthen measures and staff to promote better sanitation in communities; () introduce compulsory vaccination and physical examination at specific intervals;
 - () increase facilities for isolating carriers of infectious diseases;
 - () raise the general standard of living.

3. What type of agency do you think would be most successful in formulating measures for promoting sound health in the community?
 - () Agency of the central government; () agency organized along tribal or ethnic lines; () agency organized for specific areas or regions;
 - () agency comprising representatives from all the possible sub-agencies.

4. Which of the following diseases require the greatest attention at the moment?
- () Malaria, () tuberculosis; () smallpox; () venereal diseases;
 () leprosy; () yaws; () malnutrition.
5. What should be done to lower the infant mortality rate?
- () Extend the sphere of infant and natal clinics into the homes;
 () check injurious tribal practices; () prohibit polygamy and check promiscuity; () make protein foods available or accessible to more people in the community; () build more hospitals and clinics.
6. What should be done to increase the length of life or the average age at which death occurs?
- () Increase the general standard of living; () discourage overcrowded dwellings; () promote better community sanitation; () encourage industrialization and urban settlements; () discourage certain tribal practices.
7. Why are some health officials considered corrupt, indifferent, or obstinate? What should be done to correct such bad reputation or notoriety?
8. Kindly supply the appropriate information:
- (a) Your tribe or ethnic group _____
- (b) Sex and occupation _____
- (c) Length of service in present occupation _____
- (d) Membership in professional organizations _____

- (e) Sponsorship or participation in local organizations _____

APPENDIX III

INTERVIEW SCHEDULE FOR 80 HOUSEHOLDS AND QUESTIONNAIRE FOR SCHOOL POPULATIONS

A. Maternity Care

1. I was born: () at home; () in a maternity home; () in a hospital.
Attention and care during my birth came from: () relatives;
() midwife; () doctor.
2. The hospital or maternity home delivered: () none of my children;
() my last child; () some of my children; () all my children.
3. When pregnancy occurs in my family we seek the services and attention
of: () relatives; () private midwife; () clinic staff; () doctor.
4. After a baby is born into my family we consult: () relatives; ()
private midwife; () clinic staff; () doctor.
5. A woman expecting a baby should be put under the care of: () relatives;
() private midwife; () clinic; () doctor.
6. The safest place for a baby to be born is: () at home; () nursing home;
() hospital or health center.
7. The services of a maternity clinic are good for a woman: () never;
() who has a sick baby; () who has just had a baby; () who is about to
have a baby; () who seems to be barren.

B. Diet and Home Sanitation

1. My diet normally consists of: () rice or bread; () fish or meat;
() green vegetables; () milk; () eggs.
2. I use spoon or fork to eat: () never; () sometimes; () always.
3. My drinking water comes from: () stream or river; () well; (private
tank; () government pump.
4. I drink my water: () fresh; () after boiling; () after filtering.
5. I dump trash or rubbish: () in my yard; () on the roadside; () in the
dirty box.
6. The Sanitary Department does a good job of: () doing nothing; () dis-
posing of rubbish; () reducing the danger of mosquitoes; () promoting

good health in the community.

C. Treatment of Diseases

1. The native drugs which I have used include: () broomstone; () tea bush; () lemon grass; () agbo; () other _____
2. I go to the hospital: () when nothing else helps; () because it has the best facilities.
3. The kind of medicine I prefer is: () native medicine; () pills; () liquid drug; () injection.
4. One bad thing about the hospital is: () overcrowding; () poor drugs; () discourteous personnel.
5. I prefer private treatment because: () the hospital wastes time; () the hospital gives no privacy; () I get what I need.
6. People who are admitted into the hospital get: () bad food; () poor attention; () good care.
7. People die in the hospital because of: () careless and incompetent staff; () inadequate facilities; () the fact that even the most diligent effort by the medical staff could not save them.
8. I would let my blood be given to a sick person: () never; () who is a relative; () whose life depended on it; () if I am paid; () by donating freely to a blood bank.
9. I see the dentist: () only when my tooth aches; () for a filling; () for a false tooth; () for a regular check up.
10. People with tuberculosis should be: () kept at home; () cared for by the hospital.
11. People with smallpox should be: () kept at home; () cared for by the hospital.
12. People with gonorrhœa should: () do nothing; () consult a private doctor or nurse; () report to the hospital or clinic.
13. I would do one of the following to treat each of these diseases:
 (a) use native medicine; (b) buy medicine from the drug store;
 (c) consult a mori-man; (d) consult a private nurse; (e) consult the hospital or clinic.
 _____ Colds or headache; _____ Diarrhea; _____ Dysentery; _____ Malaria;
 _____ Leprosy; _____ Yaws; _____ Malnutrition; _____ Mental illness.

D. Personal Background

Tribe _____ Sex _____ Occupation _____
Religion _____ Marital status _____ Monthly income _____
Educational level _____ Native society _____ Age _____
Size of household _____ Number of rooms _____ Number in room _____
Place of birth _____ Place of residence: 1 year ago _____,
3 years ago _____, 5 years ago _____, 10 years ago _____.

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