MOVING FROM THE MARGINS TO THE CENTER: ELEVATING THE SPACE ON KAHOʻOLAWE THROUGH A MODERN NAVIGATIONAL PLATFORM

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Copyright

Dedication

This dissertation is dedicated to my mother, Liane Patricia Carmen Iaukea; and sister, Sydney Lehua Iaukea.

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Abstract

The first Hawaiian Renaissance took place in the 1880s during the reign of King Kalākaua. A second Hawaiian Renaissance occurred in the 1970s and included numerous forms of resistance, agency, and empowerment of an Indigenous culture, although within a colonial context. I start with the catalyst event of the Kalama Valley evictions to show how a community comes together in peaceful, non-violent direct action to protest and spark a cultural resurgence in oral traditions. This dissertation examines the two main social movements, The Protect Kahoʻolawe ʻOhana and the Polynesian Voyaging Society, that emerged from this era, and showcases how Native Hawaiians negotiated pathways of knowledge through these movements by reclaiming, reasserting, and reconceptualizing Hawaiian identity in modern times. The power of the two movements joining together in 2004 created a dynamic and collaborative space for traditional voyaging practices to be recognized and practiced, thereby elevating the sacred island of Kahoʻolawe. The voyaging scientific and cultural concepts and practices are, once again, coming back into the main framework of the Hawaiian culture and allow for a conscious mindset of possibilities that open up a space for voyaging practices, lessons in stewardship, and the aloha ʻāina philosophy. I used three methodologies: (1) geospatial technology analysis through GIS mapping of two navigational platforms, the Moaʻulaiki Navigational Platform and the Kuhikeʻe Navigational Platform; (2) quantitative analysis of traditions and practices; and (3) Indigenous research methods in moʻolelo, mele, oli, and elements of reference (stars, sun, and moon). Data has been collected from numerous archives, nineteenth-century Hawaiian-language newspapers and literature, published reports, Hawaiian cosmology and genealogical chants, and aerial pictures from drone technology. I used the results from my extensive research and fieldwork on Kahoʻolawe to create a Hawaiian pedagogy along with a voyaging-based curriculum designed

for navigational students to learn and practice at the Kuhike‘e Navigational Platform on the island of Kaho‘olawe but also anywhere else in the world.

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Introduction

The first Hawaiian Renaissance took place in the 1880s during the reign of King Kalākaua. Kalākaua focused on perpetuating traditional Hawaiian practices such as hula, chants, legends, and the recording of the genealogical chants, such as the Kumulipo. In the 1970s, Native Hawaiians began to reclaim their culture and cast off their allegiance to a largely American worldview, from its catalyst of the Kalama Valley evictions, a protest that would ignite a cultural resurgence in the Hawaiian culture, to a grassroots movement that witnessed the seminal third Hawaiʻi State Constitutional Convention of 1978, the People's ConCon, an event that brought Hawaiian issues to the forefront. Protect Kahoʻolawe ʻOhana materialized at this time and successfully stopped the bombing of Kahoʻolawe by the military and saw the State of Hawaiʻi's acquisition of Kahoʻolawe. This movement began and perpetuated what has come to be known as "the Second Hawaiian Renaissance," a social and intellectual movement that propelled the revitalization of Hawaiian culture through the reclamation and reassertion of oral traditions (Lancaster 2015). Those traditions are found in areas such as protocol and ceremony, hula, religion, and most important for this dissertation, voyaging. Together, these Hawaiian practices inaugurated a new era and helped revive the traditional philosophy of "aloha ʻāina." The Polynesian Voyaging Society, which also started in the 1970s when a voyaging canoe was reconstructed using celestial navigation from Hawaiʻi to Tahiti on a path of rediscovery, would [also] serve as an important beacon for the emerging worldview (Zeug 1976).

The 1970s was a time for dramatic change. The world was experiencing a major wave of protest that would have after-shocks for decades to come. A sense of freedom in living one's life started to become the ideal, and American culture experienced striking changes. These included openness in interracial relations/marriage, sexuality, and community. American politics and

culture shifted radically. The changes in organizing, from events such as the Vietnam War, the American Civil Rights Movement, and the New Left movement's approach to responding with prayer, reverent resistance, and the kapu aloha philosophy with the kūpuna in the foreground, made for a profound impact in the Native Hawaiian approach. Over time, Native Hawaiians have revitalized their own language, rituals, tactics, and strategies that arise from a distinctly Indigenous perception of the world. The Native Hawaiian resistance against the American occupation has become increasingly more Indigenized in responding to the marginalization and discrimination. The templates of resistance today are created with the Native Hawaiian at the center, as seen in the current protest of the Thirty Meter Telescope controversy, as new styles of resistance and organization are invented as we reinvigorate a new nation.

The revitalization of voyaging and navigation represents a way to understand this new form of nation-building and community organizing. Through a voyaging philosophy—to Kahoʻolawe, establishing laws and policies, incorporating different ways of resistance, and even a non-violent, direct resistance in the Mauna kea Thirty Meter Telescope controversy—Native Hawaiians have revitalized native traditions and knowledge, organized prototypical public events, and developed an experienced group of committed and knowledgeable leaders, navigators, and educators among them. Ultimately, voyaging today, especially the Mālama Honua Worldwide Voyage, continues Kalakāua's desire to establish Hawaiʻi among the family of nations on solid footing.

A next step in the indigenization of the Native Hawaiian movement and Hawaiʻi at large is to advance native knowledge and pedagogy. Hence, the importance of a culture-based curriculum that includes history, voyaging, culture, resistance, science, language, and much more. A K-12 curriculum will change the minds and alter the future of tens of thousands of

Hawaiian students who can represent a culmination of the movement that began with the land struggles in Kalama Valley and other main struggles, such as Kahoʻolawe. Decolonizing education is decolonizing the mind in a forward direction toward national restoration. It is my contention that the fundamentals of voyaging offer a similarly powerful vehicle for self-liberation.

Framework

My approach has been to acknowledge the powerful colonial system that endures while, at the same time, reconceptualizing and reinvigorating a future with native agency and native empowerment as central movers. To do so, I have examined the two social movements, The Protect Kahoʻolawe ʻOhana and the Polynesian Voyaging Society, to see how each movement started, the evidence of such a social movement, the objectives of those involved, and how the traditions are reflected in practice. I focus on the Hawaiian people's call to organize and what that meant for each movement. These social movements each have their own story of navigating from the margins to the center in terms of navigating change and creating agency. Both contributed to other aspects of the Hawaiian renaissance, including the regeneration of hula practices, mele (songs), oli (chants), and of course, voyaging. There are many points to discuss when talking about Kahoʻolawe, such as spirituality, voyaging, and aloha ʻāina practices, and I highlight the acts of liberation that underwrite the fundamentals of voyaging. These concepts of voyaging are, once again, coming back into the mainstream of the Hawaiian culture and allow for a consciousness of possibilities that open up a space to reclaim, reassert, and ultimately re-conceptualize Hawaiian identity in the twenty-first century.

I draw upon the two navigational platforms, the Moaʻulaiki Navigational Platform and the Kuhikeʻe Navigational Platform, on the island of Kahoʻolawe, as examples of moving

beyond the binaries associated with colonial power and hegemony, and I highlight other forms of empowerment through voyaging. The Moaʻulaiki Navigational Platform is an ancient site for navigators and focuses on how to see the world through the elements of reference, which come in the form of the sun, moon, and stars. The Kuhikeʻe Navigational Platform is a modern site for navigators as ancient techniques are weaved together with modern-day concepts. Voyaging activities draw in everyday people regardless of their political and social ideologies and allow for new forms of cultural understanding. Voyaging traditions can be seen as an inspiration for reclaiming Hawaiian history and traditions and can be used to empower and liberate a population that has been marginalized and oppressed for generations. My research examines native agency in relation to the voyaging initiatives. The development of the voyaging culture can be seen as a form of resistance, a new and different approach to reclaiming Hawaiian identity that is a positive and appropriate response for the Hawaiian people. My approach to what might be termed decolonization is unusual in that I look at what is possible now within the colonial context of marginalization, culture, and language. I see acts of liberation and empowerment in the fundamentals that voyaging and education highlight. I believe these educational efforts can help move the Hawaiian story forward toward a consciousness of Hawaiian culture and Hawaiian worldview. There are other dimensions to think about, including music, hula, and language. Voyaging can be seen as something that includes everyone in the movement regardless of their political allegiance. This pathway has an elevated value in the circumstances that face Hawaiʻi today, given the realities of the colonial mentality and brings together people from all walks of life, socio-economic status, and Hawaiian and/or non-Hawaiian, alike. As professor of Indigenous education, Linda Tuhiwai Smith explains:

> The strength of the movement is to be found in the examples of how communities have mobilized locally, the grassroots development. It is at the local level that indigenous cultures and the cultures of resistance have been born and nurtured over generations. Successful initiatives have been developed by communities themselves, using their own ideas and cultural practices. Considerable reserves of confidence and creativity within many communities have generated a wide range of social, educational, health, and artistic initiatives (Smith 115).

The quote above explains the strength of a grassroots movement, and the Hawaiʻi example can be seen in the Protect Kahoʻolawe ʻOhana and the Polynesian Voyaging Society movements. It is important to realize that the purpose of reaffirming a Hawaiian consciousness is to go back in time to understand ancestral knowledge as a foundation on which the present population can start building different pathways of understanding for the future. These building blocks can be seen in an act of liberation that empowers the present and the future of the people. Acts of liberation become more powerful at the grassroots level because they have a genuine decision-making role that navigates a path forward with Hawaiian agency at the forefront. This path forward helps to acknowledge what is right in front of us and, thereby, what needs the attention to bring about a change. I am presenting the case that the smaller, everyday interventions, such as understanding the environment, intangible pathways, and environmental calendars, are just as important, if not more important, for decolonizing the mind of a people that has been marginalized for a long time than overt political actions. Those voyaging concepts in themselves are another level of resistance that lessens the oppression and increases self-worth through the reassertion of native knowledge. The reassertion of native knowledge is empowering because it creates a sense of consciousness that ultimately empowers the person. As Tongan writer and anthropologist Epeli Hauʻofa says:

> It is time to create things for ourselves,
> To create established standards
> Of excellence that match
> Those of our ancestors (Hauʻofa 16).

The quote above highlights the philosophy from a native culture that honors the excellence of our native ancestors. It is a calling to the generations today to create a pathway of excellence just as our ancestors once did. The notion of liberation through action is well illustrated in the work of Argentinian philosopher and activist Enrique Dussel. Along with fellow philosophers Rodolfo Kusch, Arturo Roia, and Leopoldo Zea, Dussel critiques the structures of colonialism, imperialism, globalization, racism, and sexism, challenging western models of understanding (Dussel 1985). He argues that action and reflection can, in turn, help to propel social and political movements of liberation. Although Dussel's work emerges from the South and Central American context, it still has much to teach people who are denied their agency and culture in other parts of the world. The single thread that runs through Dussel's work is the question of resistance to oppression. Dussel's Philosophy of Liberation poses a challenge to the language of Euro-American philosophy, emphasizing the role of "self-liberation" through changes in the lives of individuals. Long before political structures can change, Dussel argues, minimal acts of liberation can be achieved (Dussel 12).

The traditions of Hawaiʻi and its Indigenous people offer a similar opportunity for personal liberation. Knowledge derived from kūpuna and recorded oral histories and legends of action and participation provide an equally profound approach to reconceptualizing the present and the role of Hawaiians in the islands today. I argue that acts of liberation are present in grassroots movements and represent powerful routes that lead to native agency and empowerment as I contend that the fundamentals of voyaging offer a similarly powerful vehicle for self-liberation. And, as Dussel argues, social movements and individual "conversions" may be more effective than politics per se in changing attitudes toward sovereignty. This approach

can be conceptualized in many ways: through language, song, dance, and education, more generally.

Voyaging can teach the connection between humans and the environment through concepts utilized to understand voyaging dynamics. In doing so, it is possible to attain a sense of liberation when a person begins to understand the tie to ancestral knowledge. In essence, the Hawaiian population does not have to assimilate or abandon their Hawaiian-ness but can reclaim identity in a different context. This context can be through places and objects, such as navigational platforms. It can also be through processes and practices. This kind of empowerment can help address the marginalization of the people and ultimately help offset the disbalance between the colonized and colonizers in Hawaiʻi. This trajectory is apparent in numerous social movements, notably the effort to protect Kahoʻolawe, the creation of a navigation school, and through education, more generally.

The two important themes, voyaging and education, in my research are present in each chapter. My research is significant in that it shows the most recent information on voyaging and curriculum. Throughout my work, I have seen where I can add more and/or fill in the holes of thought and history by including a Hawaiian perspective in the dialogue. Another aspect is to highlight the significance of reconceptualizing historical facts. I sought not only to create a path for native agency but more so to reclaim and reassert Hawaiian beliefs through oral culture. Furthermore, my research is significant in that it offers a segment of critical dialogue in the reconceptualization of Indigenous educational platforms and helps raise consciousness about implementing a curriculum conducive to cultural values and traditions. Knowledge of history, the Hawaiian worldview, along with beliefs and the fundamentals of an oral culture, help create a sense of liberation even before more political steps are taken.

Conceptual & Theoretical Framework

A conceptual framework is a source of inspiration that helps to explain what needs to be reclaimed for an educator to move forward. I started my framework by looking at Kenyan writer Ngũgĩ wa Thiong'o's theory of "The Cultural Bomb." The Cultural Bomb describes a colonizer as having "the effect to annihilate a people's belief in their names, in their languages, in their environment, in their heritage of struggle, in their unity, in their capacities and ultimately in themselves" (Ngũgĩ 3). This annihilation is done through the assimilative toolkit of the U.S.: changing the native language to English; schools being taught by American teachers; emphasizing the American history and philosophy; the reconfiguration of the landscape; and struggles among the native population. Colonialism encompasses not only politics but also consciousness. All of these subversions contribute to a system that is unfamiliar and that excludes the native worldview. This description resonates with me because the same process has happened in Hawai'i, whereby U.S. occupation has had a devastating impact on the native population.

The effects of "The Cultural Bomb" distance native peoples from their homeland, while the native person still occupies his or her original space. There is a disconnect in the belief system caused by this erasure of culture. According to Thiong'o, there is a break in colonized societies between a people and their place of origin. In Hawai'i, the process of Americanization through the absorption of the American language and powerful systems of domination adds difficulties to the effort of native people to reclaim their rights. As Thiong'o argues, colonialization embraces two aspects of the same process: "the destruction or the deliberate undervaluing of a people's culture, their art, dances, religions, history, geography, education, orature, and literature, and the conscious elevation of the language of the colonizer" (Ngũgĩ 16).

In transitioning from understanding the destruction of a culture to seeing how people respond through resistance, I explore the work of American political scientist and anthropologist James C. Scott. Focusing on the working-class population in Southeast Asia, Scott looks at everyday forms of resistance. In his work, *Weapons of the Weak* (1985), Scott argues that local residents demonstrate independence and resilience in the very acts of cultural resistance to dominant orders. While these populations may seem to acquiesce to domination, small acts of public defiance and alignment provide an everyday platform of resistance. What Scott calls a "hidden transcript" becomes a means by which the oppressed and colonized can assume their own culture and identity. Scott's theory resonates with the history of Hawai'i and finds expression in the multiple layers of resistance still in effect today. Understanding the ways of reasserting themselves and their culture within the system of colonial dominance becomes another level of decolonization that is seen in voyaging and can be taught in education.

Another perspective in my conceptual framework is the ideal of promoting what is possible. This type of resistance through personal liberation uses agency in understanding recent events in history to help foster a positive pathway forward. I have added another perspective to this framework in that I am building something new and positive. The wave of protest in Hawai'i has been connected to peaceful, non-violent, direct action. These ideals were seen in the Civil Rights Movement in the continental U.S. in response to violent and oppressive behavior against black Americans. Martin Luther King, Jr. believed in a non-violent philosophy in marches, rallies, and protests. This is the same philosophy that played out in the Kalama Valley evictions, in the reoccupation of Kaho'olawe, and most recently in the protests atop Mauna Kea, and underlines a pattern for Native Hawaiians in the social movement.

James C. Scott recognizes a commonality around social movements. Scott bases his ideas in part on Bertolt Brecht's notion of "epic theater" (Scott 75). Brecht's concept of epic theater proposed that a play should not cause the spectator to identify emotionally with the characters or action before him or her but should instead provoke rational self-reflection and a critical view of the action on the stage. Scott argues that performance in a social context can take on a comparable meaning, distancing the viewer from the foundational "story" and allowing for introspection and self-realization. Scott is equally attracted to the complexities of "Svejkian talk" exemplified in Czech novelist and philosopher Jaroslav Hašek's *The Good Soldier Švejk* (Teevan 1999). The principal character, Josef Švejk, demonstrates his experience through his very criticism. As Scott explains:

> These Brechtiain or Svejkian forms of class struggle have certain features in common. They require little or no coordination or planning; they make use of implicit understandings and informal networks. To understand these commonplace forms of resistance is to understand much of what the peasantry has historically done to defend its interests against both conservative and progressive orders. It is my guess that just such kinds of resistance are often the most significant and the most effective over the long run (Scott 3).

Resistance leads to what French anthropologist Claude Lévi-Strauss called a bricolage in which everyday people can reconceptualize their place in the world through the reassembly of parts (Lévi-Strauss 131). Interested in how societies create novel solutions by using resources, Lévi-Strauss argued that the building blocks of a different outlook already exist in the collective social consciousness of individuals. I believe we can employ the notion of bricolage to change the way people think about their lives. This type of resistance is based on reconceptualizing reality. I believe that a good example can be found in voyaging practices. By understanding voyaging through education, the very act of participation provides a sense of liberation that allows for a deeper knowledge of the Hawaiian culture and a better sense of Hawaiian identity. This route to

liberation gives a new meaning to a culture-based curriculum for the students. It is apparent that we are like our ancestors in that we are dealing with what is viable now and on our own terms. Reconceptualizing our identity and roles as Hawaiians are forms of liberation and ideals that allow us to be Hawaiians on our terms with a knowledge of who we are today because of who our ancestors were yesterday.

The "bricoleur," or adaptive creator, compiles a set of images or beliefs that together constitute a personal philosophy. I answer to the everyday people who constitute different approaches and worldviews toward a collective act of "bricolage." The Hawaiian Renaissance showcases the ability to take your people from the margins and reconceptualize a future from the center. The chapters will show this dynamic along with a philosophy that has a different worldview based on traditional knowledge.

CHAPTER ONE:

Social Movements & the 1970s Second Hawaiian Renaissance: Reclaiming, Reasserting, and Reconceptualizing Hawaiian Identity

> To conceive of history as a process of the liberation of man is to consider freedom as a historical conquest; it is to understand that the step from an abstract to a real freedom is not taken without a struggle against all the forces that oppress man, a struggle full of pitfalls, detours, and temptations to run away. The goal is not only better living conditions, a radical change of structures, a social revolution; it is much more: the continuous creation, never ending, of a new way to be a man, a permanent cultural revolution. In other words, what is at stake above all is a dynamic and historical conception of man, oriented definitively and creatively toward his future, acting in the present for the sake of tomorrow (Gutierrez 32).

I was born in 1971 on the island of Maui to a Hawaiian/Chinese father and a New Zealand-born mother. I grew up with my sister, who is one year older than me. Before I was born, my grandparents moved from O‘ahu to Maui to be active in our lives. As in every family, some dynamics were already in place that made up the environment I grew up in. My grandmother was pure Hawaiian and only spoke the Hawaiian language. She was loyal to her Hawaiian ancestry and her mother tongue and refused to speak English when it was imposed on her at a young age. My grandfather was mostly Hawaiian with a little bit of Chinese. Or the American way to describe him is 75% Hawaiian ancestry and 25% Chinese ancestry. He was the opposite of my grandmother in that he only spoke English and refused to speak the Hawaiian language. He believed the American philosophy would bring economic wealth to him and our family. With that being said, I went to a public school in which the curriculum was taught in the English language, American textbooks were used for the curriculum, and I was taught only by American and Japanese teachers. At home, the Hawaiian language was spoken, Hawaiian traditions were a part of my foundation, hula and ocean sports were my family’s passion and therefore mine also, and a Hawaiian worldview existed. My grandmother passed away when I was young, and the dynamics and philosophies in my family would change greatly after her passing. Soon, the

English language was spoken more in my home, and discussions on Hawaiian history and honoring Hawaiian traditions started to fade away. It was hard for me to go to an American school and do well. It was difficult to negotiate living in two different worldviews until I became an adult. In reflection, the differences were extreme and stood out. I explain my family dynamics because it is not so black and white in ways of responding to colonialism but rather an example of a family left to navigate through the consequences of the colonial mentality that ultimately shaped my own philosophy and understanding of identity and agency as an adult. It was as though my grandmother was the link to the past, and years later I realized, she was also the link to the future.

Introduction

The second Hawaiian Renaissance occurred in the 1970s and included numerous forms of resistance, agency, and empowerment in the context of Hawaiʻi and its history of colonization. That period saw a grassroots movement ignite a cultural resurgence in oral traditions. Restoring traditions brought back a consciousness of Hawaiian culture that would surface in the educational system, in which a culturally-based curriculum is now a common educational tool. In understanding the history of Hawaiʻi and the U.S., we become aware of the loss of culture that took place in Hawaiʻi. As historian Jon Osorio states: "The renaissance that arose at that time has grown over forty years later into a dynamic political, cultural, and social movement that has come today to be a large part of the way that Hawaiʻi defines itself to the world" (Osorio 15). This chapter examines the 1970s "Second Hawaiian Renaissance" at a time in Hawaiian history when Hawaiʻi's identity was renegotiated and reconceptualized. I examine the Second Hawaiian Renaissance by analyzing how the Hawaiian population responded to the American culture

through assertions of native agency and cultural traditions. It wouldn't be until years later that the fruits from that labor would exist and flourish.

I look at the Kalama Valley evictions as a catalyst event that triggered a resurgence of Hawaiian culture. The 1971 push-back to development and the eventual eviction of families in Kalama Valley ignited a grassroots movement that would take on a life of its own. I follow the cultural movement through all of the major events until the 1978 Hawaiʻi Constitution Convention and the new constitution's contributions to reclaiming Hawaiian identity. I look at how the social movement started, its pathway to reconceptualizing Hawaiian agency, and ultimately, what came about because of those events. I do this by analyzing how the Hawaiian population resisted a long-standing dominant colonial presence by showing native agency through peaceful, non-violent direct actions.

I look at the objectives of the protest and how the approaches were reflected in practice. More importantly, I see what people have gone on to do as a result of a new emphasis on Native Hawaiian ways of "doing." Acts of liberation are present in grassroots movements, and they represent powerful routes for native agency and empowerment. I demonstrate how the individuals and/or groups of people throughout the process acquired distinct forms of liberation and, in the process, Indigenized the Hawaiian response to marginalization and discrimination that would take on a life of its own. These events guided the native population forward, and the movement took on a life of its own.

I Ka Wā Ma Mua, I Ka Wā Ma Hope

The above title of this section is *I Ka Wā Mua, I Ka Wā Ma Hope* and is translated as "the time in front, the time in [the] back" (Ulukau ʻOiwi Vol.3, 2003), which can loosely mean that the past is the future. For myself, understanding the past allows for a foundation in moving forward.

Therefore, the first Hawaiian Renaissance took place in the 1880s during the reign of King Kalākaua (*Illustration* 1.1). King Kakākaua was "the first reigning monarch to travel around the world and built Iolani Place in 1882 to enhance the prestige of Hawaiʻi overseas and to mark Hawaiʻi's status as a modern nation" (www.iolanipalace.org). He sought national identity as he replaced the Christian national anthem, *He Mele Lāhui Hawaiʻi*, with *Hawaiʻi Ponoʻi* in that same year. Kalākaua held a "second" coronation in 1883 for the local people and missionary descendants as a way to bring peace between the groups. The first coronation attempt was in 1873, but he was unsuccessful following the elections between Lunalilo and himself, in which he lost. King Kalākaua enjoyed Hawaiian sports, traditions, and language and made sure to have hula, chant, and rituals at his coronation and beyond. The King wanted to trace his own family's genealogy and recorded an oral cosmology chant in the Hawaiian language called the Kumulipo, a creation chant that consisted of 2,102 lines and was originally transmitted orally (usgenwebsites.org/HIHonolulu/history/kanaka_maoli/the_kumulipo).

King Kalākaua was known for establishing international relations between the Hawaiian Kingdom and foreign governments. My great great grandfather, Colonel Curtis Piehu Iaukea (*Illustration* 1.2), served many roles (*Illustration* 1.3) for the Hawaiian Kingdom and was the most traveled member of the Hawaiian Administration. As the Hawaiian Kingdom's chief diplomat, Chamberlain, and Secretary of Foreign Affairs, Iaukea's travels took him to several countries, including representing King Kalākaua in Moscow for the coronation of Tsar Alexander III of Russia in 1883 (*Illustration* 1.4). In 1885, Colonel Iaukea represented King Kalākaua with the Japanese Government to "conduct the final negotiations for bringing Japanese contract immigrants to Hawaiʻi" (Duus 1999, 73). That same year, the first group of Japanese or Issei generation to Hawaiʻi arrived with 676 men, 159 women, and 108 children. In 1897,

Iaukea would attend the Queen Victoria's Diamond Jubilee, and in 1898, he would travel to Washington D.C. with President Dole and his wife as the secretary and military attache. All of these examples of travel, negotiations, and diplomacy prove Hawaiʻi's position in the world as Colonel Iaukea was representing the Hawaiian Kingdom in all events (*Illustration* 1.5). King Kalākaua became sick while on travel in San Francisco and died on January 20, 1891. His sister, Princess Liliʻuokalani, ascended to the throne and became Queen (*Illustration* 1.6).

On January 17, 1893, a group of missionary descendants, lawyers, and businessmen, many of whom also served in the legislature and were Hawaiian subjects, overthrew the Hawaiian Kingdom government and its reigning sovereign, Queen Liliʻuokalani. As my sister, political scientist Sydney Lehua Iaukea recorded:

> This illegal overthrow was led by attorney Lorrin A. Thurston; more importantly, it was made possible by the support of U.S. foreign minister John L. Stevens and the U.S. Marines aboard the USS Boston. Once in power, a Committee of Safety renamed the government the Republic of Hawaiʻi and set about trying to annex Hawaiʻi to the United States as a territory to assure the continued flow of Hawaiʻi's sugar to the United States tariff free. A treaty of annexation never passed. Instead, in 1898 President McKinley signed into law a joint resolution, passed only as an internal bill in both houses of the U.S. Congress, and not voted on in Hawaiʻi, which was already internationally recognized as a sovereign and independent state. This joint resolution made Hawaiʻi a territorial outpost of the United States, which occupied it as a staging ground for U.S. troops fighting the Spanish-American War in the Philippines (Iaukea 1–3).

The above quote represents the events that occurred and would eventually change the social, political, and economic status of Hawaiʻi. Per internal law and constitutional law, a country can take over another country with a treaty and not a joint resolution. Therefore, Hawaiʻi has never been colonized politically and remains under belligerent occupation from the U.S. to this day. However, Hawaiʻi has been occupied for so long that mentally we are colonized, myself included. Iaukea became Queen Liliʻuokalani's business agent and managing trustee of the

Lili‘uokalani Trust from 1909 to 1923 and was appointed Secretary of Hawai‘i during the Territorial Government in 1917 by President Woodrow Wilson.

In 1896, the American assimilation “toolkit” was underway with the banning of the Hawaiian language and the replacement of ‘ōlelo Hawai‘i by English. Hawaiians learned American history and were absorbed in the culture of the colonizer. Soon, Hawaiian culture was replaced by American culture. The military was very influential from the start of the overthrow. Hawai‘i is the largest port of U.S. military servicemen in the world due to it being strategically located between the U.S. and East Asia (Hawai‘i Real Estate 2013).

In the first half of the twentieth century, Hawai‘i’s economy was dependent on agriculture, with the plantations growing mainly pineapple and sugar. By 1910, there were about 150,000 Japanese living in Hawai‘i, and most of them were working on the plantations. Nisei is translated as second-generation Japanese, and it is this generation that would remain in Hawai‘i and become actively involved in politics and business until today.

At the end of the century, the economy became dependent on tourism. As the plantations started to disappear, the tourism industry stepped in to dominate the economy in the last half of the twentieth century. Hawai‘i’s economy surged after statehood, and an increasing number of luxury resorts and elite homes were built. “By 1970, the majority (80%) of people living in Hawai‘i were not able to own their own homes; they were just too expensive” (Trask 1987, 127). Affordable housing also was on the decline. The price to live in Hawai‘i increased to high levels, creating extreme difficulty for the local population to live within their means. Issues for local families at that time were affordable housing, the high cost of land, increased taxes, and low-paying jobs. These trends particularly affected Native Hawaiians. “Western domination has largely stripped us of our language, customs, social position, self-governance, and culture

identity" (Benham 4). "The annual median of Hawaiian families income was $3,000 to $4,000 less than the incomes of the haole, Chinese, and Japanese populations, with a third of the Hawaiian population earning less than $4,000 a year" (Trask 128). As the cost of living in the State of Hawai'i continued to be among the highest in the United States, reports showed Native Hawaiians at the bottom of the statistics in their homeland. "They also had poorer education, lived to a lower degree in poverty and were more likely to be in prison than their non-Hawaiian counterparts" (Kana'iaupuni 3). They were in all ways disadvantaged in their own land.

The 1950s and 1960s were previously a hive of dramatic change. The world was experiencing a major wave of protest that would have after-shocks for decades to come (www.loc.gov/civil-rights-act/). A sense of freedom in living one's life started to become the ideal, and American culture experienced striking changes. These included openness in interracial relations/marriage, sexuality, and community. American politics and culture shifted radically in terms of the issues of gender and sexuality. Events such as the Vietnam War, the American Civil Rights Movement, and the New Left movements all profoundly impacted American society, with corresponding repercussions in the Hawaiian Islands (Harrison 1995, 261).

As Doug McAdams explains, there was "a political and cultural wave of speaking out, and, in turn, it created a momentum and helped fashion many of the specific political and cultural elements we associate with today" (McAdams 10). This cultural revolution would see women's rights and anti-war sentiments gain increasing support. The fifties and sixties offered a new platform for learning the skills needed to organize other activist movements. The United States and other parts of the world began to see activists as a new visible presence. The Equal Rights Movement, led by Martin Luther King, Jr., spurred kindred movements: women's rights, gay and lesbian rights, children's rights, and much more. The emphasis on peaceful, non-violent direct

action was widely embraced and extended beyond black Americans to other groups, including Native Hawaiians. By the end of the 1960s, Hawaiians, too, had begun to advocate for their rights. “Knowledge of past abuses, the present conditions of Native Hawaiian people, and the loss of their ancient culture had begun to resurrect in Hawaiʻi as well” (Trask 2000, 1).

Kalama Valley

In 1961, the Kamehameha Schools Bishop Estate trustees negotiated a deal to develop 6,000 acres in East Oʻahu, later to be known as Hawaiʻi Kai. In line with the vision of high-profile developer and industrialist Henry Kaiser (July 1970), Hawaiʻi Kai would be one of the Bishop Estate’s most ambitious land partnerships (Milner 2013). The Bishop Estate was founded by Bernice Pauahi Bishop as a trust that would fund the education of Hawaiian children (Kanahele 1986, 14). The trust owned about nine percent of the land in Hawaiʻi at that time. The 1961 deal with Henry Kaiser resulted in the planned construction of 4,300 homes (with the discussion of possibly building another 2,000 homes) on a parcel of dry land and salt marshes (a fishpond, duck and pig farms, and vegetable farms and wetlands) in East Oʻahu. Kaiser’s team provided the designs for individual homes. The Hawaiʻi Kai Development Corporation scheme met with little resistance and passed through the City and County of Honolulu permitting process. The final part of the project consisted of 250 acres in an area called Kalama Valley. As with the rest of Hawaiʻi Kai, the development plan envisioned a large subdivision for single families, apartment buildings that included high and low-rise units, ten hotels, reaching as high as fifteen stories, numerous restaurants, and a golf course. “One hundred and fifty families were to be evicted because of this development, igniting public unrest and protesting voices of Native Hawaiians” (Trask 1987, 128).

The families living in the valley had month-to-month leases. Bishop Estate Trustee Richard Lyman pointed out that the trustees understood the new project as a business proposition without any consideration being given to how the community would be affected by the change. To the estate's trustees, it was about increasing the assets for the Kamehameha Schools and satisfying fiduciary responsibilities. In later hearings, the trustees admitted to not considering the needs of tenants and focusing solely on the commodity value of the developments. The board's membership had close ties to Hawai'i's Big Five companies, its members directly or indirectly connected to those companies. It would become obvious that the interests of the Hawaiian community in the Kalama Valley would not be well-served by the estate (Trask 131). The Big Five companies consisted of C. Brewer, Theo H. Davies, Amfac, Castle & Cooke, and Alexander & Baldwin (imagesofoldhawaii.com). These companies were focused on agriculture and the sugar industry. Earlier, these companies had control of Hawai'i's economic market.

Hawaiian families had originally moved to Kalama Valley to escape development and the high cost of housing in metropolitan Honolulu. For the Hawaiian community living on the city's outskirts and in rural areas, losing their safe haven presented a new challenge. The Hawaiian families were poor and had not been given time to relocate. Most of the breadwinners worked in construction and farming. The community was close-knit and lived a Hawaiian lifestyle, which meant they worked hard but also enjoyed relaxing among family and friends.

An initial incident of the protest was the complaint by long-time resident George Santos that he could not afford to move. Santos was a pig farmer and had his pig farm in Kalama Valley. He could not possibly see how he could move all of his pigs from one area to another, especially without public support. He and his neighbors spoke out strongly against the evictions.

Santos would assume a growing leadership role. His speeches and public statements at rallies helped to sustain the movement.

The evictions of Kalama Valley became a pivotal time in Hawaiian history in which the Hawaiian population pushed back against the U.S. domination and resisted the ongoing erasure of the Hawaiian culture and people. This time period sparked what Scott describes as a "deeper appreciation of everyday forms of symbolic resistance and the way in which they articulate with everyday acts of material resistance" (Scott 304). The most important aspect of this period is that it brought a community together and eventually became the impetus to bringing the Hawaiian population together.

The protest was a demonstration of community-based activism. All of the protesters were non-violent but arrested for trespassing on private land. In the end, there were more protesters at the eviction than residents and police. As the policemen demonstrated their power, the residents sang songs and exercised passive resistance. The *Star-Bulletin* described the residents as "gentle rebels." Despite their cautiousness, all of the defendants were found guilty and given suspended sentences. The Kalama Valley struggle sparked a calling in Native Hawaiians, who saw a need to answer the pressures of an Americanized system through peaceful action in protests, marches, and rallies that continue today.

The Kalama Valley tract was eventually developed as a large golf course, with elite homes with security gates around the perimeter. Infrastructure was needed to accommodate the development in Kalama Valley. This included roads, parks, and a sewage station. The local population was never consulted on the development plan. In subsequent years, the Kalama Valley struggle would be seen as one of the several catalysts for the second Hawaiian Renaissance for Native Hawaiians. Although the battle was not successful, several distinct

lessons became evident in the aftermath. These included a growing concern with overdevelopment, the importance of agricultural lands, and people's place in the environment. These issues came to be repeated periodically in subsequent struggles over land and housing and still underscore many of the values of the Hawaiian community today.

The evictions of Kalama Valley became a pivotal time in Hawaiian history in which the "local" and Hawaiian population pushed back against the U.S.-dominated state and resisted the ongoing erasure of the Hawaiian culture and people. This period sparked what Scott characterizes as a "deeper appreciation of everyday forms of symbolic resistance and the way in which they articulate with everyday acts of material resistance" (Scott 304). The most important aspect of this period is that it brought a community together and eventually became the impetus to uniting the Hawaiian population. The struggle sparked a calling in Native Hawaiians, who saw a need to answer the pressures of an Americanized system through peaceful action in protests, marches, and rallies that continue today. This type of protest is seen as being specific to the Native Hawaiian resistance against the American occupation and becomes a template of an indigenized form of resistance for Native Hawaiians today and others in similar situations.

New Hawaiian Organizations

The Native Hawaiian resistance started to become Indigenized during this era as a number of special interest organizations favoring Native Hawaiian claims took root immediately after the Kalama Valley protests. The group called "The Hawaiians" became the first major Native Hawaiian political organization in the 1970s. The principal focus of this group was to campaign for reforms in the policies of the Department of Hawaiian Home Lands. "The Hawaiians" organization was founded in Oʻahu but quickly gained a footing on other islands. As Historian Tom Coffman explained: "One of their main goals was to enable qualified beneficiaries, many of

whom had been on the application list for 15–20 years, to be placed on the trusts lands set aside by the act" (Coffman 294). "The Hawaiians" pressed for more homes to be built on Hawaiian Home Lands sites to better serve qualified applicants placed on the waiting list. In order to expose what they perceived as the department's mismanagement, the group lobbied at the legislature in support of increased appropriations with which to build more homes for Native Hawaiians.

The Congress of Hawaiian People joined "The Hawaiians" in 1965 following a controversial decision to appoint Matsuo Takabuki as a trustee for the Bishop Estate (King 65). The Bishop Estate funds the Kamehameha Schools, which focuses on educational opportunities for Hawaiian children in grades K-12. The Bishop Estate—now renamed Kamehameha Schools—is also the largest private landowner in Hawaiʻi. It was during this time that "the trustees were selling land to developers for millions of dollars with little record of how the money was spent" (Creighton 241). In addition, the trustees also waived lease payments over a twenty-year period for some lessees to provide an incentive for the development of raw land. Examples such as this led to anger in the community and a fresh look at the business practices of the trustees at the Bishop Estate. There was anger among the Hawaiian population that a Japanese-American had been appointed instead of a Native Hawaiian. The aim was to ensure that a Native Hawaiian would be brought onto the board, with the hope that a Hawaiian would better monitor the estate's activities.

The following year, in 1972, the Aboriginal Lands of Hawaiian Ancestry (A.L.O.H.A.) organization was established to secure reparations from the U.S. government for the role of the U.S. in the 1893 illegal overthrow of the Hawaiian government. The first of the bills supporting this outcome followed the broad outlines of the Alaska Native Claims Settlement Act (ANCSA),

signed into law by U.S. President Richard Nixon in 1971. According to Cooley, "ANCSA was intended to resolve long-standing issues surrounding aboriginal land claims in Alaska, as well as to stimulate economic development throughout Alaska" (Cooley 1983). The initial bill led to the creation of the Native Hawaiian Study Commission by President Carter in 1980 and raised the consciousness of the role of the U.S. in the overthrow. In 1981, when President Reagan assumed office, he disbanded the commission but was subsequently convinced by Native Hawaiian Republicans to reconstitute a nine-person commission called the Native Hawaiians Commission pursuant to Public Law 96-565, Title III on June 23, 1983. The study lasted 21 months and looked at the needs and concerns of Native Hawaiians and the socio-economic and cultural factors between the minority of Native Hawaiian members and the majority of members from the continent.

The early organizations focused on issues pertaining to land use. Hui Mālama ʻĀina o Koʻolau was established in 1973 to protect land in windward Oʻahu from development. This group was active in opposing the construction of the Defense Interstate Highway H3 designed to connect two military bases on Oʻahu. As a spokesperson for the U.S. Department of Transportation explained at the time:

> As planned, H-3 would constitute the third and final segment of Hawaii's interstate Highway System. It would be a six-lane, controlled-access highway extending for approximately fifteen miles across the southern half of Oʻahu, from near Pearl Harbor, on the island's leeward side, across the Koolau Mountains, to the Kaneohe Marine Corps Air Station, on the windward side. Two conventional highways, the Pali and Likelike Highways, now provide trans-Koʻolau routes (U.S. Department of Transportation 1998).

The U.S. military rationalized the need for the highway in order to connect the Marine Corps Air base with the U.S. Navy port at Pearl Harbor. The interstate would enable transport between the two critical military bases. The project started in 1960 and provoked a continuous strand of

litigation that saw the State of Hawai‘i bypass the required environmental impact statement and ignore the requirements set out in the National Environmental Protection Act of 1969. The greater community protested throughout this project due to the fact that the construction damaged sacred sites and religious structures. In 1986, U.S. Senator Daniel Inouye had the freeway exempted from other environmental laws so that the construction could be completed. The final cost of the construction was 1.3 billion dollars, or 80 million dollars per mile, making this project the most expensive interstate highway in history (Kelly 2).

These separate acts of protest and engagement led to broader coalitions and more ambitious aims. In 1974, ‘Ohana o Hawai‘i was created to re-establish the political status of Hawai‘i as a nation independent from the United States. This group traveled to the United Nations to petition and start the process of de-occupation in Hawai‘i. The momentum to protect land and sacred sites further saw the establishment of the Coalition of Native Hawaiian Claims, known today as the Native Hawaiian Legal Corporation. This corporation did and continues to advocate on behalf of Hawaiians when they are faced with legal issues and litigation relating to ancestral lands and access to natural resources for cultural, religious, and subsistence purposes.

The same year under the Native American Programs Act of 1974, the term Native Hawaiian was first included in the definition of Native Americans (McGregor-Alegado 1980). This placed Native Hawaiians in the same category as American Indians, Alaskan Natives, and Federally Recognized Tribes, whereby Native Hawaiian organizations could now receive federal funds. This change of recognized status allowed for a non-profit organization called Alu Like, Inc. to establish a presence on each of the Hawaiian Islands, with a focus on asserting Native Hawaiian rights as Indigenous peoples of Hawai‘i. Alu Like, Inc. continues to provide funding for education, training, and career-building classes and workshops. The organization also

includes a separate branch that provides childbearing classes, individual self-help workshops, family-centered activities, and elder care as a way to take care of the community.

Some of the newly created organizations had a very specific place or site that the members wished to protect. In 1975, a group called Hui Ala Loa on Molokaʻi was formed to advocate for Hawaiian issues on Molokaʻi. The members focused on obtaining a ten-year agreement to have ocean access through Molokaʻi Ranch so that Native Hawaiian residents could walk to the ocean for subsistence fishing and gathering. This group would later organize against development on Molokaʻi, arguing that increased population growth would affect the residents' livelihoods and the way of life on the island. There were two additional protests in the same year with the Mokauea Island evictions and the Waiāhole-Waikāne protest against development on the windward side of Oʻahu.

In 1976, A.L.O.H.A. president Charles Maxwell called for the occupation of Kahoʻolawe and the need to stop the bombing of the island. Maxwell used this call to occupy Kahoʻolawe to draw attention to the grievances of Native Hawaiians (McGregor 2007). Members Hui Ala Loa responded to this call. Together with other activists from Maui, they gained national attention by showing the injustices done to the island and Native Hawaiians in general. These members ended up on the one boat that passed the Coast Guard blockade and landed on the island. This act started the movement to stop the bombing of Kahoʻolawe and eventually led to the creation of the Protect Kahoʻolawe ʻOhana. Protect Kahoʻolawe ʻOhana's ambition was to stop the bombing of Kahoʻolawe and restore the cultural and natural resources of the island. The events of this movement would start a greater resistance to land dispossession in Hawaiʻi in general and at the same time create a passion for reasserting native identity, cultural traditions, and sovereignty claims. Chapter Two will discuss this movement in depth.

That same year, the Polynesian Voyaging Society (PVS) was organized, and the iconic voyaging canoe, *Hōkūleʻa*, was created. This organization would provide a new sense of pride to Hawaiians as they rediscovered the accomplishments of their forebears. Chapter Three will discuss the beginnings of the Polynesian Voyaging Society and the role that *Hōkūleʻa* played in reviving a cultural tradition and starting a voyaging movement in Hawaiʻi and Oceania on its own.

1978 Hawaiʻi State Constitutional Convention

Two years later, the 1978 Hawaiʻi State Constitutional Convention took place, laying the groundwork for Hawaiʻi today, both in the laws and the template of resistance. Considered a watershed event in the history of Hawaiʻi, the convention established term limits for elected officials, created the requirement for a balanced budget, and created the Office of Hawaiian Affairs. The ConCon78 clearly included major amendments that provided Native Hawaiians with recognition and entitlements. The convention also underlined the importance of preserving Hawaiian culture and establishing Hawaiian as an official state language. The constitutional convention learned a great deal from the Kalama Valley protest as well as other protests and the efforts of other Hawaiian organizations. Together, this movement linked to Hawaiian identity, reasserting, reclaiming, and reconceptualizing a new era for the Native Hawaiian population. The convention was pivotal in establishing the groundwork for many Native Hawaiian rights within the U.S. government. Below are the Native Hawaiian Affairs committee amendments that were approved in the convention in 1978.

Amendment 20, Article X, Section 4, amended the State of Hawaiʻi to provide for the promotion of Hawaiian history, culture, and language and a Hawaiian education program. Providing for the use of community expertise to further the Hawaiian education laid the

foundation for the creation of the Kūpuna Program for the public-school grades K-6. This program introduced culturally-based kūpuna (elders) and Makua (adults), many of whom were native speakers, to teach Hawaiian culture in public schools (hlbhawaii.org/con/conart/12html). Kūpuna or grandparents are pillars of the Hawaiian community and were recognized for their value to the community and would be "part of the classroom to share their cultural knowledge, life experiences, and the Hawaiian language" (www.hawaiipublicschools.org).

Amendment 20, Article XV, Section 4, established Hawaiian as one of the official languages of Hawai‘i together with English. This provision eventually enabled the establishment of three Hawaiian-language programs: (1) ‘Aha Pūnana Leo; (2) Kaiapuni School—Hawaiian Language; and (3) Hawai‘i State Public Charter Schools.

The revival of the Hawaiian language had its origins in practices leading up to the Con-Con 78. In 1970, the Kūpuna Component started in the Windward District on the island of O‘ahu. This program was important because the kūpuna (elderly) would come into the classrooms and share their ‘ike (knowledge). Hawaiian language courses at the University of Hawai‘i started in 1926 by John Henry Wise as he taught classes at the Mānoa campus and the Kamehameha Schools Kāpalama campus. However, in 1971, the Hawaiian language classes saw a peak in enrollment that was contributed to the reinvigoration of cultural affirmations during this period.

Furthering the effort to revive the Hawaiian language, the University of Hawai‘i at Mānoa campus initiated two Bachelor of Arts programs in Hawaiian language and Hawaiian studies (https://manoa.hawaii.edu/catalog/schools-colleges/hawaiian/kawaihuelani/). Hawaiian studies was first established under the Liberal Studies Program and by 1977 would be proposed to be a Hawaiian Studies Program at the University of Hawai‘i Mānoa campus. This was

followed in 1977 by the creation of a non-profit organization called ‘Ahahui ‘Ōlelo Hawai‘i. This organization focused on perpetuating the Hawaiian language by offering Hawaiian-language classes to adults in the community (https://edithkanakaolefoundation.org). The same year, Aunty Edith Kanaka‘ole created Hui Ho‘oulu ‘Ōlelo Hawai‘i as a meeting place that focused on the revitalization of the Hawaiian language and hula (https://edithkanakaolefoundation.org). As a result of the support from the community and the university system, the Department of Education (DOE) began the development of a Hawaiian Studies Program. Other language programs at other institutions followed, and in 1982, the University of Hawai‘i at Hilo started a Hawaiian Studies program.

In 1984, Hawaiian-language speakers founded ‘Aha Pūnana Leo, Inc., the first Hawaiian-language school for children. The group met to discuss strategies and implementation on the island of Kaua‘i at Hōkūlani Cleeland’s house and was made up of Hawaiian-language speakers and teachers, such as Ilei Beniamina, Hōkūlani Cleeland, Kauanoe Kamanā, Larry Kimura, No’eau Warner, Koki Williams, and Pila Wilson. The first Hawaiian-language preschool was established in Kekaha on Kaua‘i in 1984 (www.ahapunanaleo.org/history-hi-1).

Hawaiian-language education continued to flourish in the following decades. In 1986, the Hawai‘i State Legislative session created the Hawaiian Language Medium Education Program for the Hawaiian language in public schools (Hawai‘i Revised Statutes 302H-1). A year later, the Hawai‘i State Legislature passed a resolution to support the Hawaiian language and all other Native American Languages. Within this same year, the ban on Hawaiian-language medium instruction in public schools was lifted, and The Board of Education approved the Hawaiian Language Immersion Program. (www.hawaiipublicschools.org/TeachingAndLearning/StudentLearning/Hawaii)

In 1990, the Department of Education approved the Ka Papahana Kaiapuni in the public school system for grades K-12. This established separate classes and schools where the curriculum and instruction were carried out in the Hawaiian language. Fast forward to 2020, and almost every public school district in Hawaiʻi has a Ka Papahana Kaiapuni classroom where the curriculum and instruction are in the Hawaiian language, and there are twenty-one schools that have Hawaiian-language immersion from K-12, such as the Anuenue School in Palolo Oʻahu (www.hawaiipublicschools.org/TeachingAndLearning/StudentLearning/Hawaii).

As of 2019, there are twenty-one ʻAha Pūnana Leo programs, including four on Kauaʻi, one on Niʻihau, four on Hawaiʻi Island, four on Maui, two on Molokaʻi, and six on Oʻahu. Hawaiian immersion programs are now available in K-12; there are eighteen Kaiapuni schools and six Hawaiian public charter schools. As of the last survey, there are over 2,300 students in all of these classes in Hawaiʻi. A student can also obtain a Bachelor's degree, Master's degree, and starting with 2007, a Ph.D. in the Hawaiian language offered at the University of Hawaiʻi at Hilo campus.

In the 1970s, Hawaiians speaking the Hawaiian language were a rarity. In 2020, it was common to hear Hawaiian spoken in schools, universities, supermarkets, and shopping malls and hear both individuals and families speak the Hawaiian language. Hawaiian people are working at more diverse jobs and in careers that were once not typical in the 1970s. Hawaiian-language use is now common at many levels of commerce and government, such as on bank checks and ATM machines. Establishing Hawaiian-language preschools in the 1978 Hawaiʻi State Constitutional Convention helped the Hawaiian people speak their ancestral language and, through the process, see the world through a Hawaiian lens. In essence, this process allows Hawaiian communities to

identify with the journey of speaking the Hawaiian language in modern times and presents a platform for the community to reassert and reclaim the Hawaiian culture.

Amendment 28, Article XII, Section 4, focused on Public Trust. The amendment would set up a trust corpus and define Native Hawaiians and the general public as the beneficiaries of the lands granted to the State of Hawaiʻi by Section 5(b) of the Admission Act, Article XII, Section 5 established the Board of Trustees for the Office of Hawaiian Affairs, and Article XII, Section 6 explained the power of the Board of Trustees (hlbhawaii.org/con/conart/12html). This amendment created the Office of Hawaiian Affairs (OHA) to advocate for the well-being of Native Hawaiians. The advocacy goes two ways: the first pathway addresses the intergenerational injustices and learning to deal with those events by being well-informed of the historical events; the second pathway is envisioning a course forward in self-determination and the overall health of the Hawaiian people. "OHA is focused on strategic priorities for improving the conditions of Native Hawaiians in the areas of ʻāina (land), culture, economic self-sufficiency, education, governance, and health" (www.oha.org).

Since 1978, OHA has matured considerably. OHA is now the thirteenth largest landowner in Hawaiʻi, exerting control over 27,000 acres, much of it applied to agricultural ventures. OHA oversees 170 employees and is directed by a nine-member Board of Trustees. There are offices in Hilo and Kona on Hawaiʻi Island, Maui, Lānaʻi, Molokaʻi, Oʻahu, Kauaʻi, and Washington D.C. OHA currently provides resources to Native Hawaiian students each year, including $500,000 in scholarships and loans. Moreover, OHA helps Native Hawaiians borrow money to start businesses, buy and renovate homes, and start other projects. Organizations can receive grants to aid the communities, and OHA awards about $9 million annually (www.oha.org/about/what-we-do/).

In other areas, OHA prides itself on working with organizations that focus on uplifting and improving the Hawaiian community through new alliances. One example of collaboration includes a pairing with the Native Hawaiian Justice Task Force to find solutions to the high numbers of Native Hawaiians in prisons. Another common effort is to improve Native Hawaiian health (www.oha.org/mauliola). This is carried out in cooperation with the Nā Limahana O Lonopūhā, the Native Hawaiian Health Consortium, to reduce obesity, diabetes, and heart disease among the Hawaiian population. The focus is on supporting the Hawaiian community, and that aspect makes this type of mobilization a more distinct and successful social movement.

Amendment 29, Article XII, Section 7 highlighted Traditional and Customary Rights. Under the amendment, the state would reaffirm and protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes by ahupuaʻa tenants who are descendants of the Native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the state to regulate such rights (hlbhawaii.org/con/conart/12html). As the amendment explains:

> The State reaffirms and shall protect all rights, customarily and traditionally exercised for subsistence, cultural and religious purposes and possessed by ahupuaʻa tenants who are descendants of Native Hawaiians who inhabited the Hawaiian Islands prior to 1778, subject to the right of the State to regulate such rights" (www.capitol.hawaii.gov).

This amendment is important because it recognizes that Hawaiian people have a Hawaiian worldview with specific customs and beliefs connected to subsistence, cultural practices, and religious beliefs. Also, the amendments date Hawaiian people back to being in Hawaiʻi prior to 1778 and therefore recognize Hawaiian people as being the native people of Hawaiʻi.

Amendment 31, Article XV, Section 3, recognized the Hawaiian flag as a second flag of the State of Hawaiʻi. This flag was commissioned in 1816 by Kamehameha I to show piety and

allegiance to the United Kingdom. The Union Jack represents the relationship between the United Kingdom and Hawaiʻi as sovereign nations. The eight stripes represent the eight Hawaiian Islands: Hawaiʻi, Maui, Kahoʻolawe, Lānaʻi, Moloka'i, Oʻahu, Kauaʻi, and Niʻihau. The colors from the top of the flag are white, red, blue, white, red, blue, white, and red. This flag represents a time in history when there were wars and countries flew their flags to show sovereignty, as is the case today. Recognizing the Hawaiian flag shows the connection to the Hawaiian people and recognizes their history in the islands. Section 5 declared the motto of the State of Hawaiʻi be, "Ua mau ke ea o ka ʻāina i ka pono" (https://www.capitol.hawaii.gov/session2018/bills/HB1264_.HTM).

In addition to these specific amendments, the Constitutional Convention also decreased the amount of land and increased the number of years required to adversely claim ownership of lands. It established important precedents defining the Public Trust, especially in relation to fresh water in the islands. By establishing the Hawaiian language as an official language, having Hawaiian culture and language in schools, and acknowledging Native Hawaiians as one of the two beneficiaries of the ceded public lands trust, indigenizes the Hawaiian movement and makes a transition for Hawaiians to go from the margins to the center in re-resetting the story for Hawaiʻi by re-focusing attention on the Hawaiian people and their heritage. Indigenizing the State Constitution showed how significant each of the Hawaiian amendments was by making Hawaiians more central to Hawaiʻi and placing them in a position to focus more clearly on Hawaiian agency within an occupied nation. In addition to these specific amendments, the Constitutional Convention also discussed stopping the bombings of Kahoʻolawe and looked further at issues such as housing, land ownership, and development.

The Merrie Monarch Festival

Cultural revitalization and decolonization take many forms and emerge as being just as important as political decolonization, as seen with the 1978 Con-Con. Others are more deeply rooted and cultural, whereby throughout these mobilizations, the style, protocols, language, rituals, and tactics break from national and international templates and become more rooted in Hawaiian traditions, culture, values, and thinking. The Merrie Monarch Festival is an example of a popular movement that has profoundly impacted the Hawaiian people. The festival began with Hawaiʻi Visitors Bureau as a way to bring more visitors to the island of Hawaiʻi and has evolved to become an important forum for the exchange of ideas and a place to showcase Native Hawaiian culture. As the website for the Merrie Monarch organization explains:

> The Merrie Monarch Festival has contributed to a renaissance of the Hawaiian culture, providing a platform on which cultural practices and values can be honored and passed on from generation to generation (merriemonarch.com).

The Hawaiʻi Island Chamber of Commerce initiated the festival in 1963. Five years later, the by then private Merrie Monarch Festival organization was run by a community of members wanting to perpetuate hula traditions. The Merrie Monarch is a non-profit organization that evokes the legacy of King Kalākaua. The hula festival is a week-long event that features an art fair with Hawaiian products, a parade to celebrate the traditions of hula, and a final culminating event—the highlight of the week—in a three-day hula competition featuring Hawaiian hālau from the State of Hawaiʻi and the continental U.S. This event is extremely competitive and is by invitation only. As a result, the best hula hālaus receive invitations to compete against each other. This event is televised live and live-streamed on the internet, allowing thousands of people from around the State of Hawaiʻi and the world to watch from their living rooms.

The three-day competition is an example of the change that took place during the Hawaiian Renaissance. The first part of the competition shows the connection to Hawaiʻi's last reigning King from the nineteenth century, which honors tradition and creates a foundation. The last part of the competition allows hula practitioners to create modern-day traditions with a creative focus that shows how a thriving culture can reinvent and reconstruct itself in the twenty-first century.

The event is named after King Kalākaua, the last reigning king. Known as "The Merrie Monarch" (Armstrong 16) because he enjoyed hula (both performing and spectating), loved music and chant, and was a proponent of Hawaiian mythology, King Kalākaua would throw parties with fine food and exotic drinks. He also believed in the longevity of traditions through hula and the Hawaiian language at a time in history when both were disappearing. He once stated that "Hula is the language of the heart, therefore the heartbeat of the Hawaiian people" (Yamanaka 2). King Kalākaua focused on the perpetuation of culture and "defied the missionaries and their church by encouraging the traditional arts and elevating them to royal treasures" (Kuykendall 1961). Kalākaua would arrange for public performances of hula and "published the genealogical prayers, the Kumulipo" (Silva 89) to establish to use of hula and mele as "official narratives of the nation" (Silva 91).

In 1883, King Kalākaua revived the traditions of hālau hula (dance groups) to perform for his coronation ceremony and later, in 1886, for his birthday jubilee. Kalākaua himself learned to chant from his grandmother, as well as from the chanters on the court. "His active pursuit of the ancient chants was perhaps the most important factor in the revival and perpetuation of the oli and hula, for he did this in the face of opposition and denigration by haole missionary-oriented groups of the day" (Kanahele 201). Kalākaua would eventually put together the legends and

myths that he was taught into a book called *The Legends and Myths of Hawaii: By His Hawaiian Majesty Kalākaua* so that the future generations would know them as well. “He used Native Hawaiian oral and performative culture to revalue Hawaiianness, create political solidarity, and enact national resistance to foreign domination” (Kanahele 200–203). Two of his published chants are called Kaulilua and Auʻa ʻia and would become hula pahu or “sacred chants and rituals performed with a shark-skin drum” (Kalākaua 24).

The second night of the Merrie Monarch features the Hula Kahiko or an “old, ancient, antique, long ago, beforehand” (Ulukau Dictionary) style of dancing hula. This night represents the continuation of ʻike Hawaiʻi (Hawaiian knowledge) that a kumu hula learns from his or her predecessor. In some families, this direct lineage of ʻike Hawaiʻi goes back generations, and hula perpetuates this lineage through an oral culture and performance. This night portrays the kumu hula as the source of ʻike (knowledge) and as living repositories of this knowledge in this generation. The kaona or hidden meaning is hidden in the mele and the hula; therefore, the kumu hula takes great responsibility in creating the interpretation in the movements and choreography for the composition.

Three kumu hula demonstrate the legacy that is passed down through the generations. Nālani Kanakaʻole is the daughter of kumu hula Edith Kanakaʻole, a renowned chanter and composer. Edith Kanakaʻole learned from her grandmother, Mary Kekuewa Kanaele Fujii, who was trained in the hula kapu tradition in the late 1800s and learned the hula style called ʻaihaʻa, which can be seen today. Her mother, Mary, was also a kumu hula and taught her choreography and composition. Nālani’s sister is Pua Kanakaʻole Kanahele and is known for her vast ʻike in hula chant. Kanakaʻole is a Hawaiian-language speaker and began teaching others her family’s traditions at the age of 14. She grew up watching her mother create a chant, at the same time

composing a hula. She credits her mother for teaching her to understand oli and mele (Gill 2017, 1).

Another kumu hula is Hōkūlani Holt-Padilla from the island of Maui. Padilla grew up in a family of kumu hula and still finds enjoyment in bringing life to the mele with hula. “We teach and learn about stories, place names, cultural practices, plants, animals, weather conditions, foods, ceremonies, religion and the myriad ways that our ancestors saw their environment” (HonoluluMagazine.com 2017). The kaona has different levels of understanding as Padilla references kaona as adding another interpretation to the hula. According to Puakea Nogelmeier, “Kaona is the impetus for mele or oratory, and is thus the foundation for the composition, guiding the imagery and word choice” (HonoluluMagazine.com 2017). Puanani Alama started her hula career at a young age; as a teenager, she was dancing in shows in Waikiki. She has taught hula for over seventy years and credits her ‘ohana for the love of hula as they allowed her to teach others at the young age of twelve. Alama finds her passion in passing down the traditions in hula to the many generations that came after her.

The one thread in common from these three kumu hula is that they each have learned the hula from their family members, continuing their lineage through their own genealogy of hula traditions. Each kumu hula grew up watching their mother and/or elder dancing hula and connects that experience with a Hawaiian worldview through kaona and understanding of the Hawaiian language.

> Our dead are woven into our souls like the hypnotic music of bone flutes: we can never escape them. If we let them, they can help illuminate us to ourselves and to one another. They can be the source of new-found pride, self-respect, and wisdom (Wendt 50).

The above quote speaks about the generational connection that allows for traditions to be passed down through the generations. It is when we practice ancient traditions, like hula, that we can

then continue to be connected to our ancestors through traditions. This very dynamic brings a sense of confidence in our culture. Along with hula comes mele (song). Unlike many things that come back into play, there is usually a domino effect to follow. Hula needs mele, and therefore, a consciousness of mele comes forward. Traditional mele and current modern-day mele are showcased for the hula hālau to perform and show more than one tradition. During this time, Hawaiian music saw a resurgence with the likes of Gabby Pahinui and the Sons of Hawaiʻi, Ledward Kaʻapana and the Hui ʻOhana, and Keola Beamer. Each of these performers created a space for the younger generation to see and learn from them and to be able to follow after them. The above entertainers are just a few Hawaiian musical pioneers credited with bringing the focus back to the mele by reinventing skills and traditions.

Both hula and music have been important transmitters and perpetuators of Hawaiian culture. The Merrie Monarch shows just how quickly these forms have caught on. In 1971, there were only nine women hālau who entered the competition. In 1976, the men were allowed to perform also. Two years later, the competition outgrew the Civic Auditorium and moved to the Hoʻoulu Tennis Stadium, which was renamed the Edith Kanakaʻole Multipurpose Stadium. This is where the event expanded as the festival added another night to the competition and expanded to have many other activities over the duration of a week. In 1980, the seats were sold out for the first time, and the committee decided to televise the event. This event is seen as the pinnacle of hula as only twenty-four of the best hula hālau are invited to perform and compete.

The objective of the Merrie Monarch is to perpetuate Hawaiian culture through hula. This objective is reflected in the performances at this competition and the hālaus that started in Hawaiʻi, the U.S. Continent, Canada, Japan, and the rest of the world. Today, there are hula competitions all over the world. Kumu hula and hula dancers have gone on to establish hula

competitions and festivals such as the World Invitational Hula Festival, the Queen Liliʻuokalani Keiki Hula Competition, the Annual Mokihana Festival on Kauaʻi, Ka Piko Hula, Molokaʻi, the Annual Kamehameha Competition, Prince Lot Hula Festival on Oʻahu, Hula O Na Keiki on Maui, and the Queen Emma Hula Competition on Kauaʻi.

The important takeaway for the Merrie Monarch is that Hawaiians are now informed by past traditions in the construction of modern-day traditions. Another significance is the collaboration of many different people, organizations, and their expertise. Academic research on the traditions, music, and translations adds to the value of hula; professional Hawaiian singers come together to sing with others that they would usually compete against, thus expanding knowledge and experience. Communities all over Hawaiʻi and the world watch these performances to reconnect to history, genealogy, and cosmology—all for the sole reason of perpetuating the Hawaiian culture. The fact that one aspect of the competition honors the traditional style of hula, and a day later, the event highlights a new, creative, and modern form of hula shows this specific syncretism of a culture thriving and moving forward into the future.

Another significance that highlights the bigger picture of this event is seen in the collaboration of many different people, organizations, and expertise from the kumu hula. The academics research the traditions, music, translations, and accuracies; professional Hawaiian singers come together to sing with others that they would usually compete against; hula hālau compete, and those that do not make the invitation would watch to learn how to improve and educate themselves in the traditions of hula. Communities all over Hawaiʻi and the world watch these performances to reconnect to history, genealogy, and cosmology, all for the sole reason of perpetuating the Hawaiian culture.

Another significance of the Merrie Monarch Festival shows how Native Hawaiians can reassert and reconceptualize a modern-day identity in cultural practices. This event allows for the recollection of traditions while, at the same time, creating a space to reinvent and create what a Hawaiian is in this modern world. This movement also helps to think about new ways of decolonization by easily identifying the efforts in regenerating a tradition. This, in and of itself, allows for a new set of standards and performances that push the envelope of how a culture can thrive while reconceptualizing itself in a colonial space.

Ngũgĩ wa Thiong'o writes about the cultural bomb, in which the effect of colonization can be explained through the cultural bomb. If the cultural bomb aims "to annihilate a people's belief in their names, in their languages, in their environment, in their heritage of struggle, in their unity, in their capacities and ultimately in themselves," then there is a disconnect in the belief system that causes an erasure of culture. As Thiong'o argues, colonialization embraces two aspects of the same process: "the destruction or the deliberate undervaluing of a people's culture, their art, dances, religions, history, geography, education, orature, and literature, and the conscious elevation of the language of the colonizer" (Ngũgĩ 16). A cultural renaissance is about taking the culture from the margins and placing it in the center to focus on how to redefine and reconceptualize new cultural forms of affirmations, and the Merry Monarch is a prime example of this dynamic. Focusing on the Hawaiian culture and redefining what it means to be a Hawaiian in modern times is a liberating process that allows for a pathway forward without restrictions and/or boundaries that would otherwise marginalize and oppress our thought process and/or vision of cultural revitalization. In essence, any pathway forward means the culture is alive and sustainable, whatever the outcome.

Peaceful Non-Violent Direct Resistance

As I mentioned in the introduction, today's templates of resistance are created with the Native Hawaiian at the center. The Kalama Valley evictions changed the approach to protest, and a direct, non-violent peaceful protest would be the strategy that started in the early 1970s and is continuing into the twenty-first century, with the latest protest being the Mauna Kea Thirty Meter Telescope controversy. What has come out of the second Hawaiian Renaissance is a new style of resistance and organizations that have been invented as we rebuild a new nation. The organizing and resistance come in the form of prayer, reverent resistance through kapu aloha, and with kūpuna in the foreground.

This type of resistance can be seen today with the planned development of the Thirty Meter Telescope to be placed on top of Mauna Kea. Mauna Kea is believed to be a sacred mountain for Hawaiian people and is connected to where Wākea, the sky god, comes from. On a regular basis, Hawaiian people go to Mauna Kea to practice their traditional and customary rights for religious practices. The proponents of the Thirty Meter Telescope viewed this mountain as a prime location for their telescope in 2009 and made plans to move forward with construction over a ten-year period. Protests broke out at the beginning, and in 2014, the protests would spread across the state. Within a year, the protectors would form a blockade on the road to block the construction crew from driving up to the summit with the construction equipment. Within weeks, there would be arrests made of thirty-one people, mostly kūpuna and women, and they all were in peaceful but direct resistance to the law enforcement. As the Hawaiian population became enraged, the message from these kūpuna would be no violence toward the opposition, and instead, everyone should be in kapu aloha if they wanted to protest in any manner. Kapu aloha became the philosophy for the protectors and is seen as a way to address

social change and political unrest. Kapu stands for "prohibit," and aloha stands for "love." To put these two words together in a phrase would be to stand in peace toward resistance. The Mauna became a safe place to practice traditions, and oli as religion became the daily platform in the resistance. This process renegotiated Hawaiian agency and changed the dynamic of protest to match the examples of the Kalama Valley evictions in the 1970s with peaceful, non-violent direct actions.

From the Margins to the Center

Understanding history can change the trajectory of the mental landscape. At the beginning of this chapter, I wrote about the legal status of Hawaiʻi today. Colonialism can be seen in different facets, politically, economically, and/or consciously. Hawaiʻi is not colonized politically today, but the colonial mentality exists because we have believed what we were told through the assimilation toolkit of the U.S. and, therefore, over the many years in this system, have become colonized mentally. What needs to change is the perspective in which we recognize ourselves as Hawaiians. After understanding the political history in Hawaiʻi, it becomes important to process where we, as Hawaiians, fit into Hawaiʻi's history as its native people and, more importantly, where we fit into our own history in our homeland.

In taking a step back and looking at our positionality critically, we see that the same institutions that existed during the Hawaiian Kingdom continue to exist today in Hawaiʻi. The system is the same. For example, if we look at the government, weʻll notice that the Supreme Court is still the location for the Supreme Court. The Department of Land and Natural Resources is the Ministry of the Interior, the Lieutenant Governor's Office is the Ministry of Foreign Affairs, and the four governors of Hawaiʻi are now the four mayors. Queen Liliʻuokalani and John Dominis's residence was at Washington Place, and today it is the official residence of

Hawai‘i’s Governor, and ‘Iolani Palace remains in place. The Royal Hawaiian Band continues to be the Royal Hawaiian Band, The Army is the Royal National Guard, and the Royal Order of Kamehameha continues to exist today. The motto of “Ua mau ke Ea o ka Aina i ka Pono” was adopted by the Hawaiian Kingdom in 1843 continues to be the motto for the State of Hawai‘i today per the Constitutional Convention of 1978, Amendment 31, Article XV, Section 3. The Hawaiian flag from 1817 is the second official flag of the State of Hawai‘i today per the Constitutional Convention of 1978, Amendment 31, Article XV, Section 5. The Hawaiian language is an official language of Hawai‘i together with English per the Constitutional Convention of 1978, Amendment 20, Article XV, Section 4. Finally, the royal families from the Hawaiian Kingdom continue to exist today. The only two things that have changed are the Monarch and Cabinet names. Therefore, we are not reinventing the wheel because the wheel is still the same. What needs to occur is decolonizing the mental landscape so that we recognize ourselves as Hawaiian people.

One aspect that can help in remembering can be found in mele or song. Lili‘uokalani composed over 150 songs, and a lot of them continue to be sung today, such as *Aloha ‘Oe*, referring to two lovers bidding farewell. Today, this song is sung at the end of a gathering. *He mele lahui* was the third of Hawai‘i’s four national anthems as Kamehameha IV requested for Princess Lili‘uokalani to write this song in 1866. *The Queen’s Jubilee* was composed by Princess Lili‘uokalani to commemorate the Golden Jubilee of Queen Victoria of the United Kingdom. *The Queen’s Prayer* or *Ke Aloha O Ka Haku* is a famous song composed while the Queen was under house arrest at ‘Iolani Palace. *Sanoe* describes the love affair between Princess Likelike and Colonel Curtis Piehu Iaukea. These songs represent history and can be heard from entertainers today and on Hawaiian radio shows each week. Therefore, these clues are all around

us in the Hawaiian language, and we only have to be conscious of their existence in order to change our view of ourselves. The second Hawaiian Renaissance shows a continuance of our people creating, reinvigorating, and reconceptualizing Hawaiian identity in the twenty-first century.

The proof of *I ka wā ma mua, I ka wa ma hope* is all around us but can also be seen in collective gatherings, such as the E Hoʻolau Kānaka ʻĀina Summit (2018–2019), another clear example of placing Hawaiians at the center of social change in Hawaiʻi and the repositioning of Hawaiians within this islands. For many years, Hawaiians have been pushed to the edges of political power and were long marginalized in terms of the islands' culture. The events of the 1970s have begun to move Hawaiians toward a more central position in the future of Hawaiʻi. As Smith explains:

> The strength of the movement is to be found in the examples of how communities have mobilized locally, the grassroots development. It is at the local level that indigenous cultures and the cultures of resistance have been born and nurtured over generations. Successful initiatives have been developed by communities themselves, using their own ideas and cultural practices. Considerable reserves of confidence and creativity within many communities have generated a wide range of social, educational, health, and artistic initiatives (Smith 115).

The impact of change can be seen in this summit when this call for action was held at the Kokokahi YWCA in Kāneʻohe Oʻahu on June 29–30, 2018. "This gathering brought together more than 120 participants representing over 80 community-based groups, non-government organizations (NGOs), traditional Hawaiian practitioners, private companies, and government agencies" (ʻĀinaSummitReport 2018–2019, 43). The two-day event was sponsored by the Office of Hawaiian Affairs (OHA), the Department of Land and Natural Resources (DLNR), and the Kamehameha Schools. This recent summit report is an example of Hawaiian people directing their own pathway forward by focusing on what Native Hawaiians need to do within

communities and in collaborations with others. Three issues needed to be addressed, namely, (1) ancestral lands, (2) culturally grounded decision-making to guide proper stewardship, and (3) co-management or collaborative management. At the summit, panel presentations highlighted ʻike kūpuna and how it "encompasses the vast knowledge, perspective and insight that remains an ancestral link for Native Hawaiians as indigenous people" (ʻĀinaSummitReport 2018–2019). One panel discussed ancestral lands and the connection that Hawaiians have to the land itself. "The term ancestral lands encompass a range of both pilina to a place, and land tenure arrangements including kuleana lands, long-term leases, land grant awards, or simply places where families have lived and maintained longterm presence" (ʻĀinaSummitReport 2018–2019). A third panel focused on collaborative management, which focuses on communities, government agencies, and stakeholders coming together. The summit identified four different areas for future advocacy. These were "Generative Networks, ʻĀina-related Advocacy, Climate Resilience, and Community-Based Subsistence Fishing Areas" (ʻĀinaSummitReport 2018–2019). Small groups agreed on short- and long-term action plans as both were needed for the immediate future and long term. The summit identified a pathway forward with Hawaiian leaders helping to develop approaches for a healthy and vibrant culture for Native Hawaiian people in the twenty-first century.

The call for action to strengthen and empower Hawaiian communities focused on several themes throughout the summit. The first theme focused on "Culturally Grounded Governance and Policy-making" (ʻĀinaSummitReport 2018–2019, 33). This called for thorough and complete research of cultural resources and traditional practices in areas being purchased and/or developed. This action plan insisted that an applicant become the responsible party instead of the community and/or practitioners. A collaboration with departments and agencies was

recommended, as those entities could offer assistance and resources to better identify the area under discussion. The directive action plan was to synchronize the GIS mappings of the culturally sensitive areas and allow for a single portal to upload and access the information. The plan called for the Office of Hawaiian Affairs to organize workshops and an online portal to assist community members. The third action was to have a curatorship agreement with three organizations/schools. The Office of Hawaiian Affairs would facilitate, the Department of Land and Natural Resources would be the landowner, and the Kamehameha Schools would assist through technical support. All parties would have licenses and the option to manage and/or steward the cultural property. For the successful and continual maintenance of the portal, the proposal called for a task force to oversee the activities and accelerate the permit process for stewardship of the site.

The second theme focused on the "Protection of Ancestral Lands" (ʻĀinaSummitReport 2018–2019, 34). The first directive of this plan was to change laws through the legislative process, create a moratorium for adverse possession, and increase the requirement for 51% Hawaiian ownership. The directive action plan sought to be proactive in establishing classes in which community members and families could learn how to protect their ancestral lands. The third theme focused on "Enhancing Collaborative Management" (ʻĀinaSummitReport 2018–2019, 35). The first directive sought to establish an application system for community-based traditional and customary stewardship. The second directive focused on E Hoʻolau Kānaka and their recommendations on how the Hawaiʻi Conservation Alliance (HCA) can incorporate their most recent research on community-based management. A fourth theme focused on "Economic Sustainability for Land Stewardship" (ʻĀinaSummitReport 2018–2019, 36). A fifth theme focused on "Best Practices for Stewardship and Management" (ʻĀinaSummitReport 2018–2019,

37). The first directive was to build capacity in management and stewardship training and learning new skills. The aim was to establish a new level of esteem and value to add to the well-being of the person. The overall aim was to bring practice under the heading of mālama ʻāina. This included bringing back the konohiki and traditional management, returning to the Ahupuaʻa system of management. The sixth theme focused on "Climate Change and Resilience" (ʻĀinaSummitReport 2018–2019, 37). The first directive of this plan was to help nurture ʻōiwi scientists at the local level. Incorporating real-world stories of people's climate change observations would help create changes, responses, and solutions. A second directive was to have a climate action plan in every county that includes an Indigenous voice and expertise. A third directive was to support charter amendments that establish climate change positions. A fourth directive was to discuss ways to respectfully address cultural sites in hazardous zones and in jeopardy of flooding due to sea-level rise. The above action plan is an example of how movements help us think in new ways about decolonization movements and, more importantly, Hawaiian mobilizations.

Conclusion

My argument focuses on the acts of liberation found in how people respond to social movements and how this is represented in the powerful routes that lead to native agency and empowerment. In further understanding the dynamics of reclaiming, reasserting, and reconceptualizing a culture, an understanding of history and politics helps to conceive why events took place and how new templates to native agency and resistance were created along the way. This chapter is instrumental to my project because it shows how social movements change power structure and can transform politics and revitalize and reconceptualize culture. The Kalama Valley evictions triggered a push-back to development that would ignite a grassroots movement that created an

indigenized and Hawaiian response to marginalization and discrimination. The response was seen in the creation of new organizations, new political discourse, new strategies, and new alliances through different templates of resistance as I followed the cultural movement through all of the major events up until the 1978 Hawaiʻi Constitutional Convention and the new constitution's contributions to reclaiming Hawaiian identity.

The Hawaiian population responded to American culture through assertions in cultural affirmations, native agency, and peaceful, non-violent direct action. These assertions were seen in the templates of resistance today that were created with the Native Hawaiian at the center, as seen in the current-day protest of the Thirty Meter Telescope controversy, as new styles of resistance and organizations are invented as we reinvigorate a new nation. As the cultural bomb is seen as destroying a culture and, in essence, erasing all that is native, this chapter can be seen as how to reconstruct the bomb, only this time reasserting the Hawaiian culture with innovation, reassertion, and modern tools in reconceptualizing Hawaiian identity in the twenty-first century.

The change in behavior aimed to reclaim, reassert, and reconceptualize what it is to be a Hawaiian today. Examples of these affirmations are seen in Hawaiʻi's Constitution in 1978 as a contribution to reclaiming Hawaiian identity. Each Hawaiian amendment is significant to the bigger picture of reconceptualization and ultimately positioning Hawaiians as more central to Hawaiʻi. The changes that come from making Hawaiian an official language to having Hawaiian culture and language in schools to acknowledging Native Hawaiians as one of the two beneficiaries of the ceded public lands trust indigenize the Hawaiian movement and create a transition for Hawaiians to go from the margins to the center for the reconceptualization of culture.

This awareness would also spur political activism by emphasizing greater autonomy and sovereignty, protecting traditional native gathering rights, and ending the bombing of Kahoʻolawe island for military training purposes. I showed what the movement has done over time in revitalizing our own language, rituals, tactics, and strategies that are distinct to a Hawaiian perception of the world. I highlighted what Native Hawaiians have moved on to do and how it has impacted changes in behavior. This change in behavior aimed to reclaim, reassert, and reconceptualize what it is to be a Hawaiian today. At the same time, the Native Hawaiian community brought attention to the training practices of the military in the bombings of Kahoʻolawe and witnessed the voyaging canoe, *Hōkūleʻa*, sail via celestial navigation from Hawaiʻi to Tahiti using traditional knowledge. Each social movement being independent on its own and yet running parallel with each other proves them to be the two powerful movements of the renaissance. Chapters Two and Three are committed to these movements as they are examples of acknowledging the powerful colonial system that endures while, at the same time, reconceptualizing a future with native agency and native empowerment as central movers, thereby continuing to prove how important it is in moving positionality from the margins to the center.

Chapter Two

Protect Kahoʻolawe ʻOhana & the Sacredness and Return of Kahoʻolawe

Social movements play a big role in Hawaiʻi's modern history. The social movement to stop the bombing of Kahoʻolawe became a catalyst for the second Hawaiian Renaissance that included a reclaiming of religious practices, the aloha ʻāina philosophy and practices, and a reconnection to navigation traditions. In this chapter, I look at the movement to protect the island of Kahoʻolawe and highlight the Protect Kahoʻolawe ʻOhana movement and their role in saving the island from U.S. military bombing. I give a chronology of the ʻohana's history and show how the collective effect of Hawaiians helped steer the movement through different pathways of agency in order to return the island to its people and reconnect Hawaiians back to the sacred island. The changes in organizing brought a new approach to responding with prayer, reverent resistance, and the kapu aloha philosophy with the kūpuna in the foreground, making for a profound impact in a Native Hawaiian approach.

I focus on what has come from the fight to save the island and highlight several cultural affirmations from this movement. The first affirmation was the dedication of the sacred island to the God Kanaloa in reviving the aloha ʻāina philosophy as the foundation to the Hawaiian belief and in showing respect and love for the land. The second cultural affirmation was in reviving religious practices and traditions for Laka, Kāne, and Kanaloa. The third affirmation was the revitalization of the annual Makahiki ceremony honoring Lono, the Hawaiian god of agriculture, rainfall, and peace.

In redefining ourselves through revitalization, a kuleana, or responsibility, takes precedence in expanding the space for Hawaiians. I discuss aloha ʻāina activities and show who and how this philosophy is employed today and how Hawaiians are navigating an approach that

encompasses ecological and cultural understanding through the ideas of aloha ʻāina. Expanding participation in cultural activities is another pathway in reviving the island, and it is here that voyaging education and practices come into perspective. Bringing more resources to the island is another way to move Hawaiian agency from the periphery back to the center.

> The contemporary rediscovery of Kahoʻolawe as a sacred island dedicated to Kanaloa led to a revival of the traditional Hawaiian value of aloha ʻāina or love and respect for the land. Ancestral memories of the kūpuna focused upon aloha ʻāina as the Hawaiian value at the core of traditional spiritual belief and custom (McGregor 264).

Growing up on Maui in the 1970s and feeling the land shake and tremble when the military dropped bombs on Kahoʻolawe was a normal part of life in my memory. The village that surrounded me was mostly Native Hawaiians who were angry at the bombings. The emotions experienced as a child felt as if it had been a deep personal wound that could not be explained yet felt to the depths of my bones when the bombs would detonate. It wouldn't be until years later that I could put my feelings to words yet still not quite explaining exactly how it felt and being reminded that the naʻau, the touch, the hearing sometimes has a stronger emotion connecting to it than words could ever explain.

I grew up around Charlie Maxwell and danced hula for his wife. Uncle Leslie Kuloloio's (Uncle Les) mom, Aunty Alice, babysat my sister and me at a young age. As we grew up, Uncle Les, together with Uncle Charlie Keau, would take us to contested sites that they monitored on the island. As an adult, I am informed by my experiences from my childhood. The work on this dissertation reflects my connection to my own epistemology and agency and informs my own philosophy, as demonstrated in my endeavors. Uncle Les accompanied my mother and me to Kahoʻolawe in 2018 to participate in and contribute to my fieldwork for this dissertation. It would end up being Uncle Les's last trip to Kahoʻolawe before his passing in 2020.

History

Kahoʻolawe is the smallest of the main Hawaiian Islands, "with just 47 km of general coastline that wraps a single shield which formed 1.03 million years ago. The island is aligned with the southwest rift zone of Haleakalā Volcano on Maui less than 10 km to the northeast" (www.soest.hawaii.edu). The terrain is rugged with cliffs, valleys, hills and is surrounded by ocean channels, shorelines, and reefs.

> Archeological evidence suggest[s] that Hawaiians came to Kahoʻolawe as early as 400 A.D., settling in small fishing villages along the island's coast. To date, nearly 3.000 archeological and historical sites and features - inventoried through 2004 - paint a picture of Kahoʻolawe as a navigational center for voyaging, the site of an adze quarry, an agricultural center, and a site for religious and cultural ceremonies. Traditionally, the island has been revered as a wahi pana and a puʻuhonua (kahoolawe.hawaii.gov).

In the latter part of the eighteenth century, goats were introduced to the island, and in 1858, the island was leased for sheep ranching (http://www.kahoolawe.hawaii.gov/plans-policies-reports.shtml). By allowing feral goats and sheep to over-graze, the natural flora was destroyed, and the island became vulnerable to wind and rain. During the Hawaiian Kingdom in the nineteenth century, the island was used as a penal colony (Sacred Land Film Project). However, in the early part of the twentieth century, cattle ranching further worsened the island's ecosystem.

Pearl Harbor was attacked on December 7, 1941 by the Japanese forces (Gilbert 2009). Over 2,400 Americans died, and over 300 airplanes, eight battleships, and 20 other naval vessels were damaged (Rosenberg 2019). The next day, President Franklin D. Roosevelt asked the U.S. Congress to declare war on Japan, and in return, the U.S. declared martial law in Hawaiʻi (Green 101), and the island of Kahoʻolawe became a bombing range (Kahoolawe.hawaii.gov/KICC/RestoringaCulturalTreasure.pdf, 1993). On December 11th,

Japan's allies Germany and Italy declared war on the U.S. In return, the U.S. declared war on the European powers, and the U.S. entered into World War II as one of thirty countries involved. Weapons testing started almost immediately with a ship-to-shore bombardment of the island and, later, with American submarines testing torpedoes by firing them at the shoreline cliffs of Kahoʻolawe. By September 1945, 150 navy pilots, the crews of 532 major ships, and 350 Navy, Marine, and Army officers had trained on Kahoʻolawe. Another 730 service members had trained in joint signal operations on the island. During World War II, "Kahoʻolawe soon gained the reputation as the most shot-at island in the Pacific" (Honolulu Star-Bulletin August 16, 1946:19). The war came to an end in 1945, and Nazi Germany and Japan were defeated.

Rather than returning the island to the jurisdiction of the Territory of Hawaiʻi on February 20, 1953, by use of an "Executive Order #10436, Dwight Eisenhower secured Kahoʻolawe for the use of the U.S. Navy as a bombing target and placed the island under the jurisdiction of the secretary of the Navy" (Graves 12). Over the decades after World War II, the wars would change, but the bombing would continue. During the Korean War (1950–1953), Navy carrier planes used Kahoʻolawe to practice airfield attacks and strafing runs on vehicle convoys as targets (McGregor 2019). In 1965, during the Cold War (1947–1991), three one-kiloton nuclear explosions were simulated on the island when the U.S. Navy detonated 500 tons of TNT in three tests. During the Vietnam era (1955–1964, 1965–1973, 1974–1975), Navy and Marine Corps jets practiced attacks on surface-to-air missile sites, airfields, and radar stations on the island. By the time of the Gulf War (1990–1991), live-fire training on Kahoʻolawe was reduced, and the Navy shifted and focused on other target ranges.

Beginning of the Protect Kahoʻolawe ʻOhana

As mentioned in the previous chapter, the A.L.O.H.A. organization had introduced a bill in the U.S. Congress to provide reparations to the Native Hawaiian people for the illegal role of the U.S. in the overthrow of the Native Hawaiian Constitutional Monarchy. As the bill was not making any progress in Congress, the president of A.L.O.H.A., Charles Maxwell, a policeman on Maui, decided that Native Hawaiians needed to demonstrate on federal land in order to draw national attention to the desperate conditions of Native Hawaiians, which led A.L.O.H.A. to seek reparations (McGregor 2019). Maxwell consulted with Native Hawaiians through the islands, and the decision was made to put out a call to occupy Kahoʻolawe to draw attention to the A.L.O.H.A. bill for U.S. reparations.

At dawn, on January 6, 1976, a flotilla of fishing boats with grassroots Native Hawaiians from the various Hawaiian Islands made its way toward Kahoʻolawe. Someone had contacted the news media, and the U.S. coastguard, which patrolled the waters between Maui and Kahoʻolawe, was alerted. The coastguard warned the fishing boat captains that their boats would be confiscated if they entered the nearshore waters around Kahoʻolawe that were under the control of the U.S. Navy. As the boats provided the fishermen with their likelihood, all but one boat that carried some of the news reporters turned around. Nine protesters boarded that boat and landed at Kūheʻeia on Kahoʻolawe (Oral History of Noa Emmett Aluli and Ian Lind, UHM Center for Oral History, Kahoʻolawe Aloha ʻĀina Movement project). One protester, George Helm, then departed from the island with the news reports. Six were arrested. Two, Noa Emmett Aluli and Water Ritte, remained overnight on the island and were arrested on the second day.

When Aluli, Ritte, and Helm returned to their home island of Molokaʻi, they sought out their kūpuna, elders, to explain what they had experienced. On the one hand, they witnessed the

destruction of the island. Exploded and unexploded bombs and ordnance littered the landscape. However, they also felt a strong spiritual force emanating from the land. The kūpuna explained that the island had been sacred to Hawaiian ancestors, that it had been named and dedicated to Kanaloa, the Hawaiian deity of the ocean, and had been a center for navigation training. Feeling island's pull, Aluli and Ritte returned to Kahoʻolawe with Ritte's wife, Loretta Ritte, and sister, Scarlett Ritte, on January 12, 1976 to further explore and experience the spiritual force of the island.

Aluli, Ritte, and Helm began to organize meetings on every island to share their story and draw in more Native Hawaiians to identify with the island and get involved to protect the island from the abuse of the U.S. Navy. More occupations of the island were organized, with supporters coming from Hawaiʻi to Kauaʻi. In all, nine lands to occupy the island in protest of the bombing and military use of the island were organized from January 6, 1976, through July 17, 1977 (Kahoolawe Island Conveyance Commission 1993, 97). All were carried out in a Hawaiian manner with chants, prayer, and offerings and peaceful, non-violent, caring actions. This same year, Civil Lawsuit no. 76-0380, Aluli et al. vs. Brown, Secretary of Defense et al., was filed (MacKenzie et al. 2007). The outcome of this case brought about a significant change for not only the island but for Native Hawaiians and the people of Hawaiʻi. A year later, a partial summary judgment mandated that the Navy conduct an Environmental Impact Statement (EIS) on Kahoʻolawe (Aluli et al vs. Brown et al. 1979).

Surprisingly, the movement struck a chord among Native Hawaiians and local people across the islands. Thousands rallied and held educational concerts, signed petitions, and demonstrated against the bombing of Kahoʻolawe. Breaking with protocol, George Helm was even invited to address a joint session of the Hawaiʻi State Legislature. The movement gained

momentum and grew more powerful throughout 1976 and the beginning of 1977. George Helm also traveled to Washington D.C. to lobby the Congress and draw national attention to the island of Kahoʻolawe.

In 1976, as the grassroots movement to stop the bombing of Kahoʻolawe grew, the leaders were advised by Aunty Edith Kānakaʻole of Hawaiʻi Island, to organize themselves into an ʻohana or extended family for the island, rather than to function as a western-style association. They formed themselves into the Protect Kahoʻolawe ʻOhana. In the same year, George Helm and Noa Emmett Aluli also incorporated a 501 (c) (3) non-profit corporation, Kohe Mālamalama O Kanaloa/Protect Kahoʻolawe Fund, to fundraise and conduct education about the spiritual significance of Kahoʻolawe, the beliefs and practices of aloha ʻāina and to engage in the protection of Hawaiian cultural sites on Kahoʻolawe and throughout the islands (McGregor 2007).

On the eighth landing of George Helm, Kimo Mitchell, and Bill Mitchell, on March 5, 1977, George Helm and Kimo Mitchell were lost at sea, in mysterious and suspicious circumstances that led to the speculation of a politically motivated assassination (Standing on Sacred Ground: Islands of Sanctuary 2013). These two young Hawaiian heroes continue to be remembered for their courage, dedication, leadership, and ʻike by the Protect Kahoʻolawe ʻOhana. More broadly, they are also remembered for shaping the movement that eventually succeeded in stopping the military use of Kahoʻolawe in 1990 and sparking the revitalization and renaissance of Hawaiian culture, music, navigation, arts, agriculture, and aquaculture for the Hawaiian people and Hawaiʻi.

The martyrdom of Helm and Mitchell was a major setback for the movement. Nevertheless, the Protect Kahoʻolawe ʻOhana (ʻOhana), led by Noa Emmett Aluli, persisted in

organizing to stop the bombing of Kahoʻolawe so that the work of aloha ʻāina to heal the island could begin. The occupations and arrests had taken a huge toll and played out in lengthy court cases, imprisonments, and banishment from the island. The final illegal landing occurred on July 17, 1977. After that, the ʻOhana exercises wherein the participating foreign navies did ship-to-shore shelling of the island. The ʻOhana lobbied the congress, legislature, and county councils to stop the military use of the island.

In October 1980, as a result of a civil suit filed in 1976 by George Helm, Aluli et al. vs. Brown, Secretary of Defense, et al. No. 76-0380, the U.S. Navy was ordered to enter into a Consent Decree and Order with the Protect Kahoʻolawe ʻOhana. This Decree recognized the Protect Kahoʻolawe ʻOhana as the steward of Kahoʻolawe and provided access to the island for Native Hawaiian religious practices for four days during ten months of every year. Therefore, "in practice and as a matter of law, a Native Hawaiian political organization exercised shared governance responsibility with the U.S. navy over the island of Kahoʻolawe, from 1980 until 2003, while the United States Navy retained control of access to Kahoʻolawe" (McGregor and MacKenzie 52). The Navy was mandated to conform to the National Historic Preservation Act of 1966 (Duerken 1983) and to survey and develop a plan to protect the island's historic sites, complexes, and features. In addition, "the Navy was mandated to stop bombing the island for ten days of each month, to limit their bombing and shelling to the central third of the island, to clear two-thirds of the island of surface ordnance, to eradicate the feral goats, and to begin soil conservation and revegetation programs" (McGregor 265). In compliance with the American Indian Religious Freedom Act of 1978 (www.nativepartnership.org), the Protect Kahoʻolawe ʻOhana were acknowledged to be Ke Kahu O Ka ʻĀina or Stewards of the Land and allowed access to the island for religious, cultural, and educational activities for four days in ten months

of each year (PBR Hawai‘i 1995). This served as a critical turning point in the struggle to restore Kanaloa to the people of Hawai‘i. This allowed the Protect Kaho‘olawe ‘Ohana to reclaim and reassert Hawaiian agency on the island. The following were done as the stewards of Kaho‘olawe: “(1) An average of sixty participants were taken to the island each month to work with the ‘ohana on erosion control and revegetation projects; (2) the ‘ohana established a permanent base camp on the northeast side of the island or Kahioawa as well as three temporary camps along the north side of Kuheia and Ahupu and on the west side at Keanakeiki; (3) hiking trails were cleared, water catchments installed, and soil conservation and revegetation projects initiated; (4) ancestral shrines and temples were re-dedicated; and (5) new cultural sites, such as a traditional meeting house, a hula platform, and a memorial for kūpuna who had passed on, were established” (Social Science Research Institute 1998).

The following year in 1981, the island of Kaho‘olawe was listed on the National Register of Historic Places under ID number 81000205, which fell under the prehistoric and historic-aboriginal criteria. A comprehensive archeological survey of the whole island, sponsored by the Navy and initiated in 1976, was completed in 1980 (Hommon 1977, 1980a, 1983). Hawai‘i Marine Research, Inc., the firm hired to do the archeological work, recorded 544 cultural sites containing 2,337 features, all of which formed a body of information that was significant enough, under criterion D, to place the entire island on the National Register of Historic Places on March 18, 1981 (Hommon 1980b). That same year, the construction of the first modern traditional hale in Hakioawa began as a way to reassert traditional practices.

On October 22, 1990, after a decade of persistent, dedicated, and focused work for Kanaloa under the consent decree, “the bombing of Kaho‘olawe stopped” (McGregor 274). The Democratic senator from Hawai‘i, Sparky Matsunaga, passed away in office in April 1990. The

National Republican Party and President George Bush himself urged Congresswoman Patricia Saiki to run for the deceased senator's seat as part of the national campaign to win a Republican majority in the U.S. Senate. According to Saiki's Native Hawaiian campaign manager, Andy Anderson, Bush asked the congresswoman what it would take for her to get elected. She said it would take a miracle for her as a Republican to get elected by the Democratic State of Hawaiʻi. Asked what such a miracle might be, Saiki's campaign staff suggested that stopping the bombing of Kahoʻolawe would win her the general public's support in her bid for the U.S. Senate. The conversation goes as follows. "He said, 'What can I do for you to give you a hand here, to help with the state and get your election looked at positively?' I said, 'You've got to stop the bombing of Kahoʻolawe. It is an island that has been devastated by the impact exercises. Although the exercises are very worthy, it is an assault and an insult to the Hawaiian people'" (Oral History with Congresswomen Patricia Saiki 2018).

As a result of this conversation, and as a gesture to launch the campaign of Congresswoman Saiki for the U.S. Senate, George H.W. Bush issued the "Memorandum on the Kahoʻolawe, Hawaii, Weapons Range" on October 22, 1990, directing the U.S. military "to discontinue the use of Kahoʻolawe as a weapons range effective immediately and to set up a commission with the State of Hawaiʻi to examine the future status of Kahoʻolawe and related issues" (McGregor 2007). The next day he set out for Hawaiʻi to personally campaign and attend fundraisers for the congresswoman.

To keep his competitive edge in the race for the U.S. Senate seat, Saiki's challenger, Democratic Congressman Daniel Akaka, worked with Democratic Senator Daniel Inouye to do more for Kahoʻolawe than Saiki and Bush had done. In November 1993, the U.S. Congress passed the bill, and President Bill Clinton signed an Act that recognized Kahoʻolawe as a

national cultural treasure and stopped the use of Kanaloa for any military training for two years and 120 days. It also established the Kahoʻolawe Island Conveyance Commission (KICC) to make recommendations for the future use of the island. This was a more significant and permanent measure. A presidential memorandum could be rescinded or overridden at any time in the future, unlike a Senate bill that had been passed into law.

The K.I.C.C. conducted hearings statewide to receive testimonies about the future use of the island of Kahoʻolawe and conducted 19 studies yielding reports about the island's history, resources, and uses. As part of one of the studies, navigators from the voyaging canoe, *Hōkūleʻa*, visited Kahoʻoalwe and affirmed that the island is a good place for navigation training (kahoolawe.hawaii.gov//plans/Stewardship.pdf).

In 1992, the E kahoʻolawe E hoʻomau Ana i ka Mauli Ola healing ceremony took place with decision-makers and kūpuna. There was also a dedication of Mua Hai Kūpuna Kahualele, or memorial platform on the island. In this ceremony, there were officials that represented federal, state, and local governments. Among them were the Office of Hawaiian Affairs, kūpuna, and the leaders of the Protect Kahoʻolawe ʻOhana. Each person was served ʻawa, a ceremonial drink, by Parley Kanakaʻole, the kahu of the ceremony. Each person was asked to make a decision and commit to doing whatever was in their power to heal the island of Kahoʻolawe. The Edith Kanakaʻole Foundation composed special chants to open the ceremony at dawn and to acknowledge the genealogy of the decision-makers and kūpuna upon their stepping onto the mua. A genealogical history of the island and numerous chants in honor of George Helm and Kimo Mitchell were included to represent the people and effort of the movement.

As the sun came up in the east, participants chanted "E Ala E," a chant known throughout the islands as a protocol for starting the day in a Hawaiian frame of mind. It reads as follows:

E ala e, ka lā i ka hikina	Awaked/Arise, the sun in the east.
I ka moana, ka moana hohonu,	From the ocean, the deep ocean,
Piʻi ka lewa, ka lewa nuʻu,	Climbing to hearven, the highest heaven,
I ka hikina, aia ka lā, e ala e!	In the east, there is the sun, arise!

(Kanakaʻole 2017)

The cultural ceremony in 1993 affirmed support for the recommendation of the commission to U.S. Congress to permanently end military use of the island, turn the title over to the State of Hawaiʻi, and appropriate $400 million to clear the island of ordnance and begin the healing and restoration of the island's cultural and natural resources (kahoolawe.hawaii.gov). The final report from the Kahoʻolawe Island Conveyance Commission (KICC) confirmed that the island was to be returned to the people of Hawaiʻi as a cultural reserve (KICC 1993).

The Conveyance Commission recommended that the title of Kahoʻolawe be turned over to the State of Hawaiʻi along with Congress appropriating four hundred million dollars to conduct a ten-year omnibus ordnance clean-up of the island (kahoolawe.hawaii.gov/history.shtml). In response, the U.S. Congress set the island aside under Title X for the following purposes: (1) cultural, (2) historical, (3) archeological, and (4) educational. Ownership of the island was transferred from the U.S. Navy to the Hawaiʻi State Government in ceremonies held at Palauea Maui, in sight of the island, on May 7, 1994. As Davianna McGregor recalls in an interview about this day, "It was just a long period of commitment and dedication. You have to work slowly and build up that broad base of support across the spectrum of society to get to where there is enough to change the hearts and the minds" (Cerizo 2019). Members of the Protect Kahoʻolawe ʻOhana reflect on the people that were significant in this process, such as "U.S. Senator's Daniel K. Inouye and Daniel K. Akaka, President H.W. Bush, Governor John Waihee, and Maui Mayors Hannibal Tavares and Elmer Cravalho, and many more government officials" (Cerizo 2019). The first president of KIRC,

Emmett Aluli, gave a speech during this ceremony: "It was an unsurpassed cultural event. We were just jubilant. It was wonderful to have so many people who were part of the effort to return the island to the people to be able to witness it happen" (Cerizo 2019). And as Governor John Waihee recalls, "It was a very moving moment. I know for myself and for many people who were there, we remember the struggle. That is what I thought about that day – all the things we had been through and all the people who had been involved. And to realize that – despite everything – we won" (Cerizo 2019). Obviously, the joy of this event left everyone that was so deeply involved in the process happy regarding the transfer of Kahoʻolawe from the U.S. Navy to the State of Hawaiʻi. All of their hard work had paid off, and they were able to celebrate that enormous moment together.

The Kahoʻolawe Island Reserve: Chapter 6K Hawaiʻi Revised Statutes

In 1993, the Hawaiʻi State Legislature established the Kahoʻolawe Island Reserve consisting of Kahoʻolawe and the submerged lands and ocean out to two miles around the island. The new law provides that the Kahoʻolawe Island Reserve shall be used solely and exclusively and reserved in perpetuity for the preservation and practice of all rights customarily and traditionally exercised by Native Hawaiians for cultural, spiritual, and subsistence purposes, for the preservation and protection of the Reserve's archeological, historical, and environmental resources, rehabilitation, revegetation, habitat restoration, and preservation, and for education. Commercial uses are strictly prohibited in the Reserve. Rules and regulations to manage the island reserve will be developed by the seven-member Kahoʻolawe Island Reserve Commission. They will govern all access and activities on the island.

The Statute §*6K*-9 of the Hawaiʻi Revised Statutes set forth the composition of the KIRC (kahoolawe.hawaii.gov/kircflowchart.shtml). It states in part, the resources and waters of

Kanaloa shall be held in trust as part of the public land trust, provided that the state shall transfer management and control of the island and its waters to the sovereign Native Hawaiian entity upon its recognition by the U.S. and the State of Hawaiʻi. This measure set a precedent for Native Hawaiian sovereignty in that the State of Hawaiʻi acknowledges that there will be a sovereign Native Hawaiian entity and that repatriated federal lands can be part of the land base of the sovereign entity.

Clean-up and Restoration (1994–2004)

The clean-up of the island was conducted from 1994 to 2004. "The U.S. Navy signed an agreement with the State of Hawaiʻi to clean 30% of the island's sub-surface ordnances" (McGregor 2007, 302). The U.S. Navy received $460 million in appropriated funds from the U.S. Congress a year before, in 1993. Parsons-UXB Joint Venture was hired by the U.S. Navy to clean the island, thus making this project the largest remediation in unexploded ordnances. Parsons would eventually retrieve "10 million pounds of metal, 370 vehicles, and 14,000 tires from the island" (McGregor 2007, 302). The project did not complete its goals of clearing 30% of the island and instead cleared only 9% and/or 2,650 acres of the subsurface with a depth of four feet.

This means that access to the island will be limited because only 9% of the subsurface was cleared. Those areas include historical sites and areas for revegetation projects. Those areas and their significance are as follows: Hakioawa and Kahioawa Iki is the PKO base camp where they have restored shrines and heiaus and created new sites for cultural practices. Moaʻulanui is where KIRC has their staging area for their revegetation projects on the island. Moaʻulanui had the highest priority for clearance because of the traditional site where navigators trained in traditional wayfinding skills. Honokanaiʻa was one of the first areas cleared and became the

center of the communications system and housed the main staging area for the clean-up. Kealaikahiki was cleared because of the significance in voyaging that this location held. It would be here that long voyages between Hawaiʻi and Kahiki would start, and Kealaikahiki has become the most suitable location for training in celestial navigation today. This location was recognized as significant because of observing the position of the North Star and Southern Cross from over the horizon in relation to the central point of Kealaikahiki at this location. A navigational platform was created in 2004 by Master Navigator Mau Piailug, the PKO, KIRC, and crewmembers of the Hawaiian voyaging canoes because of this significance. More details on this navigational platform will be discussed in Chapter Four.

Other areas of significance in the cleared section were at the Keanakeiki Beach, where the Makahiki closing ceremonies occur. Kūheʻeia was the center for ranching during the twentieth century, and Kaulana was a site of the Kingdom's prison and school and current-day staging area for planting projects. Other areas that were cleared in this 9% also included a ranch in Ahupū where "the site has the island's largest petroglyph field and obsidian glass quarry" (McGregor 2007, 303). Honokoʻa is known for the fishing shrines and the landing area that King Kalākaua visited in the nineteenth century. "A cross section road connected Hakioawa and Kuhiʻeia to the central part of the island over to Honokanaiaʻa and out to Kealaikahiki and Keanakeiki" (McGregor 2007, 303). Another pathway of significance was the trail around the island at Kanapou Bay and the cliffs nearby, which are great areas to kilo the weather and elements of reference.

> Activities will continue to focus on the healing and restoration of the cultural and natural resources of Kanaloa and reviving Native Hawaiian spiritual and cultural customs and practices. The limited clearance of ordnance means that the island will not be open for general recreational or commercial activities, nor for resorts, golf source, or subdivisions (McGregor 2007, 302).

In 2003, the transfer of access control was returned from the U.S. Navy to the State of Hawaiʻi in a ceremony at ʻIolani Palace on November 11, 2003. On November 11, 2003, the transfer of access control from the U.S. Navy to the State of Hawaiʻi ceremonies took place at Hakioawa and ʻIolani Palace. "This transfer marked a new beginning in the history of the island and its surrounding waters" (KIRC 2008). He Ula Hou O Kahoʻolawe (Rebirth of a Sacred Island) is written in the KIRC Kahoʻolawe Island Reserve Strategic Plan 2009–2013 with a mission as follows:

> Our mission is to implement the vision for Kahoʻolawe in which the kino of Kanaloa is restored and nā poʻe Hawaiʻi care for the land. We pledge to provide for meaningful, safe use of Kahoʻolawe for the purposes of the traditional and cultural practices of the Native Hawaiian people and to undertake the restoration of the island and its waters. Established 1993 (KIRC 2008).

Protect Kahoʻolawe ʻOhana – Kahuʻāina (Steward) of Kanaloa Kahoʻolawe

With the transfer of control of access to the island from the U.S. Navy to the State of Hawaiʻi on November 11, 2003, the Protect Kahoʻolawe ʻOhana signed a Palapala ʻAelike Kahuʻaina Stewardship Agreement with the KIRC to sustain its ongoing access to the island and ability to bring community members to experience a safe and meaningful cultural learning experience in the sacred space of Kanaloa Kahoʻolawe.

Participants who travel to Kanaloa Kahoʻolawe with the ʻOhana sign a set of forms to be considered volunteers for the KIRC (protectkahoolaweohana.org). The ʻOhana, in its orientation packet, states, "We go to the island to strengthen our relationship with the land. We are involved in activities to revegetate, re-green and restore the island. We pay our respect to the ancient spirit of the land and recognize a response to our nurturing. We encourage and take to Kanaloa Kahoʻolawe interested individuals, students, church and community groups to experience for themselves the beauty and spirit of the island" (protectkahoolaweohana.org).

The story of the healing of Kanaloa Kahoʻolawe is the story of a generation of Native Hawaiians

assuming responsibility to end the abuse of Native Hawaiian lands and, in the process, reclaiming ancestral cultural and spiritual beliefs, customs, and practices. This is reflected in the words of founder and leader of the ʻOhana, Noa Emmett Aluli:

> On Kahoʻolawe, we've been able to live together as Hawaiians. We've been able to practice the religion and to carry on the traditions we've learned from our kupuna, our elders. In doing this, we connect to the land, and we connect to the gods. We call them back to the land and back to our lives…We commit for generations, not just for careers. We set things up now so that they'll be carried on. We look ahead together so that many of us share the same vision and dream. To our next generations, we say, Go with the spirit. Take the challenge. Learn something. Give back" (Na Leo O Kanaloa 1995).

The work to heal the island is also the work to heal as a people and a nation. As the first lands are set aside to be returned to the re-established Native Hawaiian nation, the story of Kanaloa Kahoʻolawe will continue to develop to new stages and levels, inspiring new generations (McGregor 2019).

The Role and Importance of Kuaʻāina in the Kahoʻolawe Aloha ʻĀina Movement

Kuaʻāina translates as "countryside; person from the country, rustic, backwoodsman; of the country, countrified, rustic, rural" (Ulukau) as *kua* means back and *ʻāina* means land. In the context of the Native Hawaiian cultural renaissance of the late twentieth century, kuaʻāina came to refer to those who had actively perpetuated the Hawaiian culture, living in the cultural kīpuka or rural Hawaiian cultural pockets throughout our islands. Families who lived in this manner, such as the Kukahiko ʻOhana and the Mitchell ʻOhana, spent their time in and around the ocean and shared their knowledge with the ʻOhana about where to best anchor to safely unload and load their boats. They guided the ʻOhana transport boats using the best routes through the Alalakeiki channel between Maui and Kahoʻolawe.

The kuaʻāina also shared their knowledge about subsistence fishing around Kahoʻolawe and the various marine resources available there (McGregor 2007). Aunty Alice Kuloloio and

her ʻOhana are examples of this dynamic as they would share fishing traditions and how to gather limu and where to fish around Kahoʻolawe. The Protect Kahoʻolawe ʻOhana would continue the ancient practices associated with fishing koʻa or feeding grounds and shrine markers and dedicated to Kuʻula, the deity for fishing. "Early Native Hawaiian settlers constructed sixty-nine coastal fishing shrines around the island to mark separate fishing grounds for distinct varieties of fish that thrive in the ocean offshore. In addition, there are numerous inland shrines which also appear to have a connection to fishing" (McGregor 253). In 1976 Kuʻula protocols were reopened by those who fished on the island for subsistence. In ancient times, altars were constructed by placing a single special stone or group of stones or a piece of wood inside a ring of smaller stones or by piling up stones and coral into a mound. Such constructions were found throughout the islands along the coasts. The piles of stones and coral seem to imitate the koʻa or coral mounds in the sea where fish congregate. Those altars are called by the same name, koʻa, or koʻa kuʻula, or simply kuʻula. However, not all koʻa were erected for Kuʻula-kai. Kamakau notes that Kuʻula, "a great fisherman of ancient times," was "the main ʻaumakua of fishermen," but there "were a great many fishing ʻaumakua, each related to his descendants, and each raised above [all others] by his own descendants" (Kamakau 61). The first fish caught would be an offering for the male, Kūʻula, and the second for the female, Hina. The son, ʻAiʻai, shared this practice throughout the islands to honor his parents as the chief fishing deities of Hawaiʻi.

Hawaiian tools are also found on the island, such as adzes. Kahoʻolawe has the second largest quarry in Hawaiʻi, at Puʻu Moiwi. There are also cutting tools made from basaltic glass and petroglyphs observable on the island, which seems out of place, as you are speaking here about kuaʻāina.

Other kuaʻāina from Maui would share what to pack and how to prepare for the waters

around Kahoʻolawe. “Those who go to Kanaloa bring sufficient supplies of fresh water and cook their food on propane burners and in traditional imu. It is an amazing experience in living with the ʻāina, one that transforms the lives of those who make the open ocean crossing” (McGregor 266). Many chants, moʻolelo, and place names confirm Kahoʻolawe as a wahi pana and a puʻuhonua. We know about this history because of kuaʻāina like Uncle Harry Kunihi Mitchell of Keʻanae on Maui. He would share with the Protect Kahoʻolawe ʻOhana interpretations of the place names of Kahoʻolawe, the location and uses of important sacred and cultural sites on the island and chants that his kūpuna or elders taught him about Kahoʻolawe. For example, Harry Mitchell learned the following chant from his ancestors titled, “Oli Kuhohonu o Kahoʻolawe Mai No Kūpuna Mai” (Deep Chant of Kahoʻolawe from Our Ancestors). “This chant connects Kanaloa to navigators returning from a transpacific voyage” (McGregor 254):

Wehewehe mai nei kahi ao	Dawn is breaking.
Kū mai nā waʻa kaulua kānaka mai ka waʻa mai	Two double-hulled canoes are sighted. Pūē ke The men cheer from the canoe.
Kūkulu ka iwi o ka ʻāina	Land is sighted.
ʻAilani Kohemalamalama	To your left, it is like heaven all lit up.
Hoʻohiki kēia moku iā Kanaloa	We dedicate this island to Kanaloa.
Aku a’o ka moana ʻili, moana uli ke au kāhili	God of the shallow and deep ocean. Ke holo nei me We are running in an erratic current.
ʻŌhaehae mai ka makani keiki pua aliʻi	The wind is blowing from all directions. ʻAlalā The chiefʻs child is crying.

Ka piko hole pelu o Kanaloa Kanaloa.	The island of Molokini is shaped like the navel of
Kahua pae ʻili kohonua ahua	The channel between Molokini-Kanaloa and Maui Kahiki-Nui is shallow.

Puehu ka lepo Mouʻula Moaʻula. Pūʻuhonua moʻokahuna	Dust is spreading over Mount Gathering place of the kahuna
kilo pae Honua	classes to study astronomy
Pōhaku ʻahu ʻaikūpele kapili o keaweiki.	Stone of deep magic of Keaweiki

Ka'ū li lua ka makani ke hae nei chilly	The wind is
Kāwele hele nei ʻo Hineliʻi	Light rain is falling
Nāpoʻo ka lā i Kahikimoe	The sun is setting toward Kahiki.
Nue mai ke a'o Lanikau	The glow after the sunset is like the colors of the rainbow.
Kapu mai ka honua kūpaʻa loa still. Pau ka luhi ʻana o ka moana ocean.	The world seems to be standing We shall no more labor on the
Manaʻo hālana pū i ke Akua	My thoughts are enlightened toward God.
He aloha pili kaʻu no kēia ʻāina within my heart.	My love for this land will always be deep
Aloha nō ka mana o nā kūpuna	I love the knowledge and power of my ancestors.

(Aluli and McGregor 1992)

In analyzing this chant, there are six names mentioned for Kanaloa. The first name is Kohemālamalama, which means "to your left and lit up like heaven," Hineliʻi means "light rain," Kahiki Moe means "the sun sets in Kahiki" (McGregor 2019) and/or can also mean "horizon; legendary place, one of the five divisions of the sky" (Ulukau Dictionary). The fourth name is Kanaloa, the name of the four primary Hawaiian gods known for deep sea and navigation. The fifth name is Kohemālamalama o Kanaloa and joins "Kohemālamalama" and "Kanaloa" together to mean "the southern beacon of Kanaloa" (Reeve 1995) and also "the shining birth canal of Kanaloa." The modern name for the island, Kahoʻolawe, means "to take and to embrace" (McGregor 255).

Among all of the ʻike Hawaiʻi (Hawaiian knowledge) given to the Protect Kahoʻolawe ʻOhana, as discussed above, was the advice of Aunty Edith Kanakaʻole Kanahele from Hawaiʻi Island to organize their protest in a Hawaiian manner and as an ʻohana protecting the land (Kahoʻolawe Island Reserve Commission Website). In doing so, a traditional protocol was

included as a way to connect back to the land in modern times.

The kūpuna from Molokaʻi would "reveal that Kahoʻolawe had served as a refuge for Native Hawaiian spiritual customs and practices and that it was a center for training in the arts of non-instrument navigation involving the sighting of heavenly bodies" (McGregor 252). With the guidance and ʻike from these kuaʻāina, a sacred island is recognized, and the connection to the Native Hawaiian gods is discussed. Native Hawaiian kūpuna discuss the island as a tangible manifestation of Kanaloa, the Native Hawaiian god for oceans and voyaging.

Koʻihonua or Genealogy of Kahoʻolawe

Origin chants for the Hawaiian Islands attribute the mating of Papanuihānaumoku and Wākea to the origin of the island. There is the Papanuihanaumoku and Wākea creation chant by Kaleikuahulu, Kamehameha I genealogist and son of Kumukoa (King of Molokaʻi & grandson of Keawe, King of Hawaiʻi). Verses 15 and 20 connect Hawaiian cosmology to the island of Kahoʻolawe (Ulukau. Part Three: The Chiefs Papa and Wākea).

> Papa was weakened at the birth of the island
> Kanaloa. It was born beautiful as a birdling and a
> nai'a,
> It was the child born of Papa.
> Papa forsook her husband and returned to Kahiki;
> Returned to Kahiki she lived at Kapakapakaua.

Abraham Fornander records a chant from the Kumulipo that was translated by Martha Beckwith. This chant speaks of the birth of Kanaloa.

Kaahea Papa iā Kanaloa, he moku, Kanaloa, I Hānauia he pūnua he naiʻa, porpoise; He keiki ia nā Papa i Hānau,	Papa was prostrated with an island, Who was born as a birdling; as a A child that Papa gave birth to,
Haʻalele Papa hoʻi i Tahiti, to Tahiti, Hoʻi a Tahiti Kapakapakaua	Then Papa left and went back Went back to Tahiti at Kapakapakaua.

(Fornander 1916–1919)

In another account, Fornander writes of Puʻuoinaina. In this legend, the moʻowahine lived on Kanaloa. This description of Kahoʻolawe is said to be revered that it is a sacred island.

> This daughter of theirs was placed on Kahoʻolawe; the name of Kahoʻolawe at that time, however, was Kohemalamalama; it was a very sacred land at that time, no chiefs or common people went there (Fornander 1916–1919).

In *Hawaiian Antiquities*, Haloa ʻO Wākea is a genealogy chant describing the birth of the Hawaiian Islands. An English translation was done by Emerson (Malo 2012, 8). David Malo recalls this chant below:

ʻO Wākea noho ia Papahanaumoku	Wākea lived with Papa, begetter of the islands
Hānau ʻo Hawaiʻi, he moku	Begotten was Hawaiʻi, an island
Hānau ʻo Maui, he moku	Begotten was Maui, an islands
Hoʻi hou o Wākea noho ia Hoʻohōkūkalani	Wākea made a new departure and lived with Hoʻohōkūkalani
Hānau ʻo Molokaʻi, he moku	Begotten was Molokaʻi, an island
Hānau ʻo Lanaʻikauka, he moku	Begotten was Lanaʻi, an islad
Lili-ʻōpū-punalua o Papa la Hoʻo-hoku-ka-lani	The womb of Papa became jealous at its partnership with Hoʻohōkūkalani
Hoʻi hou o Papa noho iā Wākea	Papa returned to live with Wākea
Hānau o Oʻahu, he moku	Born was Oʻahu, an island,
Hānau o Kauaʻi, he moku	Born was Kauaʻi, an island,
Hānau o Niʻihau, he moku	Born was Niʻihau, an island,
He ʻula ʻā o Kahoʻolawe	Glowing fiery red was Kahoʻolawe.

In Hawaiian mythology, Martha Beckwith records an account of the sea first arriving to Kanaloa. Beckwith recalls the chant in her writing, "Chants of Pele, Hawaiian god of the volcanoe, and her family of deities reinforce the significance of Kanaloa as a wahi pana and puʻu honua. Pele was born in Kapakuela. Her husband, Wahieloa, was enticed away from her by Pele- Kumuhonua. Pele traveled in search of him. With her came the sea, which poured form her head over the land of Kanaloa" (Beckwith 1982).

> A sea! A sea!
> Forth bursts the sea,
> Bursts forth over Kanaloa,

The sea rises to the hills.

In Kuaʻāina, Davianna Pomaikaʻi McGregor writes about this moʻolelo as she records Kepelino's version of the sea coming to Kanaloa. This moʻolelo is one example that connects land and sea in Hawaiian cosmology. The chant reads as follows: "It is said that in ancient times the sea was not known here. There was not even freshwater, but with the coming of Pele, the sea came also. It was thus that Hawaiʻi got the sea. Her parents gave it to her, and she brought it in her canoes to the land of Pakuala and thence to the land of Kanaloa, and at this place, she poured the sea out from her head." As the sea burst forth, her brothers' chant begins:

> A sea! A sea!
> The sea bursts forth,
> The sea burst forth on Kanaloa
> The borders of the sea reach to the hills, Gone is the restless sea,
> Twice it breaks forth Thrice it breaks forth,
> The sea borne on the back of Pele.

Another important moʻolelo that connects Kahoʻolawe to its history can be read in the version of Kamohoaliʻi, Pele's brother, the navigator and shark god. Two sites are associated with Kamohoaliʻi on Kahoʻolawe: Kahua Hale o Kamohoaliʻi and Lua o Kamohoaliʻi. Kahoʻolawe is one of four identified puʻuhonua or places of refuge for the deity Kamohoaliʻi in Hawaiʻi and therefore holds significance. As McGregor writes, "It is located in a deep cave that opens onto the ocean on the northeast side of the island. No one has explored it in modern times" (McGregor 2007). In the story of Laukaʻieʻie (Racoma 2008), Kamohoaliʻi is believed to be living at Kanaloa. In modern times, shrines for Kamohoaliʻi have been set up in places such as Kanapou Bay, a site known as a breeding location for sharks. This moʻolelo confirms that Kahoʻolawe is also a wahi pana in wayfinding traditions.

In oral cultures, place names connect to history and stories of the beginnings. The first name for Kahoʻolawe is Kanaloa, and later, the name changed to Kohemālamalama o Kanaloa,

which means the shining birth canal of Kanaloa or the southern beacon of Kanaloa (www.protectkahoolaweohana.org). Kahoʻolawe is the only island in the Pacific that is named for a major god. The numerous names connect Kahoʻolawe to its role as a traditional center in training wayfinding between Hawaiʻi and Tahiti. To know how to navigate, a person must know the main gods in the Native Hawaiian culture and what they represent in the elements of reference. To do so is to become knowledgeable in understanding the stars, wind pathways, ocean channels, moon phases, and sun directions. Kahoʻolawe is the ideal location to immerse oneself within the natural elements related to sailing and navigation.

Recognizing Hawaiian Culture and the Ancestral Spirits of Kanaloa

As discussed in Chapter One, the Hawaiʻi State Constitutional Convention occurred in 1978 and recognized the Hawaiian language, access and gathering rights, and the Hawaiian culture. In 1980, as a result of a civil suit filed in 1976 by Aluli et al., the Protect Kahoʻolawe ʻOhana reached an out-of-court settlement with the U.S. Navy called a consent decree (Goodyear-Kaʻōpua 2011).

From the beginning, the leaders of Protect Kahoʻolawe ʻOhana have sought answers from kuaʻāina and kupuna to better understand the connection to Kahoʻolawe and the spirituality that they felt on the island. The following is the chronological order from McGregor that discusses how the ʻohana went about connecting and revitalizing the spiritual realm. In 1976, Aunty Emma DeFries did a kanikau or lamentation chant for the ʻāina acknowledging the neglect of the island which caused its devastation. In Hakioawa, Kahuna Sam Lono and Emma DeFries of Oʻahu conducted a ceremony that would open the religious sites of the island to receive offerings. In 1979, John Anuenue Kaʻimikaua of Oʻahu and Molokaʻi conducted a ceremony with his halau hula to give life to the land by burying food offerings in the ground and dancing the hula kahiko.

Many other kūpuna came forth to offer prayer with the same intention of opening up the space for revitalizing the ancestral spirits.

In 1981, the Protect Kahoʻolawe ʻOhana asked Aunty Edith Kanakaʻole and her daughter Nālani Kanakaʻole of Halau o Kekuhi to train them to conduct a Makahiki ceremony. The Protect Kahoʻolawe ʻOhana placed the healing and re-greening of the island under the care of Lono, the Hawaiian god of agriculture.

The Edith Kanakaʻole Foundation and the Halau o Kekuhi are influential in the sacred ceremonies and rituals of Kanaloa and in contemporary Hawaiʻi as a whole. Aunty Edith Kanakaʻole was trained in the hula by her mother, Mary Ahiʻena Kanaele Fujii, who was born in the 1880s and raised in the hula kapu or sacred hula in the Puna district of Hawaiʻi Island. The halau is known and celebrated for its mastery of the ʻAihaʻa style of hula and chant, which is a low-postured, vigorous, bombastic style of hula that springs from the eruptive volcano persona, Pele and Hiʻiaka (edithkanakaolefoundation.org). The halau is known for being rooted in seven generations of family practitioners, who are seen as leaders in hula and oli.

Reclaiming Makahiki Ceremony & Practice

> I recall our beginnings when we held workshops, did our research to prepare for Makahiki, a celebration for the God Lono. We read the books by Samuel Kamakau and David Malo, talked to many kumu hula and kūpuna on the subject of traditional rites; however, for all of us involved with kahoʻolawe, we had not practiced our Hawaiian culture to the extent of understanding it fully. We wanted to be involved with ritual and ceremony to learn to acknowledge and thank Lono for our ʻāina and to ask Lono for assistance in the revegetation of Kahoʻolawe. This was our primary goal for the reinstitution of the Makahiki, not to stop the bombing or to return the island from the U.S. military. The intention for the rituals was that life would once again abound and grow on this little moku, or island. After all, this is our greatest gift. This land that sustains us is above all else our foundation (Kaʻiana Haili).

In January 1982, the Protect Kahoʻolawe ʻOhana revived an annual celebration called Makahiki (Lum 2003) in honor of the God Lono, the Hawaiian god of agriculture. This celebration is

believed to have been the first modern-day Makahiki celebration since High Chief Kekuaokalani conducted the Makahiki ceremonies in 1819 before going into battle in defense of Hawaiian religion, the year of the ʻAi Noa or abolishment of the kapu. The Makahiki ceremony ends up spreading throughout the paeʻāina and is seen and practiced throughout the islands today. The purpose of the ceremonies was to attract the Akua, Lono, to Kanaloa in the form of rain clouds to soften the earth and ready it to receive young plants to revegetate the island. Every year since 1982, the ʻohana has opened the Makahiki season in November after the appearance of the starline called Makaliʻi or the Pleiades constellation on the horizon at sunset and has closed the Makahiki season in January or late February. What the Kanakaʻole family did for the ceremony was to offer ʻike on the various kinolau or body forms of the Akua. These can be found in certain foods that represent and are kinolau to the gods. Nālani Kanakaʻole composed the prayer chants to Lono and Edith Kanakaʻole described the different chants and their purpose (Kanahele 2017, 2). "Nalani Kanakaʻole composed the chants of prayer to Lono which was the first formal prayer chant composed for a formal modern day Makahiki ceremony" (McGregor 273). Through these practices, the Hawaiian religion began to be revived.

