CHANGES IN RAROTONGAN ATTITUDES TOWARD HEALTH AND DISEASE: HISTORICAL FACTORS IN THE DEVELOPMENT OF A MID-TWENTIETH-CENTURY UNDERSTANDING

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The arrival of Europeans in the Pacific brought momentous changes to the health of the indigenous inhabitants of Polynesia, Micronesia, and Melanesia. New diseases greatly enhanced the likelihood of illness and death, and an altered economic, social, and material environment opened the way for new levels of morbidity and mortality from diseases both old and new. Standards of health were affected too by modifications in the islanders' attitudes toward sickness and in their practical responses to ill-health. One Polynesian community's attitudes and responses to illness and post-European changes in those perceptions and practices are the subjects of this study.

Western medical concepts and practices were first brought to Rarotonga, principal island of what is now the Cook group, by English missionaries of the London Missionary Society in the 1820s. European medicine was still comparatively undeveloped in the early nineteenth century, and the missionaries' knowledge of it was usually informal, but from the beginning they found themselves strenuously involved in medical work. At the end of the century their medical role was largely taken over by doctors, nurses, and other health workers appointed by the new administration set up by New Zealand. During the 120 years between the introduction of European medicine and the opening of the antibiotic era after World War II, missionary and government medical

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endeavors were varyingly effective. Despite the often vigorous effort expended during these twelve decades, it can by no means be said that disease in the Cook Islands had been vanquished by 1950, the end of the period covered in this study. But a firmly entrenched mid-twentieth-century Rarotongan perception of health and ill-health had grown out of the shocks and reactions, the innovations and adjustments, of this formative period of Rarotongan history.

Pre-European Concepts of Health and Ill-Health

Ill-health itself was of course not unfamiliar to the Polynesians who had long inhabited Rarotonga and the adjacent islands,[1] and a characteristic conception of health and ill-health had developed down through the centuries. As in all societies unaffected by a "scientific" view of disease, sickness was not regarded by the Rarotongans as a phenomenon somehow separate from the rest of life. On the contrary, beliefs about illness were integrated at the deepest level with ideas about the very nature and meaning of life itself. "Man's behaviour before the threats and realities of illness," it has been remarked, "is necessarily rooted in the conception he has constructed of himself and his universe."[2]

An understanding of the Rarotongans' religion is therefore required, including the realization that the dualism of the modern Western distinction between "religious" and other aspects of life was foreign to the traditional Polynesian mentality. The very word "supernatural" is unsatisfactory in its suggestion that supersensory and intangible beings and forces are not part of the ordinary physical environment. The Polynesians lived rather in a world "where the natural is supernatural, but the supernatural quite natural." Such thinking is inappropriately called "magical," which has connotations of an entirely absent miraculous element; the use of the word "supernatural" can hardly be avoided, but "spiritual" departs least from Polynesian thought-patterns.[3]

The earliest missionaries quickly saw that formal religion, with its gods, *ta'unga* (priests), ceremonies, and *marae* (places set aside specifically for communication between gods and humans), occupied an important place in Rarotongan life.[4] At the heart of this religion was the belief that the life of every human being was shared by his *vaerua,* an incorporeal spirit (or soul)[5] more or less permanently resident in the body until physical death. Thereafter, the spirits of the deceased continued to exist. Now termed *tupapaku,* they sometimes assumed a semi-tangble form as ghostly apparitions, but at all times were apt to communicate with and actively intervene in the lives of the living. Many

gods originated as the *tupapaku* of notable ancestors,[6] and spiritual beings as a group were characterized by their continuing interest in the welfare of their living descendants: the extent of their benevolent potency was an important factor in evaluating the worth and significance of those descendants.

The quality of sacredness attached to gods and spirits was not confined to personal spiritual beings. A powerful spiritual force pervaded many places, objects, and persons, especially those particularly closely associated with the presence of the supernatural. The violation of this sanctity or the infringement of laws *(tapu)* protecting it was a serious matter. Sacrilege and other transgressions *(ara)* damaged the offender's spiritual well-being and commonly brought punitive misfortune upon him. Whether it was famine, sickness, war, or death, observed the missionary Gill, "the first thought of the people was, that some offence had been given to the gods—that they were angry."[7]

That disease was seen as the consequence of spiritual offense is undoubted. The missionaries perceived this immediately, and even sixty years after the establishment of the mission one of its agents could still lament the strong survival of "the old heathen idea that sickness and death are the result of some sin on the part of the relatives, or on account of their anger, or the anger of the dead; or on account of the hostility of the gods of strangers who may arrive among them."[8] It is not to be expected, however, that the evidence relating to health ideology and practice at the time of contact will be extensive or detailed, The missionaries, the only Europeans living close enough to the population to qualify as reliable observers, were quickly shielded as much as possible by their flock from any suggestion that it might still put reliance on a pre-Christian belief system of greatly lowered prestige in the prevailing climate of opinion.[9]

Bodily disorders were seen as clear evidence of the destructive work of an intrusive spirit—work made easier if the victim's spiritual defenses had been weakened by impious transgression. The malevolent invading agent was drawn from the company of spiritual beings associated with the place or object desecrated or the family wronged. A custom noted by an early missionary suggests some idea of a spiritual contagion that remained even after the punitive action of the offended gods or spirits. According to the Rarotongan informant, a common practice when sickness was prevalent had been to dispatch the disease to another island by setting shreds of the victims' clothing adrift in tiny canoes fashioned from bananas.[10]

Some cases of sickness were believed to be occasioned by sorcery.

Purepure (as it is called in the Cook Islands) occurred when the malevolent spiritual invader entered the victim's body not of its own accord but when sent by some evil-minded person for his or her own ends: sorcery was thus a kind of assault. Although sorcery was certainly known and practiced in the Cook Islands, it has been little documented there and may well have been rare.[11]

It must be recognized that "ill-health" is not a completely objective category unambiguously different from "health." The word "disease" comes closer to denoting an objectively identifiable biological state, but even here the boundaries are indistinct. Landy's definitions are worth considering:

> At a minimum, a state of *health* refers to a condition of an organism that permits it to adapt to its environmental situation with relatively minimal pain and discomfort (but not their absence), achieve at least physical and psychical gratifications, and possess a reasonable probability of survival. A state of *disease* is a condition of the organism that seriously obtrudes against these adaptive requirements and causes partial or complete disablement and physical and/or behavioural dysfunction.[12]

More elegant (and more pessimistic) is the definition of health offered by Dubos: "A *modus vivendi* enabling imperfect men to achieve a rewarding and not too painful existence while they cope with an imperfect world."[13] Clearly the terms "health" and "ill-health" are relative. The distinction between them is a personal and cultural one, with different criteria in each individual and culture for the labeling of people as "sick" and "well."[14]

The concepts of health and ill-health held by a particular society involve much more than purely "medical" considerations. In the case of Rarotonga, sickness (apart from that procured by sorcery, which was itself a kind of wrongdoing) was interpreted by priest and people as the penalty justly administered to an individual (or his relative) who had upset the balance of the spiritual and social environment. As in many Polynesian and other societies, illness was regarded to some extent as punishment for behavior that threatened social harmony, and fear of illness acted as a means of maintaining social control. Sickness indicated, then, not merely a disordered physiological system but also a spiritual derangement and a disruption of social relationships.[15] It follows that a state of "health" indicated more than just the absence of clinically observable disease and infirmity. The Rarotongan word *ora* embraced the concepts rendered in English by the words "life," "health," "alive,"

and "well," and identified a condition of well-being comprised in part of states of moral and ethical wholeness normally excluded by scientific definitions of "health."[16]

Were all illnesses and deaths thought to be caused by spiritual intervention? Gill wrote that no deaths were regarded as "natural." But deaths from old age were probably an exception, for Gill himself states that they were spoken of as "following into the track of the setting sun" —surely suggestive of a natural and regularly occurring phenomenon.[17] Whether spiritual causation was rejected for injuries and ills for which the immediate cause was obvious is not clear. Many cultures do identify at least some ills as having natural causes. These are thought of as minor and normal, lacking in supernatural implications and amenable to empirical therapy. It is the more intractable and frightening conditions, or those "minor" ills that move in this direction, that are perceived as having a spiritual etiology. The line of distinction between categories varies from culture to culture.[18] But even obvious causes may not exclude the question of ultimate causation: Why did this particular injury or illness occur? The "real" cause might well be a long-past transgression and the present ill a delayed retribution. There was probably no rigid line of demarcation between pure accident—if indeed such a concept existed—and injuries or ills of more sinister significance, Empirical explanations (and treatments) could coexist with spiritual ones, given an ingrained cultural assumption that calamities were ultimately the result of actions of spiritual agents.[19] It cannot be said with certainty whether the present-day Rarotongans' distinction between *maki tangata* (natural illnesses and purely accidental injuries) and *maki tupapaku* (ills of supernatural causation)[20] predated European contact, for new classifications have since been necessitated by new concepts of illness and its treatment, and indeed new illnesses.

Pre-European Treatment of Sickness

The extent of Polynesian medical knowledge and the character of the therapies used has never been entirely clear to observers. Cook's naturalist, J. R. Forster, was one of the first to attempt an assessment. Writing of the medicine of one of Rarotonga's neighbors to the east, Tahiti, he particularly noted a strong religious element and the people's statement that there was no remedy for many common maladies. He did, however, describe some herbal remedies for wounds and remark upon the people's possession of some anatomical and considerable botanical knowledge.[21] He concluded that the most important factors in the Tahi-

tians' health were their general sobriety, their sound constitution, and the benevolent climate.

The significance of a belief in the supernatural causation of disease did not escape other observers. James Morrison (at Tahiti with Bligh) found no response to his advocacy of preventive measures against disease, as the people believed all disease was "sent from the Deity as a punnishment *[sic]* for some fault, consequently that it is impossible to prevent or escape it." A little later John Turnbull suggested that because the Tahitians regarded disease as the work of an angered god, "every thought of remedy or relief is rejected, as equally useless or impious. They [sick persons] are left to their fate."[22] It is indeed difficult to avoid the conclusion that belief in the supernatural causation of disease militated powerfully against the development of practical remedial therapies.

Nevertheless, as Forster's discussion shows, some remedial therapies did exist. As in many pre-European cultures, there is evidence of considerable "traditional" medical and surgical treatment of disease in nineteenth- and twentieth-century Polynesia. It appears to vary in character and extent,[23] and there is a problem in assessing how much of it derived from European example. The missionary Buzacott dismissed Rarotongan (and Polynesian) medical treatment as being limited to the use of "a few herbs, oils, etc.," but Gill, while accepting that bandaging, bonesetting, cleansing, and "shampooing" (massage) had long been practiced on Mangaia, believed that the whole idea of herbal applications was a European innovation.[24] That Polynesian medical knowledge was limited until experimentation was stimulated by European example is certainly a possibility, one not squarely confronted by the many students of twentieth-century "traditional" Pacific medicine who assume or specifically state that it is a surviving legacy of an elaborate diagnostic and therapeutic system handed down since time immemorial.[25]

Caution must be exercised in postulating extensive development of medical knowledge in the centuries before European contact. Not only did prevailing ideas about the cause of disease militate against such an advance, but the ancient Polynesians (and of course Europeans of the same period), lacking today's medical knowledge, equipment, and drugs, could hardly view many kinds of disease as curable. Nevertheless, to reject all possibility of experiment would be bold indeed. The Rarotongans had lived for centuries in close contact with a natural environment that they exploited in countless ways in order to survive and flourish. The possibility of an effective pharmacopoeia and surgery cannot be entirely excluded.

In Tahiti, Banks recorded that in the few cases of illness he had observed closely, the treatment offered was religious rather than physical. A Spanish visitor noted that sick people applied to the priest, "a spiritual physician," who offered a small plantain shoot to the offended god in the presence of the patient: no physical remedy was administered.[26] In this kind of medical practice diagnosis was directed toward identifying the transgression responsible for the symptoms of disease; an appropriate spiritual therapy consisted either of exorcism of the intrusive spirit, or confession and expiatory prayers and sacrifices designed to appease the offended spiritual beings, Such treatment, absurd in European eyes, was of course "rational" in the sense of being logical and appropriate to Polynesian concepts of the cause of disease. It is possible that these supernatural treatments were begun only when physical treatments failed and the patient's condition appeared to be deteriorating.[27] But the relationship between empirical and spiritual therapy seems to have been more complicated than this.

Spiritual and physical treatment were not necessarily mutually exclusive. The Tahitians "always administer Some Medicine with their prayers," wrote Morrison. This simultaneous practice of different kinds of therapy makes it hard to assess whether confidence was placed in the pharmacological efficacy of the herbal remedy or in the spiritual potency of the attendant ritual. According to one missionary observer in Tahiti, every medicine was "considered more as the vehicle or medium by which the god would act, than as possessing any power itself to arrest the power of disease."[28]

The undoubted real therapeutic value of some physical remedies may not have been the main determining factor in their use. One commentator on traditional medicine has gone so far as to suggest that objective pharmacological effectiveness "would seem in the majority of cases to be a mere matter of accident rather than evidence of conscious experiment or even of fortunate experience. The rule underlying the choice of a certain plant as an antidote against a given ailment is of a mythological and occult rather than of a general nature."[29] This may be overstating the case, but it emphasizes the possibility that even in such apparently rational measures as emetics, purgatives, baths, bloodletting, massage, dietary restrictions, and the administration of medicinal herbs (evil spirits might be driven away, for instance, by disgustingly smelling or tasting herbs),[30] the motivation may well be found in the supernatural rather than physical aspect.[31] It has been stated that, in general, "primitive medicine is primarily magico-religious, utilising a few rational elements."[32] This attempt to weigh up the relation between

empirical and supernatural therapies is more acceptable than an unreal distinction between the two.

Herbal remedies and other physical therapies, including bonesetting and massage, were certainly known and administered by the Rarotongans and their *ta'unga.*[33] But Rarotongan attitudes toward the care of the sick appeared ambivalent to observers. From the start missionaries in Polynesia were shocked by what they saw as "inhuman" neglect of the comfort and welfare of sick persons.[34] The first European missionary on Rarotonga was scandalized by "the great indifference manifested by most of the relatives and friends, even when their relative is so near death. They laugh and jest as though the departure of the Spirit from the body were a thing of trifling importance."[35] Many missionaries believed that solicitude for the sick was unknown in pre-Christian times, citing instances of the abandonment or outright killing of the aged and diseased.[36]

It is clear that aid and comfort were not invariably given to the sick. It is less clear, however, that the motive in cases of the exiling of ill persons was always one of abandonment: the intention may have been to isolate the patients, and it seems that food was provided for them. It is possible that "desertion" was reserved for cases thought unlikely to recover;[37] there was no point in nurturing a hopeless case, one forsaken by his gods and ancestors. There is evidence that patients in less desperate circumstances did receive moral and physical support. In Tahiti, for example, the patient's family and relatives "assemble in the sick person's house. They eat and sleep there as long as the danger lasts; every one nurses him, and watches by him in his turn."[38] Nor could the missionary who witnessed "the tender sympathy and unremitting attention" shown by Rarotongan women to their sick husbands in an epidemic soon after the mission's arrival suggest an entirely new and Christian motivation for their behavior. He was "delighted" to see how the women offered such solace as keeping off the flies, bathing the temples with water, and relieving pain with gentle massage.[39]

Patients themselves, however, did not always cooperate with hopes for their recovery. The missionaries remarked on a propensity of the Rarotongans to accept illness and imminent death with apathy, indifference, and a lack of faith in remedial action. Patients were observed to fade away "through sheer mental distress."[40] Such feelings of hopelessness and despondency play an undoubted role in the progress of physiological disorders, "Anxiety and despair can be lethal."[41]

In concluding this discussion of traditional Rarotongan concepts of health, it must be emphasized that the nonmedical element in the heal-

ing of bodily ills was of great importance. The cultural assumptions and conceptual framework of Polynesian patients under treatment by supernatural means may well have provided an enhanced expectancy of cure, assisted in the harmonization of inner conflicts, removed fears, served to reintegrate patients with their fellows and ancestors, provided a reason for the illness, and stirred emotions. All of these onslaughts on the patient's debilitating anxiety and demoralization and stimulations of confidence and hope would materially assist in medical recovery, quite apart from the efficacy of any empirical therapy.[42] The practice of the *ta'unga* as healer, then, was appropriate to the nature of disease as an objective phenomenon, and as observed by the Rarotongans. Disease is certainly a clinical manifestation of physiological malfunctions that people could plainly see even if they could not explain them medically: it is therefore amenable to physical medical treatment. But disease is also inseparably bound up with social and cultural emotions and stresses felt by the individual. It therefore requires a therapy appropriate for the rehabilitation of the sufferer's morale and the restoration of good relations between him and his gods and his fellows. The customary modes of treatment were able to provide these requirements.

Beyond cases of spontaneous recovery from self-limiting illnesses, there existed some helpful physical treatments and the undoubted role of psychological reassurance and social rehabilitation, Against these positive aspects are the ineffectiveness or harmfulness of some physical treatments, the lack of advanced medical and surgical knowledge and technology,[43] and the drastic effect of cultural assumptions on patients for whom treatment was inappropriate or unavailing, Furthermore, the reliance on spiritual therapy exerted a certain negative influence against the inclination to nurse and sustain the patient. Rarotongans did not share modern Western man's "deliberate search for good health as such,"[44] for good health was simply an indication of behavior acceptable to god and man. Nor did they develop an attitude of mind that regarded disease as eradicable in society or even always to be avoided or combated in the individual.

These attitudes, positive and negative, were to prove of the utmost importance in the new world the Rarotongans were about to enter.

Changes during the Missionary Period

The arrival of European medicine in the early nineteenth century did not by any means bring about a revolution in Rarotongan thinking about illness. The English missionaries who brought new medical

knowledge and many other technological innovations were confronted by the ravages of a long series of destructive epidemics[45] and were themselves soon made familiar with personal or family illness and death. It is not surprising that they developed to the full their emotional commitment to the doctrine of divinely sanctioned affliction. The missionaries understood that affliction came as part of God's plan; through it souls were warned, disciplined, or chastized according to the terrible, mysterious, and yet ultimately benevolent will of God. Nor is it surprising that the missionaries often displayed little real interest in the physical identity and character of the diseases that "humanly speaking" were responsible for illness and death.[46] In its perception of ill-health as primarily a spiritual phenomenon, the missionaries' thinking was more similar than they imagined to the Polynesian ideas they had come to change.

In the 1830s and 1840s the Rarotongans were acutely conscious that there had been a succession of calamities (including epidemics and hurricanes) since the abandonment of their ancestral gods; they were able to list these adversities for the missionaries.[47] This tragic series of events placed the people in a formidable dilemma, and a course of continued allegiance to the new God must surely have carried the day only narrowly as the people wrestled with the meaning of their afflictions. In the end, however, the effect on their thinking was to confirm them in their traditional stance toward disease and disaster. What had happened was seen in the age-old way as the awful expression of supernatural anger: to some betokening the new God's chastisement of a people not yet fully committed to him, and to others the old gods' retribution for being spurned by a faithless race.

The journals and letters of the missionaries in this period show that they struggled hard to come to a theological understanding of the suffering and sickness they were confronted with in Rarotonga. But this by no means precluded an active and practical response to the plight of the sick and suffering. It is clear that dispensing medicines and other treatments was usually part of the missionaries' daily routine and often took up much of their time. Medicines were distributed without charge, administered either on systematic rounds of the homes of the sick or dispensed from the mission itself, often at set times in the morning and evening; arrowroot and other invalid foods were often supplied too.[48] Attention to the needs of sick people was a service the missionaries found impossible to refuse, and in fact were happy to provide; they felt such activity to be "perfectly compatible with the higher duties of our station."[49]

The Rarotongans did not find missionary ideas about illness incomprehensible; nor did they respond negatively to practical missionary medicine. Plainly there was a real readiness to try therapeutic innovations: the great demand for the missionaries' medical intervention was a clear indication of the acceptability to the Rarotongans of European drugs and treatment. But it would be wrong to suppose that the missionaries were completely satisfied with their flock's attitude toward health. It distressed them that people often complied very imperfectly with their instructions for the treatment and nursing of the sick and their recommendations for sanitary improvements.

Simple resistance to innovation does not by any means fully explain the imperfect transition to European perceptions and practices. Receptive as they were to many introduced approaches to therapeutic and preventive medicine, it is clear that the Rarotongans had in no sense completely abandoned their pre-Christian understanding of health or their responses to ill-health. It is plain that the ancient perception of ill-health survived the adoption of Christianity: still to be found was the belief that disease was caused by the intrusion of spirits consequent to the giving of offense to gods, spirits, or one's fellows. The Rarotongans of 1888 were said to be "still morally and spiritually but little removed from the standpoint of their heathen forefathers"; even among church members traditional ideas of disease causation were "continually cropping up."[50]

The arrival of new spiritual leaders and the creation of a new caste of Polynesian pastors had, of course, greatly undermined the position of the traditional priestly experts *(ta'unga).* But as healers the *ta'unga* were still in evidence after the adoption of Christianity. Some of the more spectacular practitioners of this type appear to have been charlatans. But others were deceivers only in European eyes: they based their practice on assumptions denounced by Europeans as superstitious or heathen but that were literally descended from pre-European explanations of disease.

Use of herbal remedies for illness in the nineteenth century finds little mention in the historical record. The difficulties of ascertaining whether or not Rarotongans had an extensive pre-European pharmacopoeia have been discussed previously; it is simply not known how long the many *vai rakau* (herbal medicines) of today have been in use. There is no evidence that the Europeans exploited local plants for medicinal purposes, but it could be that the missionaries' use of drugs stimulated Polynesian experimentation with *vai rakau.*[51] It seems likely that the ancient Rarotongan use of a certain number of plant remedies, in conjunction

with spiritual therapies, was perhaps challenged initially by the popularity of introduced drugs but was never displaced entirely and may in fact have been more widespread in the nineteenth century than missionary sources suggest.

Some Rarotongan physical therapies received favorable mention from the missionaries. Gill testified to the many skillful treatments of "severe sprains and threatening paralysis" he had seen, and the missionaries themselves benefited on occasion from the people's knowledge of massage and their treatment of back injuries and sprains.[52] Sometimes the efficacy of certain herbal remedies was conceded. But on the whole the mission adopted a strongly condemnatory attitude toward the Polynesian therapeutic system, which they saw (correctly) as inextricably bound up with the pre-Christian religion. Not only did they denounce the practitioners of traditional medicine as dangerous to the people's health—"native doctoring kills off the population," Gill stated flatly—but they also accused them of fraudulence and a cynical preying on residual superstition. G. A. Harris dismissed them angrily as "quacks seeking for reputation."[53]

There is no doubt that the missionaries' uncompromisingly critical attitude toward the pre-Christian religion and its medical aspects was known to and accepted by the Cook Islanders. A prohibition of "sorcery" was only to be expected among the laws drawn up by the missionaries and chiefs. In the printed laws of 1879, for instance, it was forbidden to consult *ta'unga* for the purpose of finding the cause of a sickness (or for any other purpose), and fines were to be paid by convicted *ta'unga* and their clients.[54] There is no mention of a fine in the case of the *ta'unga* Matamua against whom the missionary Krause successfully campaigned in 1866, but a monetary penalty was certainly paid by a female *ta'unga* who was investigated in 1888 after the death of a child she had treated.[55]

But, denounced and proscribed as they were, ancient procedures for the diagnosis and treatment of disease survived the revolution in the people's religious allegiance and lived on into the present day. Of course, it does not appear that cultural innovations ever totally replace existing values, beliefs, and practices. Confronted by many new opinions, the Rarotongans adopted some, accepted others in part, and showed no interest in the rest. What they regarded as valuable to their own purposes they adopted and integrated into their culture. It soon became apparent that in the case of concepts of health and ill-health, an emotionally sensitive area, ancient thought patterns proved important

enough to be retained and reintegrated into what gradually developed as the characteristic Rarotongan Christianity.

Much of the persistence of pre-Christian thought and practice can be explained by the fact that the missionary approach to sickness and its treatment was not as diametrically different from the ancient Polynesian approach as might first have appeared. Certainly the missionaries were staunch opponents of the *ta'unga* and deeply critical of the pre-Christian religion and surviving "heathen" practices. In the early decades of Rarotongan Christianity the contrast between the old and new religions seemed strong, and there was a widespread initial eagerness to cast off the old ways. But this masked the compatibility between ancient modes of thought and many elements of missionary Christianity. Just as the Rarotongans had always done, the missionaries saw more than just a medical significance in health and ill-health. Like the Rarotongans, the missionaries included health within their religious view of life. The new God often seemed to act, then, in ways comprehensible to Rarotongans.

What Rarotongans learned from the missionaries regarding a new approach to health and sickness, then, was comparatively little. At least in the early decades, when the mission exerted its greatest influence, its attitude toward health was little more "scientific," "Western," or "modern" than that of the ancient Polynesians. Treatment was given in a strongly religious context by persons who looked beyond immediate to ultimate causes and who carried a spiritual authority that to the Rarotongans was a major factor in successful healing. Like the *ta'unga,* the missionaries attempted to treat more than just the physical illness, and even when their medicine possessed no efficacy they may often have facilitated recovery by giving patients hope, reassurance, and confidence. It may be that in their humanitarian concern to relieve suffering the missionaries introduced into Rarotongan attitudes a stronger interest in nursing and sustaining the sick than had previously existed. Some new medicines and treatments were also introduced, and these, like other technological innovations, were interesting and attractive to the islanders. But the new remedies were seen eventually to be little more effective than their own. The missionaries were not expert in the use of these treatments, but early nineteenth-century medicine could often avail very little even from the hands of trained physicians. Not until the century was nearly over were significant advances made in European therapeutic and preventive medicine, and few of these made much impact on missionary practice. The advent of a new religion and a new

technology had little effect, then, on the diseases the Rarotongans had learned to live with. When disastrous new diseases arrived these too were scarcely affected by European medicine, and after the first traumatic decades the people learned to accept these also.

Despite the time they gave to medical work, it is clear that the missionaries took it for granted that there would always be a certain amount of sickness in the community. Of course, the great epidemics were regarded as abnormal, but they were thought of not just as medical disasters but as events requiring a religious interpretation. The missionaries thus did not foster any inclination to look for secular reasons for the prevalence of disease. Only very gradually did they begin to regard disease as something to be attacked and eradicated for its own sake (not that the means for such effective action were yet available). As the century drew to a close the Rarotongans had not learned to seek actively for good health, but had been confirmed in their tendency to regard it simply as an indication of divine favor.

After the chiefs and people of Rarotonga had adopted Christianity, the system of law and authority was no longer based on the religious sanctions of *tapu.* But the quality of sacredness and the institution of *tapu* continued to exist and could still be violated. Primary allegiance was no longer given to the gods the people had ceremonially discarded. But belief in the existence and activity of spiritual beings (Christianity had them too, of course) was never abandoned. In a Christian atmosphere that reinforced the traditional perception of a close relationship between disease and wrongdoing, spirits could still be thought of as active in the causation of at least some diseases. In pre-European times there probably existed a distinction—although it is difficult to locate the dividing line—between afflictions supernaturally caused and those for which such an explanation was unnecessary. Spiritual and empirical explanations (and modes of treatment) could coexist, and it is probable that this distinction between *maki tupapaku* (spiritually caused disease) and *maki tangata* ("natural" disease) became firmer with the advent of new diseases that forced a reclassification. Untreatable, intractable, and puzzling diseases (and mental disturbances, *maki neneva*) were those most likely to be thought of as *maki tupapaku* and thus amenable to *ta'unga* ministrations. With the decline of the spiritual element in European medicine in Rarotonga—a gradual decline as mission medicine lost its religious orientation, and much faster when secular professional medicine arrived at the end of the century—the field became more open for the traditional medicine that continued to be disparaged but had never ceased to exist. As the twentieth century began Raro-

tongans were able to draw on two medical traditions that existed not simply side by side but in a complex interrelationship.

The First Half-Century of Government Medicine

The establishment of an official medical service accompanied the arrival of colonialism around the turn of the century. By 1950 a branch of the Cook Islands administration had been charged for half a century with the duty of ameliorating sickness and preventing its occurrence. But to the frustrated surprise of those who conscientiously provided and operated the free health service, Western medicine was not utilized as fully as it might have been. There sometimes appeared to be a curious resistance to self-evidently beneficial public-health reforms. Furthermore, there still remained a persistent adherence to the unscientific Polynesian system of medicine that had its roots in pre-European days.[56]

Doctors, nurses, and hospitals were never short of patients, but official reliance on what was thought to be the technological superiority of the European medical system could never bring complete Polynesian acceptance. The personal attributes of the practitioners (both European and Polynesian) of Western medicine greatly influenced Rarotongan attitudes toward European medical concepts and practices. There remained, too, a number of cultural obstructions to the full use of the system, obstacles that only time and the sensitivity of medical staff would remove. The management of patients and their relatives in hospital is a case in point. When the Hospital reopened in 1911, it was accepted that the patients' Rarotongan dietary preferences would be accommodated by allowing relatives and other members of the community to supply food.[57] It was recognized too that relatives should be fairly unrestricted in their entry to the building—many actually lived there—so that they could assist in tending the patients; otherwise, it was thought, few sick persons would enter or stay in the hospital.[58] This thinking remained unchanged during the first half of the twentieth century. In 1944 Dr. E. P. Ellison advised that the practice be permitted in the new sanatorium also, in order to encourage patients to enter, and the newly arrived Dr. T. R. A. Davis was told by the matron of the hospital in 1945 that the relatives were necessary for keeping the patients fed and that there would be no patients if their relatives were excluded.[59] Though usually unacceptable to unprepared European observers, this concession to Rarotongan sensitivities was an inducement to use of the hospital, for it recognized (unconsciously perhaps) the importance of family support in the recovery of the sick Polynesian.[60]

Willingness to be admitted to the hospital did not insure a readiness to remain there until treatment was completed. The removal of a child in 1912 against the doctor's earnestly expressed advice was explained by the father as a reaction against the painful dressings being applied. More significant was the removal of another child (a pneumonia case) after a *ta'unga* diagnosed a spiritual cause.[61] But the most common reason for premature voluntary discharge was the "very deep-rooted objection" to the patients' "dying elsewhere than at home."[62] The custom was perceived negatively in 1928 as creating great difficulty in "persuading relatives to allow critical cases to remain in the Hospital. Time and time again cases are withdrawn, only to die on the road or shortly after reaching home."[63] But the acceptance of the practice showed recognition of the importance Cook Islanders put on where and how death took place. It cannot be said that this and other sensitivities were always disregarded, but resistance to hospitalization was only slowly broken down. In spite of the large number of admissions made every year, there were still in 1928 "many cases" treated at home "who could more satisfactorily be looked after in hospital."[64]

Opposition to surgical operations was commonly noted. In many cases the outcome of permitted operations confirmed the resistance to surgery, as in 1898 when a prominent man died after hospital surgery for tumors, and in 1912 when a gunshot victim did not survive the amputation of his leg (surgery had not been permitted until "native medicine" had been tried).[65] But operations were certainly not unknown, and a surgically inclined doctor with the right approach, such as R. L. Norman in 1915, could perform a great many, "earning the gratification of the Natives."[66] There is no evidence of resistance to injections[67]—thousands were given annually for yaws alone—but in 1945 Davis encountered a reluctance to give blood for transfusions.[68]

Evidence that Western medical treatment of some conditions was superior to that of the Rarotongans accumulated only slowly. The treatment of yaws after World War I was the first spectacular demonstration of therapeutic efficacy, and the startling successes of penicillin and other antibiotics did not come until just after World War II.

Despite the largely benign image of "Maori medicine" in the eyes of the Rarotongan church by the end of the nineteenth century, European missionaries remained antipathetic to a system they believed to be unchristian both in origin and in character. By then, too, the weight of secular European authority had been added to the hostility the Rarotongans had long seen expressed toward their medical beliefs and practices by their religious mentors. Recourse to *ta'unga* was illegal.[69] But it

proved impossible to suppress the *ta'unga* and their clients, as Dr. S. M. Lambert found (to his surprise, since he considered the Cook Islanders "the most intelligent and most modern of the South Pacific Islanders") : "one still finds among them a deep-rooted belief in magic and witch-doctors, and many of them call upon the Medical Department only as a last resort, after native remedies and practices have failed."[70] One of the first Native Medical Practitioners, Takao Tinirau, estimated in 1932 that 20 percent of sick persons went first to the *ta'unga.* "Some get better, some do not. So the worst cases are passed on to us, and when one or two die on our hands we have to take the blame, even though the patient's condition was hopeless when brought to us."[71]

The long-serving Dr. Ellison was unsympathetic toward *ta'unga,* "devil doctors" as he termed them. On handing over his post to Dr. Davis in 1945, he complained of the trouble they caused despite the law and its penalties.[72] The quite different approach taken by Davis was a reversal of the previous official and medical stance against *ta'unga* medicine. Without abandoning belief in the superiority of Western medicine, but rather seeking to bring about a habit of consulting the doctor before rather than after the *ta'unga,* Davis was careful to discontinue the customary anti-*ta'unga* position of the Medical Department.[73] Seeking to establish good relations with the practitioners of traditional medicine, Davis let them know of his belief that some of their knowledge was valuable and worthy of scientific investigation. He found that the people held *ta'unga* in higher esteem than European doctors, and he tried to disseminate knowledge of modern medicine through them:

> Because I listened to the medicine men, they willingly listened to all I told them of my methods, going back to the villages and repeating my lessons. I explained to them that some medicines could be taken by mouth, others it was necessary to inject directly into the body. I explained how vaccines and inoculations worked in the prevention of disease. . . . We built a spirit of cooperation rather than of antagonism between the medicine men and modern medicine.[74]

Davis began to refer "psychiatric" cases back to the *ta'unga,* having been much impressed by their work in this area of ill-health:

> Many a time I have listened to a medicine man interviewing a troubled patient and always I have been astounded at the effectiveness of his method, for he would talk not only to the stricken person but to his family, his wife, his parents, children (a par-

> ticipating audience of as many as ten relatives would be present), working right back to the patient's childhood and digging, digging, until at last he brought the aggravation to the surface.[75]

This more sympathetic approach to the indigenous tradition of medicine was seen in Rarotonga only after World War II. Davis presaged the present-day willingness to recognize the merits of certain aspects of Polynesian medicine and to abandon confrontation with its practitioners. As in other parts of the world, Western medicine has accepted the intrinsic utility of "traditional" practice, not just in the efficacy of medicinal plant remedies but also in the fact that traditional medicine is an integral part of a people's culture and so is especially effective in meeting certain cultural health problems. It is recognized that practitioners of traditional medicine often perceive disease as caused by more than biological pathogens alone, and in some places attempts have been made to utilize their skills by incorporating them into the health-care system.[76] It was in this more positive atmosphere that most of the recorded information about twentieth-century Rarotongan "traditional medicine" was later gathered.

Conclusion

It is not part of the purpose of this paper to describe "Maori medicine" as it is practiced on Rarotonga in the second half of the twentieth century.[77] But Rarotongan medicine is clearly a direct descendant of the pre-European system, modified and to some extent reinforced in the nineteenth century. It is not completely separate from Western-style scientific medicine. It exists as an integral element in most Rarotongans' thinking about health and ill-health. In each instance of sickness decisions must be made about the cause and nature of the illness, and the circumstances of each case determine whether recourse will be made primarily to "traditional" or Western medicine and their practitioners.

While many Rarotongans became familiar with the practices of nurses, doctors, and hospitals (and indeed themselves became professional practitioners of Western medicine in significant numbers), it was undeniable by 1950 that over a century of close contact with Europeans and Western medicine had failed to eliminate medical ideas and practices originating in the ancient Polynesian past. Neither the Rarotongans' long acquaintance with introduced medicine, nor the Europeans' often strenuous efforts to suppress Rarotongan medicine and its

practitioners, had brought about the passing of the older nonscientific tradition.

In part the continued existence of non-European medicine was clue to the inadequacies of the official health service: because of organizational and other difficulties the therapeutic benefits of modern medicine could not be brought to the whole of this scattered population. Partly, too, the incomplete acceptance of the newer system indicated a less than wholehearted belief in its efficacy. In these misgivings the Rarotongans were more than a little justified, for missionary medicine had not kept at bay the disastrous epidemics of the nineteenth century, and even twentieth-century treatments were of little avail against many medical conditions common in the Cook Islands. Disease had not been vanquished.

Rut medical innovation had not been entirely rejected. On the contrary much of it had been welcomed, and the scope of traditional medicine had been greatly narrowed. Neither fully adopted nor completely refused, European medicine had to a large extent been fused with Polynesian concepts and procedures. The understanding of health and the response to ill-health that had emerged by the middle of the twentieth century was thus neither wholly Polynesian nor wholly European. The Rarotongans had arrived at a new understanding of health and ill-health. The ingredients of this new comprehension were surviving elements of their ancient perceptions and practices, a continuing religious approach that had been perpetuated by their nineteenth-century adoption of Christianity, and the principles and techniques of early and mid-twentieth-century Western medicine.

NOTES

This is an expanded version of a paper presented to Section K2g of the XV Pacific Science Congress, Dunedin, New Zealand, February 1983.

1. See Raeburn Lange, "Plagues and Pestilence in Polynesia: The Nineteenth Century Cook Islands Experience," *Bulletin of the History of Medicine* 58 (1984), for a description of pre-European Cook Islands health.

2. Edmund D. Pellegrino, "Medicine, History and the Idea of Man," *Annals of the American Academy of Political and Social Science* 346 (1963):10.

3. See Erwin H. Ackerknecht, "Problems of Primitive Medicine," *Bulletin of the History of Medicine* 11 (1942):503, for quotation. The point about the term "magical" is made by E. S. C. Handy in *Polynesian Religion,* Bernice P. Bishop Museum Bulletin 34 (Honolulu: Bishop Museum Press, 1927), 4. Handy also avoids the use of "spiritual," which to him suggests an almost totally absent "sense of moral aspiration"; he prefers "psychic" (p. 5).

4. John Williams, *A Narrative of Missionary Enterprises in the South Sea Islands* (London, 1837), 543ff. William Gill describes Cook Islands religion in his two-volume work *Gems from the Coral Islands* (London, 1856), vol. 1, pp. 13-18. See also R. W. Williamson's exhaustive surveys of ancient Polynesian religion: *Religious and Cosmic Beliefs of Central Polynesia,* 2 vols. (Cambridge, 1933); *Religion and Social Organisation in Central Polynesia,* ed. R. Piddington (Cambridge, 1937). Williamson's material is gathered from many earlier writers, and his Cook Islands data appear to be derived almost entirely from the writings of W. W. Gill.

5. Williamson prefers "soul," since the word "spirit" can also denote supernatural beings that have never been human. See *Religious and Cosmic Beliefs,* 197.

6. Williamson points out the great difficulty of distinguishing between gods and spirits, especially as early observers were seldom precise on this point. See *Religion and Social Organisation,* 8.

7. Gill, *Gems,* 16.

8. J. J. K. Hutchin, 12 Jan. 1888, South Seas Records (hereafter SSR), London Missionary Society (LMS) Archives (consulted on microfilms held in Hocken Library, University of Otago, Dunedin), See Williams, *Narrative* (p. 39), for the early missionaries' perception of Rarotongan beliefs about sickness.

9. In reconstructing this often elusive belief system I have sometimes made cautious use of evidence from other parts of Polynesia. Evidence from Tahiti, one of Rarotonga's geographical and cultural neighbors, is particularly relevant here and is much more abundant because of the great number of visiting European observers in the late eighteenth century. Almost nothing was written about Rarotonga before the mission arrived in the 1820s.

10. Charles Pitman, Journal Extracts, 3 Sept. 1833, South Seas Journals (hereafter SSJ), LMS Archives. Douglas L. Oliver notes the practice for Tahiti also, and sees it as a way of expelling a dangerously infectious guilt substance. See *Ancient Tahitian Society* (Honolulu, 1974), 121.

11. It has been suggested that sorcery is less prevalent in societies possessing effective authority structures capable of settling disputes and exerting social control. See R. W. Lieban (reviewing studies by Swanson and Whiting), "Medical Anthropology," in *Handbook of Social and Cultural Anthropology,* ed. J. J. Honigmann (Chicago, 1973), 25.

12. David Landy, ed., *Culture, Disease and Healing: Studies in Medical Anthropology* (New York, 1977), 129.

13. R. J. Dubos, *Man, Medicine and Environment* (New York, 1968), 67.

14. See John A. Clausen, "Social Factors in Disease," *Annals of the American Academy of Political and Social Science* 346 (1963), 139-140; V. F. P. van Amelsvoort, *Culture, Stone Age and Modern Medicine* (Assen, Netherlands, 1964), 20-21.

15. For an exposition of these themes as they operate in modern Rarotonga more than twenty years after the end of the period covered in this paper, see Margaret Mackenzie, "Cultural and Social Aspects of Pre-School Children's Health in Rarotonga, Cook Islands" (Ph.D. thesis, University of Chicago, 1973), 123-125; J. G. Baddeley, "Rarotongan Society: The Creation of Tradition" (Ph.D. thesis, University of Auckland, 1978), 288-294. The relationship of medicine to social control in Polynesia is the main theme of Richard

Feinberg, *Anutan Concepts of Disease: A Polynesian Study* (Laie, Hawaii, 1979); it is also stressed by Antony Hooper, "Tahitian Folk Medicine," in *Rank and Status in Polynesia and Melanesia. Essays in Honor of Professor Douglas Oliver* (Paris, 1978).

16. Stephen Savage, *A Dictionary of the Maori Language of Rarotonga* (Wellington, 1962), 206-207. Mackenzie, "Pre-School Children's Health," discusses the word *ora,* pp. 131-132. Rarotongan concepts thus looked in the same direction as the World Health Organization's definition of health as "a state of complete physical, mental and social well-being, not merely the absence of disease and infirmity."

17. William Wyatt Gill, *Life in the Southern Isles* (London, 1876), 70; 29-30.

18. See E. H. Ackerknecht's review of ethnographic data on this subject in "Natural Diseases and Rational Treatment in Primitive Medicine," *Bulletin of the History of Medicine,* vol. 19, no. 5 (May 1946): 468-476.

19. Some of my speculations in this paragraph owe a certain amount to comments by Oliver (*Ancient Tahitian Society,* 471, 476-477).

20. The distinction is discussed by Mackenzie ("Pre-School Children's Health," 107-109, 118-119) and Baddeley ("Rarotongan Society," 256, 265-266), where *maki tikai* is used for the *maki tangata* of Savage (*Dictionary,* 416) and Mackenzie.

21. J. R. Forster, *Observations Made during a Voyage round the World . . .* (London, 1778), 495-500.

22. Owen Rutter, ed., *The Journal of James Morrison, Boatswain's Mate of the* Bounty (London, 1935), 230; John Turnbull, *A Voyage round the World in the Years 1800, 1801, 1802, 1803, and 1804,* 2d ed. (London, 1813), 335; see also 367.

23. According to Dorothy Shineberg, the extent of pharmacological and surgical knowledge in Fiji, Tonga, and Hawaii differs. See " 'He Can but Die': Missionary Medicine in pre-Christian Tonga," in *The Changing Pacific,* ed. Niel Gunson (Melbourne, 1978), 296n. D. G. Kennedy found and described an extensive traditional surgical knowledge on Vaitupu, Tuvalu. See *Field Notes on the Culture of Vaitupu, Ellice Islands* (New Plymouth, 1931), 236-245, 248-249. But Ernest and Pearl Beaglehole in Pukapuka about the same time found much less such knowledge. See *Ethnology of Pukapuka,* Bernice P. Bishop Museum Bulletin 150 (Honolulu, 1938), 340-341.

24. A. Buzacott, *Mission Life in the Islands of the Pacific* (London, 1866), 98; Gill, *Life in the Southern Isles,* 68-69.

25. Peter H. Buck (Te Rangi Hiroa) hesitates to state whether or not the Cook Islands had a traditional pharmacopoeia, pointing out that the spiritual approach to illness minimized the incentive to experiment and that there was a scarcity of plants with medicinal potential on some islands. See Buck, *Ethnology of Manihiki and Rakahanga,* Bernice P. Bishop Museum Bulletin 99 (Honolulu, 1932), 216; idem, *Ethnology of Tongareva,* Bishop Museum Bulletin 92 (Honolulu, 1932), 81; idem, *Mangaian Society,* Bishop Museum Bulletin 122 (Honolulu, 1934), 187. For New Zealand, L. K. Gluckman rejects the possibility of an extensive Maori medical knowledge until after the influence of European example (*Tangiwai. A Medical History of 19th Century New Zealand* [Auckland, 1976], 148-155, 159, 254), a position applauded by R. E. Wright-St. Clair in his review of Gluckman's book (*New Zealand Medical Journal* LXXXV, no. 586 [27 April 1977] ,336). Both of these New Zealand authorities misrepresent Buck, whose opinion of pre-European Maori medi-

cine was not diametrically opposed to the view of Best, which they support. See R. T. Lange, "The Revival of a Dying Race: A Study of Maori Health Reform, 1900-1918, and Its Nineteenth Century Background" (M.A. thesis, University of Auckland, 1972), 14-15.

Mackenzie implies a preexisting diagnostic and therapeutic system for Rarotonga. See Mackenzie, "Pre-School Children's Health," 154; idem, "Damned If You Do and Damned If You Don't: Dilemmas in Development for Pacific Health," in *Paradise Postponed. Essays on Research and Development in the South Pacific,* eds. A. Mamak and G. McCall (Sydney, 1978), 227. This view is also taken in E. S. C. Handy et al., *Outline of Hawaiian Physical Therapeutics,* Bernice P. Bishop Museum Bulletin 126 (Honolulu, 1934), 4 and passim; F. L. Tabrah and B. M. Eveleth, "Evaluation of the Effectiveness of Ancient Hawaiian Medicine," *Hawaii Medical Journal,* vol. 25, no. 3 (1966):223-230; L. Kimura, "Kahuna Lapaʻau," *Hawaii Historical Review,* vol. 2, no. 2 (1966):273-275; F. Grepin, "La Médicine Tahitienne Traditionelle," *Cahiers du Pacifique,* No. 19 (Sept. 1976): 338-340.

26. J. C. Beaglehole, ed., *The* Endeavour *Journal of Joseph Banks, 1768-1771* (Sydney, 1962), 374; Journal of Don José de Andía y Varela, in B. G. Corney, trans. and ed., *The Quest and Occupation of Tahiti by Emissaries of Spain during the Years 1772-76,* vol. 2 (London, 1913-1919), 260. See also the diary of Maximo Rodriguez, ibid., vol. 3, pp. 28-29, 62.

27. This is the view taken by Kennedy (*Field Notes,* 247-248) of the relationship between spiritual and "natural" therapy on Vaitupu.

28. Rutter, *Journal of James Morrison,* 228; William Ellis, *Polynesian Researches during a Residence of Nearly Eight Years in the Society and Sandwich Islands,* rev. ed. (London, 1859), vol. 3, p. 47. This idea of medicine as a vehicle for the god is still found in Rarotongan medicine today (see Baddeley, "Rarotongan Society," 269). A similar association of physical therapies and religious ritual is identified by Alan Howard in precontact Rotuma. See "The Power to Heal in Colonial Rotuma," *Journal of the Polynesian Society,* vol. 88, no. 3 (Sept. 1979): 245-246, 270-271.

29. F. R. Olbrechts, writing in 1932 and quoted in Ackerknecht, "Natural Diseases," 475.

30. The suggestion of Handy, *Polynesian Religion,* 247n.

31. See Ackerknecht, "Natural Diseases," 481-485.

32. Ibid., 468.

33. See R. T. Lange, "A History of Health and Ill-Health in the Cook Islands" (Ph.D. thesis, University of Otago, 1982), 64-68, for a description of Rarotongan physical remedies.

34. E. g. Williams, *Narrative,* 505; Gill to LMS, 24 June 1840, South Sea Letters (hereafter SSL), LMS Archives.

35. Pitman, Journal Extracts, 16 Nov. 1831, SSJ.

36. Williams, *Narrative,* 289, 371; Daniel Tyerman and George Bennet, *Journal of Voyages and Travels . . . in the South Sea Islands, China, India, & c, between the Years, 1821 and 1829,* vol. 1 (London, 1831), 328-329; William Ellis, *The History of the London Missionary Society* (London, 1844), 103.

37. See Ellis, *Polynesian Researches,* vol. 3, pp. 46-48.

38. Louis de Bougainville, *A Voyage round the World,* trans. J. R. Forster (London, 1772), 271.

39. Williams, *Narrative,* 215.

40. Gill, *Life in the Southern* Isles, 182-183. Similar observations were made by Williams, Journal of Voyage to Samoa, 1830, SSJ; and G. Gill to LMS, 18 Aug. 1855, SSL.

41. Jerome D. Frank, *Persuasion and Healing,* rev. ed. (Baltimore, 1973), 76.

42. This passage owes a good deal to the arguments and phraseology of Frank (ibid., 66, 76).

43. Landy (*Culture, Disease and Healing,* 254) points out that surgery can be dangerous (it may result in surgical shock and infection); primitive conservatism in surgery may therefore have been "adaptive."

44. B. D. Paul, "Anthropological Perspectives on Medicine and Public Health," *Annals of the American Academy of Political and Social Science* 346 (1963):39.

45. See Lange, "Plagues and Pestilence."

46. The phrase was used in commenting on the effectiveness of a medicine used by the mission (Pitman to LMS, 2 July and 17 August 1830, SSL), and in reporting a missionary's death on Raiatea (Barff and Buzacott, item 104 [1834?], SSJ).

47. Williams to LMS, 27 Sept. 1832, SSL.

48. Pitman to LMS, 30 Dec. 1829, 8 March 1837, 11 Nov. 1846, SSL; Journal Extracts, 9 Nov. 1834, SSJ; Buzacott to LMS, 8 Dec. 1838, SSL; W. Gill to LMS, 5 Jan, 1852, SSL; Buzacott, *Mission Life,* 98; W. Gill, *Selections from the Autobiography of the Rev. William Gill* (London, 1880), 63.

49. Ellis, *Polynesian Researches,* vol. 3, pp. 44-46.

50. Hutchin, 12 Jan. 1888, SSR.

51. Mackenzie argues thus in "Pre-School Children's Health," 61.

52. See Gill, *Life in the Southern Isles,* 69, for quotation. For missionaries benefiting from islanders' treatments, see W. W. Gill to LMS, 14 Jan. 1867; J. Chalmers to LMS, 11 Jan. 1872; Mrs. Chalmers to LMS, 28 Sept. 1872, SSL; Gill, *Life in the Southern Isles,* 68-69.

53. W. W. Gill, 11 Jan. 1883, SSR; see also his *Life in the Southern Isles,* 69-70. Harris to LMS, 5 June 1879, SSL.

54. New Zealand, *Appendices to the Journals of the House of Representatives,* 1891, A-3, Appendix B, p. 28. See also ibid., 1892, A-3, p. 17.

55. For the case of the *ta'unga* Matamua, see E. R. W. Krause to LMS, 24 Dec. 1866, SSL. On the 1888 investigation, see Hutchin, 12 Jan. 1888, SSR.

56. Other discussions of this point will be found in chapter 3 ("Why hasn't Maori medicine died out since international medicine came to Rarotonga?") of Mackenzie's "Pre-School Children's Health," and in Shineberg, " 'He Can but Die.' "

57. Resident Commissioner to Pa Ariki, 9 Oct. 1911, Hospital file, 1909-1915 (Cook Islands Archives, A-4, file 16). The Rarotonga Hospital had opened originally in 1896, but was replaced in 1911 by a much bigger and better organized institution.

58. H. W. Northcroft to M. Pomare, 8 Nov. 1913, Medical Officers file 184, 1913 (Cook Islands Archives, A-4, file 8); Northcroft to G. P. Baldwin, 9 Dec. 1915, Hospital file, 1909-1915.

59. For Dr. Ellison's advice, see Memorandum, 17 Aug. 1944, Medical file 6/1/2, 1920-1948 (Cook Islands Archives, A-4, file 35). Tom and Lydia Davis, *Doctor to the Islands* (London, 1955), 54.

60. The practice has persisted until recent years, especially for child patients. See Mackenzie, "Pre-School Children's Health," 196-199, 399. In 1978 an attempt was made to institute regular visiting hours. See *Cook Island News,* 12 Oct. 1978.

61. For the 1912 case, see Baldwin to J. Eman Smith, 27 Feb. 1912, Medical Officers file 185/1, 1912 (Cook Islands Archives, A-4, file 4). For the case diagnosed by the *ta'unga,* see Hutchin, 10 Jan. 1898, SSR.

62. R. L. Norman, *Appendices to the Journals of the House of Representatives,* 1915, A-3, pp. 24-25.

63. B. G. Thompson, 3 Jan. 1928, file C-7, Governor's papers, New Zealand National Archives, Wellington.

64. *Appendices to the Journals of the House of Representatives,* 1929, A-3, p. 12.

65. For the 1898 case, see ibid., 1899, A-3, p. 2. For the 1912 case, see Baldwin to Smith, 16 May 1912, and attached statement by V. Maoate, file 185/1, Cook Islands Archives.

66. *Appendices to the Journals of the House of Representatives,* 1915, A-3, pp. 7, 25.

67. But see Davis and Davis, *Doctor to the Islands,* 79-82; Davis to M. Watt, 18 March 1946, Health Department file 333/12/2 (24511), New Zealand National Archives.

68. He quickly persuaded the people to conquer this aversion. See Davis and Davis, *Doctor to the Islands,* 60-62.

69. The Cook Islands Act (1915) laid down penalties for anyone who "pretends to exercise or use any kind of witchcraft, sorcery, enchantment, or conjuration" (Section 236, Cook Islands Act, *Statutes of the Dominion of New Zealand,* 1915).

70. Sylvester M. Lambert, "Some Polynesian Medical superstitions encountered in the Cook Islands," *Journal of Tropical Medicine and Hygiene* 36 (July 1933): 190.

71. "Letter from a Native Medical Practitioner in the Cook Islands," *Native Medical Practitioner,* vol. 1, no. 4 (Feb. 1933): 99-100.

72. E. P. Ellison to Resident Commissioner, 8 July 1935, Health Department file 170/337 (11952), New Zealand National Archives; Davis and Davis, *Doctor to the Islands,* 56.

73. Davis and Davis, *Doctor to the Islands, 84;* Davis, "Rarotonga Today," *Journal of the Polynesian Society,* vol. 56, no. 2 (June 1947): 203.

74. Davis and Davis, *Doctor to the Islands,* 160. See also pp. 109-110.

75. Ibid., 160-161.

76. This more positive approach is described and advocated by Mackenzie, "Pre-School Children's Health," 105, 123-124. See also idem, "Damned If You Do"; Reuben Taureka, "Traditional Values in Health Planning," *Pacific Perspective,* vol. 2, no. 2 (1973); World Health Organization, *The Promotion and Development of Traditional Medicine. Report of a WHO Meeting* (Geneva, 1978); S. A. Finau, "Traditional Medicine in Pacific Health Service," *Pacific Perspective,* vol. 9, no. 2 (1980). For discussions of medicinal plants, see South Pacific Commission, *Regional Technical Meeting on Medicinal Plants (Papeete, 1973), Report* (Noumea, 1974); and the subsequently issued Technical Paper No. 171 by R. Tamson, *Bibliography of Medicinal Plants and Related Subjects* (Noumea, 1974).

77. Descriptions are to be found in Mackenzie, "Pre-School Children's Health," passim; and Baddeley, "Rarotongan Society," chapter 6.