

# KŌKUA, MANA, AND MĀLAMA ‘ĀINA: EXPLORING CONCEPTS OF HEALTH, DISEASE, AND MEDICINE IN 19TH-CENTURY HAWAI‘I

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The history of the Hawaiian encounter with infectious diseases throughout the 1800s is a tragic story replete with themes of loss, displacement, suffering, and depopulation. While it is important to understand the significance of these themes in the larger context of Western colonization of Hawai‘i, there is another layer to this *mo‘olelo* (story, history). Despite tremendous foreign influences on religious beliefs, political and economic systems, and worldviews, many Hawaiian cultural beliefs and traditions—such as *kōkua* (help, aid, and assistance)—were retained. This article examines the Hawaiian experience with infectious diseases in the 19th century and describes the resiliency of the Hawaiian people and cultural concepts of health, disease, and the treatment of illness. The findings illustrate several enduring practices and values that may provide clues for future Hawaiian well-being.

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Despite massive depopulation, Hawaiians survived the onslaught of foreign infections. And despite tremendous foreign influence and intrusion on religious beliefs, political and economic systems, and worldviews, many Hawaiian cultural beliefs and traditions were retained. This is seen especially in the Hawaiian experience with leprosy,<sup>1</sup> as well as with other disease experiences (such as the smallpox, measles, and influenza epidemics). Thus the history of infectious diseases in 19th-century Hawai'i reveals many lessons that speak to the resiliency of the Hawaiian people and provides insights into Hawaiian cultural concepts of health, disease, and the treatment of illness.<sup>2</sup>

When Captain James Cook and his crew came upon the Hawaiian Islands in 1778, their wake forever altered the economic, political, social, cultural, and disease contexts of the island chain and its people. *Haole* (foreign) influence in the islands came swiftly. Explorers were followed by merchants, traders, missionaries, and settlers. These foreigners influenced change in Hawaiian ideas of *mana* (power) and *pono* (balance, harmony); they imposed Western concepts of law, governance, education, land tenure, and family structure. By the late 1840s, the Hawaiian government was greatly influenced by haole advisors, mostly Americans, and it was not long before rural areas—in other words, the people's lands—were under foreign control. The 1848 Mahele (land division process) privatized land and gave alienable rights to Hawaiians; however, other complementary laws allowed the haole to gain titles in fee simple—a combination that “proved fatal to native Hawaiian ownership of the soil and the integrity of native Hawaiian society” (Kirch & Sahlins, 1992, p. 3). As the foreign population sought to improve its economic situation in the islands, trade and market endeavors were augmented with a ranching and plantation economy of cattle and sugar. By the 1860s, haole controlled much of Hawai'i's resources and strongly influenced its government (Kirch & Sahlins, 1992). It is within this political and social context that I turn to a discussion of foreign diseases in Hawai'i.

By 1865, when leprosy was of great concern to the Kingdom of Hawai'i and its Board of Health, Hawaiians had already weathered many infectious diseases. The foreigners introduced diseases that were previously unknown to Hawaiians. Captain Cook and his men brought venereal diseases and tuberculosis to Hawai'i in 1778, and from that moment onward, Native Hawaiians would be assaulted again and again by myriad diseases. Some scholars assert that there were three “[great] epidemics in Hawaiian history,” namely the *ma'i 'ōku'u* of 1804

(possibly cholera or dysentery), the epidemics of 1848–49 (which included measles, whooping cough, dysentery, and influenza), and the smallpox epidemics of 1853 (Schmitt, 1970, p. 363). These epidemics all contributed to the dramatic decline of the Hawaiian population, and many of these outbreaks seriously challenged the economy and social fabric of the Hawaiian Kingdom as the population continued to decline with each invading disease.

Ma‘i ‘ōku‘u was said to have “destroyed a great number of men, women and children, and took off the majority (*hapa nui*) of the population,” during the time of Kamehameha I (“Ma‘i ‘Ōku‘u,” 1863). Yet, while many scholars (physicians and historians) have analyzed the available second-hand accounts and popular traditions of the outbreak (along with suggested population demographics for the time it is thought to have struck), there is no clear consensus as to where this disease originated, how widespread it was, how long it lasted, or its final death toll (Schmitt, 1970). Indeed it would seem to have been called by many different names by Hawaiians, ‘ōku‘u being the most common reference, because “the people ‘ōku‘u wale aku nō i ka ‘uhane,’ i.e., dismissed cruelly [sic] their souls and died” (Thrum, 1897, p. 95). Further, few are in agreement as to what the sickness truly was, although Asiatic cholera seems the most probable, and the death toll from the outbreak is estimated anywhere between 5,000 and 15,000 (Schmitt, 1970).

The epidemics of 1848–1849 were some “of the most devastating in Island history” claiming an estimated 10,000 lives, which was more than one-tenth of the population at that time (Schmitt & Nordyke, 2001, p. 1). Measles and whooping cough struck first and simultaneously. They were followed by outbreaks of diarrhea and influenza. If death was not the consequence of these diseases themselves, complications resulting from the secondary effects of the infections would often take life (Schmitt & Nordyke, 2001).

The smallpox epidemic of 1853 took the lives of 5,000 to 6,000 in its path (Schmitt, 1970). In February of that year a ship, the *Charles Mallory*, arrived in Honolulu and at least one person on board was showing symptoms of the disease (Bushnell, 1993). He was isolated on shore. The remaining six vaccinated passengers were also allowed to land, after the mail and all baggage were fumigated. The passengers all “took salt-water baths, had an entire change of clothes, and went into quarantine for two weeks” (Greer, 1965, p. 222). Measures were taken by the Board of Health to confine the disease and, for the general good, they vaccinated the

people in hopes of preventing the spread of the disease (Thrum, 1897). However, the smallpox virus still spread. By May, there was a full epidemic that lasted until January 1854—thus it was known as “*ka wā hepela*”—the smallpox time.

Smallpox came to Honolulu again in 1881, whereupon “the Board of Health sought by prompt action, a vigorous quarantine and restriction on inter-island travel to confine its ravages” and, fortunately, the disease did not spread beyond the island of O‘ahu (Thrum, 1897, p. 100). This time the epidemic lasted approximately 5 months and resulted in 282 deaths.

Beyond these three notable epidemics, Hawai‘i was affected by the introduction of many other diseases as well. Most diseases simply carried away their victims, adding to the rapid and disturbing decline of the Native Hawaiian population. Yet, there was one disease of epidemic proportion that imposed on its victims a slow death, and despite its slower pace, its impact on the social and cultural foundation of the islands would make it one of the most significant diseases in Hawaiian history. The Hawaiian experience with Hansen’s disease, with its prolonged pathology, presented significant cultural changes during the 19th century and today provides us with insights into the extent of that change as well as insight into Hawaiian concepts of health and disease previous to, and during, this tragic time.

It is thought that leprosy (called by Hawaiians *ma‘i pākē*, *ma‘i ali‘i*, or *ma‘i ho‘oka‘awale*)<sup>3</sup> came early to the Hawaiian Islands (perhaps in the 1820s or 1830s). However, it did not attain levels of great concern until the 1850s and 1860s. Thousands of victims of leprosy (90% being Native Hawaiians) would suffer at the hands of the disease,<sup>4</sup> in confinement on the Makanalua Peninsula at Kalaupapa on Moloka‘i.<sup>5</sup>

As early as 1823, missionaries were noting medical cases that may have involved some aspects of leprosy, though its confusion with early stages of syphilis may discount these records. Nineteenth-century sources report a case of leprosy afflicting a Hawaiian woman, Kamuli, from Ko‘olau, Kaua‘i, in 1835 (Mouritz, 1916). Yet, it is not certain how or when leprosy was brought to the islands. Some believed the disease was imported by Chinese laborers who were brought to the islands, but as many individuals were brought from other lands where leprosy was also endemic, it could have come from any number of sources—the Azores, Africa, India, Malaysia, Norway (Buckingham, 2002; Gibson, 1880; Watts, 1997).

The first Board of Health was organized by King Kamehameha III in 1850. The main charge of the board was to prevent and cure epidemic diseases—their primary concern at the time being cholera. It was not until April 1863 that leprosy became an official concern of the Board of Health. The medical director of Queen’s Hospital in Honolulu, William Hillebrand, reported that he was encountering many cases of leprosy at the hospital, and he admonished the next Legislature to “devise and carry out some efficient, and at the same time, humane measure, by which the isolation of those affected with this disease can be accomplished” (“Report of Dr. Hillebrand,” in MMHC Hawaiian Archives, 1886).

Kamehameha V ascended the throne November 30, 1863. At the Board of Health meeting on December 28, 1863, concern over ma’i pākē was raised, and at the February 10, 1864 meeting it was noted that the disease was spreading to the other islands. Questions as to the origin and inheritable nature of the disease were growing (“An Act to Prevent the Spread of Leprosy,” in MMHC Hawaiian Archives, 1886). It is within this context of alarm and concern for prevention of leprosy that the 1865 Act to Prevent the Spread of Leprosy was approved.<sup>6</sup>

## KĀNAKA MAOLI REACTION(S) TO LEPROSY

The *kānaka maoli* (indigenous people) response to leprosy, its stigma, and treatment varied from acceptance to resistance. Most often, Native Hawaiians seemed to react to the way in which the Board of Health was dealing with the disease rather than to the disease itself. This can be seen in the story of Pi’ilani and Ko’olau, who avoided capture by health officials in the early 1890s when Ko’olau was found to have the disease and was to be sent to the leprosy settlement on Moloka’i without his wife and son. Ko’olau fought against those who came to arrest him, and he and his family hid from authorities in the Kalalau Valley of Kaua’i. Throughout Pi’ilani’s telling of their story, she is clearly more frightened by the prospect of separation from her husband than by his illness with leprosy (Frazier, 2001). Nevertheless, it must be acknowledged that when faced with the final stages of the disease in Kalawao (where secondary infections along with open sores and abscesses would make the dying very difficult to deal with), many sufferers were abandoned to the *ho’opau ke aho* (dying den; literally, “to put an end to breath”) by their fellow sufferers (mostly Native Hawaiians). More than abandonment by

fellow sufferers, however, it is also likely that the existence of the ho'opau ke aho was a result of inadequate medical care and supplies being available to the patients of Makanalua. Without proper medical care, the end stages of the disease were extremely unpleasant, and for fellow sufferers of the disease, it would be very difficult, psychologically, to deal with one's own fate in witnessing the death of a fellow victim.

Outside of Makanalua, most Hawaiians had no qualms about having those with leprosy in their midst. Indeed, Dr. Mouritz lamented that "healthy Hawaiians will eat, drink, sleep, and live with a leper voluntarily, and without fear," and further that a "healthy Hawaiian man or woman will marry a leper, although there are plenty of well men and women in sight" (Mouritz, 1916, pp. 58–59). Once a patient contracted leprosy, all Dr. Mouritz (and most foreigners) could see was the disease, not the person. Mouritz also reported that most Hawaiians viewed the segregation of leprosy patients as "a special device aimed at them only to cause trouble, injustice, and break up their homes," as a "tyrannical act, and wholly unnecessary" (pp. 58–59). Some Native Hawaiians even told Mouritz that "if the haole is afraid of leprosy let him go back to where he came from" (pp. 58–59).

While this may have been the case for many, Hawaiian reactions to leprosy and to the policy of isolation were varied. Seeming to agree with the policy, there were those who requested that others in their neighborhood be apprehended.<sup>7</sup> Meanwhile, others opposed the policy, as evidenced by the many petitions sent from the leprosy settlement at Kalawao to the Board of Health. The petitions often requested that the board improve the conditions at the settlement, but they just as often complained about their initial removal from their homes.<sup>8</sup> Many other letters to the board were from concerned family members who believed their loved ones did not have the disease and were wrongly sent to Kalawao. For example, G. H. Keau complained that a nonleprosy woman, Mrs. Haohila, was taken to Kalawao; J. Haole believed that his father, by then at Kalawao, did not have leprosy; Kalele, a man living at the leprosy settlement stated that he was not a "leper" and wished to be reexamined.<sup>9</sup>

There were also many Hawaiians who seemed willing to comply with the isolation policy but wanted to first be certain that the leprosy diagnosis was correct. Such was the case for a young man "feeling very anxious about his Mother 'Nuku'" who was to be sent to Kalawao from the Kalihi hospital on May 6, 1873. The young man

approached a Board of Health physician, and in communications between the two, it would seem that one of the other physicians agreed that she was “one who he thinks has not the ‘Ma‘i Pākē’.” While one may wonder at a policy that would send “one who...has not the ‘Ma‘i Pākē’” to Kalawao, the physicians did agree to wait another week or two, to be sure, before sending her away. But just as telling is her son’s example of one who is willing to comply with the 1865 Act as “he has no wish to prevent her going to Molokai—if she shall be shown to have Leprosy” (“A. F. Judd to E. O. Hall,” in State Archives of Hawai‘i, 1873).

But even those *kānaka maoli* who agreed with the principle of isolation were upset by the existence of only one place of exile, at Makanalua, and many lobbied for systems of “local segregation” on the various islands. Others were willing to conform in hopes that a cure or treatment to their benefit would be found (especially among the milder cases that were treated at Kalihi Hospital in Honolulu), although over time the inadequacies of the Board of Health and available treatment would lead to greater discouragement and nonconformity. It is also telling that whereas most Westerners would avoid any admittance that leprosy had occurred in their family, in the early years of leprosy in Hawai‘i (pre-1880s) *kānaka maoli* did not express any shame in such an occurrence. In other words, Native Hawaiians did not attach a stigma to leprosy until their perspective was influenced by the *haole* way of thinking about and dealing with the disease.

## HAWAIIAN COSMOLOGY: HEALTH/DISEASE

Essential to this history of disease and leprosy in Hawai‘i is the relationship between the Native Hawaiian and the *‘āina* (land). As such, the land, its influence, connections, and uses in the history of disease in Hawai‘i, must be discerned. Thus, there are some Hawaiian concepts that are of particular importance to our understanding of this history because they speak to Hawaiian connections to the land and can provide us with the necessary metaphors.<sup>10</sup>

‘Āina is the Hawaiian term for land, but it is much more than that. Literally, the term means “that from which one eats.” Moreover, according to Hawaiian traditions, the *akua* (gods) made the *‘āina*, thus “having been born of the Akua, the

‘Āina is itself an Akua” (Kame‘eleihiwa, 1992, pp. 8, 10). Further, Hawaiians are connected to the land and to each other through the parentage of Wākea (Sky Father), “from whom all Hawaiian genealogies stem as the ancestor of the Hawaiian people” (Beckwith, 1972, p. 294). Moreover, as Native Hawaiian scholar David Malo (1951) explained, “commoners and chiefs were all descended from the same ancestors, Wākea and Papa” (p. 52).

Further, it could be suggested that the *mo‘olelo* (story) of Hawai‘i begins with the *Kumulipo* (genealogical chant of creation), wherein the genealogical sequence of the birth of the land is provided (Beckwith, 1972). The metaphor provided by the *Kumulipo* is significant to this study that concerns the land. Kame‘eleihiwa (1992) suggested that the essential lesson of the *Kumulipo* is that “every aspect of the Hawaiian conception of the world is related by birth, and as such, all parts of the Hawaiian world are one indivisible lineage” (p. 2). Kame‘eleihiwa further asserted that

When recounting a history in Hawaiian terms it is, therefore, important to examine the beginnings of and the relatedness of the players. These genealogical relationships form the parameters of cultural patterns inherently reproduced in Hawaiian history. (p. 3)

It is therefore of great significance that the gods, land, and chiefs are all considered divine in Hawaiian mythology. This is important to understand because it speaks directly to Hawaiian identity. Kame‘eleihiwa (1992) explained:

Hawaiian identity is, in fact, derived from the *Kumulipo*, the great cosmogonic genealogy...Conceived in this way, the genealogy of the land, the Gods, Chiefs, and people intertwine with one another and with all the myriad aspects of the universe. (p. 2)



Such relationships are essential to understand if one hopes to comprehend the changes that were influenced by external forces—such as foreign disease and treatments for disease—because these diseases devastated not only Native Hawaiian bodies but also the land.

The connection between the land and the people is best exemplified in the Hawaiian concepts of *‘āina*, *mālama ‘āina* (care for the land), and *pono* (well-being, balance). These concepts are significant and connected in that it is the duty of all Hawaiians to *mālama ‘āina*, and in return, the *‘āina* will *mālama* the Hawaiians, thus achieving *pono*. Disease, of course, would disrupt this balance.

These important lessons are illustrated in the *mo‘olelo* of Wākea. The historical metaphor offers us great insight, first of all to “man’s familial relationship to the land, that is, to the islands of Hawai‘i and Maui, and to the *kalo* Hāloa-naka, who are the elder siblings of the Hawaiian Chiefs and people” (Kame‘eleihiwa, 1992, p. 25). Such is the relationship reflected in the tradition of *mālama ‘āina*. The land is the elder sibling of the people. It is the duty of younger siblings and junior lineages to love, honor, and serve their elders. Kame‘eleihiwa explained, “the Hawaiian does not desire to conquer his elder female sibling, the *‘āina*, but to take care of her, to cultivate her properly, and to make her beautiful with neat gardens and careful husbandry” (p. 25). And by the same token, the land is there to care for the people: “it is the reciprocal duty of the elder siblings to *hānai* (feed) the younger ones, as well as to love and *ho‘omalu* (protect) them” (p. 25).

The metaphor of the relationship between the land and the people provides us with an essential understanding of the Hawaiian worldview. This understanding is significant because it is the disruption of that relationship that begins the separating of Hawaiian identity in the 19th century—a relationship that is paramount to the overall well-being of Native Hawaiians.

## KŌKUA AND TREATMENT OF ILLNESS

In the following statement, Hawaiian historian Samuel M. Kamakau referred to the smallpox epidemic that hit Hawai‘i in 1853, but it can be inferred that Hawaiian treatment of those who were ill would have been similar, regardless of which disease they were suffering from: “The wife nursed the husband or the husband the

wife, and when the children fell ill the parents nursed them” (Kamakau, 1992, p. 418). This point is further developed by Mary Kawena Pukui as she explained that “for any Hawaiian, the body was exposed only to close family members. And so, just as they did in sickness, family cared for family in death” (Pukui, Haertig, & Lee, 1972, p. 134). So it is not surprising that many Hawaiians were prepared to shelter and care for those who contracted a disease such as leprosy, and that they were willing to go with and be *kōkua*<sup>11</sup> (helper, nurse; to help) to those who were sent to Makanalua.

It is also not surprising that European anxieties about leprosy were especially high during the late 19th century. These anxieties were fueled by apparent Hawaiian indifference to the disease and Hawaiian resistance to the segregation policy. Yet, for many Hawaiians, segregation was worse than the disease itself. What seemed prudent to the haole— isolation of leprosy sufferers—was essentially “non-Hawaiian” to the *kānaka maoli*. The Hawaiian way was to *kōkua* those who were suffering. Another important concept in Hawaiian culture is to “acknowledge” others (Kapua Sproat-Fonoimoana, *kahuna lā‘au lapa‘au*, personal communication, October 8, 2003). To ask Hawaiians to remove loved ones from their community, to no longer “acknowledge” them, to no longer touch them (i.e., care for them), was beyond foreign. To the Hawaiian, to *kōkua* was to help; to the haole, *kōkua*, hiding, and resisting were all appalling forms of disregard for a threatening, loathsome disease (Daws, 1973).

The *kōkua* played an important role in the development of the leprosy settlements at Kalawao and Kalaupapa, but more importantly, their contributions tell us much about Hawaiian reactions to disease in general, and to leprosy in particular. There were some haole who viewed the *kōkua* as “lazy natives,” only accompanying a patient to Makanalua to get their food for free, even accusing some of trying to imitate the signs of leprosy so they could stay at Kalawao or Kalaupapa and be taken care of by the government (Mouritz, 1916). While some Hawaiian *kōkua* may have gone to, and remained at, Makanalua for such reasons, the majority were there to care for their loved one. Most went to Makanalua in obscurity; they cooked, cleaned, and nursed their family member or friend. They were also asked by the Board of Health to work in the hospital or the laundry, or some other such duties of service (once the settlement was more organized) as a way of earning their provisions (Mouritz, 1916). Other *kōkua* were well-known or prominent Hawaiians. For example, Jonatana H. Napela (of chiefly rank, educated at Lahainaluna Seminary,

a Mormon elder and former Maui magistrate) came to Makanalua as a kōkua to his wife Kiti. He would serve for a time as assistant superintendent of the Kalawao settlement, but would later fall victim to the disease himself (Korn, 1976). Yet, whether they were well-known or simply ordinary kākā maoli, whether they hid their loved ones from the authorities or went with them to Makanalua, many Hawaiians were willing to care for their sick, and in so doing they all risked contracting the disease themselves.

Many records of the history of leprosy in these islands speak to the importance of the kōkua and of the types of service they rendered. In 1878 the Sanitary Committee reported to the Board of Health on a kōkua named Keoni who “had accompanied his wife on account of his great love for her; he had been with her in the settlement about five years, and would remain with her as long as she had breath” (see MMHC Hawaiiana Archives, 1886). A patient named Hao, whose wife Luka had accompanied him to Kalawao, told the same committee that “many...in the settlement would have perished ere this, were it not for the faithful help between parent and child, husband and wife, brother and sister, and between friend and friend” (MMHC Hawaiiana Archives, 1886). Moreover, Dr. N. B. Emerson reported to the Board of Health in 1882 that

The *kokuas* are an indispensable arm of service at the settlement. Without them it would be a very difficult task to carry on the establishment. They climb the pali and drive down the cattle, they fetch the wood from the mountains and carry water from the valleys, they go into the water and cultivate and pull the kalo, they handle the freight landed at Kalaupapa, all of which are services the [patients] cannot perform for themselves...This important and necessary class of people supply hands and feet for the [patient] when his own give out. (MMHC Hawaiiana Archives, 1886)

The kōkua were needed and were willing to serve both their loved ones and the leprosy settlement.

## MANA AND HEALTH/MANA AND DISEASE

Nineteenth-century Hawai'i experienced a great deal of change through the mechanisms of commercial, cultural, and biological exchange. One of the consequences of leprosy in Hawai'i is that biological exchange—the introduction of new diseases in general and leprosy in particular—facilitated cultural (ex)change in the ways in which Hawaiians viewed disease, medicine, and the self (the body). That is, through the experience with leprosy, Hawaiian explanatory models (or views) of the body, medicine, and disease were influenced by haole views.

Up until the late 19th century, the Hawaiian view of disease, medicine, and the body was intertwined with the indigenous notions of the self and with Hawaiian cosmology. Recall that all Hawaiians are connected to the land, as children are connected to parents, in the belief that Wākea and Papa (Earth Mother) gave mystical birth to the islands and human birth to their descendants. Thus, Papahānaumoku (she who births the islands) is understood as the mother of all humans. To care for the land, *mālama 'āina*, was to care for the Hawaiian self. Further, Hawaiian cosmology connects the land and people as family, and as such, caring for the land was linked to family concerns. Hawaiians concluded that the earth was charged with the life-giving, animated, and energized forms of mana—it held the life force (Kanahele, 1986). Thus, in likening the earth to a mother, Hawaiians regarded the earth as a living entity, feeding us as a mother feeds a child and caring for all our material and biological needs. This metaphor is relevant to the present discussion because the Hawaiian view of the body and disease was connected to both the life of the land and to the idea of mana.

This connection between the land/self and disease is illustrated in a chant written by Ka'ehu, a famous composer and chanter from Kaua'i. It was composed after he was sent to Kalawao, having contracted leprosy, in the late 1880s. He begins and ends his *mele* (song, chant) questioning the consequences of this disease:

What will become of Hawai'i?  
What will leprosy do to our land—

...

What will leprosy do to my people?  
What will become of our land? (Ka'ehu, 1973, p. 128)

His mele reinforces the concept of leprosy as *ma'i ho'oka'awale*, since the disease separated Hawaiians from the *'āina*, to whom they were cosmologically connected.

The Hawaiian view held that good health was the reward for respect and compliance with the *kapu* system (religious prohibitions), which often included ethics of caring for the land. Good health also reflected reverence for the gods, and integrity as expressed in their relationships with family and neighbors. The *kānaka maoli* also recognized a dualism of complementary opposites in their cosmology. These dualities required *pono* and *mana* to maintain these *pono* relationships (Blaisdell, 1993). Sickness was viewed as punishment, imposed directly or indirectly, by the gods for having broken their *kapu* (Pukui, Haertig, Lee, & McDermott, 1979).<sup>12</sup> The result of breaking *kapu* was a loss of *mana*, and the loss of *mana* resulted in the loss of *pono* and good health.

Historical writings about the period (pre-1890s Hawai'i) illustrate that Hawaiians had little fear or disgust of leprosy, or of those who had the disease. What they did fear, however, was banishment to *Makanalua*, separation from their family, and arrest by public health officials. For example, in Pi'ilani's account of hiding from the authorities, she emphasizes leprosy as "the separating sickness" and does not reveal any fear of contracting the disease from her husband or son (Frazier, 2001).

## MĀLAMA 'ĀINA AND DISEASE/MĀLAMA 'ĀINA AND HEALTH

When the *kapu* system was dismantled in 1819 by Ka'ahumanu, Liholiho, Kauikeaouli, and Keōpūolani, men and women, as well as chiefs and commoners were then free to eat with one another. It was called *'ainoa* (unrestricted eating). By this act, *ali'i* were no longer divine, the Hawaiian gods were no longer feared, and the priests and chiefs were no longer in authority. By this time, epidemics had already devastated the Hawaiian population, and their occurrence was perceived as a loss of *pono*. The pattern of disease was changing in the islands, largely due to the social and environmental changes brought about by the influx of foreigners and subsequent environmental, cultural, and socioeconomic changes (Worboys, 1993). Alcoholism was increasing among the people, and the foreigners were bringing more diseases (Osorio, 2002). By breaking the *kapu* system, "they [the *ali'i*]

shattered the religion and the myths that gave meaning to life,” wrote O. A. Bushnell (1993), and, “in doing so, they brought down upon their nation nothing less than catastrophe” (p. 242).

Dismantling the kapu system, which had guided Hawaiian society for centuries, left Hawaiians without explanations for all that was going on around them (Bushnell, 1993). Change was inevitable, in both belief and practice. As historian Jon Osorio (2002) explained:

Perhaps these things were not perceived as mere coincidence by the Hawaiian people. There is evidence that Natives saw the growing presence of foreigners in the Islands as contributing to the miserable fortunes of the Hawaiian people. Many of them, even as Christians, wished the haole would simply go home. At the same time, the haole and their new religion promised to rescue the people and their chiefs from the social breakdown that accompanied the ‘Ainoa by introducing a new commitment and discipline—namely Christian prohibitions, which were understood to replace the old kapu. (p. 11)

In terms of health and disease, the changing beliefs in the gods allowed for changes in ideas of disease origin, cause, and consequences. As for leprosy, the changing beliefs allowed some to adopt Western views of the disease and subscribe to the new paradigm. As Hawaiian beliefs began to be transformed, so too would their practices.<sup>13</sup>

Hawaiian historian David Malo, in describing the role of disease in the rapid decline of the Hawaiian population, reported that in the late 1790s, “the pestilence (ma‘i ahulau) visited the Hawaiian islands, and the majority (ka pau nui ‘ana) of the people from Hawai‘i to Ni‘ihau, died” (Malo, 1839, p. 125).<sup>14</sup> Indeed, Malo also commented that as a result of the economic and social changes taking place, in his view—largely induced by the sandalwood trade—basic survival was at stake as many Hawaiians were struggling “and living without land, they are without food” (p. 127). Again, the Native Hawaiian connection to the land is directly linked to Hawaiian well-being.

Kamakau (1992) was speaking of the many diseases that had afflicted the people of Hawai‘i by the middle of the 19th century when he stated:

With the coming of strangers, there came contagious diseases which destroyed the native sons of the land...We are praying to God that we may reach the length of life of our forbears. We build churches, labor day and night, give offerings to charity and the Sabbath dues, but the land is become empty. (p. 416)

The changes brought about by rapid depopulation were, of course, enormous—the least of which was the literal disappearance of Hawaiians. Contemporary Hawaiian historians have noted the consequences of depopulation on the *ali‘i nui* (chiefly class), a comparatively smaller population than the *maka‘āinana* (commoners), among whom “losses from their ranks would seem more severe, because of the potential problems lack of leadership could bring” (Osorio, 2002, p. 9). Indeed, the *ali‘i* had not escaped the introduction of foreign diseases, and while they may not have been directly affected on a large scale, infectious diseases (including leprosy) and their social construction and treatment certainly did affect the *ali‘i* as these diseases took their toll on the Hawaiian population as a whole.

When Lili‘uokalani composed “He Mele Lāhui Hawai‘i” in 1866, she had already witnessed the massive depopulation taking place in Hawai‘i and had also endured a great deal of personal loss due to foreign diseases among the *ali‘i*. Lili‘uokalani equated mana with good health, and her mele speaks of the loss of mana that Hawaiians and their *ali‘i* were experiencing as a result of the many epidemics they had to endure. In other words, this loss of mana reflected a continual threat to Hawaiians and the Kingdom of Hawai‘i as epidemic diseases contributed to the loss in leadership of the *ali‘i*.<sup>15</sup>

The impact of diseases such as leprosy on the Hawaiian Islands and its people is best summarized by Kamakau (1992), who noted that in 1867

Leprosy is another disease brought to this country and still prevalent. From all these diseases the native population of these islands has suffered decrease. There is also a large mortality among children and a decline in the birthrate, not because women do not desire offspring. Some Hawaiian women have as many as ten to twenty children, but few grow to maturity. (p. 237)

## THE SCARS OF DISEASE

The scars of epidemic diseases in general and leprosy in particular still remain in Hawai'i today. Massive depopulation was the most direct consequence of all the diseases. For those who suffered leprosy, the separation was physical, cultural, and emotional at the settlement in Makanalua. Isolated and imprisoned for life, those who suffered from leprosy lost cultural and personal identity. Further, a greater process of the colonization of the Hawaiian people was at work. Under the rubric of the 1865 Act to Prevent the Spread of Leprosy (the formation of a leprosy settlement at Kalawao and the segregation of those afflicted by the disease) was the diverse array of ideological and administrative mechanisms by which an emerging system of knowledge and power extended itself into and over Native Hawaiians (Arnold, 1993).

The 19th-century Hawaiian explanatory model of the body, disease, and medicine was one that combined the Hawaiian view of the self with a cosmology that connected all people to the land. They were linked as family and as such were accountable in terms of kapu, pono, and mana in that relationship. The cause of disease was seen as an external influence, and reclaiming health was a matter of returning pono to regain lost mana. Whether it was to appease an offended *'aumakua* (family or personal spirit) or make restitution for a broken kapu, treatment was sought through a *kahuna* (priest) and the patient was treated as a whole.



The haole perspective of the body, disease, and medicine in the 19th century had evolved along with an emerging biomedical system. The body was viewed more as a machine, even at a microcosmic level. Though still debated by some, the germ theory of disease was gaining support; however, the correlations still persisted between dirt and disease, cleanliness and godliness, sanitized and civilized. Native populations were labeled as promiscuous and lascivious, thus outbreaks of disease were often viewed by haole as justified punishment for perceived flaws in Hawaiian culture.

When these two perspectives of medical explanation came into contact, as epidemic diseases were introduced to the Hawaiian Islands, the haole model soon dominated the Hawaiian view. Social, economic, and political changes had been influenced by rapid Hawaiian depopulation, helping to foster this form of cultural exchange. Leprosy, a disease set apart from the others by its historical stigma, length of incubation and duration, and disfiguring pathology, was an especially significant facilitator of this cultural exchange. While not entirely one sided, this form of cultural exchange (concerning views of the body, disease, and medicine) left surviving Hawaiians to mourn the loss of their land (to whom they were cosmologically connected) and the loss of their health (in terms of mana and pono). In the case of leprosy, Hawaiians mourned not only the loss of individuals but also the loss of ‘ohana; those affected were separated from their families and treated as criminals for contracting this particular disease.

## CONCLUSIONS

The history of health and disease in Hawai‘i in the 19th century can teach us many things. The traditional Hawaiian worldview held that concepts such as mana, pono, and mālama ‘āina were essential for good health and well-being. In particular, mālama ‘āina, the story of Wākea and Papahānaumoku, and their metaphors convey the importance of Hawaiian identity and connections to the land that correspond to well-being. The historical encounters of the 19th century severed connections to the ‘āina, directly affecting the health/disease experience of Hawaiians on many different levels—from cosmological links to basic nutrition.

Yet, in the face of tragic depopulation and displacement, Hawaiians in the 19th century maintained many beneficial cultural concepts pertaining to health, disease, and medicine. In particular, the concept of kōkua was demonstrated without reservation in the Hawaiian experience with leprosy. Even when challenged by foreign influences (laws, isolation policies, concepts of disease and disease causation), the Hawaiian principle of kōkua remained an important part of Hawaiian lives. It seems apparent that despite great adversity in dealing with epidemic diseases, Hawaiians retained certain cultural values that helped many to deal with and survive those challenges. Today's health challenges may be different from those of the 19th century (i.e., less foreign epidemic diseases, more diseases of lifestyle), yet some of these same concepts understood and practiced by Hawaiians of the past may provide valuable lessons and guidance that can be applied to our lives today and in the future.

As Hawaiians—and others—regain their connection to the 'āina and care for her, identities and mana will be strengthened and Hawaiian well-being will increase. Connecting with the 'āina can be achieved in many ways. For instance, as individuals and families hike local trails, participate in beach cleanups, spend time in *kalo* (taro) fields, work together to restore sacred sites, and give service to environmental or nature groups, respect for the 'āina will further develop. Mana will increase through these kinds of activities because *ma ka hana ka 'ike* (by doing one learns), and knowledge increases power. Moreover, in finding additional ways to be a kōkua to others—family, the community, and the environment—good health and well-being will further increase in a variety of ways and on many levels.

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Kerri A. Inglis received her BA in history from BYU-Hawai'i, her MA in the history of medicine at the University of Toronto, Ontario, Canada, and her PhD in Hawaiian history from the University of Hawai'i-Mānoa. Her research and teaching interests are in the history of health, disease, and medicine in Hawai'i and the Pacific. She currently teaches world history at the University of Hawai'i-Hilo.

## NOTES

1 The preferred term for leprosy is Hansen's disease, named for the bacteriologist who discovered the *Mycobacterium leprae* that causes the disease. However, because the term leprosy was used historically, and this article deals with the understandings of that disease and its stigma in the 19th century, the disease will most often be referred to as leprosy. The term *leper* is highly offensive to those who have the disease and will not be used in this article, unless it is used in a quote from historical documentation.

2 Stephanie J. Castillo's (1992) film documentary, *Simple Courage: An Historical Portrait for the Age of AIDS*, asserts that lessons can be learned from the history of leprosy in Hawai'i in terms of following the extraordinary example of service as was exemplified by Father Damien. This article strives to go a step further by suggesting that Native Hawaiians of the 19th century also left a legacy for us to follow.

3 Leprosy was most often referred to by Hawaiians as *ma'i ho'oka'awale*, or the "separating sickness." It is interesting to note that they named the disease for what it did to them as families and communities, not necessarily for what it did to their bodies.

4 Between 1866 and 1915, the number of those in Hawai'i who suffered from leprosy (including those who were segregated and those who, according to Dr. Mouritz, were known to have the disease but were not segregated) totaled 9,696.

5 Today the peninsula is commonly referred to as Kalaupapa; however, it is referred to as Makanalua throughout this article, first, to honor the traditional name given to the peninsula, and second, to distinguish the peninsula from the settlements of Kalawao and Kalaupapa found on the peninsula. All three names—Kalawao, Makanalua, and Kalaupapa—also refer to the three *ahupua'a* (districts) that traditionally comprised the peninsula.

6 Ultimately, the act provided for a leprosy settlement to be established on the Makanalua Peninsula found on the northern shore of Moloka'i and for leprosy sufferers to be confined there.

7 More than one letter sent to the Board of Health requested that the police come and look for those who were living with leprosy in hiding (State Archives of Hawai'i, 1873, Series 334-5, incoming letters, January–March).

8 State Archives of Hawai'i (1873), Series 334-5, Board of Health, incoming letters.

9 State Archives of Hawai'i (1873), Series 334-5, Board of Health, incoming letters, April–July.

10 It is important to look for Hawaiian metaphors to use as models when striving to reconstruct the past from a Hawaiian perspective. The best metaphors are found in the Hawaiian language itself, for language is intimately connected with cultural concepts (Kame'eleiwi, 1992). For historical (ethnographic) models, I am responding to the work and influences of Greg Dening, Lilikalā Kame'eleiwi, and Marshall Sahlins.

11 Defined as helper, *kōkua* also denotes the giving of service and caring for another. While service to others is an ideal found in many cultures, Hawaiians who served as *kōkua* for those suffering from infectious diseases in the 19th century exemplified the concept.

12 *Kapu* has been defined as forbidden, prohibited, and sacred but should also be considered as a system for regulating *mana*.

13 In an article that looks at changes in Samoan ideas about health and illness, Cluny Macpherson (1995) convincingly argued that the way in which people conceive of illness generally determines their response to it, and that changes in belief generally precede changes in practice.

14 It is unknown as to which epidemic disease *mai ahulau* refers to.

15 I am indebted to Benjamin B. C. Young, director of the Native Hawaiian Center of Excellence, John A. Burns School of Medicine, University of Hawai‘i–Mānoa, for bringing this mele and its message to my attention (Lili‘uokalani, 1999).