At the same time, the construction of the first modern traditional hale in Hakioawa began, and monthly accesses to Kahoʻolawe were occurring (1982–1990). Negotiations with the Navy were conducted every six months. In May 1986, ceremonies were opened for Kanaloa in which the central chant asked Kanaloa to give strength and skill to those united in the goal of protecting and giving life to the island. This ceremony provided focus and inspiration to those involved in the ongoing work to stop the bombing and restore the life of the island. A year later, in 1987, memorial services were held for George Helm and Kimo Mitchell, upon the official declaration of their death, ten years after their disapperance. Plaques were placed in their honor on a pohaku

in Hakioawa to remember their efforts in the fight to save Kahoʻolawe.

Hula Is Dedicated to Laka

In 1982 Kumu Hula Hokulani Holt-Padilla of Maui, a member of the Protect Kahoʻolawe ʻOhana built a pā hula or hula platform at Hakioawa to have a formal area for the hula practices. The pā hula was dedicated to Laka and named Kaʻieʻie in November 1987 during the Makahiki season. Kumu Padilla led the ceremony along with kumu hula Pualani Kanakaʻole Kanahele and kumu hula Kealii Reichel. A chant composed by Pualani Kanahele in 1992 for the healing ceremony is quoted below. "He Koʻihonua No Kanaloa He Moku" chronicles the origin and history of the island and provides a poetic summary of the process of reviving religious practices on the island and is an example of what they did to make the religious ceremonies happen.

Ua ala Hawaiʻi mai ka moehewa nui	The Hawaiian woke from the nightmare
Hoʻomaopopo i ke keiki iʻa a Papa ʻO Kanaloa	Remembered was the child of Papa O Kanaloa
Ke moku hei Haumea	The sacred land of Haumea
ʻO Kohemālamalama	O Kohemālamalama
Ke Kino o Kamohoaliʻi	The body form of Kamohoaliʻi
E hoʻōla kākou iā Kahoʻolawe	Save Kahoʻolawe
Ola i ka lani a Kāne	To live in the heavens of Kāne
Ola i ke kai a Kanaloa	To live in the sea of Kanaloa
Ua Kahea ʻia ʻo Lono i ka makahiki hou	Lono was summoned for a new year Ma ka Hale
Mua o Lono i kahea ʻia ai	At the Hale Mua of Lono, he was called Ua
Kanaloa ʻo Kanaloa i Kohemālamalama	Kanaloa was reconfirmed to Kohemālamalama
Puka hou aʻe ka mana o Kanaloa	The energy of Kanaloa was revitalized
Ua kani ka leo pahu i ka Mālama o Hoku	The voice of trhe drum sounded in the care of Hoku
Kuwawā i ka houpo a Laka	Resounding in the bosom of Laka
Ua ala ʻo Lako ma Kaʻieʻie i Kanaloa	Laka awoke at Kaʻieʻie at Kanaloa

(PBR Hawaiʻi 1995)

The chant above is to revive the traditional and ancient ceremonies of Kanaloa and recognizes the Protect Kahoʻolawe ʻOhana as a pro-Hawaiian and cultural organization. Over time, cultural

protocols strengthened the efforts of the Protect Kahoʻolawe ʻOhana and brought together the community in protesting the bombing of Kahoʻolawe.

Changing Times

In 2001, the Protect Kahoʻolawe ʻOhana contacted the Polynesian Voyaging Society to celebrate the 25th anniversary of the founding of both organizations in a ceremony to be held at Honokanaiʻa and Kealaikahiki, Kahoʻolawe (www.hokulea.com). This proved to be a historical event as they were previously two independent movements that ran parallel to each other, with very little intermixing. Moreover, the coming together was a symbol of reopening and elevating Kahoʻolawe to its former sacred island status. This event also marked the first visit of *Hōkūleʻa* to Kahoʻolawe.

In October 2004, after the completion of the ordinance clean-up and the permanent departure of the U.S. Navy from Kahoʻolawe, the Kahoʻolawe Island Reserve Commission and Protect Kahoʻolawe ʻOhana organized the Hoʻi Hou Gathering of Early Warriors and Navigation Schools at Honokanaiʻa, Kahoʻolawe. On this occasion, the Kuhikeʻe Navigational Observation Platform at Kealaikahiki was blessed and dedicated by Master Navigator Mau Piailug. The location of the navigational platform was selected by PVS navigators Nainoa Thompson and Chad Baybayan. Atwood Makanani oversaw the construction of the platform. Makanani, or "Maka" as he is called, had been an active crewmember for the voyaging canoe, *Hōkūleʻa*, since 1975 and is well versed in voyaging traditions. The platform was designed to include a star compass for navigation students to learn how to wayfind, utilizing the compass. The significance of this site is that it connects Hawaiian voyagers to other Oceanic voyagers with a shared compass, thereby connecting Oceania through similar traditions and synchronized worldviews that bring together a Satawal and Hawaiian perception. The platform also brought together the

two parallel movements of the Protect Kahoʻolawe ʻOhana and the Polynesian Voyaging Society and mended a rift between the two organizations that occurred in the 1970s when the Polynesian Voyaging Society would not add their voice to the protest of the U.S. bombing of Kahoʻolawe. Members of the Polynesian Voyaging Society apologized for not being a part of the effort to stop the bombing. Moving forward, all schools of navigation are nowadays invited to come to the island and train in wayfinding.

Elevating Kanaloa Kahoʻolawe as a Cultural Learning Center

The Protect Kahoʻolawe ʻOhana has continued to open and conduct new ceremonies and protocols for the natural life forces the Native Hawaiian ancestors honored as akua or deities. For example, in August of 2008, there was the training of moʻopapa to open ceremonies for Papanuihanaumoku.

In February of 2009, the Kukulu Ke Ea A Kanaloa Culture Plan was made for Kahoʻolawe (Kanahele 2009) by the Edith Kanakaʻole Foundation. It introduced the Papakūmakawalu approach to Native Hawaiian science and provided a guideline for the training of Hawaiian cultural practitioners in the sacred space of Kahoʻolawe. The plan recommends that the island, traditionally an ahupuaʻa of the moku of Honuaʻula on Maui, be acknowledged as an island or moku in its own right. It also recommends that the island be called Kanaloa Kahoʻolawe, in acknowledgment of its ancestral name and its status as a kino lau or body form of the deity, Kanaloa. The plan also lays the foundation for the KIRC and the ʻOhana to work together to elevate Kanaloa Kahoʻolawe into a cultural learning center for the mastery of Hawaiian science, culture, religion, arts, and practices.

Meanwhile, in the same year on November 11, 2009 the ʻOhana dedicated Namakapili Hale Halawai in Hakioawa. It is a traditional hale for the ʻOhana and huakaʻi participants to

learn about Hawaiian culture and history. In 2011, the Faafaite, a voyaging canoe from Tahiti, launched off of Kealaikahiki to return to Tahiti. This was the first time that a waʻa kaulua launched its voyage to Kahiki in the traditional manner, from Kealaikahiki, since 1400 A.D. (okeanos-foundatin.org/Faafaite).

Kahoʻolawe Aloha ʻĀina and the Cultural Renaissance

The Kahoʻolawe Aloha ʻĀina Movement also ignited a bigger and broader cultural revival that reverberated throughout the Hawaiian Islands from 1976 to the 1990s and challenged other institutions of American colonization. A general cultural renaissance developed as the number of halau hula or schools that teach traditional Hawaiian dance and chant expanded, and the number of dancers of both Hawaiian and non-Hawaiian ancestry increased. Hawaiian music gained new popularity, and new songs, styles, and rhythms were created. Lāʻau Lapaʻau, traditional herbal and spiritual healing practices, were recognized as valid and significant. Traditional Hawaiian healers began to train new generations in the Hawaiian healing arts. For international significance, traditional navigational skills were revived through transpacific non-instrument navigation in traditional Hawaiian double-hulled sailing canoes, such as *Hōkūleʻa*, Hawaiʻi Loa, and Makaliʻi (https://kauapaliloa.org/moʻaukala).

Another aspect of the Hawaiian Renaissance is in the new generation of young Native Hawaiians who are pursuing livelihoods involving the cultivation of taro. We have also started to see Native Hawaiians seeking careers in natural resources management and the protection of land. This was a time in Hawaiʻi's history that resort and industrial developments threatened to expand into the rural districts that had served as the last strongholds of Native Hawaiian custom, belief, and practice; communities began to organize to protect their lands and natural resources and the Hawaiian way of life (Trask 2000). Native Hawaiians on Molokaʻi continued to organize as Hui Ala Loa to stop the resort development that threatened to divert limited water resources

away from community-based economic development and destroy subsistence resources. Native Hawaiians in Kaʻū organized against plans to launch rockets from Hawaiian Home Lands at South Point and develop a spaceport at Kahilipali and Palina Point.

They argued that these massive projects would destroy Native Hawaiian cultural sites in the district, bring in newcomers, and transform the Native Hawaiian way of life. Native Hawaiians on Hawaiʻi Island organized against geothermal energy development in the Wao Kele o Puna rainforest of Puna. The industrialization of the volcano threatened to destroy the largest expanse of lowland tropical rainforest in the United States. The Pele practitioners asserted that geothermal energy would desecrate and destroy their deity's life force and manifestations (Faulstich 1990). Native Hawaiians on Maui organized against the sprawling resort development that blocked access to the beaches of Makena for subsistence fishing and gathering of marine resources. Native Hawaiians on all islands organized to protect their traditional burial grounds from destruction by various forms of development, a movement sparked by the controversy at Honokahua in Maui, where over 1,000 graves were dug up and relocated to build a Ritz-Carlton Hotel (Merwin 1989).

Kohe Malamalama O Kanaloa / Protect Kahoʻolawe Fund

Before George Helm died, he and Noa Emmett Aluli founded the Kohemālamalama o Kanaloa/Protect Kahoʻolawe Fund (PKF) (sacredland.org). Aluli and Colette Machado, an ʻOhana member and member of the PKF board, networked with national funding groups supportive of Native American culture, land rights, and sovereignty, among them the Seventh Generation Fund, the Tides Foundation, and the Gerbode Foundation. The PKF board included representatives of grassroots communities on every island and therefore did more than raise money to stop the bombing of Kanaloa and restore its cultural and national resources. The PKF

also supported and funded grassroots organizations engaged in aloha ʻāina struggles on Kauaʻi, Maui, Lanaʻi, Molokaʻi, and Hawaiʻi, while continuing to expand support for Kanaloa Kahoʻolawe (McGregor 2007, 268).

In the 1980s, the PKF helped Hāna Pōhaku on Maui raise funds for self-sufficiency projects in taro cultivation and fishing, research into protecting their land from federal condemnation for a national park, and protection of their water rights from diversion for hotels. The Hui Ala Nui o Makena on Maui was assisted by the PKF in the research and legal work to keep access to the Makena coastline open for fishing and gathering by local people. On Kauaʻi, the fund assisted the Niumalu-Nawiliwili Tenants Association to develop an alternative land use plan that included their new homes. For Lanaʻi, monies were raised for research of kuleana lands and water concerns. Hui Ala Loa on Molokaʻi received assistance for its litigation and organizing work to protect that island's cultural, natural, and agricultural resources from overdevelopment.

On the island Hawaiʻi, the PKF assisted the Mālama ka ʻĀina Hāna ka ʻĀina community organization in getting monies to develop a plan to settle Hawaiian Home Lands at King's Landing by families desiring to pursue traditional Hawaiian subsistence livelihoods instead of building standard residential houses on lots. Ka ʻOhana o KaLae at South Point worked with the PKF to receive monies for a community curatorship program to protect the historical sites and rich natural resources of the Kaʻū district from industrial development. The efforts of Pele practitioners to protect her and the Kilauea volcano and rainforest from geothermal development were initially funded by grants to the PKF until the Pele Defense Fund branched out from the Protect Kahoʻolawe Fund (McGregor 268–270).

Aloha ʻĀina Philosophy

> This movement brought about a revival of the traditional Hawaiian value of aloha ʻāina, or love and respect for the land (McGregor 264).

The first significant outcome from the violent history that Kahoʻolawe had endured was bringing back the aloha ʻāina philosophy into the Native Hawaiian consciousness. In the Hawaiian language, *aloha* means love, and *ʻāina* means land. Together, *aloha ʻāina* means love of the land. Aloha ʻāina has a history behind it and is a telling by culture through the language and definitions used.

It embodies a philosophy and a mindset. In 1893, Queen Liliʻuokalani was illegally overthrown by the U.S. government (pbslearningmedia.org), and her book *Hawaiʻi's Story by Hawaiʻi's Queen* (Liliʻuokalani 1898) describes the pain she felt. In 1897, Annexation was attempted through the adoption of a Treaty of Annexation and failed. Then the U.S. settled on a Joint Resolution (www.ourdocuments.gov) within their own government policies to add Hawaiʻi to their collective possessions. Under international law, this was an illegal option for the annexation of a country and thereby, the political status of Hawaiʻi continues to be under U.S. occupation. Because of this history, loyal Hawaiian nationals called their cause to fight for justice aloha ʻāina. The interpretation of this term during that troubled period was defined as patriotic. This meant that the person identifying themselves as an aloha ʻāina referred to themselves as being loyal to their Queen and were against the U.S. illegally occupying Hawaiʻi.

This term continues to be used today in the same way. However, through education and consciousness of Hawaiian identity and language, the term references much more than just being a patriot of our Queen. The philosophy of aloha ʻāina and/or "love of the land" can be traced back through genealogy and finds its natural place in Hawaiian cosmology. In Hawaiian

cosmology, Papa (Mother Earth) and Wākea (Sky Father) are the creators of the islands in the Hawaiian Archipelago.

Moʻolelo of Papa and Wākea; Birth of the Hawaiian Islands

> Here is the genealogy of these islands. Kahiko was the husband, Kūpūlanakehau was the wife. A son was born to them, Wākea. Wākea is known as sky father.
>
> Kūkalaniʻehu was the husband, Kahakanakoko was the wife. A daughter was born to them, Papahānaumoku. For short, we call her Papa and she is known as earth mother.
>
> Wākea lived with Papa. Hawaiʻi, the eldest island and their eldest child, was born to them. Papa gave birth to Maui, an island, and then to Kanaloa, an island also known as Kahoʻolawe. Then, Papa left Hawaiʻi and traveled to Tahiti.
>
> Wākea took a new wife, Kaʻula, and she gave birth to Lānaʻikaʻula.
> Wākea took another new wife, Hina. Hina gave birth to Molokaʻi, an island which is also known by the name of Molokaʻinuiahina.
>
> Papa returned from Tahiti and was furious and jealous of the two new wives. So Papa took Lua as a husband. Born was the island of Oʻahu, also known as Oʻahulua, an island child.
>
> Papa returned to Wākea. Born were the islands of Kauaʻi, Niʻihau, Lehua, and Kaʻula.
>
> It was Wākea who established the eating kapu. Wākea also placed restrictions on certain foods that women were forbidden to eat. Wākea built numerous religious sites for the gods: for Kū, for Lono, for Kāne, and for Kanaloa (Malo 188–190).

The lesson here is that we (Hawaiians) come from Papa and Wākea. We are connected to the land because they are our older siblings. The belief system is one where humans take care of the land and the land, in turn, takes care of its humans.

Moʻolelo of Hāloa; Birth of the First Man and/or First Chief

> Papa and Wākea gave birth to a daughter named Hoʻohōkūkalani. When she became an adult, Wākea's desire for her welled up within him. So he lived with his own daughter, and she became pregnant.
>
> A premature infant was born to them and they gave him the name Hāloanakalaukapalili, They buried this child near the back wall of their house and from that spot grew a taro plant. He was the source of all the taro plants in Hawaii.

> Wākea paired with Hoʻohōkūkalani again, and they had another male child, whom they also named Hāloa. This Hāloa was the ancestor of the Hawaiian race.
>
> Therefore, both the taro and the land are older siblings to Hawaiian people, just as Hawaiian people are the younger siblings to the taro and the land.
>
> Older and younger siblings have responsibilities to each other. It is the responsibility of the older siblings to feed the younger siblings, and it is the responsibility of the younger siblings to care for the older siblings. Thus, the needs of both are fulfilled. Source???
>
> This relationship continues to this very day. It is important to remember the lesson of this story in all that we do (Malo 188–190).

Therefore, aloha ʻāina refers to the connection between humans and land that lives in a cyclical relationship as foretold in our Hawaiian cosmology. The aloha ʻāina movement picks up again and is used in practice in this new generation. In essence, by reclaiming the island of Kanaloa Kahoʻolawe, we, as Hawaiians, have also reclaimed our genealogy and cosmology. This consciousness of our cosmology allows us to follow the same philosophy that our ancestors followed. This is also an example of the depths that we can achieve if we understand that our Hawaiian language contains answers within itself. The answers in the language and in the moʻolelo are there waiting for us to retrieve. Therefore, when a person speaks of going back in time to move forward, they mean to go back to Papa and Wākea to understand where we fit into our modern-day Hawaiian identity.

Lessons of Stewardship from Kanaloa Kahoʻolawe

> The Kino of Kanaloa is restored:
>
> Forests and shrublands of native plants and
> other biota clothe its slopes and valleys.
> Pristine ocean waters and healthy reef
> ecosystems are the foundation that supports
> and surrounds the islands.
>
> Nā poʻe Hawaiʻi care for the land in a manner
> Recognizes the island and ocean of
> Kanaloa as a living spiritual entity. Kanaloa is

> A pu‘uhonua and wahi pana where Native
> Hawaiian cultural practices flourish.
>
> The piko of Kanaloa is the crossroads of past
> And future generations from which the Native
> Hawaiian lifestyle spreads throughout the
> Islands. (Kahoolawe.hawaii.gov/plans/EE10-StrategicPlan2.pdf 1995)

The vision statement from KIRC encompasses the physical and spiritual restoration of Kanaloa, both the island and the god. It projects activities on the island that revolve around this restoration. The isolation of the island provides a historic opportunity to revegetate it with native plants. It also envisions a protected marine sanctuary that can serve as a pool for restocking marine life for the ocean in and around Maui Nui. The statement presented Kanaloa as a cultural learning center where the traditional cultural and spiritual customs, beliefs, and practices of Native Hawaiians such as wayfinding, fishing, and healing can flourish and spread out to all the islands. Native Hawaiian culture exists nowhere else in the world, and Kanaloa will play a role in its perpetuation. To implement this vision, the KIRC worked with the Protect Kaho‘olawe ‘Ohana and the Edith Kanaka‘ole Foundation to develop traditional kua‘āina stewardship principles for guiding the development of a land-use plan for the island (ProtectKahoolaweOhana.org).

The following are the principles seen in Native Hawaiian stewardship. The first understanding is that the ahupua‘a is the basic unit of Hawaiian natural and cultural resource management. An ahupua‘a runs from the sea to the mountains and contains a sea fishery and beach, a stretch of kula or open cultivable land, and higher up the forest. The island was divided into twelve watersheds or ‘ili. Restoration of the island will start at the central point of the island and proceed down to the ocean, ‘ili by ‘ili, recognizing the integral relationship between soil

disturbance, water flows, wind, erosion, and runoff (kahoolawe.hawaii.gov/plans/Stewardship.pdf).

The next principle concerns the natural elements. Land, air, fresh water, and ocean are interconnected and interdependent. Hawaiians consider the land and ocean to be integrally united and that these ahupuaʻa also include the shoreline as well as inshore and offshore ocean areas such as fishponds, reefs, channels, and deep-sea fishing grounds. The sixty-nine fishing ko'a constructed on the island were also markers for offshore fishing grounds. These fishing grounds are also part of ʻili and must be considered in restoration activities on the island (kahoolawe.hawaii.gov/plans/Stewardship.pdf). The third principle looks at the natural elements, such as that fresh water is the most important for life and needs to be considered in every aspect of land use and planning. The Hawaiian word for water is *wai*; the Hawaiian word for wealth is *waiwai*. In Hawaiʻi, water is the source of well-being and wealth, and the wealth of the land is based upon the amount of fresh water available (kahoolawe.hawaii.gov/plans/Stewardship.pdf). The fourth principle acknowledges that Hawaiian ancestors studied the land and the natural elements and became very familiar with the land's features and assets. Ancestral knowledge of the land was recorded and passed down through place names, chants, and legends that evoke the winds, rains, and features of a particular district (kahoolawe.hawaii.gov/plans/Stewardship.pdf). The fifth principle recognizes that an inherent aspect of Hawaiian stewardship and use of cultural and natural resources is the practice of aloha ʻāina and mālama ʻāina, or respect and conservation of the land to ensure the sustainability of natural resources for present and future generations (kahoolawe.hawaii.gov/plans/Stewardship.pdf). Taken together, these principles, learned through the collaboration of kuaʻāina, scholars, Native Hawaiian activists, and planners in projecting

future uses of Kanaloa, provide an excellent foundation for the stewardship of the Hawaiian Islands as a whole.

What Has Evolved

The Protect Kahoʻolawe ʻOhana is credited as helping to start the second Hawaiian Renaissance in Hawaiʻi because of the social movement that started because of the bombings of Kahoʻolawe (McGregor and MacKenzie 2014). The movement started a cultural revival in religion, hula, and navigation that spread throughout the Hawaiian Islands and continues to do so today. An example of what has come out of the movement can be seen at the Bishop Museum. An exhibit of Kahoʻolawe was on display, and 187,000 visitors came to see and learn the history of this movement. Kahoʻolawe is a key example that shows the dynamics of collaboration between many parties in an effort to not only stop the bombing of the island but to restore the island to its natural space. By bringing back the religion, the ʻohana has brought back the connection to the foundation of the Hawaiian culture. In that space, the cultural beliefs, ceremonies, and practices are reconceptualized for modern practices and are key to showing how a thriving people adapts to change.

Conclusion

> The ʻohana remained rooted in the founding principles of aloha ʻāina, kūpuna leadership, ʻohana or collective decision making and action, accountability to the grassroots kuaʻāina, and a clear focus on healing and restoring the life of Kanaloa itself (McGregor 268).

The ʻohana continued to follow the philosophy of George Helm, which was to "follow your naʻau, but do your homework" and made it a committed organization of political action guided by an informed and sophisticated strategy. Moreover, "the Molokaʻi kuaʻāina kept alive the memory and vision of George Helm for Kahoʻolawe to be regreened and restored as a puʻuhonua

for the Hawaiian culture, so that the sacrifice of Helm's life would not be in vain" (McGregor 268).

Today, the island of Kahoʻolawe holds an esteemed place for Hawaiians to visit and be a Hawaiian without judgment and/or criteria. There are two ways to enter the island: Protect Kahoʻolawe ʻOhana (PKO) access and/or with Kahoʻolawe Island Reserve Commission (KIRC) access. I have been to the island with both agencies and find the path with PKO more of a spiritual journey than just a mere visit to the island. Before venturing to the island, protocols and two oli need to be remembered before you are allowed entrance. The traditional way is observed and sets a tone for the duration of your presence on the island. Once there, all one has to do is just be silent because you become aware that you are not on the island with only those who came over on the boat ride with you, but, rather, you feel the presence of those who have come before you and have been awaiting your trip. I have been told that one cannot prepare for Kahoʻolawe, but rather Kahoʻolawe prepares you for a journey powered by the aloha ʻāina philosophy and Hawaiian consciousness.

While on the island, you work with the group that you came with as they become your immediate family and community. The work is completed in the daylight hours so as to plant endemic plants and move pōhaku (rock) to make the Ala Loa an obvious pathway for those people that hike up the mountain. The Hawaiian words of *lōkahi* (together) and *laulima* (many hands) are practiced because work is easier and faster if completed together.

This teaches us today how to navigate within a colonial and occupied nation. The actions that the PKO took against the U.S. allow modern-day Hawaiians to see that it is okay to stand up and speak out against a clashing colonial system if our values and spirituality are attacked by these colonial agents. This action tells us that if we do not say anything, then who will? Or, as

Dr. Kekuni Blaisdell told me in our many conversations together, “If not you, then who?” as he referred to not waiting for anyone else to speak up but rather if there is a need to say something, then say it.

The example of the Kahoʻolawe struggle also shows us that we can be diplomatic with today’s powers. There is a lot to learn from the elders that communicated with those in the highest positions of the U.S. government and collaborated diplomatically to change the destiny of Kahoʻolawe. That act recalls how our ancestors communicated in the nineteenth century by protesting the U.S. Congress’s forced annexation. By discussing Kahoʻolawe with President Bush and members of the U.S. Congress, Hawaiians demonstrated that they could follow along in their ancestors’ footsteps by taking their place at the table to discuss those issues pertaining to themselves, their belief systems, and their future as a people. It also shows us that we can all come together and collaborate on issues that are current and life-changing for one group of people. We can all learn the lessons of how we can work together and collaborate with others. This example has shown us how to effectively navigate the system through collaborations, sometimes even with those who were once deemed the enemy.

This social movement has its own story of moving from the margins to the center in terms of negotiating pathways of knowledge by reclaiming, reasserting, and reconceptualizing Hawaiian identity in modern times. This, itself, can be seen as a decolonizing methodology and strengthens Hawaiian consciousness at the same time. This movement was extreme in the beginning stages because of the bombings and the disappearance of Mitchell and Helm. Because of Mitchell, Helm, and the Protect Kahoʻolawe ʻOhana, this movement unfolded into a dynamic transformation of empowerment and agency for Hawaiian people. The call to organize showed how a community-led, grassroots movement could be just as powerful as a political change, if

not more powerful and life-changing. My personal story can attest to this affirmation that was life-changing for me. Each time I re-visit Kahoʻolawe, the affirmation of Hawaiian identity is strengthened as each trip to the island is special and spiritual. This affirmation is seen as an act of liberation for myself and empowers my native agency in my relations with my family and community. Within this same dialogue of liberation, Kahoʻolawe continues to be a place to reconnect and thrive as a Hawaiian in modern times.

Chapter Three

The Revival of Polynesian Voyaging & the Beginning of the Polynesian Voyaging Society

> I wanted this project to revive voyaging by rebuilding the canoes, relearning how to sail and navigate them. And, then, have Hawaiians and other Polynesians be the leaders of this activity. And that's exactly what happened (Finney 2017).

This chapter examines the history of the Polynesian Voyaging Society and the creation of the legendary voyaging canoe, *Hōkūleʻa*. I highlight how this voyaging event went from a research experiment to a true Hawaiian story. I follow the history and showcase the voyages that would lead to the recent voyage around the world, thereby showing how Hawaiians became active agents in their past, present, and future.

This chapter highlights the chronology of the Polynesian Voyaging Society and the iconic voyaging canoe, *Hōkūleʻa*. I look at Herb Kane, Ben Finney, and Tommy Holmes and their ingenuity toward creating and reconstructing Polynesian voyaging canoes for Hawaiʻi and the world itself. I examine the beginning years in the creation of *Nalehia* (www.hokulea.com) that ultimately became the prototype for building the iconic canoe, *Hōkūleʻa*. As the Protect Kahoʻolawe ʻOhana has its own story of moving from the margins to the center, so does the Polynesian Voyaging Society. This mobilization was also extreme in the beginning stages and has developed into a global transformation of empowerment and agency in wayfinding skills and indigenous knowledge. Over time, voyaging traditions have been revitalized and reasserted into once again being a Hawaiian tradition.

I critically analyze how voyaging became a big part of cultural awakening and contributed to the 1970s second Hawaiian Renaissance. I demonstrate this phenomenon by highlighting the dynamics of exploration and the process that leads to creating new pathways of perspectives. I show how the voyage allowed for a space for others to see how Indigenous

knowledge works. This voyage would take on a life of its own by placing Hawaiian agency and creativity at the forefront of cultural revitalization. I demonstrate the necessary collaborations between groups and organizations that supported this research experiment as it came to fruition. There are lessons that can be taken into consideration from these events, which can be useful in navigating the politics of everyday life in Hawai‘i. *Hōkūle‘a*’s first voyage proved skeptics wrong by demonstrating how celestial navigation worked. I highlight the impact this voyage had on the Hawaiian community and show evidence of its impact. I also show how the voyage challenged an existing worldview and expanded the space for another Hawaiian worldview to exist.

The inaugural voyage in 1976, called the “Voyage of Research,” reclaimed wayfinding skills for Hawaiians. The history of *Hōkūle‘a* leads voyaging into the twenty-first century with a four-year voyage called the Mālama Hōnua Worldwide Voyage (www.hokulea.com) and is seen as the voyage of education. The significance of this voyage highlights the need for a culture-based curriculum that includes the traditions and skills of Hawaiian ancestors.

Voyaging Theories

During the 1950s, arguments regarding “intentional voyages” were extensively discussed. On one side of the argument, the capabilities of Polynesians were romanticized and seemed too far-fetched even for those that believed voyaging happened with an intentional purpose. The other side of the argument denied any native agency in voyaging and refused to believe that native people knew how to voyage the world before the Europeans started their explorations. These skeptics “dismissed the legends as fabrications; declared Polynesian canoes to be unseaworthy for long, planned voyages; and decreed that it was impossible to navigate more than a few hundred miles of open ocean without a compass, sextant and other navigational aids equally

unknown to the ancient Polynesians" (Finney 1992, 10). Finney believed that if he could sail back and forth from Hawai‘i to Tahiti without using modern instruments and solely by using the elements of reference, he would prove those skeptics wrong.

The loudest criticism of Finney's work would come from Thor Heyerdahl, a Norwegian mariner and academic known for his expedition on *Kon-Tiki* and many others. The *Kon-Tiki* was a well-known experiment that saw six men sail from Peru to the Tuamotu Islands. They did so on a raft made of balsa wood that connected to native stories of the Spanish Conquistadors of the Inca that sailed between South America and Polynesia. This experiment was successful in some areas and unsuccessful in others. The sail lasted for one hundred and one days, and about forty-three hundred nautical miles were journeyed. However, it did not prove cross-current sailing existed on such a raft. Instead, it was concluded that the currents could easily move a canoe and/or raft in the Pacific traveling the same path as the trade winds and the equatorial geographic location of the Inter-Tropical Convergence Zone (ITCZ), where the pathway of the trade winds travel from east to west (Heyerdahl 1950). Heyerdahl would eventually publish a book titled *American Indians in the Pacific*, in which he argued that Polynesian origins happened from east to west and that the other way would have been impossible because the canoe and/or raft would have gone against the currents and trade winds.

> Thus, Polynesian seafarers, whom he judged to be primitive, could never have sailed their canoes from West to East, from Indonesia to Polynesia. To Heyerdahl, the capacity to sail across the ocean against wind and current was later considered a European development. The first settlers of Polynesia must therefore have come from the Americas, drifting before the current and the trade winds (Finney 1979, 11).

Needless to say, this statement became controversial, and his conclusion was not favored. As an anthropologist, Finney looked elsewhere for answers and found them in the language, the canoe itself, and in a shared culture that he believed originated from Southeast Asia.

There was another academic who did not believe in the skills of Polynesian voyagers. Unlike Heyerdahl, Andrew Sharp's theory was highly accepted. Sharp believed that the settlement of Hawaiʻi was done by mere accident. Sharp called his reasoning the "drift theory" (Sharp 776). Here is Finney's summary of Sharp's theory:

> The many islands of Polynesia had been colonized through a long series of accidents: primarily by a succession of canoe loads of islanders who were drifting helplessly after losing their way because of a storm or because of navigational error, and who by chance fetched up on uninhabited shores; plus a few canoe loads of exiles who, after being driven from their homeland by war or famine, let the winds and currents push them about in hopes that they would happen upon some new island (Finney 1979, 11).

Both Heyerdahl and Sharp agree that Polynesians traveled from shoreline to shoreline and that the most miles voyaged out at sea would be no more than three hundred miles before they would not know where they were. Sharp shows a mixture of ideas that are incompatible with one another when discussing currents and settlement directions. In one case, he believes settlement happened in Polynesia from west to east in which sailing against the current would be successful. However, Sharp does not believe Polynesians knew how to sail against the currents. Sharp, altogether, dismisses "Polynesian canoes and navigation methods as inadequate for the task of planned voyages of exploration and colonization assigned to them by the romantic interpreters of Polynesian legend" (Finney 1979, 11). Even though Sharp's research does not confirm his argument, his theory became the most believed version of how Polynesians sailed and later settled in Hawaiʻi.

Theories of celestial navigation helped to steer Finney in a direction of his own and allowed him to use his own lens to better understand the concepts of wayfinding. Ben Finney was from San Diego and was an active waterman and avid sailor in his youth. After serving in the Navy, he found himself at the University of Hawaiʻi at Mānoa in a master's program

focusing on “Hawaiian Surfing: A Study of Cultural Change” (archive.hokulea.com). While in this phase of his education and as a sailor himself, Finney became interested in wayfinding and was intrigued by the skills of Polynesian seafarers. After completing a Ph.D. degree at Harvard University in 1964, Finney devoted his time to researching Polynesian voyaging and traditional routes. He became intrigued with the legends and stories of famous voyagers who traveled between Hawai‘i and Tahiti during Hawaiian settlement in the Hawaiian Islands. However, there was a lot of controversy regarding Polynesian migration, the different pathways taken to and from, and Hawaiian knowledge used as a tool for understanding the elements of reference in wayfinding.

> Our object was to retrace the legendary voyages that once linked those far-flung islands and, in so doing, demonstrate to skeptics that the ancient Polynesians could have intentionally sailed across vast stretches of open ocean at a time when most other seafaring peoples were still hugging continental shores (Finney 1975, 5–6).

This was a lesson for Finney to experience and understand that most sailing theories were from men who did not sail. Finney used his own agency to tackle the migration and settlement theories, which eventually furthered the philosophy of voyaging and opened up a space for understanding another way of navigating the world through a sailor’s expertise. As my dissertation expands further, my own Hawaiian agency adds more to the philosophy of Polynesian voyaging and settlement as my own research and ‘ike Hawai‘i (Hawaiian knowledge) will steer me in another direction. It is important to realize that without Dr. Finney researching voyaging theories and building prototypes that would eventually lead to the creation of *Hōkūle‘a*, the voyaging renaissance of its own would not have occurred when it did. The success that voyaging has achieved in Hawai‘i, and the world started with the pioneering thinking of Dr. Ben Finney.

The First Prototype

Finney, initially, set out to reconstruct a twelfth-century Polynesian canoe to sail. However, he found it impossible to find any examples that confirmed those prototypes during that century. "The furthest back in time that he could find was in the 18th century, and therefore his research on canoes and sails were from drawings from the 18th century" (Finney 1992). As Finney's research continued, he discovered a mold for an unspecified "Hawaiian" canoe to build upon that frame and structure.

Finney would replicate an eighteenth century "inter island sailing canoe" (Finney 1979, 15). This canoe would be made of wood with a fiberglass finish. "When the canoe was finished, it was [a] thirty-one feet long and ten feet wide canoe" (Archive.hokulea.com/finneyfounding.html). This canoe was named *Nalehia* (The Skilled Ones). This canoe was made in Santa Barbara, California, in 1966, and Finney would later move the canoe to Honolulu to see how she performed in Hawaiian waters.

During this time, Finney's own agency would come into play as he relied on his sailing capabilities in testing the performance in Hawaiian waters. *Nalehia* was unique in that it did not have a centerboard or a keel, making it necessary to follow the wind for continual forward movement. During the months in Hawaiʻi, the testing focused on understanding the movement of the canoe while sailing into the wind. In sailing, the canoe should never go straight into the wind. If this happens, the canoe will spin out of control. Therefore, Finney focused on putting the canoe on a course that veered seventy-five degrees off the straight-away wind. Finney would calculate this equation by "measuring the heading to the true wind and adding the leeway angle" (Finney 1979, 15). Even though *Nalehia* did not have what other canoes and boats had, she still

"proved to offer enough resistance to leeway to enable the canoe to sail to windward" (Finney 1979, 15).

Nalehia became a success in theory and design with the limited amount of provisions onboard. This training exercise was very useful to prove Heyerdahl and Sharp wrong in their theories of wind calculations and ocean currents. This would motivate Finney to build a bigger canoe model and experiment on a longer voyage that would replicate those legendary accounts of Moʻikeha because the winds from Hawaiʻi to Tahiti are cross-current and go against the course direction. "Sailing to Tahiti is a challenge because Tahiti lies to the south southeast of Hawaiʻi, upwind and upcurrent, so the canoe must make easting against the wind and current for most of the way. The canoe crosses the northeast and southeast tradewind zones as well as two great west-flowing ocean currents, the north and south equatorial currents, which can carry the canoe 14-20 miles westward per day" (www.hokulea.com/education-at-sea/polynesian-navigation). Therefore, the next step would be to sail a canoe from Hawaiʻi to Tahiti while using the elements of reference in celestial navigation. Ben Finney teamed up with Herb Kane and Tommy Holmes to make that vision a reality. All three started the Polynesian Voyaging Society, a non-profit that would house a canoe and bring in funds for a voyage between Hawaiʻi and Tahiti.

The Polynesian Voyaging Society

In 1973, Herb Kane (archive.hokulea.com) was a sought-after Hawaiian artist. Kane was also known for his architecture skills and became a vital asset to this team as he designed the canoe's hull. The fact that Kane was of Hawaiian ancestry helped shortly thereafter when ethnicity became an issue for the voyaging canoe and its founders. Tommy Holmes was a long-time waterman, a descendant from a wealthy missionary family, and was very active in the community. Holmes would bring the connections needed to fund the voyage.

The three men created the Polynesian Voyaging Society (PVS) and the rest, as they say, is history (Froiseth 1980). Finney would become the first president, Kane became vice-president, and Holmes became the secretary. Under their leadership, the voyaging canoe called *Hōkūleʻa* would be built based on Finney's earlier example of *Nalehia*. To do so, there needed to be a financial backer, and the men found that source through the Bicentennial Celebration Committee.

The Bicentennial of America Celebration for the U.S. occurred between the 1970s and 1980s. The celebration was a series of events that honored the historical timeline that led to the creation of the U.S. The voyaging project would see the biggest support come from this celebration—both from the national and Hawaiʻi celebration—and this "venture would become an official U.S. Bicentennial project" (Finney 1979, 22). At the same time, the State of Hawaiʻi proclaimed this year as the year of the Hawaiian. The support from the Bicentennial Committee garnered a fresh influx of monetary support that would follow soon after in building the canoe. This support helped fund the Polynesian Voyaging Society and the voyaging project for Finney, Kane, and Holmes.

The project attracted the support of many businesses and organizations not only because of the magnitude of the feat but because of the bigger picture involving exploration, research, and education. Ben Finney would receive support from the following companies and people: "The National Endowment for the Arts, the Hawaiʻi Council for Culture and the Arts, the Insular Arts Council of Guam, the Juliette M. Atherton Trust, the McInerny Foundation, the A.N. Wilcox Trust, the F.C. Atherton Trust, The Polynesian Cultural Center, B.P. Bishop Museum, The East-West Center, and the University of Hawaiʻi" (Finney 1979, 305). In helping with the logistics and details of the experiment, the following people and organizations also assisted in specific ways: The University of Hawaiʻi and The East-West Center supported "the pre-voyage

study of canoe performance" (Finney 1979, 306) through a National Science Foundation grant; the University of Hawai‘i also allowed PVS to store a double-hull canoe at the Marine Expeditionary Center while the canoe was under construction; the Bishop Museum allowed Finney, Wil Kilselka, and other scientists to use their facilities to study the stars; the Matson Lines and Seatrain would allow PVS to use their storage space, and the Kamehameha Schools would help feed all the workers and made sure everyone was taken care of along the way. Finney would also receive an advance from his publisher as the research experiment was tied to a book deal. The National Geographic Society paid to have the story rights and bestowed a large contribution on the voyagers. There was also a large donation from a private citizen and supporter named Penelope Gerbode-Hopper. Finney's project was funded, and the construction of a voyaging canoe was underway. The *Nalehia* canoe would be the model that the canoe project would copy, but the goal was to make a larger and wider canoe.

Needless to say, this project involved many people, businesses, organizations, scientists, and researchers. Ben Finney knew that it would take a community to come together to make his dream come true and that all involved would have to believe in his dream to sail a voyaging canoe to Tahiti and back via celestial navigation. Due to the enormity of support and to help celebrate the bicentennial celebration, the voyage to Tahiti would have to take place in the first half of the year in 1976 (PVS Newsletter 1975).

Hōkūle‘a

As the project continued, the need for the canoe to have a name became important. Below, Herb Kane writes his account in an email and describes how he came up with the name for the canoe.

> One exceptionally clear night, I stayed up quite late, star chart in hand, locating and memorizing stars and their relative positions. I think I turned in around midnight. Sometime later, I dreamed of stars. My attention was attracted to

> Arcturus, our Hōkūleʻa. It appeared to grow larger and brighter, so brilliant that I awoke.
>
> It's been a habit for many years to keep a pad and pen on my nightstand. When the body is at rest, the mind half-awake, thoughts range about freely, and ideas form which I've found are sometimes worth noting down. Some painting ideas have come to me that way. I turned on my reading lights and wrote "Hōkūleʻa."
>
> The next morning, I saw the notation, and immediately recognized it as a fitting name for the canoe. As a zenith star for Hawaiʻi, it would be a star of gladness if it led to landfall. I phoned Paige Kawelo Barber; she thought it appropriate. I tried it on a few others and got a positive response. The name was proposed at the next board meeting and adopted (http://archive.hokulea.com/ike/kalai_waa/kane_building_hokulea.html).

Hōkūleʻa is the Hawaiian name for the zenith star called Arcturus. The name means "star of gladness." *Hōkūleʻa* was built between 1973 and 1975 and launched on March 08, 1975, on the windward side of Oʻahu in Kualoa.

Although true to the *Nalehia* model, *Hōkūleʻa* was larger and wider. Because Finney had no design of an eleventh-century Polynesian voyaging canoe, he followed a conventional plan that looked at a geographical distribution in voyaging methodology in Polynesia. The canoe was built based on "drawings of Polynesian canoe types from all the islands and archipelagos, looking for design features occurring commonly throughout Polynesia and rejecting those appearing in just one island group or region" (Finney 1998, 23). He felt that seeing the same features from different islands would reflect the possibility that voyaging to Hawaiʻi would have the same characteristics.

This type of rationale led Finney to build the hulls of the canoe with a semi V-shaped section. He found that such a shape would help the canoe veer windward in the winds. The sails would take on a crab-claw shape in which the sail was an introverted triangular sail that would make sailing with a heavy load much easier. The canoe would be 62 1/3 feet long and 20 feet wide and weighed eight tons in the end.

> Although the Polynesian Voyaging Society (PVS) wanted to use traditional materials (koa wood hulls, lauhala sails, sennit lashing) and traditional tools (adzes, bone gouges, coral files, and sharkskin for sanding) in building the canoe, the construction would have been too time-consuming as the builders tried to relearn the arts of working with such materials and tools. Instead, the hulls were constructed out of plywood, fiberglass, and resin, and the sails were made from canvas; the lashings were done with synthetic cordage (www.hokulea.com).

After the canoe was built and tested, Finney was ready to sail. Because Finney was a sailor and had his Ph.D. degree, he naturally knew experts that could help with the testing. Donald Scelsa would help with the dimensions of the canoe to make sure the performance was smooth, Edwin Doran was an expert in sailing and would give support in understanding the wind ratio, and Manley St. Denis was an expert in the sails and gave guidance to what sails to use and why.

Hōkūleʻa has no motor onboard (Yamashita 2019) and travels via the elements of reference, which are found in the stars, winds, and the eight different ocean pathways (www.hokulea.com). For the maiden voyage, there was a GPS tracker under the hull for safety purposes, but the crew could not see it at any time. The canoe does not have a bathroom and shower onboard. When the time came to use the bathroom, a person would have to lean over the side and do their business in that manner. In the case of a shower, a rope was tied to a bucket and lowered to the water. The water was brought up and poured on top of the person to clean themselves. This manner of taking care of oneself continues today and, therefore, voyaging on *Hōkūleʻa* is not for everyone.

Creating the First Crew

The leadership of Finney, Kane, and Holmes set out to find other experts in the field of sailing and navigation. In their attempts to understand wayfinding traditions, the team knew they had to seek expert advice in understanding the stars. Finney had focused on the winds and currents, but the stars' pattern became a new and exciting addition to understanding the traditional ways of

voyaging. They did not need to look too far in finding an expert in Hawai‘i. The man to seek was Will Kyselka (Finney 1994, 444). His background was in geology as he worked for the University of Hawai‘i at Mānoa campus. He also served as an astronomer at the Bishop Museum in the Planetarium, where he would work with Ben Finney, David Lewis, Dave Lyman, and many more enthusiasts and scientists. Kyselka became an integral part of the earlier experiments that would later lead to the success of the voyaging canoe.

At the beginning of the project, Finney wanted to have sailors aboard for the experiment because of the arduous task of sailing over two thousand nautical miles. He first put together those on the crew that he deemed to have an expert level of sailing experience. Besides himself, he recruited men that had a history of sailing in their resume. Finney knew David Lewis from his days of making *Nalehia*. Lewis was a well-known sailor who had sailed throughout Oceania via the traditional means of celestial navigation. Lewis was on a fellowship that allowed him to sail the Pacific with traditional navigators as part of his research. He had learned the skills from these navigators and found this way of sailing to be more to his liking. Lewis became the authority on celestial navigation in certain parts of Oceania and in the academic arena in no time. He was also a physician and was a professor at the Australian National University when Finney taught there in 1968. Lewis was placed in charge of the logistics for the navigation of the 1976 voyage. Just prior to this appointment, Lewis had voyaged from Tahiti to New Zealand using traditional celestial navigational skills, making him a sought-after navigator by Finney. Lewis was more than excited about the 1976 voyage as this research project would be the longest voyage he would do in his sailing career.

Another sailing friend of Finney was a Peace Corps volunteer stationed in Satawal by the name of Mike McCoy. McCoy married a woman from Satawal and let Finney know that his

wife's uncle was a well-known navigator. Finney thought it would be a good idea to have a traditional navigator to learn from and collaborate with. This navigator was Pius Piailug or soon to be affectionately called "Mau" and/or "Papa Mau." Finney had already been in contact with Mau for a few years prior to the voyage, and so it was without hesitation that Finney would ask Mau to join this research experiment. Mau had never sailed further than a few hundred nautical miles, and so this trip would be a challenge for him as well. This trip would also find him in another hemisphere where the stars were unfamiliar to him and his training.

> When we started working on the project, the Satawal navigator was our immediate choice, for he combined two essential virtues: skill in non-instrument navigation and an ability to work across cultural boundaries rare among his navigator colleagues (Finney 1979, 61).

Lewis would train Mau on the pathway from Hawaiʻi to Tahiti. In this training, Mau was taught about the stars on the pathway, the ocean currents, and the wind channels in the northern hemisphere. Mau was an expert on the stars in the southern hemisphere, along with the ocean currents and wind channels. For the voyage, Mau was in charge of the lashings, the booms, and the length and width of the sails. Dave Lyman became another vital crew member with his experience as a seasoned sailor and a veteran harbor pilot. He immediately became the first mate for this project for many reasons. Lyman was the complete package to have as a crewmember, not only because of his sailing skills but also because of his personality and ability to get along with everyone.

As one of the founders of Polynesian Voyaging Society, Tommy Holmes had already garnered a reputation as a notable waterman. The idea was to have all three pioneers of the Polynesian Voyaging Society on the first crew because they all shared the same vision. However, during this time, a controversy started among non-Hawaiians and the Hawaiian community in Hawaiʻi. This dynamic became apparent when Tommy Holmes agreed to be on

the first crew. Herb Kane was the captain of *Hōkūleʻa* when the canoe swamped on a training sail from Kauaʻi to Oʻahu. Kane was criticized for the incident and began to distance himself from the project. Kane would soon refuse to set foot on the canoe; therefore, he was not on the first voyage. In telling the story of *Hōkūleʻa* and her first crew, some controversies and dynamics prevented a cohesive and collaborative atmosphere prior to the voyage starting.

Finney recruited men that were known watermen to complete the crew. Sam Kalalau was a fisherman from Maui. He was knowledgeable at understanding the ocean swells and an expert at steering the canoe. He became the lead steersman for the maiden voyage. The Niʻihau crew member was Kawika Kapahulehua. He was an experienced sailor and noted waterman. He became the captain for the first voyage. Dukie Kuahulu, a Waikiki beachboy who taught hundreds of people to surf on the waves and in canoes, was also recruited. Clifford Ah Mow, a noted waterman who worked for the City and County of Honolulu as a lifeguard in Waikiki, would fit the team perfectly. Buffalo Keaulana, a noted waterman and surfer from Mākaha, would be an ideal crew member because of his physical agility and ability to read the ocean. Boogie Kalama, from Oʻahu, a mason and noted waterman known for his surfing prowess and musical talents, would bring joy to the voyage with his love for music and ability to play the guitar. John Kruse was from Kauai, and he had helped in the overall construction of *Hōkūleʻa* and led in fastening together the two hulls. Herb Kane grew to know John very well and enjoyed having him onboard as an asset to the crew. Billy Richards, a canoe paddler, was recruited in Hilo due to his physical abilities, and Shorty Bertelmann, from Hawaiʻi Island, would become an apprentice under Mau on the first voyage. Finney also wanted a Tahitian contingent and recruited Rodo Williams, a well-known waterman and fisherman from Tahiti, as a crew member.

The Historic Voyage

On May 01, 1976, *Hōkūleʻa* departed Honolua Bay on Maui for the maiden voyage to Tahiti. The navigation became the focal point of the journey, and once on their way, the experiment would begin. Piailug and Lewis would follow the four starlines used today as a newer concept and a way to organize the stars, developed in the 1990s. *Hōkūleʻa* arrived in Tahiti thirty-four days later to a crowd of over seventeen thousand people. This event attracted people from all over Tahiti and beyond. "Hōkūleʻa sailed the longest Pacific sea route between two major island groups. An official holiday was proclaimed in Tahiti, and three days of festivities and parties took place when the Hōkūleʻa arrived there" (Piianaia 39).

After a successful voyage, Finney dedicated the research and voyage to the people of Hawaiʻi. Finney realized the value in education and wanted the children in Hawaiʻi to use *Hōkūleʻa* as a "floating classroom" (Piianaia 40). The voyage motivated people to be creative, and music became the vehicle to talk about culture, exploration, and ancestry. That same year, Hawaiian musicians created and produced over two hundred songs about *Hōkūleʻa* solely for the canoe, her crew, and the Hawaiian people. More importantly, the *Hōkūleʻa* crew created a space and dialogue for Native Hawaiians to be included in their own agency.

Hōkūleʻa played a big role in the revival of the Hawaiian culture for many reasons. The impact of the voyage was proof that ancient Hawaiians knew how to sail voyaging canoes over great lengths of the ocean and were experts in celestial navigation. This voyage would change the minds of many that questioned Indigenous knowledge and celestial navigation as a viable science by demonstrating how it worked on a voyaging canoe. The voyage's success rejects the hypothesis of Sharp and Heyerdahl and is another form of validation that highlights *ʻike Hawaiʻi* (Hawaiian knowledge). The voyage introduced new ways of thinking and new ways of knowing.

It brought back a tradition that was long gone since the twelfth century but started a voyaging movement that allowed the Hawaiian population to be proud of a revitalization of traditional wayfinding practices. The voyage also created a space for Hawaiians to be proud of who they are and motivated to become conscious of their ancestral beginnings and traditions.

Hōkūleʻa became a diplomatic double-hull canoe with no political agenda but exists today as an example of agency for the Hawaiian people. *Hōkūleʻa* does not see the race or color of a person and does not get involved in anything that does not foster a collaborative and positive relationship. These diplomatic ties are good examples to demonstrate that, through these ideals, there is another way of navigating the politics of today. A good example of this is to look back in time at King Kalakāua as he was the first monarch and Hawaiian to "circumnavigate the world on a yacht" (The Hawaiian Gazette 1881). The second person to do so in the Hawaiian Kingdom was Colonel Curtis Piehu Iaukea (www.waikikiyachtclub.com/sailing), my great great grandfather. To go back in history and realize that our ancestors sailed around the world in a diplomatic style is to find that we can also do so with confidence today. An example of this history is seen in the Trans-Pacific Yacht Race (transpacys.com) that starts in Long Beach, California and finishes in Waikīkī, Hawaiʻi. This race was originally started in 1891 by King Kalakāua through an invitation from Colonel Curtis Piehu Iaukea (www.waikikiyachtclub.com) (*Illustration* 3.2). This race continues today and is the longest yacht race in Hawaiian, American, and international history. *Hōkūleʻa* helps us connect to that history and use it to find confidence in what we can do today, guided by the examples from the past.

Leading to the Future

This voyage represented pride in Hawaiian culture and a need to know our history with ancestral connections. This voyage also showed the cyclical relationship and connection that we have

with the environment and ocean. More importantly, the voyage of *Hōkūleʻa* helped to remind us that ocean voyaging is in our DNA. It was how our ancestors discovered Hawaiʻi and eventually settled in these islands. The only way to reconceptualize who we are today is to know who we were yesterday by understanding our history.

What came out of this voyage was a deeper understanding of knowledge obtained through research and literature. Finney used qualitative research methods and demonstrated that he was able to use not only tangible forms of science but also intangible elements of native science. In essence, he went back in time, some eight hundred years prior, in order to move forward to the present day.

Creating a crew list that represented many demographics and ethnicities helped to bring countries and, more importantly, their people together. Two examples showed this type of relationship immediately after the successful 1976 voyage. The first example was seen with Governor Peter Tali Coleman of American Samoa and his letter to Hawaiʻi's government officials to congratulate them on the voyage's success. The second example came from the Federated States of Micronesia in Yap, where the government proclaimed June 04, 1976, the day that *Hōkūleʻa* sailed into Papeete, as an official holiday.

Since the maiden voyage in 1976, *Hōkūleʻa* has sailed throughout the Pacific with numerous voyages to Tahiti. In 1977, the crew aimed to "understand the Kealaikahiki pathway and experimented on a four-day sail called the Kealaikahiki Project" (Piianaia 1980, 4). The goal was to understand the best practice of leaving Hawaiian waters by following legends. Piianaia saw the project as unsuccessful but learned valuable lessons in understanding the North Star and the Southern Cross. In 1978, *Hōkūleʻa* was to embark on a voyage to Tahiti with Nainoa Thompson as the navigator. Within hours of leaving Oʻahu, *Hōkūleʻa* developed a leak in one of

the hulls and eventually capsized eleven miles off of Lanaʻi. Fellow crew member Eddie Aikau searched for help as he attempted to paddle on a surfboard for the island of Lanaʻi. The crew would be rescued by the U.S. Coast Guard Cutter, *Cape Corwin*. Below is a description by crew member Kikili Hugho as he was interviewed by Jan Tenbruggencate of the Honolulu Advertiser:

> We were like hours away from losing people. Hypothermia, exposure, exhaustion. When [Eddie] paddled away, I really thought he was going to make it, and we weren't. That's how bad it was, that we were doomed (*Honolulu Advertiser* 2008).
>
> At 3:30 pm, a ship passed but did not see the overturned canoe. That night, however, at about 8:47 pm, flares from the canoe were spotted by the last Hawaiian Airlines flight from Kona. The plane circled overhead and flashed its landing lights, then reported the sighting to the U.S. Coast Guard. Hugho told Tenbruggencate:
>
> We were close to dying out there. At 7:15 or 7:30 [pm], we started looking at the Kona direction for the last flight coming out of Kona. The flight left Kona slightly late, and the pilot altered the flight path to compensate. It was a miracle find, a miracle rescue.
>
> Based on the pilot's report, the Coast Guard dispatched a helicopter, which found the overturned canoe at 9:27 pm, at 20° 53.5 N, 157° 36' W – about 30 miles south of Makapuʻu on Oʻahu, 23 miles southwest of La'au Point on Moloka'i and 35 miles west of Keanapapa Point on Lana'i. It was reported that all crew members except Eddie were still with the canoe. The Coast Guard launched a search and rescue effort immediately, joined later by the Civil Air Patrol, private boats, and a civilian helicopter hired by the Aikau family (archive.hokulea.com/holokai/1978/voyage_cancelled.html).

Eddie Aikau would never be found and, till today, is presumed lost at sea. Thompson continued to learn the skies and shortly before the 1980 voyage figured out the Southern Cross as a latitude clue for Hawaiʻi. In 1980, *Hōkūleʻa* would successfully sail to Tahiti. Nainoa Thompson would become the "first Hawaiian to navigate using traditional skills" (archive.hokulea.com). A two-year voyage in 1985–1987 called the "Voyage of Rediscovery'' (archive.hokulea.com/holokai/1985_1987) finds *Hōkūleʻa* sailing to Tahiti, Aitutaki in the Cook Islands, Aotearoa/New Zealand, Nukuʻaloha in Tonga, Ofu Island in American Samoa,

Rarotonga in the Cook Islands, Tahiti, Rangiroa, and back to Hawai‘i. In 1992, *Hōkūle‘a* sailed to Tahiti, Rarotonga in the Cook Islands, back to Tahiti, and back to Hawai‘i. The voyage was called “No Nā Mamo’’ (For the Children), and the purpose for the voyage was to participate in the Festival of the Pacific Arts, as well as “train new voyagers” (Kawaharada 1992). In 1995, Makali‘i and Hawai‘i Loa accompanied *Hōkūle‘a* as all three sailed to Tahiti for an important “ceremony in Raiatea at the Marae called Taputapuatea” (Finney 1999, 1). This voyage was called “Nā ‘Ohana Holo Moana’’ (The Voyaging Families of the Vast Ocean) (Low 2000). This was a significant event as the ceremony lifted a six-century ban on voyaging canoes entering Raiatea. The three Hawai‘i wa‘a were joined by two wa‘a from Rarotonga and one wa‘a from Aotearoa. One significant aspect of this voyage was they did intense navigation training, and someone from their islands navigated each wa‘a. The canoes would have a staggered departure from Nuku Hiva in Marquesas, and all would successfully arrive in Hawai‘i. In the same year of 1995, *Hōkūle‘a* and *Hawai‘i Loa* were shipped on the Matson barge to Seattle. The canoes would then sail from Seattle in Washington to Vancouver in British Columbia. The two canoes separated, and as *Hawai‘i Loa* sailed to Alaska, *Hōkūle‘a* sailed back to the U.S. Continent passing Portland, Oregon to San Diego, California. From California, *Hawai‘i Loa* was shipped from Juneau to Seattle to Hawai‘i and *Hōkūle‘a* sailed back to Hawai‘i.

In 1999, *Hōkūle‘a* sailed to Rapa Nui and completed a milestone in reaching the three corners of the Polynesian triangle in a voyage called “Closing the Triangle” (archive.hokulea.com/rapanui). In 2003, *Hōkūle‘a* sailed to Papahānaumokuākea to highlight stewardship of the area. In 2004, the canoe would sail to Nihoa Island, Tern Island, French Frigate Shoals, Laysan Island, Lisianski Island, Pearl Island, Hermes Atoll, Green Island, Kure Atoll, and Midway Atoll. In 2007, five of the crew members that sailed on the first and second

voyages to Tahiti, sailed to Micronesia to become initiated into Pwo by Mau Piailug. In the same year, *Hōkūleʻa* sailed to Japan. In 2007, the voyage called "One Ocean, One People" would sail the canoe to Micronesia with stops in the Marshall Islands in the Federated States of Micronesia, Pohnpei in Chuuk, Chuuk in Satawal, Woleai Atoll, Ulithi Atoll, Yap Island, Colonia, Palau. The voyage finished with a sail to Japan where the crew visited Okinawa, Oshima, Uwajima, and Yokohama. Up until 2007, *Hōkūleʻa* had sailed over 63,000 nautical miles.

The next voyage aimed at training young navigators, emphasizing the perpetuation of voyaging traditions in learning the knowledge and skill. The voyage would be called "Mālama Hōnua Worldwide Voyage'' (Care for Island Earth), and the logistics of the voyage would take five years to plan (glispa.org). The logistic plan saw *Hōkūleʻa* sail to 150 ports, 18 nations, and eight UNESCO marine world heritage sites (www.hokulea.com). The total number of crew members would total 245 people, and they would come from all of the Hawaiian Islands, parts of the Continental U.S., Tahiti, American Samoa, Tonga, Aotearoa/New Zealand, Rapa Nui, Alaska and Japan. A guiding question that led the voyage forward would be, "What do you do to Mālama the World?" or in Hawaiʻi, the question was "What do you do to Mālama Hawaiʻi?" Many hands went into planning this voyage, and by the time *Hōkūleʻa* set sail on the second year of the voyage, there would be thousands of volunteers helping to support the journey. The ʻōlelo noʻeau #142, speaks of this dynamic in saying "'Aʻohe hana nui ke aluʻia (No task is too big when done together by all)" (Pukui 1983). This philosophy believes it takes a community to be successful and is the foundation on a voyaging canoe that emphasizes the connections between people and community.

Mālama Hōnua Worldwide Voyage

The first year of this voyage was for *Hōkūleʻa* to sail around the Hawaiian Islands and focus on the Hawaiian people and culture. Ben Finney's "classroom on the water" in 1976 would continue forty-two years later with different crew members navigating the waters for the future. The focus was to see what the people of Hawaiʻi were doing to mālama Hawaiʻi. Learning journeys were created for community engagement. The learning journeys were designed for the crew to go to historical and/or cultural properties to learn their stories. The latter part of the visit would be for the crew to give back to the organization by helping to clear shrubbery and bushes, clean fish ponds, plant ʻuila (sweet potato), or plant seedlings for the greater community. The information learned from each visit would be described in a blog and uploaded to www.hokulea.com so the rest of Hawaiʻi and the world could see the many businesses that were innovative and focused on aloha ʻāina practices in Hawaiʻi. The voyage highlighted the rationale that in order to take care of the world, you first have to take care of your community, family, and ultimately yourself.

The crew on Hōkūleʻa left Sand Island, Oʻahu and sailed to Hawaiʻi Island to start the voyage. While on Hawaiʻi Island, the crew of ten sailed to a couple of ports and greeted the waʻa community there. There was not a big turnout but what stood out was that cultural practitioners would come to the canoe to exchange cultural protocols between themselves and the crew. A week later, Hōkūleʻa sailed to Maui for the next couple of months. The leadership thought that because I was born and raised on Maui that I would know where to go and who to talk to for the learning journeys. They were right. I was chosen to be a crewmember for the next few legs because of this reason. I joined the crew that was made up of two navigators, Nainoa Thompson and Bruce Blankenfeld; two captains, Kaiulani Murphy and Kealoha Hoe;

crewmember and cook, Matt Kanemoto; Director of Education, Jenna Ishii and UH Manoa professor Tara O'Neill; escort boat crew and kupuna keiki members, Haunani Kane, Moani Heimuli, and others; crewmembers from the Maui voyaging canoe, Timi Gilliom and Kalā Baybayan Tanaka; and members from the 'Oiwi tv crew, Scott Kanda and others.

I grew up in the 1970's and belong to a family that was/is involved in Hawaiian activism. I looked to visit my uncles and aunties that were all part of my life since childhood that were members of PKO, those who fought in Honokahua as iwi kūpuna were rounded up in order to make space for the Ritz Carlton Hotel, and the 1976 crewmembers and family. These Hawaiian community members would later in life become leaders in our community on Maui and for Hawai'i. I was given the task to find those leaders and to interview them for our website on Hokulea.com. Therefore, I interviewed Uncle Les Kuloloio, Uncle Snake Ah Hee, Uncle Charlie Lindsey, Uncle Kimokeo Kapuhulehua, and Alika Atay. I was honored to tell Maui's story.

Learning Journeys

The organizations in the communities were seen as examples of how to live sustainably by the different initiatives taken to reach their end goal of mālama hōnua. The first week in Maui, we ventured out to fourteen sites for the exchange. This experience was called "Learning Journeys". Below is a description of the places that we visited.

Waihe'e Coastal Dunes & Wetlands Refuge

Associate Executive Director of Conservation Scott Fisher, Ph.D., was interviewed to discuss the wildlife habitat that spans two hundred and seventy-seven acres (*Illustration* 3.1). There is a history that spans generations and centuries leading to the times between 1464 and 1813 in which two thriving Hawaiian fishing villages called Kapoho and Kapokea existed. In the eighteenth century, this land was connected to the Battle of Kepaniwai when Kamehameha and

his troops snuck across the ocean from Hawaiʻi Island and landed on these shores to attack the troops of Kalanikūpule.

Today, this area continues to be known for fishing, as the shoreline offers one of the largest and widest reefs on Maui. The grooves in and out of the shoreline house the endangered Hawaiian monk seals and protect green sea turtles. The land is home to two species of endangered birds, aeʻo (stilt), ʻalae keʻokeʻo (coot), and six endangered plants: naupaka, ʻulei, ʻakia, ʻaʻaliʻi, pohinahina, and loulu. The refuge takes pride in its history and maintains the land and environment so that the public can visit, walk around, and learn from its history. We helped the volunteers clear the shrubbery on the pathway that leads to a three-mile path, and we finished an outside shower for community groups. My blog (*Appendix* 3.1) highlights the refuge as a space where community members can gather and learn the initiatives taken to restore the land, take care of the shoreline, and teach the community the history of that space.

Hui Mālama Learning Center

The Hui Mālama Learning Center is a non-profit organization that assists Maui County in many ways. This organization showcased their seedling program in which the parents and volunteers plant the seedlings during the summer months. By the time school starts in the fall, the seedlings are ready to be planted in gardens by students at certain schools. The students maintain the garden of vegetables throughout the school year and use the crops from their garden as their school lunch. Fourteen schools in Maui County (Maui, Lanaʻi, Molokaʻi) have signed up for this program. As a crew, we visited their site in Kula and helped Alika Atay and others with the planting of 1,000 seedlings. These seedlings were a mixture of lettuce, sprouts, carrots, eggplants, and sweet potatoes. This program teaches students about sustainability, farming

practices, landscape issues, weather, and moon cycles. This lesson also teaches the traditional concept that practices taking care of the land and the land will take care of the people in return.

Maui Ocean Center

This center is concerned with the marine life surrounding Maui. This is a good example of educating the masses about the ecosystem around Maui and protecting and taking care of the living species within. My blog (*Appendix* 3.2) focused on the contaminated water in the ocean, distressed animals, and the release of animals back into the wild.

Visit with Uncle Leslie Kuloloio

Reaching out to our kūpuna was very important in this first year of the voyage. The kūpuna have the foundation and the grounding that is needed for the younger generations. My blog on Uncle Les Kuloloio (*Illustration* 3.2) explains the traditions that greeted us. Perpetuation of culture was the focal point as the kūpuna discussed with us the kuleana in sailing on *Hōkūleʻa* (*Appendix* 3.3).

Visit with Uncle Chuck Lindsey

Uncle Chuck Lindsey comes from a voyaging family in Lahaina, Maui, and gave his time freely to us as he talked about building canoes, the 1976 voyage and his role in helping the crew to prepare for the 1976 voyage, and the importance of ancestral knowledge. The importance of our meeting with him was to talk about traditional wayfinding and canoe-building. This meeting showed that there are many pockets in our community with knowledge. They will not be the families and/or people that are coming forward to speak in front of the camera or microphone but rather they are the people and/or families that have become the pillars of our community by continuing their skills and giving their knowledge freely to those who happen to come across their path.

Visiting Uncle Kimokeo Kapahulehua and the Koʻieʻie Fishpond

This ancient fishpond is estimated to have been built around the thirteenth century and used to produce fish for the ahupuaʻa it sits in. Today, the ahupuaʻa is situated in Kihei. Koʻieʻie Fishpond LLC welcomes students and community members to their shores to teach them about the importance of a fishpond. The students and community have volunteered thousands of hours to refurbish this fishpond by restoring the rock wall, building a makaha or a traditional wooden sluice gate, and understanding the traditional knowledge that goes into maintaining a fishpond. This fishpond is also used to teach history as popular members of the Aliʻi family would meet on these grounds to discuss the business of their lands. Kimokeo Kapahulehua is a well-known Hawaiian practitioner and activist on Maui. He is also the son of Kawika Kapahulehua from the 1976 first crew on *Hōkūleʻa* to Tahiti. He is the director of the Koʻieʻie Fishpond in Kihei and allowed us to help restore the rock wall in the fishpond. This activity allowed us to come together as a crew by working in the fishpond (*Illustration* 3.3). The boulders were heavy; therefore, we needed to implement the Hawaiian saying of *laulima* (many hands) and *lokahi* (all together).

Visit Moʻokiha o Piʻilani Voyaging Canoe & Crew

Visiting crew members of the Maui Voyaging Canoe was a pleasant gathering as we traded voyaging stories and compared which tool and/or sails worked best in certain waters (*Illustration* 3.4). This gathering was significant because it strengthened our waʻa ʻohana in Hawaiʻi, which allowed a few of their crew members to sail on the Mālama Hōnua Worldwide Voyage.

Hawaiian Islands Humpback Whale National Marine Sanctuary

The crew went to give a presentation of the Worldwide Voyage to the community in Kihei. It was a time to share information about the international journey and answer questions from the community. My blog (*Appendix* 3.4) focused on explaining what life on board *Hōkūleʻa* was like.

Kanaha Beach Fisheries

The fisheries set up a beach clean-up for us at Kanaha Beach Park to bring awareness of clean beaches, the harm of plastics in marine life, and community collaborations. The crew helped clean the rubbish on the beach as a way to give back to the community in helping to make their beaches clean.

Maui Ocean Vodka Farm

We visited the Maui Vodka Farm to see how the staff produced organic vodka (*Illustration* 3.5). The lessons learned showed how the community could be sustainable and creative at the same time. The staff appreciated our vision to mālama hōnua and donated two acres of their land to growing ʻuala (sweet potato) for the voyage. During the second year of the voyage that saw us travel in international waters, the staff would take care of the crop, and through the support from Matson Shiplines, they would send the crew ʻuala so that the crew could eat a locally grown organic starch. They were a good example of community support, and when others believe in what you are doing, they will help in any way they can.

Mālama Hōnua Worldwide Voyage Logistics

It was important to explain the four-year voyage to the community to support the journey (*Appendix 3*.5). The philosophy for the voyage was that the voyage could not be successful

without the community behind it. Therefore, each year was explained in detail as to the logistics and the agenda (*Illustration* 3.6).

Talk Story with Uncle Snake Ah Hee

It was important to interview veteran sailors from the original crew. Uncle Snake had been on all but one voyage between Hawai‘i and Tahiti; therefore, the leadership thought he should be highlighted in the blogs (*Illustration* 3.7). Uncle Snake comes from Maui and is a local hero in the community because of his waterman skills and expertise, and therefore his journey over the years was highlighted (*Appendix* 3.6).

Caring for the Earth: A Canoe as Our Classroom

Education became a popular subject while on Maui, and it was important to explain the philosophy behind the Worldwide Voyage (*Illustration* 3.8). The philosophy touched upon the need to include traditions in a curriculum and how this vision would work while the canoe is sailing around the world (*Appendix* 3.7).

Maui Cultural Lands

A visit with Ekolu Lindsey and family highlighted the value of preserving the Hawaiian culture through planting and harvesting kalo. The community is invited to learn the mo‘olelo that comes with the practices and, in the end, learns the value of Hawaiian knowledge in farming practices.

Creating a Voyaging-based Curriculum

The voyaging-based curriculum would start immediately as many community members would bring their children, and schools of children would gather at the canoe. Within the first week, schools of children would visit *Hōkūle‘a* and her crew, and the need was to have crew members teach voyaging skills. I was given the task of creating a curriculum so that the canoe could be an educational tool. Within the first week of greeting students and community, other crewmembers

would join us as we would need more crew to go on learning journey's and help me with the educational stations at the dockside. Below is a short description of the seven stations in the curriculum that I created and the starting point to the culture-based curriculum for the Mālama Hōnua Worldwide Voyage.

Tour on Hōkūleʻa

For the first time in the history of the Polynesian Voyaging Society, the public was allowed to tour *Hōkūleʻa*. Per Nainoa Thompson, up until 2014, the public was not allowed on board before a voyage as the canoe was seen as kapu (sacred), and that would be a time for the crew. The Worldwide Voyage changed this dynamic by allowing the communities to come on board to learn how voyaging is done and see where crew members sleep and work (*Illustration* 3.9). This dynamic follows the philosophy that the crew can only be successful with the community's support; therefore, they should be allowed to come on board and learn from crew members how the traditional skill of wayfinding is acquired. The hours for groups and schools to visit were set each day from 8 a.m. to 5 p.m. Tours were given by crew members, and presentations were given by captains and navigators. Within the first week, we had over two thousand people come to visit the canoe and crew.

This part of the curriculum (*Appendix* 3.8) did two things: one, it taught the younger generation about the parts of the canoe and the history that it is connected to, and two, the canoe brought out raw emotions for the adults and for some of them it was the first time they spoke about their true feelings on how they were affected by the intergenerational trauma of the illegal overthrow. This part of the curriculum showed how a native culture repressed their feelings for so long and that an object, such as a canoe, could bring out emotions. The majority of the

classroom and dockside curricula started on Maui and would become the model for the next three years on this voyage.

Mālama Hōnua Worldwide Voyage Logistics

This station showcased a large map of the world and outlined the course that *Hōkūleʻa* would sail (*Illustration* 3.10). After the first year, the canoe sailed in international waters to twenty-eight countries and sixty-two ports over a three-year duration. This station was important because it broke down the voyage into stages and themes thereby, including the community in our logistics. Each leg of the voyage would last up to four weeks. Three weeks at sea and one week preparing the canoe for the next leg and crew. A crew would be selected on various legs of the voyage and usually consisted of twelve crew members. The crew would come and go and swap out with the next crew of twelve crew members a month later. For the most part, each crew member stayed with the same captain that they trained with as a safety precaution. By the second year of the voyage, additional crew members would be added to the roster because journalists and TV crews wanted to document the voyage.

Each port the crew sailed to focused on having a cultural exchange between Hawaiʻi and the native peoples from each location. This dynamic would mostly be seen within the first and second years of the voyage only because the canoe was sailing in Hawaiʻi and the Pacific, where similar cultures actively practiced traditions. Along with a welcoming ceremony, there would also be a departing ceremony emphasizing traditions, language, and protocols. NOAA would help connect Hawaiʻi classrooms to the canoe and the crew members to their families (*Illustration* 3.11). This would prove to be a valuable source because NOAA became the eyes of the voyage as *Hōkūleʻa* sailed around the world. The leadership wanted the students in Hawaiʻi classrooms to follow the canoe and occasionally call the crew to ask questions. This would be

all part of the educational journey for Hawai‘i students as they could ask any question to any crew member. This meant that if they wanted to know what starline and/or constellation the navigator was following, they could ask to speak to the navigator, and he or she could answer those questions. This encompassing schedule would prove to be very engaging for the students, which would then foster an environment of learning that the students could connect to. The curriculum (*Appendix* 3.8) would highlight these countries and discuss the similarities and differences between them and the children in Hawai‘i. The fine point discussed the native people, their language, cosmological belief system, and similarities to the Hawaiian population.

The second year focused on international waters, and *Hōkūle‘a* sailed throughout Polynesia and connected to other Oceanic countries with shared cosmology, genealogy, and languages. It was to show other native peoples that we are similar and together we can be a force in identity and agency. The most important focus on this second year was to highlight sea level rise secondary to climate change. The countries in Oceania are the most affected by climate change, with a few of the island nations being the first to go underwater due to an increase in CO_2 and heating of the environment from other countries and the world.

The third year would be the first time in the history of PVS that *Hōkūle‘a* would sail outside of the Pacific Ocean. The route would take the canoe into the Indian Ocean and to the Atlantic Ocean. The focus in the third year was to be on transnational relationships. The idea was that if we could be diplomatic and worldly today, it could take us back in history to our ancestors who traveled the world and interacted with other countries at a high level. It was also an example that we can come from different countries and still be able to sit down at the table and discuss solutions that can benefit both sides. These lessons are needed today on a macro level.

The fourth year would be about making our way home. It would also be about the older sailors and leadership stepping down and allowing the younger navigators in training to take over. This would be a metaphor for the elders teaching the young the skills to perpetuate the culture.

Hawaiian Star Compass

The Hawaiian Star Compass was taught to students as a way to show the connection between man and the environment (*Illustration* 3.12). This station allowed the students to see that nature offered everything we needed to put together for the compass. This lesson (*Appendix* 3.10) showed that we did not have to go to the store to purchase things but rather use what nature gives us. This philosophy became a lesson in sustainability and opened up a space that allowed the teachers and students to look around their surroundings and work with what they had. This curriculum is also connected to math, as calculations are needed to understand the compass.

Winds & Directional Points

The winds on Maui blow in all directions, and therefore, I put together a station (*Appendix* 3.11) to understand those directions. I used a chopstick and glued a feather to the top. The feather would blow in the direction of the wind. This allowed the students to ask many questions about the direction of winds (*Illustration* 3.13), mountain and terrain effects, and how to shift and follow the wind directions. This station also brought forth the Hawaiian names and descriptions for these winds, connecting the students to the area through the oral history of wind names.

Knots

The knots station is designed to teach the bowline knot, clove hitch, and cleat hitch knot (*Illustration* 3.14). *Hōkūleʻa* has no screws to join the double-hull canoe together and instead is tied together with five miles of line. Therefore, tying a knot becomes a safety issue when you

are out at sea. As crew members, we practice tying knots all of the time. To set up this station (*Appendix* 3.12), I put together a wooden plank with a post attached to the top and used this tool for a game between the students. The students would race to see who could tie the knot the fastest. For the younger students, this exercise helped with hand-to-eye coordination skills, and for the older students, they also learned about safety techniques and how a knot could save a life.

Water Quality

The water quality station (*Illustration* 3.15) was suggested because the crew members and I showed concern about what was in the water. On the second day in Maʻalaea Harbor, some of our crew members went for a swim at the beach next door. We left the water in a hurry because we felt something bite at our skin. Upon reaching the beach and looking at our skin, we found little red dots all over us. Our crew had heard that there was an app on the iPhone to look at the water and see if anything was moving in it. This tool became part of the curriculum (*Appendix* 3.13) that very day as it helped to view the clarity of the water.

Peace Flags

Peace flags inspire creativity. The students were asked to draw on a 4x4 material (*Illustration* 3.16). The following were suggestions for them to include on the material: the ahupuaʻa name that their family comes from, their family name, and a message for the crew as we sailed around the world. The idea was to sew the individual peace flags together to form a bigger flag, and when the crew was away from Hawaiʻi, the flag would fly under the Hawaiian flag. This was a way to make them proud to see their name in a country they had never been to and ultimately feel like they were part of the crew. This section of the curriculum (*Appendix* 3.14) emphasized the students' artistic and creative skills.

Crew Sail to Kahoʻolawe

We had spent a month on Maui teaching, presenting, working, and it was now our time to find solace and sail to Kahoʻolawe for traditional ceremonies and crew bonding. As a crew, we slept at Archie Kalepa and Snake Ah Hee's house in Lahaina, a few hundred yards away from where our canoe was anchored. We woke up at 4 a.m. to have breakfast and then headed down to the boat ramp to get on the escort boat that would take us to our canoe, *Hōkūleʻa*. The next few days would be for crew only. It would be a time to reflect, a time to feel, and a time to kilo (observe). As we arrived on the dock in Lahaina, awaiting our escort boat, we were met by Shorty Bertelmann and Snake Ah Hee. They would join us on our trip to the navigational platforms on Kahoʻolawe. This would be Bertelmann's first time on the island as the 1976 voyage did not include Kahoʻolawe in the departing ceremonies and a treat for us to sail with two living legends.

The escort boat dropped us off on *Hōkūleʻa*, as she was anchored a couple of hundred yards from the shoreline. We started off slow because the winds had died down. The winds would eventually pick up, and we sailed on a path that led us to the southern part of Kahoʻolawe called Kealaikahiki. Uncle Shorty, as everyone calls him, asked me if I would steer *Hōkūleʻa* to Kahoʻolawe while he would guide me with his knowledge of the directional points that would lead to the island. I felt honored and humbled. I was on the sweep steering the canoe as Uncle Shorty would stand right behind, directing me in what to look for in terms of reference points that would help to steer a straight line en route to Kahoʻolawe. This experience used another worldview that focused on ocean pathways, wind currents, and directional points from three neighboring islands to guide sailing to our destination.

Halfway there, we started noticing fishing boats stopping to look at us. We did not think much of it until a line of boats, spaced out over the ocean, had stopped and made a path for our

canoe to sail through. Each boat had turned in to us and raised their Hawaiian flag as a sign to say they recognized the significance of the canoe. The crew and fishermen alike all waved at each other as we recognized a special moment.

We finally reached the Kealaikahiki Channel that runs from north to south directly outside of Kahoʻolawe, and we followed the channel to the end of the island (Pukui, Elbert, and Mookini 10), where Uncle Shorty helped me navigate and steer south west of the island. He directed me around the point by referencing the mountain tops to follow to get to our final destination. The entire route, Uncle Shorty was very calm and gave me his confidence that I could steer us to where we needed to go. It is this connection in voyaging that allows us to trust each other as we work as a team and interact for the good of the overall community on board. These lessons carry us back to land, where interactions with one another are mindful and supportive.

We reached Honokanaiʻo and were greeted by the KIRC team that was there to help us unload and get to shore safely. We had the ʻoiwi television crew with us to film our experience. The plan was for their equipment to come off first via a zodiac tender to film our crew arriving on Kahoʻolawe. Our crew would come off last, so we helped everyone off and waited for our turn to step on to the zodiac. Just as we received the green light to start, the winds picked up, and we could not move. We were all a bit antsy to get to shore, so we tried to move in the wind but could not because the gust was so strong that it rendered us immobile. After a minute or so, the wind had not let up, and in unison, we all started to laugh. We thought it was funny that the wind was not allowing us to move and get off the canoe. A few minutes later, our laughing stopped, and we all became serious. In this moment, we started, one by one, to become conscious that other forces were at play, which had sent us to another realm of consciousness.

We felt them there with us. Our ancestors. It was as though they had been waiting for us. That moment lasted about ten more minutes. No one talked, and when the winds died down, we all looked at each other with tears in our eyes. Some things cannot be explained but must rather be felt. It was as though that moment took us to another world view in which intangible perceptions and/or what we call kaona take place and can be felt in our naʻau. That moment would set the tone for the rest of our time spent on Kahoʻolawe as now our senses were on alert.

We as the crew felt that the younger generation needed to experience this feeling, and there was no better way to experience it than on a voyaging canoe. This sail was important for us because it allowed us to practice our traditions and recognize our ancestral philosophies. I tell this story because it has everything to do with the curriculum created during our time on Maui. As teachers, we cannot teach a subject that we do not know anything about; therefore, we cannot teach how to be a Hawaiian if we do not practice our traditions and philosophies. However, on Kahoʻolawe, the teacher becomes the student once again.

A Grassroots Voyaging-based Curriculum

In the first year of the voyage, the mission was to find out what our communities were doing to Mālama Hōnua and relay that to the world through the www.hokulea.com web page. However, what we found was beyond all imagination. Within the first year, the voyaging sail plan saw the crew sail from Oʻahu to Hawaiʻi Island, Maui, Kahoʻolawe, Maui, Lanaʻi, Molokaʻi, Hawaiʻi Island, Kauaʻi, Nihoa, Kauaʻi, and Oʻahu. During these months, there was a list of all the visitors and schools that visited the canoe. The crew saw over one hundred and two thousand people, with about seventy-one thousand of that number consisting of students ranging from grades K-12. Every type of school came to visit *Hōkūleʻa* and the crew, ranging from public schools, private schools, Hawaiian immersion schools, and Hawaiian and non-Hawaiian charter

schools. The crew spent a lot of time in Maui County (Maui, Lanaʻi, Molokaʻi, and Kahoʻolawe), where the communities became invested in the mission of Mālama Hōnua and were active collaborators. The lessons practiced and learned on Maui became the foundation for the voyaging curriculum that was used throughout the entire four-year voyage. I had many roles throughout this voyage that included educator, safety officer, and medical officer. I was not only a crewmember on the first year of the voyage in Hawaiʻi but was chosen as a crewmember for the international legs, also.

The teachers and parents had begun inquiring during the first couple of weeks on Maui if the curriculum could continue as Hōkūleʻa sailed around the world. There was a desire and a need to have the local classrooms in Hawaiʻi follow the canoe around the world. During this period, the curriculum became refined over the latter months in the first year and made the accomodations for these classrooms to follow Hōkūleʻa around the world. Three hundred twenty-four classrooms would sign up for the virtual classroom to follow the canoe on the international legs that would see the canoe sail for three years as she and many different crew members would sail the world. By the end of the first year, the curriculum would have many areas to focus on, and all were associated with voyaging skills and philosophy. The usual communication between crew and their families in the past occurred with the support from the National Oceanic and Atmospheric Administration (NOAA) as they have been involved in allowing the use of their satellite for communications purposes since the 1976 voyage. NOAA heard the need for the classrooms to be connected to *Hōkūleʻa* and graciously supported that endeavor by allowing classrooms to access the canoe. This meant that a classroom could call a number connected to NOAA, and NOAA would contact *Hōkūleʻa* anywhere in the world and connect the communications to each other.

Collaborations of all sizes, big and small, connected with the canoe and crew. Communities and organizations donated and offered support to fund a curriculum as soon as *Hōkūleʻa* left Hawaiian waters for international waters. Most importantly, the monetary support was estimated to help fund the voyage a "few times over'' and would eventually be called the "Voyage of Education." The curriculum would redefine the voyage and give more focus to the overall voyage. Because the first year was a success, the National Oceanic and Atmospheric Administration (NOAA) volunteered and offered their satellite for the educational platform to be incorporated into the curriculum. As the canoe sailed throughout the world, students were able to reach the crew on *Hōkūleʻa* via the satellite and ask questions pertaining to the voyaging curriculum that they were being taught at that time.

This curriculum became an example of moving beyond the binaries and toward empowering the younger generation in the present and future by building something new through this type of curriculum. The fundamentals that voyaging and education are addressing are drawing in all types of people that have not been drawn in before. This curriculum attracts people for different reasons and liberates the population with what's possible now. This, in itself, is more powerful than a political status because it is grassroots. By understanding voyaging through education, the agency involved leads to a sense of liberation within the self that allows for the deeper knowledge of the Hawaiian culture and a better sense of Hawaiian identity. The shift in this decolonial process is looking toward education and implementing a cultural-based curriculum as a way to incorporate a Hawaiian philosophy.

Conclusion

This Hawaiian movement is also an example of acknowledging the powerful colonial system that endures while, at the same time, reconceptualizing a future with native agency and native

empowerment as central movers. The story of *Hōkūleʻa* moves from the margins to the center as negotiating pathways of knowledge were reclaimed, are being reasserted, and are reconceptualized and reinvigorating in modern times for Hawaiian identity. What we found from the first year of the voyage was that our communities across the State of Hawaiʻi were thriving. The Hawaiian language is spoken in certain areas/communities. This dynamic brought out the many stories from the crew and community members as we watched the students speak in the Hawaiian language. In discussing these issues and realizations, we noticed that many adults would either have tears in their eyes and/or would be crying in telling their story. *Hōkūleʻa* became that safe space to talk about deep-rooted issues that would be suppressed and never talked about until then. This phenomenon highlighted the generational trauma found in many Hawaiian families today and the need to know that we are not alone in our need to reclaim and reassert our Hawaiian selves, language, and culture. The call to organize a voyage of this magnitude was a monumental feat that could not have been successful without the community engaging and being a part of it from the beginning.

Hawaiian traditions and skills are being practiced and perpetuated to the younger generations. The majority of the schools would immediately set the tone upon visiting the crew with a traditional oli that asked for permission to enter the crew space and canoe. The protocol for the crew was to oli in return with a reply to come forward and be welcomed. In this space, the realization that protocol is needed upon entering a space was taught to the crew by the students. This practice became the protocol for the crew throughout the Worldwide Voyage. The aloha ʻāina philosophy was a common theme throughout the curriculum because traditions and skills focused on the relationship between man and land. The most important realization was that the Hawaiian culture is thriving in the twenty-first century.

Today, the curriculum continues to be taught in the different school systems of Hawaiʻi (public, private, charter, immersion). In speaking with the teachers, a realization of including traditional knowledge into the curriculum has changed the dynamics in the classroom for the native student. These students who were quiet before the lessons were taught are now the students who are actively discussing problems and looking for solutions. The first year proved that a culture-based curriculum is more appropriate for Hawaiian children than the colonial curriculum seen in schools. It is in these spaces that children who were known to be quiet in class became inquisitive and talkative on the canoe. This, in itself, motivated the teachers to want to teach a curriculum that provokes and drives their students to want to learn.

For the crew, there would be ten student-navigators-in-training to start the voyage. This promotion in skill not only challenged those chosen to rise to the highest level of voyaging but expanded and elevated voyaging to another level. One of the student navigators, Haunani Kane, would be a good example of how the voyage helped to teach students to become navigators. Kane would shadow other navigators at the beginning of the Worldwide Voyage, and in the last year en route home to Hawaiʻi, Kane would navigate three of the legs on her own. The goal to teach future navigators in this voyage was successful and can be used as a floor plan for the next voyage and generation of voyagers.

In education, a voyaging curriculum is being taught in numerous schools. The Department of Education (DOE) offers a voyaging curriculum that connects to the STEM (Science, Technology, Engineering, and Mathematics) curriculum in grades K-12. Private schools that have incorporated the lessons into their curriculum are Kamehameha Schools at all three K-12 campuses (Oʻahu, Maui, Hawaiʻi Island) and Punahou High School. The curriculum can be found on university campuses, such as the University of Hawaiʻi at Mānoa, the University

of Hawai‘i at Hilo, and Community Colleges, such as Kapi‘olani Community College, Leeward Community College, Honolulu Community College, Windward Community College, and Kaua‘i Community College. Organizations that have incorporated the curriculum into their programs are as follows: ‘Imiloa Astronomy Center of Hawai‘i, Manu ‘Imiloa, STEM Institute, Kanehunamoku Voyaging Academy, National Geographic, Pacific American Foundation, and ‘Ulu‘ulu to name a few. The curriculum is flexible, and the instructor can change the lesson to meet the class objective, but the main focus is connecting voyaging traditions to the STEM curriculum for those schools in Hawai‘i. This curriculum is ultimately building upon the curriculum that started in 1992 and continues to build upon that foundation.

The student learning outcomes are seen as what the student has learned and are observable through skills. The voyaging curriculum focuses on gaining knowledge in a few areas: (1) understanding ‘ike Hawai‘i in voyaging practices, (2) learning the skills associated with voyaging and other related subjects, (3) acquiring the ability to distinguish and observe the elements of reference (stars, wind pathways, ocean channels), and (4) demonstrating a knowledge that puts together all aspects of understanding voyaging practices. In this space, a student connects to the Hawaiian foundation through traditions and philosophies that focus on the connection between man and environment, man and ‘aina, and man and sea. The common subjects in the curriculum are Sustainability, Environment, Culture, Literature, Politics, Language, Ocean Circulation, Future, Native Hawaiian Plants, Coral Reef Ecology, Outcomes, Place/Community, Vision, Values, Exploration, Change, Observation, Experience, Education, Sacred Earth, Na‘au, Pacific ‘Ohana, Kūpuna, Health, Children, Stars, Conservation, Multidisciplinary, Plankton, Ancestors, Canoe Plants, Limu, Wind, Mālama, DNA/Origins, Hawaiian Star Compass, Sea Birds, Wa‘a Design/Culture, Ahupua‘a, Compassion, Mo‘olelo,

Wayfinding, Navigation, Sea Paths, and Genealogy. In all of these subjects, a skill is included (such as observing star patterns, understanding moon phases, feeling for wind directions) to reinforce the objective of the curriculum and allow for the skill to be reinforced through physical and observable activity. In assessing the outcomes, a teacher would look for a grasp of the content, possible positive change in attitude, a sense of identity and connection to the culture, and active participation with questions and solutions if needed. Overall, after learning from a voyaging-based curriculum, a student can display the knowledge at a navigational platform and explain the patterns, directions, references, and objectives of the site.

In particular, what this voyage did for Hawaiʻi was to start the Mālama Hōnua Learning Center in Waimanalo. This charter school started with only grades K-2 and in 2017 grew in size to offer classes up to the fourth grade. On the other side of the spectrum, the University of Hawaiʻi at Mānoa Education Department offered a Master of Arts degree. The top private schools in the State of Hawaiʻi, such as the Kamehameha Schools, implemented parts of the voyaging platform to their curriculum. In honor of the 1976 crew and Pinky Thompson, the Kamehameha Schools created the Kaʻiwakiloumoku Hawaiian Culture Center on their campus, which offers a space for the crew to have meetings, for navigators around the world to come, discuss, and plan the future in voyaging, and a place to learn the Hawaiian Star Compass. The building has a Hawaiian Star Compass on the floor and is a great place to spread out and learn the directions and pathways of the stars. Another school that focuses on the lessons learned on the voyage is Punahou School. The curriculum on *Hōkūleʻa* has been implemented in the curriculum that can be found not only in the Hawaiian Studies classrooms but also in the science classrooms, English, and art classes. This support has allowed the curriculum in culture-based education to reach another level. This type of reconnection to ancestral knowledge excites the

younger generation to learn and lifts everyone to a level that sees its native people proud of who they are as Hawaiians.

Finally, navigation has its own story and links well with the island of Kahoʻolawe. For this matter, the Kuhikeʻe Navigational Platform on Kahoʻolawe is perfect for continual education in a voyaging-based curriculum. This is why all schools are invited to Kahoʻolawe to learn from ancient and modern navigational platforms. By doing so, their presence on the island elevates the space and brings more resources to Kahoʻolawe with the focus of honoring the island with one of its intended uses.

This period became more than just finding out what our communities in Hawaiʻi were doing to perpetuate Mālama Hōnua and more about having *Hōkūleʻa* as a space that allows us to talk about who we are as Hawaiians today. In this space, we are liberated. It was about showing our Hawaiian culture and being proud of our ancestors and the skills needed to navigate the world. It was about reasserting Hawaiian history, reclaiming traditional practices through active agency, and showing how Indigenous knowledge can offer possible solutions for modern-day issues, such as climate change and sustainability. In essence, this voyage was about taking over our voyaging agency and taking charge of our ʻike Hawaiʻi (Hawaiian knowledge).

Chapter Four

Reclaiming and Reconceptualizing Navigational Platforms through ʻIke Hawaiʻi

My trip to Kahoʻolawe would start in two weeks, and I was excited to head back to the island for many reasons. A group orientation was required two weeks before the trip for the Protect Kahoʻolawe ʻOhana huakaʻi, and I was excited to meet everyone I would be going with. This meeting held at the Kamehameha Schools Kapalama campus became part of the access to the island because we met the kua (backbone) or guide that would be taking care of us while on the island. Meeting each other for the first time and/or seeing friends that would share this experience with me was exciting. The daily schedule was discussed with a clear understanding of what to expect from each one of us as the leaders went over the safety and bio-security aspects of the trip.

My fieldwork took me to Kahoʻolawe, where I referenced two traditional navigational platforms. I used an array of methodologies to compile a picture of past and present knowledge that was, and is, used for voyaging. I examined literature from the nineteenth and twentieth centuries, numerous archives with collected diaries and excerpts, nineteenth-century Hawaiian-language newspapers, moʻolelo from cosmology, genealogical chants, and mele from the eleventh and thirteenth centuries. I compared this information with resources and sources on the island of Maui, which comes in many oral and written histories, for further connections of knowledge. This work is relevant today as it highlights the importance of ancestral knowledge and focuses on being informed by the past to negotiate the present and the future. This work illustrates Hawaiian knowledge and the depths that a person can go to when placing the Hawaiian culture at the center of the focus.

This chapter highlights the connection between ʻike kūpuna (ancestral knowledge) and a modern-day worldview. I illustrate this dynamic by showcasing a traditional navigational platform called Moaʻulaiki on the island of Kahoʻolawe that was used as a navigational school during the eleventh through thirteenth centuries. I juxtapose a modern-day navigational platform on the opposite end of Kahoʻolawe, called the Kuhikeʻe Navigational Platform, dedicated in 2004. I highlight the macro example of the natural occurrence of a change in culture and the micro example of how navigating over time has been reconceptualized as appropriate for today's standards.

The tools involved in voyaging are a part of a cultural tradition in which intangible perceptions are based on both approaches, objects, and sites are used to negotiate pathways of knowledge. These pathways of knowledge do not come with written descriptions or instructions but rather employ forms of communication that are sensory. By articulating the process of how objects and intangible perceptions are used in voyaging, it is possible to achieve a better understanding of ancestral knowledge. As intangible relations become heightened and reinforced today, this process serves as another form of liberation. To underscore a sense of agency within this tradition, teaching the concepts involved in voyaging to a population by reclaiming and reasserting this type of knowledge in schools is an essential step. I use the sensory perceptions of voyaging and the canoe as ways of negotiating other pathways of knowledge. The canoe, a tangible object, functions as a compass and uses both tangible and intangible Hawaiian star compasses as points of reference via celestial navigation.

Health was an important topic, and anyone going to Kahoʻolawe had to be healthy and prepared for the rugged terrain. Along with these expectations, each person needed to know how to swim and be comfortable in the ocean. The most important aspect of our trip was focused on

traditional protocols as we were given the chants to practice for the access to Kahoʻolawe from the sea and upon exiting Kahoʻolawe on our return to Maui.

The day finally came to fly to Maui to meet everyone that I had met two weeks prior. The night before heading over to Kahoʻolawe, we met at Kahului Harbor at the Hawaiian Canoe Club site to have a meeting on logistics for the next morning. Most of us slept outside in our sleeping bags under the stars, and we slept for about 2–3 hours before leaving on a bus that would take us to the boat ramp. I was on the first boat, and my kua was Emmitt Aluli. We left in the dark of the morning, and an hour and a half later, we were outside the waters of Hakioawa.

A zodiac boat came to take us a couple of hundred yards off the shore of the island. Before jumping in the ocean, we started our protocols with the *Oli Kāhea* (*Illustration* 4.17), and *Mele Komo* (*Illustration 4.*18) were chanted, and we asked for permission to enter before stepping foot on Kahoʻolawe. The Edith Kanakaʻole Foundation wrote both chants for the purpose of entry to Kahoʻolawe. "The following protocol is prescribed for the purpose of requesting permission to pae (land) onto Kanaloa-Kahoʻolawe" (Edith Kanakaʻole Foundation). Upon exiting Kahoʻolawe, we were to chant *Ke Noi ʻAʻama* (*Illustration* 4.19) and *Oli Hoʻokuʻu* (*Illustration* 4.20), requesting for release from the island to be given in a traditional manner to ask for safety back across the waters back to the islands. Ke Noi ʻAʻama was also composed by the Edith Kanakaʻole Foundation for the departure from Kahoʻolawe. "The Hakuʻili, Naʻālapa or delegated representative will release the requesting individual(s) by responding with the Oli Hoʻokuʻu. The protocol is complete at the conclusion of the Oli Hoʻokuʻu" (Edith Kanakaʻole Foundation). For voyagers in training, these two chants are necessary to learn for a traditional protocol that reveres the island as a sacred place. These chants positioned all of us to be focused and in a space that allowed for a spiritual connection between the person and the ʻāina.

Upon getting into the ocean, a *laulima* (many hands) chain formed, and bag by bag was passed down the chain in the ocean to be placed on the shore. My group continued to stay in the ocean until all boats arrived and, as a larger group, helped each other get to shore. We then had to set up our tents, set up the kitchen, and make dinner for the group. One group set up the imu (underground oven) the next day while the other group hiked up to the Ala Loa trail. I was with the group that hiked up to the Ala Loa trail, and we spent our day clearing the Ala Loa trail of debris and placing rocks on the boundaries of the trail so that others knew where to walk and what area was cleared of debris. In the afternoon, Emmitt Aluli and Davianna McGregor took us on a tour of Hakioawa, and by evening, we gathered together to eat, sing, and talk story. The hike up to Moaʻulaiki was the next day, and we all were prepared for that feat. This hike would take us to the navigating platform for my fieldwork, but first, we had to hike there.

Hike to Moaʻulaiki

I woke up at 3:00 a.m. to have time to get myself ready both physically and mentally for the events of the day. I had been thinking about the hike up to the Moaʻulaiki navigational platform for a few months and was aware that this day would be challenging, to say the least. I met with my group for breakfast, where everyone was quiet and preparing themselves for the hike. I was glad to have my committee member there for her support, and she generously let me borrow her walking stick for the day. When it was time to head to the Alaloa Trail, we all walked in silence in the early morning darkness and arrived on the first level up from the shoreline, where we did a pule together, and the leaders gave us words of encouragement. We started our protocols by chanting *E Hō Mai* (*Illustration* 4.21), which places the mind in a sacred space. The next chant was *Nāʻaumākua* (*Illustration* 4.22), which speaks of our ancestors being behind us and in front of us, guiding us forward.

I am not someone that hikes, but rather, I am a person that does water sports and feels more at home in the ocean. This hike was out of my comfort zone and to hike up to 1,100 feet above sea level is something I would never have seen myself doing until now. With all of my history in voyaging, visiting this navigation platform had become a dream of mine. But first I had to climb there. The beginning of the hike was okay as everyone was talking, and our leaders were on a good pace for us. Within the second hour, the talking had died down, and we had all settled in for the hike. An hour and a half into the hike, the sun started to come up. We stopped hiking and met the sun with protocols as we all chanted *E Ala Ē* (*Illustration* 4.23).

We knew that there was a point of no return on this hike and that if we got there, we would have to continue to the top without turning back. For myself, I was glad I had a walking stick, but I was constantly aware of my breathing as I was huffing and puffing up the mountain. We all made it to the no-return spot within two hours, and at that point, we encouraged each other to carry on.

I tell this story because it was not about how tired and exhausted I had become or how highly aware I was of how out of shape I had become in graduate school. But more so, I tell this story because the group that I started out with in the morning had become my family by the end of the hike. When at times, I felt like I could not continue, there was always someone around me encouraging me to go on. After a while, I started seeing more and more of the men staying back to help me. I had completed five marathons before, but this was nothing like that; it was strenuous. As parts of the group carried on, we, the ones behind, would also continue at our own pace. Every once in a while, the faster group would stop and let us catch up to them so that we could take a break together. There was no judgment or negative talk, only encouragement and words of support so that we could all get to the top together. At some point along the trail, one of

the guys pulled out his ukulele and started singing songs that we all knew, both contemporary Hawaiian and Hawaiian music. It got our minds off of the physical pain and helped us get through the steep parts of the hike.

As we traveled higher and higher up the mountain, a feeling came over us that we were connecting to a Hawaiian worldview that became apparent to all. This feeling was the belief in the Hawaiian worldview where people live and work and is called Wao Kanaka, which represents the relationship between man and the ʻāina. The next higher realm is called Wao Akua and signifies the Hawaiian gods. As we had passed the middle point of the hike, it felt as though we were in Wao Akua. My journey to the navigating platform had changed from getting there to being on a journey and in the footsteps of my ancestors. It was a feeling of being protected, recognized, and guided by a force far greater than mankind. I felt a spiritual connection to my ancestors and Akua, and that consciousness allowed me to exist as a Hawaiian in that space without judgment and persecution from others but rather being present in the moment with new friends that felt the same way as I did. It was a moment of clarity.

By the time we had reached the top four and a half hours later, someone was carrying my backpack filled with my fieldwork tools, someone else was carrying my water and was refilling it for me, and someone else was carrying my long-sleeved shirt so that I could cool down with wearing only my tank top. We all had a smile on our faces as we were still singing. In between songs, we had exchanged our life stories and became familiar with one another. But the most memorable part of this hike was, at one point, we started sharing moʻolelo with one another. These stories put us in another place and time. We felt as though the pathway we were on was the pathway of our ancestors, and from that point, we eased into the hike, and our bodies kept moving us forward. The pain was not felt when we had arrived at the top, but more so, it felt as

though we were on a spiritual journey together with our ancestors all around us. We had reached Wao Akua.

After we reached the top of the mountain, we took a small break before venturing up the last steep, short hike to the navigational platform and chair. Once there, we all sat in silence for a while and felt the wind on our faces as we looked out across the Maui channel. An hour later, I took out my fieldwork tools and began my work. After a long break at this location so that I could do my work, we then headed down from the platform and ate lunch together, a few minutes away on the top of Kahoʻolawe. We all had a lot to say, and we were excited about our journey so far. The next step was to walk, on top of Kahoʻolawe, to the highest peak called Moaʻulanui, where we would give hoʻokupu to the Kāne Heiau. At this heiau, we prayed for rain and exchanged moʻolelo of the area and the ocean channels below. Within twenty minutes of praying for rain, we saw the rain clouds come over Kahikinui on Maui and change directions to head over to Kahoʻolawe. It was another spiritual moment as the elements had confirmed our belief system that when you pray to our gods, they will answer. And sure enough, they answered with rain. We made the hike back down to Hakioawa, and ten and a half hours later, we arrived back at base camp, filled with memories that would last a lifetime. But more importantly, filled with the knowledge of kaona that presented itself to us on that day.

I felt a mix of emotions to be there as a Hawaiian but also as an academic. Once at the top, it was easier to understand the Hawaiian worldview through the cyclical relations of the elements of reference through the connections of the Hawaiian gods. The purpose of my story was to take you on my journey to Moaʻulaiki. By the end of my hike, I believed I had walked in the footsteps of my ancestors, and my perspective of the world around me had changed. To make sense of it, I turned to Hawaiian-language newspapers, archival data, oli, and mele to explain

what I was looking at. I spoke with kūpuna and kuaʻāina to listen to their oral accounts that had been passed down generation after generation. I started to see a different picture of how Hawaiians once saw space and time.

Research through Nā Moʻolelo

> A number of chants and legends tell of the later arrival of Tahitian seafarers and celebrate the exploits of a series of chiefs who sailed back and forth between the two centers in the 12th and 13th centuries, as dated by genealogies contained in the traditions. That is why we built our double-canoe Hōkūleʻa – to retrace those legendary two-way voyages (Finney 9).

A big part of Finney's research was placed upon the nā moʻolelo of Moʻikeha and his sons. Finney believed that if he retraced those legends, he would prove two things: (1) Polynesians knew how to sail against the current, and (2) research methodology could make use of Polynesian philosophies and worldviews. Nā moʻolelo o Moʻikeha as translated by Abraham Fornander in 1918 and Hawaiʻi Loa translated by Samuel M. Kamakau and Z. Kepelino help understand the bigger picture of how moʻolelo tells more than a story but rather a history of a people and the philosophy that goes along with it.

Moʻikeha Moʻolelo

In the Hawaiian culture, a way to pass knowledge from one generation to the next is to know the moʻolelo (story) that is involved. Remembering the moʻolelo makes it easier for Hawaiians to understand the cyclical relationships in our foundational philosophy. For example, in voyaging, we can trace ancestral knowledge through the moʻolelo of Moʻikeha (*Illustration* 4.24) dating back to the thirteenth century.

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The Moʻikeha moʻolelo is significant because it shows that this class system existed before Moʻikeha's time. Through the perspective of our last King, we are to see the genealogy of our Hawaiian people and connect that line to place names through voyaging. Among the many significances in this moʻolelo, the key significance is that the moʻolelo allows us to see that Moʻikeha and Laʻa descended from Hawaiʻi and not the common theory that they came from Tahiti (Kalākaua 1975).

The moʻolelo of Moʻikeha is also significant because it is a form of ʻike Hawaiʻi (Hawaiian knowledge) used to inform Hawaiians today about the relationships and world view from the eleventh century. There are many significances to this moʻolelo, but the main points are that this moʻolelo talks about the Hawaiian settlement. Moʻikeha's crew members settled in different parts of Hawaiʻi, and those places were named after them. For instance, Kumukahi and Haʻehaʻe in Hilo, Moʻokini and Kaluawilinau in Kohala, Honuaʻula on East Maui, Kamahualele on Lānaʻi, Moaʻulanuiakea in Tahiti and Kahoʻolawe, Laʻamaikahiki on East Maui and Kahoʻolawe, and Makapuʻu and Makaaoa on Oʻahu. A significance of these names is that Makapuʻu and Makaaoa are Moʻikeha's sisters, and therefore, there is a connection with women navigators in Hawaiian history that are not usually written about. Another significance to this moʻolelo is the genealogy of the pahu drum brought to Hawaiʻi by Laʻamaikahiki. This drum is used in hula today and is seen as a sacred tradition with a long genealogy leading back to the settlement of the Hawaiian people (Kalākaua 1975).

Hawaiʻi Loa

The moʻolelo of Hawaiʻi Loa (*Illustration* 4.25) is about the initial discovery of the Hawaiian archipelago aboard the voyaging canoe called *Hawaiʻi Loa*. The legend speaks of the voyagers who were part of that crew and would eventually settle in different areas of Hawaiʻi. The significance would be that these voyagers would not only name stars after themselves but also places.

In discussing the Hawaiian settlement, a question of Hawaiian discovery comes forth. I look to the moʻolelo of Hawaiʻi Nui and/or Hawaiʻi Loa. This moʻolelo brings out the eight navigators that sailed on *Hawaiʻi Loa* to discover Hawaiʻi. Those navigators are "Kahiki-nui, Hoku-ula, ʻIao, Kio-paʻa, Maiao, Makaliʻi, Polohilani, Unu-lau" (Johnson 1975, 166). The significance of knowing these names allows for a deeper understanding of Hawaiian discovery. These names can be seen in place names, such as Kahiki-nui on East Maui and Hokuʻula on Hawaiʻi Island, and ʻIao in central Maui; Kio-paʻa is a name for the Polaris or the North Star; Maiʻao is the name for an island atoll southwest of Moʻorea in French Polynesia; Makaliʻi is the name of the star that starts the Hawaiian calendar year; Polohilani is the name of a geographical place on Oʻahu and also a name of a star; and Unu-lau is the name for a wind that blows on Niʻihau (Johnson 1975).

Place Names

> La‘amaikahiki lived in Kauai for a time, when he moved over to Kahikinui in Maui. This place was named in honor of La‘amaikahiki. As the place was too windy, La‘amaikahiki left it and sailed for the West coast of the island of Kaho‘olawe, where he lived until he finally left for Tahiti. It is said that because La‘amaikahiki lived on Kaho‘olawe, and set sail from that island, this was the reason why the ocean to the West of Kaho‘olawe is called “the road to Tahiti” (Fornander 128).

Today, we can find a place name called “Kahikinui” on the East side of Maui named after La‘amaikahiki. The place name refers to this voyaging history of La‘amaikahiki and his father Mo‘ikeha’s trials and tribulations. From Kahikinui, you can see Kaho‘olawe in the distance. While following the wind movement on the ocean that comes from Maui and leads to Kaho‘olawe, one can see a wind pathway that forms leading in the direction of Tahiti. It is this pathway that is called Kealaikahiki. This mo‘olelo is tied to Hawaiian origins, voyaging history, place names, wind names, and pathways leading in the direction of the origin. The point of these connections is to see that the answers pertaining to who we are as Hawaiians are all around us and that we just have to be conscious when they are presented to us.

Kaho‘olawe falls into the ahupua‘a from Maui called Honua‘ula. This area was seen as a place with good soil for growing food and a vibrant fish pond for gathering fish. It is because of these qualities that the Ali‘i would live in this area. As we know from looking at the maps and mo‘olelo, the placenames were given after the crew members from Mo‘ikeha’s crew. Mo‘ikeha’s son La‘a became La‘amaikahiki after his voyage to visit his father before he died. The name tells of his travels and voyaging to and from Tahiti to Hawai‘i. The ocean channel in front of Kaho‘olawe is called Kealaikahiki, as well as the wind channel leading from East Maui, across the ocean channel to Kaho‘olawe, leading down the island from north to south, and ending at a point on Kaho‘olawe called Kealaikahiki as a name place on the westernmost point end of the

island of Kahoʻolawe (http://cramp.wcc.hawaii.edu/LT_Montoring_files/lt_study_sites_Kahoolawe_kealaikahiki.htm). The navigational platform on the westernmost end of Kahoʻolawe is called Kuhikeʻe, which a navigator used as a reference point and directional marker for the pathway back to Tahiti that was/is also called *Kealaikahiki*.

Hawaiian Worldview

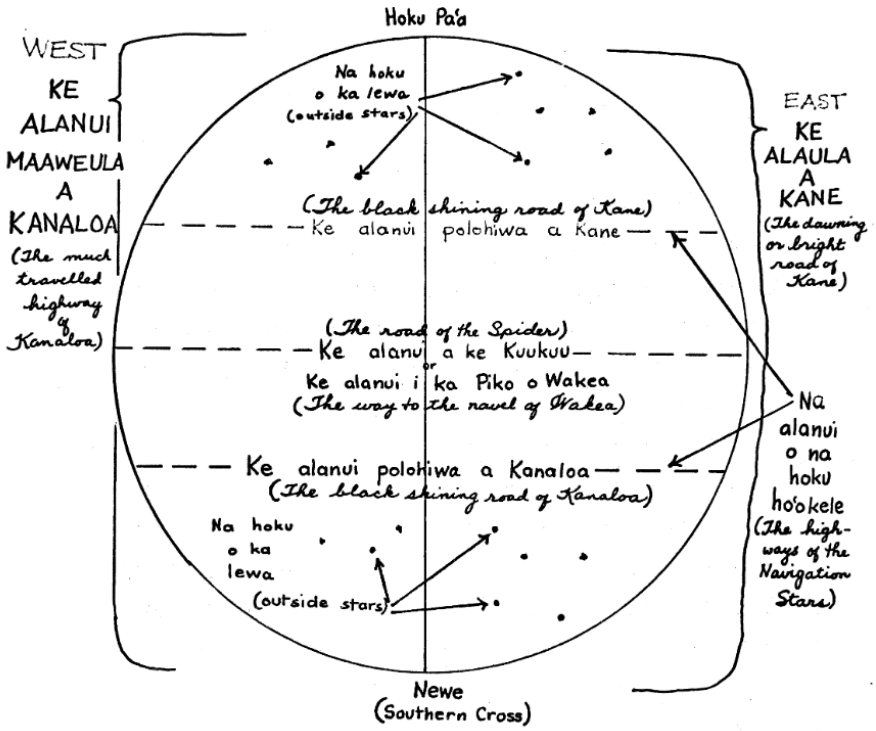
Kahoʻolawe allows for a visual of the elements and therefore is an important island to study the elements of reference through kilo (observation). In my fieldwork, I was granted access by the Kahoʻolawe Island Reserve Commission to fly a drone at the top of this navigational platform. Their GIS specialist had to accompany me as the rules of the island are that a person cannot go anywhere without a guide and anyone wanting to fly a drone needed special approval to do so in the "No Fly" area of the island of Kahoʻolawe and its protective waters of two miles in circumference. The aerial views showed the macro example of what this island had to offer by highlighting the reference points around us. The unique geography of Puʻu Moaʻulaiki makes it an opportune location for a navigational observatory. It is unique in being the only such high point on any of the major Hawaiian Islands (with the possible exceptions of Niʻihau), which is cloud free for most days of the year. As such, it provides one of the few places in these islands where one can gain an uninterrupted view of all points of the compass. The possibilities for celestial and navigational observation provided by such a vantage point were not lost on the ancient inhabitants of Kahoʻolawe, and tradition suggests that in centuries past, the peak was used as a natural observatory (Reeve 211).

I looked at Kaneakanoʻowaha to explain space in time. In *Ka Nupepa Kuokoa* (August 5, 1865), an article highlights the foundation of celestial navigation (*Illustration* 4.26) from the

Hawaiian newspaper article along with an English translation (*Illustration* 4.27 & *Illustration* 4.28). Kaneakanoʻowaha was an astronomer and a counselor to Kamehameha I during the eighteenth and nineteenth centuries. In his understanding of the heavens, Kaneakanoʻowaha explained the divisions of the sky and where and what stars could be found in them. He wrote about "Ke alualu a Kāne" (the drawing, or the bright road of Kāne), which is located to the east and/or right of the map and "Ke alanui maʻawe ʻula a Kanaloa" (the Ke alualu a Kāne highway of Kanaloa), which is located to the west and/or left of the map (*Figure* 4.1). The two directions can be seen as cardinal directions in understanding space and the connection of the main gods.

Three lines are drawn from left to right and/or east to west. The line in the middle is the sphere and/or can be seen as the drum. It is called "Ke alanui i ka Piko o Wākea" (the way of the navel of Wākea) and represents the equator. The line in the Northern Hemisphere is called "Ke alanui polohiwa a Kāne" (the black shining road of Kāne), and the line drawn in the Southern Hemisphere is called "Ke alanui polohiwa a Kanaloa" (the black shining road of Kanaloa). The names used in voyaging have metaphors attached to them, and with these dividing lines between hemispheres, the metaphor looks to two main gods, Kāne and Kanaloa, and the middle marker refers to the sky father named Wākea.

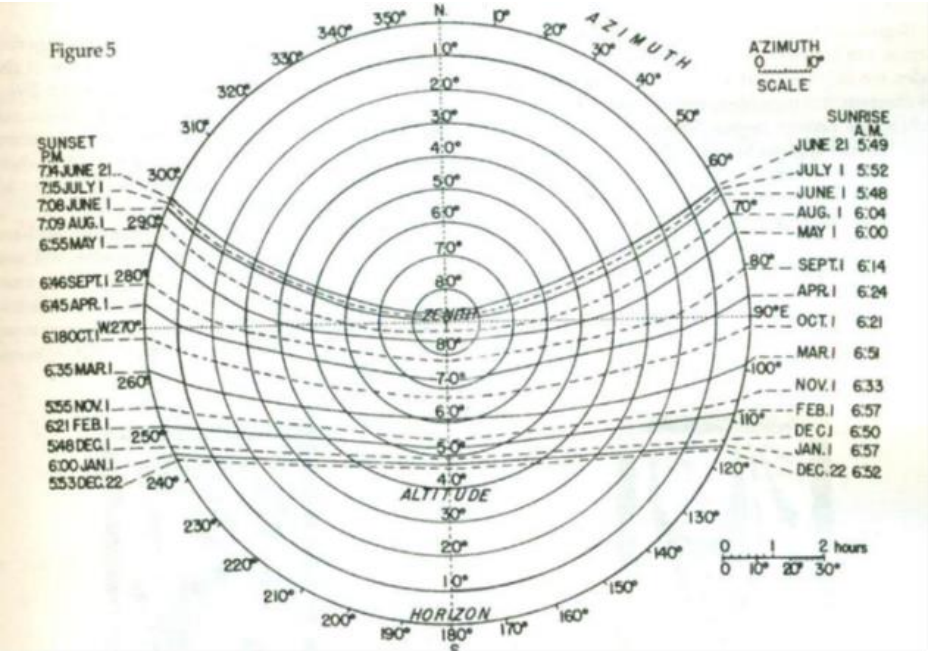
Figure 4.1. The Hawaiian concept of the celestial sphere describing space drawn by Samuel Kamakau (1865).



The God Kāne is connected to the direction of the east (*Figure* 4.1) and in association with the sun. This connection can be seen in the path of the sun during the vernal and autumnal equinoxes known as "the flaming path of Kāne." In these months, March and September, the sun rises exactly in the east on the equinox due to the earth's axial tilt. The sun moves "upward at a slant" (Kirch 198) in the sky to a certain point and then moves across the sky and sets due west on the equinox. The rest of the months in a year, the sun "rises North of true East and sets North of true West" (Kirch 198). Kamakau would write "that it had always been customary with ka poʻe kahiko, the people of old, to name the kukulu which are cardinal points in accordance with the rising of the sun in the East and its traveling to the West" (Kamakau 197). In conjunction, Kepelino states that "the old compass (He Pānānā Kahiko) for Hawaiians marked the position of

places on land by the positions of the sun, the moon, and the important stars indicated" (Kepelino 197).

Figure 4.2. The path of the Sun during each month of the year.



Johnson, et al. Nā Inoa Hōkū; Hawaiian and Pacific Star Names. Revised Edition. Ocarina Books Ltd. 2015.

The God Kanaloa is connected to the setting sun and the direction of the west (*Figure* 4.1) and also represents the deep ocean and navigational traditions. Kāne and Kanaloa are usually paired together as they are both water gods: Kāne is the god of fresh spring water on land, and Kanaloa is the god of the deep sea and/or the ocean. They are both "linked to the daily and seasonal movements of the sun. The dawn and rising sun belong to Kāne. While the afternoon and setting sun are associated with Kanaloa" (Kirch 198).

The God Kū is connected to the north (*Figure* 4.1), war, canoe-building, and fishing. The God Lono is connected to the south (*Figure* 4.1), thunder, rain, and dryland agriculture. Lono is also connected to the starline of Makali‘i that rises in November to start the calendar year called

Makahiki. During this occurrence, “Makali‘i rises in the East-northeast, at about 67 ° East of North” (Kirch 198). A good viewpoint to view the starting of the Hawaiian calendar year would be from Kaho‘olawe as this starline begins to rise over Haleakalā on Maui.

Table 4.1. Attributes of the Major Hawaiian Deities.

Table 5. Some Attributes of the Major Hawaiian Deities

Attribute	Kū	Kāne	Lono	Kanaloa
Directions	North, high, right	East, right	South, high, leeward	West, left, setting sun
Calendar	First 3 days of lunar month, dawn	Dawn, 27th–28th days of lunar month	28th day of lunar month	23–24th days of lunar month, sunset
Landscape and natural phenomena	High mountains, old-growth forest, *‘ōhi‘a* and *koa* trees, sky	Light, sun and the sunrise, freshwaters and streams	Thunder, rain, *kukui* tree, black pig	Seawater, ocean, sunset
Seasons	Season of *kapu pule* (temple ritual)	Summer, sun’s northern limit on ellipse	Rising of Pleiades, Makahiki season	Winter
Functions	War, canoe building, farming, fishing (Kū‘ula), sorcery	Male power of procreation, irrigated agriculture	Dryland agriculture, medicine	Fishing, navigation, death and healing

Data abstracted in part from Valerio Valeri, *Kingship and Sacrifice: Ritual and Society in Ancient Hawai‘i* (Chicago: University of Chicago Press, 1985), table 1.

After the foundation is set, the voyager can start to study the stars and constellations within the grid of the skies. For this detail, I looked at the notes found at the Bishop Museum that were kept in a box by the curator of Bernice P. Bishop Museum, E. H. Bryan, in 1901, on astronomical notes collected from various sources in the nineteenth century. In these papers, there were five men who were either astronomers, known voyagers, and/or businessmen in the nineteenth century. These men were “Kepelino, Kanalu, Kamohoula, Laukahikupua, and Kupahu” (Makemson 589).

I highlight Kepelino because his information is connected to the knowledge that makes up the foundation for understanding time through astronomical traditions used in voyaging.

Kepelino was the private secretary of Queen Emma and was a Hawaiian-language newspaper editor who was known for writing Hawai‘i’s history in the nineteenth century. Kepelino brings forth the understanding of the stars and separates those stars into three groups. In the first group, the main stars were considered to be the “Sun, Moon, and Venus” (Makemson 589). The second group highlighted the stars used in navigation, and the third group represented the many stars in the heavens. In the first group, the sun was used for the cardinal directions as the sun rises in the east and sets in the west. In cosmology, the sun was also connected to the God Kāne and represented the self in connection to the world. The moon allowed for a natural cycle of measuring time and was/is seen to be useful as a calendar. The God Kāne is said to have created the moon in Hawaiian cosmology (Makemson 1938). The third directional marker was/is Venus. Venus was/is important because it followed the sun’s direction and was used for practical purposes. “As a morning star rising before dawn, Venus serves as a clock to the agriculturist” (Makemson 589). In the early morning, the laborer would work on the land during the coolness. As soon as they saw Venus, they would change jobs on the land. At night, Venus was used by fishermen as a sign to go home. These main stars were used for many reasons, as we see above. It becomes the backbone of the foundation of the connection between man and the environment in order to understand the cyclical relationship between the two.

The second group used the stars as guidelines for navigators. There are fixed stars such as “Hokulei” (Makemson 590), a star that is also called Arcturus, which passes the zenith in the latitude of nineteen degrees in the Northern Hemisphere. This star is called *Hōkūle‘a* today and helps sailors find the Hawaiian archipelago when heading in the direction of Hawai‘i. When out at sea and heading to the Northern Hemisphere, this star will appear after sunset, and as the stars rise higher in the sky, it will pass through the zenith at a certain point. That zenith is located at

nineteen degrees above the equator and in direct latitude to the Hawaiian Islands. Every star in the sky has a "friend" and/or a matching star in the other hemisphere. For the Southern Hemisphere, the matching star was called Hokukea, and the same instructions also apply for this star as for the *Hōkūleʻa*, yet in the Southern Hemisphere, this star is above the Society Islands or, more directly, Tahiti. These stars become beacons of land and salvation when out at sea for days and months. Both of these stars also happen to be the brightest stars in their respective hemispheres, making them easy to see at night.

There are nine other stars that voyagers use: "Makaliʻi (Pleiades); Kiopaʻa (North/Southern Cross); Hokuʻula (Mars); Iao (Jupiter); Kahiki-nui; Maiao; Unulau; and Polohilani" (Makemson 589). These stars were given their names by eight voyagers; each named a star after themselves. The legend talks about the initial discovery of Hawaiʻi on board the voyaging canoe called *Hawaiʻi Loa*. These nine voyagers were part of that crew that found the Hawaiian archipelago. The third group represents the millions of stars that are seen at night and make up the backdrop to the brighter stars that voyagers use. In voyaging, these three groups are important, and these directional markers become the compass in the sky.

There is a benefit to reading the Hawaiian-language newspapers because within them are the answers from our ancestors to the many questions that we have unanswered today. In saying so, Kaneakanoʻowaha gives us the Hawaiian names of the main stars followed by voyagers and astronomers in his century. In the Hawaiian cosmological chant called the Kumulipo, line five refers to the starlines, thereby making one of many connections between man and the elements of reference. The line is as follows: "O ke au o Makaliʻi ka po" (The time of the rise of the Pleiades) (Liliʻuokalani 1897).

> The unique geography of Puʻu Moaʻulaiki makes it an opportune location for a navigational observatory. It is unique in being the only such high point, on any of

> the major Hawaiian islands (with the possible exceptions of Niʻihau), which is cloud free for most days of the year. As such, it provides one of the few places in these islands where one can gain an uninterrupted view to all points of the compass... The possibilities for celestial and navigational observation provided by such a vantage point were not lost on the ancient inhabitants of Kahoʻolawe, and tradition suggests that in centuries past the peak was used as a natural observatory (Reeve 211).

Ke Pānānā Kahiko o Hawaiʻi

> The Place where Kiopaa stands is the North, or Koolau; the side of the earth in the direciton of the ʻcross-of-starsʻ is called the South, or kona. This is the old compass [Ke Pānānā Kahiko] by which Hawaiians marked the position of places on land by the positions of the sun, the moon, and the important stars indicated (Kepelino 1932, 80).

The word *pānānā* references the sighting wall, but in the Hawaiian Dictionary, the word is "1. a compass, especially a mariner's compass; 2. A pilot, one who directs the sailing of a vessel" (Andrews 456). Pukui and Elbert also state a similar definition as they both understand pānānā as "a compass; pilot; to row here and there" (Pukui 313). These definitions date back to Kepelino in which he describes a *Pānānā* as "Ke Pānānā Kahiko a Hawaii, the old Hawaiian compass" (Kepelino 80). This information allows a different perspective in that the ancient Hawaiian compass marks the sun's direction, uses elements of reference through observation in stars, wind directions, ocean pathways, and directional and reference markers on land. All of these elements combined to understand the cyclical relationship between seasons, environment, and man. Two different compasses, one ancient, one modern, and both successful.

The pānānā on Moaʻulaiki are for observing the rising and setting of celestial bodies, primarily the sun, but also key constellations. The North Star and the Southern Cross can also be seen from this location from February through June, thereby making kilo pai honua (observing the world) central to navigation.

Puʻu ʻO Moaʻulaiki

The navigator's platform and chair are at the Puʻu ʻO Moaʻulaiki, which is 1,100 feet high with a panoramic view and is "aligned with the Southwest rift zone of Haleakalā Volcano on Maui" (www.soest.hawaii.edu). This site can be used for understanding the science of space and time. The navigational platform was used as a navigational school between the eleventh and thirteenth centuries. The tangible forms of directional markers include the platform, lele, chair, and heiau. The value of the island of Kahoʻolawe lies in its strategic location in relation to the other Hawaiian Islands as it is located in an area that sees six islands (including itself), five ocean channels, and numerous wind pathways. The islands that can not be seen are Kauaʻi and Niʻihau. There is a clear view from Kahoʻolawe to Lānaʻi, Molokaʻi, Oʻahu (on a clear day) and East Maui. From East Maui wrapping around to Kahoʻolawe is Hawaiʻi Island with the open ocean. "The mountains of East Maui are inclusive of Haleakala at 10,000 feet elevation, are not obstructive, inasmuch as they constitute a range against which to observe the north/south progress of the sun's passage along the ecliptic and the major/minor swings of the moon" (Johnson 12).

I started my fieldwork at Puʻu ʻO Moaʻulaiki at the navigational platform (*Figure* 4.3). As Kahoʻolawe's latitude is at the center of the Hawaiian island chain, this platform and chair can be used as a fixed point that observes space and time through the elements of reference around it.

Figure 4.3. Pōhaku ʻAhu ʻAikūpele Kāpili o Keaweiki at Puʻu ʻO Moaʻulaiki. Photo by Lesley Iaukea.

The pōhaku is called Pōhaku Ahu ʻAikūpele Kāpili o Keaweiki ("put together rock that kneads the knowledge of the moʻokahuna priest Keaweiki") named after Keaweiki. Keaweiki is known as the kāhuna that taught navigation in the eleventh century from this site. "It is a bell stone which was broken in half, carried to the summit, and placed back together" (Aluli and McGregor 1992). The split in the rock (*Figure* 4.4) is lined up along a north-south course. "The foundations of a platform used for the navigational school and a housesite for the kahuna who gave instruction are also present at the summit" (Aluli and McGregor 1992). The pōhaku has remnants of branch coral set in the base. The site of coral is common in religious sites because of the connection in Hawaiian cosmology that speaks of the coral as the first ancestor to the Hawaiian people. There have been previous "recordings of three structures and seven ahu" (Bryan 1939) as Bishop Museum allocated funds for a research trip to this site. These structures and ahu are seen as directional markers in understanding starlines and seasons.

Figure 4.4. Pōhaku ʻAhu ʻAikūpele Kāpili o Keaweiki at Puʻu ʻO Moaʻulaiki center angle showing the split in the pōhaku. Photo by Lesley Iaukea.

To start, the platform itself has a compass that points out key directions for the navigator. The Bell Stone (ʻAikūpele) has an alignment of Capella in Aurigae (northwest) with its reciprocal at Procyon (southeast). Johnson identified the "rising and setting stars corresponding with the diagonal crack across the bellstone keaweiki at puʻu moaʻulaiki" (Johnson 8). In Dr. Edward Stasack's fieldwork, "across the bell stone points to the azimuth of Capella setting at 138° SW" (Johnson 13).

There is an altar for the God Lono, next to the bell stone, along with three sticks that hold up the altar. There are two sticks that cross each other that look like an "X" and a third stick that goes in the middle of them. There is no significance to the altar today, but I will explain how this altar can be used in voyaging practices shortly in this chapter. The navigator's chair is located about 60 feet to the north and facing the same direction (*Figure* 4.5). The seat measures 24 inches by 14 inches and is perched on the side of the mountain in such a way that the seat appears to have lasted over a thousand years in place. A rediscovery of the navigator's chair

occurred when Uncle Sam Lono was curious about the location of the navigator's chair and sent out his haumana (student) to look for the actual location. It is this quest to know of this location after hearing moʻolelo about it that reclaimed this site for the chair and later on would inform the Protect Kahoʻolawe ʻOhana of this location. There are other navigator chairs within Maui County, and they are located on Maui at Olowalu and Lānaʻi at Ulupueo. The two on Lānaʻi and Maui have not yet been found.

Figure 4.5. The Navigator's Chair on Puʻu ʻO Moaʻulaiki, Kahoʻolawe (06/2018). Photo by Lesley Iaukea.

The significance of Pōhaku ʻAhu ʻAikūpele Kāpili o Keaweiki at Puʻu ʻO Moaʻulaiki has a big part to do with the navigator's chair. The position of the navigator's chair is important because when sitting on the seat, the navigator will be facing in the northern direction. As the navigator tilts back at a twenty-one-degree angle, he or she can see the North Star straight ahead and the Southern Cross directly behind the seat. Therefore, this chair is used to observe and see the value of observation for navigation in studying the location of Hōkūpaʻa (North Star) in relation to

Newe (Southern Cross). This dynamic is important for voyagers sailing to Hawaiʻi because after seeing the North Star and Southern Cross, the navigator will know they are in the latitude of Hawaiʻi. The visibility of this dynamic occurs between February and June on Kahoʻolawe. The Southern Cross will be seen at 180° south alongside the stars rising on either side of the meridian, Makaliʻi 162° south and Makakilo 172° south, in the vicinity of Canopus or Ke Aliʻi Kona i ka Lewa. At this point, the navigator will head east against the trades, and those tradewinds will take the voyaging canoe west as the navigator sails into the Hawaiian waters. Below is an excerpt from Herb Kane explaining this dynamic.

> Suppose you are sailing North from Tahiti, seeking Hawaiʻi without radio or navigation instruments. You will notice that as Arcturus arches from East to West in the night sky the top of its arch, its zenith, becomes higher as you sail Northward. You prudently sail somewhat to windward to compensate for the leeward drift of your vessel, and to gain sufficient 'Easting' to arrive at Hawaiʻi's latitude upwind of your destination. When Arcturus passes directly overhead, you are on the same latitude as Hawaiʻi. You can then turn downwind, keeping the rising sun aft, the setting sun forward, the zenith of Arcturus directly overhead, and you will make landfall at Hawaiʻi (Kane, archive.hokulea.com).

Another significance to this site can be found in the timed swing of the arc, which coincides with the timed swing of the Big Dipper and Little Dipper (Nā Hiku & Hōkūpaʻa) at the North Pole. These constellations represent the "hour-clock measurement through a 45° polar ambit of the Big Dipper equaling a three-hour passage of time" (Johnson 12) and are used as a timed observation that can tell time. My example focuses on the rise and setting of Canopus, with the sky moving 15° every hour with the stars aligning at the poles on opposite horizons, east and west, through the night. In measuring the night in quarters, and every three hours, every 1/12 of the day and night, and in one hour, the sky moving 15° of arc times twenty-fours in one day will "equal the time it takes the earth to move 360° of its circle of daily rotation time" (Johnson 12), thereby calculating time.

Incorporating Hawaiian Knowledge

Today, the lele at the navigational platform on Moaʻulaiki is used for offerings for the God Lono; however, in the future, this lele can be turned into a directional marker due to the description below. Kaneakahoowaha writes about the Hawaiian knowledge of astronomy for voyaging and can be seen in the Hawaiian newspaper, *Ka Nupepa Kuokoa*, in the August 5, 1865 article titled, *Instruction in Ancient Hawaiian Astronomy as Taught by Kaneakahoowaha, one of the Counsellors of Kamehameha I*. His Hawaiian words were later translated to English by W.D. Alexander and published in Thrum's Annual in 1891.

> The three lines are drawn East and West (latitudinally), one across the Northern section, indicates the Northern limit of the sun, about the 15th and 16th days of the month Kaulua, and is called "Ke alanui polohiwa a Kane" (the black shining road of Kane). The line across the Southern section indicated the Southern limit of the sun, about the 15th and 16th days of the Hilinama, and is called "Ke alanui polohiwa a Kanaloa" (the black shining road of Kanaloa). The line exactly in the middle of the sphere (the drum, the Lolo), is called "Ke alanui a ke Kuukuu" (the road of the spider), and also "Ke alanui i ka Piko o Wākea" (the road to the navel of Wākea) (*Nupepa Kuokoa* 1865).

These three lines also reference fixed stars and are called "Na hokupaa o ka ʻāina (the stars which rule the land)" (Kaneakahoowaha 34). This reference marker is crucial in placing the stars for navigation. The stars mentioned include Humu (Altair), Keoe (Vega), Nuʻuanu, Kapea, Kokoiki, Puwepa, Na Kao (Orion), Na Lalani o Piliula, Mananalo, Poloahilani, Huihui (the Pleiades), Makaliʻi (the twins), Ka Hoku Hookelewaa (Sirius), Nā Hiku (the Dipper), and the planets, hoku hele, Kaawela (Jupiter), Hokuloa (Venus), Hokuʻula (Mars), Holoholopinaau (Saturn), and Ukali (Mercury) (*Nupepa Kuokoa* 1865).

Figure 4.6. The Three Lines. Photo by Lesley Iaukea.

Islands

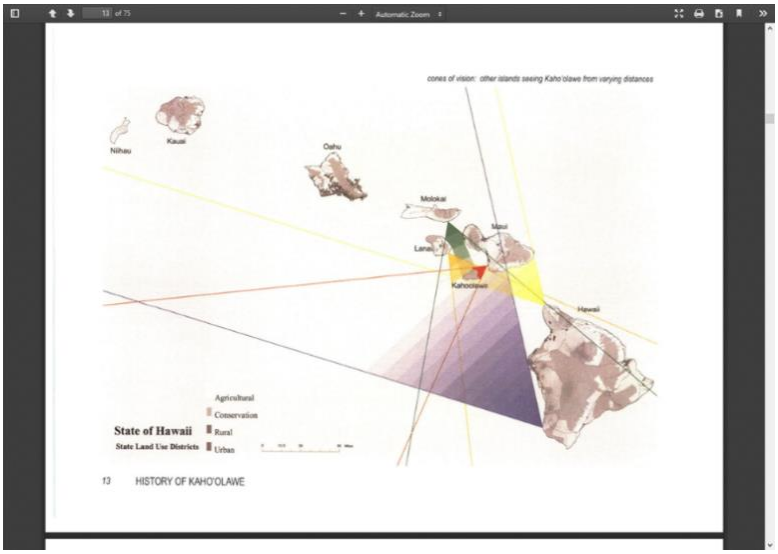
These directions are useful for the navigator as these objects tell of the directions. From this location, there are views of seven islands and their respective mountains. “From the Northeast to Eastern horizon at Puʻu Moaʻulanui there is an unobstructed view to Lānaʻi to East Maui” (Johnson 2). In turning to the southeast, Hawaiʻi Island is seen along with Mauna Kea. Facing north, Maui lies directly in front with Haleakalā in the northern position, and to the west lie the West Maui Mountains. Moving to the left in a western direction lies Molokaʻi, and further along west lies Lānaʻi. Oʻahu can be seen on a clear day behind the island of Lanaʻi as Oʻahu is seen to the left of Lanaʻi from Kealaikahiki. Finding the directions from the pohaku is only possible by visiting the platform and chair. It can not be done by looking at pictures and guestimating the conclusions. Using geospatial technology analysis, I understood the points and references of these directions as they lined up with the other islands in the area.

Points of an Island

The sides and ends of the other islands were used as markers in reference to the positioning of stars, wind channels, ocean pathways, and the pathway of the sun (*Figure* 4.7). A reference point facing East Kahikinui points to the Kealaikahiki pathway on the other westernmost end of Kahoʻolawe.

Kahikinui is a piece of the puzzle, but it is also part of the bigger picture. This area that houses this *pānānā* "lies directly inland of the exact place on the gently curving shoreline of Southeast Maui where the island reaches its Southernmost extremity" (Universal Transverse Mercator [zone 4] 8109E., 7829N). If one wanted to construct a monument in some way associated with a Southerly direction or orientation, this would be the ideal location" (Kirch 51). This *pānānā* aligns perfectly with the top of Haleakalā in the north and in the south, this pānānā serves as a good seat for two important events: the ocean pathway of Kealaikahiki that leads to Kahiki and "just above the horizon of one of the most spectacular asterisms in the Hawaiian sky: the Southern Cross" (Kirch 57). Along the other side of the chain of islands within view lies Lānaʻi, and at the most southwest side of the island, a line can be drawn to meet the view from the pānānā at Kahikinui on the ocean path called Keaikahiki. On the island of Kahoʻolawe, the ocean pathway passes the point on Kahoʻolawe called Lae o Ke Aliʻi Kahiki. This place name reconfirms the connections between islands, ocean pathways, and winds in this area.

Figure 4.7. Triangular positions connecting the line from Kahikinui to Lanaʻi.

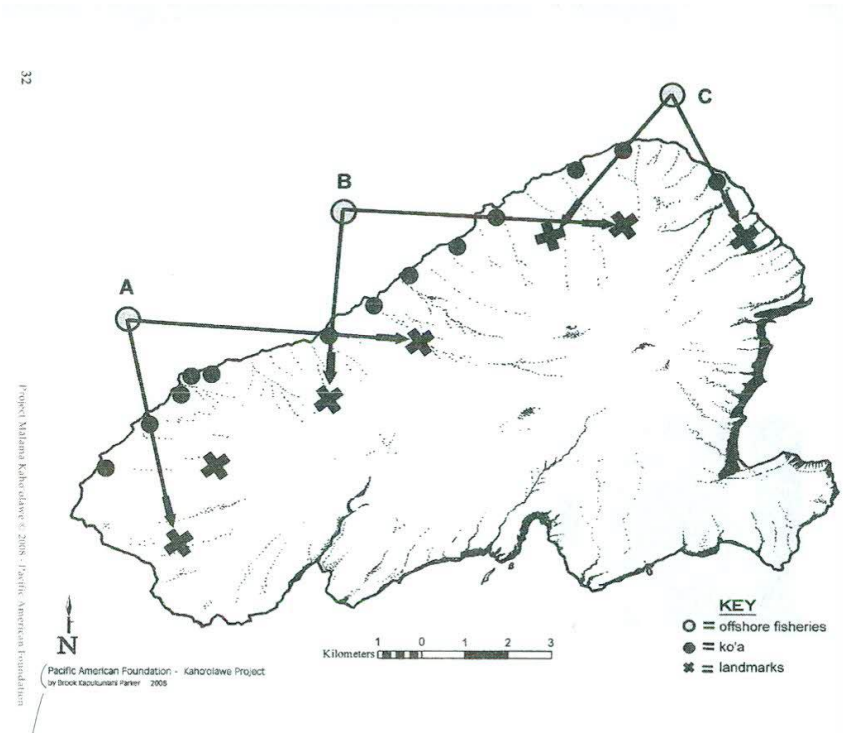


There are also reference markers in the hills of an island. It is commonly known that from puʻu to puʻu (hill to hill) is used as a reference marker for fishing koʻa and navigational directions (*Figure 4.8*).

Directional Markers

Directional markers are important because the examples are found in intangible perceptions and visual interpretations. Reference markers are combined with directional markers to give a bigger perspective of the way the parts of the world relate to each other and the cyclical relationship that exists whether we, as humans, are aware of it or not.

Figure 4.8. Pu‘u to Pu‘u.



The Intangible and Sensory Culture

A pānānā usually has objects that are used to tell a story. The intangible and sensory are tools involved in voyaging and are part of a cultural tradition in which intangible perceptions are based on objects and used to negotiate pathways of knowledge. These pathways of knowledge do not come with written descriptions or instructions but rather employ forms of communication through the sensory and/or intangible fields. By articulating the process of how objects and intangible perceptions are used on a voyaging canoe, a broader sense of identity can be ascertained. The intangible perception directly links to culture through native knowledge and forms an imagination and vision for commonality among the communities that are open to different interpretations.

The sensory objects in intangible culture create another dimension that allows for different styles and techniques of knowing through another form of communication. The object usually goes unnoticed by those that are not aware it is taking place. However, to the people who are conscious of these objects' significance, it encompasses all of who they are and is seen as a direct connection to their ancestors. The key to sensory perception is to recognize the differences between the native world and the Western/European world when talking and discussing the external senses. There are five senses that are associated with the Western/European world, and they are as follows: "hearing, touch, taste, smell, and sight" (Edwards 36). However, for Hawaiian people and those from similar cultures, there are other sensory areas that exist and add to a deeper understanding of the culture. The other sensories are as follows: hearing and aural perceptions, a sense of equilibrium and balance, a sense of movement, contact and touch, seeing and visuality, tasting, smelling, and talking. In voyaging, the canoe is an example of an object, and the perceptions that come from the elements of reference in the starline, wind patterns, and ocean swells act as other vehicles of knowledge based on oral history and culture.

Wind Pathways

Figure 4.8. The winds surrounding Kahoʻolawe.

On top of the navigational platform is the perfect view to observe the wind channels that run throughout the Maui shores (*Figure* 4.9). The Kealaikahiki wind pathway is significant because of where it starts and the pathway it takes. In legends, it is believed that there was a wind gourd that could summon these winds upon chanting for them. The gourd represents the God Lono, and the guardian of the gourd is called Laʻamaomao. Laʻamaomao was the name of Moʻikeha's crew member that sailed back and forth with Moʻikeha as the person that called out to the winds. This gourd today can be found at the Bishop Museum collection and has an inscription [that] reads:

> The wind gourd of Laʻamaomao that was in the keeping of Hauna, personal attendant of Lonoikamakahiki I [Keawenuiaʻumi's youngest son]. It was passed on to Pakaʻa, a personal attendant of Keawenuiaumi. It was placed in the royal burial cave of Hoaiku on the sacred cliffs of keoua, at Kaawaloa, island of

> Hawaii, and received by King Kalakaua I on January 1, 1883, from Ka‘apana, caretaker of Hoaiku (Kawaharada 2).

This wind gourd (*Figure* 4.9) was then donated to the Bishop Museum by Princess Kalaniana‘ole in 1923, where it sits in the basement in a cold room. It is another testament that traditional sites hold pieces of knowledge that can explain the world’s phenomena. When sitting on top of the platform and chair, the wind can be seen on the ocean pathways as the water is disturbed by the wind interacting with the ocean. What can be felt by using your face to feel the wind can also be seen on top of the ocean pathways. The wind channel seen from this vantage point is Kealaikahiki, as the Kealaikahiki ocean channel follows in the same direction. The wind path can be seen on the water when the wind is blowing over ten mph.

Figure 4.9. Wind Gourd of La‘amaomao at the Bishop Museum.

Ocean Channels

The ocean channels in Maui County are significant because they show a pattern of the many channels that run along and on the side of the islands. A powerful channel that runs between Hawaiʻi Island and Maui is called Alenuihaha. This channel is significant because of its force and depth but more so because of how it influences other channels in the area. Next to this channel between Honuaʻula, Maui, and Kahoʻolawe is the ʻAlalākeiki Channel. Running north to south from Maui to Kahoʻolawe and ending at the southern end of Kahoʻolawe is the Kealaikahiki Channel. This channel is significant because of its location, what it connects to when it reaches the northern end of Kahoʻolawe, the name itself, and the history connected to the name that leads us back to our origins. The channel between West Maui and Lānaʻi is the ʻAuʻau Channel. The channel between West Maui and Molokaʻi is the Pailolo Channel. The channel between Lānaʻi and Molokaʻi is the Kalohi Channel. These channels were/are important for a navigator to understand, and from the top of the Moaʻulaiki Navigational Platform, these channels can be seen with or without wind on them.

Mōʻiwi as a Reference Point

Mōʻiwi is another important site that can be used as a reference and alignment to the stars at night and to the annual seasons in Hawaiʻi. "There is a North and South alignment of the bifurcated stone at Puʻu Moʻiwi" (Johnson 8). Both Johnson (1993) and Sinoto (1993) report on two sites near Hakioawa located on a prominent ridgeline inland of ʻOawawahie Bay on the island's northeastern coast. They are called Makaliʻi and Makakilo. These sites are considered to be an ahu or sites of worship. Makaliʻi is in an area that has a natural rock formation and lines up from "East to West from the Makakilo ahu along the ridge" (Johnson 12). The Makakilo ahu is a man-made structure for religious ceremonies. "The Kahoʻolawe meridian alignment or North and

South axis to circumpolar stars, the axle of the earth's rotation, is shown by a relationship between ahu sites at Puʻu Mōʻiwi and the Makaliʻi and Makakilo ahu at Kahioawa ridge" (Johnson 10), which is located at 162° and 172° at the southern rotation of the pole. In Johnson's studies, the distance between Puʻu Mōʻiwi and the two ahu of Makaliʻi and Makakilo lines up with the radian measurement that lines up with the "Nā Hiku (Big Dipper) Clock" rotation. This means that the cycle of the Big Dipper constellation rotates in a three-hour time frame when at a 45° polar circumference. "This possible alignment may have functioned to help determine the zenith passages of the sun to anti-zenith passages of the Pleiades or Makaliʻi constellation" (Johnson 12). This natural occurrence is important in the middle of November when the star Makaliʻi first appears on the horizon.

Training with Identified Platforms

Though the Moaʻulaiki Navigational Platform is important for the bigger picture and Hawaiian worldview of directional and reference markers, the Kuhikeʻe Navigational Platform on the western side of Kahoʻolawe is just as important. I look at this platform as it is the newest platform in modern times. As discussed in Chapter Two, this platform was made in 2004 by Attwood "Maka" Makanani and was dedicated by Pius "Mau" Piailug. The purpose of Kuhikeʻe was to reconnect the island with its navigational legacy. And it was the Protect Kahoʻolawe ʻOhana that invited the Polynesian Voyaging Society to come and select a place to train new navigators. Nainoa Thompson and Chad Baybayan selected the site. There were representatives from all of the waʻa Hawaiʻi ʻohana, and a commitment to use that place for training and perpetuation of navigation was signified by participating in an ʻawa ceremony of commitment and keeping the ʻapu or ʻawa cup to use upon returning to Kuhikeʻe for observation. Navigator Kaʻiulani Murphy also felt this site would be best for a navigation school and was a part of the

ceremony in 2004. In 2009, Murphy would request to go back to the Kuhikeʻe Navigational Platform on *Hōkūleʻa* to fulfill the commitment to the platform. Per Murphy, the kind of training that could come from this site would be focused on developing the kilo or "stargazer, reader of omens, astrologer, observe" (Ulukau Dictionary) by understanding the patterns of the elements of reference from that location. There is no school and/or program yet for this platform; however, it is recognized for its strategic location in navigational training. Each island today has a waʻa kaulua with *Hōkūleʻa* on Oʻahu and Makaliʻi on Hawaiʻi Island having a program but no school as of recent.

Figure 4.10. Kuhikeʻe Navigational Platform on Kahoʻolawe, Aerial Shot with Drone. Picture by Lesley Iaukea (11/2018).

A navigational platform at this location in Kealaikahiki is important as students and navigators can observe the Southern Cross and North Star at sea level, thereby having another perception of where the latitude of Hawaiʻi exists. Memorizing the stars as when they first appear, the direction they travel, and where they set is important because that is a needed skill on the canoe. As Kahoʻolawe is at the latitudinal piko of the Hawaiian Islands, this is one way to know where home in Hawaiʻi is. This location is ideal for training because, at sea level, a person can see the

360° angle, thus creating the perfect location to see the phenomena with the elements. Another reason for the good location is that it is at the same level as if you were on a canoe in the ocean. The site offers a good stretch of the horizon to learn from without including the land and a good view of the swells and wind on the ocean.

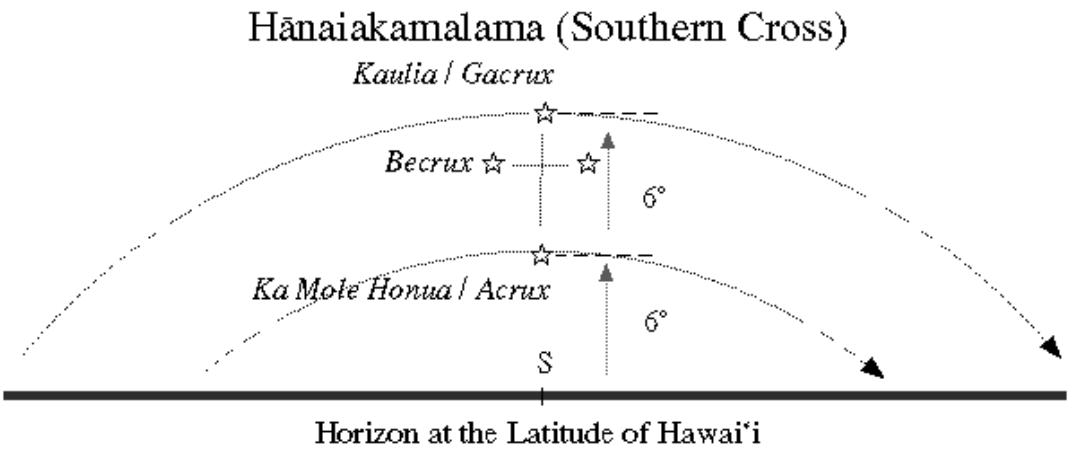
Figure 4.11. Kuhikeʻe Navigational Platform at Sea Level. Photo by Lesley Iaukea (11/2018).

Another important aspect of this area is that a person can see north and south on the water. "At Kealaikahiki, there's evidence that there was a star compass there. From the lae out there, from the point, it juts out a little bit so that you can… when you are out there, you can see both due North and due South on the water. You have to be familiar with the elements on the water, at sea level, so that vantage point at Kealaikahiki, where you have due North, you have due South, you can line them up with the rocks" (Bernie 2013).

The Southern Cross is important in establishing latitude. According to Nainoa Thompson, "It looks like a kite. The top and bottom stars in the kite always point south, Gacrux on top and Acrux on the bottom. If you are traveling in a canoe and going south, these southern stars are

going to appear to be moving higher and higher in the sky. If you went down to the South Pole, these stars are going to be overhead. If you are sailing from Tahiti north to Hawai‘i, the Southern Cross gets lower and lower the farther north you go. At the latitude of Hawai‘i, the distance from the top star to the bottom star is the same distance from that bottom star to the horizon, about 6 degrees. This configuration only occurs at the latitude of Hawai‘i” (*Figure* 4.12).

Figure 4.12. Horizon at the Latitude of Hawai‘i. Nainoa Thompson. archive.hokulea.com/ike/hookele/on_wayfinding.html.



Kealaikahiki

“Lae o Kealaikahiki is the Westernmost point on the island and faces West Southwest” (Johnson 4). Haleakalā is north of Kealaikahiki, in which to watch the sun’s path is east to west along the ecliptic. Haleakalā is used as a reference and directional marker, and, most importantly, it is used to tell the exact time when the sun comes up every morning. We know this dynamic from the seasonal movement of the sun from north to south between Kealapolohiwa a Kāne (Tropic of Cancer) and through Ka Piko A Wākea (the equator) to Kealapolohiwa a Kanaloa (Tropic of Capricorn). “The location of the traditional compass site inland of Lae o Kealaikahiki just above the high tide mark” (Aluli and McGregor 244). The site is composed of four boulders and has the four cardinal directions outlined in coral. In this location, there was also a natural navigational

marker in the immediate waters off of this area called Pōhaku Kuhi Keʻe i Kahiki ("the rock that points the way to Tahiti"). This marker represented the edge of the shoals in the channel. For this reason, the Kealaikahiki Navigational Platform can be used in collaboration with the Kuhikeʻe Navigational Platform as the four pohaku cradling the North Star and Southern Cross. This platform can be used for the four main directionals in conjunction with the Kuhikeʻe Platform. Nevertheless, there are different functions as the compass rock is used for directionals, while the use of Haleakalā and pānānā is for the keeping of the calendar.

The Kuaʻāina Moʻolelo Connection

Chapter Two refers to an important chant to connect voyaging to Kanaloa by Harry Mitchell titled, "Oli Kuhohonu o Kahoʻolawe Mai No Kūpuna Mai" (Deep Chant of Kahoʻolawe from Our Ancestors). Training for voyaging can also be found in the ʻōlelo noʻeau for Kahoʻolawe. This ʻōlelo noʻeau tells of the Moaʻe wind and the direction it blows.

> Pā ka makani ʻo ka Moaʻe, hele ka lepo o Kahoʻolawe i Māʻalaea.
> (When the Moaʻe wind blows, the dust of Kahoʻolawe goes toward Māʻalaea) Mary Kawena Pukui, ʻōlelo noʻeau #2580 (Pukui 284).

Another form of oral history that can be used in the training of new voyagers can be found in this mele that describes Kahoʻolawe and connects the island to the passage of Tahiti. Below is the song "Aloha Kahoʻolawe" written by Inez Ashdown, Pilahi Paki, and Irmgard Farden Aluli.

E ō mai e Kahoʻolawe	Respond O Kahoʻolawe
Moku o ka Pākīpika	Isle in the Pacific
Ku a moana a na kai	Surrounded by the Ocean
Ke ala no i Kahiki	There lies the passage to Tahiti
ʻO ʻoe no kaʻu i aloha	It is you that I love
Kaʻike ʻana i nā moku lana	As I observe the floating ships
Hoʻolana nei kuʻu aloha	They comfort my love
Ke aloha no o na kai	And admiration for the sea
Kula ʻula o Moaʻula	Reddened plains of Moaʻula
Nā awawa o Kamohio	The gulches of Kamohio
Naʻale kai o Kanapou	The billow of Kanapou

Ku‘u ‘āina i aloha ai	The land I love
Maluna au o ka lio holo	I ride on a swift horse
Ka ‘ike aku ia li‘ulana	As I look toward the setting sun
Ho‘opa mai o ka Moa‘e	The Moa‘e breeze caresses me
Ka makani o ka ‘āina	The wind of that land
Aloha no ‘oe e Kaho‘olawe	Aloha to you, O Kaho‘olawe
Moku o ka Pākīpika	Isle in the Pacific
Kaulana no kou inoa	Well-known is your name to all
I kakau a nā kanaka	Inherited by all the people
Ha‘ina nā pua lei nā mamo	The children, heirs and descendants
O nā moku o Hawai‘i nei	Of all the islands of Hawai‘i
Ho‘opa‘a mai ‘oe i ke aloha	Fixed love for it is within you
Ke aloha ku pa‘a o ka ‘āina	Steadfast love for the land.

Another form of training for voyagers can be found in the words of the Mele O Kaho‘olawe, which sings about the sacred names, the direction of the island, and the modern history of the island. The mele ends with an aloha ‘āina philosophy of “bringing prosperity to the land.” The music and words were written and performed by Harry Kunihi Mitchell.

Aloha ku‘u moku o Kaho‘olawe	I love my island of Kaho‘olawe
Mai kinohi kou inoa o Kanaloa Kohemalamalama	Your original name was Kanaloa You are the southern beacon
Lau kanaka ‘ole	Barren and without a population
Hiki mai na pua	Until you were invaded by nine Young men
E ho‘omalu mai	Who granted you peace
Alu like kākou Lahui Hawai‘i	Let us band together the Hawaiian Kingdom
Mai ka la hiki mai i ka la kau a‘e	From sun up to sun down
Ku pa‘a a hahai ho‘ikaika nā kanaka	Stand together and follow, be strong Young people
Kau li‘i makou nui	We are but a few in numbers
Ke aloha no ka ‘aina	But our love for the land is unlimited
Hanohano na pua o Hawai‘i nei	Popular are the young people of Hawai‘i nei
No ke kaua kauholo me	For the civil strife they cause against
Ka aupuni	The government
Pa‘a pu ka mana‘o o no ka pono	Together in one thought to bring Prosperity

O ka ʻaina	To the land
Imua na pua	Forward young people and bring
Kanakila Kahoʻolawe	Salvation to Kahoʻolawe

Hawaiian Star Compass

The following can be learned from the Kuhikeʻe Platform. The Hawaiian Star Compass is used as a reference marker to tell direction without instruments. Culture changes over time and is a sign that the culture and its people are first, living and second, thriving, not only as a people but as a culture. Two different compasses, one ancient, one modern, and both successful. The site of the Kuhikeʻe Navigational Platform is an example of this dynamic. The Hawaiian Star Compass is a similar compass to the Satawal Star Compass that Mau Piailug used for navigation. There is a focus on directional markers of the stars as they rise and set each day. The houses in the Hawaiian Star Compass have Hawaiian names with each house describing an important part of voyaging. The houses help to place where and when the stars rise and set out of the ocean. Therefore, it is important to know those stars and to be able to identify them as they rise and set. Other elements of reference help in other aspects of voyaging such as the rise and setting of the sun, moon phases, wind directions, ocean pathways, directional and reference markers on land. All of these elements combined to understand the cyclical relationship between the seasons, environment, and man. The differences are obviously in the language and names of the sections in the compass that have different oral traditions and stories connecting them to the practices of voyaging. Below, I describe the Hawaiian Star Compass in four sections: Reconceptualizing the Hawaiian Star Compass, Cardinal Directions, Wind Quadrants, and Houses.

Figure 4.13. Mau Piailug's Satawal Star Compass.

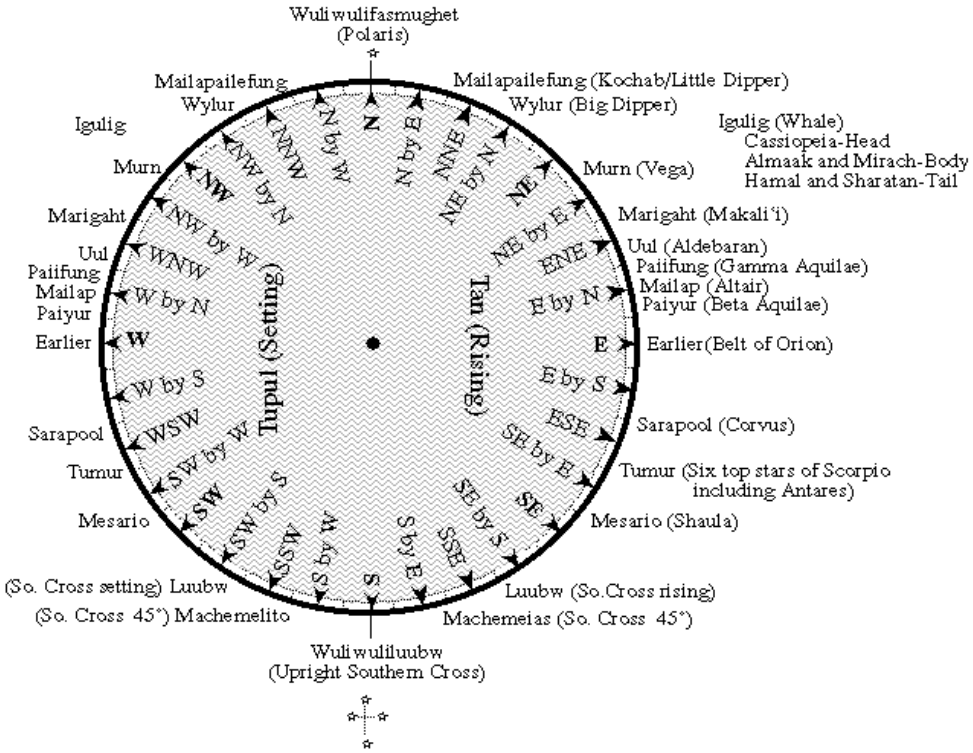
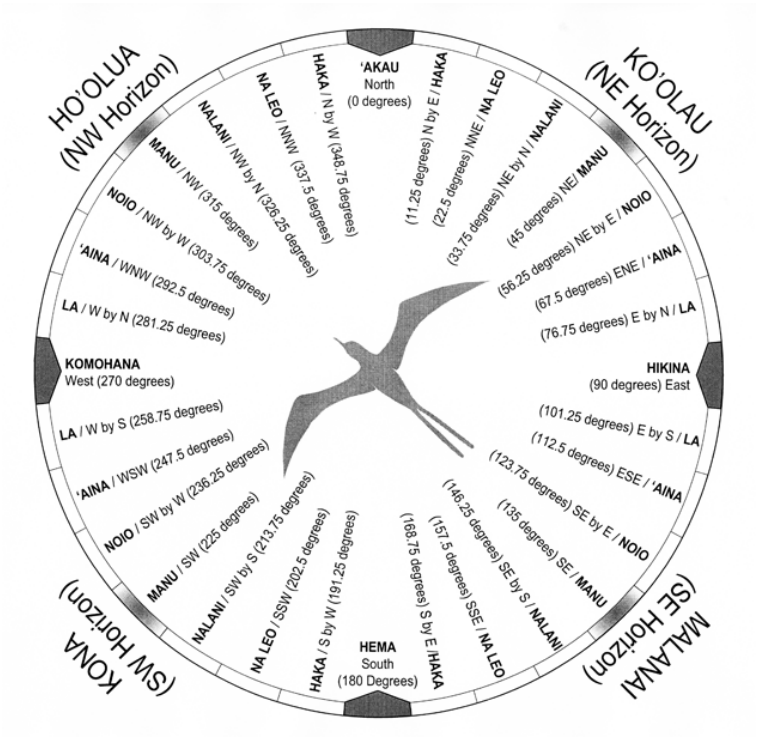


Figure 4.14. Modern-day Hawaiian Star Compass.



Reconceptualizing the Hawaiian Star Compass

The diagram above includes 32 houses in the compass, and each house has a Hawaiian name that identifies where the star comes out of the ocean, travels through the sky, and goes back down into the ocean. There are four cardinal directions, thirty-two houses, and four quadrants for wind directions. Each quadrant describes the different winds associated with the cardinal directions and is a reference marker to the location the wind is originating from. Each house is mentioned in all four quadrants and represents directional markers found in the wind patterns.

The cardinal direction of east or "hikina" (Pukui 69) is where the sun rises on the horizon. The direction of west or "komohana" (Pukui 164) is the location where the sun sets on the horizon. The direction of north or "ākau" (Pukui 13) is located on the left side of a person facing east. The direction of south or "hema" (Pukui 66) is located on the right side of a person facing east. As long as a person knows which side east is, the directional markers are easy to follow.

Wind quadrants in Koʻolau are located in the northeast quadrant of the Hawaiian Star Compass. The northeast trade winds are felt commonly throughout the islands and are named after the windward side of the island due to them originating out of that location. Malanai is located in the southeast quadrant and references the southeast part of Oʻahu. This wind is known to be calm and is defined as a "gentle breeze" (Pukui 232) associated with Kailua on Oʻahu. The third quadrant is called Kona and is found in the southwest quadrant and named for the leeward side of the islands. The fourth wind quadrant is Hoʻolua, found in the northwest quadrant, which generates a strong, forceful wind (Polynesian Voyaging Society Archives).

There are seven houses in each quadrant, and each of them measures 11.25° between each other for a total of a three-hundred sixty circumference. There are four quadrants, which means that each house is represented four times. The first house is called Lā or "sun" (Pukui 188) and will be in this "house for most of the year as it moves back and forth between its Southern limit at the Tropic of Capricorn (23.5° South) at Winder Solstice to its Northern limit at the Tropic of Cancer (23.5° North) at Summer Solstice" (Kyselka 96). The second house is called ʻĀina and is translated to mean "land" (Pukui 11) among the many definitions that can be used for this word. This house is located "between seventeen degrees and twenty-eight degrees on the horizon from East and West can be remembered because Hawaiʻi is at twenty-one degrees North latitude and Tahiti is at eighteen degrees South latitude" (Kyselka 96). The third house is called Noio or "Hawaiian Noddy Tern" (Pukui 270). This bird "helps the navigator find islands because it flies out to sea in the morning to fish and returns to land at night to rest" (Kyselka 96).

The fourth house is called Manu and is translated to mean "bird or any winged creature" (Pukui 239). This house is "midway between the four cardinal directions, and can be seen as the points of the beak, tail, and outstretched wing-tips of a bird; the bird is the traditional Polynesian metaphor for the canoe. On early voyages to Tahiti, *Hōkūleʻa* sailed in the direction of Manu Malanai, with its wings and Manu Koʻolau and Manu Kona, and its tail pointed back at Manu Hoʻolua" (Kyselka 96–97). The fifth house is called Nālani and is translated to mean "the skies, heavens" (Pukui 193) and is named after the brightest star in this house. In the Ke Kā o Makaliʻi starline, Ke Aliʻi o Kona i ka Lewa (Canopus) "rises in Nālani Malanai and sets in Nālani Kona" (Kyselka 97). The sixth house is called Nā Leo and means "the voices" (Pukui 203). This house references the "voices of the stars that speak to the wayfinder" (Kyselka 97). The seventh house is called Haka and translates to "empty" (Pukui 48), referring to clear skies "around the North

and South poles" (Kyselka 97). Below is the modern Hawaiian Star Compass that encapsulates these directional markers and quadrants to form an intangible intellectual mapping of sailing directions from point A to point B.

The Sun

The important part of the day is at sunrise and sunset. It is a time to observe the ocean and recognize the wind pattern and direction. The winds ultimately make the waves and become the main steering tool in navigating through the water. As the sun is moving higher and higher, there comes a point in which it becomes difficult to follow the sun, and the direction of the swells helps steer the course.

There are clues that can be used to help with the directional markers. When the sun is low on the horizon, the path is direct and narrow; as the sun rises, the path becomes a bit more obvious and easier to follow. However, as the sun reaches its highest point, it becomes impossible to tell where the sun has risen. At this point, the sun no longer helps, and another clue has to take over.

An account by Kawaharada describing what he learned from Mau Piailug is as follows: "Sunrise is the most important part of the day. At sunrise you start to look at the shape of the ocean-the character of the sea. You memorize where the wind is coming from. The wind generates the swells. You determine the direction of the swells, and when the sun gets too high, you steer by them. And then at sunset we repeat the observations. The sun goes down-you look at the shape of the waves. Did the wind change? Did the swell pattern change? At night we use the stars. We use about 220 stars by name-having memorized where they come up, where they go down. When it gets cloudy and you can't use the sun or the stars all you can do is rely on the

ocean waves. If you can read the ocean, you will never be lost" (Kawaharada www.hokulea.org/archives).

When the moon phase is in Muku, the skies are black and dark. At this point, the ocean becomes the next clue as reading the waves can give insight into the canoe's direction. Generally, the navigator will lie down on the hull of the canoe to feel the movement of the ocean, and in that space, an understanding of the direction of the canoe is learned. This is not an easy feat, and numerous navigators have stated that this skill takes many years to hone. One of the problems is that you cannot see the swells when the sky gets dark at night under heavy clouds. You cannot even see the bow of the canoe. And that is why people like Mau are so skilled. Mau can be inside the hull of the canoe and just feel the different swell patterns moving under the canoe, and he can tell the canoe's direction lying down inside the hull of the canoe" (Kawaharada www.hokulea.org/archives).

The sun is important because it helps set the direction in the early morning and is used as the main directional marker twice a day, at sunrise in the east and sunset in the west. As the year changes into different seasons, so does the exact orientation of the cardinal directions. The earth tilts at a 23.5° angle and orbits the sun as the sun moves along a curving path called the ecliptic and passes a group of 12 constellations called the zodiac. Tying these directions into the spring and fall equinoxes on March 21 and September 23, the sun is seen on the celestial equator and rises due east and sets due west. Due east and due west are considered to be directly 90° without going toward the north and south, unlike traveling in the direction of east and west with a little movement in the north and/or south direction.

The Summer Solstice on June 21 finds the sun north of the celestial equator and rising at 23.5° north of east or on the Hawaiian Star Compass; this direction would be in ʻĀina Koʻolau.

As the sun sets at the same 23.5° north of west, the direction in the compass would be at ʻĀina Hoʻolua. During the winter months, the sun is in the opposite direction in the south of the celestial equator and on December 22, rising at 23.5° south of east or in ʻĀina Malanai and setting at 23.5° south of west in ʻĀina Kona.

The navigator would use the sun to hold the course by lining up the direction of the rising and setting sun by placing a marker on the canoe's railing. The navigator would initially mark eight marks on each side of the canoe and pair them with another mark on the stern. These bearings help give two bearings alongside the 32 directional houses in the Hawaiian Star Compass.

The Stars

Just as the sun travels from east to west, the stars follow a similar path. The navigator holds course by orienting his canoe to the rising and setting directional points. Stars rise in the east, will travel across the sky in a curved motion, and set in the west. As the Hawaiian Star Compass is brought into this equation, the star rising will start from a certain house in the east, for example, ʻĀina Koʻolau (ENE), will travel across the sky in a curved motion and set in the west in the same house, ʻĀina Koʻolau (WNW). Another example is looking at Hokulei or Capella rising at 46° north of east in Manu Koʻolau (NE), traveling across the sky in a curved motion, and setting in the West at 46° north of west in Manu Koʻolau (NW).

In the Northern Hemisphere, the pathways of the stars lean south, and in the Southern Hemisphere, they lean north. As the canoe may drift to either side, the navigator uses his steering and corrects his position in a movement called leeway. As the stars continue their pattern of rising and setting, they continue to move about 1° every four minutes.

At the midpoint of traveling from east to west in the sky, the stars pass the meridian. There are pairs of stars called meridian pairs or pointers oriented from north to south and pointing in a certain direction. While in the Northern Hemisphere, the stars are oriented to the north. The same happens in the Southern Hemisphere that the stars are oriented to the south. Kawaharada gives examples of these meridian pairs or pointers for the North and South Hemispheres and the times a navigator will see them. They are as follows:

The Meridian Pointers to the North Celestial Pole:

Alpheratz (00h 8.4m) + Polo‘ula / Caph (00h 9.2m)
Alpha Trianguli (01h 53.1 m) + Segin (01h 54.4m)
Theta Aurigae (05h 59.7m) + Menkalinan (05h 59.5m)
Puana / Procyon (07h 39.3m) + Nanamua / Castor (07h 34.6 m) &
Nanahope / Pollux (07h 45.3 m)
Hikulua / Merak (11h 1.8 m) + Hikukahi / Dubhe (11h 3.7m)
Cor Caroli (12h 56m) + Hikulima / Alioth (12h 54m)
Ed Asich (15h 24.9m) + Pherkad (15h 20.7m)
Gienah (20h 46.2m) + Pira‘etea / Deneb (20h 41.4m)
Markab (23h 2.8m) + Scheat (23h 3.8m)

(archive.hokulea.com/navigate 4)

The Meridian Pointers to the South Celestial Pole:

Mirzim (06h 27.7m) + Ke Ali‘i o Kona i ka Lewa / Canopus (06h 23.9m)
Suhail (09h 08m) + Star in the False Cross (09h 11m)
Cross Dividers: Mu Velorum (10h 46.8m) + Unnamed star cluster (10h 46.3m)
Hanaiakamalama / Southern Cross: Kaulia / Gacrux (12h 31.2m) + Ka Mole
Honua / Acrux (12h 26.6m)
Menkent (14h 6.7m) + Mailemua / Beta Centauri (14h 3.8m)
Alpha Lupi (14h 41.9m) + Mailehope / Alpha Centauri (14h 39.6m)
Top stars in Kamakau / Scorpio: Dschubba (16h 0.3m) + Pi Scorpii (15h 58.8m)
Middle stars in Kamakau / Scorpio: Epsilon Scorpii (16h 50.2m) + Mu2 Scorpii
(16h 52.3m) + Zeta Scorpii (16h 54.6m)
Bottom stars in Kamakau: Kamaka / Shaula (17h 33.6m) + Sargas (17h 37.3m)

(archive.hokulea.com/navigate 5)

Hōkū Hele (Traveling Stars)

Traveling stars are also called planets, and they have rising and setting points that are close or next to navigational stars. These planets can be used in navigation as a reference marker if the stars are not visible and/or can be used as a directional marker on their own. Kawaharada gives examples of these hōkū hele below:

> Ukaliali‘i (Mercury) is translated to mean “following the chief” (Ulukau Dictionary), which can also mean following the sun.
>
> Hōkūloa (Venus) and/or Hōkūao is translated to mean “morning star, Venus when seen in the morning.” (Ulukau Dictionary)
>
> Hōkū‘ula (Mars) is translated to mean “a star, perhaps Mars. Red star” (Ulukau Dictionary).
>
> Makulu (Saturn) is translated to mean “Saturn” (Ulukau Dictionary).
>
> Aohoku (Jupiter) is translated to mean “Name of a star, possibly Jupiter” (Ulukau Dictionary).

Four Starlines

Four starlines make up the different seasons and months for the twelve months of the year to follow. Most of these starlines include certain stars from the eleventh to the thirteenth century in voyaging; however, other stars are new and have new names in the twenty-first century. From the twenty brightest stars in Hawai‘i noted in Kepelino’s work, nineteen of them have been configured into the four starlines for modern voyaging. Today, the traditions have changed, and through collaboration with the Hawaiian Studies Department at the University of Hawai‘i at Mānoa, a different method for following the stars has been invented. The Kuhike‘e Navigational Platform is a place where you can sit and watch a number of things occurring as the world above you moves in a cyclical nature. Below, I outline the starlines and show at what point in the sky

we see these pathways. I also show where on the Hawaiian Star Compass these starlines appear based on their declination.

Starline One: Ke Kā o Makali‘i (“The Canoe-Bailer of Makali‘i”)

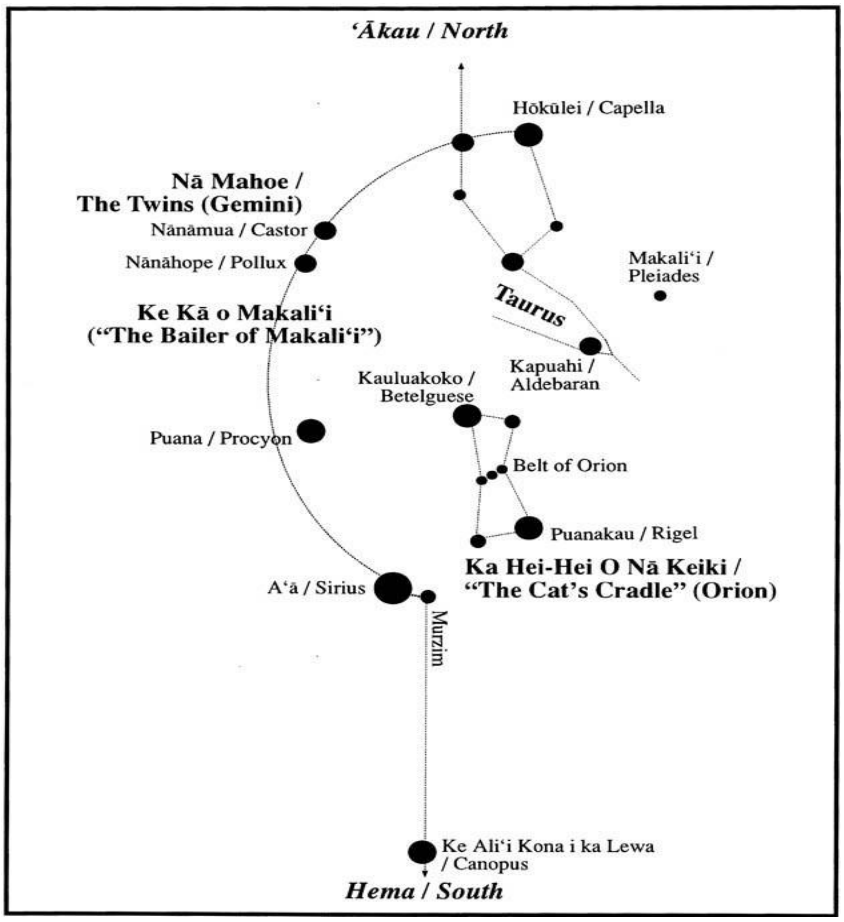


Figure 4.15. Starline One: Ke Kā o Makali‘i (The Canoe-Bailer of Makali‘i) Archive.hokulea.com/ike/hookele/Hawaiianstar Webpage.

The names of the stars and/or constellations tell a story that describes a fundamental value in the Hawaiian culture. These values are seen in metaphors and outline the values taught in the Hawaiian culture. The Ke Kā o Makali‘i starline can be explained by looking at each constellation. The star Hōkūlei is the brightest in the constellation Auriga that consists of five stars. This star is used as a starting point in the starline because it is situated in the northern end. The Nā Mahoe (Gemini) constellation calls the two stars Nānāmua (Castor) meaning to “look

forward" (Pukui 261) and Nānāhope (Pollux), meaning to "look behind" (Pukui 82). The metaphor associated with these two stars refers to looking back to our ancestors by being informed about traditions so that we can ultimately use that foundation to move forward to reconceptualize a modern version of Hawaiian identity in the twenty-first century. The ʻAʻa (Sirius) star is the brightest star in this starline, making it easy to recognize, and represents the booby seabird used in voyaging "to locate islands" (Johnson and Mahelona 52). "These birds leave their nesting island in the morning to hunt for fish at sea, flying up to fifty miles, and returning to the island in the evening hours" (Lewis 171). This star is also used as a reference marker, and once the ʻAʻa star is recognized, imagery of Hōkūlei and Nā Mahoe can be seen. In oral history, the unseen is what guides a canoe and/or person better than what can be seen.

The star called Makaliʻi or "Little Eyes" (Beckwith 367) has seven small stars in a cluster that "rises ahead of the Ke Ka o Makaliʻi starline" (Makemson 37). Makaliʻi appears in mid-November and marks the beginning of the Hawaiian calendar year called Makahiki. Makaliʻi (Pleiades) shows up first on the horizon after the sun sets in the west. The constellation travels north to south and follows the curve that starts with Hokulei (Capella). Navigational platforms were important for this very purpose so that the priest could see the new year approaching and let everyone know that the traditions associated with Makahiki would start at the next moon phase, which would be the next day. Makahiki honors the God Lono and represents a four-month season of peace, fertility, and agriculture, just to name a few representations.

The constellation Ka Hei o na Keiki (The Belt of Orion) "travels along the celestial equator (Ke Alanui o Ke Kuʻukuʻu)" (Beckwith 78–80) and is used as a directional marker. The star Puʻuhonua (the city of refuge) represents a place to go for safety. The star Puana kau is a

bright blue-white star used as a navigator's star because it is the brightest star in the west and is easy to find above Makali‘i.

Below is my fieldwork in which I used a drone to fly above the Kuhike‘e Navigational Observation Platform that shows the constellation, declinations, bright stars, the house in the Hawaiian navigational compass in this starline. This chart points out where you can see the sun rising and setting in the Hawaiian star compass, which constellation to follow in the starline, and which bright star can be used as a reference point. These answers are based on the Hawaiian Star Compass (*Figure* 4.14) when facing north at the platform. Connecting the Kumulipo and/or Hawaiian cosmology to the starlines and constellations allows for an oral approach in memorizing which stars and directions to look for as the story that is attached to these reference points give clues that aid in understanding these markers better. The asterisk annotated the bright stars in this starline, and they are used as directional markers. This starline is seen in the Hawaiian skies from November to April.

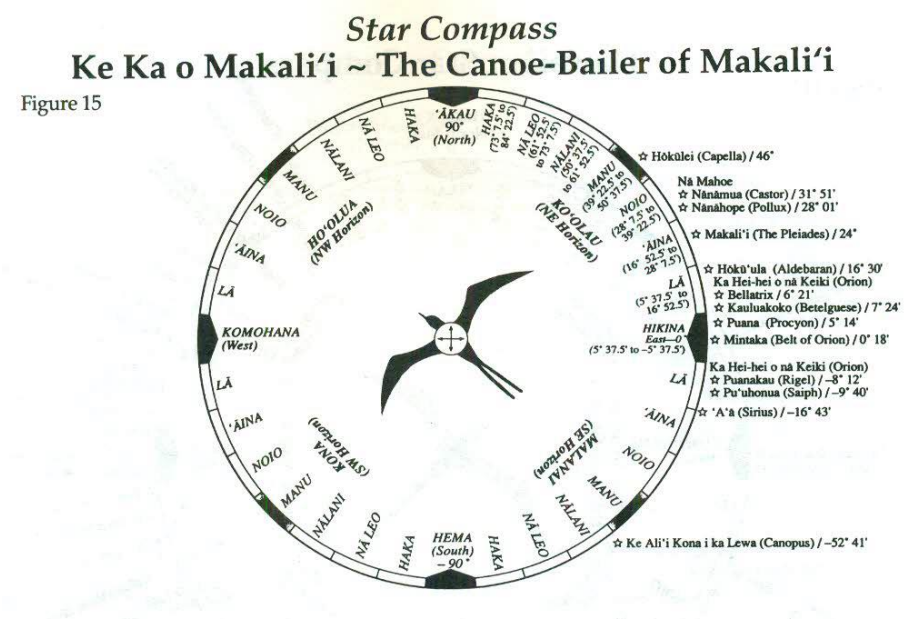
Table 2. Declinations, Bright Stars, House, and Kumulipo of the Hawaiian Star Compass.

Star	**Declination**	**Bright Stars**	**House**	**Kumulipo**
Hōkūlei (Capella)	+46°	*	Manu Ko‘olau	
Nā Mahoe:				
Nānāmua (Castor)	+31° 51’		Noio Ko‘olau	
Nānāhope (Pollux)	+28° 01’	*	Noio Ko‘olau	
Makali‘i (Pleiades)	+24°		‘Āina Ko‘olau	1888
Kapuahi (Aldebaran)	+16° 30’	*	Lā Ko‘olau	
Ka Hei Hei o Nā Keiki (Orion)				
Bellatrix	6° 21’		Lā Ko‘olau	
Kauluakoko (Betelguese)	7° 24’	*	Lā Ko‘olau	
Puana (Procyon)	+5° 14’		Hikina	1639 & 1882
Mintaka (Belt of Orion)	0° 18’		Hikina	
Puanakau (Rigel)	-8° 12’	*	Lā Malanai	1639 & 1882
Pu‘uhonua (Saiph)	-9° 40’			

‘A‘ā (Sirius)	-16° 43’	*	Lā/‘Āina Malanai	1630 & 1873
Ke Ali‘i Kona i ka Lewa (Canopus)	-52° 41’	*	Nālani Malanai	

Incorporating this starline into the Hawaiian Star Compass, Chart 4 shows where the stars would be located on the modern Hawaiian Star Compass after the four main directional references are found.

Figure 4.16. Using the Hawaiian Star Compass with the Ke Kā o Makali‘i Starline (Bryant 58).



Starline Two: Ka Iwikuamoʻo ("backbone")

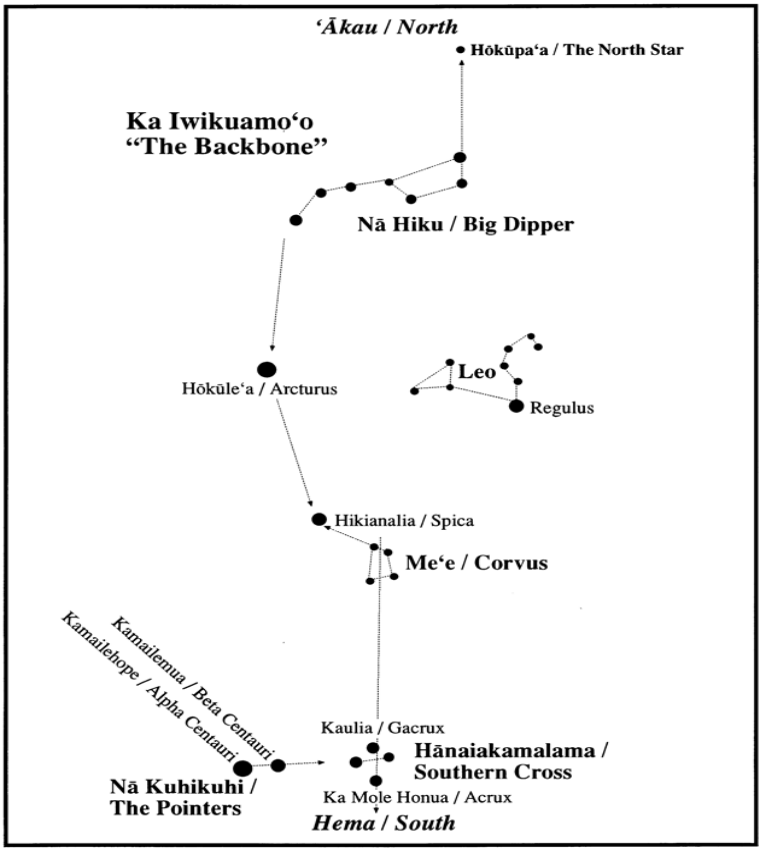


Figure 4.17. Starline Two: Ka Iwikuamoʻo (Backbone).
Archive.hokulea.com/ike/hookele/Hawaiian star Webpage.

The starline *Iwikuamoʻo* refers to a vertebra in the backbone. Pukui defines Iwikuamoʻo as "spine, backbone" (Pukui 105). This definition represents a fundamental Hawaiian value and "metaphor for a genealogical line, with each vertebra representing a generation" (Polynesian Voyaging Society Archive). The metaphor is telling the Hawaiian people to know our genealogy. This connection to genealogy can be seen in the Nā Hiku constellation. This constellation outlines seven stars. Each star is numbered in the Hawaiian language. This dynamic can be seen in the constellation's name as Nā Hiku is defined as "seven" (Pukui 69). This dynamic can also be seen in the names of each star within this constellation, as there are seven stars numbered one to six. The seventh star is labeled "the end," as "pau" translates to "finish or the end" (Pukui 319)

in the Hawaiian language. The front of each word is “hiku” meaning “number” (Pukui 69), and the ends of those words are numbered one to six. For example, Hiku-kahi or “Number one” (Pukui 111), Hiku-lua or “ Number two” (Pukui 213), Hiku-kolu or “Number three” (Pukui 164), Hiku-ha or “Number four” (Pukui 44), Hiku-lima or “Number five” (Pukui 206), Hiku-ono or “ Number six” (Pukui 289), and Hiku-pau or “Number is finish” (Pukui 319).

The brightest star in the Northern Hemisphere is called *Hōkūleʻa* (Arcturus) and is used as a “celestial beacon marking the Northern destination in the long voyages from the Marquesas and Tahiti to Hawaiʻi as the zenith star” (Johnson and Mahelona 5). This star represents the proximity of Hawaiʻi when sailing from any direction. This star signals that sailors are close to home in Hawaiʻi as the Hawaiian Islands lie directly below this star at its highest latitude. This is the reason for naming the voyaging canoe after this star. The star called Hikianalia is the pairing star of *Hōkūleʻa* and is found in the Southern Hemisphere. This star guides sailors and defines a “fishing season between April and September” (Pukui 69). This youngest voyaging canoe in Hawaiʻi is called Hikianalia because of its pairing with *Hōkūleʻa* in the night sky. The star called Meʻe or “Voice of Joy” (Makemson 17) represents the Hawaiian word *mele* and is defined as a “song or chant” or “to sing or to chant” (Makemson 17). The metaphor for this star is to remind us of cultural affirmations that hold history in these oral traditions. Below is my fieldwork that shows the declinations and the stars in this constellation, along with where you can see them based on the Hawaiian Star Compass, which are the bright stars to see at night, and where they are connected to the Kumulipo and/or Hawaiian cosmology.

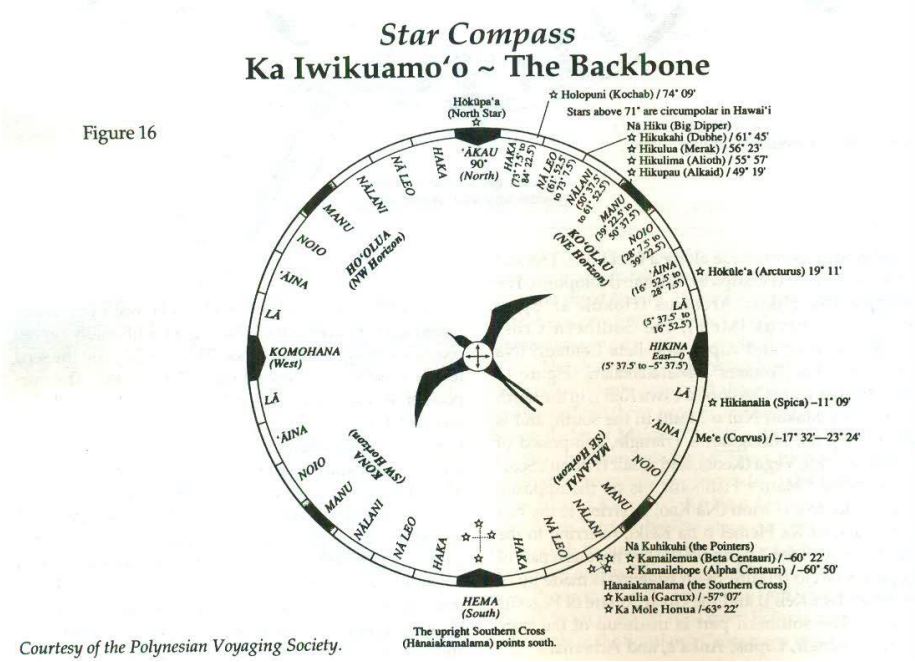
Below is my fieldwork for the Ka Iwikuamoʻo (“backbone”) starline.

Table 4.3. Declinations, Bright Stars, House, and Kumulipo of the Hawaiian Star Compass.

Star	**Declination**	**Bright Stars**	**House**	**Kumulipo**
Hōkūpa‘a (Polaris)	+90°		‘Ākau	
Nā Hiku (Big Dipper)				
Hikukahi (Dubhe)	+61 75°		Nālani/Nā Leo Ko‘olau	1652 & 1895
Hikulua (Merak)	+56° 23’		Nālani Ko‘olau	
Hikulima (Alioth)	+55° 57’		Nālani Ko‘olau	1654 & 1897
Hikupau (Aklaid)	+49° 19’		Nālani Ko‘olau	1655 & 1898
Hōkūle‘a (Arcturus)	+19° 11’	*	‘Āina Ko‘olau	
Hikianali‘a (Spica)	-11° 09’	*	Lā Malanai	
Me‘e (Corvus)	-17° 32’/23° 24’		Āina Malanai	
Nā Kuhikuhi (The Pointers)				
Nā Kahikuhi (Beta Centauri)	-60° 50’	*	Nālani Malanai	
Kamailehope (Alpha Centauri)	-60° 50’	*	Nālani Malanai	
Leo (Regulus)		*	Nālani Malanai	
Hanaiakamalama (Southern Cross)				
Kaulia (Gacrux)	-57° 07’		Nālani Malanai	
Ka Mole Honua (Acrux)	-63° 22’		Nā Leo Malanai	

Figure 4.18 shows where the stars would be located on the modern Hawaiian Star Compass after the four main directional references are found.

Figure 4.18 Using the Hawaiian Star Compass with the Ka Iwikuamoʻo Starline (Bryant 58).



Courtesy of the Polynesian Voyaging Society.

Starline Three: Mānaiakalani ("The Chief's Fishline")

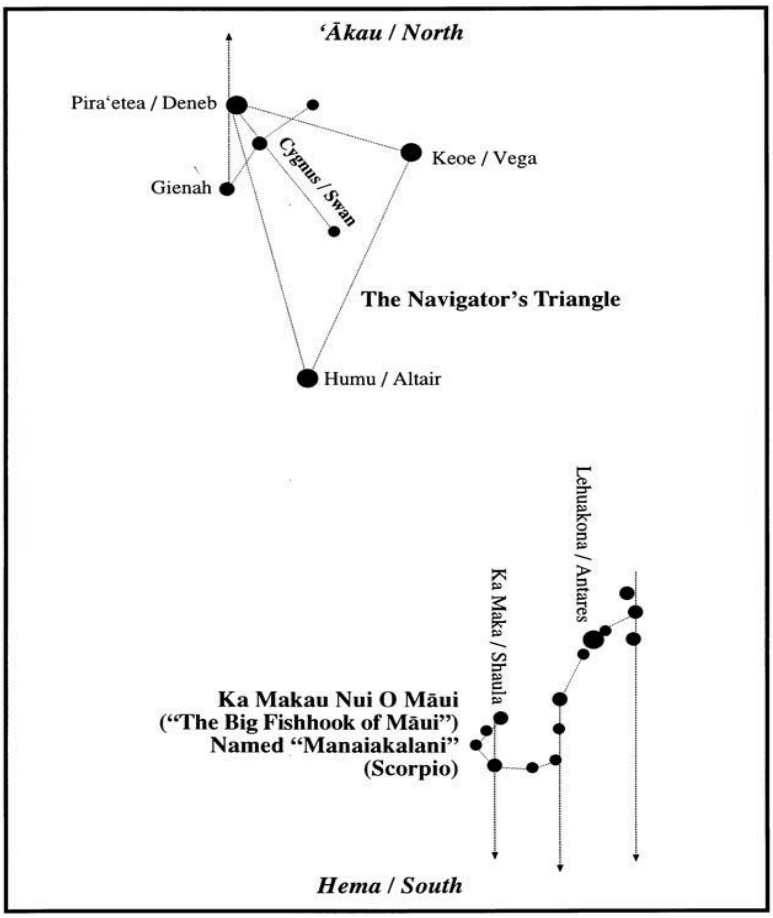


Figure 4.19 Starline Three: Mānaiakalani ("The Chief's Fishline")
Archive.hokulea.com/ike/hookele/Hawaiian star Webpage.

The third starline is Mānaiakalani and is translated to mean "The Chief's Fishline" (Johnson and Mahelona 47). I have discussed the mo'olelo of Mānaiakalani in the early parts of this chapter. This starline is named after that mo'olelo. Mānaiakalani is the name of the fish hook in the Ku'ula and 'Ai'ai mo'olelo and the Demi-God Maui's fishhook where he pulls up the Hawaiian Islands from the depths of the ocean. This starline is visible in the sky from May to October. "In the Northern sky, the Navigator's Triangle is seen and in the Southern sky, Ka Makau Nui o Maui is seen" (Polynesian Voyaging Society Archives). In the Navigator's Triangle, Pira'etea and Gienah are "meridian pointers to the north" (Polynesian Voyaging Society Archives), and

the three bright stars in the Mānaiakalani constellation are in alignment with the "meridian pointers to the South" (Polynesian Voyaging Society Archives).

These starlines are known to be named after moʻolelo and legends. In the Navigator's Triangle, "the legend of Humu told by Kupahu suggests Humu was a guide star to Kauaʻi when a canoe sailed from Oʻahu. Humu's two sons sailed with the first canoes; the older son, who knew star lore, gave his advice on which direction to sail in, which angered the steersman. The steersman threw Humu's two sons overboard; they swam behind the stars known as Humu-ma and were rescued by their father, who sailed in the last canoe with the King; Humu and his two sons reached Kauaʻi, while the rest of the canoes were lost at sea" (Johnson and Mahelona 167–168). The moʻolelo is a reminder that the fundamental aspects of the Hawaiian culture are talked about in oral history. Therefore, moʻolelo is a significant part of methodology and Hawaiian agency.

Table 3. Declinations and Stars of the Hawaiian Star Compass.

Below is my fieldwork that shows the declinations and the stars in this constellation along with where one can see them based on the Hawaiian Star Compass, which are the bright stars, where one can see them at night, and where they are connected to the Kumulipo and/or Hawaiian cosmology.

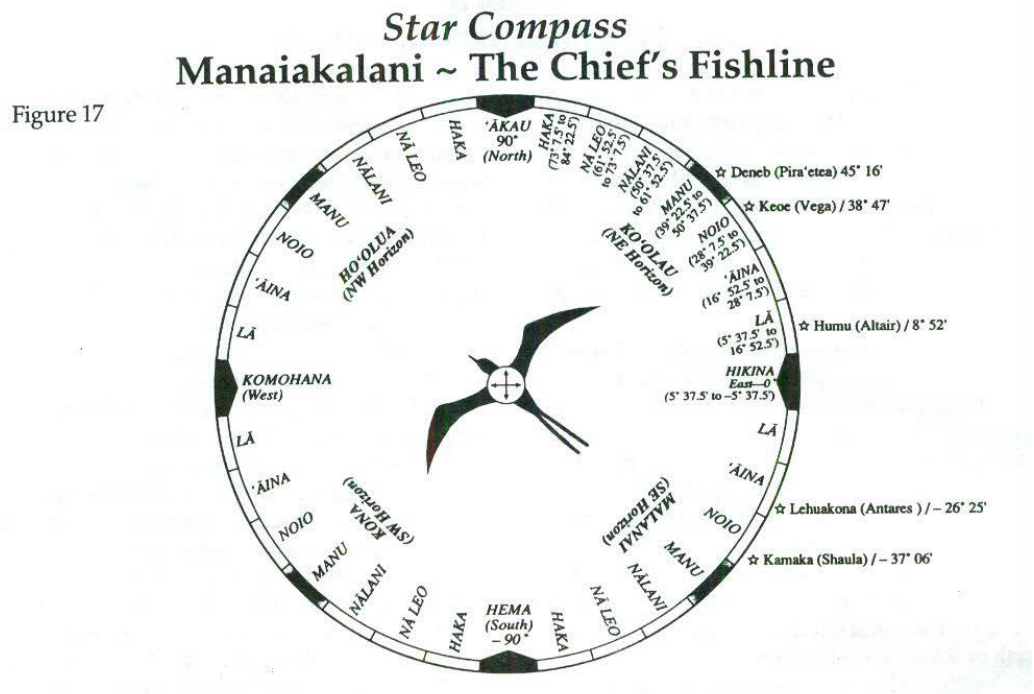
Below is my fieldwork for the Mānaiakalani ("The Chief's Fishline") starline.

Table 4.4. Declinations, Bright Stars, House, and Kumulipo of the Hawaiian Star Compass.

Star	**Declination**	**Bright Stars**	**House**	**Kumulipo**
The Navigator's Triangle				
Pira'etea (Deneb)	+45° 16'	*	Manu Ko'olau	
Keoe (Vega)	+38° 47'	*	Noio Ko'olau	
Humu (Altair)	+8° 52'	*	Lā Ko'olau	1646 & 1889
Mānaiakalani (Maui's Fish Hook)				
Lehuakona (Antares)	-26° 26'	*	Āina Malanai	
Kamaka (Shaula)	-37° 06'		Noio Malanai	
Kapoho (Sargas)	-42°		Manu Malanai	

Figure 4.20 shows where the stars would be located on the modern Hawaiian Star Compass after the four main directional references are found.

Figure 4.20. Using the Hawaiian Star Compass on the Mānaiakalani Starline (Bryant 59).



Starline Four: Ka Lupe o Kawelo ("The Kite of Kawelo")

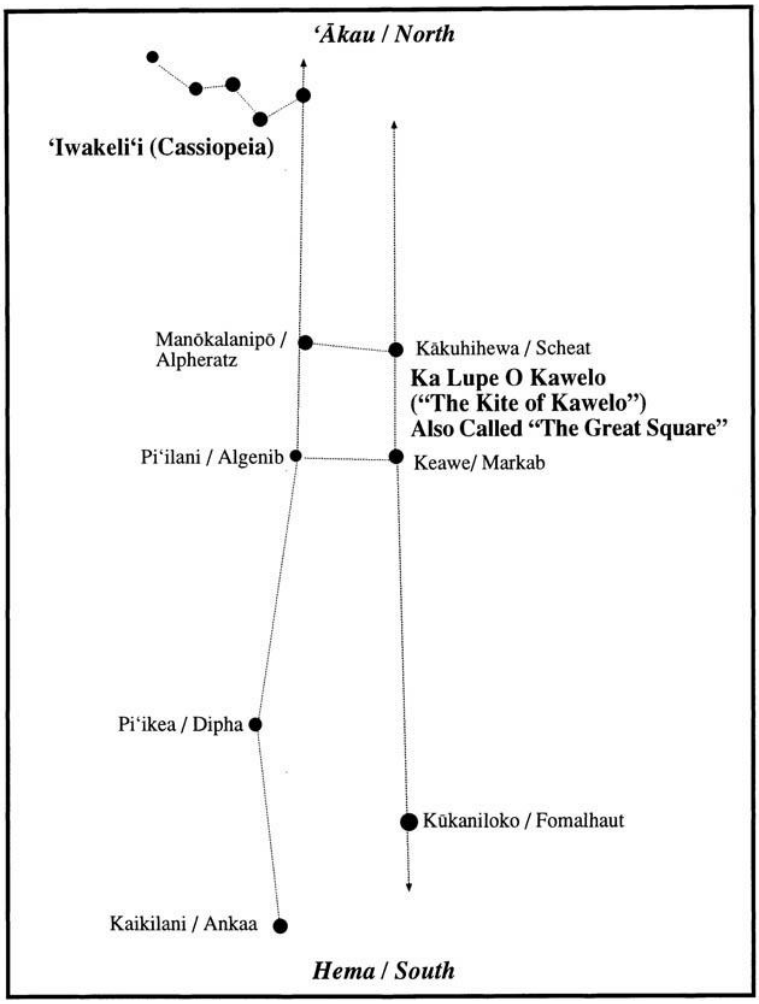


Figure 4.21 Starline Four: Ka Lupe o Kawelo ("The Kite of Kawelo").
Archive.hokulea.com/ike/hookele/Hawaiian star Webpage.

The fourth starline "rises between East and Northeast" (Polynesian Voyaging Society Archives) in the night sky. The name of the starline is after a chief from the island of Kaua'i, and the mo'olelo tells of his significance.

"One day, as Kawelo was paddling a canoe, he saw his cousin Kauahoa release a kite into the sky. Kawelo returned home that day and asked his grandparents' for a kite of his own. His wish was granted and he flew his kite next to his cousin Kauahoa. Kawelo taunted Kauahoa by making his kite leap from side to side. Soon the two kites became entangled. They twisted and

turned, but soon the string holding Kauahoa's kite broke, and it flew away, landing in a distant forest. To this day, near Koloa is a place called Kahoʻoleināpeʻa in reference to Kauahoa's fallen kite. Kawelo, being slightly smaller than his cousin, knew that Kauahoa could have punished him for what he had caused. But Kauahoa sadly blamed the wind, and the two remained close throughout childhood. However, everyone who watched the kites in the sky that day interpreted them as a sign: Kawelo's mana, or supernatural power, was greater than Kauahoa's" (Imiloa Astronomy Center Archives).

ʻIwa Keliʻi, or "Chief Frigate Bird" (Makemson 45), refers to three different types of birds that are used as directional and reference markers. "The ʻiwa or man-of-war bird" flies from shore fifty miles out to sea and back, the "noio or Hawaiian tern" flies a hundred miles out to sea and back, and the "manu-o-ku or white tern" can fly longer than a day, which means this bird flies up to two hundred miles to the deep sea and back.

The Hawaiian names in this starline were paired with the names of Moʻikeha's crew and family members. In 1996, the Polynesian Voyaging Society asked The Center for Hawaiian Studies at the University of Hawaiʻi at Mānoa to create names for these stars, and a team led by Lilikalā Kameʻeleihiwa wrote and translated each star, accordingly. See Appendix 48 for the explanation of names. Below is my fieldwork that shows the declinations and the stars in this constellation, along with where you can see them based on the Hawaiian Star Compass, which are the bright stars to see at night, and where they are connected to the Kumulipo and/or Hawaiian cosmology.

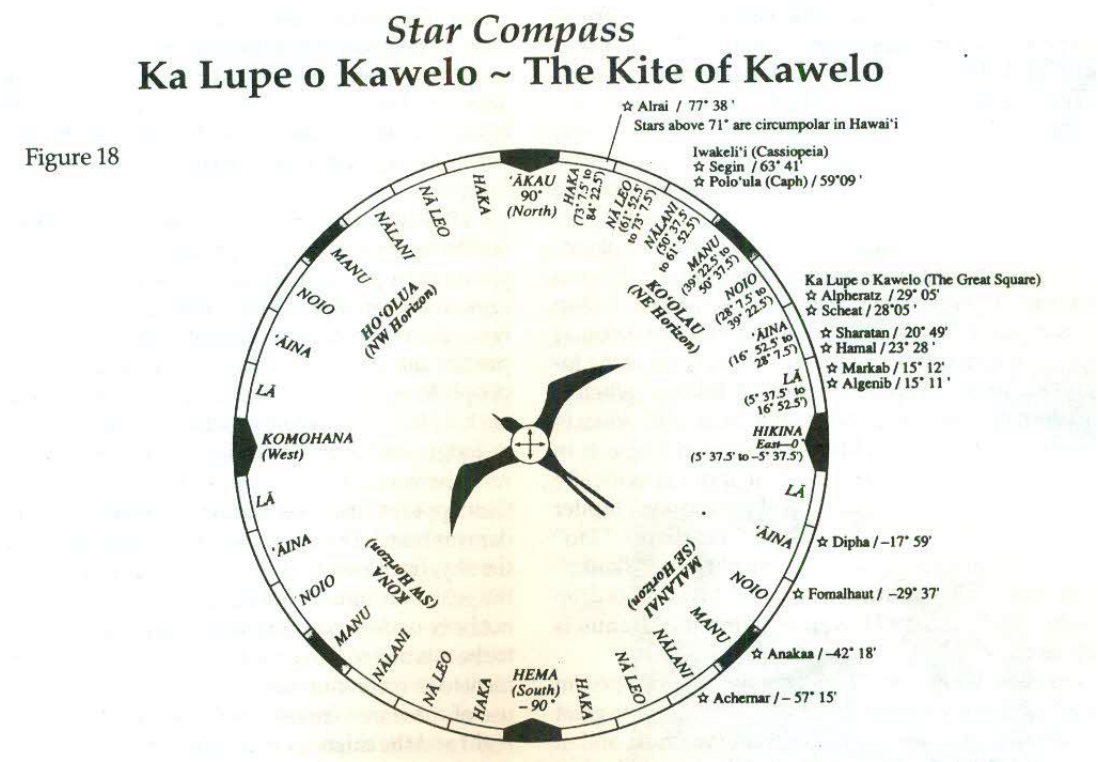
Below is my fieldwork for the Ka Lupe o Kawelo ("The Kite of Kawelo") starline.

Table 4.5. Declinations, Bright Stars, House, and Kumulipo of the Hawaiian Star Compass.

Star	**Declination**	**Bright Stars**	**House**	**Kumulipo**
Maweke (Alrai)	-57° 15’		Haka Koʻolau	
Iwakeliʻi (Cassiopeia)				
Haumea (Segin)	+63° 41’		Nā Leo Koʻolau	
Poloʻula (Caph)	+59° 09’		Nālani Koʻolau	1622 & 1865
Ka Lupe o Kawelo (The Great Square)				
Manōkalanipō (Alpheratz)	+29° 05’		Noio Koʻolau	
Kākuhihewa (Scheat)	+28° 05’		ʻĀina Noio Koʻolau	
Laʻamaikahiki (Sharatan)	+20° 49’		ʻĀina Koʻolau	
Mōʻikeha (Hamal)	+23° 28’		ʻĀina Koʻolau	
Keawe (Markab)	+15° 12’		Lā Koʻolau	
Piʻilani (Algenib)	+15° 11’		Lā Koʻolau	
Piʻikea (Dipha)	-17° 59’		ʻĀina Malanai	
Kūkaniloko (Fomalhaut)	-29° 37’	*	Noio Malanai	
Kaikilani (Anakaa)	-42° 18’		Manu Malanai	
Kalani Kaululeaiwi (Achernar)	-57° 15’	*	Nālani Malanai	

Figure 4.22 shows where the stars would be located on the modern Hawaiian Star Compass after the four main directional references are found.

Figure 4.22 Using the Hawaiian Star Compass on the Ka Lupe o Kawelo Starline.



The Moon

The moon follows the same pattern as the sun and the stars on a path called the ecliptic. The one significant difference is that the Hawaiian moon calendar revolves around a 29.5-day cycle of the moon. Each day is broken down into sections of the month that describe what to expect during those days and nights. The moon rises at a different position each day on the eastern horizon from where it rose the night before. In studying the moon phases with the compass, the rising of the moon fluctuates between ʻĀina Koʻolau (ENE) and ʻĀina Malanai (ESE) during its 29.5-day cycle around the earth. The same pattern is seen in the setting of the moon in which the moon sets between ʻĀina Hoʻolua (WNW) and ʻĀina Kona (WSW). The change in the patterns is due to the relationship with the sun and earth. Understanding the rising and the setting of the moon

each night helps use the reference marker for navigation at night. Also, because the moon can be seen in the day hours, it can also be a reference marker during the day hours as well.

The Moon Calendar

An easy way to study the Hawaiian moon calendar is to divide the number of days in the calendar by three and/or 30 divided by three equals ten. The word that describes the ten-day periods is called Anahulu. Anahulu is described in the Ulukau Dictionary as a "period of ten days; for ten days; to pass ten days." Having this approach of looking at a ten-day period gives a better idea of what each section of the month represents. In memorizing the moon phases, a pattern will start to appear. The main significance that comes out of understanding and knowing these moon phases is that all four main deities are recognized as "there are three kāloa days that represent Kanaloa, Kāne, Lono, and Mauli (life-spirit)" (Archive.hokulea.com/ike/hookele/hawaiian_lunar_month).

Anahulu Hoʻonui

"The first period of ten days is called 'hoʻonui,' 'growing bigger,' beginning on the first crescent" (Kamakau 31–32). Hilo is the name of the first night of the new moon, which means "faint" or "threadlike" (Ulukau Dictionary) and is a district and/or town on Hawaiʻi Island named after a famous Polynesian navigator. This moon can be seen in the west after sunset, rises early in the morning, and sets early in the evening. This moon phase is known for being unproductive in planting and good for shoreline and reef fishing. Hoaka is the second day of the month and means "crescent, arch, brightness, and/or shining" (Ulukau Dictionary). This moon can be seen in the west after sunset. This day is also known for good farming and good fishing.

The third to the sixth day of the month follows a numerical order in which the days along with their names are as follows: 3 = Kūkahi; 4 = Kūlua; 5 = Kūkolu; and 6 = Kūpau. These days

represent Kū as it is the beginning of each name. Also, understanding the Hawaiian language is important as each day is numbered one to three, with the fourth day translating to "entirely finished" (Ulukau Dictionary) and/or end of the count. The three-six days represent a period of changing in the sky from the third and fourth day being visible in the west and the evening to changing on the fifth and sixth day of having the moon be visible in the late evening and day hours.

Anahulu Poepoe

The second ten-day period explains each night thereafter of the full moon. Those days are between the eleventh and the twentieth. Poepoe translates to "round, rounded, circular; compact, compressed; full, as the moon; sphere, globe" (Ulukau Dictionary). The eleventh day is called Huna, which means "hide or hidden" (Ulukau Dictionary) and is visible after midnight. This night is known to be good for planting and fishing. The twelfth day is called Mōhalu, and that means "to open, unfold, as flowers" (Ulukau Dictionary). This night is the "first of the Kāne taboo, liked for planting flowers because it was believed the flowers would be round and perfect like the moon on this night" (Ulukau Dictionary). This night is visible until before dawn and is known to be excellent for planting and fishing. The thirteenth day is called Hua and is translated to mean "fruit and egg" (Ulukau Dictionary). It is the second night of the Kāne taboo. This name also references the "name for the planet Jupiter" (Johnson 230). This moon is visible until near dawn and is excellent for planting and fishing.

The next three nights are called "nā pō mahina kōnane" meaning "bright moonlight" (Archive.hokulea.com/ike/hookele/hawaiian_lunar_month). The moon phase on the fourteenth day is called Akua and translates to "God, goddess, spirit" (Ulukau Dictionary) and is the first full moon of the month. This moon is visible throughout the night and is sacred to the god Kāne.

This night is also good for planting and fishing. The second full moon on the fifteenth night is called Hoku and means “star” (Ulukau Dictionary). This moon is visible throughout the night and is known for good planting and fishing. This name is also part of the name in Hoʻohokuikalani, the daughter of Wākea and Papa and mother to Hāloa, the first man and/or chief in Hawaiian cosmology. The third full moon is on the sixteenth day and is called Māhealani, which means “heavenly” and is visible until early morning. This day is excellent for planting and fishing. Kamakau writes about these days and describes what is happening to the moon as it goes through this period. “The night when the moon was full was the night of Akua; the second night of the full moon was Hoku, when it began to crumble and peel; the second night of this peeling was Māhealani” (Kamakau 17). In essence, Kamakau describes how the full moon dissipates on the second night in Hoku, and by the time the moon is in Māhealani, it is on the way to the next phase.

The seventeenth moon is called Kulu and translates to “drop or pass as time does” (Archive.hokulea.com/ike/hookele/hawaiian_lunar_month). This moon phase is visible until early morning and is known for good planting and fishing. The next three nights are in sequence, and there are obvious changes in the moon’s placement each night. The nights go as follows: 18 = Lāʻau Kūkahi; 19 = Lāʻau Kūlua; and 20 = Lāʻau Kūpau. All three days are known to be good days for the collection of medicinal plants as it is in the name, Lāʻau. Lāʻau translates to “tree, plant, wood” (Ulukau Dictionary). This day is also known for fishing. The difference lies in the placement of the moon in which Lāʻau Kūkahi is visible until morning, Lāʻau Kūlua is visible until mid-morning, and Lāʻau Kūpau is visible until late morning.

Anahula Hoʻēmi

The word ʻēmi translates to "diminish, reduce grow smaller" (Ulukau Dictionary). This name explains what phase the moon is transitioning to on the twenty-first, twenty-second, and twenty-third day and describes the moon's location as "three-quarters of the way behind the sun along the path of the ecliptic" (Archive.hokulea.com/ike/hookele/hawaiian_lunar_month). The next three days are in a sequence that follows the earlier days of the month seen on the seventh, eighth, and tenth day. This example shows the "transition from more than half-lit moon to less than half-lit moon" (Archive.hokulea.com/ike/hookele/hawaiian_lunar_month). The names are as follows: 21st = ʻOlekūkahi; 22nd = ʻOlekūlua; and 23rd = ʻOlekūpau. The moon can be seen on these three days in the late night and until noon and mid-afternoon the next day. Generally, these days are looked upon as unproductive days and should be seen as a time for preparation.

The next three days are in sequence and follow a pattern. These nights are seen as being sacred to Kanaloa, the god of the ocean and navigation. The twenty-fourth moon is called Kāloakūkahi, the twenty-fifth moon is called Kāloakūlua, and the twenty-sixth moon is called Kāloapau. The twenty-fourth and twenty-fifth moons are best seen at sunrise, and the twenty-sixth moon is seen to the east at sunrise. Therefore, showing another directional curve in the moon phases and sun direction. These three days are good for planting and fishing. The twenty-seventh day is called Kāne, in reference to the Hawaiian god for freshwater springs and streams. The best time to see this moon is to the east at sunrise. This day is known as a time of prayer and gratitude for life, and in that understanding, there should be no planting and/or fishing. The twenty-eighth day is called Lono and is another main deity known for peace. This moon is seen in the east at sunrise and is not always visible unless the eastern horizon is clear. Kāne prayers continue on this day, and there is little planting along with no fishing on this day as well. The

twenty-ninth day is called Mauli, and that means “life, heart, seat of life, spirit” (Ulukau Dictionary). This moon is rarely visible, but when it is, it can be seen to the east at dawn. This day is excellent for planting along with good fishing. The 30th moon is called Muku and translates to “cut short, shortened, at an end” (Ulukau Dictionary) and is seen as the “end of the moon cycle as the moon is in the front of the sun as its frontside is facing the earth” (Archive.hokulea.com/ike/hookele/hawaiian_lunar_month). In this alignment, the moon is dark and not visible. However, it is a good day for planting and fishing.

In teaching the moon phases to children and also to adults, there is a chant that can be memorized so that it is easy to remember. The chant is titled Kamali‘i ‘Ike ‘Ole i ka Helu Pō (Children Who Do Not Know How to Count the Nights).

Kamali‘i ‘ike ‘ole I ka helu po	Little children who cannot count the nights
Muku Nei, muku, ka malama	Muku is here, Muku the dark moon
Hilo nei, kau ka Hoaka	Hilo, followed by Hoaka
‘Eha ku, ‘Eha ‘ole, eae	Four ku, four ‘ole
Huna, Mohalu, Hua, Akua	Huna, Mohalu, Hua, Akua
Hoku, Mahealani, eae	Hoku (“star”- full moon) Mahealani
Kulua	Kulua
Ekolu la’au, ekolu ‘ole, ekolu Kaloa, aea	Three La’au, three ‘ole, three kaloa
Kāne, lono, mauli eae	Kane, Lono, Mauli

(EdithKanakaolefoundation.org)

Kaho‘olawe is the perfect island to teach the moon phases because of the directional markers; therefore, the Kuhike‘e platform is ideal for teaching the different moon positions because of the 360° sighting along with a view of the horizon and ocean. The moon will either be on the same side as the sun or the opposite side. If the moon is on the same side as the sun, then there will be darkness, and as the moon moves away from the sun, the light will start to come into the moon phase or “when the moon waxes from crescent to gibbous” (Archive.hokulea.com/ike/hookele/hawaiian_lunar_month). The opposite sees the moon on the

other side of the celestial sphere away from the sun, and only then can the light in the moon be seen or "the moon wanes from gibbous to crescent" (*Figure* 4.23) (Archive.hokulea.com/ike/hookele/hawaiian_lunar_month). Below is a picture that shows the moon's position as it follows the sun from east to west.

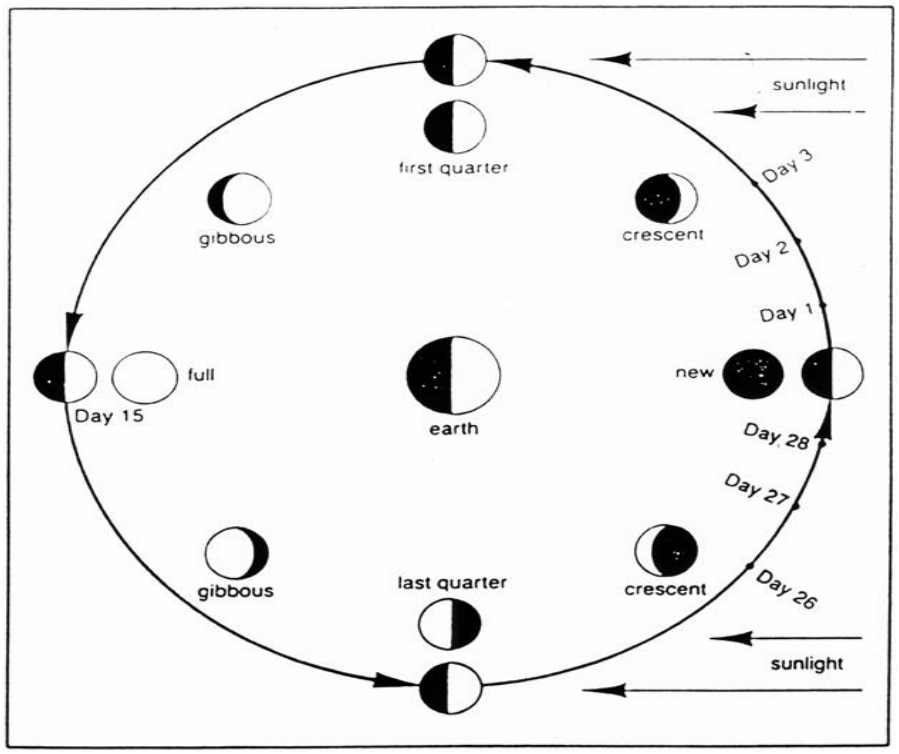


Figure 4.23. The Moon Wanes from Gibbous to Crescent. Aveni, Anthony F. Skywatchers of Ancient Mexico. University of Texas. 1980.

A longtime crew member on Hōkūleʻa, Dennis Kawaharada, describes what it is like to be on a voyaging canoe and implement the moon phases in the skill of wayfinding (*Figure* 4.24).

1. When the sun is setting, and the moon is between it and the observer on the canoe, its backside is lit, its frontside dark (New Moon);
2. When the sun is setting, and the moon is rising on the opposite side of the sky, its front side is lit, and it appears full of light;
3. When the sun is setting, and the moon is in the first quarter, the moon is near the Zenith, overhead, and its western side is lit, its eastern side dark;
4. When the sun is setting, and the moon is in the last quarter, the moon will rise six hours after sunset, at around midnight, and be overhead toward sunrise, with its eastern side lit by the soon-to-rise and its western side dark (Kawaharada 3).

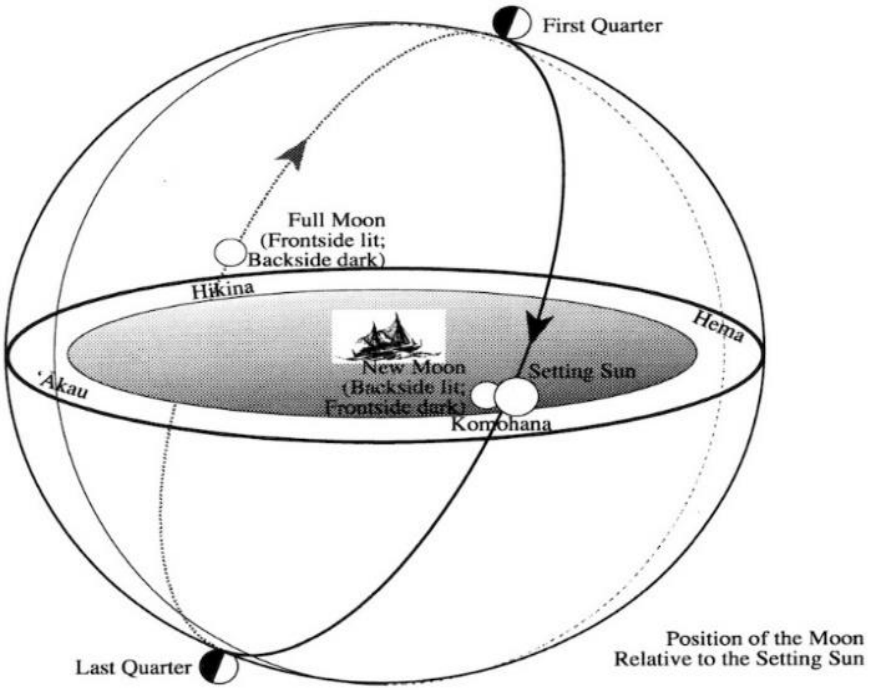


Figure 4.24. Kawaharada, Dennis. Wayfinding or Non-instrument Navigation. Archive.hokulea.com/ike/hookele/hawaiian_lunar_month. Last accessed July 2019.

Ocean Swells

Another indicator of directional references and/or markers can be seen in the ocean swells. The swell direction can only be determined by their reference to the rising and setting sun. Knowledge of the ocean and trade winds comes in handy as a northeast trade wind would create a northeast swell, storms in the South Pacific create south swells, and in the North Pacific north swells.

Swells move in a straight line from one house on the Hawaiian Star Compass to a house of the same name on the opposite side of the horizon, 180° away. Thus, a swell from the direction of Manu Koʻolau (NE) will pass under the canoe and head in the direction of Manu Kona (SE); a swell from ʻAina Malanai (ESE) will pass under the canoe and head in the direction of ʻAina Hoʻolua (WNW) The navigator can orient the canoe to these swells. For

example, if the canoe is heading SE Manu with a swell coming from the SE Manu, the person steering keeps the canoe headed directly into the swell, which lifts the bow, passes beneath, then lifts the stern. If the canoe is traveling SW, a SE swell would roll the canoe from side to side, lifting first the port hull, then the starboard hull as it passes beneath. After the navigator orients the canoe to a swell pattern, he gets used to the pitching, rolling, or corkscrewing of the canoe; when the motion changes, the navigator knows that the canoe is no longer going in the same direction (assuming the direction of the swell remains constant). The motion gets complex when more than one swell is running; an experienced traditional navigator like Mau can feel as many as four or five swells.

Landmarks

Steering by landmarks can be a great tool for training in voyaging. Landmark training entails the navigator and crew to find two landmarks, such as the top of Haleakalā and the endpoint of Lānaʻi, and find a spot in between where you can connect the two landmarks with a visual line. This training can be done off of the island of Kahoʻolawe and in the Maui County ocean channels. Landmark training can also be used in looking behind the path that the canoe just passed through. Obtaining two landmarks behind you can also help in sailing in a straight line.

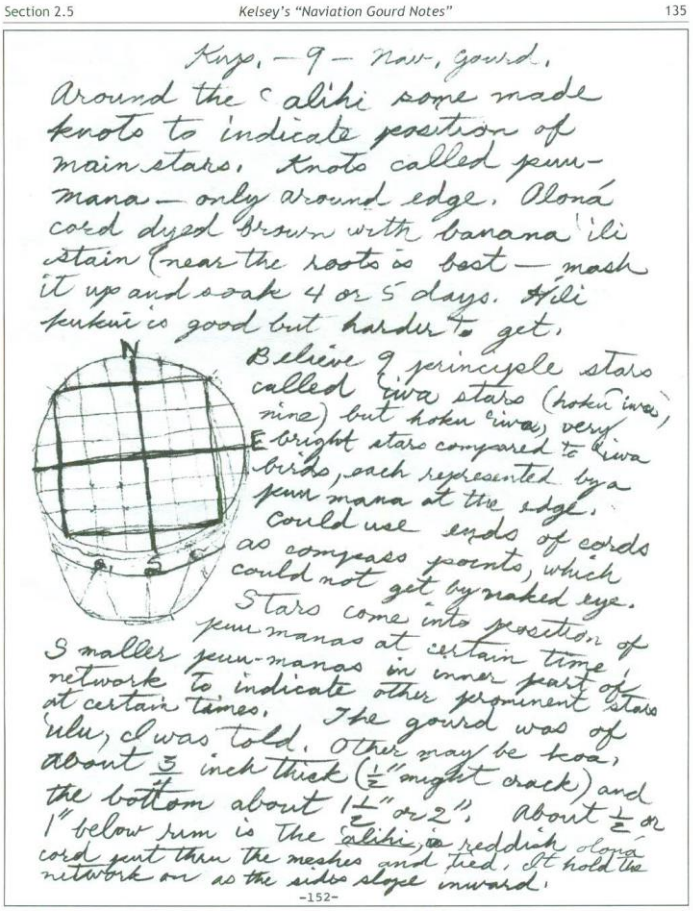
Ipu Hoʻokele Waʻa (Navigation Gourd)

A key to a culture-based curriculum is to give the student a hands-on project that will allow the memory to remember what was practiced. With the knowledge that some students learn from doing a project rather than reading the literature, I would incorporate a hana (work) into the curriculum for a voyaging student. That would be the Ipu Hoʻokele Waʻa (Navigation Gourd). The following is a description of how to use the ipu through excerpts in the Hawaiian-language newspapers and records from Malo, Kamakau, and Johnson.

The gourd was placed next to the navigator and filled with ¾ of water. The gourd was made of kou or milo, depending on what was available at the time. For voyages that were island-to-island, the bigger gourd was used, and for longer voyages from May to August, a smaller gourd was used. The gourd would be "hung up about chin-high" (Johnson 132) to mark the view of the horizon and gave the navigator a reference marker to see all the angles while out at sea.

The navigator would use the North Star as a directional marker and the horizon as a reference marker. From this position, the navigator would find the star in the east and make a "hole ½ to 1 inch below the rim" (Johnson 132). From this baring, the other main directional markers could be found, and holes were placed ½ to 1 inch below the rim in those directions, as well. The reason for the water was to "catch the reflection of the stars when two sight-holes on opposite sides were in line with the North Star – thus setting the 'needle' of the Hawaiian compass. The reflections of other guiding stars, such as the morning and evening stars, [the] Dippers, and [others of] the Galaxy, would now be in correct position" (Johnson 130). These descriptions were confirmed in the *Nupepa Kuokoa*, August 05, 1865, Hawaiian Language Newspaper (*Figures* 4.25, 4.26, 4.27).

Figure 4.25. Positions of main stars, outline by David Malo Kupihea.


Section 2.5 Kelsey's "Naviation Gourd Notes" 135

Kup. — 9 — Nav. gourd.
Around the ʿalihi some made knots to indicate position of main stars. Knots called puu-mana — only around edge. Oloná cord dyed brown with banana ʿili stain (near the roots is best — mash it up and soak 4 or 5 days. Hili pukui is good but harder to get.
Believe 9 principle stars called ʿiwa stars (hoku ʿiwa, nine) but hoku ʿiwa, very bright stars compared to ʿiwa birds, each represented by a puu mana at the edge. Could use ends of cords as compass points, which could not get by naked eye. Stars come into position of puu-manas at certain time. Smaller puu-manas in inner part of network to indicate other prominent stars at certain times. The gourd was of ʿulu, I was told. Other may be koa, about 3/4 inch thick (1/2" might crack) and the bottom about 1 1/2" or 2". About 1/2 or 1" below rim is the ʿalihi, a reddish oloná cord put thru the meshes and tied. It hold the network on as the sides slope inward.
-152-

FIG. 2.12. Navigation gourd notes: a page of the original manuscript, containing a hand-drawn illustration. Re-scanned from p. 152 of the first edition.

A mesh was added to the top of the gourd at "intervals of forty-five degree double hitched angles called puʻu mana and were tied around the circumference of the gourd to mark the position of certain stars" (Johnson 131). Each puʻumana was one inch apart on the top of the gourd where the net was secured. Each square called maka (eye) on the mesh was named. The netting was white so that it would be visible at night. There were nine principal stars called ʻiwa stars, and there were very bright stars represented by a puʻumana at the edge. "Maka ʻiwa stars were the bright stars rising from the East" (Johnson 136). On a long voyage, the navigator would look at the position "every half hour and shorter distance every fifteen minutes" (Johnson 132). The stars "were tracked across the net in their course as they traveled in a straight line through certain

squares and the East and West hole in the gourd was used to site stars" (Johnson 132). There were four holes bored at the rim in other gourds, two aligned on the north-south axis and two on the east-west axis. The star in the east was called the Hoku ‘iwa, "frigate bird." This name, ‘iwa, "frigate bird," or Isa, "nine," was also given to the nine principal knots around the edge (‘alihi) of the net and gourd rim. The ‘alihi was a reddish ‘olona cord put through the meshes at a half to one inch below the rim to hold the network on as the sides sloped inward. "The meshes numbered from 24 to 36 squares" (Johnson 138).

Figure 4.26. David Malo Kupihea's drawing of the navigational gourd along with instructions.

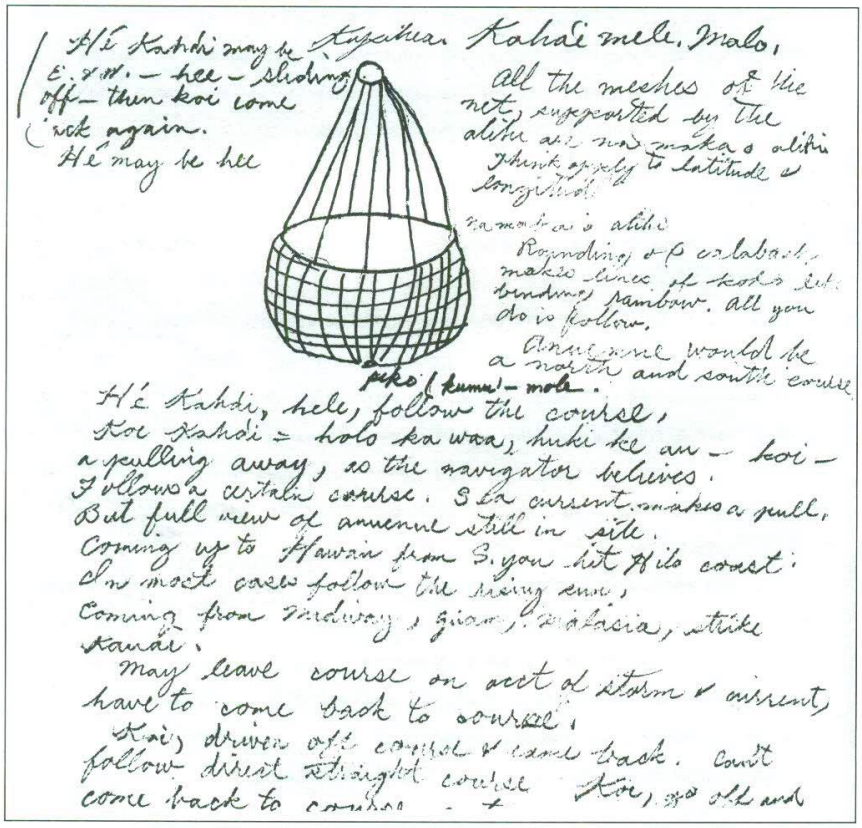
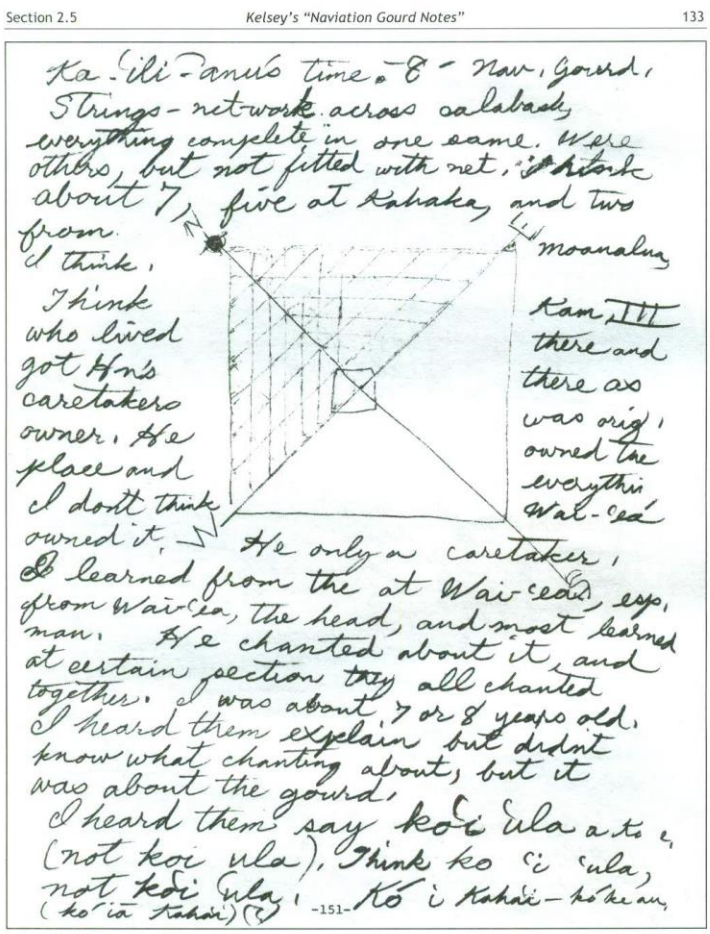


FIG. 2.11. Navigation gourd notes: a page of the original manuscript, containing a hand-drawn illustration. Re-scanned from p. 150 of the first edition.

In David Malo Kupihea's notes, he draws a picture of the gourd compass and describes the gourd based on his recollection from his grandfather Wai‘ea and Kamehameha III (Kauikeaouli). Kupihea recalls seeing many navigational gourds in his house and also some of other navigating

families. By retracing a time in history when the gourd was used and not used, it is believed that the "gourd was taken away during Ka'ikianu's time" (Johnson 132). Ka'ikianu had no known birthdate, but his passing was recorded in 1885. Therefore, the navigational gourd was used in voyaging until the latter part of the nineteenth century (*Figure* 4.27).

Figure 4.27. David Malo Kupihea's recollection of the navigational gourd and when it was used in the nineteenth century.



Section 2.5 Kelsey's "Naviation Gourd Notes" 133

Ka-'ili-'anu's time. 8 - Nav. Gourd.
Strings - net-work across calabash,
everything complete in one same. Were
others, but not fitted with net. I think
about 7, five at Kahaka, and two
from moanalua
I think.
Think Kam III
who lived there and
got Hn's there as
caretakers was orig.
owner. He owned the
place and everythin
I don't think Wai-'ea
owned it. He only a caretaker.
I learned from the at Wai-'ea, esp.
from Wai-'ea, the head, and most learned
man. He chanted about it, and
at certain section they all chanted
together. I was about 7 or 8 years old.
I heard them explain but didn't
know what chanting about, but it
was about the gourd.
I heard them say koʻi ʻula a to c,
(not koi ula). Think ko ʻi ʻula,
not koʻi ʻula. Kó i Kahaʻi - kó ke au,
(ko'ia Kahai) (?) -151-

FIG. 2.10. Navigation gourd notes: a page of the original manuscript, containing a hand-drawn illustration. Re-scanned from p. 151 of the first edition.

Conclusion

With cultural erasure at this time, there comes a need to want to know what the traditions were and how they were negotiated. It is not to go back in time and stay there, but it is to be informed and understand the natural progression of a thriving culture. It is about reclaiming ʻike Hawaiʻi and understanding how traditional navigation was done. This foundation continues to be a part of our cultural DNA while in our homeland. It is also important for Hawaiian people to know about this ʻike Hawaiʻi while they live in the diaspora. From my research for this chapter, I can now see the significance of understanding the theories from a micro to a macro perspective.

The macro perspective highlights the importance of moʻolelo as a source of ʻike Hawaiʻi. This dynamic broadens the scope of knowledge as two different worldviews are considered for a deeper and broader understanding of Hawaiian identity in the twenty-first century. The Moʻikeha moʻolelo is an important story to know and understand because of the many different facets that it offers to Hawaiian history. This moʻolelo discusses the route to and from Tahiti from Hawaiʻi, and the connectivity between the two groups of people through marriage, government, and personal relationships, thereby highlighting Hawaiian settlement to Hawaiʻi. The recognition of crew members on those voyages connected them to place names on all of the Hawaiian Islands and also connected their legacy to ancient ways of Hawaiian voyaging. Not only do we find the place names named after those crewmen and crewwomen, but also the names of wind channels and ocean pathways were named after them. Those dynamic ties of our Hawaiian ancestors continue to exist today. Hopefully, by knowing and understanding this knowledge, these stories will also be referenced to first and before Captain Cook's voyages.

The knowledge of cosmogony and geography is necessary. It becomes part of the foundation in raising Hawaiian consciousness and learning Hawaiian history as we become

informed by ʻike kūpuna in order to proceed in a forward motion of Hawaiian agency for today and tomorrow. This chapter is important because it brings forth the moʻolelo from King David Kalākaua that ultimately confirms the Moʻikeha moʻolelo that has been passed down over seven hundred years. The obvious factor that connects King Kalākaua to this voyaging genealogy is seen through Queen Kapiʻolani's genealogy which is an important aspect to pass down and discuss. This aspect places certain families with connections to historical facts of the past with the understanding of why it is important to have knowledge of one's genealogy.

There is one dynamic that stands out in this research, and that is through the fundamentals of voyaging; therefore, a better idea of the Hawaiian culture is understood. The elements of reference found in the stars, wind channels, and ocean pathways offer more than just directions but encapsulate the culture's foundation by understanding these markers. Voyaging fundamentals that are intangible and therefore sensory are tools of voyaging and can further inform the ʻike found in the progression of knowledge through these perceptions and senses. These knowledge pathways do not come with written descriptions or instructions but rather employ forms of communication through the sensory and/or intangible fields. This Hawaiian worldview is connected to the Hawaiian gods through directional and reference markers, the Hawaiian calendar through the stars, and the connection between man and the environment through place names, cosmology, and moʻolelo.

In bringing back the traditions of navigation and the Hawaiian worldview, I have found through Hawaiian methodology fragments in Hawaiian history that have been recollected. The traditional navigational compass is important to discuss as it reveals a lot about the timeline as we once believed that those traditions were not practiced for over six hundred years, and now we see that they were, in fact, practiced up until the late nineteenth century and done so by important

figures in Hawaiian history, such as Kamehameha III. It is also important to note that these traditions connect Hawaiians to Carolinians more than any other native culture that practiced navigation and wayfinding skills.

The micro examples of this research look at how a culture continues to thrive while reinventing and reconceptualizing itself over time. The Moaʻulaiki Navigational Platform and the Kuhikeʻe Navigational Platform are both signs of a culture changing, modernizing, and evolving and are an example that change is good and should be seen as a culture thriving. The Moaʻulaiki Navigational Platform continues to exist and can be used as a source of ʻike kūpuna, where a different way of looking at the world can be seen in its elements. In contrast, the Kuhikeʻe Star Compass represents the modern object in voyaging and allows for a reconceptualized version of ʻike Hawaiʻi and offers a living site of knowledge to learn and practice on. This site also shows that part of changing can come from adopting tools from other cultures and reinventing the tradition as our own. We have made it our own by using the Hawaiian language in the compass and connecting that compass to the four different starlines. Those names used in the starlines trace back the Hawaiian genealogy and voyaging genealogy to the Moʻikeha voyages of the eleventh century, thereby making sure this new compass represents Hawaiian history and voyaging legends. By studying the fundamentals of voyaging through these sites, it becomes clear that the fundamentals of the Hawaiian culture come through.

This research shows the different aspects of how to use modern science with ancient science. The term "geospatial technology analysis" explains the comparison of two different eras in time and compares the different ways of seeing the world. This opens up other ways of methodology that can be useful today in understanding science and adding to the bigger picture with a deeper understanding. Knowledge is found in many places, some that are not obvious, but

there are other places that are. The Hawaiian-language newspapers are important to research on because the words come from the Hawaiian ancestors. Another place to do research is at the Bishop Museum because the archives hold thousands of artifacts waiting to be written about. Ultimately it is about pushing the envelope to do more in uncovering pockets of history that have been erased, and for me, the most impactful methodology that I used on Kahoʻolawe came from flying the drone and analyzing the aerial data. From that work, an idea of exact directional markers and reference points were established and can now be used for voyagers in training for deep-sea voyages.

Finally, this fieldwork was significant because it allowed me to place myself at the center of my Hawaiian agency. By doing this, I was afforded a different worldview and opened myself up to interpretations and understandings. As a native woman, I am aware that I wear different hats and use each one when it is appropriate to do so. On Kahoʻolawe, the Hawaiian hat came out, and I was aware of my positionality. This opportunity is not always easy to experience because of the colonial agency of everyday life. However, Kahoʻolawe allows for that colonial gaze to be non-existent, and it allowed me to be in a place to be a Hawaiian. By understanding the voyaging fundamentals, a different set of protocols and conceptions takes over and creates new forms of identity informed by the past and strengthened by understanding how to negotiate for the present and, ultimately, building and creating new pathways for the future.

Chapter Five

E Lawe i ke Aʻo a Mālama, A E ʻOi Mau ka Nauʻao: Moving from the Margins to the Center by Elevating the Space on Kahoʻolawe through a Modern Navigational Platform

This chapter suggests new ways of understanding in an educational setting. I incorporated what I learned in my research and fieldwork in Chapter 4 and created a new pedagogy to show a framework for education that includes a Hawaiian perspective. This chapter creates, changes, and shifts a paradigm that offers new ways of finding solutions and answers. I created a voyaging-based curriculum from my fieldwork that will bring more resources into the voyaging experience, but I have offered another pathway to decolonizing the mind through the reconceptualization of Hawaiian agency. Therefore, if education is the key to decolonizing the mind, then there must be a Hawaiian pedagogy and curriculum to use. This chapter focuses on this dynamic.

Throughout this chapter, and those preceding it, I show the importance of reclaiming and reconceptualizing a culture. I also explain the "what and how" of my work and how it speaks to this dynamic. My examples are tangible and provide a space to actively practice Hawaiian traditions within a Hawaiian worldview. I further discuss how this dynamic is important in reviving navigation for the island of Kahoʻolawe, showing how to expand the participation for more voyaging students to learn from the Kuhikeʻe Navigational Platform. I use my navigational school as another source of fieldwork to test and showcase my pedagogy and voyaging-based curriculum. Ultimately, my work shows how a culture can move from the margins to the center of two worlds and practices and the possibilities derived from that positionality.

A pathway to elevating the space on Kahoʻolawe is to revive navigation on the island by

training with identified navigational platforms. My visit to Kahoʻolawe as a crew member on *Hōkūleʻa* gave me the impetus to view the island through a voyaging perspective; hence, after that, I was able to return to the island for my fieldwork. Another perspective was important because it allowed me to look at the elements of reference and how they related to the Hawaiian worldview. The examples between the two navigational platforms tell a story of reclaiming, reasserting, and reconceptualizing cultural traditions through voyaging practices in modern times. The Moaʻulaiki Navigational Platform and the Kuhikeʻe Navigational Platform are both signs of a culture changing, modernizing, and evolving and are an example that change is good and should be seen as a culture thriving. In this chapter, I pilot my curriculum and test it out at the University of Hawaiʻi at Mānoa campus. I created a residential voyaging camp and used my research on Kahoʻolawe as the curriculum in teaching voyaging skills, philosophy, and practice. I show how this camp raised the consciousness of my students in traditions by teaching them everyday forms of liberation through voyaging skills.

Expanding Participation in Culture through Training & Education

> Liberation is thus a childbirth, and a painful one. The man or woman who emerges is a new person, viable only as the oppressor-oppressed contradiction is superseded by the humanization of all people. Or to put it another way, the solution of this contradiction is born in the labor which brings into the world this new being; no longer oppressor nor longer oppressed, but human in the process of achieving freedom (Freire 49).

This pedagogy is a form of answering to the discourse by focusing back on the person's culture. Therefore, new pedagogies filled with culture-based curriculum and place-based awareness are necessary for understanding the Hawaiian worldview we seek. By placing ourselves at the center and understanding the bigger picture of colonialism, a new and revised version of education can be implemented into the school system as a form of liberation. This chapter implements new ways of understanding in an educational setting. Based on my research and fieldwork in Chapter

Four, this chapter incorporates the process and results learned in creating a new pedagogy in education to show examples of new qualitative research methods. This chapter creates, changes, and shifts a paradigm that will offer new ways of finding solutions and answers instead of a STEM pedagogy that is most frequently used and learned in the school system. The acronym STEM stands for fields in science, technology, engineering, and mathematics. The philosophy behind STEM is to teach children these subjects while learning from hands-on experiences and interdisciplinary approaches. The one aspect missing from the STEM curriculum is the native perspective and/or another worldview that sees the elements as metaphors in studying the sciences. When adding a cultural aspect to the curriculum, a more culture-based curriculum is understood to mean that a native culture's language, philosophies, and skills are included in the curriculum that will help to see solutions in another dynamic.

In this cultural-based curriculum, students learn science, technology, engineering, and mathematics through traditional knowledge found in practices learned on a voyaging canoe. Place-based pedagogies are taught through the many stages of learning the tools of the trade in voyaging. This curriculum teaches outside the boundaries of the U.S. public school curriculum by including moʻolelo (the stories) known to Hawaiian people through oral history and before Western contact.

> The philosophers have only interpreted
> the world in various ways; the point,
> however is to change it (Marx 107).

A year before the camp started, I approached the P20 program at the University of Hawaiʻi at Mānoa campus through the Vice-President's office. The P20 program is housed in the Vice-President's office at the University of Hawaiʻi at Mānoa campus and "works to strengthen the education pipeline from early childhood through postsecondary education and training with data-

informed decision making, advocacy, policy coordination and shared action" (https://www.hawaiip20.org). I wanted to have a camp that focused on a voyaging-based curriculum. A curriculum that I had already started at the Kamehameha Schools Hoʻomākaʻikaʻi Program. I wanted to have autonomy in the daily schedule, and I wanted the curriculum to follow my fieldwork on Kahoʻolawe. This curriculum would come from the evolution of my experiences and hard work. I applied for a grant through the P20 program and was accepted. The funding was for forty students in a six-day, residential voyaging-based summer program for students in the 7–8th grade from Dole Middle School and a second residential, voyaging-based, six-day summer program for thirty students in the 10–11th grade from McKinley High School. I showcase in this chapter the 7–8th graders from Dole Middle School and the curriculum I taught them.

I collaborated with different organizations and groups, such as the University of Hawaiʻi at Mānoa campus, Hawaiʻi P20 Partnerships for Education, Loʻi ʻo Kanewai, the Hawaiʻi Institute of Marine Biology for Coconut Island, the Roberts Hawaiʻi School Bus, the UH Mānoa dormitory and cafeteria, the Supporting Effective Educator Development Grant Program (SEED) for allowing their student workers to help with logistics, the Office of Student Affairs for the classroom, the Bishop Museum for the use of the planetarium and access to the Hawaiian and Pacific Halls, and the University of Hawaiʻi Department of Art and Art History for the use of their auditorium at the camp's hōʻike. It took a village to have a successful camp, and this program was and is proof of that dynamic.

My Voyaging Camp

On the first day of camp (*Illustration* 15), the students met in the classroom at the Liliʻuokalani building on the University of Hawaiʻi at Mānoa campus. My staff and I greeted them with a traditional opening ceremony, introductions to myself and my staff, and what to expect with the daily schedules and curriculum. The students were put into groups and tasked with seeing their group as a canoe (waʻa) and giving it a name. In total, there were forty students and, therefore, eight groups. Once in groups, all persons had to introduce themselves with their name, where they were from, their hobbies, and the last movie they had seen. As these groups got to know each other, they would immediately have to stand up and introduce someone from their waʻa. The focus was on naming their waʻa, ice-breaker introductions, and quick presentations in front of the class. The second half of the morning was to discuss voyaging history and culture, and such questions were asked: Who comes from a culture that has a voyaging history? What are some traditions tied to voyaging? Do you know the name of a voyaging canoe? What are some roles on a canoe? This activity was designed to get the students to think about how voyaging is connected to them and their families, their role on a voyaging canoe, and if they knew any traditions associated with voyaging. Lunch was served in the cafeteria at the dormitory on the University of Hawaiʻi at Mānoa campus. After lunch, the students learned from the Kuhikeʻe Navigational Platform Curriculum (*Appendix* 20). The students worked in their workbook, drawing the elements of reference, the Hawaiian Star Compass, the path of the sun, the path of the moon, and the four starlines. Arts and crafts were included in this curriculum as the students colored the different markers and points. By the end of the day, each group gave a presentation on what could be learned from the Kuhikeʻe Navigational Platform and drew a treemap to show how ʻike Hawaiʻi and voyaging connect. This helped the students become familiar with talking

in front of others and giving presentations in a group and individual setting. Before dinner a discussion on the activities for the next day was clarified, and students were informed about their activities for the following day. After dinner, it was time for a leadership activity, peer mentoring, talanoa, and a talk story session. Talanoa is a Pacific concept of storytelling that fosters a safe space to come together and discuss important issues that concern native people. Each night a professor from either the University of Hawaiʻi at Mānoa or West Oʻahu would give a talk about preparing for college and different types of careers.

The second day (*Appendix* 5.16) started with a meeting in the morning before breakfast. We called this moment "piko" or "navel" or "belly-button." It is called piko because this is where we all come together and start our morning in the right frame of mind by saying a prayer and discussing the day's events together. Our huakaʻi was to go to Coconut Island and learn from the biologists there about water quality. It was a busy day as 48 of us took a school bus to Heʻeia Pier and a boat ride to Coconut Island. On the way out to the island on the boat, the research experiment began, and the students collected water to be tested once at the lab on the island. While on the island, we broke into three groups and were led by two staff biologists. The first group walked down to the ocean and had a hands-on experiment at the outside classroom with sea urchins, crabs, cucumbers, and anything else that was found in the seaweed. The second group was in the science lab and used the water taken from the boat ride to the island and looked at it through a microscope. The task was to find out what type of bacteria was living in the water. The third group had a tour of the island, fish pond, shark pond, science buildings, science lab, and outside classroom to show a different learning and class environment. Lunch was on the island, and all fell asleep on the bus ride back to campus. The afternoon lesson was focused on the Hawaiian Star Compass (*Appendix* 5.21). But first, the students reflected on their morning on

Coconut Island and why it was important to understand water quality (*Appendix* 5.26). Most students did not know how to swim, and this was the first time in the ocean for most of them. After being placed back in their waʻa ʻohana, the students learned what each quadrant stood for in their workbook. They also learned the houses in the compass, how to sail using this compass, and the connection to ancestral history. To display what they had learned, each group drew a poster of their waʻa and gave a group presentation on what they made, how it connected to where they came from, and how it connects to voyaging traditions.

The students spent the morning on day three at Loʻi ʻo Kānewai (*Appendix* 5.17) located on the Unversity of Hawaiʻi at Mānoa campus (*Appendix* 5.27). It is important to learn the foods that are found on the voyaging canoe, and the loʻi is an important classroom to learn how the kalo connects not only to the sustenance of the body but also the sustenance of the mind through a connection between man and ʻāina. The students broke into three groups, and the first group learned about the different parts of the loʻi by understanding the different parts of the kalo plant and different parts of the stream. The second group had a tour of the kahawai (stream) and learned the path of the water through moʻolelo and oli. The third group went into the mud and planted the kalo. They learned the different approaches and styles of planting and saw the different stages of kalo in separate loʻi. After lunch, the students sat outside on the grass and learned from The Rising and Setting Sun Curriculum (*Appendix* 5.22). This curriculum connected to the morning huakaʻi as the sun was/is an important aspect of growing kalo. The students discussed the moʻolelo related to the sun, learned the pathway of the sun, and understood the significance of the rising and setting sun. This day connected the students to cosmology and genealogy through learning the moʻolelo that can be told all over Oceania.

The huakaʻi on day four was at the Bishop Museum (*Appendix* 5.18). The first stop was

at the Pacific Hall to view the different voyaging canoes, sails, and tools. This lesson was important because it showed the students how connected native people are to one another through language, skills, and daily traditions. The students went on a scavenger hunt to find three items that symbolized their ancestry and/or what they found interesting and would want to learn more about it. The three items were to be found in sections that focused on canoes, sails, and tools. The third event for the day was to learn about the stars in the Planetarium. The students learned about navigation, observation of the night sky, and weather conditions. After lunch, the students learned The Four Starlines Curriculum (*Appendix* 5.23) and the Ipu Hoʻokele Waʻa Curriculum (*Appendix* 5.25). The students learned about the starlines, the elements of reference connected to the starlines, and how the starlines are connected to cosmology and genealogy. The students worked in their workbooks and created an individual flow chart and a group treemap of what they learned about the stars. The end product was a group mosaic-art reflection to be shared at the closing program in front of their parents. Included in their curriculum was the ipu hoʻokele waʻa. I brought my own ipu hoʻokele waʻa to class to show how to connect knowledge to an object. This object can then be used to study while not at the specific navigational platform.

The fifth and last day was on campus, preparing for a presentation and dance at the evening hōʻike in front of their parents (*Appendix* 5.19). The morning started early with finding a place to look at the morning moon (*Appendix* 5.24). A scavenger hunt was carried out next, and everyone received prizes connected to their week of learning about voyaging. A group collage was finished as a token to give to their school for allowing them to come to this voyaging camp. Also, an individual collage/diary of events was completed so that they could take it home and remember their experiences at this summer camp. In the evening, we held an event at the art auditorium on the University of Hawaiʻi at Mānoa campus for the closing ceremonies. The event

was catered, and friends and family gathered to celebrate their child's participation in the camp. We had a keynote speaker start the event, and after her speech, the students started their presentation and danced for the large crowd. The event ended two hours later, and all were ready to go home to sleep after a long, fun-filled, and educational week.

Survey

The students were given a survey on the last day of camp to view their scope of understanding in voyaging and what they were taught, as well as whether they felt the camp was beneficial to their learning styles or not (*Appendix* 5.28). The questions were as follows: (1) Do you recognize yourself as a native person? Where do you come from and/or do you connect to another place of origin? What did you know about voyaging on day one of this camp? What did you know about voyaging on day six of this camp? Does voyaging relate to you and your family? Did learning the curriculum through voyaging traditions make the subject easier to learn? What did you like about this camp? Would you participate again next summer?

Results

There were several dynamics to learn from after looking at the answers to these questions above. Most of the students had lived in Hawaiʻi most of their life with the exception of three students living outside of Hawaiʻi in Tonga, American Samoa, and Guam. All of the students have native ancestry, but not all identify with being a native person because they no longer live in that country and/or nation. Many of the students identified as coming from somewhere else other than from Hawaiʻi even though they were born and raised in Hawaiʻi. Many of those answers focused on where their mothers were born and raised and where they wished to live today. Half of the students felt that living in Hawaiʻi disconnected them from their native ancestry because they were not physically living where their mother and father were born.

The majority of the students thought that they did not know anything about voyaging. They felt that what they learned was foreign to them. This view was popular until I started including ancestral knowledge through moʻolelo and incorporating a different worldview into the classroom. A few students mentioned how surprised they were about knowing the moʻolelo that I shared with them and learned those stories through their parents and grandparents. This connection allowed those students to listen and learn in class and, more importantly, motivated them to participate in class presentations. Each and every student agreed that voyaging related to them and their families. Most of them were excited to write about how they were related to voyaging, and that sparked an interest in them to want to go back home to their parents and ask more questions about what their parents knew about voyaging.

All of the students felt that this style of learning made the subject easier to understand. They felt that there was a lot to learn, but the process of finding the answer was easier to understand once it was explained to them. One student exclaimed, "Why can't my teacher at school use a waʻa to explain what she wants from us?" The students felt that with a native teacher, it made it easier for them to talk to me. They also felt that hearing moʻolelo from me reminded them of their parents and grandparents and automatically encouraged them to trust me. It is also key to note that most students felt it was easier for them to learn when they could do it as opposed to only reading about it.

The majority of the students answered that what they liked most about the camp was living in the dorms and having new best friends. For most of them, it was the first time they had slept away from home and had roommates that were their own age. Many of them liked staying up late at night and laughing and talking with one another. They described how that made the day's events go by faster because they loved being outside, being with new friends, and learning

about canoes. They also liked going to the Bishop Museum to look at canoes from around the Pacific. They thought it was cool that I was a crew member on *Hōkūleʻa* and that I brought them inside to see the "star show" and talk about the Mālama Hōnua Worldwide Voyage. They loved going on a boat even though most of them did not know how to swim. When asked if they would go again to another camp next summer, most of them said "yes," and most of them asked if they could come back in a week or two for another voyaging camp.

What Is It Telling Us About Reclaiming and Reconceptualizing?

The bigger picture is that voyaging traditions exist today and can be used in a curriculum to help the younger generation understand the connections between this modern world that we live in and the traditions of the past. Ancestral knowledge continues to exist and can be used as a source and methodology for looking at the world from a different worldview.

The Kuhikeʻe Star Compass represents the modern object in voyaging and allows for a reconceptualized version of ʻike Hawaiʻi and offers a living site of knowledge to learn and practice on. This site also shows that part of the change can come from adopting tools from other cultures and reinventing the tradition as our own. We have made it our own by using the Hawaiian language in the compass and connecting that compass to the four different starlines. Those names used in the starlines trace back the Hawaiian genealogy and voyaging genealogy to the Moʻikeha voyages of the eleventh century, thereby making sure the new compass represents Hawaiian history and voyaging legends. By studying the fundamentals of voyaging through these sites, the fundamentals of the Hawaiian culture became apparent. These sites show that through reclaiming knowledge through the many different pathways (literature, kuaʻāina, mele, oli, and moʻolelo), another way of looking at the world through a different perspective not only emerges but allows for new ideas and solutions to materialize. It is in this space that a

reconceptualization of traditions and culture allows a modern perception of ‘ike Hawai‘i. The Kuhike‘e Navigational Platform speaks of the revival of traditions and places them in a contemporary context so that traditions can continue to thrive for today and for the future. This example shows us that Hawaiian culture is thriving today through change and modifications of the traditions, such as the Hawaiian Star Compass. The island allows for inter-relations between the two social movements (Protect Kaho‘olawe ‘Ohana and Polynesian Voyaging Society) by constructing the original use of the island in navigation to learn the modern skills of navigation. The site, therefore, is perfect for a voyaging school in which the wa‘a kaulua from the different islands can come to Kaho‘olawe and train on the Kuhike‘e Navigational Platform.

Elevate and Bring Resources

Different lessons can be learned from the Protect Kaho‘olawe ‘Ohana and the Polynesian Voyaging Society regarding learning the history from the past and using that knowledge as a foundation to build upon for today in navigation. Joining together allows for an expanded space for Native Hawaiians to go to. This dynamic moves Native Hawaiians from the margins and back to the center in forging pathways that take back the native history and show Hawaiian agency. Expanding participation in the culture and expanding the resources on Kaho‘olawe can only benefit Native Hawaiians today as this allows more spaces for the Hawaiian population to be a part of cultural traditions. More importantly, it is about taking on a kuleana (responsibility) to redefine ourselves through revitalization. One pathway forward for a native culture is to focus on the curriculum in education and the foundation of the pedagogy. The very connection of forging our own way forward allows for a foundation in the Hawaiian culture and the ability to study and train with traditional knowledge and traditional practices through a navigational platform.

Through my research and fieldwork on Kahoʻolawe, I can see how a revitalization of navigation on the island could occur. The island represents a space conducive to understanding the elements, and per Navigator Kaʻiulani Murphy, it is a perfect location to go to and practice kilo or "observation" (Ulukau Dictionary). Murphy continues to add context to her philosophy by saying, "any opportunity to be there and kilo is awesome, and it is especially good to study there before a voyage from Tahiti to Hawaiʻi, to have a mental image of the stars at your destination. I also think itʻs important to kilo regularly from the place we live, or can be consistent to know our own place best." To add to the prime location is to include ʻike Hawaiʻi through different methods of ʻike, such as kuaʻāina, kūpuna, moʻolelo, oli, mele, and placenames. The Kuhikeʻe Navigational Platform, as stated in Chapter Four, is in a good location to practice kilo and ʻike per the experts in navigation such as Piailug, Thompson, and Murphy. Therefore, incorporating an identified navigational platform to practice and learn the art of kilo is important. I include the ipu hoʻokele waʻa (ipu navigational compass) to allow for a hands-on tool to learning the pathways of the sun, moon, and stars so that the student can take that compass anywhere in the world and use it based on the ʻike Hawaiʻi that they learned at the Kuhikeʻe Navigational Platform. Based on the knowledge obtained from this site, I can envision the waʻa Hawaiʻi ʻohana from all of the Hawaiian Islands using this site for training and school of navigation. For this vision to happen, there needs to be a different style and/or pathway of obtaining and creating a different curriculum. Below is my example of a different pedagogy than what is usually seen in schools today. This pedagogy is more mindful of the relationships that form in class between teachers and students and aims in another direction of knowledge through ancestral memory.

Bricholeur

In a bricolage fashion, I use theory and frameworks from different authors that have proven to have successful approaches to culture-based learning in a culturally responsive pedagogy. The theory and each framework combined create a new engagement in academia that creates an understanding of knowledge production and interrelated cultural affirmations.

In developing a model for culturally respectful and responsive teaching, this pedagogy aims to bring together different disciplines to engage the students in understanding different world views and ways of implementing them together to enhance the learning environment and cultural understanding of place. This realistic approach comes from a holistic point of view that adheres to cultural sensitivity in a colonial world. I name this pedagogy, Makaliʻi or "little eyes" (Ulukau Dictionary), and it is also known as the Pleiades. The name of this pedagogy is significant because when this star appears in the eastern sky at sunset in mid-November, the next new moon starts the Makahiki season. The Protect Kahoʻolawe ʻOhana brought back the Makahiki ceremony to Kahoʻolawe, and the name shows the connection and the relevance to the movement, history, and Hawaiian spirituality.

The goal of this pedagogy is to motivate a Hawaiian child to engage with the curriculum. I use the theories of intrinsic motivation as the guiding foundation for the framework and, ultimately, the direction from which a culture-based curriculum can be explained. It is the belief that within a framework that focuses on the Hawaiian place-based environment and includes all nationalities and ethnicities that live in Hawaiʻi, a more realistic approach to teaching becomes another form of understanding place and its people within it.

Intrinsic motivation is "an energizing of behavior that comes from within an individual, out of will and interest for the activity at hand" (de Charms 1968). When this dynamic is

achieved, the student has more “interest, excitement, confidence, enhanced performance, persistence, creativity, self-esteem and general well-being” (Deci and Ryan 1985). Within this framework lie four conditions between teacher and student that are created in an atmosphere of intrinsic motivation. The four conditions are “establishing inclusion, developing a positive attitude, enhancing meaning, and engendering competence” (Wlodkowski and Ginsberg 1995). This framework is also related to Ngũgĩ’s three major principles: (1) A people’s culture is an essential component in defining and revealing their world outlook. Through it, mental processes can be conditioned; (2) A sound educational policy enables students to study the culture and environment of their own society first, then in relation to the culture and environment of other societies; and (3) For the education offered today to be positive and to have creative potential for the future, it must be seen as an essential part of the continuing national liberation process (Ngũgĩ 100–101). I’ll go into detail discussing the intrinsic motivation framework further in this chapter.

Combined, these are the tools for creating intrinsic motivation. This framework is mindful of the cultural differences and the political and sensitive nature that comes with them. From Deci and Ryan’s framework come short-term and long-term outcomes. For each category, there are three structures to guide the conditions necessary for culturally responsive teaching. The “standard” describes the atmosphere between the teacher and the student. The “procedures” are the approaches designed to understand the methodological methods. The structure is the foundation that reinforces the first two categories. Below, I will go into the examples for each of the four conditions, which include the following: establishing inclusion, developing a positive attitude, enhancing meaning, and engendering competence.

The first condition is called “Establish Inclusion” (Wlodkowski 1995), and the standard

aims to establish a deeper understanding of methods and science for all students. As Wlodkowski and Ginsberg (1995) state, “creating a learning atmosphere is one in which students and teachers feel respected by and connected to one another” is a large factor in producing successful students and the leaders of tomorrow. Therefore, a reiteration of having a collaborative and inclusive atmosphere where every student feels that they belong is necessary to repeat in order to treat all students the same while at the same time leaving discrimination outside the classroom. This dynamic will clearly establish what is being learned and how it relates to the student through a basic humanity practice. The procedures for inclusive approaches include organizing the students into writing groups, assignment groups, and reflection groups. This allows for everyone to be heard. The procedure for collaborative approaches includes a more direct approach in focus leadership and research leadership. Each student has a role and kuleana (responsibility) to lead a certain aspect of the project. Together, they will create a collaboration that recognizes each student for their work and direction. The structure of this first inclusive condition will understand the foundation for the pedagogical framework, the dynamics and history of the community, and the inclusive and collaborative structure that this dynamic creates with the students.

This dynamic was seen from day one of the curriculum in which the students were put into groups of five students and were given the instructions of envisioning their group as a canoe that they needed to name. This dynamic allowed for each student to feel included in the curriculum and class in general and reinforced when the students ate all of their meals together, worked in group settings in the classroom and on excursions, shared presentations as a group in front of the class, and organized the final presentation and show for the final day.

The second condition is called “Developing Positive Attitude” (Wlodkowski 1995). This standard aims to connect the student to the subject and activity by positive reinforcement and

clear guidelines for improvement by encouraging students through group activities and individual projects. As Wlodkowski states, “creating a favorable disposition toward the learning experience through personal relevance and choice” (Wlodkowski 1995) allows for leadership skills to take place. The procedure for developing a positive attitude in class falls back on good communication skills that give clear assignments and goals. The work is ultimately viewed under a fair evaluation of work with an open dialogue on the thought process behind grades. The structure for the teacher is to be mindful of class perception and environment for students. The ability to read one’s students and become flexible in the teaching style creates an environment in which developing a positive attitude only reinforces the overall structure of the class. The structure of the class falls back on the class perception and overall environment for the students. This was evident in class as a negative outlook and/or production of an art project would take on a domino effect in the group if the outcomes were not favorable. I had to become flexible when the students did not understand the task and/or found themselves not connecting to the work and/or curriculum. As the teacher, I had to be mindful of my own attitude in the class. I focused on developing a positive attitude for my students. I allowed for mistakes and praised the students when they did well. The group activity provided a positive setting and allowed other group members to help their peers if they needed help. The motivation was that everyone in the group received the same grade, and therefore, the group members helped each other. Another motivation was the content of the curriculum, which focused on voyaging and traditions. This subject had the students talking about their families, cultures, and modern-day skills, which made them happy, creative, and positive in class. I also found out a lot about perception and motivation in the student surveys after the camp. The students felt confident when I explained the task well and gave praise in class. The students felt I was friendly and were excited to learn from me each

day.

The third condition is called “Enhance Meaning” (Wlodkowski 1995) and aims to understand the connection between the student and the literature of a culture-based curriculum through encouraging a discussion of moʻolelo, class participation, and engagement among each other. “Creating an understanding that students are effective in learning something they value” (Wlodkowski and Ginsberg 1995) provides for an opportunity to enjoy the learning experience for the student. The procedures focus on critical analyses of content through different research methods and contents, both written and orally obtained. The students will be in group settings with critical questions aimed to understand the bigger picture. This process would include art in the curriculum to encourage creativity in the work project. The structure was seen in flow maps and tree maps which showed the research, content of the project, and solutions and/or problems. The students also showed their families this dynamic on the last day during their performance in which they sang, gave a drama skit, and showed their group and class collage.

The fourth condition is called “Engender Competence” (Wlodkowski 1995), and the standard aims to introduce different knowledge pathways and/or worldviews. The reflections will take place in group and individual settings, focusing on those reflections and self-assessments while in a place-based learning environment. The structure will be through a group project. At the end of the project, the students will have a hoʻike at the end of every six-week segment of assignment and completion. The hoʻike preparation and presentation engendered competence with the students that took on a life of its own. There were many logistics, and each student was in charge of one dynamic. By the end of the week, this hoʻike was their production. They were nervous at first, but as a group found their confidence together and put on a great show. I was very proud of them all as I saw the transformation from day one, and only six days later, they

were producing their own hoʻike for their families. The reinforcing factor was the smiles and laughter on each student that confirmed how proud they were of each other and themselves.

The Self-Determination Theory

The most popular theory under intrinsic motivation is called the "Self-Determination Theory, developed by Edward Deci and Richard Ryan" (Deci and Ryan 1985). The praxis focuses on this theory in which a culture-based curriculum is enacted, practiced, and realized through critical analysis, geospatial technology analyses, and place-based hands-on engagement of a Hawaiian worldview. The pedagogy for the curriculum sets up the foundation of objectives for the curriculum to be based on.

The theory states that there are "three innate psychological needs that humans need; a need to feel competent, a need to feel related and a need to feel autonomous" (Deci et al. 2001). These three innate needs develop out of intrinsic motivation and direct a different pathway in understanding educational concepts seen in a culture-based curriculum. The self-determination theory is important because it reverses the very dynamic that sees native people at the periphery and the colonial powers at the center. In this theory, the native culture is at the center, with the colonial powers at the periphery. It is the "quest for relevance" in which "how we see a thing – even with our eyes – is very much dependent on where we stand in relationship to it" (Thiong'o 88). Intrinsic motivation highlights the internal factors of a person. This was evident in the examples of the Polynesian Voyaging Society in which traditions and skills were used to voyage via celestial navigation, Kanaloa Kahoʻolawe in which Hawaiians took a stand and protested, reconceptualized, and perpetuated Hawaiian spirituality, traditions, and the history of the Hawaiian people, and with this voyaging camp focusing on a culture-based curriculum and Hawaiian pedagogy. All three examples show how Hawaiians went from the periphery to the

center and confirm that when that dynamic is the central framework, the Hawaiian culture thrives.

Standards, Procedures, & Structures

These categories help alleviate confusion in teaching situations when the directive does not connect with the teaching approach. Usually, there are contradictions that are evident in classrooms small group collaborations, yet pop quizzes are given for each individual person; or within a constructivist learning environment, a reflection constructs a student's own understanding of an experience yet the grade is given for participation; and/or a teacher who talks about equality yet only calls upon the male students in class. These examples occur frequently, and in an attempt to reduce that contradiction in classrooms, a descriptive outline of standards, procedures, and structures can be designed to alleviate any misconceptions.

Logic Model for Planning, Collaboration, & Monitoring

A logic model is necessary in order to design a curriculum for schools and/or the community. This part of the curriculum is for the teachers, stakeholders, collaborators, and community members. Just as it is important to design a new pedagogy with a curriculum, it is also important to design a plan for teachers and collaborators to teach the curriculum. This ensures that everyone is on the same page with a focus that is parallel to each other. The outline for the design is seen below in a "logic model" (Renger 2002).

The resources include a culture-based curriculum which will include instructional materials and a student workbook, including literature, parts of directional and reference markers, sections of geography, flow maps, and treemaps. The place-based curriculum will take the students outside the classroom and into a specific location connected to the curriculum's content. For a voyaging-based curriculum, anywhere outside in the open air is good. However, to

be more specific, a trip to Kahoʻolawe to study at the Moaʻulaiki Navigational Platform to learn about the ancient philosophies of space and time and the Kuhikeʻe Navigational Platform to learn modern-day voyaging practices while understanding them among the elements of reference would be important to include. Funding is a big factor in resources and in seeing projects through to fruition in logic modeling. A focus on writing grants for a monetary fund allows students and teachers to experience place-based projects at the space historically known for the mo'olelo and traditions. A few examples of whom to receive a grant from and who has already funded voyaging ventures would be the Polynesian Voyaging Society, Kamehameha Schools, the Office of Hawaiian Affairs, other community-funded organizations, and many outside resources.

The logic modeling would have a four-week curriculum and, depending on grade level, can be taught in two- to four-week increments, one to two quarters, one semester, and/or one year. The rotations would be a forty-five-minute rotation for each section. This model includes community support already found in the Waʻa ʻohana, the school systems in Hawaiʻi, designated communities, outside resources, and private schools, such as the Kamehameha Schools and Punahou School. This model also includes support from groups with specialized knowledge and skill, such as the Protect Kahoʻolawe ʻOhana, the Polynesian Voyaging Society, the voyaging ʻohana from each island, collaborators, and stakeholders. Activities with collaborating partners would include work with the Polynesian Voyaging Society, Protect Kahoʻolawe ʻOhana, Kahoʻolawe Island Reserve Commission, Department of Education, and Kamehameha Schools. The work to be done together would be to develop training and curriculum materials for classroom settings, outside classrooms, Kahocolawe, and, more specifically, the Kuhikeʻe Navigational Platform. Other activities would include developing training sessions and workshops with designated training areas on each island and teacher training at the Kuhikeʻe

Navigational Platform.

Student performance would be based on collecting and analyzing performance data based on reflections by students and data by teachers. The output would be derived from tangible data, such as the number of students tested, the number of teachers trained, and the number of books read. The outcome will look at the short-term results in seeing if there are immediate changes in the student's beliefs and philosophies after a voyaging-based curriculum is completed. The obvious change would be if the student's beliefs and philosophies were obvious and/or observable. The long-term results would focus on the following questions: What is the lasting influence? Has the student changed his/her beliefs? What are the student's high-school achievement scores? Is there an increase in the high-school graduation rate? Is there an increase in college acceptance? Below is an example of the curriculum that comes with the Makali‘i Pedagogy, a reflection of my work in the Polynesian Voyaging Society and at the University of Hawai‘i at Mānoa.

Makali‘i Pedagogy

From my voyaging camp comes the realization that not only should the curriculum change, but the pedagogy that outlines the foundation of learning should change also. The different approach in teaching the K-12 curriculum includes many dynamics aimed to reach all students with different learning abilities. Wlodkowski and Ginsberg's research shows that not all students will engage properly in a specific curriculum. There will be students that fall outside of the norm in a classroom, especially as the curriculum in the U.S. and Hawai‘i focuses primarily on American history and the English language. For it to be effective in Hawai‘i, where there is a native culture, the content of the curriculum needs to include the Hawaiian culture to develop learning capabilities more appropriate for Hawaiian students. As Hawai‘i has many other native cultures

that live in these islands and an Asian and White population that sits in the same classrooms as Hawaiian students, the curriculum has to be more dynamic in its approach to reach more than one nationality and/or ethnicity. There is growing evidence that strong, continual engagement among diverse students requires a holistic approach—that is, "an approach where the how, what, and why of teaching are unified and meaningful" (Ogbu 1995). In contrast, "teaching that ignores student norms of behavior and communication provokes student resistance, while teaching that is responsive prompts student involvement" (Olneck 1995).

From a transnational perspective, I look to other theories and pedagogies of the curriculum that, when put together, will carve and create a dynamic pedagogy for a Hawaiian place-based pedagogical approach that is culturally sensitive to the native population while at the same time creating a space that engages all students in a curriculum that teaches from different worldviews. "Where the language of instruction is different from the language of the home, or the child's first language and where the testing of academic performance is in a second or third language, children will not test well" (Mullis 2003; Rasmussen 2003; Demmert 2005). In contrast, "culture shapes mind... it provides us with the tool kit by which we construct not only our worlds but our very conceptions of ourselves and our powers" (Bruner x–xi). "The influences of cultural environments are necessary for educators to understand because of the role this environment has on learning and what children become" (Bruner 1966; Demmert 2001; Demmert and Towner 2003; Gardner 1985, 1995; Vygotsky 1944).

Makali‘i Curriculum

Makali‘i Pedagogy is designed from my experiences of creating a culture-based curriculum with an emphasis on voyaging skills and traditions, elements of reference, and based in a historical oral and written context to create the foundation for the curriculum in navigation at the Kuhike‘e Navigational Platform. The six sections derive from my fieldwork discussed in Chapter Four, and they are the (1) Kuhike‘e Navigational Platform (*Appendix* 4.20), (2) Hawaiian Star Compass (*Appendix* 4.21), (3) Rising Sun and Setting Sun (*Appendix* 4.22), (4) Four Starlines (*Appendix* 4.23), (5) Moon Phases (*Appendix* 4.24), and (6) Ipu Ho‘okele Wa‘a (*Appendix* 4.24). The main standard will encourage Hawaiian identity through learning, practicing, and analyses of ‘ike ku‘una. The purpose is to perpetuate and promote ‘ike ku‘una and impact the Hawaiian lāhui. The Makali‘i Learning Standard will explore foundational knowledge and show how knowledge shapes Hawaiian identity. This will be done by exploring Hawaiian origins and history, developing a sense of place through directional markers and reference points, and recognizing ‘ike ku‘una for the Hawaiian knowledge, beliefs, values, and practices that encompass this philosophy.

The Makali‘i Practicing Standard explores the concept of cultural identity through recognizing the connections between ‘ike ku‘una and Hawaiian identity. This is done by aligning the education system, programs, and services to a unified set of cultural procedures. The standard practices collaboration and inclusivity with the community and organizations to show support and cooperation in cultivating a shared vision for the collective of the lāhui.

The Makali‘i Analysis Standard incorporates geospatial technology analysis into ‘ike kūpuna science to form new methodologies. This method will move science forward by understanding different worldviews and approaches in science. The ‘Ike Ku‘una Standard will

include the same practices in each lesson. The mo'olelo will be told by the kumu/teacher. Each activity will have a hana (work) and hana no'eau (work theory). The foundation of the lesson will be done with the lawena and lo'ina as guiding principles. These are values that connect learning, practice, and analysis together. Lawena refers to the behavior of a person and how they behave in public and on their own. The lo'ina of a person represents the actions that are seen in the guideline behaviors of the culture. The lo'ina is what sets apart one culture from another because there are different philosophies and actions to daily living.

The driving question will ask, how do we show appreciation of 'ike ku'una? The answers will vary, but the theme will focus on what the student practices in their everyday life that is connected to their cultural practices and ancestral connections. The learning objectives are about the student participating in an inclusive and collaborative activity in the curriculum that recognizes a shared and unique quality or characteristics among their peers. The student can explain the Hawaiian philosophy through voyaging traditions and philosophies of space and time.

The class's learning activities involve literature, discussions, group projects, reflections (both individual and group), and homework assignments. The classroom setting is collaborative and inclusive, thereby making it easier to learn without any restrictions of an unbalanced social setting. An important aspect of the learning activities is actively practicing and learning at traditional cultural sites with the class and kumu as a way to connect the literature with a place-based classroom. The hands-on research allows for the connection between man and the environment.

The resources for this pedagogy have the kumu give the literature to the student to read. The kumu goes over the reading and applies the content to a traditional cultural site. This aspect

allows the kumu to work with the student to create a collaborative atmosphere for learning. Another resource will be the student themselves coming to class prepared and being proactive in learning by reading the literature before class and being ready for discussion during class. The students will connect the literature to a traditional cultural site and be respectful of the material and interactions with fellow classmates and the kumu.

The materials are as follows: student workbook for assessment, literature, graphs, geography maps, and fill-in-the-blank activities. The assessment will focus on individual reflection, group reflection, flow maps, treemaps, and mosaic-art reflections.

Placing the Hawaiian Culture at the Center

In connecting education to liberation, Ngũgĩ calls his attempt at recognizing this dynamic "a quest for relevance" (Ngũgĩ 87). In this dynamic, the relevance of teaching a curriculum is not the only focus for this equation. The other half of this equation is also teaching the curriculum. Ngũgĩ reviews two ways of looking at this dynamic: one is to look at the "choice of material" (Ngũgĩ 88) and, two, the "interpretation of that material" (Ngũgĩ 88). It is important to distinguish between the two because for the child to be taught, the teacher must first be knowledgeable of the content. In a culture-based curriculum, this type of work is based on the foundation of cosmology and genealogy. By starting at this point, a philosophy of the culture sets the baseline as to what will be learned and taught. This baseline reflects the reality of both the student and the teacher, and the foundation for learning creates an understanding in the curriculum that connects the student to the content by understanding the culture first. This dynamic is only done best when the Hawaiian culture is placed at the center.

The island of Kahoʻolawe expands the space for Native Hawaiians to visit the island and practice protocols, traditions, and religion. The next step is to expand participation in the culture

by having an educational platform and/or navigation school at the Kuhike‘e Navigational Platform. This allows the island to be more expansive by reclaiming traditions that continue to exist in modern times.

With the rising consciousness of Hawaiian identity today, a need for a different philosophy of education and agency should be critically analyzed. As Hawaiian people continue to live in modern-day times, how do we reclaim, reassert, and ultimately thrive today and in the future? Whereas the Hawaiian culture and its people have been on the periphery of the occupying government and its policies, a reversal of scope is necessary to reclaim, reassert, and ultimately create new philosophies for modern-day Hawaiians. Ultimately, “the concepts of hegemony, of ideological domination, merits a fundamental re-thinking” (Gramsci 314). Therefore, I look at a few theories to explain a reconstructing of native identity. This reconstructing of native identity starts with positioning ourselves at the center and understanding relationships from that angle.

> The quickest route to dominating a people’s philosophy is through the educational system that highlights the colonizers philosophy and language. Written literature and orator are the main means by which a particular language transmits the images of the world contained in the culture it carries. Imposing a foreign language, and suppressing the native languages as spoken and written, were already breaking the harmony previously existing between the Hawaiian child and the Hawaiian culture. Learning for a colonial child, became a cerebral activity and not an emotionally felt experience (Thiong’o 17).

There was often not the slightest relationship between the child’s written world, which was also the language of his schooling, and the world of his immediate environment in the family and the community. This was so for me and my education when I was young, as my Hawaiian culture was practiced in my home and not in my school. For myself and many others, this allowed for a so-called disassociation of the sensibility from our natural and social environment, what we might call colonial alienation. “The alienation became reinforced in the teaching of history,

geography, music, where bourgeois Europe was always the centre of the universe" (Thiong'o 17). Therefore, where we view ourselves in the bigger picture of identity and agency is our choice, the Hawaiian choice, and the best outcome is to be at the center of our own universe and reality. This conversation has come up many times over the last century as colonialism has a cause and an effect on cultures that continue to exist today. In a relevant debate, I look at the Nairobi Literature Debate (Thiong'o 89) that speaks of the relevance of placing our own culture at the center and the colonial powers at the periphery.

The Nairobi Literature Debate

In Kenya, the colonial schools and universities were based on English as the language and European history as the baseline for the curriculum. This dynamic placed the people of Africa at the periphery by not taking into account their language and history in the education system. The colonial system focused on implementing their own European culture and language in schools and universities so that all were assimilated into the European culture. "The irony of all this was that these departments were being run in countries where the oral tradition, the basis of all genres of written literature be it in a poem, play, or a story, was beating with life and energy, and yet they were unaffected by the surging creative storm all around them" (Thiong'o 93).

From this organizing principle, three university lecturers (Thiong'o, Owuor Anyumba, and Taban Lo Liyong) protested the direction in which education was continuing in universities in Africa. In doing so, they suggested a new organizing principle that focused on the history and language of Africa, thereby placing oral history and language at the center of all discussions pertaining to education at Nairobi University.

> We reject the primacy of English literature and cultures. The aim, in short, should be to orientate ourselves towards placing Kenya, East Africa and then Africa in the centre. All other things are to be considered in their relevance to our situation and their contribution towards understanding ourselves… In suggesting this we

> are not rejecting other streams, especially the Western stream. We are only clearly mapping out the directions and perspectives the study of culture and literature will inevitably take in an African university (Thiong'o 94).

The importance of the above paragraph is that it represents a consciousness of identity in the native people of Africa by confronting the colonial system on ways to make the educational system more appropriate for the universities in Africa. In a diplomatic approach, recognition of other powers in education is included, yet it is not the prime focus of the curriculum. The focus would be on the oral literature and history of the country.

> The oral tradition is rich and many-sided… the art did not end yesterday; it is a living tradition… familiarity with oral literature could suggest new structures and techniques; and could foster attitudes of mind characterized by the willingness to experiment with new forms… The study of the Oral Tradition would therefore supplement (not replace) courses in Modern African Literature (Thiong'o 94–95).

After a lively debate, the controversial proposal eventually passed at Nairobi University. A few years later, in 1974, a conference on "The Teaching of African Literature in Kenyan Schools" was held at Nairobi University. This time, the discussion caught the attention of world leaders and school administrators. At the end of the conference and in "the quest for relevance" (96), the conference passed another resolution.

> The present language and literature syllabuses are inadequate and irrelevant to the needs of the country. They are so organized that a Kenyan child knows himself through London and New York. Both should therefore be completely overhauled at all levels of our education system and particularly in schools (Thiong'o 97).

This became important for Africa and its people but would also become important to the bigger picture of Hawai'i and its people, both native and non-native. The reason is that the teaching of the country's accurate history would benefit all who live here and those who actually study it. False histories disconnect people from their land and their communities; therefore, this would set a foundation where the knowledge of the actual history would answer many questions dealing with a large spectrum of issues. Including the native history and language would open up a space

where other cultures could see similarities to the native people, which would foster a positive relationship between the native and non-native communities.

Conclusion

A next step in the indigenization of the Native Hawaiian movement and Hawaiʻi writ large is to advance native knowledge and pedagogy. Hence, the importance of a culture-based curriculum that includes history, voyaging, culture, resistance, science, language, and much more. A K-12 curriculum will change the minds and alter the future of tens of thousands of Hawaiʻi students who can represent a culmination of the movement that began with the land struggles in Kalama Valley and other main struggles such as Kahoʻolawe.

> I belong to Oceania, or, at least, I am rooted in a fertile portion of it, and it nourishes my spirit, helps to define me, and feeds my imagination. My commitment wonʻt allow me to confine myself to so narrow a vision. So vast, so fabulously varied a scatter of islands, nations, cultures, mythologies and myths, so dazzling a creature, Oceania deserves more than an attempt at mundane fact; only the imagination in free flight can hope – if not to contain her – to grasp some of her shape, plumages, and pain (Wendt 49).

In understanding Hawaiian positionality in a colonial space, there is a need to understand and recognize the colonial mentality and the continual and lasting effects it has on Hawaiian people today. Understanding these dynamics is to better understand how best to heal from these destructions placed upon us. In the introduction of this dissertation, I mentioned statistics in which Hawaiians are at the bottom of the list for socio-economic status and at the top of the list for poverty, prison, education, and health. By healing ourselves and understanding our positionality, we create a space where pride and confidence can be our strengths again. “Without this healing most of our countries will remain permanent welfare cases not only economically but culturally” (Wendt 51).

One obvious solution is clear: We should understand ourselves better as Hawaiians. This

means to reclaim our past, reassert our present, and ultimately change and create our future. As Wendt passionately states, “We must rediscover and reaffirm our faith in the vitality of our past, our cultures, our dead, so that we may develop our own unique eyes, voices, muscles, and imagination” (Wendt 51). This means that change is inevitable when people place themselves at the center.

> Like a tree, a culture is forever growing new branches, foliage, and roots. Our cultures, contrary to the simplistic interpretation of our romantics, were changing even in pre-haole times through inter island contact and the endeavours of exceptional individuals and groups who manipulated politics, religion, and other people. No culture is perfect or sacred even today. No culture is ever static and can be preserved (Wendt 52).

To answer back to colonialism today is to elevate sacred spaces and islands, such as Kahoʻolawe. Other ways of answering back come in other negotiations, such as bringing in new resources, advocating, and creating new educational pathways in which cultural traditions and language are a part of the curriculum. These new pathways and educational foundations will allow students to learn and practice traditional protocols by revitalizing groups such as the Protect Kahoʻolawe ʻOhana. Reclaiming and reconceptualizing voyaging practices on Kahoʻolawe will elevate the island and provide an ideal location for voyaging students. Through this expansion of participation in cultural traditions, through education at the Kuhikeʻe Navigational Platform, there is a revival of voyaging practices that are encouraged, and therefore, the knowledge will be strengthened throughout the State of Hawaiʻi. The site represents more than voyaging practices but rather the depth of knowledge of our Hawaiian ancestors. There is a great amount to learn from this island and its history. Each revival brought back to the island can only help elevate and expand the island’s sacredness for Native Hawaiians today.

My voyaging camp at the University of Hawaiʻi connects to the Kuhikeʻe Navigational Platform, and it has proven that it can be done anywhere. The curriculum stood out because the

obvious reaction by the students was positive in that they were eager to learn more. Programs like these elevate the native student to want to connect to the subject or schoolwork. Introducing ancestral knowledge motivates them to follow through and understand the concepts that come with it. This dynamic makes a different type of student that allows for a consciousness of their native self by using aloha ‘āina and voyaging traditions. Decolonizing education is decolonizing the mind in a forward direction toward national restoration. It is my contention that the fundamentals of voyaging offer a similarly powerful vehicle for self-liberation.

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Appendices

Illustration 1.1. King Kalākaua

Illustration 1.2. Colonel Curtis Piehu Iaukea

Illustration 1.3. Colonel Curtis Piehu Iaukea Roles for the Hawaiian Kingdom, Republic of Hawaii, and Territory of Hawaii.

1878	Captain, The Prince's Own Corps, April 15 Colonel, Kalākaua's Personal Staff, November 29
1879	Tax Collector, Koolaupoko, Oʻahu, August 18
1880-1881	Secretary, Foreign Office
1883	Member, Privy Council, April 6 Commissioner, Great International Fisheries Exhibition, London, April 7 Special Envoy, Coronation of Czar Alexander of Russia, Court of St. Petersburg Special Envoy, Germany, France, Spain, Serbia, other European Countries, India, April 7-July 28 Envoy Extraordinary and Minister Plenipotentiary, Japan August 27
1884	Member, Board of Health
1884-1886	Collector General, Customs, September 20, 1884, to September 30, 1886
1886	Chamberlain, Royal Household, August 30 Commissioner, Crown Lands, Land Agent, August 30 Disbursing Agent, Royal Guard, August 30 Adjutant General, Royal Forces, October 4 Private Secretary, Kalākaua, October 4
1886-1887	Governor, Oʻahu, October 4, 1886, to August 5, 1887
1887	Envoy Extraordinary and Minister Plenipotentiary, Great Britain, April 11 Commissioner, Crown Lands, Land Agent, August 4
1891	Commissioner, Crown Lands, Land Agent, March 3 Member, Privy Council, March 7 Colonel, Liliʻuokalani's Personal Staff, March 12
1893, 1894, 1896, 1898-1900	Member, Board of Prison Inspectors, September 15, 1893 Reappointed: September 1, 1894, July 4, 1896, July 4, 1898, to July 1, 1900
1894	Special Police Constable, Kona District, Oʻahu, September 1
1895	Major and Quartermaster on General Staff of Republic, November 27
1897	Attaché and Secretary to Hawaiian Legation at London (Queen Victoria's Diamond Jubilee)
1898	Attaché and Secretary, Accompanied President Dole to Washington
1904	Tax Assessor, Oʻahu
1905-1909	Trustee, Queen's Hospital, August 3, 1905, to July 1, 1909

1906	Member, Road Board, March 7, 1906-1908 County Sheriff, Oʻahu, November 10
1909-1923	Managing Trustee, First Trustee to the Liliʻuokalani Trust while the Queen was alive, Appointed by Queen Liliʻuokalani.
1913-1915	Territorial Senate, Oʻahu
1917-1921	Secretary of Hawaii, Appointed by President Wilson, May 3, 1917, to October 12, 1921
1919-1920	Acting Governor, December 30, 1919, to March 30, 1920
1927-1931	Cook Sesquicentennial Committee, May 9, 1927, to May 9, 1931
1933-1935	Chairman, Hawaiian Homes Commission, March 28, 1933, to December 7, 1935
1937	Pensioned by Legislature Official Commentator on Matters and Affairs of the Monarchy
1937-1940	Board of Commissioners, Public Archives, October 23, 1937, to March 5, 1940
1939	The territorial government commissioned him as the "chief historian" of the islands.

Illustration 1.4. Colonel Curtis Piehu Iaukea's Diary Entry in Moscow at the Coronation for Alexander Tsar III of Russia.

"In my official dispatch to the Minister of Foreign Affairs, dated Moscow, June 5th, I described what took place:

In accordance with the advance notice, I went to the Kremlin, accompanied by my secretary, and was presented to the Emperor and Empress. His Excellency, Count de Giers, had requested that no long or written address be made as there would be no time. Therefore, in presenting His majesty, King Kalākaua's Autography Letter, I addressed the Emperor verbally and offered assurance of my Sovereign's regard and most earnest desire for the continuance of the friendly relations which have existed between the two countries. I also expressed the Hawaiian King's congratulations on the occasion of the Coronation and His grateful acknowledgment of the courtesy tendered by the Emperor through Captain Kalogueras of the Nayesdnik. The Emperor replied:

‘I have great pleasure in welcoming you, the first Envoy to my Court from Your King, and receive with much gratification the congratulations you bring. I hope friendly relations between our two countries may be lasting.’

Then Her majesty, the Empress, gracefully stepped forward from the side of the Emperor toward me and expressed her great pleasure in meeting with an envoy from distant Hawai‘i. She then entered into conversation, asking me many questions about the islands and about my Sovereign and inquired cordially after the health of Their Majesties King Kalākaua and Queen Kapi’olani.

In a letter to my Sovereign, I wrote:

The Empress referred to the very great distance I had traveled. After thanking Their Majesties for receiving me so graciously, I took my leave. The whole of our conversation was in English. During the course of my conversation with them, I informed the Tsar of the decoration you had sent him, and he said he would be pleased to receive it” (Iaukea and Iaukea 1988).

Illustration 1.5. King Kalākaua and the Royal Staff on ‘Iolani Palace Steps in 1882.

James J. Williams - http://whalingmuseumblog.files.wordpress.com/2011/07/king-kalakaua-1889.jpg.

Left to Right: James H. Boyd, Col. Curtis P. Iaukea, Chas. H. Judd, Edward W. Purvis, King Kalākaua, George W. MacFarlane, Governor John Owen Dominis, A. B. Hayley, John D. Holt and Antone Rosa.

Illustration 1.6. Queen Lili‘uokalani

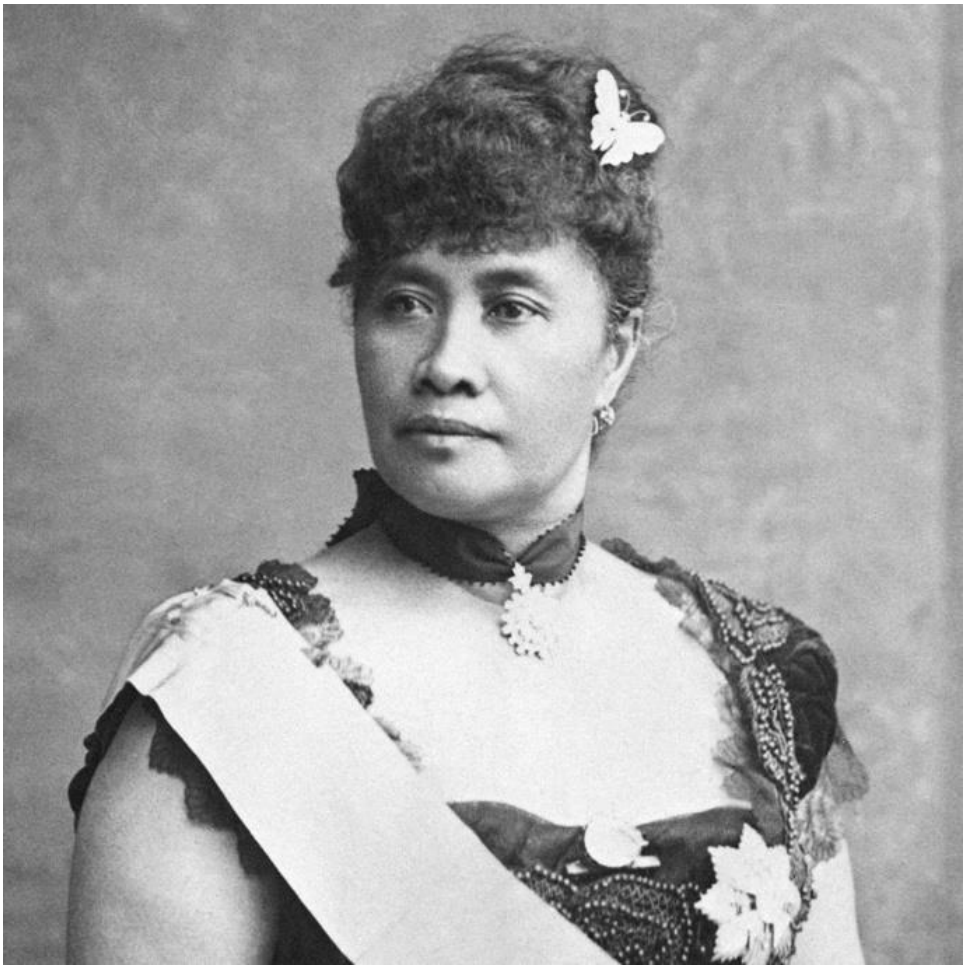

Illustration 3.1. Original Invitation to the Transpac Race by Colonel Curtis Piehu Iaukea.

“In 1886, Colonel Curtis P. Iaukea wrote what is acknowledged as the original invitation to sail in an ocean race from San Francisco to Honolulu. The race was to be held in conjunction with the King’s 50th birthday, which offered prizes and a residence for the officers and guests of the participating yachts. This race is known as the Transpacific Yacht Race and is the longest lasting sailing in the world today” (www.waikikiyachtclub.com/sailing).

TRANSPAC RACING RETROSPECTIVE

The Schooner Years

King Kalakaua

Iolani Palace
September 25th 1886

To the Commodore
of the Pacific Yacht Club.
San Francisco.

Sir.

His Majesty the King of Hawaii, desiring to show his appreciation for the friendly feelings which have always been shown him by the officers and members of the Pacific Yacht Club, has commanded me to extend an invitation to your club to be present at the festivities to be held at Iolani Palace in Honolulu, on the occasion of His Majesty's fiftieth birthday, the 16th of November next.

His Majesty desires me further to add that, by way of inducing the owners of yachts to visit the islands, he will offer prizes for an ocean race from San Francisco to Honolulu, said race to take place so as to admit of the yachts arriving here on or about the 16th of November next or a few days later. The first prize will be a trophy valued at one thousand dollars, the second valued at five hundred dollars, and the third a cup to be presented by the Hawaiian Boating Association. The race to be under the auspices of the Pacific Yacht Club.

I will also beg leave to add that a residence will be placed at the disposal of the officers and guests coming with any of the yachts under this invitation.

With the assurances of my highest regard and esteem, I have the honor to be, Sir,

Your very obdt. servant
Curtis P. Iaukea
H.Mis. Chamberlain & Private Secy.

By Ray Pendleton

Illustration 3.2. Colonel Curtis Piehu Iaukea trophy to the first foreign contestant in the Transpac Race.

In June 2011, the Club acquired this new trophy. The Transpac Trophy is dedicated to the memory of the man that wrote the first invitation for Transpac for King David Kalākaua, Colonel Curtis Piehu Iaukea.

Learning Journeys: (Illustrations 3.3 – 3.10)

Illustration 3.3. Waiheʻe Coastal Dunes & Wetlands Refuge.

Illustration 3.4. Visit with Uncle Leslie Kuloloio.

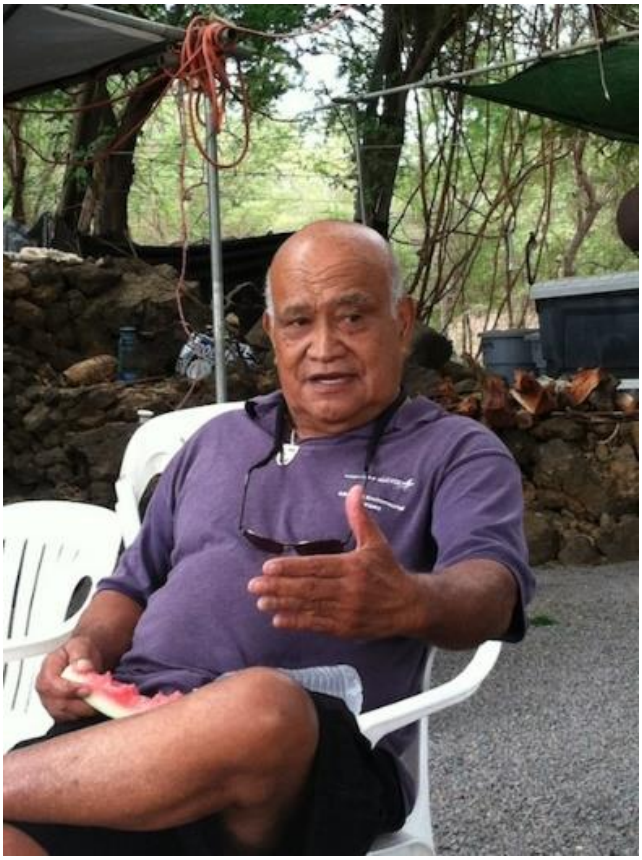

Illustration 3.5. Visiting Uncle Kimokeo Kapahulehua & the Kō'ie'ie Fishpond.

Illustration 3.6. Visit Moʻokiha o Piʻilani Voyaging Canoe & Crew.

Illustration 3.7. Maui Ocean Vodka Farm.

Illustration 3.8. Mālama Hōnua Worldwide Voyage Logistics

Illustration 3.9. Talk Story with Uncle Snake Ah Hee.

Illustration 3.10. Caring for the Earth: A Canoe as Our Classroom

Mālama Hōnua Worldwide Voyage Dockside Curriculum: (Illustrations 3.11 – 3.18)

Illustration 3.11. Tour on *Hōkūleʻa*

Illustration 3.12. Mālama Hōnua Worldwide Voyage Logistics

Illustration 3.13. Connecting to Classrooms through NOAA

Illustration 3.14. Hawaiian Star Compass

Illustration 3.15. Winds & Directional Points

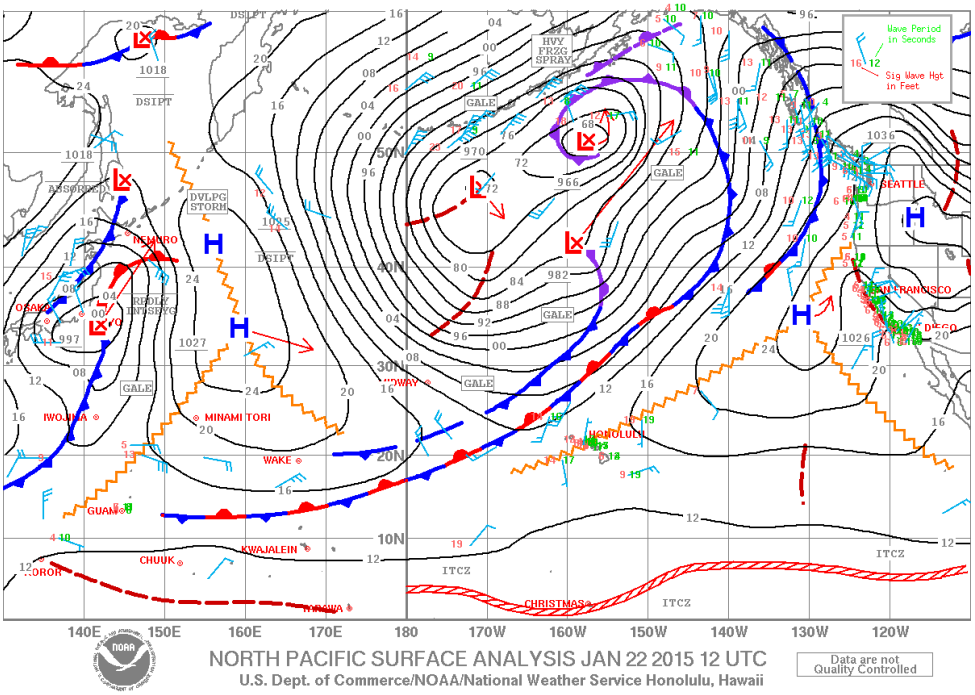

Illustration 3.16. Knots

Illustration 3.17. Water Quality

Illustration 3.18. Peace Flags

Kahoʻolawe Chants: (Illustrations 4.1 – 4.7)

Illustration 4.1 Oli Kāhea

He haki nuʻanuʻa nei kai	Indeed a rough and crashing sea
ʻO ʻawa ana i uka	Echoing into the uplands
Pehea e hiki aku ai	How is it that one lands?
ʻO ka leo	It is the voice
Mai paʻa i ka leo	Please donʻt hold back the voice

Illustration 4.2. Mele Komo

ʻAne hiki mai	You are almost here
ʻAne hiki mai ʻoukou	Almost here,
Lehua lanalana o Kanaloa	Land, land
Eia lā ka leo, ʻae	Here is the voice, yes

Illustration 4.3. Ke Noi ʻAʻAma

ʻO ʻawekuhi ʻo kai uli	Pointing tentacle of the deep sea,
Kuhikau, kuhikau	Direct, direct
E hō mai iʻaʻama	Grant an ʻaʻama
i ʻaʻama aha	An aʻama for what purpose?

I ‘a‘ama ‘ia au	For releasing me from my obligation as your guest

Illustration 4.4. Oli Ho‘oku‘u

Ku ‘oe a hele,	Rise up and take leave,
Noho au	I will remain
Ua hele ‘oe, ua hele ‘oe	Go, go see
A, ua hele lā	You have left already

Illustration 4.5. E Hō Mai

I hō mai ka ‘ike mai luna mai ē	Grant us the knowledge from above
‘O nā mea huna no‘eau o nā mele ē	The wise things that are concealed within the chants
E hō mai, e hō mai, e hō mai ē	Grant us, grant us, grant us.

Illustration 4.6. Na‘aumakua

Nā ‘Aumākua mai ka lā hiki a ka lā kau setting sun	You ancestral deities from the rising to the
Mai ka ho‘oku‘i a ka hālawai	From the zenith to the horizon
Nā ‘Aumākua iā ka hina kua, iā ka hina alo	Those who stand at our back and at our front
Iā ka ‘ākau i ka lani	You gods who stand at our right hand!
O kīhā i ka lani	Breathing in the heavens,
‘Owē i ka lani	Utterance in the heavens,
Nunulu i ka lani	Clear, ringing voice in the heavens.
Kāholo i ka lani	Voice reverberating in the heavens!
Eia ka pulapula a ‘oukou, ‘O kūkulu ke Ea a Kanaloa	Here is your progeny, Kuūkulu Ke Ea A Kanaloa
E mālama ‘oukou iā mākou	Safeguard us
E ulu i ka lani	Growth to the heavens
E ulu i ka honua	Growth to the Earth
E ulu i ka pae ‘āina ‘o Hawai‘i	Growth to the islands of Hawai‘i
E hō mai ka ‘ike	Grant knowledge
E hō mai ka ikaika	Grant strength
E hō mai ka maopopo pono	Grant intelligence
E hō mai ka ‘ike pāpālua	Grant divine understanding
E hō mai ka mana	Grant mana

Illustration 4.7. E ‘Ala E

E ala ē, lā i ka hikina	Rise up, the sun is in the East
I ka moana, ka moana h ohonu	In the ocean, the deep ocean
Pi‘i i ka lewa, ke lewa nu‘u	Climbs to the sky, the great height of the day
I ka hikina, aia ka lā, e ala e!	In the East, there is the sun, rise up!

Moʻolelo of Voyaging: (Illustrations 4.8 – 4.9)

Illustration 4.8. Mōʻikeha

This moʻolelo is significant because of its discussion of the origins of the Hawaiian people and place names for these areas it provides. There are several points of interest in this moʻolelo that fill the small pockets of the unknown. There are four different descriptions of the moʻolelo for Moʻikeha; three notable Hawaiʻi authors write about the origins of Moʻikeha and all three agree that he descends from Tahiti, and the fourth author was Hawaiʻi's last King and brother to Hawaiʻi's last Queen, King David Kalākaua. The part that differs in each of their theories questions exactly where in Tahiti Moʻikeha comes from and/or if Moʻikeha is from Waipiʻo on Kauaʻi instead. Fornander cites the homeland to be an island off of Tahiti called Ra'iātea, whereas Johnson finds Tahiti-nui and Henry records "a peninsula to the South of Tahiti" (Kalākaua 51) to be the location of his homeland.

Per Kamakau, Moʻikeha and his brother ʻOlopana come from Waipiʻo (Beckwith 353) and, because of a hurricane that flooded the area, had to migrate to Tahiti. In comparing these moʻolelo to accounts of other Oceanic countries, there appears to be a similar flooding that caused migration in the "Easter island tradition of Hotu Matua" (Barthel 10); however, this moʻolelo alone does not confirm nor deny any true origin for Moʻikeha.
However, the most compelling moʻolelo of Moʻikeha's origin comes from Kalākaua as he states that "both ʻOlopana and Moʻikeha belong to Hawaiʻi. They were grandsons of Maweke, a native chief of the Nanaula line and Aliʻi nui of Oʻahu" (Kalākaua 119). Maweke's eldest son was Muliealiʻi, the Aliʻi nui of West Oʻahu, and father of three sons, Kumuhonua, ʻOlopana, and Moʻikeha. Therefore, it is most likely that Moʻikeha comes from Waipiʻo on the Island of Hawaiʻi. While in Hawaiʻi, Moʻikeha never married yet adopted a son from Ahukai named Laʻa. Laʻa's genealogy connects him to a "Paumakua, a famous voyaging chief of East Oʻahu" (Kalākaua 119). It is told that ʻOlopana is the brother that marries Luʻukia, and a jealous relationship between the brothers would ensue and add to the voyaging moʻolelo between Hawaiʻi and Tahiti.

According to Kalākaua, after the flood in Waipiʻo, the brothers left Hawaiʻi in five canoes and sailed to Ra'iātea. ʻOlopana ruled Ra'iātea and placed his brother, Moʻikeha, as his chief adviser. This part of this moʻolelo is significant because it shows that the migration pattern started in Hawaiʻi and led to Tahiti, as opposed to the common theory that Tahitian voyagers came to Hawaiʻi. While in Ra'iātea, Moʻikeha owned a house and named his heiau, Lanikeha. This name is said to be connected to the name Laniakea, which is the Hawaiian interpretation of Ra'iātea. This connection between place names would appear to be significant in my research as place names tell a story and show a pattern of direction in the settlement. In these moʻolelo, the exact years do not appear, but rather time focuses on big occasions and centuries. At some point, it appears that Moʻikeha was an adult who returned to Hawaiʻi due to the jealously that his brother, ʻOlopana, created against him. As Moʻikeha became well-liked in Ra'iātea, the affection for him by his brother became competitive as ʻOlopana does not like his brother's good reputation.

There is another way of understanding the history of a place, and that is through place names. This moʻolelo is significant because of the places that were named after Moʻikeha's crew. Many of these names continue to be used today. The names were given to certain places depending upon where these crew members settled and made a life for themselves. These names became important in my fieldwork and research because the place names connect further to ʻike

Hawaiʻi and help to explain the dynamics between man and environment. Moʻikeha's crew had over forty members onboard, and we know today what their names were because of those stories that place them in oral history. For example, "Kumukahi is the Easternmost point of Hawaiʻi Island; Haʻehaʻe is a land division near Kumukahi; Honuaʻula is a district of South-central Maui; and Makapuʻu is the Easternmost point of Oʻahu" (Fornander 12–128). Kamakau adds to this list by mentioning other crew members and their place of settlement. The names are as follows: Moaʻula is located in Punaluʻu, Hawaiʻi Island; Pahaʻa is located in Maui; Panaʻewa is in Lahaina, Maui; Laʻamaomao, director of the winds, is in Haleolono on Molokaʻi; Pokaʻi is on Oʻahu; and Moʻeke is located in Waiʻanae, Oʻahu. Therefore, the moʻolelo of Moʻikeha and his voyages back and forth between Hawaiʻi and Tahiti are significant, not only for voyaging history but for the history of origins to Hawaiʻi. The land is connected to the name through a person, and these names tell a story that connects to cosmology and genealogy for the Hawaiian people.

As Moʻikeha had a hānai (adoptive) son called Laʻa, the evidence of a Hawaiʻi origin becomes strengthened with the familial connections that are found in Hawaiʻi. According to Kalākaua, Laʻa was born in Hawaiʻi and descended from an Oʻahu chief named Paumakua. This connection between Paumakua and Laʻa was probably remembered by Kalākaua because the two men shared the same passion for voyaging. Laʻa would follow his hānai father, Moʻikeha, to Tahiti after their land in Waipiʻo Valley was flooded. Moʻikeha would voyage back and forth between Tahiti and Hawaiʻi and would eventually live in Hawaiʻi. Laʻa, on the other hand, stayed in Ra'iātea with his uncle, ʻOlopana, and became an ancestor to the people as he became the next in line to rule Ra'iātea after his uncle. These descriptive stories help to piece fragments of history back together again by understanding a family's travels. As Laʻa travels between Tahiti and Hawaiʻi, his name becomes Laʻamaikahiki. The name "Laʻamaikahiki" describes these travels as the name means "Laʻa from Tahiti." This is also another example of what can be described further and/or in detail of a person if that person knows the Hawaiian language. Years later, Moʻikeha was older and had not seen his hānai son, Laʻa, for a while. He prepared his son, Kila, to sail to Tahiti and bring Laʻa back home to Hawaiʻi. Moʻikeha knew this would be the last time he would see his son. As he prepared to see his son, he prepared to give him a present upon arrival. A gift of cloak would take a year to make and over a hundred people to help bring together the feathers of the mamo bird (Hawaiian honeycreeper). This custom of gifting a feather cloak to a person was in practice before the Moʻikeha moʻolelo and therefore led my future work to follow the fragmented examples and stories back further in time to find out when this practice started. To make this feather cloak, one feather per bird was plucked and added to the garment. The color of this feather had to be from the same bird species and in the same color. In order to find the feathers, a person would have to know where these birds lived. After finding the birds' location, the sap from the ʻulu (breadfruit) tree would be placed on the branches where these birds would perch. This sap is sticky, and the bird's feet would become stuck on the branch. The person would pluck one feather from this bird to add to the collection for the feather cloak. Kukui nut oil would then be rubbed into the bird's feet, and the bird could fly away. This type of labor showed respect to the person receiving the cloak.

Kila would set sail with his astronomer, Kamahualele, and the rest of his crew for Tahiti in hopes of bringing back Laʻa to Hawaiʻi. Laʻa would return to Hawaiʻi and leave his life in Tahiti behind. He would sail straight to Kauaʻi to see Moʻikeha and then proceeded to sail around to the other Hawaiian islands to visit other family members. He would then move to "Kualoa on Oʻahu and consented to marry three wives, so that the blood line of Paumakua could be carried on in its native land" (Kalākaua 128). All four authors agree on the wives that Laʻa

would marry in Hawaiʻi, and from that point, the moʻolelo does not stray in different pathways. The three wives were "Hoakanui, daughter of Lonokaeha of Kualoa; Waolena, daughter of a chief of Kaʻalaea; and Mano, daughter of a chief of Kaneʻohe" (Kalākaua 132). The children that came from these marriages, Ahukini-a-Laʻa, Kukona-a-Laʻa, and Lauli-a-Laʻa, would be the lineage of the governing families for the islands of Oʻahu and Kauaʻi. The connection to Kalākaua being knowledgeable about this moʻolelo comes from his wife, Queen Kapiʻolani, and her ancestry that stems from Ahukini-a-Laʻa. As an older man, Laʻa would return to Tahiti; thus, voyaging eventually stopped between Hawaiʻi and Tahiti.

Illustration 4.9. Hawaiʻi Loa and the Discovery of Hawaiʻi. By Samuel M. Kamakau and Z. Kepelino.

Hawaiʻi Loa, or Ke Kowa i Hawaiʻi was one of the four children of Aniani Ka Lani. The other three were Ki, who settled in Tahiti, Kana Loa, who settled the Marquesas, and Laa-Kapu. The ocean was called Kai Holo-o-ka-I'a (Ocean where the fish run). Only two islands existed, and both were discovered and settled by Hawaiʻi Loa. The first he named Hawaiʻi after himself; the second Maui, after his eldest son (the other islands were created by volcanoes during and after the time of Hawaiʻi Loa).

Hawaiʻi Loa and his brothers were born on the east coast of a land called Ka ʻAina kai melemele a Kane (the land of the yellow or handsome sea of Kane). Hawaiʻi Loa was a distinguished man and noted for his fishing excursions which would occupy months, sometimes the whole year, during which time he would roam about the ocean in his big canoe (waʻa), called also an "island" (moku), with his crew and his officers and navigators (poe ho'okele and kilo-hoku).

One time when they had been at sea for a long time, Makaliʻi, the principal navigator, said to Hawaiʻi Loa, "Let's steer the canoe in the direction of Iao, the Eastern Star, the discoverer of land [Hoku hikina kiu o na ʻaina]. There is land to the eastward, and here is a red star, h**o**ku ʻula (Aldebaran), to guide us, and the land is there in the direction of those big stars which resemble a bird." And the red star, situated in the lap of the goats [a constellation], was called Makaliʻi after the navigator. Some other red stars in the circle of the Pleiades were called the Huhui-a-Makaliʻi ("Cluster of Makaliʻi").

So they steered straight onward and arrived at the easternmost island of the Hawaiian chain. They went ashore and found the land fertile and pleasant, filled with ʻawa, coconut trees, and so on, and Hawaiʻi Loa, the chief, gave that land his name. Here they dwelt a long time, and when their canoe was filled with vegetable food and fish, they returned to their native country with the intention of returning to Hawaiʻi-nei, which they preferred to their own country. They had left their wives and children at home; therefore, they returned to get them. When Hawaiʻi Loa and his men arrived at their own country and among their relatives, they were detained a long time before they set out again for Hawaiʻi.

At last, Hawaiʻi Loa sailed again, accompanied by his wife and his children. He settled in Hawaiʻi and gave up all thoughts of ever returning to his native land. He was accompanied on this voyage by a great crowd of men, steersmen, navigators, shipbuilders, and others. Hawaiʻi Loa was chief of all these men. He alone brought his wife and children; all the others came singly, without women, so he was the progenitor of this nation. On their voyage here, the Morning Star (ka Hoku Loa) was the special star they steered by. And Hawaiʻi Loa called the islands after the names of his children and the stars after his navigators and steersmen. [The island of Maui was called after Hawaiʻi Loa's firstborn son. The island of Oʻahu was called after

Hawaiʻi Loa's daughter, and her foster parent was Lua, and hence the name Oʻahu-a-Lua. Kauaʻi was called after Hawaiʻi Loa's younger son; his wife's name was Waialeale, and they lived on Kauaʻi, and the mountain was called after her because there she was buried. And thus, other islands and districts were called after the first discoveries.

After Hawaiʻi Loa had been some time in Hawaiʻi-nei, he made another voyage to find his brothers to see if they had any children who might become husbands or wives to his own. They left from Lae o Kalae, in Ka'u, and followed the stars Ke Ali'i-o-Kona-i-k a-Lewa [Canopus] and the stars of Hoku-kea o ka Mole Honua ["Star-cross of the bottom of the earth," or Southern Cross] to Tahiti and other islands to the south. On Tahiti, he found his brother Ki who had settled there and called the island after one of his own names. They sailed together southward (i ka mole o ka honua), and found an uninhabited island, which Hawaiʻi Loa gave his name, and another smaller island, which he named for his daughter Oʻahu.

When they had finished their business here, they returned to Hawaiʻi, to Lae o Kalae, steering by the Hoku-'Iwa stars and the Hoku Poho ka ʻAina. On this return voyage, Hawaiʻi Loa brought Tu-nui-ai-a-te-Atua, the firstborn son of his brother Ki, who became the husband of Hawaiʻi Loa's favorite daughter Oʻahu. The couple had a child called Kunuiakea, who was born at Keauhou in Puna, Hawaiʻi. Puna was a fertile and fine land, and it was called Puna by Kunuiaiakeakua [Tu-nui-ai-a-te-Atua] after his own birthplace, Puna-Auia, in Tahiti. Kunuiakea, on both father's and mother's side, became chief of the very highest rank (kapu loa). From him sprang the race of chiefs here in Hawaiʻi (welo ali'i) and from Makaliʻi sprang the race of common people (welo kanaka). The first has been kept separate from the most ancient times, and the second has been kept separate from the time of chaos (mai ka Po mai). But the priestly race (welo kahuna) was one and the same as the race of chiefs from the beginning. This English version of the Hawaiʻi Loa story is from Fornander, Vol. VI, 278-281.

Nupepa Ku‘oko‘a: (Illustrations 4.10 – 4.12)

Illustration 4.10. Nupepa Kuokoa, August 05, 1865. Hawaiian Language Newspaper.

Na S. M. Kamakau. }
Honolulu, Iulai 26, 1865. }

Ua kulai waiho molaelae ne au i ka moolelo o na wahi keiki hookele hoku holo moana, ai ko maneo o Mokuleia ; noweo maka uwahi kai o elokupaoa.

Ua ike ae au i ka lakou Kumu Ao Hoku holo moana. He wahi keiki i umi makahiki a oi ae paha, oia ka lakou kumu holomoku.

O Kanowa ke kahua o Hanai, ka halekula o Pekue, ka nalu o Kalakiki, ke kumu o Kaneakahoowaha ma na haumana.

No ke Aohoku ana.

1. E lawe ae ke kumu i ka ipu hokeo loihi me he pauku olokaa la ke ano. Ua kunikuni ahi ia he mau alanui. Oia hoi na alanui o na hoku hookele, ua kapaia na hoku aiaina.

A mawaho o na alanui ekolu na hoku ua kapaia na hoku o ka lewa.

2. Hookahi alanui e moe ana mai ka hokupao akau ; a hiki aku i ka hoku welelau hema o Newe. O ka aoao akau o kela alanui ; ua kapaia o " Kealaula a Kane." A o ka aoao hema ; ua kapaia " o ke alanui mawaula a Kanaloa.

3. O na kahn hikina ekolu. O ke kaha hikina ma ka aoao akau ; oia kahi e ku ai ka la i ka akau i ka la 15 me ka 16 o Kau, lua, ua kapaia ia alanui ke alanui polohiwa a Kane.

4. O ke kaha hikina ma ka aoao hema, oia kahi e ku ai ka la i ka aoao hema i ka la 15 me ka 16 o Hilimama. Ua kapaia ia alanui "o ke alanui polohiwa a Kanaloa."

5. O ke alanui iweenakonu i kupono i ka lolo, ua kapaia " o ke alaula a ke Kuukuu ; a o ke ala i ka piko o Wakea."

6. Mawaena o keia mau alanui na hokupaa o ka aina ; i ka paia na hoku hookele moana. Ua kikokiko ia kela hoku kein hoku maluna o ka ipu.

7. I ke ao ana, kuhikuhi mai ia ke kumu i na hoku. Eia o Humu me kona mau lala iwaho, a me na loina i ka akau, a me ka hema ; ke kulepe, ka puahiohio, ka waipuilani a pau ke ano. Pela no o Keoe, o Nuuanu, o Kapea, o Kokoiki, o Puweps, Nakao, Nalalani, o Pililua, Mananalo, Kaawela, Nahoki, Pina-au, Polohilani, Kaweo, Hokuloa, Ukali.

Ua makaukau oe no ka pauku olokaa. Alaila e ao oe i na mea o loko o ka hale, i na ipu o loko, i na mea o ka hale a pau i na loina a pau ; he mau hoku kiai ia, ua pau na mea o loko i ke ao ia.

9. Mai na po i na Kaloa, a hiki i o Mauli. E lawe ae ke kumu i ka moena puao maikai, a hohola ae iwaho ka hua, a e moe iho oe, a e huli ae ko alo iluna ; a e loaa ia oe ke alapolohiwa a Kane me Kanaloa aia malaila, na hoku hookele ;- oia hoi na hoku aiaina. Akaka ia oe na la kupono o ka moana, malama o ke Kau me ka Hooilo.

10. I ko holo ana i ka pae aina o Kahiki ua loaa ia oe he lalani hoku hou me na hoku i ka lewa a me ka lepo.

11. I ko hiki ana i ka piko o Wakea e malowale ia oe ka Hokupaa akau. Alaila e lilo o Newe i hoku alakai hema, a o ka pae hoku o Humu ma na koa alakai maluna. I ka pau ana o na loina ia oe o ka lani.

12. E ao oe i na loina o ka moana, i na la e pii ai ke au iluna, a me na la e moku ai ilalo, a me na la inoino o ka wili-au, me na la haumalu newenewe malie, a ku o ke au.

13. E ao oe i ke Kamaikihulipu i makaukau oe i ka hoolana, i pau ka loina o ke kaula e hoolana ai. E ao oe i ka au mai kekahi mokupuni, a i kekahi mokupuni.

14. E lolo oe i kau mau oihana i ao ai i paanaau ia oe ; i kokua mai ai ke Akua i kona mana Hemolele. I kou holo ana iloko o ke kupilikii a me na kai lipolipo o ke aloha ole.

O ka Kaneakahoowaha aoao Aohoku keia. He mau elemakule Aohoku o Kahipoliau o Namaka, o Pai, o Kahipooula, he poe Aohoku keia. Ua maopopo ia lakou na loina ; ua aneane e like no lakou me ka mua, ua oi loa'ku no nae ia o ke komo ana o Kaiahuna maloko o Kuaiako. Aole au i lohe i kekahi mea like me ia ma ke ao nei. O oukou paha kai lohe e hai iho.

Aole i pau.

Illustration 4.11. English Translation to *Nupepa Kuokoa*, p. 1. August 05, 1865.

INSTRUCTIONS IN ANCIENT HAWAIIAN ASTRONOMY AS TAUGHT BY KANEAKAHOOWAHA, ONE OF THE COUNSELLORS OF KAMEHAMEHA I., ACCORDING TO S. M. KAMAKAU.

(Translated from the *Nupepa Kuokoa* of Aug. 5th, 1865, for the *Maile Wreath* by W. D. ALEXANDER.)

TAKE the lower part of a gourd or hula drum (hokeo), rounded as a wheel, on which several lines are to be marked (burned in), as described hereafter. These lines are called "Na alanui o na hoku hookele" (the highways of the Navigation stars), which stars are also called "Na hoku ai-aina" (the stars which rule the land). Stars lying outside of these three lines are called "Na hoku o ka lewa," *i. e.*, foreign, strange or outside stars.

The first line is drawn from the "Hoku paa" (North Star), to the most southerly of "Newe" (Southern Cross?). The portion to the right or east of this line is called "Ke alaula a Kane" (the dawning, or the bright road of Kane); and that to the left or west is called "Ke alanui maaweula a Kanaloa" (the much travelled highway of Kanaloa).

Then three lines are drawn east and west (latitudinally), one across the northern section, indicates the northern limit of the sun, about the 15th and 16th days of the month Kaulua, and is called "Ke alanui polohiwa a Kane" (the black shining road of Kane). The line across the southern section indicates the southern limit of the sun, about the 15th and 16th days of the month Hilinama, and is called "Ke alanui polohiwa a Kanaloa" (the black shining road of Kanaloa). The line exactly in the middle of the sphere (the drum, the Lolo), is called "Ke alanui a ke Kuukuu" (the road of the Spider), and also "Ke alanui i ka Piko o Wakea" (the way to the navel of Wakea).

Between these lines are the fixed stars, "Na hoku-paa o ka aina." On the sides are the stars by which one navigates. The teacher will mark the position of all these stars on the gourd. Thus he will point out to his scholars the situation of Humu (Altair), Keoe (Vega?), Nuuanu, Kapea, Kokoiki, Puwepa, Na Kao (Orion), Na Lalani o Pililua, Mananalo, Poloahilani, Huihui (the Pleiades), Makalii (the Twins), Ka Hoku Hookelewaa (Sirius), Na Hiku (the Dipper), and the planets, "hoku hele,"

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Illustration 4.12. Page 2 of English Translation to Nupepa Kuokoa. August 05, 1865.

Kaawela (Jupiter), Hokuloa (Venus), Hokuula (Mars), Holoholopinaau (Saturn), Ukali (Mercury), etc.

During the nights from Kaloa to Mauli (the dark nights of the moon), are the best times for observation. Spread out a mat, lie down with your face upward, and contemplate the dark-bright sections of Kane and Kanaloa, and the navigating stars contained within them.

If you sail for the Kahiki groups, you will discover new constellations and strange stars over the deep ocean, "hoku i ka lewa a me ka lepo."

When you arrive at the "Piko o Wakea" (Equator), you will lose sight of the "Hoku-paa" (North Star); and then "Newe" will be the southern guiding star, and the constellation of "Humu" will stand as a guide above you, "Koa alakai maluna."

You will also study the regulations of the ocean, the movements of the tides, floods, ebbs and eddies, the art of righting upset canoes, "ke kamaihulipu," and learn to swim from one island to another. All this knowledge contemplate frequently, and remember it by heart, so that it may be useful to you on the rough, the dark and unfriendly ocean.

Mālama Hōnua Worldwide Voyage Blogs (Appendix 3.1 – 3.7)

Appendix 3.1: Waiheʻe Coastal Dunes & Wetlands Refuge

My Learning Journey Blog at www.hokulea.com:

> "Today, our Maui crew members enjoyed a beautiful day at the Waiheʻe Coastal Dunes & Wetlands Refuge. We joined a regular volunteer work day (every Friday) with the Hawaiian Islands Land Trust (HILT) and helped to clear invasive pests and plant ʻakiʻaki in their place. ʻAkiʻaki (Sporobolus virginicus) is a coarse grass that grows in the sand. We also had the opportunity to see how the ʻakiʻaki is propagated and help in the process. Mahalo to Scott Fisher and the volunteers with HILT for an amazing day of learning for our crew and for sharing the stories of that ʻāina."

Appendix 3.2. Maui Ocean Center

My Blog at www.hokulea.com:

> "Today was our second day in Māʻalaea, and we've been really humbled by the outpouring of community support during our short time here. Many have come to say hello, talk story, and give food and ice to us as a welcoming gesture. So far, we have welcomed about 300 guests on Hōkūleʻa for canoe tours and have made so many new friends in sharing our vision for the WWV. Children have been making individual peace flags that we will bring with us when we voyage, hopefully making them feel connected to our voyage. We will continue to offer daily canoe tours until June 26 from 9-12 pm and 1-5 pm, and then we plan to make ready and sail to Lahaina on June 28.
>
> We started our day with an early morning swim, and we came across a turtle with multiple tumors. As part of Mālama Honua, we felt we should inquire about how to help. Lucky for us, the team from the Maui Ocean Center had come to have a canoe tour on Hōkūleʻa and referred us to the NOAA hotline. We alerted the officials and learned a little bit about how to care for turtles.
>
> We then had a private tour of the Maui Ocean Center, where we learned about their release program of animals back into the wild. We were able to see healthy turtles, sharks, and manta rays at the center. For information on how to report distressed animals, please call 1-888-256-9840. To visit the Maui Ocean Center and learn about their programs, please go to their website at: http://www.mauioceancenter.com/.
>
> The crew is excited for the week ahead, as we will team up with Maui crew members and go into the community for our Learning Journeys. Please stay tuned for forthcoming blogs about the many Maui groups and communities that lead by example as they teach their keiki how to mālama honua."

Appendix 3.3. Visit with Uncle Leslie Kuloloio

My Blog at www.hokulea.com:

> "In the afternoon, the crew went to "talk-story" with Uncle Leslie Kuloloio. A well-known Hawaiian activist and knowledgeable kūpuna in oral histories. To set the tone for the meeting, Uncle Les and ʻohana greeted us with their moʻokūʻauhau kahea. The crew, in response, returned the greeting with the Hōkūleʼa kahea.
>
> We were given a tour of the ʻohana property where there was once a living and thriving fishpond and village. This property is located across the street from 'Big Beach' Makena and is a symbol of place for this ʻohana that has genealogical roots to Maui and Kahoʻolawe. We were given the history of Kealaikahiki, the pathway to Tahiti, as well as the oral history of how Maui and Kahoʻolawe are and were connected. We felt very lucky to hear this moʼolelo from a kūpuna, as he gave us all a visual of what once was in these islands.
>
> He is the Kūpuna Representative of Kahoʻolawe and Chairman to Aha Moku, Uncle sat the crew down in a circle, he proceeded to talk about culture, kuleana, and most important, the future for native Hawaiians. By the middle of our 'talk-story' we were all pretty much understanding the spiritual connection to our ancestors and the role that Hokuleʼa plays for many Hawaiians and non-Hawaiians in regards to the perpetuation of culture. Needless to say, the 2 hour meeting lasted for 4 hours, and at the end of this spiritual and deep talk, the crew ended up at Big Beach, where we sat together looking out at Kahoʻolawe and thought about our kuleana to our ʻohana and Hokuleʼa; and ultimately, our kuleana to 'Mālama Honua'.
>
> Mahalo nui loa to Uncle Leslie Kuloloio, Leinaʻala Kuloloio, and keiki for a deep sense of kuleana and the humbleness he has in giving away his manaʻo freely to the younger generations. We truly learned from our kūpuna today as he gave us much more to think about while sailing the first year of our voyage in Hawaiʻi."

Appendix 3.4. Hawaiian Islands Humpback Whale National Marine Sanctuary

My Blog at www.hokulea.com:

> "Tonight, the crew went to the Whale Sanctuary in Kihei to give a free presentation on the WorldwideVoyage for Hokuleʼa and were met with about a hundred smiling faces and a room full of positive energy. We also had a few kūpuna crew members there to support and share their manaʻo with us and the crowd. Kaiulani Murphy started off the presentation with a PowerPoint that gave the history of Hōkūleʻa and the Polynesian Voyaging Society; and the path that has led us here today with the WorldWideVoyage. Kaiulani talked about the founders of Polynesian Voyaging Society, along with known figures that are no longer here with us as a way to connect the audience to the waʻa.

Kala Babayan then spoke about the voyaging canoe on Maui and her experiences with being Po Navigator Kalepa Babayan's daughter. It was a great insight into her world where she is also very knowledgeable about the star compass as she recalls stories from her youth with her father.

Kealoha Hoe completed the presentation by describing the typical life onboard while on a voyage, the food that is being used and different food menus that are gearing the crew toward a healthier tomorrow; where there is sustainability, as we prepare to grow our own food onboard.

We then had a Q and A period where the audience posed some really great questions with foresight towards the voyage ahead. The education program was introduced and information on how to use Hōkūleʻa's voyages as part of a curriculum was discussed.

It was a great night amongst new friends, and the crew would like to thank the community for coming out and showing their support; as well as share with us their great mana and ʻike. This island of Maui has been supportive and loving towards us while we are here and we leave soon knowing that there is definitely a huge presence of people that are living aloha and preparing the future for their keiki. Aloha…"

Appendix 3.5. Mālama Hōnua Worldwide Voyage Logistics

My blog at www.hokulea.com:

"The worldwide voyage of Hōkūleʻa has many meanings; its impacts are multiple and diverse. On the face of it, a traditional Polynesian voyaging canoe with a twelve-person crew will traverse a 46,000 mile path around the world, an astounding feat in itself. The canoe is simple. It is lashed together without steel rigging, screws, bolts, or metal fasteners. It sails without a cabin, galley, or head, powered by two crab claw sails. It has no engine, no compass, no GPS, no sextant. Its mission is to visit indigenous peoples around the world and share the story of how a traditional culture, in this case, Hawaiian, is bringing to life its knowledge, intelligence, science, language and cultural integrity by restoring the practices that allowed it to endure.

If this were being done to honor the past and preserve traditions for the future, it would be worthy. But its meaning goes beyond that. Traditional Polynesian cultures were acutely attuned to their environment. Their food, language, narratives, agriculture, mores and spiritual practices were intimately intertwined to the rhythms and constraints of the land they lived upon and the waters that held them. They created vibrant cultures of healthy women and men who left a legacy of elegant mastery, both rational and intuitive, that was almost obliterated by modernity. In this, Hawaiians mirror the experience of indigenous peoples everywhere.

The voyage of Hōkūleʻa will connect wisdom traditions around the world. Indigenous science and understanding are not artifacts from the past but guides to the future, markers and pointers that can instruct and root an industrial culture that is based

on an illusion of no limits. The art of the voyage, its simplicity, the absence of anything except that which is truly necessary carries an important teaching. The voyage depends on a proficiency and awareness that can only be found in human consciousness. The frugality of means that accompanies each step of the voyage celebrates the ingenuity of humanity in ways that we have forgotten, do not appreciate, or do not know. Each leg of the voyage is a test of that knowledge, a refinement of awareness. Wayfinding has always held deeper meanings in Polynesian cultures, but with the voyage of Hōkūleʻa, wayfinding becomes a metaphor for the world, a way of seeing. The earth is a canoe, sailing through space, a craft packed with people who may have too little or too much, and who must discover how to share and collaborate in rhythm with the gifts of the earth in order to move forward into the future."

Appendix 3.6. Talk Story with Uncle Snake Ah Hee

My Blog at Hokulea.com:

"To talk about Hōkūleʻa and the vision of the Worldwide Voyage, one would have to mention those that came before us and who have shown us the way. Uncle Snake Ah Hee was born and raised in Lāhainā, Maui, where he graduated from Lāhaināluna High School. Uncle grew up in a fishing family that also surfed, dived and paddled canoe all the time. By the time he became a lifeguard at the hotels on Maui, Uncle was known for his water skills and humble personality.

In 1968, after joining the National Guard, Uncle was called upon to go on tour in Vietnam. After serving for his country, he returned home with a stronger mind and an appreciation for life. He realized that he 'wanted to see peace – all the time, all over the world.'

Introduced to Lāhainā in 1975 by Sam Kaʻai and George Paoa, Uncle was asked to be on the return trip from Tahiti to Hawaiʻi in 1976. His training consisted of surfing ten hours at a time, just to be ready for the voyage home. 'The ocean has taken hold of me spiritually and mentally. I think it's because it's tied in with my family, with being raised on the ocean.' Over the last thirty eight years, Uncle has been on most of Hōkūleʻa's deep-sea voyages. Uncle still surfs, paddles, and dives regularly today; and was seen charging the last big swell at Honolua Bay on Maui, most recently.

Uncle has become a legend in his own right, and the crew is always humbled to sail with him as he teaches us more than sailing but rather how to take action that will lead us all to a better tomorrow for our children. Uncle holds the respect of all due to his skills of being a waterman, but mostly because of his humility. "I'm here to teach the younger generation who are sailing with us – how to take care of themselves and each other – how to be humble. For me, that's the one key part. If you're humble, everything will be fine. Everyone will think the same, work the same, be closer together. Only if you are humble can you learn."

Appendix 3.7. Caring for the Earth: A Canoe as Our Classroom

My blog at www.hokulea.com:

> My excerpt shared on a blog with fellow crew member Holman on www.hokulea.com: "Hawaiʻi is a special, sacred place and traveling these islands with Hōkūleʻa brings one close to the inner workings of humbled and empowered communities that exemplify Aloha. Grounded in the relationship of land to sea, amazing individuals are nurturing a culture of caring as keepers of their homes. They are sharing these values with youth in classrooms without walls, but rather the classroom of place and of living sustainably in our island homes. These extraordinary communities are working with nature, using permaculture to manage erosion, restoring ancient fishponds, planting trees, and protecting coastal areas devoted to traditional subsistence, to mention but a few examples. A movement is growing and as the canoes share stories from around the world they become a catalyst for positive change, planting seeds for our children to live in a healthy, peaceful, and safe planet Earth.
>
> Education is the core of this voyage, with the vision to inspire children and their communities to Mālama Honua, to care for one another and our natural and cultural environments. The voyage supports education as a value-based, place-based, socially and culturally relevant program that highlights the interconnectedness of all life, the importance of cultural diversity, and the value system of caring and compassion. Innovative teachers in a group known as Aʻo Hawaiʻi are working toward sustained educational transformation, designing interdisciplinary curriculum that will relate to themes of the voyage and endure beyond, based on the principle that "the canoe is the classroom and the classroom is the canoe."
>
> The oceans and mountains of Hawaiʻi become the classroom as we redefine our entire concept of a school, to one approached from the mind of a navigator and the values intrinsic to voyaging. The art of celestial navigation requires us to listen to nature as well as the instinctual, intuitive self and contains powerful lessons for the present. Traditional navigators are attuned to the world around them, from the heavens down to the water drop, constantly noticing the shape of the sea and the character of light through the clouds. In recent times, the ancient art of wayfinding was nearly extinct until one of its last keepers, master navigator Mau Piailug from Micronesia, on the island of Satawal, chose to teach. In a traditional ceremony, he appointed five Hawaiians as Pwo navigators. Mau explained Pwo as light, love, kindness, and compassion. In embodying these qualities, the navigator must sail and bring gifts of knowledge and understanding back home.

Malama Hōnua Worldwide Voyage Curriculum: (Appendix 3.8 – 3.14)

Appendix 3.8. Tour on Hōkūleʻa Curriculum

Curriculum Standard:

- Reclaim Hawaiian identity through understanding parts of the waʻa through ʻike kuʻuna (Hawaiian knowledge, belief system, philosophy, and practices).
- Perpetuate ʻike kuʻuna in order to form a Hawaiian foundation for the lāhui.

Needs to Know:

- What are the parts of the waʻa?
- What is the ʻike kūpuna that I know?
- Why is ʻike kuʻuna important?
- Why is it important to show appreciation to ʻike Hawaiʻi?
- Why is the waʻa important?
- How will I show that ʻike kuʻuna is important to me and my ʻohana?
- How am I connecting the waʻa to ʻike kūpuna?
- How am I showing appreciation to this ʻike?
- How did my kūpuna show appreciation to this ʻike?
- How can this ʻike Hawaiʻi perpetuate Hawaiian identity?
- How is the waʻa connected to the 1970s Renaissance?

Learning Objectives:

- Participate in an activity that is inclusive and collaborative.
- Show how each member of your group is contributing to the crew and community.

ʻIke Standard:

- Recognize the waʻa philosophy and skills
- Identify each skill
- Develop an awareness of roles

Student Outcome:

- Able to define ʻike Hawaiʻi.
- Able to explain the Hawaiian connection to a waʻa.
- Retell a moʻolelo (story).
- Explain a hana (work) onboard the waʻa.
- Identify which loʻina and lawena are used onboard.
- Explain how the lesson is connected to ʻike Hawaiʻi.

Learning Activities:

- Kumu tells a moʻolelo that is connected to ancient voyaging
- Kumu explains the hana that is done onboard as a crew member

- Kumu explains the loʻina and lawena that connects to the hana and moʻolelo

Lesson Resources:

- Waʻa; The lesson is done on the waʻa.
- Canoe names of the different sections (Fig X).
- Pencil for written answers and drawing an end product.

Duration of Lesson:

- 45-60 minutes.

Lesson:

- Kumu explains the parts of the waʻa (Fig X).
- Students go over each physical part of the waʻa that is listed in Fig X
- Moʻolelo of ʻike kūpuna.
- The hana is cleaning the mast and side beams.
- The loʻina and lawena is laulima (many hands) and hoʻihi (respect) to being incorporated into the hana.
- Reflection: (Pick 3-5 students for each question)
    - What did the student like about this experience? Why?
    - How is it connected to their kūpuna?
    - What are the parts of the waʻa?
    - What is the ʻike kūpuna that I know?
    - Why is ʻike kuʻuna important?
    - How will I show that ʻike kuʻuna is important to me and my ʻohana?
    - How am I connecting the waʻa to ʻike kūpuna?
    - How am I showing appreciation to this ʻike?
    - How did my kūpuna show appreciation to this ʻike?
    - Why is it important to show appreciation to ʻike Hawaiʻi?
    - How can this ʻike Hawaiʻi perpetuate Hawaiian identity?
    - Why is the waʻa important?
    - How is the waʻa connected to the 1970s Renaissance?

Follow-up for students:

- The teacher follows up on the questions when the class returns to school the next day. The teacher can continue with the curriculum as they choose.

Appendix 3.9. Mālama Hōnua Worldwide Voyage Logistics Curriculum

Curriculum Standard:

- Reclaim Hawaiian identity through understanding the logistics of a voyage through ʻike kuʻuna (Hawaiian knowledge, belief system, philosophy, and practice).
- Perpetuate ʻike kuʻuna in order to form a Hawaiʻi foundation for the lāhui.

Needs to Know:

- What is ʻike kuʻuna?
- What countries and island nations is the waʻa sailing to?
- What are the stages and themes of the voyage for each year ventured?
- What is the role of each crew member?
- Where is Hawaiʻi situated on a globe in relation to the rest of the world?
- Why is protocol important for Hawaiʻi and the countries that greeted Hawaiʻi's waʻa?
- What are the similarities and differences between the Hawaiian worldview and other island nationsʻ worldview?
- Why is ʻike kuʻuna important?
- How does the waʻa make connections across the world?

Learning Objectives:

- Participate in an activity that is inclusive and collaborative.
- Show how each member of your group is contributing to the crew and community.
- To learn from other native people to better understand ourselves.

ʻIke Standard:

- Recognize the importance of meeting other island nations and countries.
- Identify the different languages, worldviews, and place names for the countries that are greeted.
- Develop an awareness of Hawaiʻi's role in connecting Oceania together.

Student Outcome:

- Able to define ʻike Hawaiʻi.
- Able to define the Hawaiian connection to a waʻa.
- Explain the connection between Hawaiʻi and other countries and island nations.
- Understanding the WWV as it relates to transnational relationships and native agency and identity.

Learning Activities:

- Kumu lectures on the stages and themes of the voyage.
- Kumu points out the countries and island nations that the waʻa will sail to.
- Kumu discusses a transnational perspective that connects native people to each other.
- Kumu explains the loʻina and lawena that connects to the lesson.

Lesson Resources:

- Waʻa: The lesson is done on the waʻa.
- Map of the world with an outline of the voyage (Fig X).
- Pencil for written answers and drawing an end product.

Duration of Lesson:

- 45 minutes

Lesson:

- Discussing the role of each crew member and the significance of those roles.
- Kumu explains the stages and themes of the voyage.
    - First Year: Hawaiʻi voyage to all of the Hawaiian Islands.
    - Second Year: International waters sailing throughout Polynesia, starting with Tahiti and ending with Aotearoa/New Zealand.
    - Third Year: First time outside of the Pacific Ocean and sailing into the Indian Sea to Africa. Transnational relations and being introduced to the unknown.
    - Fourth Year: Making the voyage back to Hawaiʻi and letting the navigator apprentices take over.
- Students go over each year of the voyage and why the stages are important.
- Outlining the countries to be visited and what protocol is necessary for the welcoming ceremony and farewell ceremony.
- A comparison between the Hawaiian people and other native peoples is discussed.
    - The similarities and differences that are found in language, cosmology, genealogy, place names, and voyaging traditions.
- Incorporating the loʻina and lawena into the lesson to discuss the transnational perspective and connections.
- Reflection: (Pick 3-5 students for each question)
    - What did the student like about lesson two? Why?
    - How is it connected to their kūpuna?
    - What role can each student see themselves doing on a waʻa.
    - Name one important lesson to learn from each year of the voyage.
    - What is the students' view on the protocol?
    - Why is protocol important?
    - Which country surprised the student most regarding similarities and differences?
    - Why are the loʻina and lawena important?
    - How will I show how ʻike kuʻuna is important to me if I were to be on a leg of a voyage and greet another native group of people?
    - How am I connecting the waʻa to ʻike kūpuna in another country?

Follow-up for students:

- The teacher follows up on the questions when the class returns to school the next day. The teacher can continue with the curriculum as they choose.

Appendix 3.10. Hawaiian Star Compass

Curriculum Standard:

- Reclaim Hawaiian identity through understanding wayfinding traditions and skills through ʻike kuʻuna (Hawaiian knowledge, belief system, philosophy, and practices).
- Perpetuate ʻike kuʻuna in order to form a Hawaiian foundation for the lāhui.

Needs to Know:

- What is the Hawaiian Star Compass?
- What are the names of the four directional markers and 28 houses?
- What is the ʻike kūpuna that I know?
- Why is this ʻike kūpuna important?
- How am I connecting the Hawaiian Star Compass to the waʻa?
- How does my kūpuna use the Hawaiian Star Compass?
- How can this ʻike Hawaiʻi perpetuate Hawaiian identity?
- How else can the Hawaiian Star Compass be used?
- How is the Hawaiian Star Compass connected to the 1970s Renaissance?

Learning Objectives:

- Participate in an activity that is inclusive and collaborative.
- Show how each member of your group is contributing to the crew and community.

ʻIke Standard:

- Recognize the waʻa philosophy and skills.
- Identify the four directional markers and 28 houses.
- Develop an awareness of roles.

Student Outcome:

- Able to define the four directional markers.
- Able to define and explain the 28 houses.
- Able to explain how the Hawaiian Star Compass is used.
- Able to explain the Hawaiian connection to the waʻa through the Hawaiian Star Compass.
- Identify which loʻina and lawena are used onboard.
- Explain how the lesson is connected to ʻike Hawaiʻi.

Learning Activities:

- Kumu explains the Hawaiian Star Compass in stages
    - Directional Markers (Fig X).

    - Houses (Fig X).
    - Definitions (Fig X).
    - How the markers are related to the voyaging philosophy
- Kumu explains how the Hawaiian Star Compass is used on the waʻa.
- Kumu explains how the loʻina and lawena connect to the bigger picture on the waʻa.

Lesson Resources:

- Classrooms can be outside and/or on the waʻa.
- If the classroom is outside:
    - Find directional markers in the environment, i.e., coconuts, sticks, pōhaku, branches, sand.
- If the classroom is on the waʻa:
    - Visualize the Hawaiian Star Compass placed over the waʻa with the North directional marker at the bow (forward) of the waʻa.
- The names of the different markers and houses (Fig X).
- Pencil for written answers and drawing an end product.

Duration of Lesson:

- 45-60 minutes.

Lesson:

- If outside: the students break into groups and find directional markers from the environment (i.e., coconuts, sticks, pōhaku, branches, sand).
- Place markers in designated areas on the Hawaiian Star Compass.
- Each group explains what they did and explains the markers and/or house they put together.
- Kumu gives a scenario, and the students figure out how to get to the location based on wayfinding skills.
- Students explain what were the actions needed to get to where they needed to go.
- If on the waʻa: the students break into groups and find directional markers on the waʻa (i.e., bow, stern, mast, left and right side hulls).
- Place a person at each directional marker and, in small groups, explain each quarter with the houses and the definition of those houses.
- Kumu gives a scenario, and the students talk through the answers as to how to get to the location based on wayfinding skills.
- Students explain what were the actions needed to get to where they needed to go.
- All students explain how they used the loʻina and lawena in their group activity.
- Reflection: (Pick 3-5 students for each question)
    - What did the student like about this group activity? Why?
    - How is it connected to their kūpuna?

- What are the four main directional markers?
- What are the names of the houses?
- Is the Hawaiian language important on the waʻa in understanding the directional markers and houses?
- What is the ʻike kuʻuna that I know?
- Why is ʻike kuʻuna important?
- How will I show that ʻike kuʻuna is important to me and my ʻohana?
- How am I connecting the waʻa to ʻike kūpuna?
- How am I showing appreciation to this ʻike?
- How did my kūpuna show appreciation to this ʻike?
- Why is it important to show appreciation to ʻike Hawaiʻi?
- How can this ʻike Hawaiʻi perpetuate Hawaiian identity?
- Why is the waʻa important?
- How is the waʻa connected to the 1970s Renaissance?

Follow-up for Students:

- The teacher follows up on the questions when the class returns to school the next day. The teacher can continue with the curriculum as they choose.

Appendix 3.11. Winds & Directional Points

Curriculum Standard:

- Reclaim Hawaiian identity through understanding wayfinding traditions and skills through ʻike kuʻuna (Hawaiian knowledge, belief system, philosophy, and practices).
- Perpetuate ʻike kuʻuna in order to form a Hawaiian foundation for the lāhui.

Needs to Know:

- Where does the sun rise and set?
- Where are the East and West?
- What are the names of the winds in that area and/or family Ahupuaʻa?
- What are the ʻike kuʻuna and ʻike kūpuna about the significance of the winds?
- How is the wind connected to wayfinding skills?
- How did my kūpuna show appreciation to this ʻike?
- How is the wind important in the bigger picture of wayfinding?

Learning Objectives:

- Participate in an activity that is inclusive and collaborative.
- Show how each member of your group is contributing to the crew and community.

‘Ike Standard:

- Recognize the wa‘a philosophy and skills.
- Identify the four directional markers and 28 houses.
- Develop an awareness of roles.

Student Outcome:

- Able to define ‘ike Hawai‘i.
- Able to tell where the sun rises and sets.
- Able to tell the main four directional markers.
- Able to explain how the wind is connected to wayfinding skills and traditions.
- Identify which lo‘ina and lawena are used onboard.
- Explain how the elss is connected to ‘ike Hawai‘i.

Learning Activities:

- Kumu tells the mo‘olelo of La‘amaomao.
- Kumu explains how the winds are a major dynamic in wayfinding traditions.
- Kumu explains how the lo‘ina and lawena connect to the hana and mo‘olelo.

Lesson Resources:

- The classroom is outside in the environment.
- A chopstick and/or stick is used for the student to hold; a feather is glued to the top of the stick (Fig X).
- Pencil for written answers and drawing an end product.

Duration of Lesson:

- 45-60 minutes.

Lesson:

- Arts & Crafts: Have the student put together their own wind gaze (= chopstick and/or stick and attach a feather to it).

- Have the student identify the four directional markers; The student points out where the East and West are.
- The student answers why directional markers are important in wayfinding skills.
- The student can recount the mo‘olelo of La‘amaomao.
- Hands-on Activity: The student can explain how the feather can help in calculating the mileage per hour of the wa‘a in the water.
- Students discuss the lo‘ina and lawena that are incorporated in this lesson.
- Reflection: (Pick 3-5 students for each question)

    - What did the student like about this group activity? Why?
    - How is it connected to their kūpuna?
    - Where are the four main directional markers?
    - How do they feel about knowing where the sun rises and sets?
    - Do the students feel connected to the ʻāina with their knowledge of the winds?
    - Why is the ʻike kuʻuna important?
    - How will I show that ʻike kuʻuna is important to me and my ʻohana?
    - How am I connecting the winds and directional markers to the waʻa?
    - How am I connecting the waʻa to ʻike kūpuna?
    - How am I showing appreciation to this ʻike?
    - How did my kūpuna show appreciation to this ʻike?
    - Why is it important to show appreciation to ʻike Hawaiʻi?
    - How can this ʻike Hawaiʻi perpetuate Hawaiian identity?

Follow-up for Students:

- The teacher follows up on the questions when the class returns to school the next day. The teacher can continue with the curriculum as they choose.

Appendix 3.12. Knots Curriculum.

Curriculum Standard:

- Reclaim Hawaiian identity through understanding wayfinding traditions and skills through ʻike kuʻuna (Hawaiian knowledge, belief system, philosophy, and practices).
- Perpetuate ʻike kuʻuna in order to form a Hawaiian foundation for the lāhui.

Needs to Know:

- What knots does a crew member need to learn? (Three examples below)
    - Bowline
    - Clove hitch
    - Cleat hitch knot
- Why are knots important on a voyaging canoe?
- How do knots connect to the building of a waʻa?

Learning Objectives:

- Participate in an activity that is inclusive and collaborative.
- Show how each member of your group is contributing to the crew and community.

‘Ike Standard:

- Recognize the wa‘a philosophy and skills.
- Identify the important areas to tie knots on the wa‘a.
- Develop an awareness of roles.

Student Outcome:

- Able to tie the three knots; Bowline, Clove Hitch, and Cleat Hitch Knot.
- Understands why the knots are important on the wa‘a.
- Explain a hana onboard the wa‘a.
- Identify which lo‘ina and lawena are used onboard.
- Explain how the lesson is connected to ‘ike Hawai‘i.

Learning Activities:

- Kumu shows how to tie a knot on a sample board.
- Kumu shows how to tie a knot on the mast by closing the sail.
- Kumu explains the lo‘ina and lawena that connect to the hana.

Lesson Resources:

- Line
- Knot board
- Line onboard to tie down the sail and steering sweep.
- Pencil for written answers and drawing an end product.

Duration of Lesson:

- 45-60 minutes.

Lesson Five:

- Two different curricula depending on the age of the students
    - K-8
    - 9-12

- K-8:
    - 3-4 students per group
    - Each group with a knot board
    - Groups compete against each other to see who can tie the knots the fastest.

- 9-12:
    - 3-4 students per group
    - Students learn to tie back the sails on the mast.
    - Students learn to tie down the steering sweep.
    - Students learn how to steer using a knot at the steering sweep.
    - Students compete to see who can tie the sails down.

    - Using the loʻina and lawena to the practice of tying knots.

- Reflection: (Pick 3-5 students for each question)
    - What did the student like about this experience? Why
    - Why are knots important on a voyaging canoe?
    - Which knot is their favorite and why?
    - How does a crew member bring in a sail?
    - How does a crew member put down the steering sweep?
    - How does a crew member steer while using a line?
    - Follow-up for Students:

- The teacher follows up on the questions when the class returns to school the next day. The teacher can continue with the curriculum as they choose.

Appendix 3.13. Water Quality Curriculum

Curriculum Standard:

- Reclaim Hawaiian identity through understanding wayfinding traditions and skills through ʻike kuʻuna (Hawaiian knowledge, belief system, philosophy, and practices).
- Perpetuate ʻike kuʻuna in order to form a Hawaiian foundation for the lāhui.

Needs to Know:

- What causes bad water quality?
- Why is clean water important?
- How to determine water quality?

Learning Objectives:

- Participate in an activity that is inclusive and collaborative.
- Show how each member of your group is contributing to the crew and community.

ʻIke Standard:

- Recognize the waʻa philosophy and skills.
- Identify the four directional markers and 28 houses.
- Develop an awareness of roles.

Student Outcome:

- Able to define good water quality.
- Able to understand the need for clean water.
- Explain why clean water is important onboard the waʻa.
- Explain why clean water is important for the communities.

- Identify the loʻina and lawena for this lesson.
- How is this lesson connected to ʻike Hawaiʻi?

Learning Activities:

- Kumu sets up the microscopic lens and iPhone app.
- Students are able to follow the kumu by setting up the microscopic lens and iPhone app.
- Kumu explains the hana that is done onboard the waʻa with water quality.
- Kumu explains the loʻina and lawena that connects the hana to the crew and overall health.

Lesson Resources:

- The ocean
- iPhone app and microscopic lens
- Sample of water
- Pencil for written answers and drawing an end product.

Duration of Lesson:

- 45-60 minutes.

Lesson Six:

- Kumu explains the parts of the experiment.
- The group is placed into groups (4-5 in each group).
- Each group goes to the ocean to collect a sample of water.
- Each group places the sample of water onto the dish of microscopes.
- Each person draws what they see in the water sample.
- The loʻina and lawena are being incorporated into the exercise.
- Reflection: (Pick 3-5 students for each question)
    - What did the student like about this experience? Why?
    - Why is clean water quality important to families and communities?
    - Why is there dirty water? How does that happen?
    - What can be done to make sure the water is clean?
    - How am I connecting the water to ʻike kūpuna?
    - How am I showing appreciation to this ʻike?
    - How did my kūpuna show appreciation to this ʻike?

Follow-up for Students:

- The teacher follows up on the questions when the class returns to school the next day. The teacher can continue with the curriculum as they choose.

Appendix 3.14. Peace Flags Curriculum

Curriculum Standard:

- Reclaim Hawaiian identity through understanding wayfinding traditions and skills through ʻike kuʻuna (Hawaiian knowledge, belief system, philosophy, and practices).
- Perpetuate ʻike kuʻuna in order to form a Hawaiian foundation for the lāhui.

Needs to Know:

- Each student's family name.
- Each student's ahupuaʻa.
- Why genealogy and cosmology are important for a Hawaiian.
- The connection between the WWW and the children of Hawaiʻi.
- What is the ʻike kūpuna that I know?
- Why is ʻike kuʻuna important?
- Why is it important to show appreciation to ʻike Hawaiʻi?
- How will I show that ʻike kuʻuna is important to me and my ʻohana?
- How am I showing appreciation to this ʻike?
- How did my kūpuna show appreciation to this ʻike?
- How can this ʻike Hawaiʻi perpetuate Hawaiian identity?
- How are the peace flags connected to the 1970s Renaissance?

Learning Objectives:

- Participate in an activity that is inclusive and collaborative.
- Show how each member of your group is contributing to the crew and community.

ʻIke Standard:

- Recognize the waʻa philosophy and skills.
- Identify the four directional markers and 28 houses.
- Develop an awareness of roles.

Student Outcome:

- Able to know genealogy.
- Able to know cosmology.
- Understand the Ahupuaʻa structure.
- Able to define ʻike Hawaiʻi.
- Able to explain the Hawaiian connection to the waʻa.
- Identify which loʻina and lawena are used onboard.
- Explain how the lesson is connected to ʻike Hawaiʻi.

Learning Activities:

- Kumu discusses the importance of knowing one's genealogy and cosmology.
- Kumu lets the students know that the journey to Hawaiian identity starts with themselves first.
- Kumu explains the hana that will be done and how the hana connects the students to the crew members as the waʻa sails around the world.
- Kumu explains the 4x4 fabric from each student will be sewed together to form a flag that flies under the Hawaiian flag when the waʻa leaves Hawaiʻi during the entire voyage.
- Kumu explains the loʻina and lawena that connect to the hana and peace flags.

Lesson Resources:

- 4x4 fabric.
- Colorful pens.

Duration of Lesson:

- 45-60 minutes.

Lesson Seven:

- Kumu passes the 4x4 fabric to the student.
- Students draw their family name, family Ahupuaʻa, a message to the crew on the WWV, and a picture of their choosing.
- Students discuss what they wrote and drew on the fabric.
- Students explain why genealogy and cosmology are important for Hawaiians.
- Students discuss if they know or do not know their genealogy and cosmology.
- Students discuss possible reasons why a person would not know their genealogy and cosmology.
- Students discuss their role as junior crew members due to their flag flying under the Hawaiian flag.
- Students discuss the importance of their flag reaching countries that they have never been to and/or even imagined traveling to.
- Students discuss the loʻina and lawena that is incorporated into the hana.
- Reflection: (Pick 3-5 students for each question)
    - What did the student like about this experience? Why/
    - What are their thoughts on genealogy and cosmology?
    - How is this experience connecting to their kūpuna?
    - How will I show that ʻike kuʻuna is important to me and my ʻohana?
    - How is the student connected to the waʻa when the crew sails around the world?

- Why is it important to include the children on the WWV through peace flags?

Follow-up for Students:

- The teacher follows up on the questions when the class returns to school the next day. The teacher can continue with the curriculum as they choose.

Makali‘i Curriculum: (Appendix 4.1 – 4.9)

Appendix 4.1. Kuhike‘e Navigational Platform Curriculum

Curriculum Objective:

- Understanding the Kuhike‘e Navigational Platform.
- Understanding the foundation of Hawaiian knowledge.
- Understanding the bigger picture of ‘ike kū‘una through voyaging practices.
- Connecting students to Hawaiian cosmology and genealogy.

Hana:

- Ipu Ho‘okele Wa‘a (Navigational gourd)

Driving Question:

- How do I show appreciation of ‘Ike Kua‘āina?
-

Lawena & Lo‘ina:

- Laulima: Cooperation, joint action, group of people working together, community food patch, to work together, cooperate, Lit., many hands (KSBE 2017).

Resources:

- Student workbook for literature.
- Student workbook for Directional Markers & Reference Points.
- Flow map.
- Treemap.
- Mosaic-Art Reflection.

Literature:

<u>Bibliography:</u>

Fornander, Abraham. *Hawaiian Antiquities and Folk-Lore; The Hawaiians' Account of the Formation of Their Islands and Origin of Their Race, With The Traditions of Their Migrations, Etc., as Gathered From Original Sources*. Kamahualele's chant. Laamaikahiki story. Vol. IV, pp. 152-154. Bishop Museum Press. 1918.

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Kirch, Patrick. *On the Road of the Winds: an Archaeological History of the Pacific Islands before European Contact*. University of California Press. Oakland, California. 2017.

Kyselka, Will. *North Star to Southern Cross*. University of Hawai‘i Press. Honolulu, HI. 1984.

Makemson, Maud W. *American Anthropologist*. New Series. Journal Article, Vol. 40, No.3. 1938. 370-383.

Lesson:

1. Student Workbook (Kumu teaches curriculum on Kuhike‘e Navigational Platform & class recalls answers together).

    - Directional Markers & Reference Points
        - Elements of Reference (Sunrise/sunset, Moon phases, Starlines)
        - Draw the Hawaiian Star Compass
        - Draw the path of the sun
        - Draw the path of the moon
        - Draw the four starlines

    - Color in the different markers and points.

    - Be able to recall and draw on a blank map the markers and points.

2. Leadership Activity (4-5 students to a group)

    - Be able to explain the Kuhike‘e Navigational Platform.
    - Be able to identify the path of the sun.
    - Be able to identify the path of the moon.
    - Identify the four Starlines.
    - Reflect on the importance of the Kuhike‘e Navigational Platform.
    - Individual Flow Map.
        - Found in Workbook, pg. X.

3. Class Activity

    - Participate in creating the Hawaiian Star Compass with classmates.
    - Make a treemap of ‘ike Hawai‘i.
    - Peer mentoring & Talk Story.
    - Student Reflection.

    - Type or Write 1-2 page individual reflection.

4. Student outcomes

    - Define ʻike hawaiʻi.
    - Explain the connection between the huakaʻi and ʻike kuʻuna.
    - Describe the hana.
    - Identify the loʻina & lawena.
    - Explain how the loʻina & lawena connects to ʻike kuʻuna.
    - Recognize the connection between ʻike kuʻuna and ʻike hawaiʻi.

5. End Product(s)

    - ʻIke Kuʻuna Art Reflection 6x2ft poster board.
    - Each student will be given a square to draw and color their own reflection.
    - All squares will be joined together to form a Mosaic Art piece at the end of the specific curriculum.
    - The Mosaic-Art Reflection will be a visual board of the "self-reflection" that includes reactions from the driving question, moʻolelo, hana, loʻina/lawena, the importance of ʻike kuʻuna, understanding ʻike Hawaiʻi.

Appendix 4.2. Hawaiian Star Compass Curriculum

Curriculum Objective

- Understanding the Hawaiian Star Compass.
- Understanding the Kuhikeʻe Navigational Platform.
- Understanding the change of traditions.
- Connecting students to Hawaiian cosmology and genealogy.

Hana

- Ipu Hoʻokele Waʻa (Navigational gourd)

Driving Question

- How do we show appreciation of ʻIke Kuaʻāina?

Lawena & Loʻina

- Lokomaikaʻi: Good will, good disposition, generosity, grace, king, humane, gracious, benevolent, beneficent, obliging (KSBE 2017).

Resources

- Student workbook for literature.
- Student workbook for Moaʻulaiki navigational platforms.
- Student workbook for Kuhikeʻe navigational platform.
- Student workbook for Directional Markers & Reference Points.
- Flow map
- Treemap
- Mosaic-Art Reflection

Literature

Bibliography:

Finney, Ben. A Voyage Into Hawaii's Past. Polynesian Voyaging Society: PVS Newsletter/August 1975.

Finney, Ben. *Hokuleʻa: The Way to Tahiti*. New York: Dodd, Mead & Company. 1979. Print.

Kamakau. *Tales and Traditions*. Pp 105-110. (Other versions of the moikeha-kila-laamaikahiki story).

Ke Kā o Makaliʻi (*The Canoe-Bailer of Makaliʻi*). Webpage at archive.hokulea.com/ike/hookele/hawaiian_star_lines. Last seen on December 09, 2018.

www. Kahoolawe.hawaii.gov/history.shtml. Webpage for KIRC last seen on November 16, 2018.

Lesson:

1.Student Workbook (Kumu teaches curriculum on the Hawaiian Star Compass & class recalls answers together).

- Explain the Hawaiian Star Compass.
- Four Cardinal Directions:
    - North is called ʻĀkau; "Right."
    - South is called Hema; "Left."
    - West is called Komohana; "Entering"; where the sun and stars enter into the horizon.
    - East is called Hikina; "Arriving" or "Coming"; where the sun and star arrive at the horizon (Baybayan and Kawaharada).

- Seven Directional Points in each Quadrant:

    - Lā
    - "Sun": The sun appears in this house for most of the year as it moves back and forth between its Southern limit at the Tropic of Capricorn (23.5 degrees S) at Winter Solstice to its Northern limit at the Tropic of Cancer (23.5 degrees N) at Summer Solstice (Baybayan and Kawaharada).
    - ʻĀina

- “Land”: This house is between 17 degrees and 28 degrees on the horizon from due East and due West can be remembered because Hawaiʻi is at 21 degrees N latitude and Tahiti is at 18 degrees S latitude (Baybayan and Kawaharada).
- Noio
- Named for the black noddy, which helps a navigator find islands because it flies out to sea in the morning to fish (range about 40 miles) and returns to land at night to rest (Baybayan and Kawaharada).
- Manu
- “Bird”: The four houses of Manu, midway between the four cardinal directions, can be seen at the points of the beak, tail, and outstretched wing-tips of a bird; the bird is the traditional Polynesian metaphor for the canoe in 1980. On early voyages to Tahiti, the Hōkūleʼa sailed in the direction of Manu Malanai, with its wings at Manu Koʻolau and Manu Kona, and its tail pointed back at Manu Hoʻolua (Baybayan and Kawaharada).
- Nālani
- Named for the brightest star in this house, Ke aliʻi i kona i ka lewa (Canopus), which rises in Nālani Malanai and sets in Nālani Kona (Baybayan and Kawaharada).
- Nā Leo
- “The Voices”: Referring to the voices of the stars speaking to the Wayfinder.
- Haka
- “Empty”: Named for the relatively empty skies around the North and South celestial poles. Kamakau says the names of these areas are ʻUlīʻulī (“deep, dark blue”) and Lipo (“deep, dark night”) (Baybayan and Kawaharada).

6. Color in the different sections of the compass.

7. Be able to recall and draw on a blank map the Hawaiian Star Compass.

8. Leadership Activity (4-5 students to a group)
   - Be able to explain the significance of each house in the compass.
     - Be able to explain how the compass is used.
     - Reflect on the importance of having a Hawaiian Star Compass.
     - Be able to explain the Kuhikeʻe Navigational Platform.
     - Be able to distinguish between Moaʻulaiki and Kuhikeʻe Navigational Platform.
     - Reflect on the importance of Navigational Platforms.
     - Individual Flow Map.
       - Found in Workbook, pg. X.

9. Class Activity

   - Participate in forming the Hawaiian Star Compass with classmates.
   - Make a treemap of ʻike Hawaiʻi.
   - Peer mentoring & Talk Story.

- Student Reflection.
    - Type or Write 1-2 page individual reflection.

10. Student Outcomes

- Define ʻike Hawaiʻi
- Explain the connection between the huakaʻi and ʻike kuʻuna
- Retell the moʻolelo
- Describe the hana
- Identify the loʻina & lawena
- Explain how the loʻina/lawena connects to ʻike kuʻuna
- Recognize the connection between ʻike kuʻuna and ʻike Hawaiʻi

11. End Product(s)

- ʻIke Kuʻuna Art Reflection 6x2ft poster board.
- Each student will be given a square to draw and color their own reflection.
- All squares will be joined together to form a Mosaic Art piece at the end of the specific curriculum.
- The Mosaic-Art Reflection will be a visual board of the "self-reflection" that includes reactions from the driving question, moʻolelo, hana, loʻina/lawena, the importance of ʻike kuʻuna, understanding ʻike Hawaiʻi.

Appendix 4.3. Rising and Setting Sun Curriculum

Curriculum Objective:

- Understanding the significance of the rising sun and setting sun.
- Understanding Equinox and Solstice.
- Understanding the moʻolelo that talk about the sun.
- Knowing the pathway of the sun.
- Connecting students to Hawaiian cosmology and genealogy.

Hana:

- Ipu Hoʻokele Waʻa (Navigational gourd)

Driving Question:

- How does voyaging connect to me as a Hawaiian and to my ancestors?

Lawena/Loʻina:

- Hoʻoilina: Recipient, heir, inheritance, legacy, estate, heritage, bequest (KSBE 2017).

Resources:

- Student workbook for literature.
- Student workbook for the rising sun and setting sun.
- Student workbook for Kuhikeʻe navigational platform.
- Student workbook for Directional Markers & Reference Points.
- Flow map.
- Treemap.
- Mosaic-Art Reflection.

Literature

Bibliography:

Finney, Ben. *A Voyage Into Hawaiʻi's Past.* Polynesian Voyaging Society: PVS Newsletter/August 1975.

Finney, Ben. *Hokuleʻa: The Way to Tahiti*. New York: Dodd, Mead & Company. 1979. Print.

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Kamakau. *Tales and Traditions*. pp 105-110. (Other versions of the moikeha-kila-laamaikahiki story).

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www. Kahoolawe.hawaii.gov/history.shtml. Webpage for KIRC last seen on November 16, 2018.

Lesson:

1. Student Workbook (Kumu teaches curriculum on "Rising Sun and Setting Sun" & class recalls answers together).
    - Point out where the sun rises and sets during equinox and solstice.
    - Color in the different locations that the sun rises and sets.
    - Draw the path of the rising and setting sun from the Kuhikeʻe Navigational Platform.

- Draw the path of the rising sun at the equinox.

- Draw the path of the rising sun at the solstice.

2. Leadership Activity (4-5 students to a group)

    - Be able to explain the different locations the sun rises and sets.
    - Be able to explain the advantage of the Kuhikeʻe Navigational Platform in understanding the elements of reference.
    - Be able to explain the moʻolelo of Laʻamaomao and his voyages.
    - Identify the connections to the sun rising and setting.
    - Reflect on the importance of place names.
    - Individual Flow Map.
        - Found in Workbook, pg. X.

3. Class Activity

    - Partcipate in acting out the moʻolelo of Laʻamaomao.
    - Make a treemap of ʻike Hawaiʻi.
    - Peer mentoring & Talk Story.
    - Student Reflection.
        - Type or Write 1-2 page individual reflection.

4. Student Outcomes

    - Define ʻike hawaiʻi.
    - Explain the connection between the huakaʻi and ʻike kuaʻāina.
    - Retell the moʻōlelo.
    - Describe the hana.
    - Identify the loʻina & lawena.
    - Explain how the loʻina & lawena connects to ʻike kuʻuna.
    - Recognize the connection between ʻike kuʻuna and ʻike hawaiʻi.

5. End Product(s):
    - ʻIke Kuʻuna Art Reflection 6x2ft poster board.
    - Each student will be given a square to draw and color their own reflection.
    - All squares will be joined together to form a Mosaic Art piece at the end of the specific curriculum.
    - The Mosaic-Art Reflection will be a visual board of the "self-reflection" that includes reactions from the driving question, moʻolelo, hana, loʻina/lawena, the importance of ʻike kuʻuna, understanding ʻike Hawaiʻi.

Appendix 4.4. Four Starlines Curriculum

Curriculum Objective

- Understanding the importance of the star Makali‘i.
- Understanding the four Hawaiian starlines.
- Understanding the elements of reference connected to the starlines.
- Connecting students to Hawaiian cosmology and genealogy.

Hana:

- Ipu Ho‘okele Wa‘a (Navigational gourd)

Driving Question

- How does voyaging connect to me as a Hawaiian and to my ancestors?

Lawena & Lo‘ina

- Ho‘omau: To continue, persevere, preserve, endure, last, persist, renew, to perpetuate, preservation, continuation (KSBE 2017).

Resources

- Student workbook for literature.
- Student workbook for the four starlines.
- Student workbook for the star Maka‘li‘i.
- Flow map.
- Treemap.
- Mosaic-Art Reflection.

Literature

<u>Bibliography:</u>

Ke Kā o Makali‘i (*The Canoe-Bailer of Makali‘i*). Webpage at: archive.hokulea.com/ike/hookele/hawaiian_star_lines. Last seen on December 09, 2018.

Kyselka, Will. *Polynesian Stars and Men: The Puzzle of the Ancient Navigation of the Polynesians*. Bishop Museum Science Center. Honolulu, HI. 1969.

Makemson, Maud W. *American Anthropologist*. New Series. Journal Article, Vol. 40, No.3. 1938. 370-383.

Lesson:

1. Student Workbook

- Explain the Mānaiakalani Starline
    - Color in the different directional markers.
    - Be able to recall and draw the Mānaiakalani Starline.
- Explain the Ke Ka o Makali‘i (The Canoe-bailer of Makali‘i) Starline.
    - Color in the different directional markers.
    - Be able to recall and draw the Ke ka o Makali‘i Starline.
- Explain Iwikuamo‘o (Backbone) Starline.
    - Color in the different directional markers.
    - Be able to recall and draw the Iwikuamo‘o (Backbone) Starline.
- Ka Lupe o Kawelo (The Kite of Kawelo).
    - Color in the different directional markers.
    - Be able to recall and draw the Ka Lupe o Kawelo (The Kite of Kawelo) Starline.

2. Leadership Activity (4-5 students to a group)

    - Be able to explain the significance of each constellation and star in this starline.
    - Be able to explain how the starline is used.
    - Reflect on the importance of the elements of reference.
    - Be able to explain the mo‘olelo of Mānaiakalani in at least two mo‘olelo.
    - Reflect on the importance of mo‘olelo and cosmology.
    - Individual Flow map
        - Found in Workbook, pg. X.

3. Class Activity

    - Participate in acting out a moʻolelo relating to voyaging.
    - Make a treemap of ʻike Hawaiʻi.
    - Peer mentoring & Talk Story.
    - Student Reflection
        - Type or Write 1-2 page individual reflection.

4. Student outcomes

    - Define ʻike hawaiʻi.
    - