Colonial Dis-Ease

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COLONIAL DIS-EASE

US NAVY HEALTH POLICIES AND THE CHAMORROS OF GUAM, 1898–1941

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To Nana and Honey, Fermina L G Perez Hattori and Paul Mitsuo Hattori, for their loving support and encouragement, as well as to my sisters, brothers, godchildren, niece, and nephews: Mary, Margaret, Yvonne, Paul, Stephen, Thomas, Barbara, Robert, and Matthew, Timmy, C J, Kinney, and Marijana—
and todu i atungo'-hu:

For a lifetime of food and beer,
snorkeling and sun,
books, xerox cards, and zip disks

For your histories and herstories,
poignant memories and passionate theories,
and the depths of your love for i manChamoru

Sen dangkulu na saina ma'ase
para todu i guinaiyan-miyu
yan i supottan-miyu. Si Ana

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Editor's Note

In a 1978 review of Hugh Laracy's *Marists and Melanesians: A History of Catholic Missions in the Solomon Islands,* Greg Dening called the Pacific "a historically underdeveloped area." Citing the empiricism that then dominated most studies of the Pacific, the University of Melbourne scholar argued for an approach to cross-cultural history that was bold, daring, and exploratory. He advocated historical studies that reflected the rigorous standards of social history as practiced in Great Britain and the United States; standards that required a deep commitment to contextualization, analysis, and the ways in which differing systems of symbol, myth, and law were laid bare in their exposure to one another. To write simply of change was to ignore process, debate, and personal trauma. Later, in the inaugural issue of *The Contemporary Pacific: A Journal of Island Affairs,* Dening argued for history in the Pacific to be vernacular, and vernacularly tolerant of the variety of ways through which a consciousness of the past might be expressed. Dening included legends, ballads, anecdotes, dances, and plays in his listing of the vernacular forms of history. He wrote of the shared past and bound-together present from which native and stranger regarded one another. Both had histories to tell and learn from.

The practice of history in the region has changed markedly since Dening began promoting a more deeply ethnographic approach to the study of its pasts. If there is an area within the region that has remained "historically underdeveloped" in Dening's use of the phrase, however, it would be Micronesia. Since 1983, the Pacific Islands Monograph Series has sought to make a contribution to the enrichment of historical study. Of our eighteen previously published volumes, twelve are histories. Micronesia has provided the geographical parameter for five of these histories. We take particular pride now in presenting Anne Perez Hattori's *Colonial Dis-Ease: US Navy Health Policies and the Chamorros of Guam, 1899–1941.*

It is not the purpose of this editor's preface to examine the contestation around the term "Micronesia," and Guam's often-qualified association with it. Much more important is the kind of history Hattori has written. Hers is a study rigorous in its scholarship, and poetic, even moving, in its attention to local expressions of experience and understanding. *Colonial Dis-Ease* rewrites the history of health care on Guam in the context of colonialism. Hansen's disease, midwifery, hospitals, and hookworm-treatment programs are the individual topics through which Hattori examines the effects of introduced medical practices and technologies on Chamorro cultural values, class distinctions, gender relations, political struggles, and economic expectations. Her investigations lead her beyond Guam to a careful, nuanced study of national and international discourses on disease. This is no simple history, but rather one that entails a charting of "often overlapping processes of adaptation, appropriation, acceptance, rejection, domination, and resistance." *Colonial Dis-Ease* is the nineteenth volume in a series that began with Francis X Hezel's general history of the Caroline and Marshall Islands to 1885. We believe quite strongly that Anne Perez Hattori's work will prove a most welcome addition to the practice of history in the Pacific and, more particularly, in that area of the Pacific called "Micronesia."

David Hanlon

Contents

Illustrations

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Colonial Dis-Ease

Map 1

Chapter 1
Sanitary Confinement: Guam and the US Navy, 1898–1941

Just another April Day, 1939

On most afternoons, young Jose Torres could be found in the village of Merizo[1] helping his father and uncles plant *ma'es* or *suni* or *dago* at their *lancho* (that is, corn, taro, or yams at their ranch). On an ordinary day, he'd go straight to the *lancho* after school and help his older male and female relatives until early evening. However, this was a special day.[2] After his noontime release from the Merlyn G Cook School, Jose's teacher asked him to stay behind and help with a class project. With the annual Health Parade not far away, placards were needed for students to carry on their march through the village. So today Jose got a break from his routine at the ranch.

On his walk home from school, Jose relaxed and played games with his cousins in the village. These were times to unwind, tell jokes, and enjoy the cool breeze of the late afternoon. Off in the distance, Jose could see and hear some of his female cousins and classmates helping *Pale'* (from the Spanish *Padre,* Father) get the church grounds ready for the upcoming San Dimas fiesta.[3] Jose enjoyed moments such as these, leisurely breaks from the labor of the ranch or the work around the house. He knew that while his dad was working at the *lancho,* his mother had stayed home because of a fever. Today his mother and grandmother were busy at home, working with a few aunties, cousins, and his *nina* (godmother). Whether they were sewing their clothing, hand-washing the laundry, preparing the family dinner, planning for the fiesta, or tending the younger children, a flurry of activities always seemed to be going on. Though he was just a boy, as the eldest in his family Jose had already learned to appreciate the hard work done by all of his relatives in providing for the family.

He and his cousins were not far from home when one of the boys noticed someone walking far behind them. Squinting their eyes to make

out the adult figure, the boys guessed that it was one of the Americans. It was definitely a man, as they could tell by the stranger's pants. And it was definitely an American, as they could tell from its towering height. Realizing then who was walking in their direction, the boys looked at each other in silence for just a moment. Then one of them shouted, *"Lachadek! Sigi ya in sangani i Sainan-miyu!"* (Hurry! Go and tell your elders!)

The boys split up, each sprinting in the direction of his home. One of the mothers happened to be in the outside kitchen, supervising some of the girls as they pounded the *ma'es* on the *metati* (millstone) for the evening's *tatiyas* (tortillas). Hearing the news, she quickly grabbed a machete and began chopping some of the weeds that had shot up behind the house since her husband had fallen ill. The insular patrolman surely would not impose a fine on her for weeds now grown beyond the length regulated by the navy governor.

Jose's house was farther up the road, and he was panting by the time he made it home. *"Nana, Nana,"* he called out, *"Mamamaila i sindalu"* (Mother, Mother, the soldier is coming).

"Ai, Jose, sinapatos! Lachadek!" (Jose, put on your shoes! Hurry!), responded his mother, knowing full well that her eight-year-old could be ticketed for going barefoot.

"Yan ayuda yu chumuli halom i finagasi" (And help me bring in the laundry), she further instructed. The governor had recently outlawed the laying of clothes on bushes or lawns, but since Jose's parents could not yet afford to buy a clothesline and clothespins, they still hung their clothes on the hibiscus shrubs to dry. Jose and his mother quickly raced across the yard, pulling all of their nearly dry laundry off the shrubs and into the house. If they could move quickly, they might avoid the marine and his ticket book.

Jose's mom nervously grabbed her broom and began sweeping away the few leaves that had blown onto their front porch. *"Buenas tatdes"* (from the Spanish *buenas tardes,* good afternoon), she said calmly as the insular patrolman passed by, trying to hide the slight pant in her breath. With a bead of perspiration trickling down her brow as if to betray her anxiety, she asked, *"Malagu hao gumimen, Siñot?"* (Would you like a drink, Sir?) Politely tipping his hat as he walked by, the marine nonchalantly hid his unfamiliarity with the Chamorro language. Continuing on his rounds, he stared at the still-unopened ticket book in his hands. Surely he'd soon catch someone unprepared—perhaps barefoot or improperly clad, but certainly guilty of at least one of the navy's many sanitary offenses.[4]

This anecdote typifies a not uncommon occurrence on Guam in the period of naval rule from 1899 to 1941—the surveillance of village homes and gardens by members of the US Marine Corps. Assigned the

title of Insular Patrolman, selected marines were sent to live in villages throughout the island in order to maintain "peace and order," an assignment that included the enforcement of sanitary regulations (Corbett 1925, 74–75). Insular patrolmen were authorized by the governor not only to levy fines against sanitary offenders, but also to arrest egregious violators of the sanitary codes. The figure of the insular patrolman offers a glimpse into the power accorded naval government officials and suggests the extent to which the navy monitored at least the outward appearance of Chamorro communities. Navy governors deployed marines in the villages specifically to serve as the eyes and ears of the government to enforce compliance with its laws. The gaze of the navy, enacted in this particular case by the insular patrolman, was intended to be coercive. But if the Chamorro people were under the persistent gaze of navy administrators, then so were the colonial officials under the gaze of their Chamorro subjects. I would argue that the Chamorro gaze, unlike the policing gaze of the marines, which compelled cooperation and compliance, worked in a subversive fashion to disturb reigning navy ideas about state authority, obedience, and surveillance.

Surveillance served as one powerful route through which navy governors attempted to enforce their regulations. After enough years of scrutiny and policing, perhaps the Chamorros would eventually adopt the sanitary codes of the navy government, or so hoped naval health officials. Another route through which the navy attempted to influence the Chamorros' behavior was by using them as compradors. If some Chamorros needed to be aggressively persuaded to follow navy guidelines through the pressures placed on them by enforcement officials like the insular patrolmen, others might conform more readily given the presence of Chamorro role models after whom they could pattern their behavior. Ramon Sablan presented the navy with an opportunity for such role modeling to occur.

The Making of the First Chamorro Medical Doctor

In 1940, Dr Ramon Manalisay Sablan returned to Guam, having completed both his education at the University of Louisville Medical School and his internship at Central State Hospital in Lakeland, Kentucky (Nimitz 1940, 1). The US Navy had funded the medical school education of Sablan, the first Chamorro licensed physician, but not to employ him as a navy doctor. Rather, as Guam Governor James Alexander revealed in his request for naval transportation to return Sablan to Guam, "The Naval Government of Guam has paid for Doctor Sablan's education in order that the practice of medicine by civilians in Guam might be started. At the present time the only medical service available in Guam is provided by Navy Medical Officers. Dr Sablan's return

to Guam is therefore deemed to be of benefit to the government" (1939, 1).

Sailing aboard the USS *Henderson,* Sablan, his wife, and two children left San Francisco for Guam on 27 March 1940 (Nimitz 1940, 1). On his arrival, he established a private medical clinic, but practiced for less than two years before the Japanese invasion of Guam in December 1941. Sablan's significance to my research project lies as much in his accomplishments prior to his medical career and in the various meanings that can be read from his pursuit of medicine, as in his achievements as a medical doctor.

Born in 1901, Ramon Sablan had worked as a messenger in the naval governor's office at the age of eighteen; not long after obtaining this position, he left Guam on a navy scholarship to attend the Oklahoma Agricultural and Mechanical College at Stillwater. Because of his high test scores in an examination sponsored by the navy, Sablan was selected in 1919 as one of the Chamorro recipients for this off-island college educational opportunity (PSECC 1995, 119). He completed a bachelor of science degree and returned to Guam to work for several years as a public school educator and administrator. In 1929, he obtained the position of junior assistant health officer in the navy's Department of Health, and from there he appealed directly to the Chamorro people on behalf of naval medical authorities.

One of Sablan's strategies for communicating with the masses of Chamorros took the form of a series of commentaries in the navy-run, monthly publication, *The Guam Recorder.* His monthly column was titled "A Plea for Better Health Conditions," and from February through August 1929, he used it to enlighten Guam's people on the presumed benefits of western medicine.[5] Many of the themes espoused in his columns reiterated the perspectives articulated by navy administrators and medical personnel alike in their numerous health programs and policies. In his February article, for example, Sablan exposed the long-standing frustration of navy doctors at Chamorro avoidance tactics in his statement, "if only . . . the people of Guam would just cooperate with our doctors, if they only had faith in medical science to supplant their ancient beliefs" (1929, Feb, 240). In his analysis of the state of Guam's medical affairs, Sablan—rather than indicating the medical gravity of any particular disease or health condition—maintained that the "biggest problem which the navy doctors have to contend with here is our lack of cooperation" (1929, June, 50). He expressed dismay at his fellow Islanders' lack of enthusiasm for the cost-free services of navy doctors, nurses, and hospital corpsmen. Conveying his sense of frustration, he asked rhetorically, "What do the doctors get for all these services? Nothing but discouragement and the blame, especially if the patient dies." For, he continued, on the death of a Chamorro patient,

Photo 1 Dr Ramon Sablan, the first Chamorro medical doctor. *(Collection of the Richard F Taitano Micronesian Area Research Center)*

Photo 2 Dr Ramon Sablan at work in the dispensary. *(Collection of the Richard F Taitano Micronesian Area Research Center)*

"a feeling of distrust sweeps throughout the length and breadth of the land against the doctors" (R Sablan 1929, June, 50).

In his numerous exhortations, Sablan struggled to defend the record of Guam's navy doctors, while pleading with Chamorros to partake of the medical services available from the navy. He consistently implored

Guam's people to inform themselves of the latest advances in science and medicine, and to place confidence in the professionalism and expertise of the military surgeons. Concurrently, however, his writings revealed some of the considerable obstacles hindering the success of the navy's medical department. Chamorro distrust and avoidance of western medical knowledge and naval health practitioners invariably undermined the application of literally every health initiative sponsored by the navy. In their employment and engagement of Sablan in an unusually high-profile administrative position, navy officials hoped to increase the Chamorro people's cooperation with both the health department and the entire naval government bureaucracy.

The health education program embarked on by Sablan in the *Guam Recorder* in part extolled the wonders of modern western medicine. At the same time, however, it repudiated numerous customary beliefs regarding the nature and causes of health and sickness. One of the obstacles to the acceptance of navy medicine—considered by Sablan to be "the hardest single factor to eradicate"—was the Chamorro people's belief in supernatural forces and their consequent reliance on native herbal healers, both male *suruhanu* and female *suruhana*. Referring to native medicine as "the practice of theotherapy," Sablan expressed his concern that for most Chamorros, "spirits, persons, and supernaturally endowed agencies, animate or inanimate, constitute the first and last causes of disease and death" (1929, Feb, 240).

Sablan's consternation focused partly on what he perceived as the Chamorro people's fatalistic attitude toward health. Their belief in supernatural forces, especially the spirits of ancestors *(taotaomo'na),* Sablan asserted, resulted in a situation in which most people blamed either "the Almighty" or "the *taotaomo'na"* for all human ailments on the island (1929, March, 278; April, 8). Challenging the methods of *suruhanu* and *suruhana,* Sablan argued that their chief concern was "not the pathognomic symptomatology of the disease, but the location of the property trespassed and the why of the intrusion" (1929, April, 8).[6] Furthermore, he wrote, "While I do not deny the probability that some of the herbs and roots used have certain medicinal properties, their specificity for diseases requiring different medications is certainly to be doubted" (1929, April, 8–9). In his writings, Sablan sought to convince Chamorros that the practices of Guam's native healers were premised on a variety of unsubstantiated, nonscientific claims tied to indigenous religious beliefs in spirits said to occupy both land and sea. He expressed his belief that, through a process of "gradual education," Chamorros could become liberated "from the shackles of aged traditions." He optimistically predicted that eventually their "misconceptions regarding the pathogeneses of diseases [would be] superseded by the more intelligent, logical and scientific theories" (1929, April, 9).

Unfortunately it is difficult, if not impossible, to assess the success of Sablan's educational efforts in the monthly publication. Navy documents uniformly applaud him for making inroads into the Chamorro community, presumably through his literary educational efforts as well as in his capacity as a naval health employee. As in the cases of native nurses and teachers (discussed in chapters 5 and 6), the navy understood Sablan to be an effective collaborator with the colonial administration. However, the navy placed even greater confidence in him because of the potential power and influence he could exert on his fellow Islanders. As a member of the Guam Congress House of Assembly from 1929 and one of only a handful of college-educated Chamorros, Sablan embodied for the navy the best of their achievements (*GR,* July 1939, 141). For example, naval accounts credit him, in his capacity as junior assistant health officer, for his pivotal organizational role in the Naval Government 1932 Health Contest, considered "to have been such a marked success largely because of the closer contacts Mr Sablan was able to secure between the people and the Health Department" (*GR,* Jan 1934, 169). Just as navy officials believed that native nurses and teachers would exert much influence in transforming the everyday sanitary practices of Guam's people, so did Sablan represent an opportunity to communicate with the masses who remained aloof from naval health endeavors. His utility to the navy extended beyond his knowledge in the field of medicine. He served an important function for the navy government by communicating directly with Chamorros regarding a variety of issues and by the example he provided as a model of native success in the colonial system.

On his return home from medical school in 1940, an editorial in the *Guam Recorder* by naval Lieutenant Commander Harold Edgar expressed to Sablan that "your example will, no doubt, influence the lives, happiness and welfare of your people. . . . You are indeed blazing the trail to professional industry, and self-reliance" (June 1940, 94). Unfortunately for the navy, the outbreak of the Second World War and Guam's occupation by Japan would impede both the unfolding of Sablan's medical career and his support for the navy's health agenda. Along with the numerous *pattera* (midwives), native nurses, and native healers, he lent his medical expertise to the treatment of Chamorros during the wartime occupation, but in 1951 Sablan and his family relocated to California, perhaps for greener medical pastures (PSECC 1995, 119–120).

The case of Dr Sablan exemplifies the ambiguities that lie between the polarities of naval and Chamorro aspirations, modern and traditional notions of medicine, and acceptance and rejection of western medicine. On the one hand, navy administrators sought to exploit Sablan for the benefit of their health regime as well as for the advance-

ment of their general education program. Colonial bureaucrats aspired to employ Sablan literally as an active agent in influencing and educating Chamorros in naval norms of sanitation and hygiene, and figuratively as a model for aspiring young scholars of all professions to emulate. Naval health officers, on the other hand, sought through Sablan to promote the establishment of a private medical practice in order to alleviate the burden of native patients on the naval health department. In all of these ways, the navy's interest in Sablan transcended his value as a doctor. He symbolized not only the potentialities of science, but also the possibilities for native compliance, collaboration, and assimilation.

Dr Sablan should not be viewed simply as either a victim of colonial manipulation or an agent of the navy's colonial agenda. He might also be understood as a person who maximized the opportunities afforded him by the navy in order to further his personal interests and ambitions. Ostensibly, by serving the navy's perceived goals, Sablan obtained an extraordinary educational opportunity and became empowered to assist many Chamorros in need of health care, particularly during the wartime occupation period. His medical vocation also provided him with an opportunity to achieve economic prosperity. If, from the perspective of naval personnel, funding Sablan's medical school education was never simply about health and hygiene, then perhaps for Sablan, too, becoming a doctor signified more than an interest in medicine. To reach a fuller understanding of the multiple significances of Dr Sablan to both Chamorros and navy personnel, the peculiar mix of medicine and colonialism that informed his route to medical professionalism must be explored.

Health Historiography of Guam

The stories of Doc Torres and Ramon Sablan illustrate the avalanche of political, economic, cultural, and personal interests that saturate stories of health care on Guam. Despite a rich oral history of colonial contestation and ambivalence toward the navy's health policies, written histories of Guam throughout the twentieth century uniformly praise the navy medical department for its humanitarian efforts in attending to Chamorro health. Navy reports, unsurprisingly, lauded its health programs as unequivocal markers of progress and advancement, and this self-aggrandizement effectively validated US colonialism on Guam to the colonized Chamorros as well as the larger military complex. For example, Lieutenant Commander Frederick J Nelson, who served a two-year term on Guam in the 1930s, stated, "From physical, mental, and moral conditions too depressing to describe, Guam gradually emerged into one of the cleanest, most wholesome and prosperous

spots in the tropics" (1940, 83). Numerous reports have hailed sanitary improvements as the singular highlight of American colonialism on the island. Another commentator, Chief Commissioner A C Suarez, wrote, "The greatest and most lasting contribution [of the US Navy's rule on Guam] has been that the Americans have been untiring in their efforts to educate the natives to live in a more sanitary manner" (1939, 253). The navy itself placed health care at the top of its list of achievements, notably in its 1951 *US Navy Report on Guam,* which surveyed naval achievements as the navy prepared to transfer control of the island to the Department of the Interior (USN 1951). In this report, the Office of the Chief of Naval Operations declared, "On the long road to the rehabilitation of Guam, . . . public works and public health programs formed the team which hauled the heaviest load the longest distance" (USN 1951, 5). In a retrospective look at its administration of Guam, the navy boasted that its triumph had been in guiding the Chamorros "from disease-ridden medieval peonage to the dignity and demeanor of a healthy, self-reliant citizenry in the modern world" (USN 1951, 3).

Not only military writers have praised the navy for its health regime. Guam's canonical, textbook histories, as well as other scholarly publications, have treated the field of health and hygiene as one of the navy's unquestionable contributions to the island. Even American anthropologist Laura Thompson, noted for her denunciations of naval authoritarianism on Guam, wrote, "The Navy's most solid achievement in Guam was in the field of health" (1944, 151). Similarly, Paul Carano and Pedro Sanchez noted in their textbook *The Complete History of Guam* that the navy made "substantial improvements" in Guam's health and sanitary conditions. They described the opening of the navy hospital in particular as "one of the most important advances in the island's progress" (1964, 264, 204). Scholar Robert F Rogers came to an even more emphatic conclusion, averring that "the American navy's record in public health on Guam was exemplary" (1995, 160). In his *Destiny's Landfall: A History of Guam,* Rogers asserted, "Overall, Guam's population in 1941 compared with 1899 . . . was much healthier than when the Americans arrived" (1995, 160). The unanimity of opinion in these examples from Guam's accepted historical literature, in contradiction of the diversity of opinion expressed in oral accounts, suggests that this topic is ripe for thorough and critical analysis.

In this work I aspire to disentangle the discourses of sanitation and disease on Guam, interrogating the points at which national, naval, and medical concerns conflicted or coincided, converged or diverged with indigenous ones. I investigate four health-related ventures undertaken by the US Naval Government of Guam in the period between 1898 and 1941: the administrative procedures for persons inflicted with Hansen's

disease from 1899 to the 1940s; the regulation of Chamorro midwives that began in 1899; the establishment in 1905 of the first hospital for women and children; and the program for the treatment of hookworm that was established in 1918 and continued to the end of the period. In researching these topics I have encountered a wide variety of Chamorros whose responses and reactions to western medical intrusions run the gamut from enthusiastic compliance to deliberate defiance. By looking at the experiences of health-care givers such as the *pattera* and native nurses, I offer glimpses into the different ways and means by which Chamorro health practitioners negotiated their status in the new colonial system. Childhood memories of hookworm treatments, of hospital visits, and of family members forever separated from their families as a result of the navy's policies toward Hansen's disease also illuminate the different understandings and meanings Chamorros have given to these medical intrusions.

In examining the cross-cultural encounters between Chamorro people and American navy personnel in the context of these particular medical projects, I address some of the broader issues confronted by naval and medical communities in the early twentieth century. These include the mushrooming concerns regarding the emergence of tropical medicine, developments in military medicine, the professionalization of the medical field, the establishment of public health standards and protocols, and the colonial involvement of American philanthropies. From the contestations over health and medicine on Guam, many insights emerge about both American and Chamorro interests regarding not only health care but also questions of political power, professional authority, racial and gender alterity, and the dynamics of cultural domination, resistance, appropriation, and adaptation.

Here I aim to provide a postcolonial critique of the entire body of written sources, examining those that hail the introduction of western health projects as a prominent example of the blessings of US naval colonialism on Guam, while locating previously unexplored sources that tell different stories of tension, conflict, and dissension, as well as appropriation, syncretism, and ambivalence. On one level, the story of United States colonialism on Guam, particularly in the context of health care, can be read as a series of military interventions, whether through formal colonial policies or informal social controls. The story of western medicine on Guam begs to be considered in this context of colonialism and the peculiar power dynamics that accrue from a military government. On the island, under the authoritarian dictates of a military commander, the Chamorro people were not simply presented with new medical technologies. Western health conventions and technologies served not merely as examples of colonial benevolence, but as power-laden offerings of the colonizer. They were culturally specific

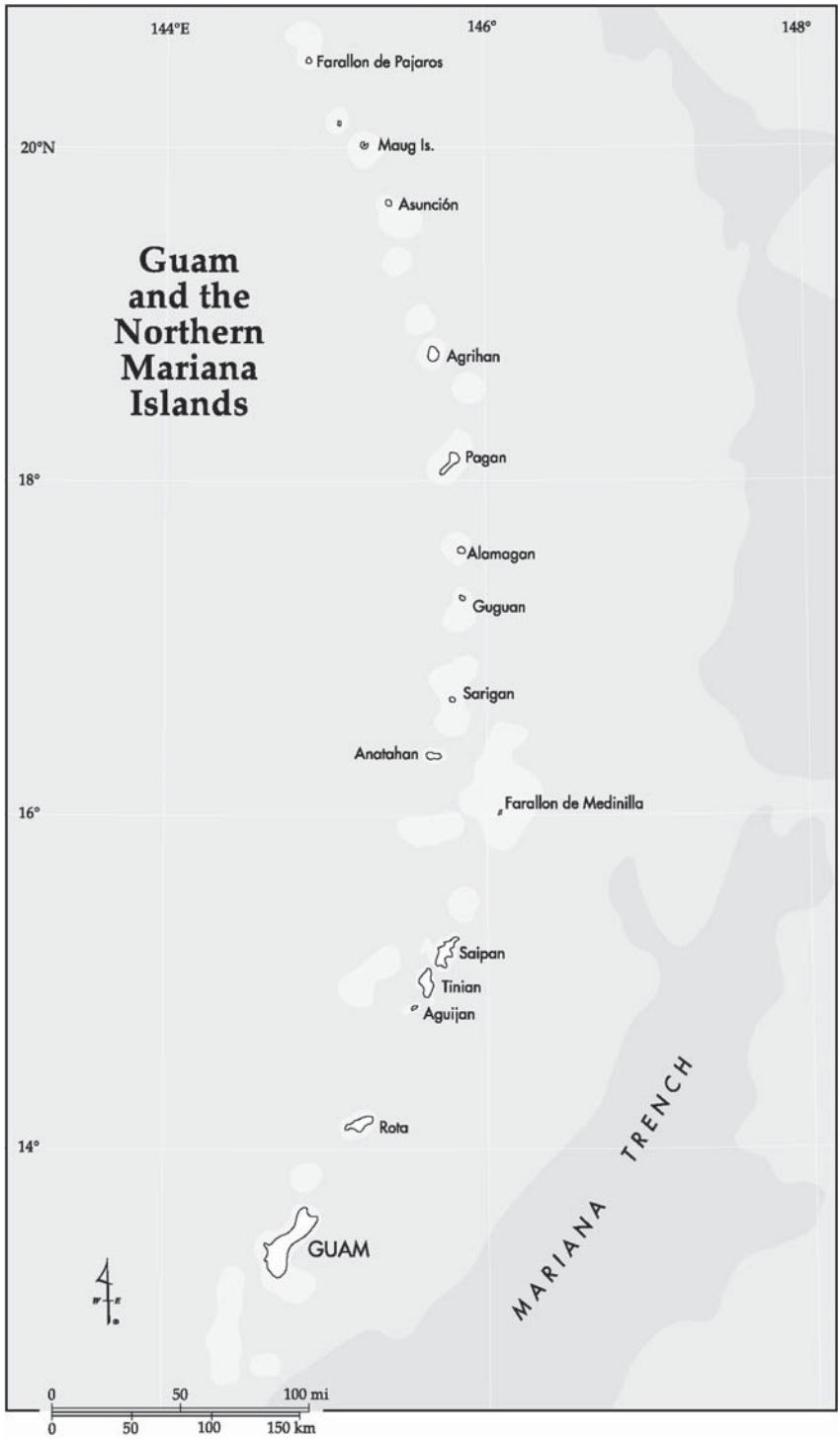
forms of bodily intervention that addressed not only issues of health and power but also matters of culture, race, and gender.

On another level, the introduction of western codes of health and hygiene can be read as part of the spread of ever-improving western medical technologies and diagnostic methods in the early twentieth century, as well as public health advancements made in light of these scientific breakthroughs. Incursions in the area of health can thus be partly understood in the broad context of international improvements in public health and medicine and partly in the more specific context of early twentieth century social activism in the United States. While the social reform efforts in the United States during this period largely addressed urban crises resulting from huge increases in the nation's immigrant population, the navy's health efforts cannot be understood solely in this context. Similarly, the Chamorro people cannot simply be cast as part of the broader trend in US population growth in the late nineteenth century.[7] Rather, as colonial subjects who came under the custody of the United States as the spoils of war, they and their stories must be analyzed in a mode that pays attention to the ambiguous and anomalous political relationship that developed between Guam and the United States.

Introducing Guam History

This research project concentrates primarily on Guam, the southernmost of the Mariana Islands in the western Pacific (map 2). It looks specifically at some of the changes to the Islanders' medical and sanitary practices that occurred as a result of the United States government's colonization of the island in the early twentieth century. Despite this limited focus, it is important to provide a broad historical framework for the period prior to 1898.[8]

Though much of the past of the indigenous Chamorros of the Mariana Islands has been obscured over time, historical and archaeological evidence confirms that the precontact Islanders resided primarily in oceanfront villages composed largely of clan members practicing a matrilineal system of descent. Within the Mariana Islands chain, as in most of the neighboring Caroline Islands, kinship connections were traced through the maternal line. All family possessions, including children, were maintained by the mother's clan, from which both males and females inherited their rights to land and other clan assets (PSECC 1994, 6). Within the matrilineal clans, leadership was conferred on men and women as the *maga'lahe* and *maga'haga,* the highest-ranking brother and sister of the clan. As the clan's elder leaders, collectively referred to as the *manma'gas,* the *maga'lahe* and *maga'haga* achieved respect as a result of their age and experience.



Map 2

Missionary accounts suggest that the ranking of clans and individuals in social classes was an important part of Chamorro society, as it was throughout the Caroline Islands (PSECC 1994, 5–6). Canonical histories typically reduce native Chamorros to three classes, with the top-ranking members identified as *matua,* a group encompassing elders such as the *maga'lahe* and *maga'haga,* as well as other persons of noteworthy achievement (PSECC 1994, 6). As the relatives of *matua,* the *acha'ot* were of lower rank and formed the vast majority of the population; they could eventually rise to power through age and by demonstration of skill and wisdom. The lowest-ranking class was the *mangachang,* considered by the *matua* to be inferior persons. Though little is known of how they became disenfranchised from the rest of society, the *mangachang* endured numerous social restrictions, including prohibitions against residing along the oceanfront, fishing in the ocean, and marrying higher-ranking persons (Cunningham 1992, 89–90).

Religious, scientific, and medical practices were interconnected, all linked to beliefs in ancestral spirits such as the *taotaomo'na* and *aniti. Taotaomo'na* translates literally as "people of before," referring to the spirits of ancient beings that were thought to "guard and protect the land, sea, and sky" (PSECC 1994, 39). In contrast, the *aniti* were animistic spirits that pervaded all forms of life, including the oceans, trees, and rock formations, as well as deceased clan members who were believed to remain tied to clan land even after death (PSECC 1994, 20–21). Physical ailments were attributed to natural and supernatural conditions, and, to treat physical infirmities that might arise, persons referred to as *makahna* performed a combination of priestly and medical services. The *makahna* were trained in the use of herbal medicines and massage techniques and were skilled in communicating with supernatural spirits, whether "for beneficial or vengeful purposes" (PSECC 1994, 21). In his analysis of Chamorro philosophy, scholar James Sellmann noted that from precolonial times the "art and science of healing and medicine" on Guam revealed strong ties between Chamorros and their environment. He maintained that the "philosophical moral implications [of Chamorro healing practices reinforced] the close ties of interdependency among people and their caring and concern for each other" (1994, 30).

Subsistence living in the Mariana archipelago required this ethic of cooperation and interdependence among Chamorros, referred to as the practice of *inafa'maolek,* literally, "being kind and good to one another" (PSECC 1994, 9). Relationships forged through intermarriages between clans and through friendships linked Chamorros in intricate familial networks so that clan members worked in unison with the larger community to promote the best interests of the group. Sharing and relying on available human and natural resources, including the fruits and fish of their labor, exemplify the dynamics of *inafa'mao-*

lek. Whether the moment required canoe building, net making, fishing, or babysitting, relationships built on the concept of *inafa'maolek* enabled clans to rely on each other for whatever need arose.

Although first visited by Europeans in 1521 during Ferdinand Magellan's circumnavigation of the world, the Mariana Islands were not formally colonized until 1668. In that year, with the establishment on Guam of the first colonial settlement in the Pacific, Spanish Catholics began actively challenging many of the ancient practices and beliefs of the indigenous Chamorros. The arrival of Padre Luis Diego de San Vitores, the Spanish Jesuit missionary who had aggressively campaigned to establish the colony, quickly led to incidents of culture conflict. Combative attempts by the Spanish to abolish what they perceived as stark evidence of paganism included efforts to eliminate the *makahna* and eradicate all traces of Chamorro ancestor worship, to restrict women's relatively free social mobility, to interrupt so-called libidinous acts of sexual promiscuity, and to intervene in familial authority by literally kidnapping children in order to remove them from what were considered pagan influences. Within four years, San Vitores was killed by the now notorious Chamorro *maga'lahe,* Matapang, and his death led to the dis-

Photo 3 Mending their *talaya* (fishing net). *(Collection of the Richard F Taitano Micronesian Area Research Center)*

astrous, thirty-year-long Chamorro-Spanish Wars. During these three decades—between 1668, the year San Vitores arrived, and 1698, the year the wars officially ended—the combined effects of warfare and disease resulted in a depopulation rate of between 90 and 95 percent throughout the Mariana Islands.[9] The conquering Spanish forces established a colonial government that placed the Marianas under the political jurisdiction of the Viceroyalty of New Spain (PSECC 1994, 32).[10] With the waning of Spain's wealth and power over the centuries, attention to its colonial possessions diminished. Most of Guam's canonical histories have described the last century of Spanish rule as a time of stagnation, isolation, and social decline. However, more recent Chamorro histories have reassessed this period as a time of survival, rejuvenation, adaptation, and rebuilding (PSECC 1994, 36).

More than two centuries of Spanish colonization left an "indelible imprint on the cultural identity of Chamorros" (Souder 1992a, 33). In particular, the introduction of Roman Catholicism transformed cultural life so much that "many Catholic practices are closely associated [today] with *kostumbren Chamorro,*" an encompassing term that refers to the range of Chamorro values and customs (PSECC 1994, 37). In the case of the traditional Chamorro health practitioners, the *makahna,* because their practices linked Chamorros to their non-Christian past, Catholic missionaries sought to eliminate them from society. Although historical records state that Spanish missionaries and soldiers successfully extinguished the practices of the *makahna* by destroying their places and artifacts of worship, many of their practices persisted through the work of the traditional herbal healers, the *suruhanu* and *suruhana*. These Chamorro terms derive from the Spanish term *cirujano* (surgeon). In their healing practices, the *suruhanu* and *suruhana,* like the *makahna,* combined massage therapy and medicinal plant remedies with particular attention to symptoms of supernatural origin (McMakin 1978, 13). Researcher Patrick McMakin considered their craft "the most intact survival of a cultural activity of the pre-contact Chamorro" (quoted in Pobutsky 1983, 4A). Arguably, there is little substantive difference between the precolonial *makahna* and the colonial-era *suruhanu* and *suruhana*.

Along with challenging the spiritual and medical practices of precolonial Chamorros, Spanish administrators also reorganized clan living patterns and disrupted the matrilineal social configuration. As a result of their colonial and mission policy of *reducción,* which strove to "subdue, convert, and gather pagans into Christian congregations," Chamorros from throughout the Mariana Islands were resettled into designated village sites, primarily located in southern Guam, beginning in the late 1600s (Rogers 1995, 43).[11] *Reducción* permitted the Spanish colonizers and missionaries to identify the Chamorros, in Spanish polit-

ical and religious terms, as newly colonized natives who were subject to divine and royal laws. In the Spanish colonial view, effective colonization and Christianization necessitated the relocation of Chamorros to provide for maximum surveillance of would-be rebels.

With the exception of persons living on Rota, who were allowed to remain where they were, Chamorros from throughout the Mariana Islands were relocated to specified villages. But clan members still preserved links to their ancestral lands by maintaining *lanchos* there, where they planted crops and raised animals. On their *lanchos,* "away from the watchful eyes of the priests and government officials, the Chamorros also told stories and sang songs about olden times, keeping alive some of their folklore" (PSECC 1994, 32). In the process of reorganizing Chamorro villages, the matrilineal system was "outlawed," as Spaniards attempted to assert "patriarchal notions of descent" and land ownership (Souder 1992a, 45). Nonetheless, Chamorro women continued to exert power and responsibility over family obligations, "responsibilities [that] took them outside the home as they sought solutions to problems" (Souder 1992a, 228).

Though the population underwent major demographic crises, rank and status remained important markers within Chamorro society. However, the ancient multitiered class system was reduced to two groups, the *mannakhilo',* of high rank, and the *mannakpapa',* of low rank (PSECC 1994, 6). Whereas in precolonial times such class distinctions were principally based on the ranking of one's mother's clan, in the Spanish colo-

Photo 4 Street scene in Umatac village, early 1900s. *(Collection of the Rockefeller Archive Center)*

nial era the groups were redefined in terms that benefited those most closely affiliated with the government. Through intermarriage with Spaniards, as well as by "serving as translators and agents for the Spanish government," the "new *mannakhilo'*" class of Chamorros emerged (PSECC 1994, 33). Significantly, the majority of the Chamorro population fits into neither of these two groups. The *mannakhilo'* and *mannakpapa'* encompass only the extremes of Chamorro society, the elite and the indigent (F Hattori 1999). While the bulk of the island population falls into neither category, the Chamorro language lacks a term to describe this ostensible middle class.

Spain's departure as Guam's colonizing power occurred as a result of the Spanish-American War. Following the end of the war in 1898, the United States claimed political sovereignty over former Spanish colonies in Puerto Rico and the Philippine Islands as well as Guam. Here the Department of the Navy exerted its authority over the entire island, proclaiming it to be the Naval Station of Guam. Spain soon sold the remaining Mariana Islands—along with its other Micronesian territories in the Caroline and Marshall Islands—to Germany, which governed them until after World War I, when they were occupied by Japan. In 1919, the League of Nations granted an official mandate to Japan, which remained in control until the Second World War, when the United States conquered the islands in a series of bloody battles. However, for the Chamorro people the most profound change occurred in 1898, when the United States claimed Guam alone as a spoil of war,

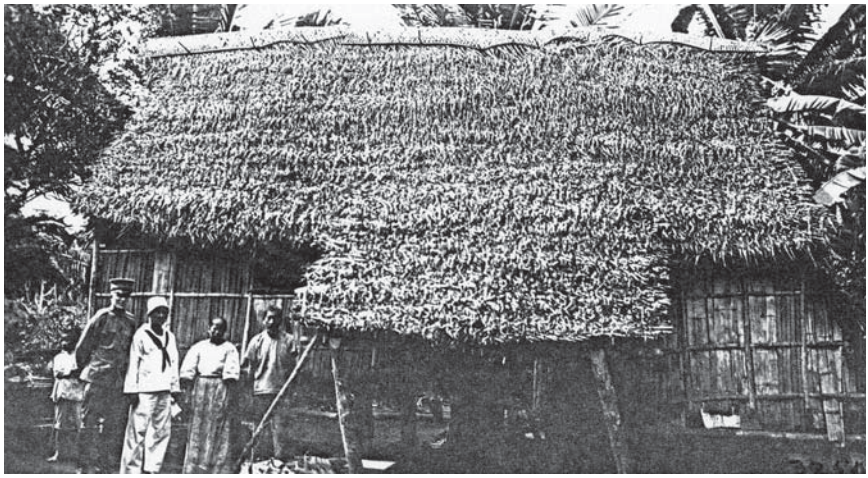


Photo 5 Typical housing structure at the *lancho* (ranch). *(Collection of the Rockefeller Archive Center)*

beginning an estrangement of Guam from the rest of the Mariana Islands that continues to this day.

On Guam, since 1898 the navy had assumed complete control of all island affairs, both civil and military. From the very beginning, the theme of American benevolence was loudly sounded. During the Spanish-American War, the USS *Maine* received orders to attack and dismantle the Spanish military presence on Guam, and in his "Instructions for the Military Commander of the Island of Guam" of 12 January 1898, President William McKinley called on the US Navy "to announce and proclaim in the most public manner that we come, not as invaders or conquerors, but as friends." McKinley further directed the naval administration to "win the confidence, respect and affection of the inhabitants of the Island of Guam . . . by proving to them that the mission of the United States is one of benevolent assimilation" (quoted in NGG *AR* 1914, 2). Despite the supposedly kindly exterior of the US colonizing force on Guam, McKinley's orders also stipulated that Guam fell under "the absolute domain of naval authority," thus legitimizing the autocratic system of government that reigned for half a century. The appointed naval officer served as both commandant of the naval station and governor of the island (NGG *AR* 1914, 2). Because of the island's strategic location, American interest focused on Guam as a military base and little attention was paid to the civil and political rights of the indigenous inhabitants. The naval governor exercised complete executive, legislative, and judicial power, with neither a judicial system nor a legislative body to act as a check on his actions. This authoritarian system prevailed until 1950, when the US Congress approved an Organic Act for Guam that, among its other consequences, shifted the political control of the island from the navy to a civilian government.[12]

For half a century the Chamorro people were subjected to the whims and dictates of a rapidly revolving procession of military officers. From the outset, however, these men attempted to map the course of Guam's social, economic, and political development in a somewhat uniform fashion. Although thirty-two different naval governors held office during this short period, administrative methods changed very little. Commander M M Leonard wrote in the December 1935 issue of the *Guam Recorder* that "the story of the navy government of Guam shows evidence of a consistent singleness of aim, prosecuted with vigor and determination, which gives to them all a singular unity. Except for minor differences of expression, they might have been written by one man" (1935, 239).

Despite consistent appeals by Chamorro leaders for a formal expression of the civil and political rights of the people of Guam, few governors acted to implement anything resembling a democratic form of

government. Only two of them attempted to address the issue. In 1917, Governor Roy Smith created the Guam Congress, but because it was only an advisory body with all of its members appointed by the governor, the Chamorro public soon lost interest in it (see Bordallo Hofschneider 2001). In 1930, Governor Willis Bradley revisited the issue of Chamorro political disenfranchisement by proclaiming a "Guam Bill of Rights" and by reestablishing the advisory Guam Congress (Rogers 1995, 149–152). But he left Guam only a year later, and subsequent governors did not follow his lead in attempting to define the Chamorro people's political rights. For the most part, the naval governors perpetuated their position of power with minimal disruption.[13]

One of the primary bodies of policy implemented on Guam addressed issues of health and hygiene, particularly in the interest of protecting the nascent American colony. Succeeding governors would reiterate a sentiment articulated by the first naval appointee, Captain Richard P Leary, who wrote that "the professional services of our Surgeons and the medical stores on hand [were provided to the Chamorro people] as an act of humanity for the improvement of the hygienic condition of the island and for the protection of our own men" (1899, 1). Navy governors vocalized these twin goals of protecting both the native Chamorros and their military personnel throughout their period of rule, sometimes placing more emphasis on one group of subjects than on the other, depending on the degree of contagion and immunity to the particular medical concern in question.

First Impressions: Chamorro Health and the US Navy

Prior to the navy's colonization of Guam, several accounts noted the cleanliness of the Chamorro people and their villages, and contemporary anthropologist Lawrence Cunningham has identified cleanliness as one of the Chamorro people's most esteemed values. In particular, he cited the observations of sixteenth- and seventeenth-century Spaniards such as Fray Antonio del los Angeles and Padre Luis Diego de San Vitores, both of whom noted an emphasis on hygiene and sanitation among Chamorros. Del los Angeles wrote in 1597, "As soon as a guest arrives, he is given hot water with which to wash." Similarly, San Vitores maintained in his late-1660s account that the Chamorros "had many sanctions that insured proper hygiene [resulting in] the cleanest houses in all of the Spanish colonies" (Cunningham 1992, 96). A number of non-Spanish accounts have corroborated Cunningham's assessment of the Chamorro people's emphasis on cleanliness. In an 1802 account from the American whaling ship *Lydia,* first officer William Haswell described the houses as "small but very cleanly" (quoted in

Wuerch 1997, 96). Following his travel to Guam, British yachtsman James Cumming Dewar stated in an 1889 report, "The streets . . . were marvelously clean" (quoted in Wuerch 1997, 116).

Even some early naval accounts paint a pleasant picture of the Chamorro people. Ensign C L Poor, a member of the newly arrived American naval community, wrote that "[The Chamorro people's] dress is neat and clean, and in their personal habits they are modest and tidy. . . . They are cleanly" (1899b, 29). Just one month earlier, Poor had noted, "Much stress has been laid, in the little that has been written about Guam, upon the prevalence of leprosy," but he continued, "As a matter of fact there is but little of it here—not over a dozen cases" (1899a, 1135).

Poor's assessment that navy observers had overstated the significance of Hansen's disease on Guam opens a window on the ambivalent discussion that arose around the topic of health and the Chamorro people. Portraying them as sometimes wretched, sometimes decent, these elastic representations of the indigenous people could be manipulated to justify a wide range of colonial policies. Furthermore, it should come as little surprise that once naval authority over Guam was established, official medical and administrative reports about the Chamorro people became less complimentary and more conspicuously concerned with the daily difficulties of managing a colonial government.

In one of the earliest official medical assessments of Chamorro health conditions, Assistant Surgeon Mack Stone described the Chamorro people to the secretary of the navy as having "slight regard . . . for cleanliness and the prevention of disease" (1899, 1). Captain Richard Leary, the first naval governor, also exhibited his understanding of the physical conditions of the Chamorros in a 1900 order that authorized the apprehension and quarantine of all American servicemen who had left their ship to live among the native people. In General Order 14, Leary explained that members of his command would "incur the risk of infection" by associating with the presumably disease-riddled Chamorros. He sought to protect those Americans exposed to native germs, as well as the other members of his command (NGG 1974, 53). As Leary was the first governor, his orders were especially significant because they established the precedents to which later governors would adhere.

General Order 14 stated the particular objective of protecting military service members, but it also worked to collectivize the Chamorro people as a homogeneously diseased group. From the start of the naval administration, governors' orders and naval policies consistently set American personnel and their Chamorro subjects apart in binary opposition to each other—not only as healthy versus diseased, but also as modern versus primitive, progressive versus conservative, industrious

versus lazy, literate versus illiterate, and moral versus amoral. Naval laws and policies treated Chamorros and Americans as mutually exclusive groups with different sets of legal regulations, educational requirements, economic interests, and health concerns. Further, in the area of health care, navy laws treated the Chamorros as identically afflicted, and thus uniformly accountable to medical authorities. In the case of hookworm therapy, for example, rather than selectively treating only those infected, navy doctors systematically administered annual treatments to all Chamorro schoolchildren without prior diagnosis of illness. The presumption was that all of them were infected. However, military personnel were treated only after a medical examination and diagnosis.

Some Chamorros perceived such approaches as less than ideal. Ramon Sablan, in his capacity as an employee of the navy medical department, wrote publicly in the *Guam Recorder* that "the wholesale method of giving the treatment to this number of children might not be as ideal as some would like it to be." Conceivably echoing the sentiments of other naval medical personnel, he went on to state that "perhaps it was the most practical way [since] only a very small percentage of the people voluntarily go to the hospitals" (1929, June, 50). Sablan's comments reveal that Chamorro patients were treated as uniformly diseased partly in light of the medical exigency created by their resistance to navy medical services. His pragmatic analysis of the navy's aggressive tactics further suggests that at least some Chamorros empathized with the government's medical procedures. As an employee of the naval government, as an appointed member of the Guam Congress, and as a member of the *mannakhilo'* class, Sablan espoused opinions that were undoubtedly shared by other Chamorros of his status.

Returning to Leary's order for the quarantine of servicemen exposed to native germs, evidence exists that not all of the American personnel on Guam viewed the Chamorro people as dangerously diseased. Noncommissioned officers, enlisted men, and marines, in particular, were denounced over the years for violating naval officers' norms of social propriety. Beginning with the first battalion, officers periodically registered complaints with the governor, as well as with higher-ranking navy officials in Washington, DC, regarding the close association of certain members of their command with the native people. A 1902 letter from Guam resident John G Esslinger expressed his outrage at the "'open and notorious' deeds of immorality" being committed, mainly by noncommissioned officers, in their "open adultery" with native women.[14] Esslinger's letter was forwarded to the secretary of the navy, who then referred it to Guam's governor with a request for information on the complaint. The following year, Governor W E Sewell replied to the assistant secretary of the navy that while "illicit intercourse and even adultery occurs," little could be done to curb such "transgressions" (1903a,

1). The alarm over interracial couplings suggests that the officers in charge saw adulterous relationships as both physically and morally debilitating even if some navy enlistees did not share the health concerns of the higher-ups.

Governors Templin Potts and W W Gilmer both sought to ban interracial marriages in an attempt to obstruct liaisons between military personnel and native women. In 1907, Potts described these matrimonial unions as "degenerating to the whites," and sought to "immediately [discharge] from the service as unfit for military duty" any man who disobeyed his order (1907, 1). Although Potts never officially banned interracial marriage, Gilmer did so in Executive Order 326 of 29 September 1919. In this law, the governor decreed that "any white person residing in the Island of Guam is forbidden to marry any person whole or part of Chamorro or Filipino extraction" (NGG EGO 1919, 1). In explaining his edict to a committee of American citizens on Guam that had formed to fight it, Gilmer stated, "If a man in the United States marries a woman of any other color, he sinks immediately to the level of his wife" (1919, 1).[15]

While naval governors such as Leary, Sewell, and Gilmer may have viewed association with the Chamorro people as either physically contaminating or beneath the dignity of American citizens, for a variety of reasons men assigned to Guam did cross sensitive ethnic barriers. In 1919 a list of more than fifty marine and navy enlisted men who had married Chamorro women was compiled by J H Underwood, W W Rowley, and T E Mayhew, three American men stationed on the island who had married Chamorro women (1919, 1). Provided to the navy governor as evidence of stable marriages between native women and military men, the list included the progenitors of families on Guam such as the Andersons, Butlers, Johnstons, Leddys, McDonalds, Manleys, and Wusstigs; it also provided tangible evidence of navy men's resistance to the notion of Chamorro contagion that was promoted in the correspondence and reports of naval administrators. While the island's governors and health officers consistently emphasized the degraded health conditions on Guam, a good number of their subordinates appear not to have shared their views.

The Navy Health Bureaucracy: Medicine, Charity, and Colonialism on Guam

From the start of the naval administration of Guam, the theme of American benevolence was emphasized. McKinley's 1898 "Instructions" called on the US Navy to prove to the Chamorros "that the mission of the United States is one of benevolent assimilation" (quoted in NGG *AR* 1914, 3). Health policies perhaps best exemplify the body of

well-meant measures implemented by the colonial government, partly to attend to the health concerns of the indigenous people, but also in the interest of protecting the military colony. As my research demonstrates, these two separate missions soon became inextricably linked. In order to execute programs most rigorously, naval governors divided the medical duties of their administration between the departments of health and police. Consequently, the treatment of health and hygiene became defined in terms of the charitable activities of the military and the criminal activities of the Chamorros.

On Guam, attending to the health concerns of both groups was ultimately the responsibility of the naval governor, who held complete authority over all island affairs. The establishment of a health department to deal specifically with the indigenous inhabitants was not dictated by either the president or the US Congress, but was undertaken by the navy itself. Navy officials acknowledged from the start that the costly expenses would be borne not by the cash-poor Chamorros but by the federal government. This fiscal reality contributed to the pervasive representation of health care for Chamorros as evidence of colonial philanthropy.

Paying credence to McKinley's instructions for the "benevolent assimilation" of Chamorros, in 1905 Governor Dyer officially established the Department of Health and Charities, directing it to assume "general supervision of the public health and sanitary interests of this Island" (NGG GO 1905, 1). After 1918, the term *charities* was dropped from the department's name, but "charity" continued to be listed as a departmental subfield in the naval government's organizational chart until 1938 (NGG *AR* 1929, 5). The initial inclusion of *charities* in the agency title says much about the navy's perception of its health responsibilities on Guam, as well as its view of the Chamorro people's supposedly abject status. In contrast, the coexisting naval agency entrusted with the health care of military personnel and their dependents was simply titled the Medical Department.

The very naming of the Department of Health and Charities conveyed the notion of Chamorros as beneficiaries of American colonial philanthropy, and this was reinforced by the allocation of federal dollars for the health care of the Chamorro people. As the people of Guam lived a subsistence lifestyle and had few cash resources, taxes accounted for only a negligible part of the government's operating budget. Instead, navy funds to run the affairs of the entire island came almost entirely from federal appropriations, and so navy government officials could easily identify their expenditures, particularly health costs, as representative of American beneficence.[16] For example, Governor E J Dorn stated in 1908 that "the Bureau of Medicine and Surgery has been most generous in its treatment of the Station," and numerous

other governors and health officers expressed similar opinions (NGG *AR* 1908, 10–11).

McKinley's call for "benevolent assimilation" on Guam was frequently and consistently repeated by others, including nonmilitary writers, throughout the next half century. In the magazine *The Outlook,* for example, an unnamed author declared in 1899, "Guam is ours, and it should be the center of the best that our civilization can give" (19 August, 906). McKinley's notion of assimilation was typically articulated as Americanization, and in this project the medical department, along with the education bureau, played a critical role. In 1921, Governor Ivan Wettengel expressed this connection explicitly in his comment that "the US Naval Medical Department has been able to greatly improve the health and sanitation of the island, which is one of the most important factors in the civilizing and the Americanization of these primitive people" (Wettengel 1921, 1). The value to be gained from assimilating the Chamorros was articulated at length in the November 1935 issue of the *Guam Recorder* by editor Jack Flynn, who exhorted the naval community to assist in the process:

> [U]ndoubtedly all of us are united in speeding the day when in thoughts, language and ideals the people of this lovely island are thoroughly Americanized and may truly enjoy the full benefits of an American form of government. . . . Inasmuch as the United States governs here, the Chamorro people should make a determined effort to throw off the last remnants of customs, languages and ideas which are detrimental to their advancement. . . . To assist in the process is the duty of every American on the Island. . . . Take into your confidence the Chamorro people who work with and under you. They are in your hands and are a kindly and worthwhile people. Help them in their struggles. (Flynn 1935, 202)

Through a number of forms and methods, the parade of naval governors on Guam pronounced laws and enacted policies aimed at helping the Chamorro people in what Flynn described as their "struggles [to] throw off the last remnants" of their culture. In some ways, naval attempts to transform the Chamorro way of life parallel the Americanization campaigns of the early twentieth century in the continental United States. In both places, these programs sought to assimilate non–Anglo Saxon people into "the American way" through education campaigns, English language lessons, and public health campaigns (McClymer 1991, 233). While some prominent Americanizers in the United States sought to "soften the impact of adjustment to a harsh and alien society," others less benevolently believed that "the immigrants should give up their ways and fully adopt American customs" (Hays 1964, 102–103).

The case of Guam differed in a number of significant ways, not the least of which was the colonial context in which such programs were introduced. The Chamorro people were not immigrants to American shores, and to them so-called "American customs" were radical foreign intrusions. As indigenous people living on their home island, it was not possible for Chamorros to assimilate into an existing American culture, as was expected of immigrants. Instead, the new culture would have to be imported, and imposed, on those colonized. Assimilation programs on Guam were promulgated principally through the dictates of governmental policy, rather than through the social pressures exercised by philanthropic organizations, as was the case on the American mainland. Moreover, although Americanization programs on the US mainland served a variety of nativist and nationalist interests, those on Guam ultimately served the interests of the military—by protecting the health of their personnel and validating their colonial presence while positioning them as the rescuers of an underprivileged race.

Nonetheless, if care of Chamorro health was one of the primary tools of American colonial philanthropy, then the ever-expanding population provided seemingly unequivocal evidence of naval success. Census counts became important testimony to the assimilation project's legitimacy and victory. The growing population ostensibly expressed in concrete terms the direct benefits gained by Chamorros from colonial medical interventions. As Governor Dorn acknowledged in 1908, "It is most gratifying to report a constant decrease in the death rate since 1905, the first year in which a census was taken after the American occupation" (NGG *AR* 1908, 10–11). Even the secretary of the navy lauded the results, for example, in this 1931 report: "[the] doubling of the native population in 30 years is due largely to the sanitary and medical work of the naval medical officers" (USN *ARND* 1930–1931, 105). These assumptions were reemphasized by Lieutenant Frederick Nelson, who wrote, "To turn this group of more than 20,000 Chamorros . . . over to any other power would probably mean their extinction, since no other nation is prepared to hold Guam as a philanthropic mission, and since the native people are dying off on the other Mariana Islands where no specific efforts for their preservation have been made" (1936, 1135).

Perhaps Nelson's comments were informed by a questionable 1910 German report that stated in equally social-Darwinist terms that, in the northern Marianas, "The Chamorros are obviously a degenerating race" (quoted in Eckart 1998, 101). The German report, like Nelson's comments, pronounced impending tragedy for the Chamorro people, despite conflicting statistics that told a story of steady population growth (Farrell 1991, 276, 285, 323). Nonetheless, Nelson's statement reveals something of the paternalistic attitudes that accompanied navy benevolence. The notion that the Chamorro people might become

extinct without the intervention of American philanthropy served the interests of not only the naval medical establishment but also the entire colonial community.

Contemporary historians such as Robert Rogers have continued to cite population figures as evidence of navy achievement. In praising the navy, Rogers stated, "the American navy's record in public health on Guam was exemplary. The death rate fell dramatically from 27.8 per 1,000 persons in 1905 to 11.7 in 1940" (1995, 160).[17] An examination of the death rates presented in table 1 reveals anything but a linear, triumphant story of naval achievement. Given the fluctuating rates of death from year to year, one would be hard pressed to argue that the statistics demonstrate unquestionable naval accomplishment in the area of health.

Measles outbreaks in 1913–1914, 1924–1925, and 1933–1935, as well as an international influenza epidemic in 1918–1919 increased the death rates considerably in those years. Navy surgeons noted other epidemics, considered minor because fewer deaths resulted, including smallpox in 1904, whooping cough in 1915, and bacillary dysentery in 1923. In each of the epidemics that affected Guam, navy doctors identified the disease's origins with particular military vessels disembarking on the island.

The death-rate statistics reveal that in every decade of naval rule, at least one major epidemic resulted in hundreds of deaths. Year after year the navy struggled to curtail the spread of epidemic diseases. The data in table 1 suggest that while the total population did increase significantly over the period of naval rule, the parallel reality of the tremendous loss of human life as a result of epidemics should not be overlooked. The statistics do not speak teleologically of medical miracles so much as they disclose more complex stories of victories and defeats.

The use of death-rate data demonstrates the availability of modern statistics as a tool of "comparative analysis as well as clinical investigation" (D Arnold 1993a, 66). Noted scholar David Arnold observed that by the mid-nineteenth century, medical data had grown in use and popularity among army leaders in Europe and North America. With the use of these new analytical tools, "health was being seen as a quantifiable commodity [in which the] possibility of progress" could now be reliably measured (D Arnold 1993a, 66). Arnold asserted that through the use of statistics in colonial India, British medical officers gained "the opportunity and the confidence to press their claims on a previously indifferent administration" (1993a, 72). In a number of examples throughout this research project, I demonstrate some of the ways in which medical statistics could or could not serve the interests of navy administrators and medical authorities.

Table 1 reveals little evidence of military medical miracles for the Chamorro people, because the advances were tempered in part by the

Table 1. Population and Death Rates in Guam, 1902–1940

Year	*Total Population*	*Number of Deaths*	*Death Rate per 1,000*	*Source*
1902	9,676	243	25.1	NGG *AR* 1902, 4
1903		na	na	
1904		na	na	
1905	—	—	27.8	Elliot 1908
1906	10,961	308	28.2	Elliot 1908; NGG *AR* 1906, 6
1907	11,227	271	24.3	NGG *AR* 1907, 6
1908	11,490	246	21.4	NGG *AR* 1908, 11
1909	11,760	322	27.4	NGG *AR* 1909, 7
1910	11,624	299	25.7	NGG *AR* 1910, 14
1911	11,877	266	24.24	NGG *AR* 1911, 4
1912	12,517	298	23.8	NGG *AR* 1912, 6
1913	12,963	261	21.2	NGG *AR* 1913, 5
1914	13,380	365	28.9	NGG *AR* 1915, 10
1915	13,689	261	19.0	NGG *AR* 1915, 10
1916	14,142	298	21.3	NGG *AR* 1917, 6
1917	14,532	254	17.5	NGG *AR* 1917, 6
1918	14,124	256	17.6	NGG *AR* 1919, 12
1919	13,623	1,059	72.3	NGG *AR* 1919, 12
1920	13,275	183	13.8	NGG *AR* 1920, 17
1921	14,090	242	17.2	NGG *AR* 1922, 4
1922	14,495	294	20.3	NGG *AR* 1922, 5
1923	14,912	272	18.2	NGG *AR* 1924, 8
1924	15,160	449	29.6	NGG *AR* 1924, 8
1925	15,246	649	42.6	NGG *AR* 1925, 4
1926	16,938	381	19.9	NGG *AR* 1926, 2
1927	17,018	262	13.4	NGG *AR* 1928, 22
1928	16,517	267	16.2	NGG *AR* 1929, 3
1929	16,989	355	20.9	NGG *AR* 1929, 3
1930	18,511	390	21.1	NGG *AR* 1930, 17
1931	19,074	401	21.0	*GR,* Feb 1931–Jan 1932
1932	18,297	462	25.2	NGG *AR* 1933, 14
1933	19,800	724	36.6	NGG *AR* 1933, 15
1934	20,279	367	18.1	*GR,* Feb 1934–Jan 1935
1935	19,455	426	21.9	NGG *AR* 1936, 6
1936	20,373	328	16.1	NGG *AR* 1936, 6
1937	20,860	323	15.5	*GR,* Feb 1937–Jan 1938
1938	21,088	479	22.7	*GR,* Feb 1938–Jan 1939
1939	21,647	350	16.1	*GR,* Feb 1939–Jan 1940
1940	21,502	316	14.7	NGG *AR* 1940, 87

stark reality of tragic, unpredictable epidemics and in part by the oppressiveness of the health department (discussed in later chapters). The annual demographic statistics signified, at best, an increase in family members who could provide additional labor on the subsistence ranches, or, at worst, little more than an increase in the family's tax debt to the naval government. Through the census, naval governors not only

tracked births and deaths but also made note of persons eligible to pay taxes or provide labor to the government. To some of the naval governors, population figures represented not so much evidence of American philanthropy fulfilled, as economic opportunity for the administration. For example, as Governor Seaton Schroeder stated in 1901, "It is hoped soon to take an actual census of the Island. Tangible benifits [*sic*] are expected to arise from this, especially in ensuring the exaction of the poll tax and the 15 days labor which (or a money commutation) the law requires be furnished by every male between the ages of 18 and 60" (NGG *AR* 1901, 9).

Population increases, rather than simply signifying the success of the medical establishment, also indicated the possibility of increased government revenues from the payment of poll taxes (despite the withholding of voting rights from Chamorros). Further, in the practical operations of the naval administration, increasing numbers of healthy Chamorros also signified an expanded labor force. Not only was each male between the ages of 18 and 60 required to work for the naval government, but rising population figures suggested the possibility of increased economic productivity for the island in general. As Schroeder's comments suggest, the navy's medical advances in the area of population growth could serve different though equally self-serving purposes.

Others also disputed the charitable functions of the navy's health department. As the navy's surgeon general concluded in 1907 regarding medical activities on Guam, "The natives . . . are entirely dependent for medical and surgical relief upon the navy. This service, however, is not a mere charity, but constitutes a legitimate charge in the health interests of the naval community" (USN *ARSG* 1907, 79). This statement ostensibly authorized military doctors to extend medical care to native peoples for the sake of American personnel. Similarly, Rear Admiral E R Stitt advocated the necessity of "introducing modern ideas of medicine" to the native Chamorros so that "they would no longer be a menace to those who would be forced to come in contact with them" (1926, 6–7). The twin policies of treating the medical problems of both navy personnel and native Chamorros were two halves of the same whole, serving the objective of protecting the military establishment.

Even when governors recommended measures aimed at benefiting the Chamorro people, some of their intentions were less than altruistic. Governor Dyer recommended in 1904 that the Chamorro people "attain a higher grade of living," but his rationale was that it would be for the benefit of the naval community (NGG *AR* 1904, 4). Making Guam a more livable place for navy personnel would ultimately require elevating the standard of living of its indigenous inhabitants. As Dyer pointed out, "It is therefore incumbent on us for our self protection

and efficiency to give the natives such care as they are unable to get for themselves, to see that they are kept healthy and free from contagion, are afforded practical instruction in their sole pursuit, agriculture, and to educate some of them to occupy such positions as clerks, mechanics and intelligent laborers in the Naval Station. . . . These people must be taught, at once, to help themselves in ways to make themselves useful to us . . . but their preliminary steps must be guided by us" (NGG *AR* 1904, 6).

Dyer's remarks show that the desires and interests of navy personnel stationed on Guam were the paramount concern of some naval authorities. The improvement of Chamorro health care facilities, as well as a range of other projects, was viewed by some as a means to those ends. Further elaborating on Dyer's point, Charles H Forbes-Lindsay, in his 1906 study titled *America's Insular Possessions,* favored the elevation of the Chamorros for the benefit of the naval community. He wrote, "it is distinctly to the interests of the American Government to give the Chamorros ample educational facilities without delay. At no very distant date the requirements of the naval station on the island will demand a number of men to fill clerical positions and to perform intelligent work as mechanics and laborers. If, when that demand arises, the island can not furnish a large proportion of the needed working force, the positions can only be filled by the Government at comparatively great cost and inconvenience" (1906, 238).

The statements of both Dyer and Forbes-Lindsay reveal the belief that the transformation of Chamorro society would directly benefit the navy. The Chamorro people, according to such observers, would be the lucky beneficiaries as the navy's own needs were satisfied. Although not all naval officials reproduced McKinley's stated objective of "benevolent assimilation," there was consensus that, for a variety of different but equally compelling reasons, the health of the Chamorro people had to be addressed.

Criminalizing Health and Hygiene: Medicine and Power

Having established a number of reasons for attending to the health of the native people, navy officials on Guam received license to practice a variety of intrusive policies in the name of health and hygiene. Whether in the interests of protecting the Chamorros, safeguarding the military community, or shielding the larger American public, virtually any social practice was subject to scrutiny in the name of public health. As a result, navy health care policies became one of the central vehicles through which the power of the colonial government was consolidated. Further, understandings of navy medical work as acts of charity concomitantly implied that the Chamorro people were obligated to their benefactors.

Governors and health officers viewed naval expenditures on behalf of the native people as charitable contributions, and some navy officials believed that Chamorros were therefore morally obliged to comply with the navy's programs. For example, navy surgeon Edward Reed commented in 1924, "In return for this liberal expenditure of [federal] funds the Health Department is entitled to the complete cooperation of the people of Guam in its efforts to improve the sanitary conditions and the health of the people" (1924, Oct, 6).

Whatever the benevolent intentions of some naval officials, archival records convey the difficult task faced by the navy in convincing the Chamorro people that health programs were undertaken for their benefit. In 1919, Health Officer E L Jones reported that meetings were held in each village, where "Efforts were made to have the natives feel and know that the Government is here for their good. Sanitary and other measures recommended . . . are for the betterment of their condition, and the promotion of contentment, health, and happiness" (NGG 1919, 1). Despite such attempts to reach out to the villagers, numerous accompanying reports of Chamorros hiding out at their ranches in order to elude health inspectors or to avoid the hospital and medical officers at all costs raise doubts about the efficacy of the navy's campaigns.

Perhaps because of the Chamorros' notorious reluctance to take full advantage of the navy's medical services, governors and medical officers frequently implemented health policies in a heavy-handed manner. Despite the supposedly benevolent intentions of the Department of Health and Charities, coercion rather than cooperation typified the administration of health programs. Although governors assigned the officials of the Health and Charities department a supervisory role over the health and sanitary interests of the island, they alone had the power to mandate, implement, and enforce health policies. Ultimate authority rested solely in the hands of an autocratic governor, resulting in an entire system of government that was undemocratic. Consequently, governors' orders, rather than outreach programs or educational campaigns, served as the vehicles through which policies regarding sanitation and health care reached the Chamorro people. Navy administrators enacted a variety of intrusive and severe laws in order to establish public health standards. For example, in 1905 the governor instituted the practice of inspecting individuals' homes, mandating in Executive General Order 8 that, in the village of Hagåtña, "The Department of Health and Charities, through its sanitary inspectors, shall inspect thoroughly the entire town at least once a week, reporting in writing the result of the inspection to the Governor, giving the names and residences of those delinquent in observing this order" (NGG EGO 1905, 1).

By 1907, regulations for Hagåtña were tightened up considerably, enumerating the provisions for dealing with outhouses, garbage, weeds, lawns, and a variety of other sanitary matters. Furthermore, in 1907 Executive General Order 132 authorized that "Sanitary inspectors are empowered to make arrests for violations of any sanitary regulation wherein the offense is punishable by an executive fine" (NGG EGO 1907, 1). House-to-house inspections became an everyday reality in every village by the end of the first decade of naval rule, not just for the inspection of houses and grounds, but also for the identification of ailing Chamorros during epidemic outbreaks. In 1913, for instance, inspections were made daily in Hagåtña, Merizo, and Piti (see map 1), in order to identify and quarantine those infected by a measles epidemic (Kindleberger 1913b, 1).

During the second decade of naval rule on Guam, sanitary laws had become even more restrictive. In 1917, island residents were ordered to "keep all weeds and grass on their premises cut to a length not exceeding six (6) inches," and noncompliance was punishable by imprisonment (NGG EGO 1918, 1). Another equally intrusive sanitary code mandated that "Wash[ed] clothes shall not be dried on the ground nor less than 18 inches above the ground" (NGG 1936, 32). While this policy sought to prevent Chamorros from accumulating dirt on their clothing, it posed an inconvenience for subsistence farmers who lacked the finances to purchase a clothesline and clothespins (Torres 1999).

Photo 6 Women washing and drying clothes at the Hagåtña river. *(Collection of the Richard F Taitano Micronesian Area Research Center)*

Another dust-defying law decreed that "girls attending the public schools must wear short skirts, the lower edge to be at least 4 inches above the ground" (*GNL,* Sept–Oct 1911, 1). This regulation resulted in the outlawing of traditional *mestisa* skirts, noted by navy administrators for their long trains that swept up dust. The laws governing girls' skirts and the hanging of laundry may have arisen out of concerns for hygiene, but they concomitantly reinforced the government's power to control the minute details of each person's daily life. Governors' orders on Guam, even regarding the length of the grass on one's lawn, had the effect of criminalizing those guilty of sanitary offenses; from 1907, violations were grounds for arrest and imprisonment.[18] Just as significantly, the police powers wielded by the governor over such mundane affairs strengthened the authority of the naval officer in charge. The control exercised by naval governors over individual bodies, families, and residences illustrates some of the ways in which issues of health and hygiene became inextricably entwined with issues of colonial power.

The criminalization of practices is further exemplified in the operations of the insular patrol, as illustrated in the story of Doc Torres from

Photo 7 The navy government's insular patrol, 1925–1927. *(National Archives at College Park, Maryland; Photograph HQ56-ADM A44482)*

his schooldays. In 1914 enforcing the sanitary regulations in the villages through the regular inspection of homes and lots became the responsibility of this group, created by Governor W J Maxwell. Bureaucratically, the insular patrol fell under the jurisdiction of the Police Department, not the Department of Health and Charities, although their duty was to enforce a broad range of governors' orders. The insular patrol was composed of enlisted marines who were assigned to "go out among the people, live among them, learn their wants and troubles, help them whenever possible, and make true reports of conditions" (NGG *AR* 1915, 11). They also had the authority to issue tickets and arrest sanitary offenders. Illustrating the perceived significance of these sanitation functions in the Police Department, the *Guam Recorder* noted in 1924, "The Police Department is now with the old Motto 'Cleanliness is next to Godliness'" (Dec 1924, 2). From the adoption of this motto it would appear that the Police Department took its responsibilities for village health and hygiene seriously. This extraordinarily close relationship between health policies and police powers demonstrates once again that issues of health and hygiene could be easily manipulated to endorse the power of the colonial government.

Governors and medical personnel consistently lauded the work done by the sanitary inspectors to improve the hygienic conditions in the villages. In a 1919 report, the island's health officer remarked, "As a whole the general appearance of this island is cleaner than any other tropical place I have ever seen. Sanitary vigilance is the reason" (NGG SR 1919, 4). By the 1940s, the navy was hiring Chamorro men to work as sanitary inspectors in the village of Hagåtña. Francisco B Leon Guerrero, better known as *Tun* Kiko Encho, gained notoriety as the sanitary inspector responsible for monitoring the capital village's streets and homes in the years leading up to World War II. According to his son, Frank, "From what I gathered, he was mean. He had to make sure the areas around the outhouses were cleaned and the lawns were mowed. . . . He made sure the houses were neat, free of debris, germs and diseases." Yet Edith Rosario Blankenfeld, a resident of prewar Hagåtña, remembered Frank's father differently: "The streets were cleaner then, thanks to Kiko Encho" (Santos 1993, 10). The story of *Tun* Kiko Encho suggests that Chamorros were frequently not mere witnesses or victims in the various colonial health projects on Guam. Rather, they became entangled in a variety of complex ways, some embracing the naval policies, others despising them, some avoiding them, and others accepting them as beneficial. Frank obviously felt a certain tension as a result of his father's employment by the navy in such an adversarial role. Whereas some villagers undoubtedly disapproved of *Tun* Kiko's work, others such as *Tan* Edith appreciated his efforts.

Not only did the "vigilance" of health officers, sanitary inspectors,

and other navy bureaucrats compel Chamorro compliance, but the influential Roman Catholic clergy were also called on to help out in the navy's cause. In a speech before important naval officials, prominent merchant Jose Flores described the situation: the Spanish Capuchin friars "are going house to house, urging upon their parishioners the need for sanitation and cleanliness and cooperation with the authorities" (1938, 14). This was not the first time the Catholic clergy had become directly involved in assisting the naval government with the promotion of its sanitary policies. In 1917, Catholic priests assisted Governor Roy Smith in his program to relocate Chamorros out of their clustered villages and onto their dispersed ranch lands. Smith's migration plan, had it been successful, would have resulted in decreased population densities in the villages, primarily in the capital of Hagåtña, and would thus have improved public health conditions. As Smith reported in 1917, "The priests have lent their cordial aid . . . by preaching from the pulpit and by individual counsel" (NGG *AR* 1917, 41).

Although few Chamorros adhered to their pastors' calls for relocation to the ranch areas in 1917, it may be impossible to ascertain the effectiveness of pulpit politics in the 1938 example. Nonetheless, it is still meaningful to identify the extent to which navy administrators went in their attempts to reform Chamorro notions of public health and hygiene. Perhaps realizing that Catholic priests, to whom villagers were notoriously loyal, would exercise greater influence over the Chamorro people than the health officers could, navy governors attempted to accommodate the local culture. In asking the church to help the government accomplish its health objectives, the navy was forced to adopt Chamorro ways of getting things done. Yet, as these examples also expose, in extending colonial power through the application of health policies, even Roman Catholic authorities became entangled in the webs of medicine, colonialism, and power.

The cooperation of Catholic clergy with the navy government is in part explained by the turmoil experienced within the church in the early twentieth century. During the first four decades following the Spanish-American War, control over the local church shifted three times. In 1899, Governor Leary deported the Spanish Augustinian Recollects, regarding them "as a hindering influence in the Americanization of the Island" (Sullivan 1957, 99). In their absence, local church work continued principally through the efforts of Chamorro priest Padre Jose Palomo until 1907, when the Vatican created the "spiritual jurisdiction of the Prefecture Apostolic of the Marianas" and asked the Rhine-Westphalian Province of the Capuchins to assume church leadership in the islands (Sullivan 1957, 102). This arrangement lasted only a few years before diplomatic tensions between Germany and the United States resulted in yet another change. In 1911, the Vatican split

the Guam church from those in the northern Marianas, creating "the Vicariate Apostolic of Guam" and entrusting its care to the Spanish Capuchin Province of Catalonia (Sullivan 1957, 105). In 1938, navy requests for the removal of the Spanish clergy—because "they were alien citizens in an important military base"—resulted in their replacement with American Capuchin priests from St Joseph's Province in Detroit (Sullivan 1957, 145). Given the uncertainties in the local church hierarchy in the first half of the twentieth century, it would appear that Catholic priests were concerned with establishing their own spheres of influence. In light of their institution's instability, their relationship with the naval government was typically one of pragmatic cooperation.

In negotiating their own relationship with the naval government, most Chamorros sought to avoid the legal inconveniences that would result if they disobeyed the navy's sanitary regulations. Not only might their names be submitted to the governor, but they could also face fines and imprisonment for violations. For those Chamorros who lived by subsistence outside Hagåtña, even twenty-five-cent fines were considered prohibitive (Torres 1999). To avoid such consequences, as Chamorro Protestant Minister Joaquin Flores Sablan recalled, "Some of the mothers would station their children about two blocks away to give them due and timely notice if the inspector was approaching so that mothers could go through the motions of sweeping the place. If the place was dirty, they could be fined" (1990, 300).

Like Doc Torres, Minister Sablan confirmed that Chamorros were ever mindful of the insular patrol members and their inspections. Like Sablan, Doc Torres recalled that villagers in his home village of Merizo were quick to conform to the dictates of the inspectors, if only to avoid the costly fines that they could ill afford (1999). The examples provided by both men hint at the strategies and motives employed by Chamorros in complying with navy regulations. They afford a view into the different ways in which cooperation with colonial authorities can be misunderstood, bringing to mind scholar James Scott's notion of the "weapons of the weak" (1985). While some Chamorros earnestly sought to abide by the regulations as a way of maintaining good relations with the colonial authorities, others conformed in the interest of improving their physical well-being and the sanitary conditions of their village. Some tolerated the regulations only at a perfunctory level, expending minimal effort to avoid costly fines, while others paid little regard to the regulations, as evidenced by the high number of sanitary violations reported by Guam's naval governors in the *Annual Reports* of 1937, 1938, and 1939 (NGG *AR* 1937, 21; 1938, 26; 1939, 27). Furthermore, as anthropologist Laura Thompson noted in her prewar publication, *Guam and Its People,* "some [Chamorros] are ingratiating and opportunistic, interested in American culture mainly in so far as they can use

it for their own ends—namely, as a level to raise their economic and social status" (1941, 276).

Through this research project, I reexamine the histories of medicine and health care experienced by both Chamorros and Americans on Guam in the context of colonialism. By analyzing cases involving Hansen's disease, midwifery, hospitals, and hookworm treatment programs, I illustrate that the navy's introduction of western medicine and scientific technologies concomitantly influenced Chamorro cultural values, gender relationships, class delineations, political struggles, and economic expectations. Episodes marked by tension, uncertainty, conflict, and dissension, as well as displays of indigenous acceptance, rejection, appropriation, syncretism, and ambivalence should inform an understanding of the spectrum of naval health policies on Guam.

In the next chapter, I provide a general survey of the discourses on disease in both national and international contexts, as well as in the context of navy colonialism on Guam. I further examine the role of tropical medicine as a developing subfield for the medical professional in the colonial apparatus. As one of the navy's "tools of empire," to borrow a phrase from historian Daniel Headrick, western medicines and health technologies provided compelling mechanisms through which American administrators on Guam could justify their colonial mission while appealing to the local population. Finally, chapter 2 considers not only the renown gained by naval physicians in their treatment and diagnoses of tropical diseases, but also the navy personnel's fears and anxieties about serving tours of duty in tropical climates.

The third chapter delineates naval regulations regarding Hansen's disease and gangosa, policies that first confined patients to a "leper colony" in the village of Tumon, but later exiled them to one in the Philippines. As the chapter shows, naval fears of tropical ailments resulted in intrusive policies that overtly sought to protect military personnel from the disfiguring diseases suffered by the native people. Apprehensions over such horrifically described diseases could be manipulated by colonial administrators interested in increasing their annual budgetary allowance. In addition, as a public health issue, the sequestration of Hansen's disease patients created a conflict between administrative concerns for protecting the health of the military establishment and Chamorro concerns for the interests of the patients, not merely as individuals but as members of extended family groups. In examining the processes through which naval administrators asserted their interest in sanitation, I consider also the intersections between public health issues and the navy's particular political, moral, and cultural agendas.

The fourth chapter examines the battery of naval regulations placed on Chamorro midwives, *i pattera,* as well as traditional herbal healers,

i suruhana, and mothers. Among the first health-related regulations enacted by the navy were restrictions on the practices of the *pattera* in the interests of saving the lives of native children. Chamorro midwives were represented as primitive and ignorant crones, unfit for medical service. In chapter 4, I propose that the battle to circumscribe the power and practices of *pattera, suruhana,* and mothers became an arena in which naval officers attempted to construct both political authority and social control, not surprisingly at the expense of Chamorro women. Navy statements about midwives can be read to express medical anxieties regarding the professionalization of their position as health-care specialists as well as institutional anxieties regarding the status of the medical corps within the naval bureaucracy.

In chapter 5, I survey the founding in 1905 of the first hospital for native women and children, the Susana Hospital. Wives of navy personnel stationed on Guam raised funds for the project, billing the hospital as a mission to save "the little people of Guam" (E Johnston 1971, 41). While the hospital can be seen as an institution that asserted the power and knowledge of American women over Chamorros, ironically it did so in the interests of the naval government and male authority. In the hospital, Chamorro women's and children's bodies would come under the surveillance of an exclusively male medical corps. Moreover, as the place in which Chamorro women would receive training as nurses, the Susana Hospital became for Chamorro women at once a place of economic opportunity and a site where they were subsumed into a bourgeois American mold. In this chapter, therefore, I examine the historical contexts of and cultural meanings given to hospitals as well as the roles played by hospital-run training programs, particularly in relationship to native women in the American overseas colonies.

Chapter 6 examines the watch on children's bodies, primarily as enacted in the annual hookworm treatments administered to all schoolchildren. Attitudes and policies concerning hookworm reveal naval administrators' assumptions about race and class as well as their beliefs about the gravity of educating children in western epistemologies of hygiene. In this study of hookworm on Guam I also explore the role of philanthropy in America's territorial expansion. The interest and involvement of the Rockefeller Foundation on Guam, as well as in other overseas areas, speaks to some of the powerful ideological and political connections between national policies, military objectives, corporate interests, and so-called charitable ventures. The responses of children to the most intrusive colonial policies on Guam elucidate the understanding of forms of both internalized surveillance in the mode of Michel Foucault and resistance as examined by James Scott.

My research project concludes in chapter 7 with a discussion of some of the changes in health care attitudes and practices that have occurred

on Guam since 1898. There is no blaring of trumpets to proclaim the victory of western medicine over indigenous epistemologies of health and hygiene. Rather, western medicine, itself in distress through the early decades of the twentieth century (and indeed, some might argue, still in turmoil to this day), had to prove itself time and again, not only to an indigenous people who were rarely enthusiastic celebrants of its advances, but also to military bureaucrats, corporate philanthropists, and health professionals inside and outside the military establishment. In employing the developing laboratory and diagnostic technologies of the time, navy doctors and nurses bemoaned their failures and struggles as much as they celebrated their successes. Navy bureaucrats experienced similar achievements and defeats in their policy decisions, establishing the domination, rather than the hegemony, of the state government.

In this historical, cultural analysis of health and medicine on Guam, the best stories are not one-sided accounts of victory or defeat, resistance or compliance. Rather, the most compelling stories are tales of the often overlapping processes of adaptation, appropriation, acceptance, rejection, domination, and resistance. In the campaigns to combat filth and germs, and in the struggles for life and death, a glimpse is given of the tensions underwriting the contests for power and authority between Chamorros, Americans, men, women, doctors, nurses, children, and adults.

Chapter 2
"We Have Taught Guam to Wash Her Face": The US Naval Government and Western Medicine on Guam

A 1911 *Guam News Letter* article nonchalantly commented, "We have taught Guam to wash her face" (*GNL,* Sept–Oct 1911, 2). In this navy publication, the statement was not headlined, not boldly exclaimed, not highlighted in any conventional journalistic manner. Rather, it was tucked away in mid-paragraph toward the end of a two-page article that outwardly addressed the desire of the navy to develop the island's economy. Despite its obscure placement, the very unobtrusiveness of the statement testifies to its significance and the privileged position of health policies on Guam under the navy. By 1911, written reports from the naval government no longer struggled to convince readers of the necessity or efficacy of its health policies; they unanimously conceded that the naval government had achieved a medical miracle. As the *Guam News Letter* article suggested, the island's improvements in health care had become the standard against which other colonial projects could be measured.

The 1911 statement can be decoded in a number of ways. Not only did it infantilize Guam as if it were a child in need of basic lessons in grooming, but it also feminized the island, through the use of the pronoun *her* and the personification of Guam as a submissive disciple embracing the lessons of an enlightened—presumably male, empowered, and authoritative—instructor. In addition, the statement exemplifies the discourse on colonial progress that typically made front-page news in this naval publication. As the article reported, "No one who has seen only the countries of the temperate zone can realize the tremendous work that has been accomplished in these past twelve years in cleaning up the island, physically and hygienically." The navy's success in "cleaning up the island" was seen as all the more remarkable because of the island's location in the tropics.

While the newsletter article suggested that progress had been made in the area of hygiene, a cartoon published in the July 1912 issue

addressed a wider array of colonial projects that would supposedly contribute to the maturation of the Chamorro people (reprinted in PSECC 1994, 69). With the caption, "More Like His Dad Every Day," the cartoon depicted the Chamorro people as a dark-skinned child being elevated to the stature of a parent—here the American symbol, Uncle Sam.

The image not only reduced the Chamorro people to mere children under the training of a superior patriarch, but did so in a particularly racist manner, emphasizing the primitiveness and dark color of the child. Once again Guam is feminized: whereas Uncle Sam wears pants, the child wears a dress. The different clothing that encodes Guam as feminine, combined with the racist and infantilizing aspects of the cartoon, suggests that the island is receptive to the masculine guidance of the paternalistic navy. In the cartoon, "hospitals" were placed at the top

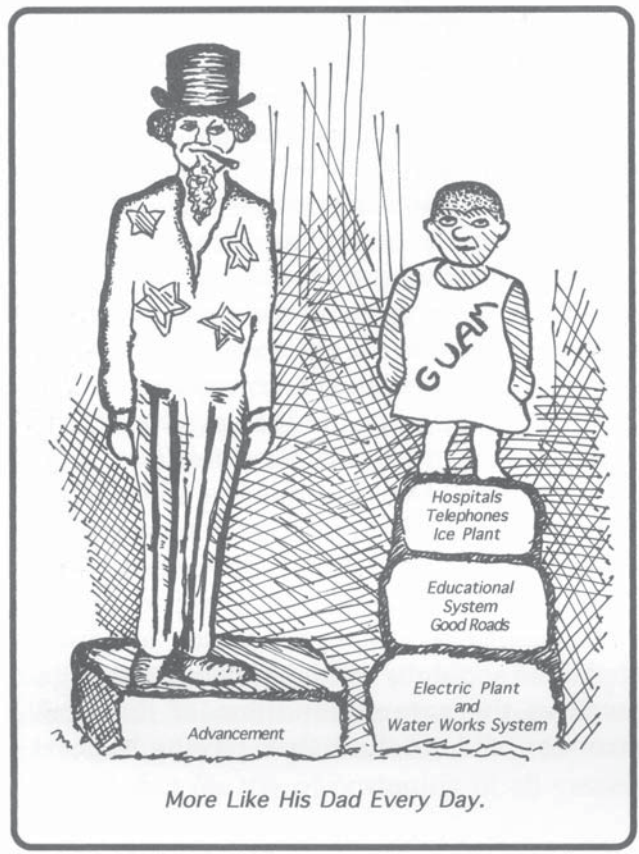


Figure 1 Cartoon in the *Guam News Letter,* July 1912.

of the list of projects that might elevate the Chamorros to the level of adult "advancement," followed by "Telephones, Ice Plant, Educational System, Good Roads, Electric Plant, and Water Works System." In this way, and especially in the racialized manner of its presentation, the caricature reinforced the notion that health and medical issues were of utmost importance. More than racialization, feminization, and infantilization can be read into both the comment and the cartoon. The navy's representation of Chamorros as simplistic and immature suggests that the navy presumed to know and understand its colonized, indigenous subjects, and was thereby licensed to exact whatever demands it saw fit: As the mature, enlightened adults in the colonial relationship, the navy could act responsibly and conscientiously on its subjects' behalf.

Just as these examples reveal naval sentiments toward the Chamorro people, another article titled "Guamitis" published in the *Guam News Letter* exposed naval perceptions of the tropical island environment. Written by a man identified only as "a sufferer in the tertiary stage in one of his lucid moments," this article referred cynically to "a recent disease . . . caused by the Mariana Island: Guam" (*GNL,* Oct 1916, 9). In pseudomedical terms, the column reported that the ailment was "Well known to Officers, Chief Petty Officers, Marines and other unfortunates." Among the numerous symptoms listed were a loss of interest in routine affairs and life in general, apathy, nostalgia, perturbability, anxiety, and moodiness. According to the author, if the Guamitis sufferer possessed intelligence prior to settling on the island, "on his arrival it will soon deteriorate, and even the most intellectual, on his return to his native land, will be found to have less intelligence to a marked degree." The only treatment available was "to assure [the patient] that after two years in Guam he will certainly be sent home, [since] after arriving in the States the disease will entirely disappear and ultimate recovery will be assured."

Although the "Guamitis" column was undoubtedly written for the amusement of a predominantly military audience, it displayed egregious navy attitudes toward life in the tropics. The humid climate, as well as the "isolation and solitude" of the island, was thought to contribute to a wide range of psychosomatic conditions among persons stationed on Guam. The piece not only expressed naval frustrations with what they considered debilitating tropical conditions, but also betrayed the loneliness and alienation of personnel based thousands of miles from their homes. Just as significantly, the story raised once again the issue of health, notably the health of military personnel, as one of the navy's central concerns in its mission on Guam.

According to several health officers assigned to Guam, newly arrived military personnel were met with a variety of horror stories about

"Guamitis" and other tropical health hazards. In 1936, Medical Corps Lieutenant C H McMillan wrote, "The new arrival in Guam, after reading of the diseases of the tropics and listening to tales told by those 'Old Timers' who have survived from one to two years of life here, frequently lives in terror of the health hazards which seem to surround him and his family" (*GR,* Aug 1936, 5). The "terror" that allegedly accompanied military personnel on the island was described further by Guam's Health Officer, S L Higgins: "[I]t is not a surprising thing that many among the naval colony live in a constant state of fear of disease. . . . The squalor of the surroundings in which he is forced to live, with swarming natives on three sides, sometimes four, for some natives live beneath them in the same houses, affords him no inspiration or stimulus to a white mans [*sic*] normal mode of life, and not a few are in reaility [*sic*] driven to drink" (1937, 1).

Given these cautionary tales of danger in the tropics, it is no surprise that the naval government on Guam placed much emphasis on its health policies, both to combat genuine apprehensions and to assure its dependents that everything possible was being done to protect their well-being. But the native Chamorros were not simply foils against which the navy could demonstrate its colonial benevolence. Perhaps less surprising, one of the first, and certainly the most financially profitable, Chamorro-owned industries to commence operations during the navy period was a soap factory. Beginning in 1930, the Ada Soap Factory produced bars of coconut oil soap in a Hagåtña plant, consummately manifesting the desire of the navy to clean and sanitize the Chamorro people, as well as to persuade them to participate actively and voluntarily in health-minded pursuits and productive, commercial projects. While the founding and success of this enterprise reflected a budding capitalist conscience on the island, it can also be viewed in other ways—as evidence perhaps of Chamorro acquiescence to naval sanitary policies, as representative of Chamorro economic opportunism in light of the relentless navy surveillance of Chamorro sanitary practices, and most certainly as testimony to the complex ways in which native agency operated in the colonial context.

Josef Martinez Ada, a Chamorro man who was born on Guam but spent his childhood years in Saipan, founded the Ada Soap Factory in 1930. Josef's father, Pedro Ada, had worked in Saipan as an interpreter for the German colonial government (PSECC 1995, 49–56). Reflecting the close relationship that had developed between Pedro Ada and Georg Fritz, the German resident governor of the northern Marianas, Josef and his brother Antonio traveled to Alzey, Germany, in 1906 to live with the Fritz family and broaden their educational horizons. Antonio eventually moved to Hamburg to learn about the merchant navy. However, Josef stayed with the Fritz family to study baking, photography,

and soap making, and he spent his spare time working at the Fritz family soap factory. In 1928, after his father's death in Saipan, Josef and his family returned to Guam, where, shortly afterward, he opened the Ada Soap Factory in the Anigua district of Hagåtña (*GR,* April 1930, 6).

Advertising themselves as the "first native soap manufacturers in Guam," the Ada family soon developed their factory into Guam's principal manufacturing business of the prewar era (*GR,* Feb 1938, 35). By contrast, most other Chamorro commercial enterprises, such as Elliott's Drug Store, Baza's grocery store, Maria T Franquez's dressmaking and hemstitching shop, Mrs C F Rosario's General Merchandise store, and Pascual Artero's garbage collection agency, focused on providing services (Sanchez 1989, 121; *GR,* Sept 1934, 137). From the perspective of naval authorities, companies such as the Ada family's reduced the island's trade deficit, and thus had multiple effects on the local economy. To the delight of the naval government, moreover, the success of the Ada Soap Factory extended beyond soap production. As reported in the April 1930 *Guam Recorder,* the factory's coconut oil soap products provided "additional benefit to the agricultural interests of Guam [insofar as the factory] not only furnish[ed] a local market for

Photo 8 Josef Martinez Ada (grandfather of former Guam Governor Joseph Ada) and his son, Juan Ada (father of former Guam Senator Tom Ada), at work in the Ada Soap Factory. *(Collection of the Richard F Taitano Micronesian Area Research Center)*

copra, [but also supplied] a good and cheap livestock feed in the copra meal by-product" (*GR,* April 1930, 6).

Within a few years of the factory's opening, Ada's soap products had surpassed the sales of competing imports from the mainland, and navy administrators reported that "it is only a question of time when it will be about the only laundry soap sold here" (*GR,* March 1932, 490). Demonstrating the popularity of the Ada products, the company sold 2,118 bars of soap in the period from 1 October to 31 December 1933, compared to sales of 4,251 bars of Crystal White soap from the United States. In 1934, however, sales of Ada's soap increased to more than 5,000 bars in the period from 1 July to 30 September, while sales of Crystal White fell to 2,483 bars (*GR,* Dec 1934, 258).

The success of the Ada company can be attributed to the demand for soap created by a sanitation-conscious colonial administration and the entrepreneurial efforts of the Ada family, as well as the support lent by other Chamorros for this locally manufactured product. In particular, numerous copra producers and other farmers benefited from the Ada company's success through subsidiary contracts. The company exempli-

Photo 9 Josef Ada and son Juan at work in the Ada Soap Factory. *(Collection of the Richard F Taitano Micronesian Area Research Center)*

fies Chamorro participation in both the capitalist economy promoted by the US Navy and the health campaigns championed by the island's administrators. Rejecting Chamorro marginalization and victimization by the navy in its coercive health policies, members of the Ada family aggressively appropriated western technologies and took advantage of naval health obsessions to carve out their own status and power. In the process, the meaning of soap was extended beyond its sanitary application. In the example of the Ada family enterprise, *soap* can also signify western technology, capitalist opportunity, native submission to cleanliness lessons, and indigenous interpretations of health, hygiene, and American colonialism.

As these examples begin to illustrate, health care of both native people and navy personnel figured prominently in the public projects of the naval government. In their wake, not simply health, but a number of more important racial and cultural issues became amplified. In this chapter, I address the history of western health care in Guam, principally examining how rapidly changing medical technologies became entangled with tropical medicine and military medicine in a Pacific island context. Further, the health policies and programs instituted by the naval government addressed more than medical and scientific concerns. They were a prominent part of the navy's larger colonial apparatus, pacifying a variety of social, cultural, political, and economic anxieties experienced by military personnel stationed on Guam and at their Washington, DC, headquarters. In exploring the range of naval government strategies that attempted to regulate Chamorro health activities, I also consider the relationship between colonialism and medicine, not just in Guam but in the wider Pacific.

As this chapter demonstrates, remarks like "We have taught Guam to wash her face," cartoons like "More Like His Dad Every Day," newspaper columns like "Guamitis," and the burgeoning of the Ada Soap Factory hardly convey the fluctuating dynamics of power between Chamorros and navy personnel. If the navy were attempting to teach the Chamorros, both literally and figuratively, how to wash their faces, then certainly Chamorros such as the Ada family were equally involved in the project, whether in accepting, rejecting, or redefining the meanings and intentions of health projects.

Surveying the Changing Health Landscape

Too many of Guam's historians have treated health and western medicine as simple, static categories that required no prefatory explanation. Yet historical records trenchantly reveal that medicine, like colonialism, has its own complex and contentious history. Particularly in light of burgeoning historical works emerging from the field of medical history, it

would be grossly insufficient to say that western medicine was imported to Guam and leave it at that. Western medicine itself has a rich history, and even its development in the United States by no means parallels its growth in other western nations. Historians such as William McNeill have emphasized that major advances in medical knowledge began to proliferate only in the late nineteenth and early twentieth centuries. Consideration of those changes is essential to an understanding of navy colonialism on Guam from 1898 to 1941. Changes experienced in the American body politic and in western medical practices during that period informed the establishment of the American navy on Guam and its accompanying health department.

McNeill, for example, demonstrated in his *Plagues and Peoples* that "it was not really until after 1850 or so that the practice of medicine and the organization of medical services began to make large-scale differences in human survival rates and population growth" (1998, 246). He doubted that prior to this period many physiological benefits resulted from the consultation of even the most expert medical authorities, suggesting that the western medicine transported to overseas Pacific colonies such as Guam in the late 1800s was itself in the midst of breakthrough. Anthropologist Victoria Lukere has noted that even in the early decades of the twentieth century, Fijians regarded hospitals as places of death, and thus, "European medicine, lacking any sweeping curative powers at that time and even fewer as exercised under Fijian conditions, had limited abilities to counter such negative associations" (2002, 198).

The late 1800s saw significant changes in the United States, partly because of its radical acquisition of off-shore colonies such as Guam as a result of the Spanish-American War and other acts of imperialism, but primarily because of economic, demographic, and social changes. In the decades following the Civil War, unprecedented numbers of immigrants entered the country—some six million people between 1877 and 1890 and another eighteen million in the quarter century before World War I (Mintz and Kellogg 1988, 86). By 1900, more than thirty-eight cities in the United States had populations greater than one hundred thousand people (Cooper 1990, 1).

With these expanding populations, a wide range of social problems developed. The population of Milwaukee, for example, exploded from 20,000 in 1850 to nearly 300,000 by the turn of the century. Inevitably, the problems of urbanization proliferated, including "infectious diseases; crowded, dark, unventilated housing; streets mired in horse manure and littered with refuse; inadequate water supplies; unemptied privy vaults; open sewers; and incredible stench" (Leavitt 1996a, 3). Less than adequate living conditions in all of America's newly urbanized areas not surprisingly resulted in increased risks of contagion and high

urban death rates. Catastrophe struck in recurring epidemics of yellow fever, cholera, smallpox, typhoid fever, and typhus. Every outbreak of epidemic disease "impressed upon public opinion . . . the need for effective public health administration" (Rosen 1993, 215). The scope of political activity would thereafter be extended in the direction of public health management and control.

In the wake of such dramatic outbreaks, numerous cities and states established boards of health. Louisiana took the lead in 1855, followed by New York City in 1866 and Massachusetts in 1869, and by the early twentieth century every state supported a board of health (Leavitt 1996b, 39; Starr 1982, 184). In 1878, the US Congress created a National Board of Health to "assist state and local health officials in devising quarantine regulations and sanitary measures to check the spread of epidemics" (Hoy 1995, 67). Sanitarians of the time were largely informed by the "environmentalist paradigm of disease, which stressed the role of climate, topography, vegetation and soils . . . in the aetiology and transmission of epidemic diseases" (D Arnold 1994, 12). As Leavitt noted of the endorsement of environmental factors in the treatment of disease, "Much of the work early in the [twentieth] century rested on the prevailing medical theory that dirt caused disease and emphasized keeping the city environment clean. The so-called 'filth' theory of disease posited in a very general sense that undifferentiated urban pollution . . . caused bad air, or 'miasmas,' which could lead to disease" (Leavitt 1996b, 22).

The theory that disease was environmentally determined piqued the interest and activism of health officers and city planners alike. Public health physicians "believed that rotting organic wastes in crowded urban areas produced a miasmatic atmosphere conducive to the spread of diseases" (Leavitt 1996a, 70–71). Informed by this theory, health department officials focused on neighborhood sanitary projects as a means through which infectious diseases might be contained. Pioneering sanitarians developed projects that would bring clean water into the cities and establish procedures for the disposal of garbage and sewage. Whereas only 24 percent of American homes had running water in 1890, by the 1930s the majority did. However, most Americans living in rural areas did not gain access to running water until after 1945 (Hoy 1995, 15). Likewise, from the 1880s onward, sewage systems became available to increasing numbers of Americans (Hoy 1995, 65–68).

By the end of the nineteenth century, new scientific discoveries offered revolutionary theories about the causes of epidemic disease. Advancements in biology during the mid-nineteenth century occurred chiefly because of a series of significant discoveries and refinements in the area of diagnostic technology. As their reliability improved, instruments such as microscopes, X-rays, and chemical and bacteriological

tests came into wider use, providing scientists with critical tools with which to probe the sources of disease. Physicians too began to enjoy the use of now-essential clinical instruments such as stethoscopes, ophthalmoscopes, and laryngoscopes (Starr 1982, 136). The scientific development of new diagnostic tools was an important element in the "expanding role of physicians as gatekeepers to positions and benefits in the society" (Starr 1982, 137).

Although health departments on the East Coast embraced an expanding range of responsibilities toward the end of the nineteenth century, most regions of the United States remained untouched by the new developments in science and medicine until well into the twentieth century. The more rapid reform in the east can be linked to a number of political, economic, and social factors, but particularly to the greater risk of epidemic contagion in its more urbanized areas. The earliest far-reaching public health reforms were implemented in the wake of jarring epidemic outbreaks that, for the most part, occurred predominantly in densely populated northeastern cities. In the southern and western regions of the nation, public health advances came more slowly, due to factors such as poorer economic conditions and continuing discrimination in areas such as health and education against African Americans and other ethnic minorities.

By the early decades of the twentieth century, years referred to as the Progressive Era, hygienic practices were already shifting. Public health practitioners increasingly stressed the importance of bacterial and scientific analysis. As well, general environmental concerns were exemplified in public school programs that emphasized the medical and physical examination of schoolchildren rather than the creation of sanitary school environments (Starr 1982, 188). Historian John Milton Cooper has detailed the so-called golden age of American politics, the activist stance of the Supreme Court, the substantial growth of industrial development, the increasing numbers of immigrants, and the rise in expressions of social discontent that typified these decades (Cooper 1990). These expressions of social discontent included a plethora of reform movements led by "'progressive' educators, psychiatrists, social workers, penologists, sociologists, and lawmakers initiating a variety of reforms intended to help the family adapt to modern conditions" (Mintz and Kellogg 1988, 119). Convinced that the active intervention of knowledgeable professionals could address and eliminate social problems, so-called Progressives advocated the broad expansion of government services into all areas of society.

On the health frontier, sanitarians' efforts became institutionalized in the form of government services during these pivotal decades, and concomitantly, numerous civic organizations formed to address growing public concerns for hygiene. In New York, for example, groups such

as the Ladies' Health Protective Association, the Sanitary Protection League, the Street Cleaning Aid Society, and the Women's Health Protective Association of Brooklyn proliferated (Hoy 1995, 74–81). Notably, the active involvement of women in civic projects signified the emergence of "New Women" in this era. These women, described by historian Carroll Smith-Rosenberg as members of the educated, bourgeois class, asserted their rights "to a career, to a public voice, [and] to visible power" (1985, 176). As activists, they concerned themselves principally with issues related to "children, home, family, education, health, hygiene, food, sanitation, and other women" (Woloch 1984, 299). From the late 1800s to the 1920s, the activism of these women and numerous other interest groups merged with the concerns of scientists, physicians, and public health specialists in pushing for wide-ranging improvements to America's health and sanitation systems.

Amid early twentieth century trends in urbanization and industrialization, including the spread of technological innovations such as the automobile, airplane, radio, telephone, electricity, running water, sewage systems, and so forth, emerged a quickly changing perception of the United States as modern and progressive (see, eg, Cooper 1990, 1–30). With the rapid influx of millions of southern and eastern European immigrants, health care became articulated as an important symbol of American citizenship. The new arrivals differed not only in their substantial numbers, but more important, in their regions of origin. No longer primarily Anglo-Saxons, they were perceived and represented as "vast masses of filth" (quoted in Hoy 1995, 92). For instance, Hoy asserted, "confrontation with racial and cultural outsiders . . . transformed cleanliness from a public health concern into a moral and patriotic one" (1995, 87). Sizable immigrant communities became targets of Americanization programs aimed at "cramming the assimilation experience, normally the product of generations of living in America, into a short-term indoctrination in 'the American way'" (McClymer 1991, 233). In the first two decades of the 1900s, more than thirty states passed laws implementing Americanization programs, and the federal government embarked on extensive programs geared toward the rapid assimilation of these ethnic minorities. Amid nativist fears of Balkanization among these new migrants, cleanliness became one means through which some semblance of outward conformity might be forged (Hoy 1995, 87; McClymer 1991, 234–235).

Americanization programs instructed immigrants on the supposedly basic facts about American life, including English-language skills, civics and history lessons, and ways of keeping clean in an urban environment. Believing that they were helping immigrants better adjust to their new surroundings, "social workers, educators, and employers . . . insisted that training in hygiene begin as early as instruction in English"

(Hoy 1995, 88). As Hoy graphically asserted, "By linking the toothbrush to patriotism, Americanizers clearly demonstrated that becoming American involved a total makeover of personal habits and loyalties" (1995, 89). As a result, not only among recent immigrants but in the larger society as well, by the early 1900s cleanliness had become a hallmark of being American; cleanliness had been transformed into a cultural value "with the overwhelming support of physicians and sanitarians, school teachers and nurses, parents, state and local officialdom, philanthropists, and most powerfully of all, corporate America" (Hoy 1995, 123).

The flip side of this scenario of cleanliness as American patriotism was the magnification of a long-lingering racist stereotype that equated dark-skinned peoples with dirt, filth, and inferiority (Hoy 1995, 92). Though not a new idea, amid the fervor of Progressive era reforms, the metaphorical likening of cleanliness to whiteness and poverty to darkness (including black skin, dirty living conditions, and unsanitary habits of personal hygiene) seemingly represented the literal, objective truth. Medical historian Andrew Wear asserted that by the early 1900s, the theme of cleanliness could be evoked in terms of "social, moral, and racial as well as physical" conditions (1993, 1302–1303). In the case of Guam, this array of "social, moral, and racial" ideas invariably informed the application of public health reforms as they traveled across the ocean to one of America's newest colonial possessions.

Tropical Medicine and Colonialism in the Pacific

Through a variety of aggressive diplomatic and military exploits in the waning years of the nineteenth century, the political and military interests of the United States extended for the first time to regions far beyond its continental borders. Nascent colonies in Guam, as well as in Puerto Rico, the Philippines, Hawai'i, and eastern Sāmoa, posed new challenges for the US military, unaccustomed to its role as administrator over civilian populations. While the navy received presidential authorization from William McKinley to govern Guam and eastern Sāmoa, the army accepted jurisdiction over the Philippines and Puerto Rico.

On Guam, the first colonizing battalion of navy and marine corps personnel arrived in August 1899 and learned that establishing the initial settlement posed a number of problems, not the least of which was employing the troops in several laborious public works projects aimed at "surveying the harbor, erecting beacons, planting buoys, building rafts, landing stores, [and] renovating and repairing Government buildings in Agana and San Luis" (Leary 1899, 1). In an account written by a member of the first Marine Corps battalion stationed on Guam, such work projects posed considerable health risks for the military.

> The hot tropical sun and working hard with poor food soon brought the men down with sickness. Not a day passed but that two or three men went to the hospital with fever. . . . Twelve of our comrades and an officer died with the fever. It was hard on those who were not sick, for they had to stand two hours on watch over the sick men, who were out of their minds with fever. There was a double funeral one day, two of our men dying at the same time. It was a sad affair. Climatic fever was the cause. Nearly every man was on the verge of insanity. It was almost as bad as a battlefield, for there was great danger of being sunstruck, for the sun was terribly hot, fever raging, and also danger of being killed by storms and earthquakes, Guam being noted for them. We were the pioneers of the island. (Clifford 1901, 10)

Clifford's account placed great emphasis on the tragedies that befell his colleagues and underlined the military's lack of familiarity with and anxiety over tropical environments. As a federal government report concurred, "There seems to be something very irritating, nerve-racking and disagreeable to Americans about the climate [on Guam]. They appear to be under tension, more easily upset, more irritable and more depressed mentally, so to speak, than at other stations" (Leigh 1927, 264).

The hazards to military personnel plagued navy administrators, particularly in the early decades of colonial rule. In 1900, Guam's first naval governor, Captain Richard Leary, reported to the secretary of the navy, "there are on the sick list fifty-four men out of a total force of one

Photo 10 Photograph of first US Marines on Guam, 1899. *(National Archives at College Park, Maryland; Photograph 22C-525983)*

hundred and fifty, there being four cases of simple fever, eighteen cases of typhoid fever and twenty cases of diarrhoea which seems to be epidemic" (1900, 1). Throughout Leary's short reign, maintaining the health of his battalion posed an exasperating challenge.

Reflecting on the health experiences of this first naval command, Secretary of the Navy John Long noted the hazards of life on Guam in his *Annual Report of the Navy Department*. In 1900, he declared that because of the island's "debilitating" climate, "conditions are not favorable at this station for continuous good health" (USN *ARND* 1900, 1080). By 1903, the navy's surgeon general declared that "a stay of more than two years at this station results in mental deterioration among the officers as well as men" (USN *ARSG* 1903, 95). Such perceptions by the highest-ranking members of the Navy Department contributed to an unusually high turnover rate among Guam's military personnel—a fact most apparent in the appointment of an astounding thirty-two governors over a forty-one-year span. As Robert Leigh attested in his study of federal health policies, because of the climate, military tours of duty on Guam were shorter than those at other stations, including Sāmoa (Leigh 1927, 264).

The navy's concerns about the health of their personnel were compounded by the presence of a native colonial population whom they regularly encountered. Whereas several early reports from Guam emphasized environmental factors such as the tropical heat as key challenges to the health of military personnel, others directed attention to the Chamorro people's ostensibly diseased condition and its potential impact on the navy establishment. Even prior to the settlement of Leary's pioneer battalion, visiting navy surgeons in passing ships noted the presence of syphilis, tuberculosis, whooping cough, and other ailments (Stone 1899, 1). In a letter to the secretary of the navy, for example, Governor Leary noted, "With the exception of medical supplies belonging to our vessels, there is not an ounce of medicine in this island, and as the inhabitants are seriously in want of medical attendance the professional services of our Surgeons and the medical stores on hand will be carefully, judiciously but gratuitously given for the amelioration of their situation, as an act of humanity for the improvement of the hygienic condition of the island and for the protection of our own men" (Leary 1899, 1). Recognizing that not simply the tropical environment, but also native germs, could pose a threat to his battalion's welfare, Leary established the precedent of extending military health services to the indigenous people of Guam. To duly protect the members of the military, navy administrators and doctors felt it necessary to attend to the physical conditions of the native Chamorros.

Leary's decision to extend medical treatment to Guam's native people established a precedent that differed markedly from other colonial

territories in the Pacific where, as anthropologist Margaret Jolly has noted, "Western medicine in the colonial context was often first associated with missionaries rather than secular scientists or doctors" (1998a, 13). On Guam, however, not only did the US Navy resolve to administer medical care to the Chamorro people, but they also possessed the financial resources and police power to implement health policies. These ingredients combined to create a history of colonial medicine that is unique in a number of ways.

Medical endeavors to systematically address the varied causes of illness among both military personnel stationed in the tropics and the native inhabitants of the islands contributed not only to the growing importance of tropical medicine in the navy's medical department, but also to the increased significance attached to scientific approaches to medicine within the navy. The developing field of tropical medicine added authoritative force to the notion that western medicine would be an important instrument in the colonizing process. An explicit link between tropical medicine and imperialism was made by G E M Vaughan in 1907: "Disease still decimates native populations and sends men home from the tropics prematurely old and broken down. Until the white man has the key to the problem, this blot must remain. To bring large tracts of the globe under the white man's rule has a grandiloquent ring; but unless we have the means of improving the condition of the inhabitants, it is scarcely more than an empty boast" (1907, 8901).

Vaughan's pronouncement illustrates the notion that by the end of the nineteenth century, "the new tropical medicine was an important element in the ideology of progressive imperialism" (Worboys 1993, 521). "Improving the condition of the inhabitants" of the world's tropical colonies, as Vaughan asserted, would be an essential prerequisite if "the white man [were] to bring large tracts of the globe" under his rule. In his work *Epidemics and History,* historian Sheldon Watts articulated this argument further with his assertion that the concurrent development of tropical medicine and the "great age" of European and North American imperialism was no coincidence. He maintained, "From its very onset tropical medicine was thus an 'instrument of empire' intended to enable the white 'races' to live in, or at the very least to exploit, all areas of the globe" (1997, xiii).

However, understanding tropical diseases was not important simply as a tool of empire. As navy Surgeon General P S Rossiter stated in 1934, medical personnel faced fears about the spread of tropical diseases to the North American mainland. "The Spanish-American War, which resulted in our becoming a world power with many widely scattered colonial possessions, added many duties to the Medical Corps of the Navy which they are still performing. . . . Naval medical officers were faced with the problem of dealing with numerous tropical dis-

eases, their prevention and treatment, and the prevention of their introduction into the United States" (Rossiter 1934, 262).

This general concern for the health of continental Americans informed practitioners of tropical medicine in the United States. Calling for the establishment of a school of tropical medicine there, Harvard medical school professor E N Tobey emphasized the urgency with which general practitioners throughout the country needed to become familiar with the field. As he explained, the likelihood of tropical diseases spreading through the nation seemed imminent "due to increase in travel, the return of discharged soldiers and sailors, missionaries, teachers, people connected with our diplomatic and consular services, people of leisure, engineers and merchants" (1909, 1099–1100). Given these general concerns for the health of Euro-Americans, both those traveling to tropical areas and those at home coming into increasing contact with travelers returning from the tropics, doctors and researchers specializing in tropical medicine faced daunting challenges.

According to historian Phillip Curtin in his research on European experiences in the tropics, these challenges included implementing public health measures in the new colonies and using the latest advancements in germ theory to decrease mortality rates among European military personnel by the mid-1800s. Curtin asserted that in tropical areas, sanitary measures regarding clean water, clean air, and sewage disposal "certainly accounted for the most important mortality changes in midcentury." Additionally, he pointed out that medical authorities concurrently focused greater attention on diseases "most spectacular" and "most exotic," particularly malaria, yellow fever, and cholera (Curtin 1995, 61). Curtin's attention to the decreased mortality rates of Europeans in the tropics is a reminder that scientific knowledge about health conditions and medical problems in the tropics progressed dramatically in the late nineteenth century. As a result of general medical advancements, the sanitary and infrastructural improvements aimed initially at protecting military personnel invariably extended to benefit the health conditions of colonized peoples in places like Guam.

Despite the health gains offered by western medicine, another body of evidence suggests that in the colonies medicine was viewed not merely as a philanthropic gift, a new technology, or a benevolent presence in indigenous lives. Rather, psychoanalyst Frantz Fanon has posited a correlation between medicine and colonialism, showing the manipulation of health policies in the interests of consolidating state power. "[C]olonization, having been built on military conquest and the police system, sought a justification for its existence and the legitimization of its persistence in its works" and medicine served as the principal means through which this justification and legitimization of colonial-

ism was achieved (Fanon 1965, 122). In his interpretation of acts of resistance by colonized peoples, Fanon noted a pattern different from those in poor, rural European settings: "The colonized who resisted hospitalization did not do so on the basis of fear of cities, the fear of distance, of no longer being protected by the family, the fear that people would say that the patient had been sent to the hospital to die, that the family had rid itself of a burden. The colonized not only refused to send the patient to the hospital, but he refused to send him to the hospital of the whites, of strangers, of the conqueror" (Fanon 1965, 125).

Fanon's work has challenged researchers to explore not only the range of responses to medicine by those colonized, but also the reasons for such actions (or evasions). As in the case of Guam, from the vantage point of the colonized Chamorros, health policies were never understood simply in medical terms, but became conflated with colonial power and naval authoritarianism.

This conflation of supposedly benevolent social policies with colonial power on Guam would be identified by Margaret Jolly as "a pervasive feature of colonial discourses" (2001, 282). In her examination of maternity and the politics of fertility in Vanuatu, Jolly observed the consistent "imputation of an alliance between foreign interests and female interests" by missionaries and other colonizing Europeans whose well-intentioned policies sought to "recuperate" Melanesian women from what they believed to be the most oppressive of conditions (Jolly 2001, 282). In this scenario of the colonizer as champion of the downtrodden Pacific female, state power is persuasively legitimized as an instrument for positive social change. Similarly, Christine Dureau's research on Simbo in the Solomon Islands has demonstrated some of the ways in which well-intentioned missionary attempts of the past century to replace indigenous practices of childbearing with more hygienic western ones ultimately have resulted in the consolidation of male and state power over females. Dureau wrote that as a result of missionary interventions, "birth and infancy were progressively relocated from forest to clinic. Despite its undoubted health benefits, this was at the cost of subjecting women's reproduction to the surveillance of both husbands and medical personnel" (2001, 239). The examples provided by both Jolly and Dureau illustrate ways in which women's bodies became sites of struggle for control "between themselves, their husbands and brothers, and the state" (Dureau 2001, 234).[1] Likewise, at various points in Guam's history, the bodies of leprosy patients, babies, schoolchildren, women, and the indigenous population-at-large would be literally and discursively manipulated by colonial and medical officials to promote their particular political, economic, and cultural agendas.

Health-related concerns could easily be manipulated by imperial states to validate not only their colonization of Pacific islands, but also

to justify continual acts of cultural imperialism. In Nicholas Thomas's examination of sanitation policies and the creation of state power in Fiji, for example, he has trenchantly illustrated that "Almost anything to do with the organization of custom or village life could potentially be modified in the name of sanitation," since health concerns could be expressed magnanimously as representing "the state's rational interest in preserving the native race" (1990, 157). In the first decades of the 1900s, Fijians were subject to rigorous sanitary restrictions, including bans against the chewing, drinking, and planting of *yaqona* (kava), rules that all sleeping places be located at least eighteen inches above the floor, and requirements that "all houses and kitchens be kept clean and free of dirt and rubbish" (Thomas 1990, 159). Even more intrusive was the forced relocation of four villages to sites deemed more hygienic, although, as Thomas has revealed, "officials were constantly bewildered by the fact that the mortality rates for 'insanitary' sites were the same as those for good locations" (1990, 165). Such arbitrary, yet far-reaching sanitary regulations demonstrate the degree to which "political, moral and cultural impositions were justified by their association or conflation with the programme of sanitation" (Thomas 1990, 157).

Perhaps the leading figure in the colonial critique of western medicine, historian David Arnold has stated, "Medicine has come to be identified as a colonizing force in its own right, a potent source of political authority and social control" (D Arnold 1993b, 1394). In the justifications of colonialism, medicine has been recognized almost universally as a benevolent gift of the colonizer. Like Fanon and others, Arnold has instead examined medicine as part of a larger system of competing political, economic, and social interests—between and within indigenous and expatriate communities (Fanon 1965, 121). Despite the apparent "colonizing force, . . . political authority and social control" of medicine, Arnold has insisted on a nuanced approach to the history of colonial medicine. In the context of India, for example, he noted, "Western medicine was forced to recognize that . . . it had to be more than a mere carbon copy of medicine in Europe. It had to fashion its own compromise, negotiate its own passage, between the laws laid down in the scientific metropolis and the practical possibilities and priorities determined by colonial rule of an 'alien' society" (1993a, 293).

In the case of Guam, as Fanon, Thomas, and Arnold have submitted, just as scholars would be remiss to assess the navy's health policies outside the relevant political, social, cultural contexts and in light of issues of power, race, class, and gender, so would researchers be negligent to assume that even an autocratic naval administration was able to impose its health policies hegemonically. As I shall show in subsequent chapters, despite naval intentions and designs, the government and the medical department were consistently engaged in processes of compromise

and negotiation, not only with the indigenous Chamorros but also with members of their command and national policymakers.

Medicine and the US Military on Guam

To understand the role of medicine on Guam, it is essential to consider the overlapping issues of colonialism, military government, tropical medicine, cultural imperialism, and benevolence. Moreover, the promotion of health policies on Guam must also be examined in the context of the navy's own bureaucratic structure. Most fundamentally, the navy medical department on Guam sought to protect its military personnel, a duty that concomitantly dictated attending to the health needs of the native Chamorros. On a broader level, medical personnel were also embroiled in a project to validate the medical department's significance to both the navy and the wider medical community. Only since 1842, in a reorganization act passed by the US Congress, had the Bureau of Medicine and Surgery been recognized as one of the Navy Department's five divisions, along with the Bureau of Yards and Docks; the Bureau of Ordnance and Hydrography; the Bureau of Construction, Equipment and Repair; and the Bureau of Provisions and Clothing. The five bureaus were not treated equally by Congress, and in particular the salary scale revealed a "great disparity in compensation," with the head of the Bureau of Medicine and Surgery receiving the lowest pay. This disparity in pay scales among the five bureau heads confirmed to the medical bureau head that "the Congress had placed him and his area of expertise on the lowest level of importance" (Langley 1995, 356).

Discontent over salary matters within the navy was intensified by the knowledge that army surgeons earned nearly double what those in the navy received (Langley 1995, 248). Not only was the status of navy medical personnel diminished within the US Navy hierarchy, but navy doctors were also devalued in comparison to army doctors. Navy surgeons struggled, therefore, not only to upgrade their institutional status in order to raise the Bureau of Medicine and Surgery to a level commensurate with the four other navy bureaus, but also to enhance their personal rank to a level equivalent to their higher-positioned army counterparts. As navy medical historian Martha Crawley pointed out, in the early decades of the twentieth century, "The Naval Medical Staff was struggling for status and recognition at a time when the Army Medical Department, led by Walter Reed and William Gorgas, had become internationally renowned" (1989, 117).[2] The army's medical advances, particularly in combating the outbreak of yellow fever in Cuba, had brought considerable prestige to its medical staff. By comparison, the navy medical bureau struggled to gain similar renown.

Operating in an institution steeped in hierarchy, navy doctors on Guam attempted throughout the first four decades of the 1900s to use the relatively new area of tropical medicine as an avenue through which they might challenge the accomplishments of their army counterparts and consequently command the attention of navy and congressional policymakers. These volatile issues of rank, pay, and prestige plagued navy medical personnel well into the twentieth century. Not surprisingly, tropical medicine became an active arena in which navy medical personnel could debate these pressing professional issues.

At stake in the medical treatment of the Chamorro people was not simply the physical welfare of the military and indigenous communities, but also the medical bureau's significance to both the naval hierarchy and the national and international medical communities. For example, Crawley illustrated that navy medical discoveries on Guam of the ailment gangosa "caught the attention of Congress and made the reputations of numerous naval surgeons in the wider medical community" (1989, 260). Numerous naval medical personnel received acclaim through the publication of their Guam findings in periodicals such as the *Journal of the American Medical Association, The World's Health, US Naval Medical Bulletin, Military Surgeon,* and the *American Journal of Nursing*. Several navy surgeons on Guam received invitations to present papers at international medical conferences, particularly on topics concerning tropical medicine. Through the achievements of the navy's individual surgeons, the navy surgeon general was able to strengthen the bureau's general status within the navy.

The individual achievements ostensibly also illustrated the validity and viability of military colonialism in the tropics. For example, Victor Heiser, an acclaimed authority in tropical medicine and director of the Rockefeller Foundation, emphasized the significant gains made by military surgeons in their colonial missions. Drawing a link between American colonialism and tropical medicine, he stated, "In my medical school days we never heard of this subject; it was the Spanish-American War that was largely responsible for our entrance into the field of tropical diseases" (1968, 654). In the ostensible interest of the millions living in tropical areas and the expanding concerns of various colonial administrations, medical authorities called for "stronger and broader responsibilities toward the health requirements of the indigenous populations of the tropics" (Yoeli 1972, 1239).

In this light, the field of tropical medicine can be seen as connecting seemingly disparate concerns over individual medical careers, competitive military hierarchies, and colonial interventions by both the navy and the army. On Guam, numerous accounts have credited the navy for its care of native people as well as Americans, while other writings have recognized the contributions to medical knowledge made by practi-

tioners on the island. However, few studies have acknowledged the link between indigenous health care and military expansion. As Crawley stated regarding the significance of tropical medicine in the context of American military expansion, "A major naval base could not be planned at Guam until the worst forms of disease had been brought under control" (1989, 278). Bringing diseases "under control" not only enabled the navy to expand its mission in the Pacific, but also provided it with a rhetorical device through which its officers could boast of their accomplishments as colonizers.

When editors of the September–October 1911 issue of the *Guam News Letter* proclaimed, "We have taught Guam to wash her face," they were participating in an ongoing colonial discourse that extolled the works of US Navy governors and health officers. The cartoon and its caption, "More Like His Dad Every Day," provided further evidence of navy attitudes toward the Chamorro people's physical condition. But comments and cartoons such as these were not simply indicative of the navy's self-aggrandizing efforts. Rather, they formed part of a larger orientalizing discourse that framed the Chamorro people in ways useful to the naval government in its colonial endeavor. The reactions and responses of Chamorros tell an equally important side of the health story, for if the navy was intent on orientalizing the Chamorro people as diseased and ignorant, then there were those such as Josef Ada and Ramon Sablan who would co-opt the navy's very own self-promoting rhetoric for their personal or family gain.

Perhaps it can be argued that the navy's efforts at self-aggrandizement in the area of health care were terribly successful, as few today dispute the notion that their introduction of western medicine to Guam resulted in improved health and sanitary conditions. Similarly, in the case of the Philippines, historian Reynaldo Ileto has illustrated that "Even nationalist writers . . . find it impossible to interrogate the established notion that among the blessings of American colonial rule was a sanitary regime which saved countless Filipino lives" (1995, 51). One of the most compelling aspects of the story of American imperialism on Guam (as in the Philippines) is that it was a military form of colonialism in which state power was backed incontrovertibly by military might. In contrast, in Great Britain's Pacific colonies, the existence of "a weak and divided state" meant that health policies were "uncertain in their forms and uneven in their effects" (Jolly 1998b, 178, 197). On Guam, however, no such weakness, division, uncertainty, or unevenness hampered the navy. Military commentators and island historians alike have zealously pointed out the extraordinary success of the navy's health projects, but they have been unwilling to examine and evaluate the political, economic, social, and cultural costs of such "progress."

As this chapter has begun to make clear, the history of medicine in

the United States, in the tropical Pacific, and in the military is a complex web of competing economic, political, and cultural interests both inside and outside the scientific community. At the turn of the twentieth century, advances in the field of tropical medicine, increasing confidence in western medical technologies, and the arrival of naval forces all converged on the Guam stage, where the entangled relationships between medicine and colonialism would be played out. Here, I outline some of the links between medicine, politics, science, and culture as a way to better understand the construction of colonial power. In the next chapter I examine naval regulations concerning Hansen's disease and persons disfigured by that affliction to illustrate some of the ways in which health concerns became powerful arenas for political and social control by the US Naval Government of Guam.

Chapter 3
"They Were Treated Like Animals in a Parade": Fear and Loathing of Hansen's Disease on Guam

> On the island are a great many lepers. It was a common sight to see them walking the streets without hands or eyes or noses, also with one leg. Men, women and children were afflicted with this dreadful disease. At the church and on the street no attention was paid to it until Governor Leary gave orders to get rid of the horrible disease.
>
> John H Clifford, *History of the Pioneer Marine Battalion . . .*

Even before the establishment of the naval colony in 1899, surgeons traveling aboard military vessels passing through Guam noted the existence of Hansen's disease on the island, frequently, like John Clifford, a member of the first marine division stationed on the island, overstating the disease's spread among the Chamorro people. In January 1899, on discovering five cases of Hansen's disease in the hospital, Assistant Surgeon Mack Stone declared it, along with syphilis and tuberculosis, among the "principal diseases found among the inhabitants of the island" (1899, 2–3). Similarly, the 1899 *Report of the Surgeon-General* registered the fear of and disgust for Guam's diseased persons: "The bodies of some of them are simply one putrescent pultaceous mass without recognizable features" (USN *ARSG* 1899, 203). Graphic and widely circulated comments like these indicate a dread of tropical diseases, and as American navy personnel came to learn more about Guam, Hansen's disease became one of their paramount concerns.

For the navy colony, treating the disease became especially problematic because, as Lieutenant Commander Vincedon Cottman reported in his 1899 sanitary audit of the island, "the natives appear indifferent to the disease and are apparently ignorant of the great danger of personal association with the afflicted persons" (1899, 334). As Clifford had noted, whether at church or on the street, Chamorros paid "no attention" to the disease (1901, 15). Similarly, Lieutenant William E Safford,

assistant to Guam's first navy governor, Richard Leary, wrote in his diary on 14 August 1899 that persons afflicted with "leprosy [were] scattered over the island living with their families, who apparently have little fear of contagion" (quoted in Wuerch 1997, 119). Given Chamorro people's "indifference" to and ignorance of the disease, as well as their lack of trepidation regarding it, navy officials determined that isolation of infected persons was the only workable solution. Despite the costliness of the policy of seclusion, navy doctors defended it in light of "the fear that some American would become infected with leprosy" (W F Arnold 1906, 1).

However, at least one naval employee expressed a conflicting opinion. Ensign C L Poor, one of Clifford's colleagues in Guam's nascent naval establishment, wrote in an 1899 article in *Harper's Weekly,* "Much stress has been laid, in the little that has been written about Guam, upon the prevalence of leprosy. As a matter of fact there is but little of it here—not over a dozen cases" (1899a, 1135). Poor's observations at least hint that navy officers and enlisted personnel held different views of Chamorro infirmity. The lower ranks of the US Navy and Marine Corps displayed little hesitation in fraternizing with the indigenous Chamorros.

For a number of complex reasons, Poor's comments appear to have been disregarded as navy officials busied themselves with determining how to solve this seemingly urgent health risk. Prevailing opinion favored Clifford's representation of Hansen's disease as both "dreadful" and "horrible." These attitudes and policies can be traced to an older history of western and biblical stigmatization of the disease, as well as to a more contemporary history of colonialism, race, tropical medicine, and public health.

It is clear that Chamorro people understood the disease and persons afflicted with it very differently, as recorded in Clifford's and Safford's descriptions of their acceptance of such persons in their midst. Few written sources overtly acknowledge the native people's perspectives, but a simple examination of the vernacular vocabulary for Hansen's disease sheds light on their attitudes toward it. Two of the Chamorro words for "leprosy" are Spanish transliterations, *lasarinu* or *nasarinu* from *lazarino,* and *leprosu* from *leproso* (Topping, Ogo, and Dungca 1975, 277). Another term is an indigenous word, *atektok,* defined literally as Hansen's disease but also translated as "to hug each other" (J Camacho, pers comm, 1999). While the etymological roots of this word are uncertain, perhaps this particular meaning reflects a sense of needing to nurture and embrace the sick person. Patients, particularly in the later stages of the disease, frequently require the physical assistance of others, and this definition of *atektok* may reflect an awareness of these

needs. Beyond its layers of literal and metaphorical definition, the term reveals Chamorro attitudes of acknowledgment and assistance for those unfortunates rendered infirm. These meanings do not carry the western connotations of stigma, disgrace, outcast, or ostracism found in descriptions of Hansen's disease by persons such as Clifford, Safford, and the navy surgeon general.

In this chapter I examine the series of unfortunate navy medical and public health policies entailing the apprehension and exile of Chamorros that resulted from the unbridgeable chasm between Chamorro and American attitudes toward Hansen's disease. Under the US Navy Government of Guam, procedures regarding the disease enabled naval officers to display and exert their colonial power and authority, while feeding their perception of American colonialism as benevolent and philanthropic. Further, in their battles against the disease, navy officers realized an opportunity to define and exploit the terms of "public health" on the island, not only for medical and monetary gains, but also in the interests of advancing their claims to moral and state authority. In the case of Guam, discussions of Hansen's disease were informed by reigning ideas concerning colonialism, race, tropical medicine, and public health. To understand the thinking that authorized the apprehension and sequestration of Chamorros, it is necessary to examine the ways in which ideas about medicine, public health, race, and power conflated with those of colonialism—particularly in the context of an unequal power relationship that existed in colonized territories such as Guam.

Defining the Disease

The disease known for centuries as "leprosy" is defined in *Merriam Webster's Medical Dictionary* (1995) as a chronic illness caused by an infection that may result in paralysis, the degeneration of muscles, and the production of deformities and mutilations. In 1873, Norwegian scientist Gerhard Henrik Armauer Hansen definitively identified the bacillus, *Bacillus leprae,* though it was not confirmed until two decades later that the disease was contagious rather than hereditary (Daws 1973, 6–7). Further, it would take nearly half a century for Hansen's momentous discovery to result in accurate diagnoses of the ailment. On Guam early in the twentieth century, despite the certainty that the disease was a menace to the island, definition and treatment of it were still uncertain procedures. Ailments such as gangosa, yaws, and syphilis were frequently misdiagnosed as Hansen's disease, and persons suspected of suffering from it were confined in a "leper colony" *before* undergoing a medical examination. For instance, in 1908 Navy Surgeon G L Angeny

revealed that only seventeen of the fifty-one Chamorros who had been confined by navy medical officers were, in fact, infected (1909, 331). Physicians throughout the world were unable to distinguish between Hansen's and other diseases of the skin.

On Guam, the affliction was most frequently confused with gangosa, a disease not limited to the island but sometimes associated with Guam because of the notoriety that resulted from scientific studies conducted by military doctors in the early years of the twentieth century. In a 1906 article in the *Journal of the American Medical Association,* navy surgeons O J Mink and N T McLean revealed the results of the first scientific study of gangosa, introducing it to the medical world. In the process, they made names for themselves as tropical medicine specialists, and established a reputation for American military medicine as an important contributor to international scientific progress. Contributions to medical knowledge made by these and other surgeons stationed on Guam worked not only to further medical knowledge and promote the medical careers of individuals, but also to solidify the position of the Bureau of Medicine and Surgery within the larger naval hierarchy and to promote the importance of the navy within the larger military bureaucracy, particularly in its competition with the army for respect and prestige.

Mink and McLean described gangosa as "characterized by a destructive ulceration, usually beginning on the soft palate, pillars or uvula, and extending by continuity to the hard palate and nasal cavity, larynx, and even to the face" (1906, 1166). Beginning as an ulcer in the nose or roof of the mouth, without treatment, the disease spread "until the mouth, nose, lips and even the eyes may be destroyed" (Reed 1924, July, 5). Chamorros transliterated the Spanish term *gangosa* to *ganggosu* and understood it to be a chronic sore or irritation. Because of the facial disfigurements it inflicted, gangosa was frequently mistaken for Hansen's disease by navy doctors. It was also frequently misidentified as or linked to both syphilis and yaws. In a medical study conducted on Guam in the early twentieth century, Navy Assistant Surgeon E P Halton concluded: "Judging by serum reaction, . . . it is seen that yaws as well as syphilis may be culpable in causing gangosa" (1912, 192). By 1914, Navy Surgeon C P Kindleberger had concluded that gangosa was a late form of yaws (quoted in Crawley 1989, 259).

Not only on Guam, but internationally as well, venereal diseases such as syphilis were commonly mistaken for Hansen's disease. Physicians living in Hawai'i, for example, "constantly confused the two diseases, sometimes to the point of believing that leprosy developed out of syphilis" (Gussow 1989, 95). This problem resulted in part from syphilis's resemblance to Hansen's disease in "some of its dermatologic manifes-

tations"; doctors making visual diagnoses could easily confuse the two (Brandt 1993, 563). William McNeill affirmed in *Plagues and Peoples* that medieval doctors would have classified yaws as "leprosy," noting that yaws "results from infection by a spirochete which is indistinguishable from the organism that causes syphilis" (1998, 187). However, yaws and syphilis differ in how "the infection transfers itself from host to host, and in the paths of infection within the body that result from different ports of entry" (McNeill 1998, 188).

McNeill indicated that in medieval Christendom, "Leprosy, of course, was a generic term used to describe a number of different infections that affected the skin in conspicuous and horrible ways" (1998, 185). Indeed, the Greek word *lepros* means "scaly," but *lepros* itself comes from the Hebrew word *saraath,* and was translated as such when the Bible was translated from Hebrew to Greek. The term *saraath* encompasses a number of different skin conditions (Beckett 1987, 494). The Bible makes numerous references to "leprosy," with Leviticus 13:1–3 containing the most detailed description of a disease that was understood not merely as an impurity of the flesh, but also as an affliction of a contaminated soul. Throughout the Middle Ages the illness was considered "a disease of the soul as well as the body," and a tradition developed in Christendom in which church groups took on the responsibility of caring for those who suffered from it (Beckett 1987, 494–495).

Despite numerous references to the disease in the Old and New Testaments and in European medieval literature, contemporary epidemiologists have speculated that many of these accounts in fact describe a wide variety of ailments, including what is today designated as Hansen's disease. Further, according to physician D W Beckett, more accurate medical accounts of it can be found in documents from India and China (1987, 495). The Hansen's disease bacteria appears to have been noted in Europe and the Mediterranean coastlands beginning in the sixth century AD. "Thereafter, together with other infections classified as leprous, it remained of major importance until the fourteenth century. Leprosaria were established outside thousands of medieval towns. By the thirteenth century one estimate puts their number in all of Christendom at 19,000" (McNeill 1998, 185).

However, by the eighteenth century Hansen's disease had largely disappeared in Europe (Beckett 1987, 495). Contemporary medical theorists have offered a range of possible causes. According to Kenneth Kiple, an increased incidence of tuberculosis in Europe conceivably could have provided some immunity against it, or perhaps the plague killed off most of those who hosted the disease (1993, 366). On the other hand, Beckett has suggested that scholars will never know what caused the disease to disappear from Europe (1987, 495).

Hansen's Disease in the Pacific

In the great majority of the Pacific Islands, Hansen's disease did not appear until the nineteenth century. In his study of infectious diseases in the Pacific, John Miles asserted that there was "no unequivocal evidence of Hansen's disease in any pre-European material from any of the Pacific islands" (1997, 52). Despite oral historical records of "leprosy" in Fiji and the Solomon Islands in pre-European times, Miles was reluctant to definitively categorize the afflictions as Hansen's disease. Nonetheless, written reports documented its presence in a number of islands by the late 1800s. In French Polynesia, the disease was first mentioned in 1874, while reports from Sāmoa, New Caledonia, Vanuatu, and Papua New Guinea also attested to its introduction in the late decades of the nineteenth century. In Hawai'i, the introduction of Hansen's disease is frequently attributed to Chinese merchants and immigrants who began to settle there in the mid-nineteenth century (Beckett 1987, 495). According to a 1959 South Pacific Commission study of Hansen's disease conducted by D A Lonie, much of the blame for its introduction throughout the Pacific was laid on Chinese immigrant labor. Lonie conceded that this may be true for Western Sāmoa, French Polynesia, and possibly New Caledonia, but countered that for the most part it was spread "by infected islanders moving to other islands, or by travellers who had contracted the disease in other countries and then returned to their own islands" (1959, 19).

The first account of "leprosy" in Fiji is usually attributed to Lyth, a Methodist missionary treating patients in 1837, but some contemporary scholars doubt it was actually Hansen's disease (Austin 1949, 399; Beckett 1987, 495). By 1897, however, it had become a serious problem in Fiji, with about four hundred cases on Viti Levu (Lonie 1959, 10). Consequently, in 1899 the colonial government enacted "The Lepers Ordinance," establishing a "leper asylum" on Beqa, an island south of Suva (Beckett 1987, 496). Perhaps this decision was made in response to an international policy made by the World Leprosy Congress. In 1897, at the first convention of this organization, "leprosy professionals at the congress voted overwhelmingly for the segregation of lepers worldwide" (Watts 1997, 40–41). In 1911, the Fiji facility was moved to the island of Makogai, which became widely used as a Hansen's disease treatment center for a number of South Pacific Islanders (Lonie 1959, 10; Beckett 1987, 496). Makogai admitted Samoan patients from 1922, Cook Islanders from 1926, Tongans from 1934 to 1955, and Gilbertese from 1936 to 1948 (Lonie 1959, 4, 7; Beckett 1987, 496).

Although a number of South Pacific Islanders were sent to the Makogai facility in Fiji, the "leper colony" on the island of Moloka'i in Hawai'i emerged as the one most widely known in the Pacific and, some would

argue, in the world. In Hawai'i, government health officials secluded Hansen's disease patients involuntarily on Moloka'i from 1866 to 1969 as a public health measure to combat the spread of the bacillus (Gugelyk and Bloombaum 1979, 1). After Hawai'i implemented its policy of confinement in 1866, other locales followed suit—notably, Norway in 1885; New South Wales in 1890; Cape Colony, South Africa in 1892; Carville, Louisiana in 1894; Japan in 1900; Ceylon and Culion, Philippines in 1901; and Canada in 1906 (Gugelyk and Bloombaum 1979, 8). Scholar Zachary Gussow argued, "This practice in Hawaii of segregating lepers initiated the modern use of isolated leper colonies, and by the end of the century Molokai became the Western model for controlling the disease worldwide" (1989, 85).

Kamehameha V announced Hawai'i's confinement policy in his 1865 Act to Prevent the Spread of Leprosy, which empowered the Board of Health to confine "all leprous patients who shall be deemed capable of spreading the disease of leprosy" (Mouritz 1916, 33). Historian Gavan Daws pointed to the policy as a means by which Hawaiian monarchs attempted to interrupt the depopulating impact of yet another epidemic disease that posed "a menace to the very existence of the Hawaiian people" (1973, 60). Others supported the seclusion policy for less benevolent reasons. For example, A A Mouritz wrote in 1916 that due to the presence of "leprosy" in Hawai'i, "he [the Hawaiian] is the weak link in our chain of national health defense" (1916, 9). In Mouritz's analysis, the colony was not such a bad place: "the leper is practically condemned to life-long imprisonment of a certain form, not absolute restraint within prison walls, but he is banished to a delightful tract of land on the north or windward side of the island of Molokai, bordering on the ocean, where he can enjoy fine air, sunshine in abundance, and genial surroundings, all the comforts of home, perfect freedom alone lacking, which, even if the majority of lepers wished to avail themselves of, they could not, their disease crippling their bodies and preventing locomotion" (1916, 69). This theme of "confinement-as-benevolent" would be repeated often in discussions of Hansen's disease on Guam.

Confinement policies were by no means motivated only by varied desires to uplift diseased people. Growing scientific evidence, emerging particularly in the area of germ theory, suggested that so-called tropical diseases could not be attributed solely to either hereditary or environmental causes. "[A]s long as Westerners could comfortably maintain that leprosy was hereditary, and at the same time primarily a disease of the dark-skinned, . . . there was no cause for alarm. But if leprosy was in fact contagious, and if . . . the contagion was capable of passing between races, . . . then perhaps Western imperialism was creating an empire of leprosy, in which Westerners themselves might be consumed" (Daws 1973, 7).

Protecting Hawaiians on Moloka‘i was not simply a strategy for the regeneration of the population, but was also conspicuously intended as a way to protect Westerners from what was perceived to be possibly the most loathsome of diseases. Medical historian Michael Worboys observed that concerns in India and Hawai‘i were "also associated with fears that 'natives' might be harboring the disease and could introduce it into European stock. Contagious-germ theories gave scientific backing to popular fears of the disease and of natives" (1993, 531).

In Guam and the northern Mariana Islands, European explorers' accounts and other written sources verified the existence of Hansen's disease as well as other skin diseases as far back as the seventeenth century, though it is difficult to know when it first appeared or how it entered these islands. Images of Chamorros suffering from "leprosy," taken from the accounts of voyagers such as William Dampier in 1686 and Louis de Freycinet in 1818 have been reevaluated as depicting gangosa rather than Hansen's disease (Roberts 1928, 294). In 1905, navy officer William Safford hypothesized that syphilis and Hansen's disease were "probably introduced into Guam by diseased convicts and laborers, some of whom were Chinese, sent to the island from the Philippines" (1905, 121).

Contemporary studies suggest that Spanish medical authorities did not distinguish between gangosa and Hansen's disease, and instead classified all skin ailments as "leprosy." Despite the medical uncertainty, the earliest colonial attempts to deal with the disease came in 1831, when Spanish Governor Francisco Ramón de Villalobos (1831–1837) established a hospital "for leprosy patients" in Adelup (del Carmen 1998, 3). In 1835, the men categorized as "leprosy patients" were transported to a colony in Saipan, and the female patients later joined them there. In 1871, a "leprosarium" was established at Tinian, though it is not clear from the documents whether the Saipan patients were moved there. In April 1890, a new facility was built at Pago, Guam, but was demolished by a typhoon only seven months later (del Carmen 1998, 3).

Father Aniceto Ibáñez del Carmen reported in his journal entry of June 1890, "By order of the governor, all persons on this island of Guam suffering from sores have been identified and, according to the doctor, there are 110 lepers. They are to be taken to the place where the old *pueblo* of Pago was located, southeast of this capital city" (1998, 97–98). Based on the figures provided by the earliest American medical reports, it seems likely that the overstated figure of "110 lepers" can be attributed to the Spanish medical authorities' pervasive ignorance, and that this number likely included misdiagnoses of syphilis, gangosa, and yaws. Nonetheless, by August 1899, when the US Navy arrived, Safford commented that "only one leprosy patient" resided in the hospital (quoted in Wuerch 1997, 119). It appears that, like later American naval gover-

nors on Guam, Spanish colonial administrators in the Mariana Islands experienced similar trepidations and exercised with comparable fervor plans to remove Hansen's disease sufferers—as well as countless others misdiagnosed with the disease—permanently from Chamorro society, as had been done in Hawai'i, Fiji, and other locales worldwide. For the most part, however, despite the limited presence of Spanish doctors on the island, it appears that the majority of the Chamorro population, including those afflicted with Hansen's disease, gangosa, and yaws, remained under the medical care of traditional Chamorro herbal healers, the *suruhanu* and *suruhana,* throughout the nineteenth century.

"Leprosy" and the US Navy on Guam

From the outset of American contact with Chamorros, graphic comments of navy officers such as Governor Richard Leary, Lieutenant William Safford, Navy Surgeon General Mack Stone, and Lieutenant Vincedon Cottman about the "horrible" and "dreadful" presence of Hansen's disease on the island heightened American naval fears of both Guam and its people. The affliction posed just one of many potential tropical health hazards that, even into the 1930s, generated some degree of fear among Americans stationed on Guam. Such fears of menacing health threats in the tropics are clearly evidenced in reports by officers like Medical Corps Lieutenant C H McMillan and Health Officer S L Higgins. An arriving navy man, "after reading of the diseases of the tropics and listening to tales told by those 'Old Timers' . . . frequently lives in terror of the health hazards that seem to surround him and his family" (McMillan 1936, 5). Navy personnel on Guam "live in a constant state of fear of disease. . . . and not a few are in reaility [*sic*] driven to drink" (Higgins 1937, 1). For some forty years after the commencement of naval operations on Guam, American personnel registered reports of medical horrors, of which Hansen's disease was undoubtedly the most dreaded. That these observations frequently resulted in the depiction and definition of Chamorros in terms of disease is evident from numerous early accounts that describe the native people not merely by variables such as height, weight, hair color, and skin color, but also by their discernible health conditions.

Given the consternation expressed by members of the first naval battalion assigned to Guam, active steps were taken to confine Hansen's disease patients in 1902. Guam's second naval governor, Commander Seaton Schroeder, wrote in his *Annual Report* that, in February, having discovered "four lepers living in the midst of a friendly community . . . I at once decided to segregate them" (NGG *AR* 1902, 5). His official segregation decree, General Order 43, would not come until 12 June 1902. In that document, Schroeder justified the policy of excluding patients

at the newly designated Tumon colony on the grounds that it was "of paramount necessity, in the interest of humanity and for the protection of society" (NGG GO 1902, 1). He further celebrated his actions by claiming, "The only means open to the Government for uprooting so serious an evil is the *heroic* step of segregating the unfortunate lepers" (NGG GO 1902, 1, emphasis added). Although he recognized that, for the patients interred, the sequestration policy meant a "loss of personal liberty," as well as "separation from their families," Schroeder also asserted that the policy would "lengthen the lives of those who are segregated" (NGG GO 1902, 1). In referring to this profoundly invasive policy as a "heroic step," he contributed to a discussion of navy medical philanthropy that would flourish through the next half century.

Both Schroeder's rationale for secluding Hansen's disease patients and his celebration of American medical heroic measures would be repeated by numerous others in their defense of the Tumon colony. For example, Schroeder's successor, Commander W E Sewell, in a 1903 letter to the assistant secretary of the navy, supported the necessity of the colony "for the protection of the Americans residing here, and to keep the horror out of sight" (1903b, 1). Another governor used the example of Moloka'i to argue for the sequestration of Guam's Hansen's disease patients. In a 1905 letter to the assistant secretary of the navy, Governor George Dyer stated, "The necessity for the segregation of the lepers for the protection of the white population, and incidentally the existence and efficiency of the Naval Station, is unquestionable. This has been demonstrated in many places, notably in Hawaii" (1905, 1).

As has already been shown, these sorts of comments affirm that, understandably, the paramount concern of the naval government of Guam was the protection of their military personnel. The health concerns of the Chamorro people would be attended to, particularly if perceived as a threat to the well-being of the naval community, essentially in the interest of shielding Americans from possible contagion. Understandings of naval benevolence toward Chamorros must therefore be tempered by recognition that the health of Chamorros mattered to the navy principally when it endangered the health of navy enlistees through possible contagion.

Although preventing the spread of diseases to Americans was the navy's primary concern, at least one officer argued for the care of Chamorro health on strictly economic grounds. Acting Governor Lieutenant Luke McNamee wrote to the secretary of the navy in 1906 that separating "leprosy patients" was a critical means of protecting the native labor force. He explained that "from a business standpoint, [the naval government would be wise] to protect that labor and the officers and employees that are required to come into close contact with it" (McNamee 1906a, 1). Certainly to a number of navy officials, debilitat-

ing diseases such as Hansen's and hookworm signified more than a medical dilemma. Such ailments also symbolized the island's underdeveloped subsistence economy and were perceived as obstacles to development, progress, and modernity.

Most naval accounts privileged the protection of their colonial establishment, but some argued for the Tumon colony on behalf of the welfare of the native people. J P Leys, a navy surgeon on the island in 1904, observed that the segregation policy was for the protection of all uninfected persons, "Americans and natives alike" (1904b, 1). This self-serving sense of benevolence and humanitarianism toward the native people—evident also in Schroeder's judgment of the government's actions as "heroic" in taking steps toward segregation—is manifest especially in Schroeder's 1902 *Annual Report,* where he wrote, "Everything possible has been and will be done to mitigate the unhappiness and distress of these unfortunate people" (NGG *AR* 1902, 5–6).

Some navy officers described the policy of isolation in benevolent terms that elided the violence of the navy's colonial mission, just as others exploited the natural beauty of the seclusion site to mask the harshness of their confinement policy. For example, Governor Schroeder described the selected location at Ypao Beach on the shores of Tumon Bay as "a very pretty spot, and healthy, fronting upon a nice, clean beach" (NGG *AR* 1902, 5). Just as Mouritz had earlier depicted the Moloka'i site as "a delightful tract of land . . . where [the patient] can enjoy fine air, sunshine in abundance, and genial surroundings" (1916, 69), so did Schroeder describe the Ypao locale as an attractive physical environment. At the very least, such comments were an attempt to camouflage the harsh reality of confinement—from the hunt for those afflicted; to their capture, imprisonment, and permanent segregation from their spouses, children, parents, and other relatives and friends; to the fears and loneliness they experienced once imprisoned in an unfamiliar terrain without their customary resources. It is as if the beauty of their new surroundings was specifically selected to shroud

Photo 11 Ypao "Leper Colony" at Tumon, Guam. *(Collection of Don Farrell)*

the violence and repulsiveness of the methods through which they had been removed from their families. For navy personnel, perhaps the "nice, clean" environment of the Tumon and Moloka'i colonies worked to offset what they viewed as the most hideous of diseases and the most wretched of those diseased.[1]

Criminalizing the Infirm

Once they had selected Ypao as the locale for the Tumon colony, naval officials began to deal with a number of logistical details, such as condemning and clearing the land, constructing the buildings, and hiring personnel—primarily as security guards (NGG *AR* 1902, 5–6). The need for security guards supports the idea that the Chamorro sufferers from Hansen's disease were treated not primarily as patients, but as inmates. Schroeder's General Order 43, like numerous other references to the Tumon colony made by physicians and officers alike, addressed the patients as "inmates" (NGG GO 1902, 1; Elliott 1908, 2). The language of criminality is used frequently throughout the documents, such as in references to "harboring" the diseased (NGG *AR* 1902, 5); "decreeing [their] restraint" (NGG GO 1902, 1); and placing patients on "parole" (NGG *AR* 1938, 14).[2]

In the previous chapter I discussed the criminalization of health and medicine, paying particular attention to the variety of laws and punishments meted out to those who committed sanitary offenses. Violations such as failing to mow one's lawn or wearing skirts that touched the ground revealed much about the consolidation of state power through the manipulation of health issues. However, perhaps the best examples on Guam of criminalizing health care in the interests of colonialism and military power are found in the policies toward Hansen's disease.

Schroeder's General Order 43 not only established Ypao as the locale of the colony, but also ordered the apprehension and confinement of patients, despite the medical department's inability to differentiate between Hansen's disease and gangosa. Locating, apprehending, and exiling suspected patients from the entire island necessitated the operation of a strong police force empowered by the state—in this case, the American military. Along with ordering the confinement of patients, General Order 43 prohibited them from leaving the colony and forbade others from entering "without a written permit approved by the Governor" and authorized their apprehension, as well as the arrest of "all persons who harbor, conceal or assist in the flight of any inmate" (NGG GO1902, 1). For those who might attempt to escape, Schroeder ruled that "any inmate who goes beyond the limits of the Colony without the requisite permission shall be punished by ten to twenty days of ball and chain for the first infraction, and by one to six months for a

repetition of the offense" (NGG GO 1902, 1). Such harsh punishments equated the patients with condemned criminals under the control of the US Navy. In a number of ways, the persons confined at Tumon were restricted more severely than those in the Hagåtña prison; at least those in the prison were permitted to see visitors relatively freely.

Aside from treating patients as wanted fugitives, the policies about Hansen's disease were further criminalized by the grim appearance of the Tumon colony and its structures. As a report in the *Guam Recorder* described the enclosure, "The Colony is surrounded by a high barbed wire fence except on the ocean side and two native guards are employed for the purpose of preventing the lepers or their relatives from leaving or entering the grounds. In addition to these precautions iron bars have been placed upon the windows of the houses occupied by lepers and padlocks upon the doors. At nine PM every night each leper is locked in his house by the Superintendent of the Colony" (Kindleberger 1912, 1). If the navy constructed the colony to resemble a prison, it may have been only a minor improvement over the actual jail, where contagious cases had been confined at one point and where mentally ill patients were imprisoned until 1909 (NGG *AR* 1908, 12; 1909, 14).

The criminalization of the ill is found not only in the language regarding their disease, but also in the manner of their capture and arrest and in the style of their living arrangements. Those deemed physically threatening were treated not with medical care, but with military severity. The concerns expressed about them in naval documents focused primarily on the terms of confinement rather than on the methods of medical treatment, confirming what David Arnold has observed in African, Asian, and Pacific colonies: "medicine was one of the most intrusive expressions of state power" (1993b, 1409). In its arrest of patients, and in its continued surveillance of the Chamorro population for other possibly afflicted persons, the navy established itself as a powerful and inflexible colonizer. Further, these policies perhaps best epitomize the navy government's approach to health and medicine as a disciplinary matter "to be imposed by force." In the exercise of health policies, "the needs of the state, not the wishes of the people, were bound to be paramount" (D Arnold 1993a, 114–115).

Care and Confinement

Schroeder identified 4 persons afflicted with Hansen's disease in 1902, but by the time the Tumon colony was opened, 24 persons had been diagnosed with "leprosy" and confined there. The number of patients remained steady at 24 until 1907 when, under the command of Governor McNamee, the navy began also to confine gangosa patients, reflect-

ing his incorrect perception of gangosa as a disease "more repulsive, painful, and disfiguring than leprosy" (McNamee 1906a, 1). McNamee reported to the secretary of the navy that nearly four hundred persons on Guam were afflicted with gangosa (1906a, 1). Responding to McNamee's trepidations, Surgeon General Presley Rixey bluntly stated in a letter to the secretary of the navy regarding persons afflicted with gangosa that "their presence is a menace" and went on to advise that "the necessity for the segregation of these unfortunates is imperative" (Rixey 1906, 1). Not surprisingly, in the following year, 1907, the numbers of Chamorros confined at the Tumon colony increased dramatically, from 24 patients to 185 (table 2; McCullough 1909, 323).

Despite McNamee's desire to confine up to four hundred persons (out of a total population of approximately ten thousand), in the very next year, a larger number of patients were released from the colony "as a result of bacteriological examinations made by the medical officers" (NGG *AR* 1908, 13). These laboratory tests demonstrated to the medical department that many of the confined Chamorros had been needlessly sequestered. The population of the Tumon colony decreased from 185 in 1907 to 126 in 1908, a drop of more than 30 percent. Of those remaining, 60 patients had Hansen's disease and 66 had gangosa. The patients were not segregated from each other, creating a situation in which nonleprous gangosa patients could conceivably have contracted Hansen's disease (Elliott 1908, 2). Further, other noninfected patients were added to the compound in 1909 when a house in the Tumon colony was constructed for the "detention of insane patients" (NGG *AR* 1909, 14). In the face of such evidence, philosopher Michel Foucault's insight into western society's "condemnation of illness," rather than "benevolence toward sickness," merits consideration (Foucault 1988, 46). It would seem logical that if naval officials were con-

Table 2. Number of Patients Confined at Tumon Colony, 1903–1910

Year	*Number*
1903	24
1904	24
1905	24
1906	24
1907	185
1908	126
1909	91
1910	26

Sources: McNamee 1906a, 1906b; McCullough 1909, 323; Elliot 1908, 2; Dorn 1909b, 1; NGG *AR* 1910, 43.

cerned with the health of their numerous patients, they would have sequestered them separately, according to the type of illness. Instead, policymakers exposed numerous gangosa and mentally ill patients to Hansen's disease despite knowing it to be contagious, and then released them after two or more years of confinement. In its cavalier attitude toward the diseases of all of the infirm, the navy ultimately seemed more interested in removing them from society than in curing their ills.

By 1909, only 22 of the 60 Hansen's disease patients had been confirmed as suffering from the disease, with the other 38 reclassified as gangosa patients, representing a further 63 percent decline in the number of Hansen's disease patients. In the same year, Guam's navy surgeons determined that "certain leper cases are really gangosas and also that certain [gangosa patients] may be provisionally released without danger" (Dorn 1909b, 1). Therefore, in 1909, 35 persons were released from the Tumon colony, 14 of whom had been classified with Hansen's disease and the other 21 with gangosa. By 1910, the Hansen's disease patients confined at Tumon numbered 26, only two more than had been originally sequestered between 1902 and 1906 (table 2; NGG *AR* 1910, 13).

What can explain the navy's overzealous condemnation of Chamorros? Why did the navy detain people before verifying their actual medical condition—in some cases, only diagnosing detainees two to three years later? Do the imperfect medical technologies of the time help to explain the extraordinary rate of misdiagnosis? Does the western dread of "leprosy" and other forms of physical disfigurement explain the fervor of their segregation tactics? Did naval fears of the tropics also add to their general paranoia about Chamorro disease and Otherness? Certainly all of these, as well as a number of unidentified factors, likely contributed to what happened on Guam. However, an examination of the economics of Hansen's disease may shed additional light on the ways in which navy "carelessness" was perhaps not as inadvertent as it might appear.

Milking the Menace

For a naval station as secondary to the navy as Guam was in the period before World War II, the cost of attending to the medical needs of the Chamorro people placed great strains on the navy's budget. Numerous governors' reports mention their difficulties in serving both the naval and local communities with their limited funds. However, to the naval governors, the existence of "leprosy" presented a situation that could not be dismissed or disregarded. With the establishment of the Tumon colony, yet another expense was added to the naval government's burden. As Senior Medical Officer J P Leys wrote in 1904 of the Tumon

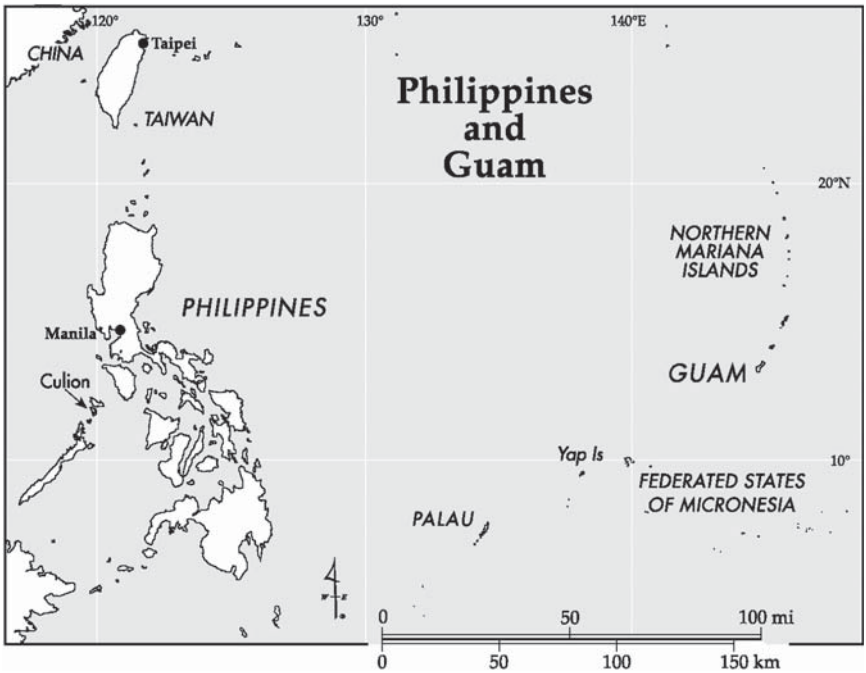
colony, "the entire cost of its establishment and maintenance, including cost of a superintendent and guards, and of a cheap and monotonous ration for the inmates, has been borne by the Insular Treasury" (1904b, 1). To meet these expenses, Governor Dyer that year suggested, "The segregation, installation and maintenance of these unfortunates should be a direct charge of the United States" (NGG *AR* 1904, 11). In April 1906, Governor Templin Potts aggressively addressed the funding issue in a cablegram to the secretary of the navy: "Health NavStation imperatively demands immediate segregation 110 lepers and gangosas burden too great for Island treasury earnestly request Congress be asked appropriate this session" (1906a, 1). Less than two weeks later, Acting Secretary of the Navy Truman Newberry agreed, writing to the chair of the US House and Senate Committees on Naval Affairs, "it would appear to be the duty of this Government to protect, in every reasonable manner, the health of its officers, enlisted men, and civil employees who are necessarily brought into close contact with the native population of the island" (1906, 1).

Taking even more assertive action, Potts threatened the secretary of the navy, "If federal aid is not extended to this island by appropriation of Congress it will be absolutely necessary for me, in the near future, to release a large number of the lepers and gangosas" (1906b, 1). Potts's strategy was successful in exploiting American fears of "leprosy" and the possibility that one of their personnel or dependents might become infected. As a result of his manipulative warning, in 1907 "a Federal appropriation became available for use in the care of lepers and for other allied sources" (Roberts 1928, 294). Beginning that year and continuing annually thereafter, the Navy Appropriation Bill before Congress contained a special budgetary category, "Care of lepers, etc, Island of Guam" (US Senate 1912, 1). With this special annual source of funds, the naval government was no longer forced to rely exclusively on its paltry annual budget from the Department of the Navy. The urgency of the Hansen's disease problem was used as a tactic to generate additional funds for the navy, ostensibly for the specific care of patients. However, in very creative ways, shortly to be elaborated, the navy was able to manipulate this source of special congressional funding. It should be no surprise that the number of persons confined at the Tumon colony escalated between 1907 and 1910 from 24 to 185, validating the exigent need for the extra congressional appropriation and providing the navy with a cause célèbre that would guarantee them an additional source of funds to run their government.

The economics of Hansen's disease played out even more curiously over the next few decades, as governors began using the fund for expenditures not related to the confined patients. In 1912, the navy surgeon general acknowledged that the "Special appropriation for the

care of lepers is broad in its scope" (Stokes 1912, 1). Soon after, the "broad scope" of the "Care of lepers" fund had expanded to include the payment of teachers' salaries, office supplies, and a number of miscellaneous budgetary items (see, eg, NGG *AR* 1926, 9). In 1913, for example, less than 15 percent of the $14,000 congressional appropriation was spent on behalf of the Hansen's disease patients, and in 1925, only $3,000 out of the $18,000 congressional budget for "Care of lepers" was allocated to expenditures related to the disease (Hinds 1913, 1; NGG *AR* 1925, 13, 19). Governors liberally used the fund for a variety of pet projects. Some of these involved the treatment of diseases such as tuberculosis, hookworm, and gangosa; however, most of the money was allocated to administrative expenses.

Numerous conclusions can be drawn from a critical evaluation of the ways in which the navy government used Hansen's disease funds. With the commencement of the special congressional appropriation in 1907, the navy found itself with a new and secure source of annual funding. Between 1907 and 1913, the congressional funds were substantially consumed by demands for personnel, housing, and other expenses at the Tumon colony. By 1913, however, the navy government had begun exil-



Map 3

ing Guam's patients to the Philippines, a policy decision that resulted in tremendous cost savings. Beginning that year, the navy government began budgeting the congressional "Care of lepers" appropriation primarily for a wide range of projects unrelated to Hansen's disease. Indeed, after 1913, the naval government began paying the Philippine government an annual stipend for the care of Guam's patients that amounted to less than 20 percent of the annual congressional allotment. The navy could then capitalize on the savings by using the remaining 80 percent of the appropriation for a variety of other expenses. Undoubtedly, the knowledge that sending Guam's patients to the Philippines would save the naval government considerable sums of money influenced governors in their determination to move the Hansen's disease patients off-island. It seems reasonable to question whether the navy's interest in moving the patients to Culion in the Philippines was motivated by its desire to divert some of the annual appropriation to projects that would otherwise be unaffordable (map 3).

In another, very different, sense, the presence of Hansen's disease on Guam was milked by navy officials—this time, the medical community—for the purposes of research, publication, and renown. Navy doctors published several articles on the disease in medical journals, typically describing the cases present on the island. In the July 1912 *US Naval Medical Bulletin,* for example, Navy Assistant Surgeon W M Kerr published "Leprosy: With notes on and illustrations of the cases as they occurred in the Tumon Leper Colony, Guam, Marianas, during the months of October and November, 1911." In this article, Kerr not only explicitly described each of the twenty-four patients interred at the colony, but also included photographs of each of them, identified by their initials. These stark photographs highlight the various deformities of each case, so that the photographer posed each patient with his or her hands, feet, or face prominently emphasized. In some of the photographs, the patients had been stripped of all clothing, ostensibly to display the full extent of their malady. In none of the photographs are the patients smiling; from the grimaces, frowns, and glares on their faces, they appear all too aware of the dehumanization they have yet again been made to experience. In medical research, as in other areas, the careers and medical interests of navy doctors took precedence over the cultural and human dignity of the Chamorro patients.

The economics of Hansen's disease—in terms of its material advantages for naval policy and medical surgeons—cannot fully explain the overzealousness of navy governors in their apprehension and confinement of potential patients, but it does contribute to a fuller understanding of the issues at stake for the navy government. Sources indicated that the disease generated fear in the Americans' hearts, that Chamorros were perceived as diseased and dangerous, and that navy

personnel considered tropical locations threatening and hazardous. From an examination of how the "Care of lepers" appropriation was used, it is clear that the navy took advantage of these fears of unimaginable tropical diseases and grossly diseased native people for its own fiscal benefit.

Resisting Arrest

Undoubtedly the decade-long experience of uncertain confinement illustrates the absence of civil liberties and constitutional protections from the island. With no bill of rights or other document to protect the Chamorro people's civil and political rights, the navy defined its government as disciplinary and autocratic rather than as collaborative. Moreover, in the process of articulating and addressing the problem of Hansen's disease, navy officials were successful in achieving what David Arnold referred to as the "ideological subordination" of the indigenous people (1993b, 1406). Through one decade of fear and loathing of the disease on Guam, navy officials confined nearly 2 percent of the population, stigmatizing the native people as diseased and dangerous while demonstrating their own authoritarian powers.

Given the severe terms of confinement that the navy attempted to enforce at the Tumon colony, as well as the inconsistencies in medical diagnoses, even navy officials noticed Chamorro disapproval of government tactics and policies. Before confinement became the official policy, American writers had commented on the native people's apparent acceptance of persons in their midst suffering from a variety of diseases. Once the navy began inspecting and apprehending Chamorros, many attempts were made to hide afflicted family members. Schroeder described four sufferers who, in 1902, were "harbored in well-intentioned but ill-advised concealment" (NGG *AR* 1902, 5). Another report noted that afflicted Chamorros "had slipped away to their coconut groves, where they hid until hunted out by the medical officer in charge of treatment" (quoted in Crawley 1989, 258). Further, in his 1904 *Annual Report,* Governor Dyer stated that the Chamorro patients "prefer to live with their families who have always had them and who regard it as an unwarranted and unnecessary interference to require them to part" (NGG *AR* 1904, 11).

Chamorro lack of concern about the disease, and certainly desires to keep members of the extended family close together, resulted in acts of noncompliance with navy health regulations. In a letter to the assistant secretary of the navy, Governor Dyer reported that, rather than submit willingly to medical officials, "The natives are accustomed to [Hansen's disease] and, therefore, are opposed to the isolation of their relatives, and take every possible means to conceal their affliction" (1905, 1).

While governors Schroeder and Dyer appear to have sympathized with the victims' plight, others, such as Governor E J Dorn, communicated a less understanding view. In his personal journal, Dorn wrote on 7 February 1910, "Had charge laid against the man who allowed his child to be ill with gangosa a year without reporting. Shall break up such neglect if I can." Dorn again dealt aggressively with this issue one month later, when several parents were called before the courts for concealing their sick children. As a result of these occurrences, the *Guam News Letter* reported, "Governor [Dorn] has given orders to prosecute all similar cases of concealment under Article 581 of the Penal Code. Parents owe it to their children to provide them with the medical treatment furnished gratis by the Federal Government" (quoted in Hubbard 1994, 13). Dorn's reactions and comments to these cases suggest that by the end of the navy's first decade of rule on Guam, at least some of the ranking officers had grown weary of their lack of disciplinary control over this particular medical situation. Navy governors such as Dorn realized that Chamorros were clearly hiding persons in need of medical attention, and assumed that the navy could do little else but treat them as hostile criminals.

By 1911, ostensibly to cope with native noncompliance, Guam's navy governors began recommending that the Hansen's disease patients be transferred off-island, preferably to the "Culion Leper Colony" in the Philippines. Governor G R Salisbury reported in his 1911 *Annual Report,* "In spite of careful watching it is doubtful if we succeed in maintaining the lepers in strict isolation" (NGG *AR* 1911, 3). Despite the navy's battery of laws, surveillance tactics, and architecture of barbed-wire fences, iron-barred windows, and padlocked doors, Senior Medical Officer C P Kindleberger conceded in January 1912, "In spite of these precautions lepers have escaped from the Colony and have visited friends and relatives in the surrounding ranches and in Agaña, and relatives of the lepers have entered the Colony through the barbed wire fence" (1912, 1).

Similarly, Antonio Unpingco, Speaker of the Twenty-Fifth Guam Legislature, acknowledged that even after his grandfather, Juan Ulloa Unpingco, was sequestered in 1907, his grandmother continued to visit him at the colony despite laws that prohibited such interaction (Unpingco 1999). Whether it meant defying the threatening regulations against visitation or finding ways over or through barbed-wire fences, Chamorros managed to circumvent naval laws, perhaps reinstating native understandings of *atektok* as an infirmity treated through hugging and nurturing. In these examples of Chamorro resistance to navy confinement policies, it is evident that despite a variety of naval attempts to sever ties between Hansen's disease patients and their families, maintaining a strict quarantine over the residents of the Tumon colony was impossible. Moreover, it is possible that, just as the Ameri-

cans expressed considerable fear and loathing of the disease on Guam, so did Chamorros convey their fear and loathing of hospitals and other institutions of confinement. Numerous accounts document the Chamorro people's general uneasiness with hospitals, which they regarded as places of death. Governor Dorn noted in his 1909 *Annual Report* that the Chamorros "have a peculiar dread of hospital treatment" (NGG *AR* 1909, 11). Two decades later, an anonymous article in the *Asiatic Fleet Magazine* reported that after three decades of naval rule on Guam, "there still are some people who have fear of the doctor and the hospital. They feel that one goes to the hospital to die, and a great many of the natives don't go there until they are ready to do just that thing" (An Old Guamanian 1928, 9). Given their dubious introduction to American medicine, it is no wonder that many of Guam's native people viewed doctors and hospitals with distrust.

"They Were Treated Like Animals in a Parade"

The decision by the naval government to transfer Guam's Hansen's disease patients yet again, and to a colony far from home, was based partly on the navy's realization that it had been ineffective in quarantining

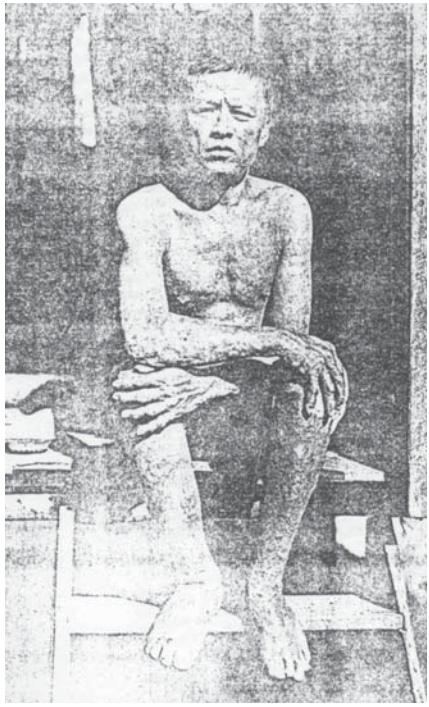


Photo 12 Juan Ulloa Unpingco. *(Kerr 1912, case 17)*

the Tumon colony patients from noninfected friends and relatives. Both Governor Salisbury and Senior Medical Officer C P Kindleberger acknowledged that, despite all their efforts, the naval government could prevent neither the Hansen's disease patients from escaping the colony nor others on the island from illegally visiting their exiled kin. From the navy point of view, removal to an even more remote location guaranteed isolation of the afflicted parties. This idea had been suggested as early as 1899, when navy doctor Mack Stone recommended to the secretary of the navy that Guam's patients should be sent to another island (1899, 1). And Lieutenant Vincedon Cottman, who visited Guam in January of 1899, had urged that Guam's patients be sent to Moloka'i (quoted in Carano and Sanchez 1977, 181).

Aside from seeking a more perfect quarantine station, seclusion at an already existing colony offered an opportunity for the island government to save on the expenditures that were otherwise necessary for the daily maintenance of the Tumon colony. A November 1911 letter from Philippine Governor-General W Cameron Flores, in response to an inquiry made by Governor Salisbury a couple of months earlier, assured the governor that the Culion colony would willingly accept Guam's patients for an approximate total cost of less than $4,000 per year for twenty-four persons (Kindleberger 1912, 1). Kindleberger noted the great cost savings that would result from transferring Guam's patients to Culion and further justified the proposal by falsely reporting to the navy surgeon general that "each leper would welcome the change from the small wire enclosure in which they are now penned awaiting death, to the large island of Culion, a tropical environment practically similar to the one they are accustomed to" (1912, 1). Salisbury also declared, "it is the opinion of the Governor and the Doctors that all concerned would be benifitted [*sic*] could the lepers of Guam be removed to Leper Colony on the Island of Culion, Philippines" (map 3; NGG *AR* 1911, 3).

By 1912, Governor R E Coontz had noted that the navy department had approved Salisbury's recommendation and it only required congressional action to be finalized (NGG *AR* 1912, 5). Both the US Senate and the House of Representatives approved the transfer of Hansen's disease patients to the Philippines, and agreed "to pay the cost of their transfer and maintenance" (USHR 1912, 11170). Only four months later, Guam's patients were loaded aboard the USS *Supply* for the ten-day trip to Culion, arriving there on 10 December 1912 (USN 1913, 1).

Few written sources reported the departure of Guam's Hansen's disease patients, and even fewer Chamorros alive today recall the events of 1912. Governor Coontz, for one, reflected on the departure of Guam's eighteen leprosy patients—thirteen men and five women—in his autobiography, *From the Mississippi to the Sea*. He described the spectacle of departure, "In December, 1912, I received orders to transport all the

lepers, then in Guam, to Culion Island, in the Philippines. It had to be done ostensibly on account of economy, but it was a heartrending procedure. On the way from the leper colony to the steamer it was necessary for all of the unfortunates to pass through the town. Their relatives and many other natives congregated to see them go. It made one think either of a circus parade or a big funeral. One leper was eighty-eight years old, and whether or not he survived the trip I never learned" (Coontz 1930, 345–346).

Chamorro historian Pedro "Doc" Sanchez wrote of relatives and friends who "wept openly as they passed by" (1989, 104). Over a decade later, crowds still gathered to bid farewell to Chamorros departing for the Philippines aboard naval vessels. A 1925 account by navy chief nurse Elsie Brooke recounted the ordeals of Maria Roberto, a Chamorro woman who had been employed by the naval government from 1914 to 1924 as a chaperone for native nurses who lodged in the navy hospital. The navy's employment of Roberto had been an important concession made by health officials, who realized that their nurse-training program (discussed in chapter 5) would suffer from a lack of participation without a culturally appropriate Chamorro matron to live at the hospital and look after the young nursing students. Acting as surrogate mother to all of the nursing students, Roberto effectively assured the parents and other elders that their daughters would be both protected and nurtured in their stays at the training hospital. Thus her tragic circumstances stirred the emotions of persons in both the naval and Chamorro health communities. A tribute to her in the *American Journal of Nursing,* written by navy nurse Della Knight, declared that it was Roberto "who holds together the fabric of the work built up by the Navy nurses" (1922, 738). In an account written to describe Roberto's departure from Guam aboard the ship bound for the Culion colony, chief navy nurse Brooke reported that "a large percentage of the population of Guam," including many who were her relatives and friends, gathered to say "a last farewell when [Maria Roberto] left for Manila. . . . great indeed was the grief of all who were associated with her at the naval hospital and, in fact, all over the island" (Brooke 1925, 284).

Just as trenchantly, Chamorro educator Peter Onedera recalled his aunt's description of the procession (Onedera 1999a). According to him, she considered it one of the most sorrowful experiences of her lifetime. She recalled hundreds of people lined along the streets of Hagåtña, wailing for their fellow Chamorros whom they would presumably never see or hear from again. For Antonio Unpingco, reading and hearing these accounts of the way in which his grandfather, Juan Ulloa Unpingco, was made to leave his homeland in 1912 never gets easier, not even a near-century later. Imagining the mental and physical anguish of his grandfather and his fellow patients as they were made to

walk from Tumon to Apra Harbor alongside a multitude of wailing relatives and friends, Unpingco painfully reflected, "They were treated like animals in a parade" (1999).

Surviving Culion

The USS *Supply* left Guam on 2 December 1912 with eighteen special passengers on board. However, the ship was two persons short. "The day before their departure two of them escaped. One was a blind man and the other was a woman who could not walk. The blind man carried the woman on his back, and they went many miles into the vastness of the island" (Coontz 1930, 345–346). The poignant image of this rebellious Chamorro couple, one who could not see and the other who could not walk, conveys graphically how atrocious and unacceptable they found the expulsion policy. The news of their escape must have caused great distress, and undoubtedly resentment, among their family members, who would have been in turmoil to learn that their relatives were not receiving the loving care that would have been provided by the *familia* (extended family). Instead they were being treated as escapees from incarceration, forced to fend for themselves against the navy's military force. Despite the reward of fifty dollars per person offered by the navy government, and despite the "thorough search by the Island Police Force," it was over a month before the couple was captured (Coontz 1912, 1). Though they were sent to Culion on the next navy ship, their attempt to liberate themselves from the tragic situation shatters Kindleberger's rationalization that the Chamorro patients would welcome the change to a more spacious venue. Despite their slim chances of successfully evading the navy, these patients risked their lives to resist banishment.

Even its own sparse records of the Chamorros at Culion reveal that much dissatisfaction was expressed to the navy. Following complaints from Guam's patients, George W Calver, medical officer of the USS *Supply,* was forced to investigate the situation in the Philippines. He spent three and a half days at Culion and reported a number of complaints to Guam's governor. "The primal reason for their discontent is perhaps the fact that Culion is a veritable 'Tower of Babel.' There are fifteen, more or less different, Filipino dialects spoken besides American, Spanish, German, French and Chamorro . . . . [thus] they found communication with the rest of the colony difficult and as a result felt the isolation more severely. Again transplanting of these natives into an entirely new environment caused considerable homesickness" (Calver 1915, 1).

Further, Calver noted a number of complaints about the inadequate food ration, explaining that "the ration now supplied . . . is adapted to the Filipino and not to the Chamorro" (1915, 1). As a result of his inves-

tigation, the navy government of Guam increased the monthly stipend to each Chamorro patient by approximately three dollars and began supplying each of them with extra items such as ship biscuits, Guam-grown tobacco, navy plug tobacco, standard navy saltwater soap, and leather for sandals. The navy consented to a total monthly increase of $6.76 per person (Maxwell 1915, 1).

Photo 13 Chamorro patients at Culion "Leper Colony," Philippines. *(Collection of Antonio Unpingco)*

Photo 14 Chamorro patients at Culion "Leper Colony," Philippines. *(Collection of Antonio Unpingco)*

Communication between the Chamorros at Culion and people on Guam was sparse. Navy archival documents report little more than the number of new deportees to Culion and the deaths of Chamorros there. It is not known how much, if any, information was divulged to Chamorro families on Guam regarding their loved ones at Culion. Antonio Unpingco, for example, recalled that once his grandfather left for Culion he was never heard from again. Though this was likely due in part to the limited literacy of most Chamorros in the early twentieth century, Unpingco believes that his grandfather's sense of *mamahlao* (shame) was also a factor. Because of the navy's view of the Hansen's disease patients as dangerous outcasts, and their relatives as medically suspect, Unpingco reflected that it would have been understandable for his grandfather to feel *mamahlao* for the embarrassment and trauma caused his wife, children, and other family members as a result of his illness (1999). For the Unpingcos and Ulloas on Guam, not even the death of their family member, Juan Ulloa Unpingco, was communicated to them.

Ending the Exile

From 1912 to 1924, any Chamorro diagnosed with Hansen's disease, regardless of gender or age, was sent to Culion on the next available transport. Finally, in 1924, the policy was rescinded, and although the Chamorros at Culion were not all permitted to return, new patients were allowed to remain at the old Tumon colony. The change in policy came as a result of the recommendation of surgeon Edward Reed, who felt that, ironically, the Culion expulsion policy resulted in worse health conditions among the Chamorros. He argued to the governor that, in the case of Hansen's disease, "The majority of cases cannot be identified early without the cooperation of the people and, in my opinion, this cooperation will not be complete while we continue to send the cases so far from home" (Reed 1924, Sept, 4). Though he was referring specifically to the diagnosis of Hansen's disease, Reed's comments encompassed the broad spectrum of health problems. Through its policies toward this disease, the navy conspicuously reminded the Chamorro people of its hegemonic control over decisions regarding the entire range of health concerns.

Reed's role in revoking the Culion policy points to a number of other considerations regarding the nature of the colonial project. First, his account demonstrates that navy doctors and administrators did not always agree about the island's health policies, in particular this one to purge it of Hansen's disease by banishing sufferers. It appears that Reed, and conceivably other navy doctors as well, objected to the medical authoritarianism endorsed by navy administrators. In his opinion,

the antagonistic stance taken by the colonial government served to foster the native people's distrust and thus intensify Chamorro avoidance of the navy's health officers. Second, the impact of Reed's observation demonstrates one of the compromises that navy administrators were persuaded to make in order to achieve long-term gains in their health programs on Guam. Reed understood that a conflicted relationship between Chamorro patients and their naval doctors stood in the way of the native people's voluntary use of American medical services. He was thus successful in persuading his commanding officer to change the Culion policy.

As Reed discerned, the 1912 policy to relocate Hansen's disease patients to Culion undoubtedly contributed to the general decision by many Chamorro people to avoid American doctors and hospitals as much as possible. Perhaps Frantz Fanon was correct when he evaluated medical doctors "as a link in the colonialist network, as a spokesman for the occupying power" (1965, 131). Certainly for those exiled, as well as for members of their families, encounters with American medicine neither demonstrated the superiority of western science nor exemplified colonial philanthropy. Rather, for some Chamorros, the navy's exertion of power in exiling patients engendered a relationship of distrust and disrespect. As medical historian Judith Walzer Leavitt wrote, "Health reform, even when successful . . . cannot be tallied on simple mortality graphs, but has to be understood within the complex social and cultural milieu in which it struggled. Its benefits in terms of lives saved have to be balanced with its debits in terms of lives changed, diversities forgotten, freedoms squelched, livelihoods denied. Progress does not only move forward" (1996a, 264).

Despite the navy's accomplishment in eliminating most Hansen's disease cases from the island, it nonetheless struggled to communicate its concern for the Chamorro people's well-being. Navy reports following its initial policy in 1902 boasted triumphantly of the great service to humanity achieved by eliminating the disease as a threat on the island. Certainly Chamorros today are—and perhaps even some back then were—thankful to be free from the ravages of diseases such as Hansen's and gangosa, despite the mix of economic, racist, and political motives the navy might have had in embarking on its actions. Yet amid the hoopla of medical hagiography, the story of those who suffered, both as patients exiled to Culion and as spouses, children, and grandchildren of those who were lost to them, must be honored. "We just thank God that we're better off . . . but at the same time, we should know where we came from. Because let's face it—if it wasn't for [Juan Ulloa Unpingco], I'd never be here" (Unpingco 1999). In my interview with Unpingco, he conveyed a complex mix of ambivalent emotions. At once, he communicated feelings of anger at the navy for its militant

tactics, sadness for the estrangement of a very close family member, and regret for not growing up under the guidance of this grandfather. At the same time, Unpingco's feelings were entangled with an appreciation for his grandfather's sacrifice, which prevented further infection within the Unpingco family, as well as with a certain empathy for the navy for the drastic steps it took to eradicate the disease in the only way it knew.

Remembering Culion

Unpingco, accompanied by former Guam legislator Ernesto Espaldon, visited Culion in 1992, searching for his grandfather and hoping to exhume his remains for return to his Chamorro homeland. He was unable to find any written trace of his grandfather, and even more sadly, he found no evidence of his ancestor's death and burial. He was informed that, in all likelihood, his grandfather's remains had already been removed from the individual grave site to a mass burial mound, as was the practice on Culion for persons deceased for over a decade. In spite of this setback, Unpingco returned to Guam with something more than he had expected—an attachment to, a compassion for, and an understanding of the man who had been so unpleasantly banished to another island so far from his own. Since Unpingco's trip in 1992, he and his family members have reconnected with the man once thought lost to them—through written archives, through a photograph of his grandfather that I located in the National Archives, through the photographs and video-recordings of the Culion environment made by Unpingco in his trip there, and through his descriptions of the pathways on which his grandfather once walked, the ocean in which his grandfather once swam and fished, and the land in which he was interred.

To capture this history in dramatic form, in November 1999, Chamorro language professor and playwright Peter Onedera presented a play titled *"Nasarinu,"* a Chamorro transliteration of the Spanish word, *lazarino* (leper). His production dramatized the story of "the Chamorros stricken with leprosy and confined at Ypao around 1912" (*PDN,* 16 July 1999, 36). Onedera, inspired by his aunt's recollection of the traumatic march of the patients to their departing ship for Culion, brought emotion and compassion to a group of people who have historically been treated as both embarrassments to their families and pariahs in American society. Rather than simply remembering the Chamorro patients as "lepers," Onedera's play, dedicated to the memory of those lost to Culion, revived them as living, breathing husbands, wives, parents, sons, and daughters of Chamorros whose lives were forever altered in December 1912 (1999b).

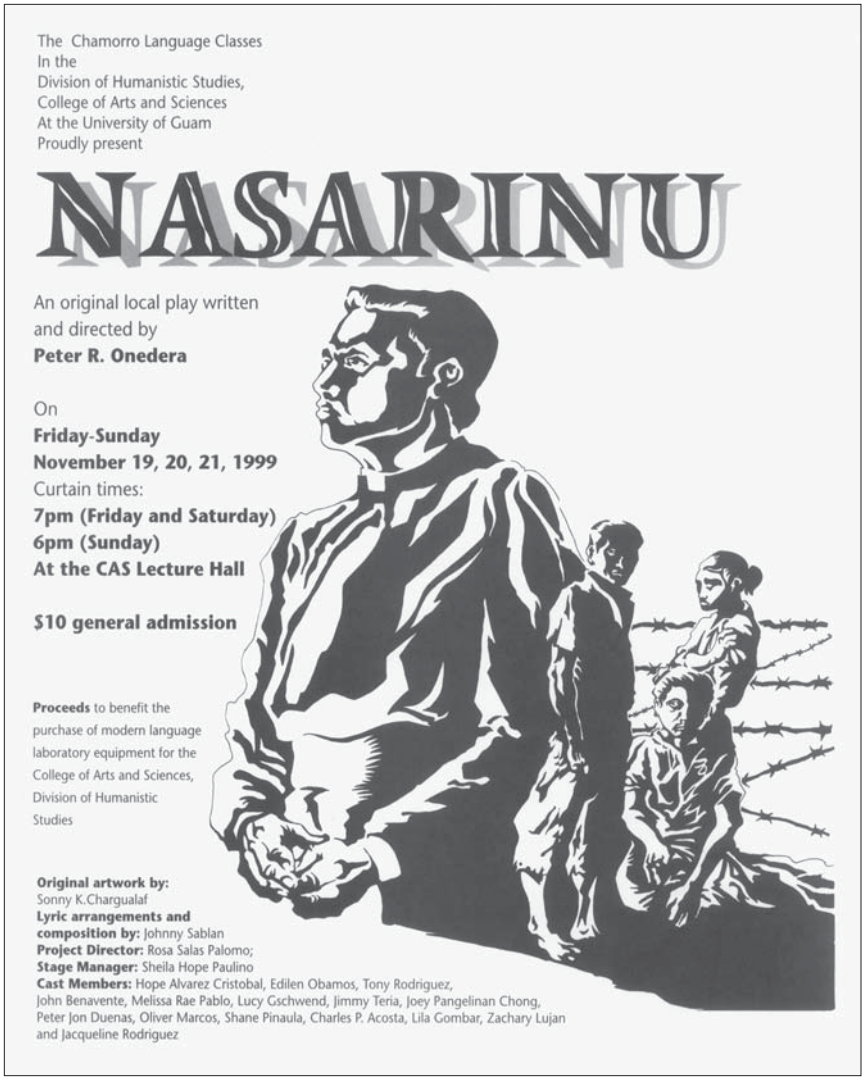


Figure 2 *Nasarinu* playbill. *(Courtesy of Peter Onedera)*

Eighty-seven years after the Culion expulsion, Chamorros continue to seek ways to preserve their familial ties, despite the obstacles of time and space. The men and women who left, it could be said, have been given new life today, partly as reminders of the callousness with which the navy treated afflicted Chamorros, partly as symbols of the powerlessness of the Chamorro people under the naval administration, but also partly as flesh and blood members of Chamorro *familia* refusing to forget nearly a century later those cast out. In remembering this regrettable history, the power of navy officers on Guam was demonstrated, as well as some of the tensions between navy officers and enlisted personnel and between administrators and doctors in determining the most effective health policies for Guam. Confronted, too, are the grim intersections between medical exigency and familial loyalty, acknowledging the successful near-eradication of Hansen's disease on Guam despite the harsh realities that accompanied this medical feat. But more than all of this, the Tumon and Culion colonies testify to the sacrifices of Chamorros, both those who were exiled and those left behind.

Having explored issues of colonial authority, state power, and public health through the Chamorro experience of Hansen's disease, in the next chapter I examine the experiences of Guam's midwives, *i pattera*. Viewed by the navy as primitive crones who jeopardized the health of Chamorro women and newborn children, *i pattera* were faced with a variety of laws designed to monitor and evaluate their functions. The campaign to supervise the powers and practices of midwives became an arena in which naval officers attempted to construct their political authority at the expense of Chamorro women. Navy policies regarding midwives reflected doctors' anxieties regarding the professionalization of their position as health-care specialists, colonial misgivings about the influential role of Chamorro women in matters of life and death, naval presumptions about the superiority of western medical technologies, and scientific struggles regarding the status of obstetrics in the pantheon of medical specialties.

Chapter 4

Feminine Hygiene: The US Navy, Chamorro Maternity, and Gender Relations in Colonial Guam

> The women rule here!
>
> Thomas B McGrath in *Daughters of the Island*

Historical accounts of depopulation in the Mariana Islands frequently privilege Chamorro women as the survivors and perpetuators of the indigenous race. In virtually all of Guam's canonical histories and textbooks, the Chamorro man is depicted as having died in the seventeenth century at the hands of the Spanish military during their conquest of the Marianas, while women alone are the survivors of the race. The work of Chamorro feminist scholar Laura Torres Souder exemplifies the locally accepted lore, saying that the "Spanish-Chamorro Wars spanning the 30-year period from 1670 to 1700 resulted in the decimation of the Chamorro male population" (1992a, 31). Although estimates of the precontact Chamorro population range from Russian explorer Otto von Kotzebue's low guesstimate of 40,000 to the highest approximation of 100,000 made by the Jesuits, Spanish accounts concur that the postconquest Chamorro population in 1710 numbered 3,539 (Jane Underwood 1973, 15, 20).[1] Historians agree that the vast majority of Chamorro deaths occurred as a result of epidemic disease, rather than warfare (Hezel 1982, 133–135).

The historical record contradicts significantly the notion of male demise that has become accepted locally. The oft-cited census of 1710, produced by the Freycinet expedition, shows that among the surviving Chamorro population of 3,539 were 1,867 males and 1,672 females (Shell 1995, 6). Even though Spanish documents refute the idea that only women survived the Chamorro-Spanish Wars, Souder's assumption of male depopulation has been widely accepted, even by US colonial authorities in their handling of Guam. For example, the Department of Commerce's 1920 Census of Guam reported of the Chamorro

people, "most of the adult males were exterminated during the Spanish conquest" (USDC BC 1920, 2).

Acceptance of this error has profoundly affected the ways in which Chamorro gender roles have been understood in contemporary Guam. For example, in the 1994 publication *Hale'-ta: I Ma Gobetna-ña Guam—Governing Guam: Before and After the Wars,* a high school history textbook produced by the government of Guam, the authors not only replicated the discourse of male demise, but concluded, "Since only a few Chamorro men survived the wars, . . . [a]s wives, mothers and homemakers, Chamorro women played a key role in the survival of Chamorros and their culture to the present day" (PSECC 1994, 35). The notion that the Chamorro culture persisted through colonial conquest because of women's contributions is reinforced in the elementary school textbook, *Hestorian Taotao Tano': History of the Chamorro People* (PSECC 1993a). There, the authors wrote that due to the death of Chamorro men in battles and through diseases, "Chamorro women remained the life force of the Chamorro people. As wives, mothers and homemakers they became the anchor for the Chamorro family. Chamorro mothers taught their children the Chamorro language and how to be Chamorro. They preserved the importance of the familia in Chamorro society by maintaining powerful roles as decision makers in family matters. They taught family members about family and community obligations and responsibilities, and about how to behave properly and how to be good adults. . . . *It was in these leadership roles that women ensured the survival of present day Chamorros and their culture*" (PSECC 1993a, 85, emphasis added).

This privileging of women in both the colonial and indigenous histories works to emasculate the island and to validate a male-engendered colonial intervention. The historiographical erasure of Chamorro men enables historians to fill the gap, so to speak, with stories of valiant colonial men who came to Guam to rescue its beleaguered females. This elision of Chamorro male agency has worked successfully in crafting Guam history after the Chamorro-Spanish Wars as a story primarily about Euro-American men with momentary glances at Chamorro women sprinkled through centuries of text.

Because these understandings of the depopulation that followed the establishment of the Spanish colonial settlement prevail, statements such as Thomas McGrath's that "The women rule here!" flourish (Souder 1992a, xv). Historiographically, in numerous and different ways, Chamorro women have been privileged over Chamorro men, not only as the survivors and thus agents of Marianas history, but also as the very agents of life and death. In this chapter I examine a number of different ways in which the consequences of such privileging of Chamorro women are manifest.

On one level, the centrality of women as a theme for navy colonizers coincides effectively with their discursive feminization of the island. With the erasure of men from the Chamorro landscape, Guam was feminized not only as a terrain from which men were literally absent, but also as a space available for the colonial penetration of a masculinized naval establishment. The feminization of Guam can be read in the demographic anxieties of the navy administration. Writings on the American naval colony on Guam from 1898 to 1941 invariably referred to the demographic devastation caused by the Spanish colonizers. American writings consequently blamed Spain for the initial depopulation of the Mariana Islands, for continually infecting the surviving people with a variety of diseases, and for failing to attend medically to these ills. An important part of the American colonizing mission, therefore, was articulated as the "rehabilitation" of the Chamorro race. In this restoration project, the navy assumed the role of masculine progenitor, increasing the fertility of Chamorro women through a variety of health measures intended for the benefit of mothers.

As discussed in chapter 2, the increasing Chamorro population became an important testament to the value of the navy's colonizing project on Guam. Lieutenant Frederick Nelson assumed that the natives of the Mariana Islands were "dying off," therefore justifying American colonialism on the grounds that "[t]o turn this group of more than 20,000 Chamorros . . . over to any other power would probably mean their extinction, since no other nation is prepared to hold Guam as a philanthropic mission" (1936, 1135).

The notion that the Chamorro people might become extinct without the intervention of a benevolent and fecund American colonizer served the interest of not only the naval medical department but also the larger naval government. Ostensibly in the interests of reviving the native people's vitality, American administrators on Guam saw fit to introduce a variety of policies and programs aimed at increasing the population through the introduction of western standards of hygiene and sanitation. As scholar Martha Lenora Crawley noted in her study of the US Naval Medical Department from 1890 to 1916, navy medical officers on Guam "had one advantage that the public health practitioners in America did not have: they enjoyed the support of the absolute authority of the Naval Governor" (1989, 262). However, this seemingly unstoppable rehabilitation project did not affect all Chamorros equally. Women, partly because of their reputation as progenitors of the Chamorros, suffered more intrusive forms of control and surveillance.[2]

Health policies on Guam encompassed a variety of forms and addressed a number of issues. However, several policies affected women differently from men in certain ways, and the gendered aspects of the policies are worthy of analysis. In particular, beginning in 1900, naval

governors targeted the Chamorro midwives, referred to in the native language as *pattera,* as menaces to the general health of the island population. Navy physicians described the Chamorro *pattera,* like their counterparts on the US mainland, as incompetent, dirty old women whose primitive forms of knowledge and methods of practice impeded the progress of modern medicine.[3] With the intention of reforming and controlling the activities of the *pattera,* various governors implemented policies and programs directed at overseeing these women's activities. Governors' regulations required *pattera* to obtain licenses in order to practice, further stipulating that licensure be limited to those who completed courses at the naval hospital to the satisfaction of their surgeons. Further, *pattera* were subject to inspections, to license renewal procedures, and to limitations on the geographic areas in which they were permitted to practice. Articulating a message that was repeated consistently over the next four decades, Governor Seaton Schroeder in 1901 claimed that "the mortality rate among infants and young mothers has been very greatly reduced by the refusal of licenses to practice Mid-Wifery until after completing a course of elementary instruction under the Medical Officer" (NGG *AR* 1901, 9). While the navy tracked the overall island death rate, it did not provide statistics for either infant or maternal mortality rates. Instead, many of the navy's criticisms of Guam's *pattera* echoed comments voiced in the continental United States by American medical professionals.

The attempts of American naval administrators to regulate, confine, and monitor the activities of Chamorro women caregivers—particularly the practices of the midwife *(pattera),* the female herbal healer *(suruhana),* and the Chamorro mother *(si Nana)*—are the subject of this chapter. Rather than regulating all of the native health caregivers identically, government policies and practices dealt with women in a variety of ways and for a variety of purposes. Anthropologist Margaret Jolly has demonstrated some of the ways in which, in many Asian and Pacific countries, "indigenous patterns of mothering have been challenged and to some degree transformed . . . in the name of civilization, modernity and scientific medicine" (1998a, 1). As I elaborate here, in the colonizing process, notions such as civilization, modernity, and scientific medicine frequently intersected with discourses of race, gender, and power, though in ways that reverberated differently throughout the Chamorro community. In the process of regulating the *pattera* as well as the *suruhana,* and in attempting to reform the nurturing practices of the Chamorro mother, navy officials struggled with women over control of Chamorro bodies from the moment of birth—a battle concerned as much with political power as with improving methods of medical care. By focusing on maternity as a critical area of health-care reform, navy administrators and doctors introduced concepts of domesticity that

concentrated on mothers as the individuals responsible for the maintenance of health in the family. Furthermore, in their attempts to control both the *pattera* and the *suruhana*, navy officials sought to institute the professional, medical authority of American physicians on the island at the expense of the native practitioners.

Policies that ostensibly sought to improve the health of women concomitantly worked to consolidate the social and political mechanisms of control exercised by navy officials on Guam. At the same time, the policies dealing with issues of maternity also attempted to redefine the domestic space, as well the social and moral responsibilities of women, in specific, gendered ways. In the process of endeavoring to control Chamorro maternity, the navy introduced medical practices that privileged individualism over communalism, and that defined modernity, progress, and civilization in opposition to notions of tradition and culture.

Midwives and Medicine

Not only in the area of childbirth, but also in other areas of health care, the medical role of women was challenged in the nineteenth and twentieth centuries. Across much of Europe, women were responsible for general health care from the Middle Ages to the eighteenth century, but thereafter, medical men began to dominate hospital medical science (Geyer-Kordesch 1993, 890). By the nineteenth century, formal medical training opportunities increasingly excluded women, and the medical profession made little effort to provide training for midwives (Duffy 1993, 285). Not only on Guam, but throughout the west and in western-colonized territories, childbirth practices were transformed radically in the nineteenth and early twentieth centuries. In light of these historical shifts, some writers have viewed the history of childbirth "as a chronicle of interferences in the natural process" (Arms 1975, 23). Medical historian Johanna Geyer-Kordesch, for example, maintained, "Midwifery remains the prime example of how an established field of expertise practised for centuries by women was changed into a medical speciality practised in hospital, mainly by men" (1993, 903).

Through the eighteenth century, childbirth could be described as "an exclusively female affair, a social rather than medical event, managed by midwives and attended by friends and relatives" (Dye 1980, 98). As late as 1910, midwives delivered about half of all babies in the United States (Litoff 1986, xiii). By the 1940s, however, women were increasingly relocating to hospitals for their deliveries, with midwives in effect losing many of the controls over childbirth they had held for centuries (Leavitt and Walton 1984, 156). In the three decades between, physicians had begun agitating for the curtailment of midwifery practices.

As historian Nancy Schrom Dye remarked, "obstetrics was emerging as a new medical specialty, and obstetricians were anxious to bolster their status within their profession and build their practices by convincing Americans that there was a crying need for their service" (1980, 104). Consequently, in the first decade of the twentieth century began "the contest between the increasingly self-conscious obstetrical specialist and his adversaries, the midwife and her advocates" (Kobrin 1984, 318). By the middle of the twentieth century, Dye noted, midwives had largely been replaced in most of the west by the "medical model of childbirth . . . as the medical profession consolidated its control of birth management" (1980, 98). As her comments suggest, a complex history involving the growth of the medical profession, hospitals, medical schools, and scientific and obstetric technologies had intersected by the early decades of the twentieth century to displace midwives as well as other traditional health providers.

In the west, and particularly in the United States, a plethora of economic, social, and cultural factors contributed to the decline of midwifery. Developments in the medical industry such as improved drugs, anesthesia, surgical implements, and the developing specialty of obstetrics, as well as the multiplication of American hospitals in the years after 1910, unquestionably strengthened the position of degreed, licensed physicians (Leavitt and Walton 1984, 160; Litoff 1986, 10). Moreover, generally increasing economic affluence in the United States contributed to this pattern, as greater numbers of pregnant women could afford hospital care, doctors' fees, and other costs associated with obstetrical visits. Further, the secular trend toward limiting family size contributed to the acceptance of obstetrics, as more infrequent pregnancies became "generally equated with major operations and worthy of greater expense" (Kobrin 1984, 324). Still another theory is that the midwife's growing unpopularity in the United States must be understood in the context of industrialization. "The new technology of mass production was quickly shrinking the importance of the individual craftsman. The emphasis now was on efficiency as saving time" (Susie 1988, 3). In Susie's analysis, midwives represented premodern methods, while hospitals symbolized modern technology. Others have suggested that the ostensibly modern obstetrics grew in popularity because of "a growing public demand from women, who were becoming increasingly self-conscious about their own welfare" (Kobrin 1984, 325).

While a variety of factors led to the decline in the popularity of midwives, immeasurable damage was done to the midwifery profession through public statements representing them as inferior to medical school graduates. For example, a 1906 New York report described midwives as "hopelessly dirty, ignorant, and incompetent" (Kobrin 1984, 318). Scholar Judy Barrett Litoff claimed that they became scapegoats

for the high mortality rates associated with childbirth (1986, 6). In her analysis, midwives unfairly shouldered the burden of such attacks, which could more likely be explained by various complex factors including poverty, inadequate prenatal care, and the capability of the birth attendant. "Blaming such a complex and wide-ranging problem on the midwife was a way of sidestepping a very complicated and controversial issue" (Litoff 1986, 8). At the same time, blaming midwives for far-reaching problems invariably benefited those most critical of the female birth attendants—the new obstetricians. As Dye pointed out, because obstetrics was emerging as a new medical specialty, "obstetricians were anxious to bolster their status within their profession and build their practices by convincing Americans that there was a crying need for their services" (1980, 104). Both Litoff and Dye would agree that not only did obstetricians struggle in the early twentieth century for acceptance in the medical community, but they also fought off competition from laypersons such as midwives. Perhaps this goes far in explaining why, in the United States, the medical profession was intent on abolishing midwives, unlike many European countries that sought merely to license and train them (Loudon 1993, 1056).

Despite the declared "crying need" for professional obstetric services due to ostensibly inferior midwifery practices, Litoff contended that the use of obstetricians did not result in safer childbearing methods. Instead, "the emergence of 'scientific' obstetrics had given rise to a fresh set of problems" (Litoff 1986, 5). Until the 1920s and 1930s, the vast majority of medical students had little or no clinical experience in obstetrics, although they studied female anatomy and physiology (Donegan 1984, 312). A survey conducted in 1912 by Dr J Whitridge Williams, professor of obstetrics at Johns Hopkins University, revealed that obstetrics was by far the weakest area in the medical school training. According to his findings, "The average medical student witnessed but one delivery, and the average for the best twenty medical schools was still only four" (quoted in Kobrin 1984, 319).

Williams's report concluded that until the late 1930s obstetricians lost far more patients from improper practices than did midwives (Kobrin 1984, 319). Physicians' improper use of forceps, anesthesia, and surgery, along with "exposure to the hospital's environment of cross infection," contributed to high rates of maternal and infant mortality at the hands of obstetricians (Susie 1988, 1). Similarly, reports in the 1930s issued by the White House Conference on Child Health and Protection, the national Committee on the Costs of Medical Care, and the New York Academy of Medicine all concluded that the record of physicians was not equal to that of midwives (Litoff 1986, 6). Medical historian Irvine Loudon described hospital deliveries in the early decades of the twentieth century as "a disaster throughout the Western

world" (1993, 1055). In his analysis of hospitals in London, Edinburgh, Paris, Vienna, Copenhagen, Boston, New York, and Sydney, Loudon trenchantly concluded that the risk of the mothers dying while in a hospital was "five or even ten times higher than it was for the poorest women delivered in hovels or slum tenements by untrained midwives" (1993, 1055). The New York Academy of Medicine revealed that 66 percent of the city's maternal deaths between 1930 and 1933 were preventable (Susie 1988, 2).

Maternal mortality rates finally began to fall in the late 1930s, particularly with advancements in anesthesia, improvements in hospital and educational facilities, developments in clinical and laboratory research, and a host of other refinements in the field of obstetrics (Cianfrani 1960, 418). Perhaps most significantly, members of the medical community finally acknowledged and implemented the 1847 findings of Hungarian obstetrician Ignaz P Semmelweis regarding puerperal fever, a significant cause of maternal mortality. This fever, defined in *Merriam Webster's Medical Dictionary* as "an abnormal condition that results from infection of the placental site following delivery or abortion," was one of the primary factors contributing to high maternal mortality rates. In 1847, Semmelweis deduced that puerperal fever was produced "primarily by contact with the contaminated hands of doctors and medical students coming from the autopsy room." To combat this contamination, Semmelweis introduced the routine of hand washing with a chlorine solution before manual examination (Ackerknecht 1982, 187). Yet for over half a century, Semmelweis's conclusions regarding puerperal fever remained unpopular with medical professionals, possibly, as Loudon asserted, because "it indicted medical practitioners as the transmitters of this much-dreaded disease. Loudon argued that Semmelweis's thesis was "denied or ignored or forgotten" until a group of bacteriologists at the end of the nineteenth century, including Louis Pasteur, confirmed it with the discovery of the particular organism that caused the fever (Loudon 1993, 1060–1061).

Despite evidence against the safety of hospitals and obstetricians throughout the early decades of the twentieth century, midwives struggled to maintain their practices. Around 1910, physicians began successfully to agitate for the "drastic curtailment of midwifery practices" (Dye 1980, 104). Dye noted in "History of Childbirth in America" that while only a few states outlawed midwifery altogether, most enacted regulatory requirements that the great majority of midwives could not meet (1980, 104). Further, Litoff stated that in a number of ways midwives found it difficult to contend with the challenge posed by the American medical institution: "Beset by the problems of poverty, language barriers, and geographical separation, [midwives] remained isolated from each other. They had no national organization to lobby for

their cause. Largely left to their own resources, midwives simply went about their work as unobtrusively as possible" (Litoff 1986, 7).

By the middle of the twentieth century, midwives found themselves attending primarily to a lower economic class of women, particularly among ethnic minorities and recent immigrants. Such women continued to rely on midwifery services into the 1940s, for a variety of social, cultural, and economic reasons, including an inability to afford the cost of doctors and hospitals; shared traditions, customs, and language; and opposition to the presence of men in the birthing room.

Particularly in light of the medical horrors that accompanied obstetricians into the early twentieth century, contemporary critics have aimed much criticism at the American medical profession for its estrangement of midwives. Feminists such as Barbara Ehrenreich and Deirdre English (1973) have attacked the medical profession for its expropriation of women's traditional roles as healers, pharmacists, and midwives. Others "have interpreted the continuing growth of modernist interventions in the mothering process . . . as elaborate male-dominated mechanisms of social control" (Stivens 1998, 66). Numerous feminist concerns, along with highlighting the intersections between medical issues and those of gender and sexuality, have suggested that struggles over the professionalization of the medical field have been, and still are, densely enfolded in concurrent struggles for political, social, economic, and moral authority.

These struggles were indubitably complicated in the colonial context, as studies of maternity throughout the Pacific and Asia have demonstrated. Margaret Jolly's pathbreaking scholarship has shown numerous instances in which both western medical methods and colonial policies generated by both government and mission officials in the islands profoundly influenced the experiences of motherhood (see, eg, Ram and Jolly 1998; Jolly and Lukere 2002). Particularly in light of depopulation crises that occurred throughout the Pacific in the nineteenth and twentieth centuries, mothers were typically blamed "for aspects of life for which they could not have been responsible—preeminently the devastating effects of exotic infectious diseases, like measles, influenza and dysentery" (Jolly 1998b, 199). To abate the problems of depopulation in Fiji, Jolly noted that "forms of surveillance and intervention were devised to police maternal 'incompetence' or 'insouciance' and to instruct women to be better mothers" (1998b, 178). The model of the "better mother" was unsurprisingly the middle-class white woman who frequently traveled into the Pacific as a companion to her missionary spouse. In this process of privileging certain mothers as "better," despite colonial representations of maternity as a source of "sameness and identification between women," women were clearly divided across class, race, and national lines (Jolly 1998b, 177).

An examination of the struggles between the American naval profession and the Chamorro *pattera, suruhana,* and mothers on Guam demonstrates many of these conflicts over medical authority, scientific and technological superiority, and class, race, and gender restrictions. In the colonial context, particularly on Guam in the absence of a body of independent medical practitioners, navy policies and their consequences differed in some ways from those in the wider history of childbirth. A look at the *pattera* offers a better understanding of some of the ways in which the navy attempted to shift health care and the nurturing of individual bodies from being a private concern of the extended family to a public, government responsibility.

In the process, private family matters such as childbearing and maternity became redefined by the navy as state and public health concerns for population and demographics. As in the case of Hansen's disease patients, the regulations imposed on the *pattera* illuminate the issue of the consolidation of state power in the exercise of public health programs, although with very different results. For the *pattera,* the navy's powers to oversee, arrest, and exile Chamorros held little actual authority. Further, as Ludmilla Jordanova noted, "The fraught position of the midwife illustrates one of the ways in which beliefs in women as bearers of tradition and men as bearers of modernity worked" (1989, 33). As an examination of the situation of the *pattera* reveals, Chamorro women have consistently—and inaccurately—been represented as the bearers and preservers of outmoded traditions, supposedly standing in staunch opposition to modern change.

(En)gendering Health on Guam

The March 1910 regulation issued by Governor Edward Dorn stated that "girls attending the public schools must wear short skirts, the lower edge to be at least 4 inches above the ground (*GNL,* 23 Mar 1910). It was mandated in the interest of sanitation, insofar as the long trains of these skirts strewed dust about. Essentially outlawing the traditional *mestisa* worn by Chamorro females, this edict also illustrated the extent to which navy officers desired to exercise control over individual bodies and did so under the guise of sanitary reform. Wielding its colonial authority, the naval government attempted to exercise its power over the Chamorro body. However, the success of its policies was questionable. Seven years after Dorn's edict was issued, navy governor Roy Smith declared in an executive notice, "The Order of March 10, 1910, requiring that school girls shall not wear long skirts is not being observed" (*GR,* Mar 1929, 255). This governor urged teachers to monitor and report violations of the order and further threatened that mothers

might soon be ordered to follow the same short-skirt law as their daughters.

Controlling the length of girls' skirts may have been an unenforceable policy that was ignored by a portion of the population, but it demonstrates the extreme determination of the navy governors to impose their brand of sanitation on the Chamorros. More significantly, the edict also reflects late-nineteenth-century American ideas about the role of women as domestic guardians against various forms of filth, both moral and material. American naval exhortations to Chamorro women concerning issues of cleanliness illustrate one of the ways in which Chamorro women, more than men, shouldered the burdens of newly introduced bourgeois concepts of domesticity, cleanliness, and hygiene as emblems of civilization and modernity (Hoy 1995, passim).

For example, in the schools, girls alone were "required to take an intensive study in the hospital for a course of two weeks before the eighth grade graduation" (NGG *AR* 1928, 7). Schooling was mandatory only from ages eight to twelve, and the inclusion of a health compo-

Photo 15 Women hulling rice in *mestisa. (Collection of the Richard F Taitano Micronesian Area Research Center)*

nent as a graduation requirement speaks loudly to the navy administration's recognition that youngsters were the most accessible and pliable audience for their lessons on hygiene. Moreover, requiring that only female students undertake the "intensive study" testifies to the administration's belief in the role of women as the caretakers of domesticity and hygiene. Like the abolition of the *mestisa,* the health education requirement reinforced the navy's convictions not only that Chamorro females were responsible for sanitary concerns on Guam, but also that it was the navy's role to ensure compliance.

Under the navy, Chamorro men seem not to have been expected to maintain similar attitudes toward cleanliness and propriety. Rather, they were expected to work strenuously and productively out in the sun on their ranches or on the ocean. Since 1899, Chamorro men had been directed by law to work the land, typically on the *lancho* owned and cultivated by nearly all members of the predominantly agrarian society. In General Order 6 of 4 October 1899, Governor Richard Leary ordered Chamorros not only to "plant a quantity of corn, rice, coffee, cacao, sweet potatoes, or other fruits and vegetables," but also to raise "at least 12 hens, 1 cock, and 1 sow" (NGG 1974, 51). The navy certainly could not police such a law, but through its articulation Leary made his point —that men should be actively engaged in some form of productive agricultural economic activity. A 1935 *Guam Recorder* article, "A Word to the Older Boys of Guam," exhorted young Chamorro men to work the "tilable [*sic*] land that has gone to waste on the Island," to "double the amount of copra" produced locally, and to fish for "greater profit." Author Daniel Daggett advised them to "put your shoulders to the wheel and be ready to do your part" in improving Guam's economic outlook (1935, 299). To the navy, then, Guam's men were expected to engage in industrious activities contributing to the island's fiscal prosperity.

In the workforce, employment opportunities for women were typically limited to positions as teachers or nurses, domestic spaces deemed appropriate and suitable. According to Chamorro educator Laura Souder, these were "the only generally accepted roles for young women, other than as home-makers" (quoted in Howard 1986, 1). Even in the educational system, the gendered curriculum uncovered naval attitudes about men's and women's roles in society. As Chamorro educator Pedro Sanchez explained, male students learned carpentry, net making, and industrial arts, while female students were instructed in sewing, weaving, baking, and cooking (1989, 125, 153). In their view of gender roles as demonstrated in a range of policies, navy officers held women rather than men accountable for domestic matters such as cooking and cleaning, health and hygiene.

Above and beyond legislating the length of women's skirts in the

interest of hygiene, naval power over the Chamorro body extended more intimately into the bodies of women in their maternal roles. Richard Leary, the island's first naval governor, initiated this process of naval intrusion into Chamorro maternity. As the article, "Gynecology in Guam," published in the 3 February 1900 issue of the *Army and Navy Journal* reported, "Capt Leary, the Governor of the Island of Guam, has recently forwarded to Washington what is considered a remarkable innovation in naval requirements—a requisition for a full set of obstetrical and gynecological instruments. . . . From the requisition . . . it is evident that the female population of the island are about to be initiated into the most recently approved scientific surgery" (p 540).

As the article suggested, the involvement of navy doctors in obstetrics and gynecology was not part of their standard operations in the early 1900s. Employed to attend to the health care of its enlistees, navy doctors were accustomed to treating primarily male patients. This was true in other colonized islands of the Pacific as well. For example, Pacific historian Donald Denoon, stated that in "the colonial states [of the Pacific], [t]hroughout the past hundred years governmental medical officers were mainly concerned with the well-being of men" (1989, 95, 97). Given this preoccupation with male health, obstetrics and gynecology would not have been part of the orthodox training of navy doctors, since, as Williams's comments quoted earlier reflected, even the best

Photo 16 Mother and daughters weaving. *(Collection of the Richard F Taitano Micronesian Area Research Center)*

medical schools in the United States failed miserably to prepare their doctors for obstetrical work until the 1930s. As the *Army and Navy Journal* article revealed, this was the "most recently approved" form of surgery, and for military doctors who would expect a clientele of exclusively male patients, it would have been considered an irrelevant course of study.

Why then, with limited financial resources and limited medical personnel, would Leary and other navy officers on Guam venture into such uncharted waters? Perhaps their monopolization of western medical techniques on Guam partly explained Leary's intent. As the exclusive wielders of modern, medical tools, navy doctors could use gynecological instruments not only as representations of their knowledge, but also as symbols of their power—both medical and political. Perhaps their confidence in these tools of modernity and technology, unreliable as they were at the time, explains why the navy ventured into obstetrics and gynecology. Perhaps their general sense of technological superiority, both as colonizers and as university-trained medical men, tells part of the story. However, additional questions remain about the navy, gender, and power and linger in the lines of women waiting "to be initiated" into modern medicine.

In light of Leary's interest in obstetrics and gynecology, it is not surprising that one of the earliest naval laws sought to regulate the health practices of the Chamorro people by addressing the procedures of the *pattera*. As well as delivering infants, *pattera* performed a variety of functions both before and after the birth. Pregnant women were seen before the time of delivery, to ascertain the condition of both mother and child, and also to receive massages from *pattera* to relieve back pain. Midwives like *Tan* Ana Rosario sometimes performed four or five massages a day on pregnant women, in addition to making their normal rounds of village women whose delivery was imminent (Cruz 1997, 28). Rosario noted that some women would visit her home for a checkup three or four days before their anticipated birth date (Cruz 1997, 27). Similarly, *Tan* Ana Rios Zamora could be gone from her home for three days at a time, visiting expectant mothers and assisting with deliveries. She used herbal medicines in treating her patients and performed a variety of prenatal examinations (Cruz 1997, 4, 6).

Naval officers frequently portrayed *pattera* activities as threatening to the very survival of the Chamorro people. For example, the navy surgeon general claimed in his 1910 *Annual Report,* "The present midwives are a most incompetent lot, age and ignorance being apparently the requirements" (USN *ARSG* 1910, 89). The constant theme of education, or lack of it, that surfaces throughout the litany of disparaging comments is no surprise, as at the time throughout the United States medical school graduates were themselves actively involved in a profes-

sionalization process that privileged the status of degreed, licensed doctors.

The theme of age also merits attention. Descriptions of midwives regularly raised the issue of old age, viewed as debilitating by the navy, but as empowering by Chamorros. For example, in his 1906 *Annual Report,* Governor Templin Potts described midwives as "incapacitated by age" (NGG *AR* 1906, 5). In another account, navy nurse Elizabeth M Leonhart wrote in the *American Journal of Nursing* that the Chamorro *pattera* were "dirty old women who were native Sairy Gamps" (1914a, 296). This allusion to Charles Dickens's Sarah Gamp from his novel, *Martin Chuzzlewit,* elicited a vision of a fat old midwife, portrayed as drunk, cruel, and ignorant (Hayward 1924, 66). From these sorts of comments, it appears that navy doctors and nurses viewed themselves as American representatives of modernity and progress, while dismissing the elderly midwives as symbolizing obsolete, premodern knowledges and technologies. On Guam, the disdain for age looms as significant precisely because it is contrary to the cultural norm. To the Chamorro people, historically and culturally, age ranks above all other factors, including gender, clan, and class, in determining status and power (Souder

Photo 17 Chamorro *pattera,* 1902. *(Collection of the Richard F Taitano Micronesian Area Research Center)*

1992b, 143). Consequently, efforts by the navy government to privilege young, formally educated medical authorities over their empirically trained elders *(manamko)* presented not simply a challenge to the educational and professionalization process, but also undoubtedly created tensions in negotiating the terms of cultural authority under the new colonial order.

From the outset of the American occupation in 1898, navy officials argued that the incompetence and primitivism of the elderly midwives jeopardized the very survival of the Chamorro population. One naval account, summarizing US government operations on Guam between 1898 and 1902, described a "deplorable rate of mortality among mothers and infants" (Beers 1944, 38). Annual navy reports in 1901 and 1902 by Governor Seaton Schroeder alleged that there were many deaths among infants and young mothers, although no statistics were presented by the navy government to document them (NGG *AR* 1901, 9; 1902, 5). Nonetheless, the assumption that was accepted for decades among navy officers, as described in the 1917 Report of the Department of Health and Charities, was that the "[m]ost primitive and dangerous methods characterized the practice of midwifery in the early days of American occupation in Guam" (NGG 1917, 10). Such affirmations invariably served to validate and justify a slate of government policies against the *pattera* in the name of protecting the Chamorro population.

Schroeder mandated the first set of regulations regarding midwives in his General Order 28, issued on 1 November 1900. Asking the Chamorro midwives for "prompt and cheerful obedience to this order," Schroeder established a course of instruction in which the *pattera* would be exposed to medical techniques from the navy's "eminent surgeons who . . . have had the benefit of a careful study and training" (NGG 1900c, 1). The limited training offered here apparently involved "a course in elementary gynecology and antisepsis" (USN 1951, 6). In his order, Schroeder required that every practicing midwife obtain a license to practice from the naval government. Three years later, Governor W E Sewell expanded the requirements in General Order 71, which mandated that midwifery licenses had to be renewed annually, presumably in order to supervise midwives' activities more closely. Further, along with a training session, midwives would now also have to pass an examination to qualify for a license. In his order, Sewell instructed the *pattera* to "report at the Enfermeria (Maria Schroeder Hospital) in Agana on December 15, 1903 at 9 AM, for a course of instruction to be followed by an examination" (NGG 1903, 1). According to the surgeon general, this one-day instructional session essentially concentrated on training midwives in what the navy described as "the requirements of modern and hygienic care" (USN *ARSG* 1904, 4–5).

By 1907, the navy had begun the systematic instruction of midwifery

through a newly created school for native nurses (Guerrero 1964, 1). The primary intention of this school, run through the Susana Hospital for women and children, was to create a corps of native nurses who would assist the naval doctors in their dealings with other Chamorros. As former governor George Dyer testified before the US House of Representatives, the navy-trained nurses and midwives "could go among their sisters, secure their confidence, teach them the importance of cleanliness as it affected their health and that of their families, and finally work a change in their attitude toward medical attention" (quoted in USHR 1911, 3607). On completion of the nurse-training program, the all-female graduates could opt either to board in the hospital as salaried nurses, or to return home with their midwifery certificate and license. Because nurses were required to live in the hospital seven days a week and remain unmarried, a good number of the graduates did leave the hospital, and their nursing careers, in order to return to their villages as midwives.

Despite these attempts to create a class of women who would ultimately serve the navy's interests in redefining Chamorro notions of health and hygiene, the efficacy of navy programs remains questionable. Particularly in the early decades of the twentieth century, when the language barrier was quite severe, it was perhaps predictable that the nurses' training may not have been quite as clinical as expected. According to Chief Nurse Hannah Workman, in the early years of the native nurses' school, "the native nurses acted more as maids and helpers to the staff of navy nurses than as nurses" (1930, 127). Midwife *Tan* Joaquina Herrera noted that in her 1938 training program, she learned "to clean the bathroom and change the bed linens, bring food from the galley to the patients, take patients' temperatures, and give patients a bed bath and brush their teeth" (quoted in Cruz 1997, 8). Moreover, according to navy surgeon H E Odell, after three years of the navy's educational training program, Acting Governor F B Freyer rescinded all of the licenses of the *pattera* because of "numerous cases of puerperal infection and infantile tetanus" (Odell 1911, 1). Freyer ordered all midwives to report to the navy health officer for new qualifying exams (NGG EGO 1910, 1).

While the success of the educational program for midwives can be called into question, even more doubtful was the degree to which the nurses' school was favored by the Chamorro public. Those who enlisted in the program were propelled by a variety of motives. Some, such as *Tan* Joaquina Herrera, were plainly interested in helping women deliver babies, while others expressed a general interest in helping people (Cruz 1997, 8, 17). For *pattera* Emeteria Quichocho Dueñas, the decision to enroll was influenced by several respected aunts who had graduated from the training program (PSECC 1995, 273). *Tan* Emete-

ria and *Tan* Joaquina both noted that being a midwife was one way of contributing to their extended families, because they were able to share the payments of food and other items given to them by their patients (PSECC 1995, 273; Cruz 1997, 18).

Yet most reports regarding the midwife-training program emphasize the dearth of interested women. One account of the history of nursing on Guam noted, "Students were few and far between. They were admitted to the Hospital as soon as they applied" (*PP,* May 1965, 15). Despite this liberal admission policy, by 1914 only 12 women held midwifery licenses on the island, delivering 544 infants that year—an average of 45 per midwife (NGG SR 1915, 12–13). By 1917, the number of midwives had increased to 14, 11 of whom were graduates of the native nurses' training school (NGG DHC 1917, 10, 18). With 675 births that year, the *pattera* averaged 48 deliveries apiece. In 1919, in order to boost enrollment, the government began recruiting potential students to the nursing school by offering a variety of economic incentives. In Executive Special Order 48, Governor William Gilmer ruled, "Hereafter native girls who graduate from the 'Native Nurses' School of Trained Nursing' and who qualify as teachers in the public schools shall . . . be given preference in appointment as school teachers and their pay shall be 20% in addition to the regular pay of teachers of their grade" (*GNL,* Oct 1919, 8).

Despite such inducements, by 1932 the school had graduated only 66 nurses or midwives since its inception twenty-five years earlier, an average of fewer than 3 graduates per year (Douglas 1932, 1). By 1937, 81 women had completed the program—still an average of only 2.5 graduates per year. Of those, only 38 had gone on to request midwifery licenses on exiting the hospital program—less than half of those eligible (GR, Sept 1937, 27, 42).

Archival sources fail to address the reluctance of women to enroll, but at least some accounts suggest that particular cultural concerns were operating. *Tan* Joaquina revealed that her parents only reluctantly allowed her to enroll in the training program, expressing their misgivings about "the American people there, the corpsmen" (quoted in Cruz 1997, 17). Forming alliances and making compromises with American administrators apparently caused tension between *pattera* and other Chamorros. For example, in her study of the prewar *pattera,* Karen Cruz asserted that "the pattera and their working relationship with American men [US Navy personnel] were sometimes viewed critically by some Chamorro people" (1997, 38). Another account, which described the training programs for both *pattera* and native nurses, stated that to work "under the supervision of 'foreigners' was normally received by the family with astonishment and something akin to horror" (*PP,* May 1965, 14). Such comments reveal that racial and cultural tensions about Ameri-

cans and military men informed Chamorro people's decisions regarding enlistment in the training program. While *Tan* Joaquina was able to persuade her parents to allow her to register for the program, how many other young women were deterred for these or similar reasons?

These surprisingly low figures can be read in a number of ways. First, the shortage of students reveals that, despite potential financial benefits, relatively few Chamorro women were interested in becoming affiliated with either the American medical profession or the naval government bureaucracy. Despite nearly four decades of US naval medical efforts to incorporate Guam's people into the medical system, by the late 1930s Chamorro indifference or wariness was still being expressed in this program's lack of native patronage. Second, the figures serve as a reminder of just how busy the *pattera* were. Because their responsibilities entailed not simply delivering infants but also preparing women for childbirth and providing "medical and practical advice for the first few days of the newborn's life," a vocation as a *pattera* could be time consuming (Guevara 1975, 60). Many of these women credited their husbands and extended family networks for their success, acknowledging that because of the amount of time they spent away from home, their continued practice as *pattera* required the patience and understanding of family members (Cruz 1997, 38).

Blaming *Pattera*

Despite concerns about the dangerous practices of *pattera,* it is ironic and quite telling that the naval archives are fairly silent about Guam's infant and maternal mortality rates. In 1908, the navy reported two deaths from puerperal septicemia (Angeny 1909, 329); in 1913, the health department counted one death from puerperal sepsis and seven from tetanus neonatorum (NGG SR 1913, 2); and in 1914, there was only one case of tetanus of the cord (NGG DHC 1914, 1372). Outside these rather moderate reports, there is no striking evidence of midwife malfeasance. While placing much blame on the shoulders of the midwives for what are described as their deplorably filthy methods, navy documents contain surprisingly little concrete evidence to support the allegations. Instead, the real life-and-death concerns about population focused on other trends—particularly, what the navy liked to promote as the "constant decrease in the death rate" due to its agenda of hygiene and sanitation (NGG *AR* 1980, 10–11).

In highlighting, and perhaps overstating, the perils posed by Chamorro *pattera,* navy officials obscured their own culpability in bringing to the island more pressing threats to the native population—namely, epidemics such as measles in 1913 (43 deaths), 1932 (152 deaths), and 1934 (152 deaths); bacillary dysentery in 1923–1924 (at least 69 deaths);

and whooping cough in 1938 (149 deaths) (NGG *AR* 1913, 5; 1924, 8; 1933, 14–15; Moe 1941, 456; NGG SR 1919).[4] While navy personnel carefully researched the origins of each epidemic and diligently tracked the accompanying death rates, they failed to acknowledge the severity of these illnesses for the indigenous people. Naval reports frequently blamed the high deaths on the Chamorro people's unwillingness to call on naval doctors. Furthermore, naval narratives of Chamorro demography repeatedly emphasized the declining death rate over the decades, as well as the overall increase in population. Therefore, in blaming the *pattera* for what were negligible death rates in comparison to the rates as a result of epidemics, the navy misrepresented the status of health on Guam, magnifying local health problems while downplaying introduced ones. The navy's constant criticism of midwives who had graduated from its own training program raises a number of questions. Did the *pattera* abide by their training or were they resisting naval supervision and control? Was the navy indicting its own training program as inadequate, perhaps in the interest of obtaining increased funds or justifying further colonial intrusions?

As in the continental United States, midwives in Guam were represented as almost uniformly premodern, antiprogressive, and uncivilized. Several *pattera* practices, including the burying of the afterbirth and umbilical cord under the family house to prevent the child from ever straying too far from home, were labeled as ignorant superstitions, antithetical to the presumably legitimate forms of knowledge presented in science textbooks and medical laboratories (Thompson 1941, 242). Yet licensed doctors were not necessarily better arbiters of life and death on Guam. For example, Navy Assistant Surgeon E O J Eytinge revealed that one of his gangosa patients, a twenty-four-year-old Chamorro woman, spontaneously aborted after being administered medicine prescribed for her infection. "The pregnant state was unsuspected, because the patient said nothing about it, and was unmarried, and, so far as appearances go, all Chamorro females appear pregnant" (Eytinge 1914, 116).

Despite the navy's disparaging opinion of the midwives, the central role they played on Guam, unlike most of the continental United States, would not fade until after the Second World War and well into the 1950s. While *pattera* delivered more than 90 percent of all births prior to the war and 45 percent in 1953, by 1955 the number had dropped to 15 percent, and by 1960 to 8 percent (Cruz 1997, 38). Partly because no independent medical professionals were practicing on Guam before the war, the navy could neither ban midwifery nor significantly erode its dominant position on the island. In 1917, for example, of the 675 births on the island, only 13 occurred in the hospital—a figure amounting to approximately 2 percent of the native newborns (NGG DHC 1917, 6,

18). Likewise, in 1919 only about 2 percent of births took place in the naval hospital (NGG SR 1919, 1, 6). Most Chamorro mothers would likely have shared *Tan* Maria San Nicolas Chargualaf's opinion of hospital birthings. In an interview, this ninety-two-year-old Chamorro *manamko* (elder) from the village of Talofofo stated that *pattera* who were well known and highly regarded by her family delivered all ten of her children. Asked if she ever considered going to the hospital instead, she replied, "Why should I? Who would want to go there? *Tan* Marian Dogi [her first *pattera*] is already the best" (Chargualaf 1999).

Although naval writings denigrated the *pattera,* there is no striking evidence to suggest that Chamorro mothers lost faith in midwives' abilities to perform competently. They were well known and highly respected in the villages, maintaining the professional authority lost to midwives elsewhere. Further, they enjoyed freedom of movement throughout the island and were able to earn an income during a period when money-making opportunities were scarce. Public health researcher Karen Cruz affirmed these points in her study of Chamorro midwives, titled *The Pattera of Guam: Their Story and Legacy*. Based on interviews with several of Guam's midwives and with some of their relatives, Cruz attested, "The self-employed pattera was an independent and trusted practitioner" and "The opportunity to earn money for themselves and their families had importance" (1997, 38). Although they apparently accepted the training offered by the navy and seem to have abided by naval licensure regulations (unlike midwives in the United States), Guam's *pattera* appear not to have surrendered their power, respect, and status to the degreed medical professionals employed by the navy. Rather, the *pattera* were confident, independent women who took pride in their work and whose efforts were greatly appreciated and respected by their villagers (Cruz 1997, 38). Many *pattera* viewed their work as a way of providing assistance to other Chamorro women, while numerous Chamorros continue to regard *pattera* as women who serve their village.

The understanding of the *pattera* as a colonial collaborator because of her willingness to endure the training program and abide by the licensing regulations must be reassessed. Some, like Lenore Manderson in her study of Malaysian midwives, have noted that "midwives were regarded as gatekeepers, whose support or resistance to Western health services would determine community acceptance and compliance" (1998, 37). On Guam, evidence suggests that naval officials intended to use the *pattera* to engender trust in American medical practices among the general population. According to navy nurse B C Bennett, many Chamorros viewed American health practices as "medical intrusions" (1925, 199). Numerous accounts, such as ones in the *Guam Recorder* by Ramon Sablan and Lieutenant John Enyart, reported that frustratingly

few Chamorros made use of naval hospital services (R Sablan 1929, June, 50; Enyart 1935a, 183). Naval governors hoped that the *pattera,* because of their "great influence over their people," would convince other Chamorros to avail themselves of hospital services (Bennett 1925, 198). As early as 1904, the navy surgeon general expressed the opinion that the training of native midwives "accomplished much good to the ignorant and impoverished families" on the island (USN *ARSG* 1904, 4–5). Yet little evidence exists to suggest that the *pattera* inspired great confidence in the naval hospital and American doctors among the native people. Because some *pattera* were also trained in traditional curative methods as *suruhana,* one must question the degree to which these women relied on western medicine. *Tan* Ana Salas Rios Zamora, for example, served as both a *pattera* and a *suruhana,* relying in her practice not only on the formal procedures taught by the navy, but also on Chamorro herbal medicines and massage techniques (Cruz 1997, 5).

Even in attempting to train the midwives, navy officers were forced to compromise in order to accommodate Chamorro social and cultural proprieties. One such compromise involved the practice of providing chaperones for the young Chamorro women who entered the training program. In accordance with cultural norms, unmarried Chamorro females always traversed the island with a chaperone, typically an older female or a close male relative. Unchaperoned Chamorro women would have been subject to gossip and perhaps even labeled derogatorily as *machalapon,* a term that can refer to someone disrespectful of the rules and customs.[5] Chamorro parents were vehemently reluctant to send their daughters unescorted to the naval hospital for training. Consequently, in 1914, the navy was forced to hire a chaperone, *Tan* Maria Roberto, who was held personally responsible to the families for each woman's welfare while at the hospital (Knight 1922, 738). The presence of a chaperone such as *Tan* Maria worked to assure parents that their daughters would not be subject to social scrutiny, and that, while away from home in this foreign environment, they would be protected and nurtured by a respectable member of the Chamorro community.

Much as the parents and family members of Chamorro nursing students appreciated the maternal care offered their daughters by Maria Roberto, so did the navy nurses appreciate her contributions. In a tribute to her, navy nurse Della Knight stated, "Her ability to understand and speak English makes her services as interpreter in the instruction of the nurses and in transmitting orders most valuable." Knight extolled Roberto's usefulness further in noting that "she knew personally all the midwives, where they practiced, how they did their work, whether they were meeting requirements set by the medical officers" (1922, 738). Roberto thus functioned as far more than a chaperone and assisted the navy in executing its broader health agenda. The navy's acknowledg-

ment of the various benefits offered them by Roberto bears testimony to their need for native cooperation, for which they were forced at times to negotiate. The hiring of Roberto enabled the navy to achieve more success than it would have otherwise, but it was nonetheless a concession: the navy had to accommodate Chamorro cultural norms in order to realize its own agenda. Despite its powers, laws, and controls, the navy could not hegemonically impose its will on the native people. To be effective, navy administrators had to negotiate and yield, however moderately, to Chamorro expectations and concerns.

Maria Roberto's story was further complicated when, in 1925, after ten years as a chaperone at the navy hospital, she was deported to Culion after contracting Hansen's disease. Her departure from Guam was met with great displays of grief throughout the island, suggesting that her particular tragedy might have militated against the navy in its health efforts. While Roberto's support and work likely increased Chamorro participation in the navy's health-care programs, her contraction of Hansen's disease must have generated some discussion among the native people of the dangers of the hospital environment. The tragedy of her story highlights the ambivalences and contradictions that both Chamorros and navy health officials encountered in their daily lives.

In some ways like Maria Roberto, the *pattera* and native nurses were perceived as collaborators with the American military because of their close affiliation with navy medical personnel. Nonetheless it would be inaccurate to characterize these women as agents of the military or puppets of the naval administration. Similarly, it would be erroneous to attribute to the *pattera* a political consciousness that is not evident in their statements. They viewed themselves not as resisters to naval authority, but as conformists to government expectations and regulations. As *Tan* Joaquina reflected, "I always [follow] the rules. Yes, to have your license you have to be very strict and do a good job" (quoted in Cruz 1997, 18).

The notion of *pattera* working in conjunction with the western medical establishment and as bearers of modern medical techniques conflicts with concurrently prominent images of midwives as emblems of primitivism and premodernity. As the research of Chamorro scholar Christine Taitano DeLisle has demonstrated, neither view is sufficiently complex to describe the actual practices of the *pattera*. The midwives did not entirely dispense with their traditional methods and simply replicate naval teachings wholesale. Rather, they synthesized newfound knowledge with traditional applications of massage techniques, prayer, and some herbal medicines (DeLisle 2000, 92–103). DeLisle noted that the *pattera* hybridized both Chamorro and western methods to achieve optimum results—marrying procedures such as massaging techniques learned empirically through their years of experience, with practices

learned academically such as asepsis, the sterilization of their hands and equipment, through their instruction by naval doctors and nurses. Throughout the first half of the twentieth century, in light of considerable evidence to the contrary, the navy's view of *pattera* as crude practitioners and dangerous menaces was ill-founded.

On one level, regulation of the *pattera* can be understood simply as an attempt to improve the procedures of Guam's health practitioners for the well-being of Chamorro women and children. Certainly the navy wanted to ensure the growth of the population, if only to serve as a statistical, ostensibly objective validation and rationalization of its colonial project on Guam. But regulation of the *pattera* can also be read as part of the navy's general desire to have the Chamorro people abide by its rules of health and hygiene. Activating women as nurses and midwives was clearly part of the navy's plan to entice the Chamorro people into its hospitals and other American medical services. But aside from their medical value, the regulations can be understood in a number of other ways. As argued previously, the body of navy health policies was just one element in the context of military controls over the entire Chamorro society. In an important sense, regulating midwives was a minor part of a larger program of social control, reminding the Chamorro people that their vocations and, to some degree, their social and economic status, depended on acquiescence to naval regulations. Further, regulation and control of midwives was part of an ongoing process in the west of the professionalization of the medical field. For the first time on Guam, medical professionals—graduates of mainland universities who were licensed members of professional organizations—worked to privilege themselves as authorities with the power to exercise control over the "nonprofessionals" attempting to work in their field. In the interest of asserting their own medical authority, naval health officials undermined the efficacy of native practitioners such as *pattera*.

The tensions that emerged from the experiences of Guam's *pattera* suggest that issues of race, gender, and power informed Chamorro responses to American policies, just as they informed American decisions regarding their colonial subjects. Perhaps in their alliance with American health officials, some *pattera* may have been viewed by their peers as crossing racial boundaries. However, others of their contemporaries may simply have appreciated their economic and social independence. But to the Americans, it was necessary to restrict the autonomy exercised by this group of women, ostensibly in the interest of health care.

In Jordanova's analysis of controls over midwives in France, she detected "enormous unease about the demarcation between male and female medical practitioners that was as much about sexuality, sex roles, science and nature as it was about professionalism" (1989, 32). Notably

during this period, numerous other actions taken on Guam illustrated the navy's interest in regulating women's roles in society. As Laura Souder asserted, "The Victorian views of US Naval Administrators coupled with legal restrictions they imposed on the [Chamorro] populace affected a redefinition of 'women's proper place'" (Souder 1992a, 63). In light of her analysis, perhaps *pattera* can best be understood as women who resisted confinement to a newly emerging domestic sphere, particularly as embodied in the workings of the patriarchal American military. Certainly some if not all of the *pattera* enjoyed the prominence of a noted social status as well as a level of economic achievement that was otherwise unattainable even for most men. Such social and economic status could be interpreted as counterhegemonic to the naval mission on Guam. At stake in the navy's control of *pattera* activities was not only the improved physical condition of the native people but also the regulation of a powerful body of women. In the case of the *pattera,* the American concern for health care justified the assertion of (male) state power, but its implications especially affected women's bodies.

Forbidden Medicine: Banishing the *Suruhana*

Though midwives were the most visible group the navy had to contend with in their attempts to control Chamorro maternity, another group of female health practitioners, the *suruhana,* also fell under naval scrutiny. Researcher Patrick McMakin described *suruhana* as women "especially adept in obstetrical and gynecological problems [such as] the female menstrual cycle, morning sickness, and . . . promoting fertility" (1978, 57).[6] *Suruhana* typically specialize according to their particular skills and training. Some mostly treat problems with the menstrual cycle or the birth process, while others are renowned for their skills in treating spiritual illnesses relating to the *taotaomo'na* (people of before)—the ancestral spirits believed by some to inhabit the Mariana Islands (Pobutsky 1983, 5A). *Pattera* cared for women prior to and during the labor process and up to their eight-day postpartum checkups, whereas *suruhana* handled a broader range of gynecological, and sometimes supernatural, concerns (Guevara 1975, 61).

Given the comprehensiveness of their medical practices, as well as the mystical and secretive nature of their work, the *suruhana* were subject to even closer and more suspicious scrutiny by the navy than were the *pattera*. "[T]heir names and activities are carefully guarded from the government authorities who, in their efforts to introduce Western medical practices, are trying to stamp out the native art as quickly as possible" (Thompson 1941, 197). Just how the navy went about eliminating the *suruhana* is perhaps an unanswerable question, as their archives contain no direct mention of the subject. No governor's orders or other

navy laws mention even the existence of the *suruhana,* much less any desire to criminalize their activities. An attempt to eradicate or delegitimize them might be read precisely through this omission. It is possible that navy officials consciously chose to ignore *suruhana* as a way of belittling them. Just as conceivably, however, navy administrators may have been simply ignorant of their existence. *Suruhana* could have been confused with the *pattera* and the *techa* (traditional prayer leaders), both of which were roles played by elderly Chamorro women who, in the course of their work, syncretized Catholic rituals with Chamorro spiritual beliefs.[7] Because some of the *pattera* also served as *suruhana,* while others cofunctioned as *techa,* navy officers could very easily have confused or misunderstood the activities of women in these three separate, though frequently overlapping, roles. For example, *pattera* who were also *suruhana* used massage skills and herbal remedies developed in the *suruhana* trade. Similarly, *pattera* who concurrently practiced as *techa* drew on Catholic practices such as using holy water and praying to church saints to aid with the safe delivery of babies. In actuality, all of Guam's *pattera* syncretized their traditional knowledge with American medical methods, Roman Catholic prayer rituals, and indigenous spiritual beliefs. Given this complex hybridization of cultural influences, perhaps the navy increased its condemnation of the *pattera*—an unambiguously identified group of women—because of its inability to comprehend what to them would have been a confusing spectrum of *suruhana, techa,* and *pattera* and the intersections among all three groups of women.

Indirectly, however, the navy did attempt to usurp the power and authority of all native health practitioners, including *suruhana,* in two specific policies—one that mandated that midwives refer complicated cases to the Naval Hospital, and another that attempted to monopolize the production and distribution of medicines on the island (NGG GO 1904, 1; NGG 1936, 985). In these two laws, Chamorro reliance on the male *suruhanu,* the female *suruhana,* and their herbal remedies was officially prohibited, although in practice the regulations were unenforceable and their effectiveness arguable. Because many *pattera* were also trained as *suruhana,* it would have been impossible for them to separate the two roles. However, navy regulations reveal that in the navy's view, there would be no other health practitioners than those at the Naval Hospital and those trained by the navy. The navy further attempted to undermine the influence of the native health practitioners by distributing health educational literature with abundant messages about the importance of obtaining proper medical care at the Naval Hospital, and about the medical and scientific inaccuracies of numerous Chamorro beliefs and practices, particularly as they related to health care.

Thompson maintained that rather than attempting to regulate the

practice of *suruhana* as they did in the case of the *pattera,* military officials tried to eradicate them. This observation suggests that issues other than the modern practice of medicine were at stake. To the naval authorities, *suruhana* posed a challenge to the modernizing project not merely because their medical practices interfered with those of the naval medical staff, but also because of their connections to Chamorro spiritual and supernatural beliefs, typically denigrated by the navy as primitive superstition. *Suruhana* medical practices deal in part with illnesses attributed to supernatural forces, particularly those relating to the activities of the *taotaomo'na* (McMakin 1978, 49–51). "These supernatural agencies [*taotaomo'na*] may cause illness or even death to anyone who incurs their displeasure, but they are especially dangerous to young children and to gestating and lactating women" (Thompson 1941, 201). By eradicating *suruhana* activities, navy officials concomitantly sought to eliminate what they saw as one of the last vestiges of primitivism. American doctors on Guam frequently indicted native superstitiousness—implicitly ascribed to both *suruhana* and *suruhanu* —for the Chamorros' avoidance of naval medical facilities. According to government reports, Chamorros were unwilling to consult American doctors because of native "superstitions" and because of the authority exercised by herbal healers (R Sablan 1929, Feb, 240). Native "superstitions" were thus frequently attacked because they were believed to obstruct the spread of modern, western forms of medical treatment. Further, women, rather than men, were thought to believe more strongly in the existence of the *taotaomo'na* and in the curative powers of the *suruhana* (R Sablan 1929, April, 9). Scholar Lawrence Cunningham theorized that in continuity with precolonial times, "Women and children are thought to be especially vulnerable to the *taotaomo'na,* especially pregnant women. . . . This may go back to the fact that women and children lived on their husband's or father's clan territory. This land was protected by the husband's or father's clan's ancestral spirits. The ancestral spirits of other people's clans were more likely to be hostile" (1992, 105). In contrast, navy personnel theorized that the *taotaomo'na* were manifestations of Chamorro cowardice, superstition, and ignorance (Johnson 1942, 992).

As in the case of the *pattera, suruhana* as active, influential, and respected women represented a form of native resistance to both naval hegemony and American definitions of gender propriety. The continued vitality of *suruhana* to the present day reflects and reinforces the inability of the prewar navy on Guam to privilege modern, western medical technologies over indigenous ones. In particular, during the World War II occupation of Guam by Japan's imperial forces from December 1941 to July 1944, traditional healers such as the *suruhana* were busy attending to the medical needs of the island people. As epidemiologist

Robert Haddock noted in his *History of Health on Guam,* during the war years Chamorros "had to resort to the use of locally available home remedies [and the] folk medicine art" that the navy had attempted for nearly half a century to eradicate (1973, 9).

Though perhaps unintentionally, both the *suruhana* and the *pattera* subverted the professional and capitalist aspects of western medicine promoted by the navy's health authorities. For example, in Executive General Order 162 of December 1910, midwives were authorized to charge $2.50 for an "ordinary case" and to refer those unable to pay to the hospital in Hagåtña (NGG EGO 1910). Despite the law, numerous *pattera* as well as *suruhana* typically insisted on noncash forms of payment, such as farm produce or canned foods. My mother believed that offering cash to a *pattera* or *suruhana* would be considered an insult (F Hattori, pers comm, 31 July 1999). This approach suggests that these women consciously sought to remain outside the cash sector, identifying their services as something other than a capitalist commodity. While their stance did not necessarily represent resistance to the island's budding capitalist economy, it certainly was a way to distinguish themselves from medical authorities who exacted cash payments from their patients.

In combating what they considered one of the vestiges of primitivism on Guam, naval administrators used notions of primitivism as a way to exert and justify colonial authority. By conflating superstitions with women, particularly *suruhana,* and by describing Chamorros as primitive, naval officials invented and maintained a primitivist discourse as an integral part of their "rhetoric of control and domination" (Torgovnick 1991, 192). Without endorsing the validity of such binaries, I suggest that naval governors, in the project of establishing colonial domination, constructed and used such dichotomies as man-woman, American-Chamorro, and modern-primitive to validate their power and authority (Jordanova 1989, 21). As Marianna Torgovnick asserted in her *Gone Primitive,* "Western discourse on the primitive . . . mask[s] the controller's fear of losing control and power" (1991, 192). In order to reinforce their control and power on Guam, navy administrators also focused on Chamorro mothers, as the day-to-day overseers of family matters and as the prime targets of their attempted reforms.

Blaming *Nana*

Naval attempts to control midwives' activities stimulated the specter of state power in asserting the supremacy of western childbearing techniques over native ones, as well as male, state interests over female, extended family ones. The challenges presented to the naval government by *pattera* and mothers raised a number of issues concerning race,

gender, and power. On a basic level, attempts to regulate *pattera* and mothers expressed naval concerns for rescuing women and children from what were viewed as the Chamorro people's premodern sanitary practices. Naval preoccupation with Chamorro population counts and with high levels of infant mortality can be observed in their continuous and diligent efforts at documenting population changes to indicate "improved well-being and good health among the population" (Cruz 1997, 34). The obsession with population growth as evidence of the benefits of American colonial rule resulted in a situation in which, as Jolly has observed of several British colonies in the Pacific, "mothers were . . . singled out as a major cause of depopulation" (1998b, 178). Particularly in Fiji, Jolly argued, "undue blame" attributed to native mothers "promoted a racist denigration of the indigenous mother and a glorification of the white mother" (1998b, 199).

Similarly on Guam, through vehicles such as the monthly publication, *The Guam Recorder,* as well as pamphlets distributed in schools and villages and outreach services provided by both Chamorro and American health-care providers, Chamorro mothers were instructed on various points of maternity. For example, the "Woman's Section" of the *Guam Recorder* addressed the issue of child care among Chamorros, placing the responsibility for children squarely on the shoulders of women. In the August 1924 "Woman's Section" a columnist alleged, "Improper feeding and uncleanliness are without doubt, the deciding factors of the high death rate of children in Guam," and further asserted that "the ultimate responsibility for the prevention of deaths results with the mother," urging, "it is of vital importance to the welfare of the race that 'Mother love' be supplemented by an intelligent comprehension of what constitutes a normal childhood" (*GR,* Aug 1924, 34).

Perhaps it cannot be known how Chamorro readers responded to such statements, but the column certainly provides evidence of the navy's presumption that child care was a woman's concern. Nowhere is "Father love" considered, nor is the role of male caregivers—including important figures in Chamorro families such as fathers, grandfathers, godfathers, uncles, nephews, and cousins—ever addressed in discussions of infants. Despite the ancient matrifocality of Chamorro culture, men have still held important roles, particularly as fathers, godfathers, and uncles, in child-rearing activities (Cunningham 1992, 174). Indeed, Jolly asserted that throughout the Pacific, "mothers were not solely or even primarily responsible for the nurture and care of their children. Fathers, aunts and uncles, grandparents and elder siblings all nurtured" (1998b, 200). Even in the face of Guam's long history of colonialism, men have not surrendered their participatory roles in child care, although naval exhortations consistently singled out mothers as solely responsible for the welfare of their children.

Other essays advised Chamorro women on the proper ways of clothing, cleaning, and feeding their children. A "Care of Children" column in the November 1924 issue of the *Guam Recorder* offered Chamorro mothers the following, completely impractical, advice: "Never have anyone sleep with the baby, and only touch the child when it needs to be fed, changed, or bathed" (*GR,* Nov 1924, 8). To many Chamorros, this advice would be tantamount to inviting harm to an infant. For example, the concept of *matgodai,* described by my mother as a "deep, sudden urge to hug, pinch, or squeeze another person," encourages Chamorros to pinch or even lightly bite babies (F Hattori, pers comm, 31 July 1999). Failing to provide such contact could potentially harm the child, because it is believed that some people's feelings of *matgodai* are so spiritually powerful that repressing them may make a child ill or cranky. Nonetheless, the certainty with which such published advice was disseminated to Chamorro mothers suggests, on the one hand, that Chamorro child-rearing practices were improper and unsophisticated; on the other hand, the very foreignness of such advice conceivably meant that for the most part it could be easily disregarded.

The issue of women and maternity was even addressed in the 1911 naval publication of a pamphlet entitled *Hygiene: Elementary Course for the Public Schools of Guam.* In addition to being disseminated in the schools, the pamphlet was used as an educational tool in the villages, where government employees were sent to explain its contents in the Chamorro language. Besides exhorting Chamorros to wear shoes, bathe daily, avoid sitting around in wet clothes, and "sleep on a bed and not on the floor," the pamphlet provided guidelines for the care of infants (NGG 1911, 1). It cautioned mothers not to feed young babies bananas or other fruits, rice, soup or meat, and also instructed them on the proper modes of bathing and dressing infants. Finally, it directed mothers to "[b]ring all sick babies and those whose food does not agree with them, to the Hospital as soon as possible for treatment" (NGG 1911, 2). As an instructional instrument, the pamphlet was broad in content and scope, the most reiterated message being to report any hygienic abnormalities to the navy hospital immediately. Yet, the very impracticality of its suggestions—particularly against feeding babies any fruits, rice, or soup (mainstays of the Chamorro diet)—undermined its effectiveness and the navy's campaign in the schools. Nonetheless, as Margaret Jolly asserted in her study of missionary wife surveillance of ni-Vanuatu women, "Intervening in infant feeding was part of a wider process of reforming the relation of parents and children, and in particular mothering" (1991, 40). The collapse of child-rearing responsibilities onto the shoulders of women was part of a broader agenda to transform the Chamorro family into one that better resembled the bourgeois American one—nucleated, domesticated, and subject to male authority.

This theme is further exemplified in another *Guam Recorder* column that presumptuously advised Chamorro mothers on breast-feeding protocols. In a 1934 article, Assistant Health Officer Lieutenant C L Andrews instructed Chamorro women, "No mother should nurse her baby longer than nine months and at whatever time she weans her baby she should see a doctor or the hospital corpsman in her district and receive definite instructions" (1934, 154). Exhortations such as these not only assumed the ignorance of mothers, but also privileged the knowledge of American male health experts—doctors and hospital corpsmen—over Chamorro women caregivers such as *pattera* and *suruhana*. Through the advice of such columns and pamphlets, Chamorro mothers were given instructions in maternity, supposedly validated by the latest discoveries in science and medicine, though frequently precarious in content. These "enlightened" columns attempted not only to isolate the mother as solely responsible for her offspring, but at the same time to transform Chamorro mothering practices into something quite foreign and impersonal. Implicit in the caveats offered by the navy was the notion of motherhood and maternity as confined and defined by a domestic space newly introduced to Chamorro women. In an article titled "A Guam Girl: Who is She?" an unnamed *Guam Recorder* columnist described Chamorro women: "A girl of wondrous fascination and remarkable attractiveness, . . . she will make the home of her husband a paradise of enchantment, so that the heaven-touch harp of marriage, with its chord of love and devotion and fond endearments, will send forth a sweet strain of felicity as ever thrilled the senses with rhythmic pulsing of ecstatic rapture" (*GR,* Nov 1934, 208).

Such descriptions romantically endorse notions of patriarchal power and female domesticity. However, in her feminist analysis of Guam history, Souder argued that the Chamorro culture has been unremittingly matrifocal since before western contact, as evidenced in a variety of mother-centered songs, proverbs, and legends (1992a, 54–55). Souder and other historians have privileged the powerful role of women-as-mothers in Chamorro society. In this context, and that of colonial and cross-cultural encounter, one must wonder how Chamorro women received naval instructions on motherhood.

According to Souder, the American navy, much more than the previous Spanish colonial administration, "affected a redefinition of 'women's proper place.'" As a result of changing social and cultural norms under the navy, Chamorro women "rarely ventured outside the home except to perform household tasks, garden, or fulfill obligations" (Souder 1992a, 63). However, Souder's argument pertains principally to elite Chamorro women who could afford to maintain such a restrictive lifestyle. Other women apparently engaged in many of the same laborious activities as their fathers, brothers, and husbands. For exam-

ple, Sister Mary Peter Uncangco frequently accompanied her father and brothers to their family *lancho* where her days were spent doing ranch work (Uncangco 1999).[8] Moreover, women such as *pattera* and *suruhana* enjoyed virtually unrestricted social mobility. Given the economic realities for most Chamorro women, it is difficult to uphold Souder's claim that navy attempts to define and confine women were broadly successful.

Yet the navy's project of domesticating Chamorro women intersected quite effectively with lessons on hygiene and maternity—both of which also privileged the role of mothers as solely responsible for the maintenance of their family's health and well-being. One could plausibly argue that the navy's attempt to undermine and usurp the power of women resulted in precisely the opposite effect. That is, as a consequence of the navy's focus on *pattera, suruhana,* and mothers, Chamorro women were able to reconsolidate and reaffirm their power in society. Under the navy, *pattera, suruhana,* and mothers in effect merged traditional forms of authority bestowed on women and on health caregivers with newly introduced opportunities for power. Just as neither *pattera* nor *suruhana* appear to have declined professionally as a result of naval restrictions against them, nor did women-as-mothers diminish in status. As Souder contended, "motherhood has provided a context through which Chamorro women have exercised power and control, both within the family and in all other spheres of society" (1992a, 55–56). On Guam, Chamorro women maintained their social status and cultural authority under the navy by merging newly introduced ideas of domesticity and maternity with already-potent local meanings of motherhood. Without necessarily deferring to naval notions of modern maternity and proper mothering, Chamorro women as mothers, as *pattera,* and as *suruhana* rather than forfeiting their power to navy doctors and administrators entrenched their roles as the bearers of life and death on Guam. Thus, in the meanings of motherhood, converging naval and Chamorro agendas regarding issues of maternity, modernity, domesticity, medicine, and power are highlighted.

In the next chapter I continue my examination of the relationship between the navy medical establishment and Chamorro women through an analysis of the Susana Hospital—Guam's first hospital for women and children. Begun by navy wives in 1905, the Susana Hospital fund-raising project was billed as a mission to save "the little people of Guam." While the hospital was perhaps an institution that asserted the power and knowledge of American women over Chamorros, it did so, ironically, in the interests of the naval government and male authority. In the hospital, Chamorro women's and children's bodies came under the surveillance of an exclusive male medical corps who practiced a form of medicine that was primarily private rather than social, and indi-

vidualized rather than communal. Furthermore, as the space in which Chamorro women would receive training as native nurses, the Susana Hospital became for Chamorro women at once a place of economic opportunity and a site for their attempted domestication in a bourgeois American mold. Finally, as an institution funded primarily by American charitable groups such as the Russell Sage Foundation, the Susana Hospital offers an opportunity to examine some of the roles played by philanthropic organizations in the new American colonies. Therefore, in the next chapter I examine not only the historical contexts and cultural meanings of hospitals, but also the roles played by hospital-run training programs and philanthropic organizations, particularly in their relationships with native women in the American overseas colonies.

Chapter 5
"The Cry of the Little People": The Susana Hospital and Guam's Women and Children

In 1905, a group of American women living on Guam joined forces with the naval government in its efforts to reform the health care practices of the island's Chamorro people. These wives of naval officers stationed on the island supplemented the naval government's health ventures with the establishment of the Susana Hospital, an institution specializing in obstetrics, gynecology, and pediatrics. It was to be the first hospital on Guam established specifically "for the benefit of the women and children of the native race" (E Johnston 1971, 41). A circular distributed to US mainland friends of Guam's navy personnel endeavored to raise funds for the founding of such a hospital. In it, the project was represented as a response to the "cry of the little people of Guam." The circular was signed simply, "THE AMERICAN WOMEN IN GUAM" and described the "plight of the women and children of Guam" in terms of "unsanitary living conditions, crowded housing, uncared for sick people [and] no provision for the care of civilian women and children" (E Johnston 1971, 41).

This naval wives' project assumed the frailty of Chamorro women and children, referring to them as "little people" who lived wretched lives without adequate protections. Rather than assessing Guam's conditions in terms of rich networks of familial interdependence, their descriptions of Chamorros are pervaded with a sense of poverty and debility, expressed in words or phrases like *plight, unsanitary, crowded, uncared for,* and *no provision for.* Exhibiting a racist and infantilizing attitude toward the objects of their efforts, American women on Guam took it on themselves to address the physical conditions of Chamorro women and children, assuming the same air of superiority affected by their husbands. Just as navy men had sought to rejuvenate the Chamorro population through the regulation of Hansen's disease patients and female health practitioners such as *pattera, suruhana,* and mothers, American women participated in comparable health programs. Misun-

derstandings of Guam's indigenous practices of maternity, midwifery, and herbal healing invariably served to validate a slate of government policies and private initiatives in the name of protecting the native population.

Prior to the American colonization of Guam in 1898, the Spanish government had operated a hospital, although its few beds were intended for the use of "military personnel and their families of the Spanish garrison" (R Sablan 1929, March, 260). For the most part, native patients were treated at home by indigenous healers or by Spanish military doctors. Medical institutions such as hospitals were unfamiliar to most Chamorro people and their establishment specifically for native use affected the lives of men, women, and children in a number of significant and diverse ways. Beginning in 1901 with the founding of a hospital for native men, the navy Department of Health and Charities introduced Chamorros to a specific version of medicine—an interpretation of healing practices as essentially individualized, exclusively scientific, and bound by a number of western assumptions about the nature of disease and healing.

The introduction of hospitals furthered a largely adversarial relationship between Chamorro "patients" and American doctors that began earlier with navy policies toward Hansen's disease and continued with numerous other health-related intrusions into Chamorro life. For various reasons, such as the language barrier, the monetary costs, and Chamorro unfamiliarity with western medical technologies, some native people avoided hospital services as much as possible. However, for other reasons—such as the desire to take advantage of modern technologies or the wish to express their elite, *mannakhilo'* status—some Chamorros availed themselves of hospital services. Still additional factors, such as the forced confinement of children in order to treat hookworm, informed the varied and conflicted responses of Chamorros to these medical facilities.

As I have discussed in previous chapters, the challenges Guam presented to the nascent American colonial government by Hansen's disease patients, *pattera, suruhana,* and mothers connected to issues of race, gender, and power. For example, the navy's concerns about Chamorro maternity practices resulted in attempts to rescue Chamorro women and children from what the navy considered as outdated sanitary practices. On another level, however, the regulatory policies can be viewed as the attempts of an embryonic colonial government to establish a new social and political order. Compared to the previously discussed methods of regulating Chamorro women, the strategy employed by the founders of Susana Hospital more ambitiously confronted the persisting predicament of "unsuitable maternity." Notions of maternity were challenged not only through the surveillance of Chamorro *pat-*

tera, suruhana, and mothers, but also through the civic activities of military wives on Guam. In their motives can be detected their disrespect for native mothers, as well as the aggrandizement of their own roles as white mothers. Certainly the expressed views of the American military wives toward their Chamorro counterparts reflect racially informed assumptions about the supremacy of western ways of healing and child-rearing. Perhaps just as significant as the activities of military wives-turned-philanthropists were American women's highly visible roles as navy nurses. Actively involved in training native nurses and in treating Chamorro patients, American nurses, as much as military wives, contributed to Chamorro notions of medicine, modernity, and domesticity.

The Susana Hospital can be read as a symbolic assertion of the power of American women over Chamorro ones, and of American notions of maternity and child care over those of the Chamorro people, but ironically it did so in the interest of the naval government, male authority, and modernity. In the Susana Hospital, Chamorro women's and children's bodies came under the surveillance of male doctors, a medical practice with which both Chamorro women and men were especially uncomfortable. Additionally, as patients and as nurses, Chamorro women's close working relationship with American men caused disquiet among some native families. The explicit objectives of the Hospital Women's Aid Society were "to try to induce all women and children needing medical advice to present themselves at the hospital for this purpose; to make the native inhabitants of Guam understand that the hospital is for them; [and to] persuade their relatives, friends, and acquaintances to avail themselves of its advantages" (E Johnston 1971, 41).

The underlying interest of American naval wives, it would seem, was to promote the use of western medical practices. With the establishment of the Susana Hospital, navy officials may have hoped that the *suruhana* might cease to hold sway over the native people, and that the *pattera* would be regulated or replaced by western medical procedures. Modernity, represented in the facilities of the Susana Hospital, provided a powerful context in which issues of race, class, gender, and power became entangled.

Institutionalizing Medicine in the Hospital

On one level, the opening of the Susana Hospital in 1905 occurred in the context of a general movement in America to expand hospitals and hospital services. From the 1870s to the early decades of the twentieth century, hospitals in the United States were undergoing a number of critical transformations, particularly in the proliferation of their num-

bers. In 1821, Boston opened its first public hospital, joining the Pennsylvania Hospital and the New York Hospital as the first general hospitals in the nation. In 1873, there were only 120 hospitals in the United States, but by the 1920s, the number had risen to more than 6,000 (Vogel 1980, 1). In a study of the origins of the American hospital system, historian Charles Rosenberg linked this burgeoning development to the growth of US cities, which had also increased rapidly in size and prominence in the nineteenth and early twentieth centuries (1979, 18). One outcome of this growth was the need of hospital services for a new clientele. "All [of the cities] had large populations of wage-earners, many of them immigrants from foreign shores or rural America, without secure homes or roots within the city, and such workers formed the most significant component of an inexorably increasing patient population in the second half of the 19th century" (Rosenberg 1979, 18).

Rosenberg indicated that not only did hospitals face added demands for services resulting from the sheer increase in population, but they also encountered new social and economic conditions that facilitated the institutionalization of medical care. Prior to the 1870s, most Americans made little use of hospitals, relying instead on familial networks to provide necessary care. As medical historian Morris Vogel explained, "The hospital was not central to the practice of medicine. Good treatment was home treatment; sickness was endured, for the most part, in its traditional setting in the home and among family" (1980, 1). But by the late nineteenth and early twentieth centuries, Vogel noted, the utility of hospitals had transformed, as they now "made up for the absence of 'natural protectors' for those without families. They provided relief for 'helpless people'" (1980, 11). Furthermore, even for those of "a better class," hospitals provided needed services where "work kept family members away during the day and left them too tired to care for the sick properly at night" (Vogel 1980, 11).

Accompanying the demographic and social demands that led to the development of institutionalized forms of health care were scientific advancements that contributed significantly to the expansion of hospital services. Prior to the 1870s, Vogel asserted, "Hospitals offered patients no medical advantages not available in the home; actually, hospital treatment in the 1870s added the risks of sepsis or 'hospitalism'" (1980, 9). Numerous medical historians would agree with sociologist Paul Starr's claim that American hospitals into the 1880s and 1890s "had closer connections to charity than to medicine and played a small part in medical practice" (1982, 25). Because of the philanthropic role played by hospitals into the late nineteenth century, they were frequently perceived as "asylums for invalids, marginal institutions treating the socially marginal" (Vogel 1980, 77). As a primarily religious or

charitable organization that focused more on tending the sick than on curing them, the hospital was considered an institution "whose use stigmatized its patients" (Vogel 1980, 1).

With developments in modern medicine in the late nineteenth century, hospitals evolved into representatives of modern medical science. "Contributing to this development were the invention and introduction of a steady stream of complex medical equipment, beginning with the x-ray apparatus near the end of the century and following with elaborate machinery for physiotherapy" (Vogel 1980, 77). Advertising these services to an ever-wealthier clientele, hospital administrators "intoned the virtues of scientific medicine to a constituency impressed by the novelties of the germ theory, antiseptic surgery, and serum therapy" (Rosenberg 1979, 18).

By the 1920s, the hospital was no longer a place of charity dominated by the poor and dependent (Rosenberg 1979, 18). Private patients and charitable foundations were becoming key players in the economic viability of America's voluntary hospitals, particularly given the prohibitive and escalating costs of new medical technologies. "Few institutions have undergone as radical a metamorphosis as have hospitals in their modern history. In developing from places of dreaded impurity and exiled human wreckage into awesome citadels of science and bureaucratic order, they acquired a new moral identity, as well as new purposes and patients of higher status" (Starr 1982, 145). As Starr, Vogel, and Rosenberg have all suggested, this transformation of the hospital involved its "redefinition as an institution of medical science rather than of social welfare, its reorganization on the lines of a business rather than a charity, and its reorientation to professionals and their patients rather than to patrons and the poor" (Starr 1982, 147–148). Moreover, many historians would agree that "even the best hospitals of the Western world did not play much of a role in reducing mortality until almost the end of this period, the late 1930s, when the sulfa drugs began to be available" (Cassedy 1991, 76).

While hospitals after World War II had so reformed their reputations that they were seen "as quintessentially part of modern medical care," this was far from true of the early twentieth century hospitals established in the Pacific (Granshaw 1993, 1197). That the hospital of the early 1900s offered meager assurance of health protection and little in the way of miracle panaceas were important factors that undoubtedly diminished its appeal as a health institution for use by colonized Islanders. In Fiji, for example, hospitals were viewed by the indigenous Islanders as places of death. Victoria Lukere noted that the term "*Vale ni mate* was intended to mean 'house for the sick,' but could also be translated 'house of death,' and this reputation persisted long after the name was changed" (2002, 198). Fijian recalcitrance toward colonial

hospitals was matched on Guam by the Chamorro people's extreme reluctance to go beyond the white doors of the naval hospital.

Hospitals and the US Navy

The history of hospitals under the US Navy follows similar, though not identical, patterns. In 1811, the US Congress passed the Navy Hospital Act, which established the board of Naval Hospital Commissioners—a body that included the secretaries of the Navy, Treasury, and War departments. Although the board was given the task of procuring sites for navy hospitals, a number of factors delayed the opening of a navy hospital for two decades. Considerations including "internal divisiveness," and "economic instability, the lack of a well-organized navy medical corps, and the public attitude toward hospitals and medicine in general," forced the navy to wait until 1830 before its first hospital opened in Norfolk, Virginia (Brings 1986, 275, 289). Succeeding navy hospitals opened in Portsmouth, Virginia, in 1830; League Island, Philadelphia, in 1833; Portsmouth, New Hampshire, in 1834; Chelsea, Massachusetts, in 1836; and Brooklyn, New York, in 1838 (Crawley 1989, 149). However, these early hospitals functioned in a number of capacities, including "serving as a general hospital, home for aged and crippled sailors, a workhouse for dependents of those killed in action, and finally, a school." Hospitals used by the navy resembled almshouses, as did most hospitals in the wider United States (Brings 1986, 273).

As in the larger American society, general economic and social changes in the late nineteenth century led to an increased awareness of navy hospitals as places for health care rather than charitable relief. In 1898, following the start of the Spanish-American War, the US Congress formally founded the Navy Hospital Corps "in order to bring its hospital care up to the standards practiced in the Army and in major civilian hospitals" (Crawley 1989, 188). Beginning in the 1890s, the navy had embarked on a new expansion effort, working to "improve training, professionalize the officer corps, and cope with the new technology of warfare" (Crawley 1989, 15). As the navy grew, so did its medical department, aware of the need to establish "a modern medical establishment that could bring modern medicine, nursing, and pharmacy to meet the needs of the service" (Crawley 1989, 339). In 1908, as part of the modernization effort of the navy's Bureau of Medicine and Surgery, Congress established the Navy Nurse Corps, although women had been volunteering to serve in the navy as nurses since the war against Spain in 1898 (Crawley 1989, 21, 190). Still, as military medical historian Albert Cowdrey noted, not until the Second World War did the military attract larger numbers of American physicians. Finding it difficult to recruit doctors in the face of competition from an increasingly prosper-

ous civilian sector, the army and navy both attracted men who primarily "simply liked the military life or hoped to intern at military hospitals, or—when the Depression came in 1929—put on the uniform because they needed a government paycheck" (Cowdrey 1994, 11–12).

In Guam, the history of hospitals, as well as the history of western medicine, has been subsumed beneath the general history of both general and navy hospitals. Guam's historians have understood the introduction of western medical methods on Guam as characteristic of the advantages of modernity, particularly the advancements in science and technology that accompanied the American flag. For example, Medical Corps Lieutenant J L Enyart encouraged Chamorros to make greater use of hospital services provided by the naval government: "Medicine is a living thing—a living science which relates to the alleviation of diseases. It is constantly growing, constantly moving forward, and the one person who can place this science, this knowledge at your disposal, is your doctor. Visit him at our Naval Hospital. Faith in him and confidence in the knowledge he offers may mean the difference between a premature death and a long and useful life. Do not wait until the pain and distress of your particular affliction becomes unbearable" (Enyart 1935b, 329).

Here, as in numerous other examples, western medicine was held out to the Chamorro people simply as gifts of "science" and "knowledge," without consideration of the cultural biases accompanying such concepts. Navy doctors were concomitantly represented as medical messiah figures, offering long life to those who would have "faith" and "confidence" in them. These doctors and their medical technologies joined paved roads, electricity, and running water in the pantheon of gifts presented by the colonizer.

Enyart's exhortation to the Chamorro people demonstrated that the navy medical corps approached the introduction of hospitals and doctors on Guam primarily in terms of scientific knowledge and the advancement of technologies. Further, these medical methods were held exclusively by the navy, but were made available to its colonized peoples. Enyart's comments also suggested that even four decades into American rule, Chamorro people were loath to use hospital services. A closer look at the story of navy hospitals on Guam reveals that the introduction, growth, and expansion of hospitals in the new American colonies did more than simply replicate the wider history. Rather, as Robert Trennert has observed among the Navajo Indians, hospitals functioned "not only as an act of humanity but as an essential part of the civilizing process" (1998, 65). The introduction of hospitals and other western medical practices were an important part of the "civilization program on the Navajo reservation as they worked specifically to break native reliance on indigenous healers, [and], more broadly, to advance the

assimilation process" (Trennert 1998, 69). Similarly, Frantz Fanon theorized that, among colonized peoples, hospitals signified not only medicine and science, but more significantly the power of colonial governments to implement their invasive political, economic, social, and cultural structures and policies (1965, 125). "The statistics on sanitary improvements are not interpreted by the native as progress in the fight against illness, in general, but as fresh proof of the extension of the occupier's hold on the country" (Fanon 1965, 121–122). In Fanon's analysis, to the colonized, doctors form a part of the total colonial apparatus and are indistinguishable from other colonial officials. Certainly on Guam, more than simply treating diseases and promoting hygiene, navy doctors and the medical corps played a pivotal role in the attempt to assimilate Chamorros into the American political and cultural fold.

Leftovers and Laborers in Guam's Navy Hospitals

Prior to the founding of the Susana Hospital for women and children in 1905, the Naval Government of Guam had established the "leprosy colony" at Tumon, as well as dressing stations in the villages to administer to superficial wounds and other minor injuries, and a hospital for men. This men's hospital was founded in 1901 with a $3,000 allotment from the island government and another $1,750 solicited through local subscriptions (E Johnston 1971, 40). Even before it opened, Governor Seaton Schroeder attempted to appeal to potential Chamorro patients. In 1900, he issued General Order 24, stipulating that island hospitals would "receive patients without payment," with the salaries of all hospital staff members paid by the naval government. Encouraging Guam's native people to use the facilities, Schroeder proclaimed, "All those who are ill or suffering from disease are cordially invited to present themselves for care and treatment; more than that, they are strongly urged to thus avail themselves of the generosity displayed by the Navy Department of the United States and by the Government of the Island of Guam" (NGG GO 1900b, 1). As previous chapters have discussed, this link between naval philanthropy and medical care was typically overtly stated. The navy regularly touted its free medical services as evidence of its policy of "benevolent assimilation," as prescribed by President William McKinley, despite its very much greater concern to protect its own personnel against native diseases.

Following General Order 24, Schroeder's wife, Maria, began a local campaign to raise money for an island hospital. This first hospital was named the Maria Schroeder Hospital in honor of her "interest and effort," as well as the "benevolence and energy" that resulted in the project's realization (E Johnston 1971, 40; NGG *AR* 1904, 10). By April 1901,

Governor Schroeder was able to report to the assistant secretary of the navy, "The ground has been cleared, the materials are being collected, and the work of construction will soon begin" (1901, 1). On 10 June, "the corner stone of the Civil Hospital in Agana was laid by Mrs Schroeder . . . with the blessing of the venerable Padre [Jose] Palomo" (NGG *AR* 1901, 3).

Originally built with a capacity of twenty beds, the hospital was expanded with an operating room and a room for bacteriological work in 1906 (NGG 1908; NGG *AR* 1906, 4). Although the Maria Schroeder Hospital operated as a municipal hospital, in 1910 the Naval Government of Guam donated it to the federal government (E Johnston 1971, 41). From then on, it was collapsed into the US Naval Hospital, at the time composed of two segregated wards—Ward 1 for native men and Ward 2 for Caucasian males (NGG 1910, 1).

As Schroeder's General Order 24 demonstrated, the naval government was continually praised for its philanthropy toward the Chamorro people. For instance, Surgeon R L Nattkemper wrote, "The people of Guam are very fortunate in having such medical facilities and should at all times avail themselves of such, and co-operate to keep the Island clean and healthy" (1925, 7). The navy surgeons themselves were just as frequently the recipients of praise and appreciation. For example, Governor Schroeder wrote in 1905, "the naval surgeons of the station

Photo 18 Spare interior of the native ward in the navy hospital. *(Collection of the Richard F Taitano Micronesian Area Research Center)*

attend them without fee, and with devotion and skill worthy of the highest praise" (1905, 718). Despite such self-aggrandizing comments, the navy struggled to gain acceptance by the local community throughout its near half-century reign on Guam. Governor George Dyer commented in 1905 that the Chamorros were gradually and "[w]ith much difficulty" being taught by the medical officers to avail themselves of medical services. As he lamented, "This is a matter of very slow growth. The natives are still inclined to resort to their own methods, and especially the women are shy about consulting with the Medical Officers" (NGG *AR* 1905, 11). Numerous other accounts, such as this one by Navy Surgeon J G Ziegler, encouraged "further cooperation on the part of natives and inhabitants of Guam in taking advantage promptly of the medical facilities available to them." He beseeched Chamorro readers of the *Guam Recorder* to "COME TO THE HOSPITAL WHEN SICK, AND WITHOUT DELAY" (Ziegler 1925, 8, emphasis in original).

The Chamorro people's reluctance to take advantage of this seemingly extraordinary opportunity for free medical care might be understood partly in connection with other exercises of medical authority on the island. An antagonistic relationship had undoubtedly developed between the Department of Health and Charities and the Chamorro people as a result of numerous navy policies. For example, their Hansen's disease policy unquestionably contributed to the native people's avoidance of American health institutions. The heavy-handed, often criminalizing ways in which the navy handled its general health policies also reinforced Chamorro resistance to American medical operations. Moreover, the regulations regarding the activities of *pattera* and *suruhana* furthered a largely adversarial relationship between Chamorro "patients" and American doctors. Other factors such as the language barrier, Chamorro unfamiliarity with western medical technologies and scientific knowledge, and hesitations about entering colonial spaces must have reinforced native people's vacillation about hospital services. Avoidance of the navy hospital can also be linked to conflicting social and cultural norms regarding disease. Chamorro health practices situated disease and disability in a social, communal context, with entire *familia* involved in the curing and caring process. The individualized nature of western medicine conflicted with the Chamorro collective approach. Further, the native people's reliance on herbal healers—both male *suruhanu* and female *suruhana*—suggests that the traditional sources of healing continued to provide relief and corresponded with the cultural needs and expectations of Chamorros. The continuing vitality of both *suruhanu* and *suruhana,* with their combined focus on both natural and supernatural causes of illness, indicates that the primarily scientific, clinical approach to sickness was unfamiliar and discomforting.

Moreover, the hospital itself demanded of its patients a particular code of social and cultural behavior that would have been uncomfortable, if not outright alienating, for Chamorros. As historian Vogel noted of the relationship of hospitals in the continental United States to immigrant and rural-born patients, hospital rules reflected an expectation of vulgarity from patients. "Rules instructed the patient to behave himself. Rude language was forbidden, as was card playing. When physicians made ward visits, patients were to sit up silently in bed. Severely restricted visiting hours limited the patient's contact with friends and family, potential sources of moral corruption. The high masonry walls surrounding hospital yards did the same" (Vogel 1979, 162).

Socially constraining though Vogel's city hospitals were, navy hospitals were possibly even more restrictive. *Si difunta* Sister Mary Peter Uncangco described the navy hospital in Hagåtña: "The hospital looked so formal—the grass was always perfectly cut, the walls were always clean and white, the staff always wore clean clothes. No one wanted to go in there because you had to walk so perfect, not touching anything, not making noise, not making mess. It was like going inside the cathedral. You had to be on your best behavior or else you'll get in trouble" (1999).

The navy hospital represented an uncomfortable space—not simply because of the physical poking and prodding of unfamiliar medical

Photo 19 The Navy Hospital. *(Collection of the Richard F Taitano Micronesian Area Research Center)*

instruments, but because of the social norms expected of all persons entering its doors. As *si difunta* Sister Mary Peter recollected, the navy hospital represented a zone to be avoided whenever possible, primarily because it was one of those buildings in which the Chamorro language was banned from use; in order to encourage the speaking of English, navy officials mandated that all government buildings be English-only zones. Moreover, *si difunta* Sister Mary Peter's descriptions of the navy hospital reflect her feelings of intimidation under the gaze of hospital personnel. Her likening of the navy hospital to the Roman Catholic cathedral suggests a moral component of the hospital, as well as the discomfort caused by the social pressure of having to behave in manners defined as polite or refined. Both churches and hospitals inspired feelings of unease with their associated expectations of "proper" behavior. The observations of Sister Mary Peter indicate that to some Chamorros the Maria Schroeder Hospital was an inhospitable and uncomfortable environment, even for visitors.

Other ordinary issues—such as the types and quality of food served at the hospital—also contributed to Chamorro avoidance of free navy hospital services. In a report to the Navy Department's Bureau of Medicine and Surgery, Commanding Officer H B Price wrote that while food for both native and American patients "is prepared in the same kitchen, by the same cooks and in many cases in the same pot, . . . [t]he ration for the native patients principally consists of 'left overs' from the [Medicine and Surgery] ration made into stews and hash" (1925, 1). Little wonder then, that ninety-two-year-old *Tan* Maria San Nicolas Chargualaf, when questioned about her memories of the navy hospital, could recall little more than the unpalatable food—what would have been referred to in the Chamorro language as *na'babui* (pig food). *Tan* Maria, who as an adolescent had been confined at the navy hospital for treatment of hookworm, recalled that her mother would smuggle homemade food for her through a family friend who worked at the hospital (Chargualaf 1999). While Governor Price boasted that the use of leftovers reduced the cost of feeding natives to only twenty cents per meal, compared to seventy cents for the hospitalized military personnel, one must question both the sanitary consequences and moral implications of feeding leftovers to the native patients. On a nutritional level, one wonders about the safety of recycling leftovers; on a more significant ethical level, what does the use of leftovers say about the navy's perception of Chamorros? That leftovers were fed specifically to native people, rather than to all patients equally, suggests that a number of racial assumptions were at work. To *Tan* Maria's mother, the hospital food was simply inedible, although she and the other Chamorros were in all likelihood unaware that they and their family members were being fed *na'babui*.

Displeasure with the navy hospital can also be traced to the Medical Department policy of using able-bodied patients as free laborers on the hospital grounds. In a November 1916 letter of complaint to the secretary of the navy that was forwarded for investigation to Navy Judge Advocate General W C Watts, a group referring to themselves only as "THE GUAM PEOPLE" complained of their confinement and forced employment at both the hospital and private residences. According to the unnamed letter writer(s), "We have families, ranches, animals and plantations but we abandon them all for we are compelled to work in the Hospital" (GP 1916, 1).

Following this complaint, Judge Watts conducted an investigation and a Court of Inquiry in 1917, specifically addressing whether Chief Pharmacist's Mate Hiram W Elliott abused his position by employing patients for inappropriate purposes. The investigation revealed that female patients in the women's hospital were made to clean the floors in their wards, while men were dispatched for a variety of outdoor projects (Watts 1917, 9). Patient Juan Cruz Aguigui testified, "Sometimes I cleaned out the yards in the hospital and sometimes I worked in the [tuberculosis] hospital," while Pedro Taijeron Salumnamnam stated before the judge that he was forcibly employed at "cutting grass and cleaning the Naval Cemetery" (Watts 1917, 12, 14).

The board of investigation's statement of findings confirmed that "While at the hospital patients were given treatment and required to work only when able to do so and only about the hospital grounds." However, the board also ruled that Elliott had "never obliged patients or laborers to work," thus invalidating the charges brought before the Judge Advocate General (Watts 1917, 16–18). The conclusions drawn by the investigators, and confirmed by Governor Roy Smith, validated the navy's practice of exploiting hospital patients as sources of free labor, a procedure that undoubtedly deterred Chamorros from seeking hospital services. The mere fact that Chamorros protested enough to warrant such an investigation reveals that this was an incredibly offensive practice, as, for the most part, Chamorros reserved complaints for their family members' ears. Given the variety of tasks that the supposedly ill Chamorros were assigned to perform, it is no mystery that the hospital would not have been viewed with much regard.

The navy's use of leftovers, as well as their use of native hospital patients as laborers, provides a glimpse into the ways in which the navy used its medical philanthropy as a sort of moral leverage against charges of dehumanization and exploitation of native patients. Because medical services were provided free of charge to the Chamorro people, the navy assumed it had a license to treat them in ways that certainly would not have been tolerated among a "better class" of patients. To the Chamorros, the navy's self-promoting "free" hospital services were not without cost after all.

To Help the "Little People of Guam"

While first the Maria Schroeder Hospital and, after 1910, the Naval Hospital, attended to both Chamorro and American men, the establishment of the Susana Hospital in 1905 created a parallel institution for women and children. Prior to the founding of the Susana Hospital, Governor George Dyer recognized a gender disparity in medical services in his 1905 *Annual Report of the Naval Government of Guam.* He wrote to the secretary of the navy:

> One of the most important improvements necessary is an extension, in the form of a separate building, for a woman's ward. . . . A separate building should be constructed at the earliest possible moment, suitably fitted for the use of women, and provided with women nurses. This would serve to increase the confidence of the native women in the skill of the doctors, and incidentally be a considerable factor in the health of the people. . . . The extension and equipment of this hospital offers an opportunity for benevolently inclined Americans to assist in a philanthropic work, the benefit of which to these simple and helpless people can not be adequately expressed. (NGG *AR* 1905, 11)

Dyer's comments reflect a number of important assumptions about Chamorro women and the navy's perception of itself as protector and provider to the weak and needy. The navy's treatment of this hospital for women differed from that of the men's hospital, which received comparatively little fanfare in its opening or operations since hospitals for its enlistees had already become institutionalized within the navy bureaucracy. While the navy ordinarily handled male patients, Guam provided a unique opportunity to extend health care to nonmilitary females. In lending assistance to women, therefore, the Susana Hospital was categorized as "philanthropic," expressing the navy's view of women as helpless and innocent. More important, Dyer's message suggests that the navy recognized the importance of incorporating Chamorro women into the colonial government's health regime, and that the navy believed that women's health care should be separate from men's.

Given the assessment that the island needed a hospital specifically for women and children, Governor Dyer's wife, Susan, soon began soliciting funds for such a project. She formed the Hospital Women's Aid Society, which was renamed the Susana Hospital Association following the establishment of the hospital (E Johnston 1971, 41). The hospital was named after Susan Dyer for her pivotal role in initiating the project. She diligently raised funds both on Guam and in the continental United States, collecting enough money to finance this pet charitable project. Among the donations was a $10,000 grant from the Russell

Sage Foundation of New York that was formally transacted in 1907. Susan Dyer obtained this allotment directly from Margaret Olivia Sage, Russell Sage's widow, who established the foundation after her husband's death in 1906 (De Forest 1907, 1).

Though founded as a private hospital run by the association, the Susana Hospital was staffed by American navy doctors and by an initial complement of volunteer military wives and a handful of native women trained by Mrs Norman McLean, wife of one of the navy doctors (Perry 1939, 364).[1] The ten-bed hospital opened in October 1905 under the direction of Assistant Surgeon McLean, initially in a building rented for $35 a month. The structure was referred to as "the convent" because it had once housed *Pale'* Jose Palomo, Guam's only Chamorro Roman Catholic priest (NGG 1910, 1). Unlike the government-owned and run Naval Hospital, the privately operated Susana Hospital charged its patients a fee. Though the charge was considered small by the navy, it was apparently prohibitive enough to restrict native admissions. In a 1908 health report, Surgeon M S Elliott of the Department of Health and Charities commented that in the Susana Hospital, "The average number of patients is very small, between three and four. At present there are two patients in the hospital. . . . Patients are charged fifty cents a day, which is one of the reasons given why [there] are not more patients" (NGG 1908, 5).

In order to compensate for a shortage of funds, the Susana Hospital opened a pharmacy, which operated a soda fountain and also sold drugs

Photo 20 Original Susana Hospital structure, circa 1905. *(Collection of the Rockefeller Archive Center)*

and souvenir items such as native handicrafts for American tourists (NGG *AR* 1915, 16; E Johnston 1971, 42). Other funds were generated, such as annual interest of roughly $600 from the Russell Sage Foundation trust and the rental of "one private room used by Europeans" (NGG *AR* 1915, 16; Dorn 1909a, 4). The question of public or private ownership of the hospital was muddled from the start, largely because of numerous intersections between navy policies, navy personnel, navy wives, and private interests. For example, physicians' services at the Susana Hospital were "furnished free of all cost by the medical officers of this station" (NGG *AR* 1906, 5). It is difficult to ascertain from the archival records the degree to which navy wives like Susan Dyer were involved in the operation of the hospital beyond their fund-raising activities. From an examination of the membership of the Susana Hospital Association Board of Directors, it appears that the navy wives deferred all authority to the island's male leaders. Board membership was defined strictly to comprise the governor of Guam as president, the senior island judge or senior naval chaplain, one of the Catholic priests, the chief of industry, the senior naval medical officer as hospital superintendent manager, and a civilian secretary-treasurer (USN 1921, 17). With a board membership consisting primarily of persons attached to the navy government, the distinct impression was that the Susana Hospital operated as a naval hospital, except for the private funds obtained from the Russell Sage Foundation.

This confusion over whether it was a private or a public hospital came to the forefront during a 1909 visit to Guam by a Navy Hospital Board of Inspection. Governor E J Dorn explained to the secretary of the navy, "A misapprehension seems to have existed in the minds of the Board of Inspection as to the status of the Susana Hospital. The Hospital, as was stated at the time of the Board's visit, is a private hospital founded in October 1905, by an association of residents, and others, under the title, 'THE SUSANA HOSPITAL ASSOCIATION'" (1909a, 3).

Ironically, only ten months after Dorn's explanatory letter, the Susana was officially absorbed into the navy hospital bureaucracy. In December 1909, a major earthquake destroyed the Susana Hospital building. When the navy promptly stepped in to rebuild it, the Susana became incorporated under the auspices of the navy hospital. Following the earthquake, the secretary of the navy "agreed to appropriate $6000 from the Hospital Fund for the construction of a hospital to which women and children should be admitted, provided that it should be known as the 'Naval Hospital', Guam, MI" (NGG 1910, 2–3). Thus in January 1910 the Susana Hospital Association ceded a portion of its property to the navy with the provision that "a hospital 'for the use of women and children' should be built upon it" (NGG 1910, 3). On 29 January 1910, Navy Surgeon General Presley Rixey informed the secre-

tary of the navy that the government of Guam had renamed the facility the "Naval Hospital, Island of Guam" (1910, 1). This new wing of the US Naval Hospital of Guam was referred to as Ward 3, and provided the same services as the old Susana Hospital. Because it was now part of navy hospital operations, services were free of charge.

In 1911, however, ostensibly because demand for obstetrical and gynecological services had increased beyond what was available in Ward 3, the Susana Hospital Association constructed a new Susana Hospital (SHA 1936, 2–3). This second Susana Hospital was built on the association's remaining land in Hagåtña, which had not been turned over to the navy. Like Susan Dyer's original project, the new Susana Hospital charged fees and housed its patients in private rooms, unlike the dormitory-style accommodations in the Naval Hospital's Ward 3. In 1917, a kitchen was added, along with more gynecological and operating-room equipment. The extensions were funded by a second donation from Margaret Olivia Sage—a cash contribution of $5,000 (SHA 1936, 2).

Numerous accounts state that the growth of the Susana Hospital was necessitated by an increased need for obstetrical services. However, some suggest that the new hospital also served the interests of an expanding *mannakhilo'* (elite Chamorros). For example, the 1928 *Sanitary Survey of the Island of Guam* reported that "persons wishing private rooms" gravitated toward the Susana Hospital, particularly "natives of

Photo 21 Navy Hospital in foreground and Susana Hospital in background. *(Collection of the Richard F Taitano Micronesian Area Research Center)*

the better class" (NGG SR 1928, 1). According to the unnamed author of the article, as "the demand by individuals able to pay for private rooms and services became more apparent, [the Susana Association] decided to construct the present hospital building on the northwest corner of their remaining land." The Susana's elitism served a class of primarily Hagåtña-based Chamorros, some of whom had intermarried with American military personnel and formed part of an "upper class."[2] Except for a handful of Chamorro families who operated small village stores or beauty shops, or had family members working for the naval government as teachers, nurses, or office clerks, few Chamorros had regular access to cash. For the prosperous few, having access to the most modern conveniences of the Susana Hospital perhaps enhanced their sense of privilege.

For example, my grandmother, *si difunta* Maria Leon Guerrero Perez, chose in 1940 to deliver her first child, my mother, Fermina Perez Hattori, in the Susana, rather than with the assistance of a *pattera*. She chose the Susana Hospital in part because she felt it would offer her maximum comfort and protection, but also because, as a result of my grandfather's employment by the naval government, they could afford the expense (F Hattori, pers comm, 31 July 1999). *Nana* believed, furthermore, that the hospital represented modernity, cleanliness, and advanced science. However, after my mother's birth my grandmother returned to *pattera* for her next four pregnancies. My mother never learned precisely why, but assumed that other options proved more attractive. Since her sisters and cousins had midwives deliver their children, my grandmother apparently felt confident that such traditional practices were safe.

On the other hand, while some were attracted to the Susana Hospital because of its elitism, other Chamorros avoided it partly because of its perceived *mannakhilo'* status. Hagåtña resident Sister Mary Peter Uncangco supported this notion of the Susana catering to elite Chamorros when she stated, "We would never be a patient there. That's for the rich people" (1999). Similarly, Governor L S Shapley in 1926 said of the Susana Hospital that "a great majority of the better class of native women enter this hospital" (NGG *AR* 1926, 7). In some of these comments, tensions between Chamorro women of different economic classes are implied. In the process of choosing the Susana Hospital, *mannakhilo'* women expressed their elitism, desiring the privacy of their own rooms, even at a relatively high cost. Concomitantly, by steering clear of the Susana, other Chamorro women conveyed their avoidance of the *mannakhilo'*. As Sister Peter's comments suggest, some nonelite Chamorros attempted to avoid interacting with native elites, much as they did with colonial officials. Such evasion tactics hint at a degree of class tension between Chamorros of divergent economic status.

For villagers outside the capital of Hagåtña, uneasiness about the hospital was even more intense. For Jose Torres, a native of the southernmost village of Merizo, considered one of the more culturally conservative villages on the island, traveling to Hagåtña was an infrequent occasion, and entering its new, clean, and modern American buildings was especially daunting. Torres's recollection of the Susana was that "it was made for the Hagåtña rich. The rest of us didn't have that kind of cash to pay for the rooms there" (1999). Instead, *Tan* Maria San Nicolas Chargualaf, who moved from Hagåtña to Talofofo early in her life, explained that she, her relatives, and fellow villagers from the southern part of Guam would be much more likely to visit a *suruhanu* or *suruhana* if in need of medical care. Choices were made, not in the name of science and medicine, but because of issues such as language compatibility, proven reliability, and acceptance of payment in the form of produce and other food items rather than cash (Chargualaf 1999).

The Susana Hospital's role of promoting or exacerbating growing class distinctions between Chamorros with access to American dollars and those without did not emerge only through admittance to the hospital as paying patients. The Susana Hospital's role in training native women as nurses also contributed to notions of class and affluence, as well as to surfacing tensions between elite and nonelite native women.

Women, Nurses, and Domestic Training

The navy training school for native nurses was created in 1907, partly to instruct potential midwives, but also to develop a body of native nurses who could tend patients in the new Susana Hospital. Under the tutelage of Mrs McLean, "Several native young women [did] remarkably well" in training (NGG *AR* 1906, 5). Governor Templin Potts commented in 1907, "The native nurses at the Susana Hospital for women and children are satisfactory. . . . [A]ll things being considered they are probably more efficient than imported trained nurses would be. Living in their normal habitat and understanding the prejudice and peculiarities of their own people, they have immeasurable advantages" (NGG *AR* 1907, 8).

Potts's message suggests that one of the navy's intentions from the outset was to employ native nurses as intermediaries, recognizing that it would be difficult to change native notions of health and hygiene without intimate access to Chamorro families. Native nurses' ability to understand the Chamorro culture, or in Potts's words, "the prejudice and peculiarities of their own people," added to their potential medical value. Once native women entered the training program, navy officials from governors to doctors to nurses frequently commented on the "satisfactory," though limited, aptitude of these native nurses. For example,

in 1913 navy nurse Elizabeth Leonhart, writing in the *American Journal of Nursing* of the six native nurses on Guam, described them as "very gentle and willing, but absolutely indifferent to many things which seem extremely essential to us" (1913, 128). Another navy nurse wrote, "We always find them courteous, kind, willing and never tired of doing well, which is the spirit of a real nurse. Of course their standard as graduate nurses cannot equal that of the American graduate nurse" (Bennett 1925, 198). Navy Captain Lucius Johnson, who served as Guam's assistant surgeon in 1917, stated that the native nurses "were most tractable and kindly in their treatment of the sick, but the amount of knowledge that they could absorb was limited" (1942, 996).

Blame can hardly be placed entirely on the shoulders of the native students. First, language barriers proved a significant obstacle in their education and training. In 1914, seven years after the debut of the training program, Nurse Leonhart wrote, "Our knowledge of the language of the Island increases, but our communication with native nurses and patients depends more on the language of signs. Our hands now obey our minds with marvellous rapidity and our gestures are no longer stiffly made" (1914b, 988).

Even two decades later, in 1927, the persistent language barrier remained a formidable obstacle to instruction, causing the naval government to lengthen the nurse-training program from two to three years. Chief Nurse Hannah Workman, in a letter to the island's com-

Photo 22 Chamorro native nurses, circa 1910–1920. *(Collection of the Smithsonian Institution, Office of Printing and Photographic Services)*

manding officer, defended this decision on the grounds that "two years is too short a period of time in which to teach the native student the details of nursing thoroughly. The students' difficulties in mastering the English language together with their limited capacity for understanding and grasping technicalities make their development in proficiency and dependability too slow a process to be accomplished in the prescribed two years" (Workman 1927, 1).

Along with the language barrier and the perceived difficulties of teaching foreign technologies to the Chamorro student nurses, it might be asked whether the nature of the work they were required to do was also an obstacle to the training program's efficacy. Chief Nurse Workman conceded that in the "early years of its life the native nurses acted more as maids and helpers to the staff of navy nurses than as nurses" (1930, 127). According to Chamorro Nurse Olivia Guerrero, the first native nurses were instructed in hygiene, patient care, bed making, bathing, alcohol rubs, and bandaging (1977, 24). Amanda Guzman Shelton, who entered the training program in 1922 and served as Chief Native Nurse from 1934 to 1948, stated that her primary instruction was in making patients' beds, bathing and feeding patients, and distributing medicine (quoted in Bordallo 1965, 16). Likewise, Nurse Maria Garcia of Agaña Heights, who graduated in 1935 from the native nurse training program, reported that aside from attending lectures, her assignments required that she "mopped floors, cleaned bedpans, and made beds" (quoted in Mallo 1978, 30). *Tan* Joaquina Herrera, a *pattera* who graduated from the native nurse program, noted that in her 1938 training program, she learned "to clean the bathroom and change the bed linens, bring food from the galley to the patients, take patients' temperatures, and give patients a bed bath and brush their teeth" (Cruz 1997, 8). The words of navy nurses such as B C Bennett, who said in 1925 that the standards of native nurses "cannot equal that of the American graduate nurse," and Chief Nurse Workman, who wrote in 1930 that "the native nurses acted more as maids and helpers to the staff of navy nurses than as nurses" confirm that definite distinctions were made between the skills and responsibilities of navy and native nurses (Bennett 1925, 198; Workman 1930, 127). The systematic racial segregation of the two groups of nurses points to wider navy practices of discrimination that caused tensions in the local community.[3]

Treating the native nurses more as janitors than as nurses must have been offensive to at least some of them—and perhaps helps to explain the low rates of enrollment in the training program. The navy nurses themselves were put in the unfortunate position of not only having to teach, but having to teach non–English-speaking students. Perhaps it is understandable that the Chamorros were often employed for simple, labor-intensive tasks that required few detailed instructions. Yet such

assignments raise the question of racism toward the native nurses. Were the navy nurses also obliged to mop floors and clean bedpans? It is easy to speculate that the availability of native nurses spared the navy nurses from some of the more distasteful or laborious tasks.

Formally, however, by 1937 the nursing school curriculum consisted of lectures by navy doctors in "Theoretical Nursing, Hygiene and Sanitation, Anatomy, Physiology, Materia Medica, Drugs and Solutions," along with lessons from the navy chief nurse in "Practical Nursing, Ethics, Etiquette, Dietetics and Bandaging" (*GR,* Sept 1937, 27). Including topics such as etiquette alongside more appropriate medical subjects reflected the patterns of US nursing programs, where Guam's navy nurses had, of course, received their training. Prior to the founding of the Navy Nurse Corps in 1908, Navy Surgeon William C Braisted, who served as surgeon general from 1914 to 1920, defended the value of women nurses in wartime, based on his observation of Japanese nurses during the Russo-Japanese War in 1905: "The Japanese woman has occupied so long a position so subordinate and has been trained to an idea of obedience so absolute that they are specially fitted for service in military establishments" (quoted in Crawley 1989, 213). Braisted believed that, in time, American women could be instructed and disciplined to emulate the work of Japanese nurses (Crawley 1989, 213). As his comments indicate, naval views of women and the work they could contribute were severely limited by sexist notions of propriety and domesticity. Accordingly, on Guam, native nurses were not perceived by the navy as powerful, influential, and professional women but as subordinate women who could learn proper modes of sanitation and health care in their navy training.

In the United States, nursing education in the late nineteenth century began to reflect "Victorian standards of womanhood" (James 1979, 212). As Janet Wilson James perceived in her study of the professionalization of nursing in the 1890s, "Middle class habits of neatness, punctuality, truthfulness, study, method and order, personal hygiene, and table manners were inculcated as fundamentals" in nursing education programs (1979, 222–223). Likewise, on Guam these standards of behavior were taught to Chamorro women partly, if significantly, through the nursing program. Issues of etiquette and propriety continually arise in naval descriptions of native nurses. Chamorro nurses were continually evaluated as much for their genteel appearance as for their job performance. In Nurse Leonhart's description of the Susana Hospital's six native nurses, she wrote that they "dress in white, and their foot wear consists of soft 'mules.' On festive occasions they don stockings and shoes and suffer all the tortures of unaccustomed compression with the same joyous bravery we display in satisfying our vanity" (1914a, 296). Similarly, Nurse B C Bennett judged Chamorro women to be "excep-

tionally good nurses," but added, "how attractive they look in their neat uniforms" (1925, 198).

Not only were the native nurses often described as attractive, but they were also frequently represented as coming from a higher class than the average Chamorro. For example, the navy surgeon general's 1904 annual report referred to the native nursing students as representing "an intelligent class of women" (USN *ARSG* 1904, 4–5). Navy Nurse Della Knight described the Chamorro students in the program as coming from "the better class of native girls" (1922, 738). And on its formation in 1905, the Susana Hospital Association listed one of its objectives as to "hunt up suitable women for nurses" (E Johnston 1971, 41). Given that American industrial society was concurrently attempting "to institutionalize women's traditional domestic functions," it is hardly surprising that the navy also aspired to identify and capitalize on a class of native women who might willingly and effectively translate "traditional domestic functions" to Chamorro society at large (James 1979, 202).

Ironically, however, while the navy may have considered its native nurses to represent the class of elite Chamorros, the assignment of these women to laborious tasks such as mopping floors probably discouraged most *mannakhilo'* women from enlisting. For example, Fermina Perez Hattori maintained that most elite Chamorro women would not have considered nursing an occupation appropriate to their status (pers comm, 19 Aug 1999). Primarily because nurses were required to humble themselves by serving others and doing strenuous tasks, that

Photo 23 Chamorro native nurses, circa 1930. *(Collection of the Smithsonian Institution, Office of Printing and Photographic Services)*

occupation was less popular among the *mannakhilo'* than a career in education or in clerical work. Few among Guam's native nurse corps can be found bearing the surnames of elite Chamorro families such as Martinez, Bordallo, or Calvo. Using native nurses as menial laborers in the hospitals thus created a dilemma for the navy in its attempts to showcase these women as elite. The service-oriented work of nurses would more likely have been tackled by nonelite women seeking to augment their family's income.

It is difficult to discern the degree to which lessons in domesticity or expressions of elitism informed the decisions of Chamorro women who did enlist in the nurse-training program. Some, such as Amanda Guzman Shelton, were drawn by the nature of the work. Exposed to the nursing profession as a child, when she frequently brought food to a hospitalized aunt, Shelton simply enjoyed the work of nurturing and caring for the sick (PSECC 1995, 147). Others, such as Soledad Pablo Tenorio, decided to join the training program in order to maintain close ties to girlfriends who had enrolled (PSECC 1995, 295). Still others likely enrolled because of the challenge the program presented. For these nursing students, described by Nurse J Beatrice Bowman as "the most intelligent girls from different parts of the island," the nursing program may have been viewed as a rare opportunity to advance their curiosity and academic interests (1924, 690). For some young women, the nursing program might have answered the complaint registered by Maria Perez, in a 1920 *Guam News Letter* article, that for women on Guam, "there are no schools there to prepare us for anything except basket weaving and cooking" (quoted in PSECC 1994, 75). Nursing provided some with an opportunity to progress beyond the prevailing navy norms for Chamorro women. Parallel conclusions were drawn by historian Donald Denoon, whose research in Papua New Guinea has illustrated that opportunities in nursing provided New Guinea women with "some measure of public distinction [at a time when] the colonial state made no attempt to train female staff of any kind" (1989, 105).

In attempting to introduce nursing to Chamorro women as part of a budding domestic economy, the navy sought to emulate historical developments in late-nineteenth-century industrial American society. Women of the middle class sought employment, and, in the analysis of historian Christian Maggs, "Contemporaries sought ways of opening up the world of work to such women, whilst retaining some of the trappings of middle-class women's non-work experiences. Nursing, as well as teaching and some areas of commerce, were areas of employment which were potentially able to absorb women from the middle classes looking for entry into the labour force" (1993, 1320).

For the native nurses on Guam, the Susana Hospital became in many ways a surrogate domestic space where they were charged with respon-

sibilities such as changing beds, serving food, and maintaining order. Ironically, the desire to promote domesticity may not have been realized in the way the navy desired. The great majority of nursing graduates resisted confinement altogether by leaving the hospital as soon as their training was completed, either to work in the villages as *pattera* or simply to return to their family environment. The navy government's requirement that native nurses remain unmarried must have deterred many young Chamorro women from pursuing the occupation, as motherhood was an integral component of a woman's identity. Many more women simply chose not to enter the nursing program, despite a variety of lucrative enticements such as a preferential hiring status and pay increases for nursing-school graduates applying for teaching positions (NGG 1919, 8).

For those women who left the nursing profession to work instead as midwives, the domestication and confinement they faced in the Susana Hospital were radically overturned after they left its walls. Once outside the Susana, the *pattera* had virtually unrestrained mobility, respected social status, and economic security. For those who remained dedicated to the nursing profession, their subversion of domesticity became most apparent with the outbreak of World War II. Once US Navy personnel were forced to leave Guam in 1941 for prisoner-of-war camps in Japan, the native nurses were the only health-care providers left behind, and they served as the caretakers of the Susana Hospital. Chamorro Nurse Maria Garcia recalled that she and a few other nurses were ordered by the Japanese military to stay at the hospital. There she worked at the pharmacy, dispensing and at times making medications (Mallo 1978, 30). Chief Native Nurse Amanda Guzman Shelton "was provided with a whole store of medical provisions, so that she could take care of the wounded and sick" (quoted in Bordallo 1965, 18). Ultimately, after the navy doctors and nurses were removed from the island, and after the Susana Hospital was destroyed by war, the native nurses, as well as the *pattera, suruhana,* and *suruhanu,* were the only medical authorities to whom the population could turn. Having absorbed the knowledges and technologies transmitted to them by the navy in order to serve their own social and economic agendas, women from a variety of social classes used their opportunities in a number of ways. Neither Susan Dyer nor Margaret Olivia Sage could have anticipated that their benevolent ventures on Guam would undergo such upheavals.

Philanthropy and Colonialism

Histories of the Susana Hospital, written principally by navy employees, native nurses, or other persons affiliated closely with the hospital's operations, typically lavish praise on Margaret Sage for her generosity

to the women and children of Guam under the auspices of a charity named for her husband, who died in 1906.[4] The Russell Sage Foundation was established by Margaret Sage in 1907 for "the improvement of social and living conditions in the United States"[5] with more than $35 million set aside by her husband. It was one of only eight foundations in the United States at the time and the third largest in terms of monetary holdings (Glenn, Brandt, and Andrews 1947, 3, 13). After being contacted by Susan Dyer personally, Margaret Sage had created the Susana Hospital trust before the Russell Sage Foundation was officially incorporated. On its formal incorporation on 11 April 1907, Margaret Sage transferred custodianship of the Susana Hospital trust to the foundation's trustees, making them "responsible for the investment of the capital of the trusts and the transfer of income to the beneficiaries" (Glenn, Brandt, and Andrews 1947, 37).

Following Margaret Sage's second donation of $5,000 in 1915, Susan Dyer wrote, "This new thought for those faraway and helpless women and children will strengthen the tie that links their thoughts and prayers with your name and I am sure, some day, somewhere, they will come crowding about you with gratitude in their eyes from which the earth mists of sorrow, pain, and want have gone forever" (1915, 1). In her sentiments, one detects not simply appreciation, but also pity for the Chamorro women in their perceived wretchedness. Writings on medical philanthropy on Guam repeat certain themes in Dyer's letter. The image of helpless women suffering in pain and sorrow, appealing for relief, and ever appreciative of humanitarian efforts, informs many discussions about the founding and subsequent operations of the Susana Hospital. No mention is made of a thriving body of native health practitioners, primarily composed of respected, influential women such as *pattera* and *suruhana*. Nor is there mention of the context of American colonialism under which such representations of downtrodden natives were constructed. Instead, Margaret Olivia Sage is treated to a graphic image of Chamorro women whose eyes are filled with the "earth mists of sorrow, pain, and want" (S Dyer 1915, 1).

The naval records are also silent about the ways in which philanthropic efforts such as the Susana Hospital fit quite comfortably into the larger colonial program of assimilation and acculturation. As scholar Kathleen McCarthy concluded of charitable trusts at the end of the nineteenth century, US philanthropists "shift[ed] their goals from almsgiving to fundamental social change" (1984, 3). Surely the Susana Hospital illustrates nicely some of the ways in which seemingly altruistic giving served purposes far beyond the health-care needs of Chamorro women and children. Much medical philanthropy in the past century focused on abating the impact of "escalating medical costs" attributed to such expenses as new and sophisticated equipment, opening addi-

tional facilities, paying salaries, or simply keeping wards open (Bynum 1993, 1482). However, at the Susana Hospital, acts of medical philanthropy by the Russell Sage Foundation and others introduced an entirely new system of medicine and scientific authority, privileging the practice of medicine as a private, individualized affair, rather than as a social, communal one. They insinuated the power of the medical establishment and the overarching authority of the naval government. Accolades such as those heaped on Margaret Sage failed to address the complex issues raised by her act of charitable giving.

Susan Dyer, likewise, is typically saluted as one of the notable female humanitarians of Guam history. In a posthumous article regarding her organization of the Susana Hospital, an anonymous columnist for the *Guam Recorder* wrote, "There was no question that the people needed the institution, but although it is quite possible that some of them realized this fact, no one else had the necessary initiative to start any movement of a similar nature. Mrs Dyer not only had this initiative but she also had the ability required for its accomplishment" (*GR,* May 1924, 7). The hagiography of Dyer that informs virtually every written history of the Susana Hospital typically incorporates both affection for her and a measure of sympathy for the unfortunate Chamorro women and children. For example, Emilie Johnston's 1971 survey of health care on Guam credits Dyer for showing "concern" for the "nonexistent" sanitation on the island and the "many illnesses" suffered by Guam's people, particularly the "unprovided for" women and children (1971, 41).

Furthermore, the navy is frequently depicted as the valiant defender of the weak and powerless, a representation that began as early as 1900, when Captain Richard Leary declared his desire to protect "the well-earned reputation of the American Navy as champions in succoring the needy, aiding the distressed and protecting the honor and virtue of women" (NGG GO 1900a, 1). The military stewardship of the Susana Hospital after 1909 therefore fulfilled, at least rhetorically, Leary's intention of "protecting the honor and virtue of women." Demonstrating the persistence of this theme of navy gallantry after the Susana Hospital Association transferred its control of the hospital to the navy government, a 1914 *Guam News Letter* article signed only with the initials "J L N" reported, "At a single stroke the bulk of the burden of providing hospital accommodations for the feminine portion of a population of 12,000 souls, which it had met so nobly yet so feebly, was lifted from its shoulders by the great resources of the kindly disposed Federal Government" (*GNL,* Dec 1914, 2).

The Susana Hospital provided the navy with an ideal opportunity to cultivate its notions of philanthropy, partly because of the powerful rhetoric of protecting helpless women whose representations it con-

trolled. The navy also took full advantage of its role as benevolent colonizer, with no apparent ulterior motive in this act of altruism. Other examples of navy charity were more easily challenged as self-serving efforts aimed at protecting its own establishment. In particular, its "charitable" efforts toward Hansen's disease patients could hardly be viewed as being made simply in the interests of the patients themselves. Even navy officials admitted that they were protecting themselves by expelling these patients from the island. However, in the case of Guam's women, the navy had little to gain directly from embarking on a women's hospital project. In so doing it could validate its philanthropic work as an exemplary, seemingly pure, form of humanitarianism and, more significantly, progressive imperialism.

The Susana Hospital provided an ideal opportunity for navy wives to become actively involved in civic projects. Just as hospitals provided a comfortable domestic space for middle-class women in the United States to find employment, so did they provide a fitting opportunity for officers' wives to expend their humanitarian energies. Aside from directly soliciting funds on behalf of the Susana Hospital, military wives became involved in other projects for the same cause. For example, in 1914 the "ladies of the Naval Colony" sponsored a "Charity Fair" whose object was "to obtain funds for the interior fittings and equipment of a modern diet kitchen in connection with the Susana Hospital" (*GNL,* Dec 1914, 2). The navy administration came to expect the active philanthropy of its employees' wives, particularly in relation to the women's hospital. In the process, as anthropologist Margaret Jolly has noted of colonizing women in Fiji and Vanuatu, middle-class white women who landed with their husbands in the Pacific were typically "privileged not just as idealized models of maternity but as active instructors or educators of 'other mothers'" (1998b, 178).

On Guam this privileging of military wives involved more than Dyer's philanthropic efforts and extended also into the realm of proper motherhood. Yet military wives largely seem to have been reluctant to assume this privileged position. Perhaps indicating that military wives succeeding Susan Dyer had retreated to the safety of their private homes, a 1928 *Guam Recorder* article appealed for their increased charitable activities: "Local conditions lack so much that could be improved upon if the Americans, particularly the American ladies, who come to Guam would only help a little. If they would only give up one afternoon a week, or one a month, and meet for the purpose of discussing and recommending some little improvement that might be accomplished if presented to the authorities by a body of interested wellwishers" (*GR,* Aug 1928, 100). It would seem that the US colonizing mission on Guam demanded the efforts of "American ladies" as much as their navy husbands.

The End of the Susana

With the coming of World War II to Guam in 1941, all of the naval hospitals were closed as the Japanese Imperial Army invaded and occupied the island. Following the reoccupation of Guam by the US Navy at the end of the war, the Susana was officially subsumed under the operations of the new Guam Memorial Hospital. In the original authorization that transmitted the $10,000 contribution from the Russell Sage Foundation in 1907, foundation attorney Robert de Forest wrote that should the hospital cease to exist, the Susana Hospital Foundation shall have the "power and authority to dispose of the income of said fund as may seem to them to best serve the interests of the native women and children of Guam" (1907, 1). Thus in 1953, the Russell Sage Foundation turned over the principal amount of $10,000 to the Guam Memorial Hospital, ending a half-century of philanthropic giving (SCNY 1953).

Ironically, although the Susana Hospital was created for Chamorro women through the efforts of navy women (Susan Dyer and the Hospital Women's Aid Society) and funded by an American female philanthropist (Margaret Sage), the male-dominated navy medical corps assumed medical responsibility and moral authority over Chamorro women's bodies. Ultimately, despite the prominent role played by military wives in the creation of the hospital, their actions inadvertently entrenched more deeply the control already held by their husbands-in-power. This irony correlates with the findings of scholar Christine Dureau, whose study of Solomon Islands women's fertility revealed that

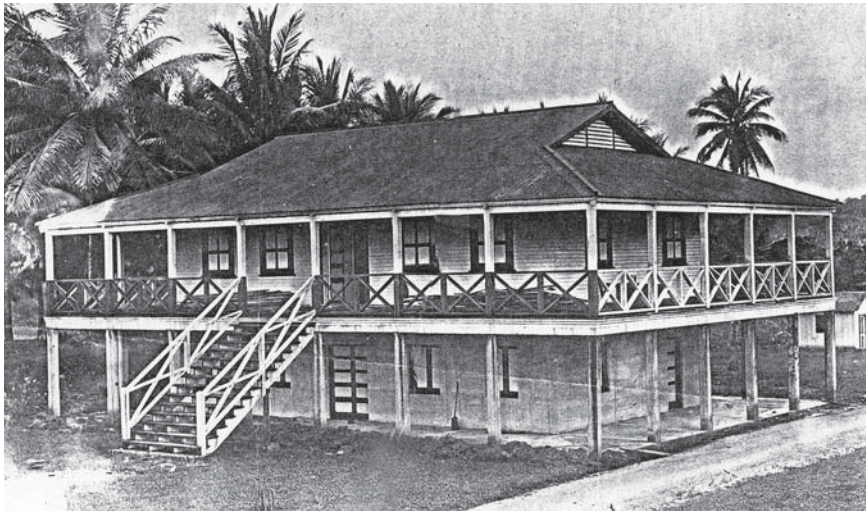


Photo 24 Susana Hospital, circa 1930s. *(Collection of the Rockefeller Archive Center)*

"Under missionary influence, birth and infancy were progressively relocated from forest to clinic. Despite its undoubted health benefits, this was at the cost of subjecting women's reproduction to the surveillance of both husbands and medical personnel" (2001, 239). On Guam, once their few attempts at active philanthropy were initiated, the island's navy wives seem to have disappeared from sight, content to live their lives outside the civic center.

With the navy wives obscured by their public inactivity, the very women who were consistently represented as beleaguered and downtrodden seem to have become the central female figures in the navy's health program. Rather than marginalizing Chamorro women as the objects of philanthropy and domesticity, projects such as the Susana Hospital and the nurse-training program facilitated a rise to respect and authority for a good number of them. During their tenure as nurses in the hospital, a number of Chamorro women defied easy domestication by carving out for themselves positions of medical authority and social status. Working under a thoroughly patriarchal government system run by the US Navy, Chamorro women found opportunities as nurses and empowered themselves to make something out of what could have been a servile position. Considerable evidence of Chamorro women administering medical care during the World War II occupation of Guam suggests that the native nurses were no mere maids to the navy nurses and doctors. Rather, they syncretized their new knowledge with older cultural definitions of caring and service deployed in the assistance of their fellow Islanders—not as substandard medical specialists, but as respected caregivers.

In the next chapter, the responses of children to some of the most intrusive colonial policies on Guam, particularly in the context of the navy's hookworm eradication program, are examined. Just as previous chapters have illustrated, numerous connections between national policies, military objectives, corporate interests, and native desires for political, social, and economic gain can be discerned from the experiences of Chamorro children as hookworm patients.

Chapter 6
Hookworm and Hygiene: Chamorro Children and the Clinical Gaze

> *ulo':* Worm, germ, bacteria, caterpillar, maggot.
> Donald M Topping, *Chamorro-English Dictionary*

> hook·worm: *n:* any of several parasitic nematode worms (family Ancylostomatidae) that have strong buccal hooks or plates for attaching to the host's intestinal lining and that include serious bloodsucking pests.
> *Merriam Webster's Medical Dictionary* 1995

In May 1998, a week before I left to conduct my primary research in the various archives in Washington, DC, I dined at a restaurant in Honolulu with a few members of the Lujan family, visiting from their home in Barrigada, Guam. Toward the end of the evening, I got into a casual conversation with the elder of the group, *Tun* Juan Lujan, a man in his mid-sixties. I gave him a general description of my research project and asked if he remembered anything about health care under the navy. He immediately declared, "You should talk to someone older. I was only a boy during that time." *Tun* Juan humbly professed that he was not a historical authority.

I nodded, and said, "Okay, okay," but then asked him if the navy was still doing hookworm treatments at the schools during his time. He quickly sat upright and animatedly exclaimed, "Oh, my God! That was worse than hell!" His eyes grew big. His hands nervously combed through his hair. He stood up and started walking, shuffling his feet while pacing back and forth, a few steps in each direction. He looked me straight in the eye and said, "I'll never forget what they did to us." He went on to describe the hookworm medicine as he recalled it—a bitter liquid so thick that it would not spill out of the nurse's measuring cup, even if held upside down. *Tun* Juan continued with his recollections:

> [T]hey gave each of us a cup of the medicine, and also a slice of lemon to suck on after we swallowed. But no one wanted to drink the medicine because it tasted so bad, and because it was so hard to swallow. So the nurses had to hold the kids down on the teacher's table, one by one, pushing it down their throats. The kids would scream and cry, and the nurses would resort to using a spoon to force it [in]to their mouths and down their throats. Kids would fight the nurses and their spoons, and inevitably there would be blood around their mouths from the pressure of the spoon. Soon, all the kids in the classroom would be screaming and crying. And before long, all of the kids in the school would also be crying, because they could hear what was happening to us. They knew that their turn was coming up and there was no escape. (Lujan 1998)

Tun Juan looked me directly in the eye and emphasized, "I'll *never* forget that!"

Tun Juan's terror-filled memories revealed to me some of the profound problems that created a chasm between naval attempts to cure disease and Chamorro trepidations and distrust of western medical methods. His memories suggested that factors other than science and medicine stood between Chamorros as patients and navy medical personnel as healers. Inspired by his trenchant memory of this event from his childhood, I searched for other references to children's experiences on Guam under the United States Navy, particularly in regard to hookworm treatment. Through hookworm, I hoped to reach a better understanding of the impact of the navy's health policies toward at least one generation of Chamorros—those now the island's *manamko* (respected elders).

Chamorro historian Pedro C Sanchez also recollected the hookworm ordeals. He reported in *Guahan Guam: A Complete History of Guam,* "During the months of January and February the annual hookworm treatment, dreaded by students, was administered to every school child at the school. Those who missed the treatment at the school were required to take them at the hospital. No one was excused" (Sanchez 1989, 127).

The most invasive strategies for targeting hookworm entailed more than school examinations and forced treatments. They involved the arbitrary apprehension and sequestration of infected students at the navy hospital without parental consent or knowledge. Governor Robert E Coontz, who ruled the island from April 1912 to September 1913, described the intrusive tactics exercised over children's bodies in naval efforts to fight this malady: "We had hospitals that could accommodate about eighty hookworm children at one time. We took this number from the same school if possible, kept them for two weeks, gave them

the treatment every other day, then discharged them and took them in again six months later." He went on to admit that the parents "were fearful and besieged the doctors and nurses with complaints" (Coontz 1930, 337). These strong-arm tactics rendered parents and families powerless against the force of the military government, exposing the navy's totalitarian tactics, exercised under the guise of colonial philanthropy. More insidious than this hegemonic control was the fact that Chamorro resistance to these atrocious trespasses into their family life would be read by navy officials as evidence of ignorance and backwardness. To the navy, Chamorro opposition to their health policies was a sign that the native people simply did not know what was good for them.

The scenario of children as captives in the Naval Hospital on account of their presumed hookworm infestation raises a host of concerns linking health to a number of other cultural, economic, political, and social issues that have informed the analyses of previous chapters. Feeling powerless in their attempts to control Chamorro women—as demonstrated in their inability to define, confine, and domesticate *pattera, suruhana,* mothers, and nurses—the navy may have looked to children as their best avenue for gaining acceptance in the Chamorro communities. Perhaps their incursions into the lives of children equally reflected

Photo 25 Schoolchildren lining up for annual hookworm treatment. *(Collection of the Pedro C Sanchez family)*

the navy's frustrated attempts to control Chamorro men—as evidenced in their inability to disempower *suruhanu* or secure the cooperation of men as hospital patients. More than likely, numerous navy policies were intentionally directed at children due to their malleability, a thesis supported in Michael Young's research of missionary designs on children on Dobu Island in Papua New Guinea. Young quoted Anglican Bishop Montagu Stone-Wigg, who visited Dobu in 1901 and commented, "The children are as plastic wax under our hands and we can mould them at will," to demonstrate persuasively that children-focused policies were not accidentally concocted (Young 1989, 117). In addition to the potential for successful reform of native Islanders, Young determined that "child rescue" strategies worked effectively to "wring the hearts and empty the purses of [the missionaries'] readers." Strategies that targeted children's bodies revealed "a complex of sentimental, pragmatic, instrumental and sacrificial motives" (Young 1989, 132–133).

In this chapter I focus on what Sanchez referred to as the "dreaded hookworm treatment" (1989, 127), but I also discuss other forms of medical surveillance exercised over children's bodies by the navy from the early 1900s through the 1940s. Health campaigns, parades, and contests, as well as a comprehensive hygiene curriculum and a shoe-wearing crusade, illustrate the collaborative efforts of nurses, doctors, hospital corpsmen, teachers, and education administrators in tackling a disease such as hookworm. In the name of sanitation and the eradication of hookworm, Chamorro schoolchildren became the objects of intense physical poking and intellectual prodding to a degree not experienced by most adults on Guam. In the schools by 1905, Guam's children were subject to bodily inspections and other forms of "physical supervision" (NGG *AR* 1905, 14).

From the various reports and recollections of both Chamorros and Americans such as Juan Lujan, Pedro Sanchez, Robert Coontz, and George Dyer, a variety of tactics aimed at improving the health conditions and practices of Chamorros have been identified. Many of these procedures were socially, culturally, and physically intrusive—and often dehumanizing. Like other navy policies, they were based on concerns of naval power and native disempowerment, as well as the array of ambivalent intersections between the two. Just as I have discussed naval controls over Hansen's disease patients, midwives, mothers, nurses, and traditional healers in the previous chapters, here I examine the regulation of children to tell an often-complicated story of domination, resistance, adaptation, and appropriation.

These controls over individual bodies correspond with David Arnold's assertion that "colonialism used—or attempted to use—the body as a site for the construction of its own authority, legitimacy, and control" (1993a, 8). Arnold's analysis suggested that beneath the veneer

of paternalism and medical philanthropy that seemingly motivated the navy's health policies on Guam lurked the mechanisms of colonial power. Similarly, Michel Foucault theorized that the disciplines of the body intersect with the regulation of populations, "giving rise to infinitesimal surveillances, permanent controls, extremely meticulous orderings of space, indeterminate medical or psychological examinations, to an entire micro-power concerned with the body" (1990, 139). In this chapter I examine the variety of techniques that monitored individual bodies as well as the political and moral concerns of both military officials and their Chamorro subjects.

Attitudes and policies concerning hookworm illustrate not only naval administrators' assumptions about race and class, but also their beliefs about the necessity of educating children in western epistemologies of hygiene. Through hospitalization and treatment, and through intensive and extensive education campaigns, the navy attempted to indoctrinate Chamorro children in western hygienic practices and, in the process, acculturate them as compliant colonial subjects. Here some of the distinctive strategies and outcomes that emerged from the targeting of children rather than adults are detailed.

Finally, as in the previous chapter, I also explore the role of philanthropy in America's territorial expansion. In the case of hookworm, the interest and involvement of the Rockefeller Foundation on Guam speak to some of the powerful ideological and political connections between national policies, military objectives, corporate interests, and charitable ventures. The responses of children to some of the most intrusive colonial policies elucidate both surveillance in the mode described by Foucault and everyday forms of resistance as examined by James Scott.

Discovering the Hookworm

> The hookworm entered its victim's body unobtrusively, usually through the tender skin between the toes. . . . Once in the bloodstream, the parasite worked its way to the lungs, where it left the vascular system and entered the alveoli before making its way up the bronchial passages into the throat. From there, it was swallowed and passed into the gastrointestinal tract. It would then fasten onto the lining of the upper part of the small intestine, where it began feasting on its host's blood. The number of worms in an infected person varied from a dozen to several thousand. Securely lodged in the bowels and supplied with a virtually limitless source of nourishment, the female adult hookworm—about half the length of a pin—would lay approximately 10,000 eggs a day directly into the gastrointestinal passageway. The encapsulated young passed out of the body with the victim's feces. If they happened to

> be deposited on warm, moist, sandy, or loamy soils, the eggs might hatch into larvae, closing the circle. (Ettling 1981, 1)

Though hookworms have existed for centuries, hookworm disease was identified relatively recently, particularly because its discovery was contingent on laboratory methods not widely practiced until the late nineteenth century. The first article that definitively identified a case of hookworm in the United States appeared only as recently as 1893 (Stiles 1939, 287). By 1900, US Army Captain Bailey Ashford reported hookworm infestation in Puerto Rico, and from his findings began the first organized American campaign for the eradication of hookworm in an American territory (Duffy 1993, 176). Ashford's assignment in Puerto Rico as part of the Army Medical Corps put him in charge of a field hospital established to assist victims of an August 1899 cyclone. As a result of his hospital observations, Ashford noted that increases in food consumption failed to produce any notable changes in the prevalent anemic condition of the Puerto Ricans. He concluded "that there existed some other cause not only for the condition of these patients but also for that of the great number of anemics found throughout Puerto Rico" (Glasson 1911, 131). After further research, Ashford theorized that intestinal worms were the cause of these health problems. Based on his assumptions, Ashford speculated in 1910 that more than 300,000 of Puerto Rico's 1 million residents were infected with hookworm (Glasson 1911, 133).

Concurrently in the continental United States, Dr Charles Wardell Stiles of the US Public Health and Marine Hospital Service was studying the same problem, exploring the biological causes of "cotton mill anemia" in the South. This anemia, "like miner's anemia before it, had been attributed to poor food, lack of ventilation, and long working hours, as well as to going to work too young, using tobacco, and breathing cotton lint" (Boccaccio 1972, 34). However, Stiles, like Ashford in Puerto Rico, connected the misunderstood anemia to hookworm, "confirming cases microscopically wherever he could" (Boccaccio 1972, 34). As a result of his scientific research, by 1903 Stiles had identified the species *Necator americanus,* establishing it as a genus of hookworm distinct from two other varieties—the initially discovered genus, *Uncinaria,* originally classified in 1789, and the species *Ancylostoma duodenale,* categorized in 1843 (Stiles 1939, 285). Stiles theorized that the hookworm *Necator americanus* traveled to North America from Africa as a result of the transatlantic slave trade, though its origins could not be definitively ascertained. Nonetheless contemporary medical anthropologists such as Kathleen Fuller have theorized that based on "paleopathologic indications . . . hookworm was one of the many pathogens brought to the Americas after contact in 1492" (1997, 297). Since Stiles's prominent studies, hookworm has been classified as a tropical disease because the

worm requires warm weather for its propagation. As a result of Stiles's aggressive research, he was acknowledged in scientific circles as the "chief hookworm expert" of the early twentieth century in the United States (Boccaccio 1972, 31).

As the extent of the hookworm problem in the United States became evident, the Rockefeller Foundation of New York established the Rockefeller Sanitary Commission for the Eradication of Hookworm Disease. Founded in October 1909, the New York philanthropic organization immediately commissioned Stiles as its "scientific secretary" (Boccaccio 1972, 33). The commission soon initiated a massive educational campaign to awaken southerners to the problem of hookworm, concentrating its efforts in Virginia, North Carolina, South Carolina, Georgia, Alabama, Mississippi, Tennessee, Arkansas, and Louisiana (Duffy 1993, 176; Glasson 1911, 134). The foundation mobilized state and local school and health boards, medical societies, journals and newspapers, creating a public health awareness campaign that became the model for future programs in the South (Duffy 1993, 176). The Rockefeller Sanitary Commission's programs in the South raised the issue of class, as poor whites in particular found themselves the subjects of Rockefeller programs. As southerner Will Campbell wrote, "We had not known until then that we were backward and therefore had not pondered the possible reasons for our backwardness" (1978, 44).

As a direct result of the Rockefeller hookworm eradication crusade, the South's first free dispensary opened in 1910 in Marion County, Mississippi, and other public health measures soon followed (Tullos 1978, 47). Adults and children alike gained exposure to numerous medical and educational campaigns directed not only at solving the hookworm infestation problem, but also at improving general conditions of sanitation and hygiene. Even for several years after the disbanding of its sanitary commission in 1914, the Rockefeller Foundation continued to fund half of the southern state and county health costs (Tullos 1978, 48). Historian John Ettling maintained that as a result of the Rockefeller Sanitary Commission's work, funding for public health measures in southern states rose by 81 percent between 1910 and 1914 (1981, 220–221). Not only did those state governments increase funds for health projects, but apparently the commission's health-related activities also raised the public's awareness of their sanitary and hygienic practices.

In 1902, based on budding scientific research that linked Southern cases of anemia and listlessness to hookworm, the *New York Sun* labeled the disease the "germ of laziness" (Boccaccio 1972, 30). Stiles estimated that approximately two million southerners—most of them poor whites—were infected. Based on these startling statistics, foundation officials attributed the South's depressed economic condition to hookworm

disease (Tullos 1978, 41). The Rockefeller Sanitary Commission distributed 350,000 pamphlets that presented the economic significance of hookworm disease as "one of the most important factors in the inferior mental, physical, and financial conditions of the poorer classes of the white population" (Tullos 1978, 42). As the pamphlet trenchantly stated, "Remove the disease and they can develop ambition" (quoted in Tullos 1978, 42).

This pseudoscientific correlation between hookworm disease and indolence contributed to a number of disturbing moral judgments in the United States about those afflicted. According to medical historian Suellen Hoy, hookworm victims were represented not sympathetically for their medical woes, but rather scornfully as "physically underdeveloped and mentally dull, . . . 'despised by others as lazy, shiftless, indolent, untrustworthy good-for-nothings'" (Hoy 1995, 130). Revealing the general contempt for those afflicted, as early as 1910 the Immigration Service categorized hookworm as a dangerous disease and a cause for deportation (Boccaccio 1972, 52). Not surprisingly, because of the tropical origins of many hookworm victims, those affected by such policies in the United States were exclusively persons from outside western Europe who were concurrently experiencing other forms of racial discrimination. Moreover, burgeoning scientific knowledge about hookworm inadvertently contributed to racist attacks against African-Americans. In a 1913 article published in the popular magazine, *The World's Work,* Dr Charles Nesbitt wrote, "In 1902, Dr Stiles discovered that the hookworms, so common in Africa, which were carried in the American Negroes' intestines with relatively slight discomfort, were almost entirely responsible for the terrible plight of the Southern white. It is impossible to estimate the damage that has been done to the white people of the South by the diseases brought by this alien race" (quoted in Tullos 1978, 45–46).

As with navy enlistees' fear of Hansen's disease and other threatening tropical diseases potentially present on Guam, the possibility that dark-skinned peoples' ailments could contaminate the white population generated no shortage of racially infused rhetoric. Racist ideas discursively associated with hookworm disease informed the policies of colonial governments like the US Navy on Guam as well as the charitable contributions of American philanthropists in tropical areas around the world.

The international impetus for hookworm elimination was also supplied by the Rockefeller Foundation, through a newly created branch of the immense philanthropic organization. In 1914, only five years after the Rockefeller Sanitary Commission was established, the foundation declared its mission accomplished and terminated the commission's operations in the American South. In its place, the Rockefeller Founda-

tion established the International Health Board to pursue hookworm eradication on a transcontinental scale. The board developed a standard three-step campaign, similar to what had been advocated in the South by the commission. It entailed taking steps "to determine the distribution of the infection, to cure the sufferers, and to remove the source of infection, ie, to stop soil pollution" (Boccaccio 1972, 38). Since 1911, a hookworm belt had been established with the help of American consular offices, and within it the board directed its efforts (Boccaccio 1972, 52). Based on their success stories from the American South, the International Health Board attempted "the remaking of tropical and semi-tropical peoples and the bringing of their lands into the use of civilization as fast as their products [were] needed" (Tullos 1978, 48). As the board's comments suggest, less-than-magnanimous motives typically informed American foundations in their tropical philanthropic ventures. Historian E Richard Brown asserted, "Because the hookworm propagates itself in warm, moist climates, it is particularly associated with mining and the growing of rice, coffee, tea, sugar, cocoa, cotton, and bananas—the resources and cash crops of concern to philanthropists who also have large investments in the South and underdeveloped tropical countries. Because hookworm disease reduced the strength and productivity of workers in these occupations, it had a direct effect on profits" (1976, 898).

In his reading of Rockefeller Foundation archives, Brown concluded that their strategists believed that public health programs such as a hookworm eradication campaign would both "increase the health and working capacity of these peoples [and] help induce them to accept western industrial culture and US economic and political domination." Corporate executives, and thus foundation administrators, were convinced that tropical diseases such as hookworm, malaria, and yellow fever posed obstacles to the economic development of countries located in the tropical hookworm belt (Brown 1976, 897). Brown persuasively indicted Rockefeller medical philanthropic efforts, both in the United States and abroad, for perpetuating what he referred to as "the imperialist tradition." "Despite their humanitarian outward appearances, the major Rockefeller public health programs in the Southern United States were intended to promote the economic development of the South as a regional economic, political, and cultural dependency of Northern capital. Rockefeller Foundation public health programs in foreign countries were intended to help the US develop and control the markets and resources of those nations" (Brown 1976, 897).

In Guam, Rockefeller involvement through the International Health Board, however benign in appearance, contributed to the American colonial project by validating and encouraging the US Navy in its inva-

sive and criminalizing approach to public health. Rather than simply contributing to the elimination of hookworm, the Rockefeller Foundation on Guam, perhaps inadvertently, advanced US naval interests in military authoritarianism, colonial hegemony, and medical professionalism by throwing its financial and moral weight behind the navy medical agenda for Guam. The Rockefeller Foundation actively encouraged the navy's unbounded surveillance and enforcement tactics in the interest of "charity work."

Counting the Worms

Navy doctors documented Guam's first cases of worm infestation in 1904, and described the hookworms as not only infecting the intestines of "nearly every inhabitant," but also causing, in several instances, life-threatening intestinal inflammations (Leys 1904a, 1). J F Leys, the island's health officer, implored then Governor George Dyer, "Does not the persistence of this condition, an ever-present one here, and an entirely remediable one, constitute a reproach to us who have been in charge of these helpless people for six years already?" (Leys 1904a, 1). His comments, sympathetic though paternalistic, suggest that the scientific findings of the army's Ashford in Puerto Rico and Stiles in the southern United States had raised the consciousness of those in the medical community, particularly persons practicing medicine in tropical areas. Leys's remarks also demonstrate the general attitude of medical philanthropy that informed naval policies on Guam, specifically in their charge over people who knew little of the disease's etiology and lacked access to its medicinal cures. The presence of a variety of worms in Guam corresponded to conditions in other Pacific islands. Questions remain unanswered regarding the earliest introduction of parasitic worms into the Pacific, although surveys of Sāmoa, Tonga, Tuvalu, and Vanuatu in 1924 and 1925 verified the presence of both varieties of hookworm in those islands (Miles 1997, 75). Researcher P A Buxton determined that "the hookworm *Necator americanus* was nearly universal and clearly had been established for a long time, but that *Ancylostoma duodenale* was only present where it had been introduced by Indians and Chinese in recent years" (quoted in Miles 1997, 75).

Hookworm sufferers on Guam, like those in the southern United States, were described in terms of diminished mental and physical capacities. For example, in 1910 Governor E J Dorn described "many of the little patients" diagnosed with hookworm disease as "weak minded, [and] practically idiotic" (NGG *AR* 1910, 14). Additionally, in 1912 Governor Robert Coontz described the native children sufferers as "skinny, undernourished, and morose" (1930, 337). Similarly, Chamorro minis-

ter Joaquin Flores Sablan recollected that in the 1930s, navy officials "claimed that the people were infected with hookworms . . . which caused them to be lazy and sickly looking" (1990, 297).

On the one hand, the superficial, and later clinical, diagnoses of hookworm infestation likely did address health problems such as anemia and intestinal disorders. On the other hand, however, questions arise from the discursive intersections between medical and scientific knowledges, colonial and capitalist desires for land, labor, and capital, and disingenuous descriptions of natives as "lazy," "weak minded," "practically idiotic," and "morose." It would seem as if the physical effects of the iron deficiency anemia that results from hookworm infestation were worked to conflate lethargy with mental weakness so that instantly there was a medical reason to explain native people's perceived stupidity. In this representation of hookworm as a disease of hot places and dark peoples, medical diagnoses were manipulated to mark Chamorros, as well as African Americans in the United States, as mentally inferior, if only because of the hookworms that infected their bodies. Further, reducing differing perceptions of land, labor, and capital to simple medical explanations such as the hookworm-induced "laziness" of native people and southern whites did little to acknowledge and address conflicting cultural notions of such terms. For example, the Chamorro people's lack of interest in navy economic schemes could be explained as a result of hookworm, rather than as a result of competing and con-

Photo 26 Members of a Chamorro family infected by hookworms. *(Collection of the Rockefeller Archive Center)*

flicting cultural uses, definitions, and understandings of labor, land use patterns, and other forms of "capital."

Through the treatment of Chamorros for intestinal parasites, navy surgeons such as C P Kindleberger justified the colonial government's health policies on the grounds that they were "most important for the future health, happiness, and prosperity of the inhabitants of Guam" (Kindleberger 1913b, 1). Yet Kindleberger's eye was on the "future," perhaps indicating that the navy's overwhelming interest in curing Guam's children was not solely a matter of medical exigency, but also part of an attempt to assimilate Chamorro youth into western medical and economic traditions. Unable to force adults to report for hookworm treatments, the navy apprehended children as the recipients of their medical benevolence. Kindleberger may have had confidence that Guam's "health, happiness, and prosperity" were inextricably linked to the navy's health policies, but in the eyes of many Chamorros those terms were defined exclusively by naval interests.

Despite the navy's awareness of worm disease on Guam in 1904 and its pronouncements that the condition was "entirely remediable," the Department of Health and Charities reported just three years later that 13 percent of the island's deaths in 1907 were caused by intestinal worms (McCullough 1909, 323). By 1908, however, the number of deaths as a result of intestinal worms had decreased from 30 to 3, and at that point navy surgeon G L Angeny could state with confidence, "We do not see here the severe cases of hookworm infection that occur in some other tropical countries, Porto Rico [*sic*], for instance; cases there, as a rule, averaging more than ten times the number of worms found in the cases in Guam" (1909, 330). Despite this early optimism, Governor Dorn announced in 1910 that medical tests revealed extremely high rates of infection. From the village of Agat, for example, Dorn reported that "every child was found to have hook worm infection" (NGG *AR* 1910, 14). After a more extensive survey in 1913, surgeon Kindleberger disclosed that "practically every native adult, all native children over 2 years of age, and some as young as 6 months, are infected with one or more intestinal parasites" (1913a, 87). Conditions improved slightly in the 1920s, although by then roundworm, rather than hookworm, had become a more pressing problem. In a 1923 survey of approximately one thousand Chamorros, less than half were diagnosed with hookworm, while more than 90 percent were infected with roundworms. Several villages showed particularly high rates of infection; in Dededo, for example, all of the 92 samples taken (in a village of 175 residents) tested positive for roundworm, as did 97.5 percent of the 109 samples taken from Hagåtña's 9,500 residents (HIPG 1924, 138).

Despite these alarming statistics, the navy never specifically addressed roundworm as a problem as serious as hookworm and offered no expla-

nation for its omission. The emphasis on hookworm may have resulted in part from its status as a tropical disease receiving much philanthropic attention through the activities of the Rockefeller Foundation. Moreover, military rivalry as a result of the Army Medical Corps' renowned hookworm discoveries in Puerto Rico may have influenced the navy's focus on hookworm eradication.

A decade later, hookworm infection was again on the rise, with 62 percent of schoolchildren testing positive for hookworm in 1934 (NGG *AR* 1931, 17; 1934, 69). Since 1907, navy surgeon F E McCullough had surmised that the infections were "due to the combined effects of polluted water (the principal source of which is shallow wells), the absence of sewers, and the fact that a large percentage of the native population are barefooted" (1909, 323). Subsequently, naval personnel's attention to the causes of the disease grew more aggressive, although it would never replace the treatment of children as the primary focus of their eradication strategies. Medical personnel identified and sought to implement a host of sanitary reforms, including an array of changes in the personal grooming habits of most of the island's population. Kindleberger attributed the "almost universal worm infection" to his perception that "nearly 60 per cent of the natives are very dirty in their habits, bathe infrequently, practically never clean their finger nails nor wash their faces and hands before eating, have only a few cooking utensils, are careless about drinking water and the preparation of food, usually eat with their fingers from a common dish, and are frequently inveterate chewers of betel nut" (1913a, 87). Even the clothes-washing practices of Chamorros were viewed with chagrin, although the questions of water pollution in the river were never systematically assessed or addressed by navy officials.

Largely because navy surgeons perceived native practices as essentially filthy, what they sought was a transformation, rather than an amelioration, of Chamorro hygiene. To achieve this, the Health Department joined forces with the Department of Education, incorporating lessons in personal hygiene into the curriculum. In April 1911, Kindleberger announced "an elementary course in hygiene [that was] now a part of the instruction given in all the island public schools" (1913a, 87).

Along with issues of personal hygiene, the problem of soil contamination posed perennial problems for the navy. In the naval government's 1913 *Sanitary Report,* the Department of Health and Charities recommended:

> On the ranches and in the towns, pollution of the soil with fecal matter should be stopped. Ranches should use dry earth privies, and inhabitants of towns, the dry earth pail system or water-closets. Adults guilty of soil contamination should be fined. . . . Reduction of the almost universal infection with these parasites can be accom-

> plished by the prevention of soil pollution; by educating the children and adults in regard to the methods of infection and means of preventing same; by providing the smaller towns with waterworks, sewers, public latrines and baths, and crematories for garbage and objectionable refuse; by the gradual increase in cleanliness of person and clothes; the use of clean, well cooked food, pure drinking water, and modern cooking utensils and tableware. (NGG SR 1913, 3)

Eradicating the causes of hookworm infestation demanded a number of capital-intensive developments, specifically, the construction of a water distilling plant and a modern sewage system. Such infrastructural projects were costly, and the naval administration consistently stated that these expenses were beyond its means. Instead, the administration focused its energies on the short-term benefits gained by administering health care to the Chamorro population—particularly schoolchildren—rather than on the long-term benefits that could come only by addressing the sources of contamination. The ability to statistically evaluate their success rate in curing children of hookworm may have encouraged navy administrators to focus on the sorts of projects that produced measurable outcomes. However, this approach to the hookworm problem was ineffective because it failed to protect Chamorros

Photo 27 Women washing clothes at the Hagåtña river. *(Collection of the Richard F Taitano Micronesian Area Research Center)*

against the long-term risks of perennial recontamination. By administering to the needs of sickly, anemic, and helpless children the navy could confirm its magnanimity toward Guam's native population while demonstrating the efficacy of its actions by means of statistics.

Rockefeller Medicine

Perhaps feeling frustrated by their inability to curb the hookworm problem on Guam, navy officers turned to an institution already world renowned for its hookworm work. In a letter dated 7 August 1917, navy governor Roy Smith solicited the Rockefeller Foundation in New York for assistance with hookworm—"the scourge of the island. . . . If the Rockefeller Foundation can see its way clear to assist in this [hookworm] campaign, it will be contributing to a very worthy object, and its generosity would be deeply appreciated by a most grateful and responsive people" (Smith 1917, 1). In November 1917, Smith received a response from Dr Victor G Heiser, the Rockefeller Foundation's International Health Board director for the East. Heiser was long familiar with both tropical medicine and the military administration of American territories, having served as a sanitation officer in the Philippines for over a decade. In his reply to Smith, he expressed the foundation's interest in Guam's hookworm problem and added that soon after receiving Smith's letter, he had met in conference with Navy Surgeon General W C Braisted to develop plans for the International Health Board's involvement on Guam (Heiser 1917a, 1). In a separate letter to Surgeon General Braisted, Heiser announced that "at some time in the near future we would be very glad to have one of our officers stop at Guam, while en route to the East, and assist your medical officers in starting a hookworm demonstration along the lines which we have found so successful in many other parts of the world" (1917b, 1). Heiser optimistically informed Braisted that, based on navy records of widespread hookworm infection on Guam, the foundation would likely be able to render its expertise with promising results. By comparison, he stated that in the former Ceylon, "It has been our experience . . . that the working efficiency of the people increases 20 per cent or more after hookworm measures have been carried out" (Heiser 1917b, 1). Based on such enthusiastic promotions, arrangements were finalized for Rockefeller doctor John Grant to spend one month on Guam to cooperate with the navy medical officers "in starting a campaign against hookworm disease along lines found successful by the International Health Board in the United States and many foreign countries" (Heiser 1918, 1). The surgeon general, reflecting the Navy Department's interest in and support of the Rockefeller health activities on Guam, assured Heiser that "a large quantity of chenopodium, thymol, magnesium sul-

phate, and castor oil" had been shipped to Guam for Dr Grant's use (Braisted 1918, 1).

Once on Guam, however, Grant was dismayed to find little of the enthusiasm and encouragement so evident in the pages of official navy correspondence. Instead, as he confided to Heiser, "I find the situation here rather peculiar. I reported to the Governor the morning of my arrival . . . but I do not hardly think he thought I was especially needed here. . . . None of the doctors have gone out of their way to make me feel at home as have some of the line officers and civilians. As far as I can make out the only object the Government had in mind in communicating with the IHB was to secure the necessary funds which they cannot secure from their own Department to install a sewerage system in Agana by which they beleive [*sic*] they could rid themselves of all parasitic infection" (Grant 1918a, 1).

In later letters, Grant noted several occasions when navy government officials impressed on him Guam's dire need for Rockefeller dollars, rather than technical expertise. Several of his letters also registered his bewilderment at some of the tensions he sensed from the higher-ranking navy personnel—particularly the chief medical officer. After a week on the island, Grant was apprised of the source of the ill feeling by several unnamed junior medical officers. According to them, "it would be against the interests of the [navy health officer] to carry out the suggestions of a civilian" (Grant 1918b, 1). At the same time, the younger medical officers assured Grant that some of his suggestions would be followed after he left, though under the authority of the navy surgeon. Navy administrators were more than willing to accept money from the Rockefellers, but they were loath to accept ideas that originated from persons outside the military service. Military structures of rank and authority stood between Grant and the International Health Board, medical professionalism, and hookworm eradication on Guam.

Grant's experiences on Guam not only soured his feelings toward the navy, but also led him to question the efficacy of military medicine in the tropics (1918b, 1; 1918c, 1). Observations such as "The Governor is not exactly my idea of an efficient executive" and "The executive officer, Dr Jones, does not know as much medicine as a Junior in medical school [and chief medical officer] Dr Johnson is about the same professionally" revealed Grant's lack of respect for Guam's navy administrators in their capacity as health authorities (Grant 1918b, 1). His opinion of the lower-ranking medical officers, on the other hand, was much more positive, and his final recommendations specifically identified younger doctors whom he believed would be most effective in managing a medical program.

Grant's work on the island involved surveying both the people and the land. He examined a sample of the population for evidence and

degree of hookworm infestation, and evaluated the island landscape in order to develop strategies for eliminating the spread of the disease. The results of his examination of 937 persons—approximately 6.5 percent of the total population—indicated that 64.5 percent were infected with hookworm. However, according to Grant, "The infection is not severe. In no instance was a case seen with an infection heavy enough to cause retardation of growth, edema, or ulceration" (1918f, 1). He also noted in his *Report on the Hookworm Infection Survey of Guam* that "soil pollution is not so prevalent as in the Southern United States" (1918f, 8).

From the outset of his stay on Guam, Grant had suggested a plan that included strong elements of community education, coupled with the military's enforcement of sanitary laws. In particular, Grant believed that because Guam was "a military controlled possession," the issue of enforcement would be relatively simple (1918a, 1). Furthermore, the general sanitary conditions on Guam were "much superior to those found in the majority of the communities of the Southern States." Therefore, "it should be a simple problem to make the Island a modern and ideal sanitary district" (Grant 1918e, 1). In most of his letters and reports from Guam, Grant emphasized that the expense to the navy in implementing a joint campaign of community education and compulsory installation of sanitary privies would be negligible. Both the governor and the chief medical officer repeatedly emphasized, to the contrary, that the costs of such a program would be prohibitive. In their view, the navy would be unable to implement the International Health Board's recommendations without additional Rockefeller support, preferably in the form of a monetary subsidy (Grant 1918e, 1; 1918b, 1).

Frustrated by the lack of cooperation and consensus from the governor and the ranking medical officers, Grant confided to Heiser, "somehow one cannot present facts to men that have been in the navy for thirty years in the same manner that one can to civilians" (1918c, 1). In his final letter to Heiser from the island, he expressed the opinion that "Guam would be an exceedingly simple problem provided one received the proper executive support. Any of the younger medical men could conduct a campaign in a satisfactory manner." He added that the involvement of native people would be critical for the success of the strategy, because "An intelligent native would be necessary for the educational part of the campaign" (Grant 1918d, 1). Moreover, Grant identified Juan Aguon as a Chamorro who could capably assist the navy in such a project, since he had so efficiently assisted Grant in his month-long survey of Guam. Grant wrote that Aguon "handles the native clinic of 60 to 100 every morning alone . . . and has a sanitary district in Agana to inspect" (1918d, 1). Navy employees, on the other hand, were disapprovingly evaluated. Ironically inverting the categories of lazy native

and industrious naval personnel, Grant declared, "Nine tenths of the day one can step into the office of the hospital and find the officers sitting around doing nothing" (1918d, 1).

From Grant's descriptions, his sense of futility and frustration with the military's inhospitable reception, impenetrable bureaucracy, rigid protocols, and austere operating methods are evident. Perhaps in their dealings with International Health Board personnel, navy officers' financial interest in the Rockefeller fortune outweighed their medical concern for hookworm-infected Chamorros. It certainly appeared to Grant that they were more interested in the money the board might possibly allocate to Guam than in any proactive, immediate plans for hookworm eradication. In all fairness to navy administrators, Grant's recommendations did not differ radically from what was already being implemented on Guam. Quite significantly, however, the International Health Board and the navy held different opinions as to which aspects of the recommended hookworm eradication plan should be emphasized. The board placed equal emphasis on short-term solutions such as the treatment of those infected and on long-term ventures such as the eradication of soil pollution. The navy, on the other hand, concerned itself predominantly with the surveillance of individuals through forced hospitalization stays, bodily inspections, and educational programs.

Although the navy was not receptive to Grant's recommendations, navy officers represented themselves in their reports as working in close collaboration with the Rockefeller Foundation. Perhaps navy personnel still hoped to obtain funds from the International Health Board for future projects, or perhaps an affiliation between the board and the Navy Department—and possibly between Director Heiser and Surgeon General Braisted—was too important to disregard. Conceivably, governors and health officers on Guam might have represented their interactions with the board in a positive light as a way of preempting whatever criticisms Grant might level against them.

Even more revealing than the issue of the working relationship between the International Health Board and the navy was the way in which navy officials manipulated Grant's visit to their advantage—using his recommendations to validate the existing state of affairs. As Smith commented in his 1918 *Annual Report,* for example, "The visit of Dr Grant has thus served to assure the Island authorities that they are on the right track in contending with this scourge" (NGG *AR* 1918, 7). Rather than attempting to use Grant's report as a blueprint for future policies and strategies, navy officials interpreted his recommendations as a sort of report card that positively evaluated their previous efforts. As further evidence of the naval administration's exploitation of Grant's recommendations, Smith's successor, Governor William Gilmer, wrote in 1919, "Work started by the Rockefeller Foundation is continued by

constantly improving the sanitary conditions. All school children are sent to the Hospital regularly once a year and treated. A large number of children under school age are also sent to the hospital for treatment. . . . During the year three large combination toilet, shower, and wash houses were erected in Agana. Others will be erected as funds become available" (NGG *AR* 1919, 8).

In attending to both persons with hookworm disease and the sources of contamination, therefore, navy officers appeared to follow Grant's advice. One wonders, however, about the relative effort involved in medically examining every schoolchild compared to erecting three toilet and wash facilities. In seeming to address Grant's recommendations, the navy continued to apply levels of coercion and compulsion typical of other health initiatives already implemented on the island.

Generally speaking, the Rockefeller recommendations on Guam corresponded with suggestions that had been made for other areas of the world where the International Health Board was involved. The standard three-step campaign advocated in the American South, as well as in numerous areas of southeast and east Asia, called for determining the distribution of the hookworm infection, attending to the victims of the disease, and eliminating sources of infection such as polluted soil (Boccaccio 1972, 38). On Guam, Grant's suggestions did encourage the navy to use its military might to strictly enforce the "sanitary orders and regulations already in effect" (NGG *AR* 1918, 7). Notwithstanding the tensions between Grant and some ranking navy officers, the involvement of the Rockefeller Foundation on Guam served to sanction the navy's ideological and political desires to entrench their control over the indigenous population, particularly through health policies. On the foundation's side, its explicit philanthropic interests on the island remained unstated in correspondence between International Health Board officials and navy personnel. However, as E Richard Brown's historical research of the Rockefeller Foundation has revealed, "Foundation strategists believed the biomedical sciences and their application through public health programs would increase the health and working capacity of these peoples [living in tropical zones] *and* help induce them to accept western industrial culture and US economic and political domination" (1976, 897).

Despite the seeming inconsequence of Grant's one month of work on Guam, it may have served broader Rockefeller goals. Because Grant's visit was brief, it is difficult to assess the degree of the International Health Board's success in influencing Chamorros to accept western "economic and political domination." Certainly the Rockefeller Foundation was not an innocent bystander in the construction and maintenance of naval hegemony on Guam. By encouraging the navy to exercise its coercive powers in the area of public health, the board

actively promoted naval surveillance and enforcement procedures. In its strategies the navy applied a variety of these forceful tactics that did conform to board recommendations—schemes that focused on curing the sick, cleaning the soil, and preventing recontamination.

Bitter Medicine: Curing the Sick

As with other health policies, the criminalization of violators was offered as a viable approach through which hookworm infection might be abated. In 1913, for example, the Health Department expressed its desire that adults "guilty of soil contamination" should be fined (NGG SR 1913, 3). In their annual reports and sanitary surveys, navy personnel consistently expressed their concerns about the problem of soil pollution, particularly on the ranches and in the outlying villages. Reflecting their frustration with the continued persistence of hookworm into the 1930s, Assistant Health Officer C L Andrews remarked that persons contracting hookworm disease "have been guilty of violating an important sanitary rule" (1934, 153). Blaming the perpetrators of sanitary crimes did little to diminish the problem of hookworm infestation on Guam. Navy officials realized that they would have to take assertive steps to eliminate this pest.

To address the hookworm problem, the naval government relied primarily on funds in the annual Special Congressional Appropriation, "Treatment of Lepers and Special Patients, Island of Guam." Their efforts concentrated primarily, though not exclusively, on examinations and treatments of schoolchildren throughout the island (NGG *AR* 1916, 13). The *Special Sanitary Regulations for the Island of Guam,* issued in 1910, ordered persons afflicted with hookworm to "present themselves for treatment at the US Naval Hospital or Dressing Station," though such laws typically were ineffective in producing the desired results (NGG DHC 1910, 1). Because Chamorro resistance in the form of evasion was the usual reaction to such regulations, the navy invariably resorted to more aggressive measures. In 1910, Governor Dorn reported that schoolchildren from outlying villages were brought to Hagåtña for hookworm examinations, with all hospital costs paid out of the "Leprosy account" (NGG *AR* 1910, 14). Governor Coontz's description of this hospitalization policy reflected official naval support: "We had hospitals that could accommodate about eighty hookworm children at one time. We took this number from the same school if possible, kept them for two weeks, gave them the treatment every other day, then discharged them and took them in again six months later for a final application of the remedy. It worked successfully" (Coontz 1930, 337).

While Coontz further noted that this medical confinement was vehe-

mently opposed by a number of fearful and irate parents, the navy considered it an effective strategy. In 1913, surgeon Kindleberger wrote, "The Agaña children from 2 to 12 years old and all children of school age (6 to 12) from the smaller towns have been admitted to the hospital twice during the last fiscal year and given from 12 to 14 days' treatment for intestinal parasites" (1913a, 88). This hospitalization of children kept the medical staff quite busy year-round. Navy nurse Frederica Braun, for example, reported in a submission to the *American Journal of Nursing* that during her tenure on Guam, there were always between thirty and forty children admitted to the hospital for hookworm treatments. "[A]s fast as one set is ready to go out, another comes in. The treatment lasts from ten days to three weeks" (Braun 1918, 650).

Tan Maria San Nicolas Chargualaf was one of those children hospitalized by the navy—not simply against her will, but without the knowledge and consent of her parents. As she vividly recalled of her childhood days as a resident of Hagåtña, one day during school hours several navy personnel and school administrators rounded up her entire class and walked them over to the hospital. Assuming that all of the children in the class suffered from hookworm infection, the navy confined them for several days in the dormitory-style setting of the Naval Hospital. Once sequestered, the children were not permitted to see their parents or other visitors and were forced to endure what she remembered as "very bitter, sickening medicine" (Chargualaf 1999). Her parents learned that she had been taken to the hospital only from the reports of her siblings who attended the same school and had observed the grim procession to the hospital. When asked if her brothers and sisters were ever hospitalized, *Tan* Maria replied, "No, I guess we were the only ones who had the *ulo'* [worms]" (Chargualaf 1999). Although *Tan* Maria could not recall exactly what year she was hospitalized, it likely occurred around 1916, a year in which navy figures reveal that a total of 468 children were hospitalized for hookworm treatment (NGG *AR* 1916, 14).

Tan Maria's recollections suggest that although the navy represented its hookworm initiatives in the most magnanimous of terms, to many Chamorros these hospital stays were anything but generous gifts. Rather, to some parents they represented the often arbitrary and hegemonic power exercised by the military, particularly over their children. The hospital confinements further deepened the adversarial relationship between the navy medical department and the native Chamorros. They demonstrated to Chamorros not simply the government's concern for their physical well-being and medical needs, but also the navy's interest in flexing its political muscles. To children, on the other hand, hospital stays spoke little of issues such as state power and military colonialism. Instead, youngsters like *Tan* Maria remember the hospital

more for its unappetizing food, white walls, clean floors, and the feelings of homesickness they experienced.

Questions arise about the medical wisdom of administering treatments to patients not infected with the particular illness. In the case of hookworm, for example, children were indiscriminately treated with medicines that were neither easy to swallow nor kind to the stomach. The different treatments ingested over the decades almost unvaryingly caused severe nausea and, in some cases, serious illness. The earliest medication sanctioned by hospital authorities was a combination of epsom salts and thymol, a poisonous derivative of phenol used today primarily to kill mold and fungus in books (Boccaccio 1972, 48). The treatment was considered "as simple as the method of diagnosis, although it entailed grave risk to the health, or even the life, of the patient if the instructions were not followed to the letter" (Ettling 1981, 5–6). As historian John Ettling wrote, "A dose of thymol followed by an Epsom salts chaser (on an empty stomach) would first jolt the worms loose from the intestinal wall and then forcibly expel them from the system" (1981, 6). Of this earliest medicinal treatment, medical historian Mary Boccaccio reported, "the treatment with salts was uncomfortable, and occasionally thymol resulted in death due to allergy" (1972, 48).

By the 1920s navy doctors had replaced the unpredictable thymol treatments with another uncertain chemical combination. As the island's health officer reported in the *US Naval Medical Bulletin* in 1924, the navy was engaged "in experimentation at the naval hospital with carbon tetrachloride and oil of chenopodium to determine which or what combination of the two will be most effective for mass treatments of the native population" (HIPG 1924, 139). The military's undaunted use of experimental medicine on colonized native people serves as a reminder that the patients in Guam's Naval Hospital were politically and economically disenfranchised by the navy on their own island. Without a voice in government and without a mechanism through which protests and complaints might be lodged to contest the naval doctors' practices, the Chamorro people—and most particularly, the schoolchildren—were at the mercy of the navy's medical department.

At least one Chamorro youngster died after ingesting the chenopodium oil medication. A 1929 *Guam Recorder* article reported the young boy's death, stating that he might have had "an allergic reaction, or some other predisposing factors which the supervising doctor could not possibly evade" (R Sablan 1929, June, 50). The article was written by Ramon Sablan, the Chamorro man whose off-island undergraduate schooling had been funded by the navy and who had been hired in 1929 to work as the junior assistant health officer in the navy's Department of Health. In his commentary, Sablan acknowledged the uncertainties of the medicine, conceding that "the wholesale method of giv-

ing the treatment to this number of children might not be as ideal as some would like it to be." Yet he ultimately defended the aggressive tactics of the medical department, asserting that "there is no other alternative to adopt but mass treatment, [since] only a very small percentage of the people voluntarily go to the hospitals for the free worm treatment. . . . with all due sympathy to [the parents of the deceased boy], we must not overlook the three thousand other children who were undoubtedly benefitted" (R Sablan 1929, June, 50).

The use of chenopodium oil nonetheless continued through the 1930s, and it was the substance remembered so vividly—and horrifically—by *Tun* Juan Lujan, Pedro Sanchez, and others. In his childhood reminiscences, Jose Torres also reflected on his experiences, explaining the administration of the hookworm medication in the 1930s as he remembered it.

> Chenopodium oil is toxic for the worms. We would get sick for two or three days, or even more than that. They'll cancel school for a week because they know we're all going to get sick from the medicine. And once a year, everybody assumed that everybody's infected, so you don't check their stool. Just line them up and they'd give us this oil. Oh, it was terrible. It was toxic. If you drink enough of it, you'll die. And first, the night before, they give you castor oil. Then the next morning, nobody eats breakfast, and you come to school and line up. They just call you, put it in your hand, and put it down your throat. Then you would go home sick, vomiting. It was very effective. (Torres 1999)

Along with the alienation of his experiences, Torres's comments also suggest, once again, that the public health system of the navy marginalized and disempowered many children and parents throughout the island. Rather than authorizing parents to make health-care choices for their children, the navy arrogated those responsibilities to itself. Viewing naval doctors as virtual parents to Chamorro children and adults alike, the navy instituted hookworm policies that exemplified not only the paternalistic attitudes held by government officials, but also some of the profound ways in which the human body became a site for the construction of colonial authority and legitimacy. On the other hand, some Chamorros, like Ramon Sablan, viewed navy medical policies as justifiable in the interest of the public's health and welfare. To Sablan, in order to raise the standard of living on Guam, navy authoritarianism was an unfortunate necessity because of the recalcitrance of the general population. Sablan's *Guam Recorder* column shows that some Chamorros did embrace aspects of government policy, even promoting it to their fellow Islanders. Other well-educated and elite Chamorros may well have shared Sablan's views, looking favorably on western health-

care services such as the Susana Hospital and the hookworm treatment program.

In its medical efforts in particular, the navy was never quite as successful as it wished. In its hookworm treatments, the navy misunderstood the disease by "not getting to root problem—prevention. You could be treated on Wednesday, and by Friday you're re-infected again" (Torres 1999). Torres suggested that to some Chamorros, despite semiannual medical treatments, their perpetual state of illness due to constant recontamination only deepened their distrust of the navy's "superior" medical and scientific knowledge and technologies. In part because of the high frequency of hookworm reinfection, Chamorro misgivings about the efficacy of western medical introductions were never comfortably assuaged.

The navy continued to execute its forced-hospitalization strategy well into the next decade, although by the mid-1920s, only those children clinically diagnosed with hookworm infection were sequestered in this manner at the hospital. However, all hospitalized children, whether or not admitted for hookworm infestation, received the worm treatment. As the island's health officer revealed in the 1927 *Annual Sanitary Report of the US Naval Station, Guam,* "It is quite customary to administer worm treatment to native cases at the hospital sometime during their stay; usually early. (In the early days of American occupation of the Philippine Islands, every case of ingrown toenail sent to the hospital (in the Navy Yard) was treated for dengue before his discharge from the hospital. This is mentioned to contrast conditions there with conditions in Guam)" (NGG SR1927, 4).

Along with the involuntary hospitalization of children, beginning in 1916, the naval government inaugurated a "monthly medical inspection of school children" (NGG *AR* 1916, 13). However, after only three months the frequent examinations were canceled because of prohibitive time and budgetary constraints (NGG *AR* 1916, 14). In their place, the medical department settled on semiannual visits to all of the island schools, once during the rainy season and again during the dry season (NGG *AR* 1924, 12). By the second decade of American rule on Guam, the navy's doctors administered hookworm treatments at both the schools and the Naval Hospital. For example, in 1924, Governor H B Price reported, "A total of 2,896 treatments were given in this campaign [at the schools]. . . . 1,260 other treatments for intestinal parasites were given during the year at the hospital" (NGG *AR* 1924, 12).

By the mid-1920s, the tactic of hospitalizing schoolchildren was implemented through the collaborative efforts of the Department of Health and Charities and the Department of Education. Governor Price noted, "The teachers regularly send all pupils needing treatment to the Naval Hospital in Agana or to the Hospital Corpsman in outlying

villages. This is routine" (NGG *AR* 1924, 9). The participation of native schoolteachers in the navy's health regimen was frequently praised by Guam's colonial administrators. For example, Governor Willis Bradley stated in 1929, "The work of the teachers in cooperating with the Health Department during the year is to be commended. Teachers and principals held daily inspections, and such cases as were deemed of sufficient seriousness were sent to the hospital for treatment" (NGG *AR* 1929, 24). Along with Guam's native nurses, teachers were among the few local employees hired by the naval government—both groups' salaries were paid out of the congressional "leprosy appropriation." Perhaps the navy considered teachers, like nurses, to be transmitters of values such as cleanliness and propriety. Native teachers formed an essential link in the navy's surveillance of schoolchildren, particularly during the hookworm campaign.

Employing the clinical gaze of school administrators, teachers, doctors, nurses, and hospital corpsmen stationed around the island in village dressing stations, the naval government attempted to scrutinize the daily health of Guam's schoolchildren. In 1936, Governor Benjamin McCandlish reiterated the navy policy identifying the "health of school children [as a] matter of primary importance" (NGG *AR* 1936, 10). Through the education of Guam's juveniles, navy government officials believed that they might influence the sanitary practices of Chamorro adults as well. As McCandlish stated in his 1936 *Annual Report of the Naval Government of Guam,* "The Health Department of the Naval Government of Guam, working in cooperation with the Department of Education, has effectively safeguarded the health of the children and has disseminated to the adult population of the Island through this channel important information on sanitation and hygiene" (NGG *AR* 1936, 10).

Just as the navy hoped that native nurses and hospital-trained *pattera* would bring modern scientific knowledge and techniques to the grassroots level, so did they anticipate that schoolchildren would be the bearers of new modes of sanitation and hygiene. Through the intimate surveillance of children's bodies, in both the classroom and the Naval Hospital, the colonial government aspired to achieve a metamorphosis in personal hygiene practices.

Toilet Training: Cleaning the Soil

To combat the reinfection problem, navy administrators did attempt to stem the sources of contamination. Although the policing of schoolchildren was perhaps its most far-reaching practice, the navy strove to address the hookworm problem through a variety of other means. Dealing with Guam's water and sewage problems ranked foremost among

the navy's infrastructural concerns, particularly to protect its naval officers and dependents from hookworm and a variety of water-borne diseases. From 1899, the navy had attempted to improve on the system of water wells that the indigenous people had long employed. Governor Richard Leary constructed a temporary water-distilling plant in Hagåtña in 1899, in which water was pumped first into a small iron tank, then funneled through pipes to select government offices and a few houses occupied by navy officers. The US Congress appropriated special funds for a water supply system in 1910; nonetheless the water system throughout the prewar naval period was never reliable, particularly during the dry season (W Johnston 1926, 66).

To navy officials, the sewage situation—which they considered most revolting—contributed to Guam's water problems. In 1904, Governor Dyer graphically described the village of Hagåtña: "It has no sewers except the open river. The excreta of men and animals are deposited over the whole surface of the town. The liquid portions and the rain washings of these excreta percolate directly into the general body of ground-water described, and this general body of infected water is tapped by the wells" (NGG *AR* 1904, 13).

To prevent the contamination of well water and to thwart the propagation of hookworms in Guam's tropical soil, the navy passed a number of laws aimed at regulating the construction of outhouse facilities and the disposal of sewage. For example, one set of regulations mandated that a box of loose earth had to be kept conveniently close to the outhouses so that all excreta could be immediately covered; it further specified that privy pits had to be dug at least four feet deep (NGG 1916, 1). The 1925 *Orders and Regulations with the Force and Effect of Law in Guam* defined the types of privy approved by the naval government, even stipulating that no child under the age of ten should be given the task of disposing of outhouse receptacles. Moreover, the *Orders and Regulations* provided that the Departments of Health and Public Works were both responsible for inspecting and approving the construction of outhouses (NGG 1925, 88–89). Jesus Barcinas of Merizo recalled these inspections in his 1938 *Village Journal,* where he wrote that on 20 December 1938, "The district corpsman inspected the private latrines of the town. He told the teachers that the assistant health officer is expected here on either December 21 or the day after" (Thompson 1941, 313). A month later, Barcinas added to his journal, "The corpsman went out to see the latrine project on the farms" (Thompson 1941, 320). Apparently for the purposes of protecting the soil and water from hookworm contamination, an official party of navy officials, accompanied by schoolteachers, health officers, and village corpsmen, scrutinized individual outhouse facilities. As inconsequential a topic as latrines might seem, some Chamorros had vivid recollections of the hoops through

which they were made to jump in order to comply with navy rules. Jose Torres, also of Merizo, recalled his family's experience:

> Eventually they found out the way [hookworm] was transmitted. It's through people walking around bare-footed and people contaminating the soil. . . . And so new legislation came out. Number one—Everyone has to wear shoes. And number two—you must dispose of your soil or excreta in such way. . . . Next thing we knew, a notice came down from Hagåtña—you must build an outdoor latrine, and it has to be with concrete. Concrete now. Not anything else. . . . God, I remember we didn't have the money to buy cement so the neighbors got together. We all pitched in and we all helped each other. Of course, there was an inspection and if you don't have this ready and correct, they'll fine you. (Torres 1999)

Torres concluded with the comment, "all this, you know, it's hypocrisy. I don't care what happens, you don't force people to do this. . . . Do this and do that" (1999). Torres's observations reflect not only his displeasure with the pressure placed on his cash-poor parents, but also his discontent with the dictatorial manner in which the navy government frequently operated. His recollections reveal a degree of intrusiveness unforeseen even by Foucault and others in their theorizations of state intervention and surveillance. Torres's reflections further indicate that for at least some Chamorros, the hookworm and health concerns that informed projects such as the uniform construction of concrete lavatories were seldom understood by Guam's indigenous people in terms of their sanitary benefits. To many of those people, particularly farmers and ranchers with limited access to cash, this was simply one more rule to observe and one more fine to avoid. Rather than telling a story of water and sewage infrastructural developments, tales of concrete outhouses reveal some of the intersections between colonial power and medical authority, between naval invasions of privacy and Chamorro acts of compliance.

Shoe Stories

Aside from medical treatments and the regulation of latrines, navy officers also attempted to address the hookworm dilemma through a policy that mandated the wearing of shoes. In governors' speeches, *Guam News Letter* and *Guam Recorder* columns, and classroom lesson plans, navy administrators relentlessly urged Chamorros to wear shoes. Following the recommendations of the Rockefeller Foundation's Dr Grant, efforts had been concentrated on children, particularly where surveillance was easiest—in the schools. In 1924, already six years after Grant's visit to Guam, Department of Education superintendent Thomas Col-

lins issued a memorandum to all teachers specifically addressing the subject of hookworm:

> CHILDREN AND PEOPLE WHO GO BAREFOOTED ARE MOST OFTEN INFECTED. . . . For some time the Superintendent has been encouraging teachers to do their best in TEACHING children why they should wear shoes or slippers. To date there is not one school which can boast of having every boy and girl wearing some kind of foot gear.
>
> If teachers will follow the health habits and teach them, children will want to wear shoes or slippers. We cannot force them, to do so we must educate them to the point where they will want to do so. Until then the value of our health teaching will never increase.
>
> What teacher will boast of the first room to have all children wearing foot gear? The Department will await the news with great interest. (Collins 1924a, 1, emphasis in original)

Collins's dispatch to his teachers reflects again the convergence between navy health policies and educational strategies. A memorandum specifically aimed at getting both students and teachers to wear shoes indicates that this was a matter of some concern and frustration. Just as teachers were expected to monitor the particular ailments that afflicted island students, so were they pitted against each other in a competition to inspire and educate children along the lines of navy sanitary standards. From Collins's memorandum, it may be inferred that the issue of wearing shoes—or rather, not wearing shoes—was one that generated some deliberation and discussion about the value of education in promoting better sanitary practices. Collins's memorandum illustrates the navy policy of using the schools as sites where health lessons might become internalized over time, so that teachers might educate students "to the point where they will want to [follow the hygiene rules]."

These new principles of hygiene, undoubtedly including shoe wearing, became normalized over the decades of naval rule. But as Jose Torres remembered, shoes were not all that easy to acquire for families like his in the 1930s. "My mother always said, 'Don't you wear these shoes until just before you get into the classroom. And as soon as the bell rings, you know, on your way home, take them off and put it away so this thing is going to last. Because I'm not going to buy you another [pair of] shoes for two years'" (Torres 1999).

For Chamorros with limited access to money, the schools attempted to alleviate the financial burdens of purchasing shoes by instructing male students in the craft of making slippers, primarily out of hemp (NGG *AR* 1926, 5; 1935, 32). For example, Governor L S Shapley

reported in 1926 that boys in the Hagåtña schools learned "carpentry, gardening, basket and mat weaving, slipper making and copra making" (NGG *AR* 1926, 5). Shoes were also the focus of charitable giving, as noted by Governor McCandlish in his 1936 *Annual Report:* "Through the cooperation of many individuals a Christmas fund was established and expended by the Department of Education for the purchase of shoes for needy children. During the Christmas Holidays, 2,000 pairs of shoes were distributed free among the school children of Guam" (NGG *AR* 1936, 11).

Perhaps these are the same shoes remembered by Jose San Nicolas, formerly of Barrigada, who distinctly recalled receiving free shoes from the naval government (pers comm, 1 Dec 1998). San Nicolas jokingly reminisced that a navy truck filled with shoes was driven around his village, and the children ran out to grab a pair that appeared to be appropriately sized. For some children, the shoes did actually fit, or they were able to trade them for a closer-fitting match with a family member or neighbor. However, others were never able to find the right size, and simply carried the odd-fitting shoes around to signify to both teachers and navy officials that they did possess a pair.

The subject of shoes is introduced not merely for its comic value, but also because it illustrates once again the extent to which the navy attempted to remedy each and every medical and sanitary concern they identified on the island. It is difficult to assess the degree to which Chamorros began wearing shoes as a response to hookworm disease. Mr San Nicolas did not associate the navy's health policy with hookworm; to him, wearing shoes was more likely evidence of modernity and Americanization. To others, perhaps shoes, like American styles of clothing and hair styles, symbolized a sense of elitism and middle-class propriety to which some Chamorros aspired (Howard 1986, 16–22). At once a health measure and a measure of success, shoes to some Chamorros became symbolic of something more than footwear and certainly more than a measure to prevent hookworm contamination.

Converging Encounters in Health and Education

If shoes represented a locus of coercion, resistance, adoption, and appropriation, then a variety of other children-focused strategies undoubtedly held their own meanings and significances. Throughout the United States, health reforms—including ones introduced by the Rockefeller Sanitary Commission—"targeted the schools, seeing them as 'the most ready access to the general public'" (Hoy 1995, 131). However, the road to acceptance in America's public schools was a rough one, as public health professionals struggled for decades to gain an endorsement of their plans to examine children in the schools. By the

1910s, schoolchildren in northern states were regularly given medical examinations in their schools, and by the 1920s, southern states had adopted the practice (Hoy 1995, 132).[1] With their power checked by political leaders, school boards, and private-practice physicians, public health officers encountered a number of challenges in their fight to control school health (Leavitt 1996a, 73). However, by the 1920s public schools nationwide had become "a forceful agent in inculcating American, middle-class habits of cleanliness" (Hoy 1995, 134).

On Guam, under the absolute authority of the naval government, there were no competing powers to prevent the military from exercising complete control both within and beyond the schools. In many ways, Guam's schoolchildren were treated like military enlistees, lined up for head-to-toe inspections of both body and dress on a daily basis. According to the 1905 description of Governor Dyer:

> Each child is inspected daily by the teachers, and if found soiled in person or dress, is sent at once to the lavatories, separate buildings for each sex, in the rear of the school building. In these are stationed a man and a woman, respectively, to see that the children wash themselves thoroughly, and attend to their necessities after the manner of civilized people. If their clothes are soiled they are sent home to have them changed. This matter of personal cleanliness, neatness of attire, and proper habits, has been very carefully insisted upon. . . . It is believed that this intimate physical supervision of 1500 children has had a sensible effect upon the general average of health in the community. (NGG *AR* 1905, 14)

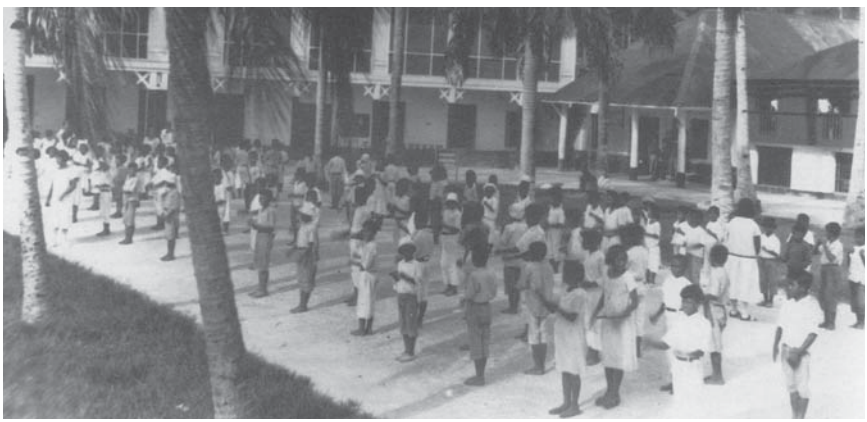


Photo 28 Schoolchildren lined up for a fingernail and cleanliness inspection. *(Collection of Don Farrell)*

Such objectifying inspections speak loudly of the navy's will to control children and to enforce compliance and conformity. Rather than simply teaching children lessons in hygiene, the daily inspections served to establish and normalize the authority of persons such as schoolteachers, medical professionals, and naval administrators. Yet less politically charged lessons were undoubtedly conveyed to the children. In order to avoid *mamahlao* (shame and embarrassment) from being individually and publicly dishonored, children would have complied as much as possible with their teachers' sanitary rules. They also would have obeyed their teachers in observance of *mannginge'*, the Chamorro value of showing respect to elders or persons in authority. Thus in the interests of averting humiliation, respecting authority, and avoiding conflict, many Chamorro children would have conformed with the hygienic expectations of their instructors. Did such compliance signify their acceptance of American power and authority? Did their obedience represent their endorsement of naval norms of sanitation and hygiene? These questions cannot be answered definitively, but it is certainly possible to read the submissiveness of children more as a survival tactic than as a pledge of allegiance.

Along with being subjected to probing, dehumanizing, and undoubtedly embarrassing bodily inspections, children took courses in hygiene that were introduced into the curriculum for grades two through eight (Collins 1923, 1). Among the lessons emphasized were directives to "Wash the hands and face with soap and water three times a day, before eating" and "Take a bath every day and always wear clean clothes" (NGG 1911, 1). Students were also reminded to avoid infected soil and wear shoes at all times in order to prevent hookworm contamination. Another health measure taught in the hygiene curriculum instructed students to "sleep on a bed and not on the floor." In their rationale, navy doctors taught students, "If you sleep on a mat, the dust from the floor which is filled with germs, will be inhaled during sleep" (NGG 1911, 2). Undoubtedly, the same doctors failed to realize that the vast majority of Chamorros would have had neither finances nor access to purchase beds.

In addition to the mandatory classes in hygiene for grades two through eight, beginning in 1929 "the girls from the 8th grade took special work in the Naval Hospital under the direction of the Chief Nurse" (NGG *AR* 1929, 24). For six weeks of entirely health-centered instruction, young girls were singled out for even more thorough indoctrination into the navy's sanitary standards. Doubtless, this gender-specific curriculum suggested to both boys and girls that, at least in the minds of the navy's ranking officers, sanitary vigilance was the social responsibility of women.

Through lessons in hygiene, Superintendent of Schools Thomas Collins explicitly sought to interweave additional messages on morality and gentility. In 1924, he wrote that the subjects of politeness and health "are inseparately [*sic*] linked [since] the practice of certain health habits gives evidence of good manners and good breeding." Ultimately, "Clean people are liked. Negligence in bathing ears, hands, hair teeth are disagreeable and impolite to others" (Collins 1924b, 33). Raising the issue of class, Collins's curriculum objectives certainly advocated the introduction and application of western values among Guam's colonized people. As well as being culturally, socially, and economically inappropriate for the vast majority of the Chamorro population, such promotions of Americanization also served the colonial purpose of assimilating Guam's people to American standards of living.

Besides school lectures and lessons in hygiene, "the Governor instituted a series of popular lectures" delivered twice a month at the Cine Gaiety Theatre in Hagåtña; an "illustrated lecture on hookworm" was one of the first of these presentations (NGG SR 1919, 12). Moreover, annual "Clean Up" contests and parades, as well as competitive health contests between rival villages also served as vehicles through which the navy attempted to inspire participation in and acceptance of its sanitation programs. In the 1924 Clean Up Week parade, for example, "The teachers and pupils of the Agana Schools accompanied by the Naval Station Band marched in parade through the principal business and residential sections of the city on 4 September. . . . Each child carried either a broom, mop, fly-swatter or some implement for cleaning homes and killing flies. The children carried banners bearing slogans

Photo 29 Health awareness parade in Hagåtña. *(Collection of the Pedro C Sanchez family)*

[such as] . . . Use the hospital; If sick, see the doctor at once; Make all toilets fly proof; Keep toilets clean; Bury all waste; When sick go to the Hospital; Save the helpless children; The Hospital saves lives" (*GR,* Sept 1924, 26). According to the same article in the *Guam Recorder,* these banners were then reused in similar parades in the villages of Sumay, Agat, Inarajan, Umatac, Merizo, Piti, and Asan (*GR,* Sept 1924, 26).

In a similar though not exclusively health-related parade, Merizo village school administrators and teachers in 1936 organized a procession through the streets. They created the event to serve as "an incentive for every student to place himself according to his scholastic accomplishment" (*GR,* Sept 1936, 36). In the parade, students were lined up in the following order: 1. School Cadets; 2. Highest Children in the Test; 3. Gardeners and Members of the Boys' and Girls' Club; 4. Weaving and Sewing; 5. Cleanest Children; 6. Most Industrious Children; 7. Nutrition; 8. Good Conduct; 9. School Monitors; 10. Athletes; 11. Cooperation (*GR,* Sept 1936, 36). Along with public validation of the significance of cleanliness to the navy, such displays by students also promoted concepts of individualism and competitiveness among the children.

Like the Merizo children, students in the Umatac Magellan School similarly "formed a 'Health Parade' every morning for three days" in October 1938. In their event, students marched down the street carrying signs with statements such as "We want 100% cleanliness," "We want 100% wearing shoes," and "We want 'Help' for Susana Hospital" (*GR,* Dec 1938, 30). It is difficult, if not impossible, to assess the success of health parades and similar educational campaigns run by the naval government. Students were required to participate in such events, occurring as they did during school hours and under the supervision of school employees. Were students proud of being identified as the "cleanest" among their schoolmates? Did such recognition inspire them to compete with one another for such accolades? Did students learn real-life lessons by carrying around signs instructing them to wear shoes or to bury all waste? These sorts of school-sponsored health activities are probably best appreciated in the broader context of a wide range of exercises, all focusing on compliance with naval regulations, health-related or otherwise. In the grand scheme of colonialism, perhaps the variety of rules and regulations imposed by the navy spoke to the Chamorro people more about Americanization and modernity than about health and hygiene.

Can success in the areas of science and medicine be measured, even with the help of statistics? Throughout its decades on Guam the navy certainly amassed an amazing array of medical facts and figures to demonstrate the legitimacy and vitality of the colonial project. However, in the case of hookworm, statistics were the navy's worst enemy, demonstrating the difficulty of eradicating the disease from the island.

In a 1924 study of intestinal parasites on Guam, government health department officials revealed laboratory findings that "persons who were treated and cured in 1915–1917 did *not,* in 1922, show a markedly decreased incidence of intestinal parasites" (HIPG 1924, 139, emphasis added). The health report concluded that "it is not believed that human infestations can be eradicated from Guam" (HIPG 1924, 139). Likewise, almost fifteen years after the Rockefeller Foundation visit, navy health officer F E Porter announced, "Hookworm infection has appeared to be increasing and special efforts are being made to locate and treat all cases and a campaign of education is being carried on both through the Hospital Corps men located at the various dressing stations throughout the island and by lectures to the school-teachers in the native schools" (1932, 447). After decades of attempted sanitary reforms, such a disclosure must have unsettled at least a few navy bureaucrats. As far as hookworm disease was concerned, medical statistics provided the navy with few opportunities for self-aggrandizement.

But if success were measured according to the ability of the navy to produce conformity and obedience, then some analysts would evaluate the parades and participation in programs as clear evidence of navy achievement. Through medical treatments, parades, health contests, and the like, perhaps the navy did naturalize its presence on the island, gaining acceptance in some circles due to persistent efforts. Some Chamorros, including Ramon Sablan and others who shared some of his views, did look favorably on the variety of methods employed by the navy to engage native people in its health programs. But while these activities attracted some, they alienated many others, creating a divide of distrust and discomfort in the face of naval assertiveness. Hygiene lectures and health parades influenced different children in different ways. Sister Mary Peter Uncangco recalled these events as just an opportunity to get out of school, march around the town with her schoolmates, and listen to the navy band play a tune or two (1999). Nonetheless, she also recognized that somehow during her childhood she learned to be spotless in her dress and fastidious in her practice of personal hygiene. However, as she understands it, these values of cleanliness and meticulousness were imparted by her grandparents, parents, aunts, and uncles (Uncangco 1999). Childhood memories, vivid as some might be, have only limited validity in illuminating the degree to which naval injunctions regarding health and hygiene became internalized and normalized by Chamorros. Conformity to the expectations of schoolteachers, most of whom were native Chamorros, inevitably resulted in the adoption of western norms of sanitation. Yet wearing shoes, visiting hospitals, and cleaning one's fingernails should not be viewed simplistically as symbols of Chamorro submission to colonial authority, state power, and western scientific superiority. These sorts of

treatments also amplified the paternalistic role assumed by the navy, which perceived itself as a father figure to the infantilized Chamorro population-at-large. At some points, accepting the requirements of the colonizer served as a survival tactic for Chamorros who wished to avoid the gaze, or the punishments, of teachers, doctors, nurses, and others in positions of authority. Certainly for some, the newly imported ideas, medicines, and technologies represented the promise of modernity and progress. The full range of motives that propelled Chamorro participation in or avoidance of naval health regimes may never be known. If shoes and parades were filled with a diversity of meanings, then hookworms and hospitals were also repositories of cultural significance.

Chapter 7
Conclusion: Colonial Dis-Ease on Guam, 1898–1941

Chamorro Health and Struggles over Culture, Power, Race, and Gender

Throughout this work, I have presented arguments against a teleological interpretation of the spread of western medicine on the island. Orthodox interpretations of the impact of western medicine on Guam, evident in the analyses of scholars such as Paul Carano, Pedro Sanchez, and Robert Rogers, have hailed it as a prominent example of the blessings of naval colonialism. For instance, in their *Complete History of Guam,* Carano and Sanchez asserted that the navy made "substantial improvements" in Guam's health conditions (1977, 264), and in *Destiny's Landfall: A History of Guam,* Rogers praised the navy's health record on Guam as "exemplary" (1995, 160). Such explanations have assumed without question that western medicine entered the island as a precise and coherent scientific practice. My research has demonstrated instead that the historical experience of medicine on Guam was marked by episodes of contention, dissension, opposition, confusion, and development. In my examination of cases involving Hansen's disease, midwifery, hospitals, and hookworm treatment programs, it has become evident that throughout the early twentieth century the field of western medicine was in the throes of transition and transformation. My work has illustrated that the navy could not introduce western medicine and its accompanying scientific technologies to Guam without concomitantly influencing Chamorro cultural values, social relationships, political controls, and economic expectations. Through newly introduced norms of health and hygiene, the navy aspired to transform Chamorro cultural practices in a number of varied and profound ways.

Part of the challenge faced by western medicine on Guam was the need to comprehend and implement contemporary discoveries that demonstrated the value of germ theories of disease, rather than mias-

matic, environmental ones. In what was still just a budding science, western medical practitioners struggled to understand and develop their expertise in new and spreading laboratory technologies, as well as evolving clinical diagnostic procedures. Throughout the learning process, western doctors both celebrated successes and bemoaned failures, remedying some while misdiagnosing others. For example, the frequent misdiagnosis of gangosa as Hansen's disease resulted in the unnecessary confinement of more than one hundred native patients for approximately two years. Not only did the gangosa patients find themselves needlessly sequestered, but at the same time they, along with mentally ill patients, were exposed to the contagious Hansen's disease through their close confinement in the Tumon colony.

In the same way, thousands of children were arbitrarily subjected to nauseating medications for hookworm disease, including some medicines that navy doctors admitted to using in experimental dosages. The application of obstetrics and gynecology by navy medical practitioners who most certainly received little, if any, training in these new fields of medicine created scenarios for Chamorro females in which the practices of western medicine may have been much more deadly than any of the traditional remedies or procedures. The uncertainty of western medical practitioners in treating Hansen's disease, gangosa, hookworm, and gynecological problems—as well as their inability to prevent hundreds of deaths in early-twentieth-century epidemic outbreaks of influenza, smallpox, whooping cough, measles, and bacillary dysentery—repudiates the simplistic notion expressed by most Guam historians that "the American navy's record in public health on Guam was exemplary" (Rogers 1995, 160). Navy doctors' lack of familiarity with diseases classified as tropical contributed to a situation on Guam in which neither medical practitioners nor their prescribed treatments worked perfectly or even positively. Confusions over ailments such as gangosa and Hansen's disease certainly caused them some consternation, as did their awareness that, even after fifty years of colonial rule on Guam, the medical department was neither highly regarded nor voluntarily visited by the majority of the indigenous population. Chamorro patients, unimpressed by the tentativeness of numerous medical procedures, were invariably loath to trust and respect the navy's medical personnel.

Furthermore, military medical practitioners in the colonial context faced obstacles not encountered by mainland doctors. Obliged to protect military personnel and dependents, navy doctors experienced considerable professional pressure in the face of their terrifying fears and ignorance of numerous little-understood tropical diseases. Not only imperfect scientific knowledge, but also their constant struggle to obtain the funds necessary to inoculate themselves against these enig-

matic maladies, posed problems. Living in unaccustomed humidity and attending to numerous cases of heat stroke, navy doctors undoubtedly encountered diverse, unanticipated medical challenges.

Just as the introduction of western medicine on Guam must be appreciated in the context of its own historical and scientific developments, so should the different interpretations of medicine that challenged colonial administrators be understood in their cultural setting. One of my purposes in this study has been to demonstrate that the introduction of western medicine to Guam involved not merely the importation of new technologies and new epistemologies of science, but also a transfer of new social relationships and unfamiliar cultural norms. For example, the doctor-patient association presented an uncomfortable social situation for native patients, especially when extended to Chamorro women. In the Susana Hospital, the troublesome nature of this professional relationship was amplified as the navy's exclusively male medical corps engaged with women's bodies in ways not previously experienced. In the authoritative role commanded by the medical specialist, the navy introduced a type of medicine that differed greatly from native practices. Prior to American colonial rule, Chamorros' medical experiences revolved around interactions with herbal healers in familiar and comfortable village social settings replete with clan members and others in physical proximity to the afflicted.

Western medicine introduced definitions and understandings of science, nature, and the supernatural not subscribed to by most Chamorro people. For example, the concept of medicine as clinical and laboratory based conflicted with Chamorro notions of health as both naturally and supernaturally determined. Chamorros long accustomed to comprehending their health problems in terms of the desecration of sacred places or the violation of particular cultural behaviors must have thought strange the demands of navy doctors for samples of blood, soil, fecal matter, and other laboratory specimens. To people attuned to relating their health conditions to the surrounding conditions of people, land, spirits, and weather, such diagnostic techniques may have seemed disconnected from their environmental realities. Moreover, western medicine promoted not only the practice of modern science, but also particular social values such as individualism and activism. Treating patients on a private and personal basis, while pursuing cures along the lines of the western activist tradition, typified the navy's approach on Guam. By contrast, Chamorro medical practitioners such as *pattera, suruhana,* and *suruhanu* interacted with their patients in the full social setting in which they lived. And whereas *pattera* involved a number of women from the expectant mother's familial circle, navy doctors viewed childbirth in the hospital as a private matter between

doctor and patient. This shifting of venues from the openness of the Chamorro home to the privacy of the naval hospital contributed further to the sense of displacement among Chamorro patients.

In a number of other ways, western medicine promoted values entirely alien to Chamorro convalescents. For example, patients banished by the navy for the hideousness and contagiousness of their Hansen's disease had been treated by Chamorros in just the opposite manner—as being in need of extreme nurturance, rather than hostile banishment. Hookworm sufferers and schoolchildren islandwide frequently encountered moralist and moralizing lessons linking cleanliness to self-worth, gentility, good manners, and personal popularity. Rather than teaching about health and hygiene in the context of science and biology, the navy's health curriculum was framed in terms of morality. Western medicine on Guam became embroiled in a variety of political, cultural, and economic cross-cultural confrontations.

The laboratory technologies of military medical personnel, as well as their access to the latest in medical innovations and discoveries, added to their self-perception as the purveyors of modernity. Navy administrators unfailingly represented western medicine as one of the blessings of modernity, in contrast to Chamorro medical methods, which were uniformly characterized as traditional, archaic, and superstitious. Navy doctors juxtaposed the traditions embedded in practices of midwifery against the latest in hospital gynecology and obstetrics. *Pattera* were typically represented as ineffective, old, and unsophisticated, essentially exemplifying antiquated traditions. By contrast, naval medical practitioners assumed the superiority of their relative youth and formal training, viewing themselves as symbolic of modernity and progress. In the process of asserting their professional status, navy doctors and nurses challenged Chamorro notions and definitions of authority, tradition, and modernity in ways that typically privileged the navy's medical corps.

Practices such as washing hands and faces before eating, and wearing shoes, became emblems of progress and evolution, rather than neutral indicators of better sanitary practices. Improving the health of Chamorros was never simply about health, but was typically linked to other, moralistic concerns. For example, navy officers and doctors made constant linkages between Hansen's disease and primitivism, midwifery and ignorance, and hookworm and mental slowness. These rhetorical associations between diseases and practices prevalent on Guam and supposed vestiges of primitivism acted as powerful, persuasive propaganda in support of an increased navy role to develop its otherwise backward colonial subjects. If a toothbrush represented patriotism in Progressive Era America, then hookworm and any of the other tropical diseases found on Guam served as representations of backwardness, ignorance, and laziness. In this powerful way, Chamorro physical con-

ditions represented more than health; they were read as signs of a whole range of denigrating complaints that worked to validate naval intervention.

Western cultural norms regarding the definition of appropriate gender behaviors also became entangled with navy discourses on health and hygiene. Navy nurses and their native nurse apprentices viewed themselves not only as carriers of modern values and behaviors such as cleanliness and moral rectitude but also as paragons of femininity and domestication. In emphasizing the significance of health issues primarily to Chamorro women, navy nurses and doctors imposed their western value systems and gender demarcations on Guam's native people. For example, sending schoolgirls to the Naval Hospital for lengthy lessons in health care isolated them as responsible for community-wide health issues. As the future mothers of Guam, the schoolgirls were specifically targeted as the objects of intense medical scrutiny. Perceiving them as the bearers of the race, the navy placed additional controls over mothers, midwives, herbalists, nurses, and schoolgirls. The identification of Chamorro women by the Susana Hospital founders as the "little people" of Guam illustrates the navy's infantilization of native women in order to privilege the knowledge and power of western medical professionals and naval authority.

Just as the introduction of western medicine contributed to the propagation of culturally dissimilar gender norms, so did the practice of western medicine raise the specter of race as an important category of analysis. By subjecting Chamorro patients to procedures not applied to navy personnel and dependents, the navy demonstrated its racialist policies. Whether serving leftovers to Chamorro patients in the Naval Hospital or exploiting their labor, colonial administrators routinely subjected Guam's indigenous people to a variety of practices informed by racial perceptions. The fact that navy medical officials asked only Chamorro patients to mow their lawns and mop their floors lends credence to this argument. Moreover, in the navy's treatment of Chamorros as uniformly contaminated, race became a marker of disease, simply in the interest of medical exigency. More often than not, schoolchildren and hospital patients were treated for hookworm with unquestionably harsh medicines, whether or not they suffered from the ailment. Sickness, rather than fitness, was the navy's presumption of the entire native population of Guam.

Throughout the battery of naval health policies, Chamorros were infantilized and feminized as destitute, ignorant, helpless, and dependent on the navy for their very survival. Such processes of infantilization and feminization confirm that western medicine entered Guam with a complex social and cultural agenda. Instead of assuming that Chamorro adults were capable of acting in the best interest of their fami-

lies, navy officers assumed their ignorance and acted on their behalf, institutionalizing Chamorro children without parental permission and placing sanitary officers throughout the island to police the sanitary activities of villagers. Such examples demonstrate that the navy positioned itself as the paternal master of its colonized Chamorro children. Further, navy discourses and policies actively feminized the island and its people through the consistent depiction of Guam and Chamorros in terms of submissiveness, dependence, and naïveté—both desperate for rescue and in want of supervision by the masculinized, authoritative, and knowledgeable colonial master.

Just as western medicine brought with it an array of western gender and racial understandings, so also did it introduce foreign notions of class. For example, naval views of hospitals and nurses as representative of moral propriety were weighted by a number of class interests. Through the training of native nurses and midwives, navy administrators hoped to instill middle-class values of cleanliness and diligence in both students and their family members alike. However, navy attempts to place elite women in leadership positions as nurses largely failed, because upper-class Chamorro women would have had little interest in working primarily as cleaning ladies, second fiddle to the navy nurses. Rather than attracting elite women, the nurse-training program drew working-class women who typically viewed nursing as a means through which they could help their families acquire cash. Consequently, and because the native nurses were treated poorly in comparison to navy nurses, the nurse-training program never attracted the number or class of women that the navy hoped it might. The story of the Susana Hospital also demonstrates that Chamorro notions of class were confirmed in the context of naval health policies, as upper-class Chamorro women sought hospital services in the interest of modernity and progress, and as a vehicle through which they could illustrate their social elitism.

The navy's economic agenda for Guam was revealed in its articulation of health policies. For example, in the treatment of hookworm disease, implications of lazy natives and the depressed Chamorro economy contributed to naval interest in curing the problem. Instead of investigating and understanding Chamorro labor patterns and land-use systems in order to explain agricultural patterns of production, navy governors assumed that laziness and ignorance were the causes of what they perceived as inefficient uses of land and other natural resources. Rockefeller Foundation views of hookworm as a disease of laziness suggested to navy officials that by removing the worm, they could reinvigorate the Chamorro population. These kinds of conclusions drawn by administrators point to some of the ways in which concerns for the health of the Chamorro people intersected with navy and corporate philanthropic interests in commercializing Guam's agrarian, subsis-

tence economy. Likewise, the intense education and training in hygiene forced on Guam's youth facilitated the introduction of western values. Promotions of sanitation-as-Americanization also served the colonial purpose of assimilating Guam's native people to western standards of living.

Various tensions, uncertainties, and conflicts underlay the spectrum of naval health policies on Guam. Whether curing some patients of their particular afflictions or misdiagnosing and mistreating others, naval medical personnel never represented an infallible science or an unfailing medicine. Instead, they confronted the daily challenges presented by scientific technology, medical professionalism, colonial power dynamics, native disregard for a number of their programs and regulations, and cultural conflicts of race, gender, and class. In appreciating the varied experiences of medical officers, colonial administrators, corporate philanthropists, native nurses, Chamorro patients, and others involved in the naval government health program on Guam, one must acknowledge the incoherence and inconsistency of colonialism and its forms of control.

Medicine and Colonialism

This research project has shown that in the colonial context, western medicine was never simply about the health and welfare of the Chamorro population. Rather, a dense layering of concerns regarding the nature of power, authority, civilization, modernity, and domestication contributed to the introduction and enforcement of the navy's health regime. For Chamorro patients, navy doctors frequently couched their medical decisions in terms of the "civilizing mission" of the colonial project. Whether expressed as President William McKinley's objective of "benevolent assimilation" or as Americanization, the practice of western medicine on the bodies of colonized Chamorros was frequently accompanied by exhortations about medicine as one of the magnanimous gifts of the colonizer.

McKinley's statement to the nascent naval colony on Guam, that "the mission of the United States is one of benevolent assimilation" (quoted in NGG *AR* 1914, 2), suggested from the outset that paternalistic rhetoric and self-aggrandizing appraisals would characterize the policies of Guam's colonial administrators. The navy frequently reiterated its concern for rehabilitating and saving the Chamorro race from extinction. For example, in their documentation of birth and death rates, navy officials attempted to certify that their health policies resulted in dramatic demographic increases. Other statistical evidence offered by the navy also served its interests by validating colonial health policies as both charitable toward and advantageous for Guam's native people. The

numbers of Hansen's disease patients secluded ostensibly testified to the lengths to which the navy would go to protect the future health of the Chamorro people. Likewise, in the numbers of midwives and nurses trained, navy administrators could register their concern for the safety of expectant mothers, newborn infants, and the general welfare of the Chamorro population. Further, navy officials promoted the treatment of thousands of children for hookworm and other diseases as evidence of their efforts to ensure the future productivity and happiness of the Chamorro people. However, such health policies resounded with paternalism and racism, specifically tagging the Chamorro people as diseased, destitute, and dependent.

In their association with a number of American charitable foundations, navy officials and philanthropists alike manipulated notions of poverty and charity to validate the use of health policies in constructing colonial mechanisms of power over the Chamorros. In the Susana Hospital, navy wives and Russell Sage Foundation philanthropists identified women and children as the "little people" of Guam who were desperate for charitable donations. The Sage Foundation, in collaboration with navy officers and their activist wives, contributed to the objectification of Chamorros as both the agents and the victims of disease and deserving of sympathy and charity. In helping the navy to establish a medical institution for the care of women and children, the Sage Foundation validated a number of presumptuous colonial policies that assumed the superiority of western epistemologies and technologies and corroborated the professional authority of American doctors over traditional healers. The involvement of the Rockefeller Foundation's International Health Board on Guam further contributed to ideas of Chamorro debilitation and naval hegemony. In supporting the navy's various intrusive health policies, the board legitimized the tactics and strategies employed by military officers in dealing with recalcitrant native people. Navy administrators and philanthropists viewed their campaigns against disease and unsanitary living conditions as testaments to the success of their Americanization efforts on the island. The use of hospitals, the eradication of hookworm, and the education of Chamorro students in modern principles of health and hygiene presumably indicated the benefits of colonialism and humanitarianism.

Partly as a way of rationalizing their colonial presence, navy personnel emphasized their intrepid roles in alleviating the miseries of the supposedly helpless native people. However, many of the health policies were overtly aimed first at protecting the health of navy personnel and their dependents, an agenda that was soon subsumed by the navy's emphasis on the philanthropic nature of its colonial project. Quite significantly, such emphases on the importance of the navy's Department of Health and Charities served to promote the overall necessity of the

Bureau of Medicine and Surgery within the larger naval hierarchy, where it was ranked the lowest of the navy's five bureaus. Navy medical officials consistently sought to uplift their status through their work in tropical colonies, both in protecting navy personnel and in preventing the spread of frightful tropical diseases to the continental United States. By exaggerating and exploiting the fear generated by the presence of Hansen's disease on Guam, the navy successfully garnered additional funds from the US Congress and gained increased publicity about the urgency of their medical mission.

The practice of medicine in a colony like Guam intensified the authoritarian position appropriated by doctors. Actively involved in the surveillance of the Chamorro population, navy doctors became participants in the criminalization of health and hygiene practices. In consolidating their professional authority, these doctors and health workers asserted their administrative might as well as their scientific knowledge. Whether engaged as sanitary inspectors, educators of native nurses and *pattera*, consultants to the governor on medical matters, or hospital administrators, navy doctors controlled not only medicine, but also a battery of rules, regulations, and punishments relating to a plethora of sanitary concerns. While public health officials on the US mainland struggled for power against the conflicting aspirations of political leaders, school board members, and private practice physicians, no such obstacles existed in the colonial context of Guam. In the colonies, issues confronting mainland doctors regarding the rights and liberties of individual patients never materialized.

Because of the coercive characteristics of colonial medicine, navy doctors consistently found themselves at odds with their Chamorro patients. Whether in association with police officers, insular patrol members, sanitary inspectors, or school nurses, naval doctors were intimately involved in the regulation and superintendence of Chamorros. The unusually forceful role of American medical personnel on Guam implicated them in the military's peculiar agenda of establishing control and domination over the island's population. Whether arresting suspected Hansen's disease patients, ticketing women for drying their clothes on bushes or lawns, scrutinizing village homes to ensure properly mowed lawns, or inspecting the body and dress of individual schoolchildren, navy doctors were actively engaged in the surveillance and control of Chamorro bodies, healthy or diseased.

Such a connection to police power invariably worked against military medical practitioners in their attempts to appeal to ailing native people. To the navy doctors such measures served the interests of health, sanitation, and hygiene, but to the Chamorro people issues other than medicine were at stake. In the project of establishing colonial control on Guam, the medical department played a fundamental

role. However, instead of feeling encouraged to take advantage of the navy's free medical services, many Chamorros felt intimidated, humiliated, and dehumanized by their encounters with western medicine. Such experiences contributed to a serious chasm between navy doctors —who saw themselves as offering medicine—and Chamorro patients —who instead perceived coercion and state power. For some Chamorros, naval health regulations signified the navy's power and authority more often than its interest in medicine and health care. Some abided by the health regulations in order to serve their own interest in avoiding punishments and fines, rather than out of concern for promoting wellness. Yet other native people perceived doctors as adversaries rather than allies.

This review of medical practices on Guam illustrates some of the limits of colonial rule in general. From the perspective of the navy doctors, one measure of success would have been the Chamorro people's willingness to report cases of illness voluntarily. Naval personnel exhorted Chamorros to report to doctors as soon as symptoms became evident, rather than waiting until conditions had deteriorated beyond the point of medical treatment. However, many Chamorros had developed such an antagonistic relationship with the medical department that such voluntary requests for assistance could seldom occur. Because many felt alienated from the medical system and belittled by its dehumanizing treatment, they avoided western medicine as much and as long as possible, even risking death.

In their interactions with charitable organizations, Chamorro patients' actions reflected the same reluctance and distrust. In the colonial context, medicine represented more than health care, more than the curing of people's ailments, more than an interest in the research and development of tropical medicine. In Guam, the association of western medicine with state power and military control precluded the full manifestation of its therapeutic potential. Similarly, the correlation between American benevolence and the Chamorro people's perceived destitution contributed to an unequal power relationship that obscured the potential benefits of philanthropic medicine.

Chaperones, Soap, the Chamorro MD, and Indigenous Participation

A long list of Chamorros took advantage of opportunities presented by the navy's health regime and furthered their cultural and economic interests by actively participating in a variety of ways. Yet the histories presented here of nursing chaperone Maria Roberto, the Ada Soap Company, Dr Ramon Manalisay Sablan, nurses, teachers, and other would-be collaborators show that native participation in the colonial

economy must be understood beyond terms such as acceptance or rejection, victimization or agency, and domination and subordination. Rather, from the limitations of such dichotomous expressions emerges a spectrum of variable positions, understandings, and significances. For the Chamorro people under the stewardship of the US Navy, neither acceptance nor rejection captures the range of alternatives at their disposal. Within the scope of acceptance, for example, lay a variety of possibilities, including co-opting the navy's own agenda for political, economic, or social gain. In the cases of Guam's native nurses, Dr Ramon Sablan, and the Ada Soap Factory, Chamorro participation in the military's health regime might be best understood as a means through which individual and clan desires for personal fulfillment, economic gain, social status, and educational opportunity were advanced. Some of the women who chose to enter the nurse-training program, including their beloved chaperone Maria Roberto, were motivated by the desire for material advancement in a military economic system that otherwise constricted opportunities for women. Similarly, had Ramon Sablan not taken advantage of the educational advancement offered him by the navy, his career choices would have been limited. For the Ada family, perhaps soap was a commodity so ideal as to minimize the riskiness of their capitalist venture. Rather than viewing the options of Roberto, the native nurses, Sablan, and Ada in terms of sanitary zeal, one may see their choices as encompassing a broader variety of motives, from altruistic desires to serve others to pragmatic desires for material profit.

For those who seemed to embrace the colonial health agenda, taking advantage of colonial opportunities may have presented a way to reinscribe traditional notions of power, authority, or status beneath the new veneer of modernity. For example, *pattera* had long enjoyed a position of respect and prestige among the villagers, and the navy's newly introduced licensing regulations posed an irritating, though manageable, obstacle to maintaining their practice. The acquiescent actions of these women may be understood in terms of their commitment to their craft, or perhaps as reflective of their genuine aspirations to improve their techniques in the interest of enhancing both their delivery records and their professional reputations. The compliance of *pattera* may also indicate a general desire to avoid conflict with the demonstratively coercive colonial administration. For a variety of reasons, perhaps including social and political considerations beyond the scope of sheer medical exigency, women-as-midwives observed the naval regulations.

Those elite *(mannakhilo')* Chamorros who cooperated voluntarily with the naval government also based their decisions on a variety of reasons. Some selected the Susana Hospital partly because of the perceived status attributed to its patients. Others selected navy medical services in part because they understood western medicine to be safe, modern, and

progressive. Still others participated in naval medical projects as a way of associating themselves with the island's colonial powers. Thus at least some *mannakhilo'* Chamorros availed themselves of navy medical services to identify themselves as privileged, to define themselves as modern and progressive, or to affirm their cooperation with the colonial government. These *mannakhilo'* added their own class-based understandings to the scientific ones subscribed to by medical officials. In the process, tensions undoubtedly arose between them and the masses of Chamorros.

The compliance of children with naval health regulations was also a response to the broad context of colonial power and authority. Some students perhaps obeyed their teachers' exhortations in order to protect themselves from the gruesome hookworms and disease-filled germs depicted in lessons, films, posters, and public lectures. Others perhaps abided by the health rules to avoid the embarrassment of being individually singled out as unsanitary. Yet other children may have viewed compliance as an opportunity to excel in the classroom or even to gain the goodwill of authority figures such as teachers, school administrators, doctors, and nurses. Some of those interviewed suggested that participation in health parades and other school-sponsored activities signaled merely an interest in fun and entertainment, while others noted that compliance was a way to avoid fines and other forms of punishment. Whether by wearing shoes, marching in health parades, or simply improving their habits of personal hygiene, children who heeded the advice of their elders brought their own motives and rationales to the decision-making process. These children were not mere victims of colonial hegemony, but were agents in their own right, drawing conclusions and making decisions on the basis of their individual and familial motives and aspirations.

Essentializing all of the apparently acquiescent Chamorros under the rubrics of assimilation, acceptance, submission, or even sanitary zeal elides their instrumentality as decision makers informed by their own agendas. Just as colonial administrators, military doctors, navy wives, and corporate philanthropists espoused a variety of concerns and interests on Guam, so did native Chamorros draw on an assortment of intersecting, and sometimes conflicting, social, political, economic, and cultural motives in their acceptance of and resistance to naval policies.

Chamorros responded to naval dictates with a variety of avoidance strategies, whether by hiding Hansen's disease patients from health authorities on family ranch lands or, as patients, by escaping from the Tumon colony. Other techniques were also popular, such as alerting fellow villagers at the sight of sanitary inspectors to avoid fines for infractions of the health code. Going through the motions of sweeping, mowing one's lawn, or putting on shoes to avoid the reproach of naval

administrators, sanitary inspectors, teachers, and other health officials were typical and effective everyday forms of resistance. In the process of exercising these strategies, Chamorros turned their gaze against the navy, surveying the actions of government officials with the same zeal as they themselves were scrutinized.

Consciously avoiding the services of navy medical officers in deference to the services of a *pattera, suruhana,* or *suruhanu* was another common form of active resistance. Opposition to the navy's health agenda may have contributed to the low enrollment of women in the native nurse-training program, as well as the negligible number of children delivered annually at the Susana Hospital and the humble few who voluntarily registered as hospital patients. The reluctance of many women to use the services provided at the Susana Hospital denotes a resistance to their objectification as helpless and impoverished women by medical philanthropists.

Such avoidance tactics, considered by some to be conservative forms of resistance, nonetheless disturbed naval notions of order and power. Because of the near universality of these practices, I argue that they were successful strategies for undermining the colonial administration's ability to impose its hygienic norms unilaterally. Through these elusive responses to naval health programs, Chamorros successfully disrupted naval attempts to intrude into their daily lives.

Resistance also took the form of outright protest, whether in the form of appeals to the governor regarding the arbitrary confinement of schoolchildren in the Naval Hospital or in litigation before the navy judge advocate general's court on behalf of Chamorro medical patients who were obliged to provide free labor while in the hospital. Stories of family members smuggling food to their hospitalized kin, as well as accounts of Chamorros who violated naval regulations to visit family members confined at Tumon, reveal the ways in which socially fracturing regulations were frequently, and proudly, disregarded by Chamorros.

In between the poles of acceptance and resistance is a wide spectrum of possibilities. Whether accommodating naval authorities or avoiding them, whether manipulating naval intentions or subverting them, Chamorro people acted neither unanimously nor predictably. Rather, because their reasons differed according to individual, clan, or class interests, as well as from one historical context to another, their actions must be understood in their individual particularity. Native people responded to a plethora of discrete encounters with distinct motivations.

At the same time, these varying responses must have created tensions among different groups of Chamorros. Some of these conflicts were class-related, such as those between *mannakhilo'* Chamorros who

generally supported many of the navy's policies and the majority of nonelites who were mostly less enthusiastic. Other tensions arose around the issue of age, where elderly *pattera* faced the denigration of younger medical professionals, including native nurses, who defined their own expertise partly in terms of their relative youth. Tensions also undoubtedly emerged between Chamorros who viewed traditional forms of medicine as obsolete and primitive, and those who continued to avail themselves of such services. An understanding of local responses to naval projects requires transcending the formulaic polarities of Americans and Chamorros, agents and victims, and domination and resistance.

For many, the navy's health program brought little in the way of relief—the families of children who were involuntarily and arbitrarily confined at the navy hospital for hookworm treatments only to become continually reinfested; those persons who were actually harmed and who sometimes died, due to the ill effects of experimental medicines prescribed to them by navy doctors; and all of those whose lives were touched by Maria Roberto, whose very devotion to her hospital job led to her contraction of Hansen's disease and banishment to Culion. Many Chamorros found their knowledge and understanding of the navy's health program filled with too many cultural and physical contradictions to make it a truly viable alternative to their *pattera, suruhanu,* and *suruhana.*

Because of the assorted forms of resistance and its own uneven record of health care, the navy could not comprehensively enforce many of its restrictive laws. Consequently, it was sometimes forced to bend its rules; for example, it offered a bounty for the identification of escaped Hansen's disease patients, although no one in the local community ever revealed their whereabouts. As a strategy for educating Chamorros otherwise unreceptive to their medical offerings, navy administrators undertook to hire native nurses. And to guarantee the success of that program, they had to hire culturally appropriate chaperones for the native nursing students. Medical personnel had to coexist with the *pattera,* who, unlike midwives in the continental United States, could not be supplanted as the primary agent of deliveries. Similarly, navy doctors in this period could not radically subvert the respect and authority paid to *suruhanu* and *suruhana* by the general Chamorro population.

Colonial Dis-Ease on Guam

Ever since I was a little girl growing up in the village of Dededo, I can remember being told by teachers, nurses, and other adults of the horrors that would result if I didn't wear my shoes. I listened to innumer-

able stories of diabolical hookworms that had the mysterious power to enter my stomach through the skin on my bare feet. My imagination reeled as I envisioned thousands of worms inside my body, stealthily crawling through my intestines and other organs. The thoughts were repulsive enough to sicken my stomach, but more important, they were powerful enough to make me wear my shoes.

I recall admonitions about playing in the dirt or getting dirt under my fingernails. I avoided getting dirt on my dresses, on my socks, on the soles of my shoes. I recollect how one of our neighbors, the wife of an off-island hire of the US Federal Government, would, one at a time, lift me and three of my sisters up to hose us down before we were allowed to enter her house. I remember admiring her shiny floors and immaculate countertops. Nothing ever seemed unkempt, and there was never a trace of dirt or dust to be found.

Yet I also recall the playhouse built by my father in our back yard, where my siblings and I would sometimes mix mounds of dirt with water in order to make messy, juicy mud pies. I also remember going to my relatives' houses or to our family ranch where nearly everyone ran around barefoot at least once in a while. Among my family, there was always some occasion to get one's hands covered in the soil of our land, whether in the work of feeding chickens, pigs, cows, and carabaos; climbing the fruit trees to gather mangoes or guavas; or picking, husking, and grating coconuts and other agricultural products. There was a certain pride attached to the traces of earth on our hands and feet. It was dirt that symbolized the bounty of the land, the fertility of the soil, the labor and sweat of our physical efforts, and the satisfaction of contributing to the daily responsibilities of feeding the family.

Something definitely seemed to be brewing in all of this dirt. Years later, while conducting archival research as a graduate student at the University of Hawai'i at Mānoa, I was struck again by a barrage of reports by US naval officers on Guam regarding dirt. To these navy officers, dirt symbolized not hard work and mouths to feed, but rather primitivity, poverty, disease, and a host of other perceived problems. To these colonial administrators, the bare feet and dusty skin of Chamorro men, women, and children represented the Herculean cleanup task that lay before them.

My personal, varied experiences have motivated me to explore some of the relationships between Chamorro and American naval notions of dirt and disease. Since my elementary school days, I have heard countless stories about the amazing miracles of medicine that recounted not only attacks against dirt, germs, and disease, but also victories over superstition, primitivity, and so-called premodern ways. They were stories of a benevolent American colonizer that shared its scientific and medical knowledge with its Chamorro subjects.

As a child of the so-called modern era on Guam, like other Chamorros of my generation, I have been exposed to the works of *suruhanu* and *suruhana,* as well as to board-licensed doctors and nurses. We all grew up hearing stories of *pattera,* alongside recollections of the Susana Hospital and hookworms. Probably most Chamorros, like myself, have assumed incorrectly that over time, western medicine simply arrived on the island and, as a miraculous panacea, marginalized local remedies. This one-dimensional version of Guam's medical history has been promoted not only by historians, but also by an array of government leaders, medical officials, schoolteachers, and others with still-active assumptions about the ignorance of traditional healers and the backwardness of the stereotypical *lanchero* Chamorro who resists Americanization.

Rather than telling a story about patients and cures, I want through this project to suggest that the history of medicine on Guam entails multiple stories, some of success, others of failure, but most too ambivalent to be so categorized. I have learned that in some ways our experience of medicine in the first half of the twentieth century was unique, given the particular colonial history and the specific projects that were introduced on Guam. I have also demonstrated in other ways how developments on Guam have been significantly influenced by the functioning and malfunctioning of national and international medical scientists. Just as it has been a struggle to unravel the layers of naval bureaucracy, it has also been a challenge to understand the involvement of Chamorros. Rather than finding large, loud rebellions and other conspicuous signs of dissent, I have had to confront a broader range of actions and reactions, many of which reflected tensions within segments of Chamorro society. I am learning slowly that it is only with extreme caution that I can comfortably refer to "the Chamorro people."

My hope is that this study opens up discussion on Guam and about Guam, not only about health care, but also about the nature of the prewar naval period. I hesitate to compare prewar and postwar medical systems on the island, precisely because of what divides the two eras—World War II. As a postwar baby, I cannot count the number of stories I have heard about the horrors of the wartime occupation of Guam, of the exhilaration of American liberation, and of the benefits of American colonial rule that those of us who did not experience the war can never fully appreciate. I believe that because of the traumas of World War II, memories and histories of the prewar period have become decontextualized to portray it as a time of bliss, simplicity, peace, and harmony. Indeed, to speak of prewar political, social, and economic hardships before a group of elderly Chamorros is considered disrespectful to the United States, a country that war sufferers believe should be honored for its eventual liberation of Guam.

This work has respectfully broached the subject of the prewar naval government in terms that restore agency to those persons who indeed struggled through numerous challenges in order to raise their families as best they could. The prewar period offers stories of cross-cultural encounter, tension, and conflict, as well as tales of accommodation, resistance, and opportunism. To appreciate the changes and improvements to our systems of health and hygiene on Guam, we Chamorros must recognize the medical advancements as well as the adversities that have been posed historically—challenges not only to our bodies, but also to our cultural, social, political, and economic forms of diversity and sovereignty.

Notes

Chapter 1: Sanitary Confinement

1. The Chamorro name for Merizo is Malesso' (see map 1).

2. This scenario is a reconstruction based on the childhood recollections of Jose "Doc" Torres (pers comm, 19 March 1999).

3. San Dimas is the patron saint of the village of Merizo, and the fiesta is an annual commemoration of each village's patron saint.

4. For example, Executive General Order 8, issued in 1905 by Governor L McNamee, required that every homeowner in the village of Hagåtña "keep his house or houses and grounds in a neat and clean condition, free from garbage and filth of any description." The same order directed the Department of Health and Charities, through its sanitary inspectors, to "inspect thoroughly the entire town [of Hagåtña] at least once a week, reporting in writing the result of the inspection to the Governor, giving the names and residences of those delinquent" (NGG EGO 1905).

5. The *Guam Recorder* was founded in 1924 by W W Rowley, a former navy sailor. Initially billed as "the Naval Station's most complete and interesting record," the monthly publication was purchased by the navy in 1933, and its editorial staff was made up of navy personnel who worked on it voluntarily (Carano and Sanchez 1974, 245).

6. Sablan referred here to a Chamorro belief that illness can be caused by ancestral spirits should they become offended by the irreverent use of land or sea resources. Part of the remedy prescribed by *suruhanu* or *suruhana* would include returning to the site where the offense was committed and performing rites of forgiveness. These beliefs and practices continue to this day.

7. In the late 1800s, not only did immigration into the United States escalate tremendously, but "Others" in American Sāmoa, Guam, Hawai'i, the Philippines, and Puerto Rico entered into the American political landscape through various acts of colonial appropriation. For more on this subject, see Wei and Kamel 1998.

8. Currently available general histories of Guam include Rogers 1995, PSECC 1994, and Sanchez 1989.

9. Only approximately 3,500 Chamorros survived the wars. The story of the depopulation is further elaborated in chapter 4.

10. Following Mexican independence from Spain in 1821, jurisdiction over the Mariana Islands was transferred to the governor-general of the Philippines.

11. For more on the subject of *reducción,* see Rafael 1993, 90.

12. For more information on the political history of Guam under the United States, see Bordallo Hofschneider 2001 and A Hattori 1995.

13. See Bordallo Hofschneider 2001 for an extensive discussion of naval abuses of power on Guam, as well as Chamorro acts of resistance.

14. I am not certain who Esslinger was, though I presume he was a member of the US Marine Corps, since the orders to investigate the case were also forwarded to the Commanding Officer of the Marines (Esslinger 1902).

15. A group identifying themselves as the "American Citizens of Guam" lobbied the secretary of the navy to overturn Gilmer's law, citing numerous marriages between American men, primarily marines, and Chamorro women. Less than a year after Gilmer proclaimed this law, Assistant Secretary of the Navy Franklin Roosevelt ordered him to revoke it. See Wettengel 1921; also Rogers 1995, 145.

16. The only exceptions were charitable donations by the Russell Sage Foundation, discussed in chapter 5, and the Rockefeller Foundation, discussed in chapter 6.

17. My calculation of a 1940 death rate of 14.7 is based on 316 deaths in a population of 21,502 and statistics provided in the 1940 *Annual Report of the Naval Government of Guam* (NGG *AR* 1940). Rogers's figure of a death rate of 11.7 is perhaps based on a fiscal rather than calendar year analysis, but the specific source of his data is not provided.

18. For the idea of criminalization in the health care field, I am indebted to fellow UH graduate student, Kerri Inglis. See, for example, her 1999 paper "Criminalizing the Victims of Disease: Leprosy in Hawai'i, 1865–1969."

Chapter 2: "We Have Taught Guam to Wash Her Face"

1. For further consideration of the effects of colonial power on children and their bodies, see Young's historical analysis of the impact of Christian missionization on D'Entrecasteaux Island children in Papua New Guinea (1989, 108–134).

2. Crawley, in particular, noted the medical achievements of army doctors in combating yellow fever in Cuba (1989).

Chapter 3: "They Were Treated Like Animals in a Parade"

1. Descriptions of the Culion Leper Colony in the Philippines, where the Chamorro patients would eventually be exiled, also emphasize the natural beauty of the site.

2. Kerri Inglis developed the idea of criminalization in her research of the Moloka'i colony and her analysis there has shaped mine here. See Inglis 1999 and forthcoming dissertation, University of Hawai'i, Mānoa.

Chapter 4: Feminine Hygiene

1. Kotzebue's estimate was made in 1821, more than a century after the conclusion of the wars, and the Jesuit estimates were based on the observations of

priests such as Father Diego Luis de Sanvitores, who established the first Roman Catholic mission on Guam.

2. This theme is persuasively explored in a variety of colonial contexts in Ram and Jolly 1998.

3. See, for example, pejorative descriptions in USN *ARSG* 1906, 24–25; and 1910, 89.

4. The influenza pandemic of 1918–1919 resulted in 853 deaths on Guam. It was part of an international outbreak, and not attributable to naval negligence.

5. For a discussion of chaperones in the context of dating, see Carmen Artero Kasperbauer, "Chamorro Culture," in PSECC 1996, 34.

6. Both male *suruhanu* and female *suruhana* practice their healing throughout the Mariana Islands, but for the purposes of this gynocentric analysis, only the female herbal healers are considered.

7. Similarly, DeLisle discussed the roles of those *pattera* who served concomitantly as prayer leaders *(techa)* (2000, 107–110).

8. Hundreds of my students at the University of Guam have shared stories of their grandmothers' labors, killing chickens, pigs, and cows, foraging in the jungle for food, and doing countless other "dirty" jobs. Few of them could recall their grandmothers performing the exclusively domestic roles referred to by Souder. At most, some women lived this restricted lifestyle once they reached old age or if they suffered some physical disability that prevented them from working on the ranch.

Chapter 5: "The Cry of the Little People"

1. In 1908, the US Congress established the Navy Nurse Corps, and by 1910, the first navy nurses had received assignments for duty on Guam (Crawley 1989, 21).

2. See descriptions of Chamorro class awareness in Howard 1986, 40.

3. Segregated schools, playgrounds, hospitals, baseball teams, and the like were all a part of the naval administration of Guam, though historians have been loath to liken these practices to those that existed in the southern United States. Protests were lodged; for example, in a 1937 report to Secretary of the Navy Claude Swanson, Guam Congress Member Baltazar J Bordallo objected to the discriminatory pay scales of the navy, asking that local hires be paid the same wages for the same jobs as were paid to off-island hires (PSECC 1993b, 50).

4. Such histories include previously cited writings in the *Guam News Letter* (Dec 1914) and the *Guam Recorder* (May 1924); and by SHA (1936); Emilie Johnston (1971); and O Guerrero (1977).

5. Russell Sage Foundation. <http://www.russellsage.org/about/about_us.shtml>

Chapter 6: Hookworm and Hygiene

1. Hoy asserted that southern states followed the policies of the North after the Rockefeller Sanitary Commission's hookworm projects raised the consciousness of medical inspectors and state health administrators.

Glossary of Chamorro Language Terms

acha'ot	precolonial class of artisans, relatives of *matua* who performed the clan's subsistence activities
aniti	animistic spirits that pervade all forms of life, including the oceans, trees, rock formations, and deceased clan members
atektok	leprosy
dago	yams
difunta/u	honorific for a deceased person
familia	extended family; since the onset of Spanish colonial rule, this term has encompassed the bilateral group of relatives, not just the matrilineal ones; from Spanish *familia*
ganggosu	gangosa, from the Spanish *gangosa*, meaning muffled or nasal voice
i	the
ibba	type of tree with small, sour fruit; *Phyllanthus acidus*
inafa'maolek	literally, being kind and good to one another; term encompassing an ethic of cooperation and interdependence among Chamorros
kostumbren Chamorro	general term for Chamorro customs and values
lancho	ranch owned by the extended family where farming takes place and where families typically gather for celebrations; from the Spanish *rancho*
lasarinu	leper; from the Spanish *lazarino*
leprosu	leprosy; from the Spanish *leproso*
machalapon	scattered; also, disrespectful of rules and customs
ma'es	corn
maga'lahe	prior to colonial rule, the leading male of the clan,

	defined as the eldest and highest-ranking brother of the family; from the terms *magas* (head or boss) and *lahe* (son or male)
maga'haga	prior to colonial rule, the leading female of the clan, defined as the eldest and highest-ranking sister of the family; from the terms *magas* (head or boss) and *haga* (daughter or female)
makahna	precolonial herbal healers who performed a combination of priestly and medical services; they were trained in the use of herbal medicines and massage techniques and skilled in communicating with supernatural spirits, whether for beneficial or vengeful purposes.
mamahlao	shame, embarrassment
manamko	the elders; plural form of the word *amko* (elder)
mangachang	lowest-ranking class in precolonial Chamorro culture
manma'gas	collective term for the elder leaders of the clan; plural form of the word *magas* (boss)
mannakhilo'	colonial era term for upper-class Chamorros; the colonial elite
mannakpapa'	colonial era term for lower-class Chamorros
manngingе'	show of respect to elders or persons in authority, typically manifested by kissing the right hand of an elder on meeting; plural form of *nginge'*
matgodai	deep, sudden urge to hug, pinch, or squeeze another person, especially a baby
matua	precolonial highest class, encompassing elders such as the *maga'lahe* and *maga'haga*
mestisa	traditional woman's dress introduced in the Spanish colonial era
metati	millstone on which corn is ground before being mixed in a batter for *tatiyas,* the Chamorro version of tortillas
na'babui	pig food
Nana	mother
nasarinu	leper; from the Spanish *lazarino*
nina	godmother
o'gu	gangosa
Pale'	Catholic priest; from the Spanish *padre* (father)
pattera	midwife
pugua	betel nut
si	article preceding proper names (eg, si Nana, si Mary), except when addressing the individual directly

suni	taro
suruhana	female herbal healer, from the Spanish *cirujana* (surgeon); a colonial-era descendant of the *makahna*
suruhanu	male herbal healer, from the Spanish *cirujano* (surgeon); a colonial-era descendant of the *makahna*
Tan	honorific title for an elderly Chamorro female
taotaomo'na	literally, people of before, referring to the spirits of Chamorro ancestors who were thought to guard and protect the land, sea, and sky
tatiyas	Chamorro version of the Mexican tortilla
techa	persons, frequently elderly women, who lead the family in prayer, especially in reciting rosaries and novenas for fiestas and funerals
Tun	honorific title for an elderly Chamorro male
ulo'	worm, germ, bacteria, caterpillar, maggot

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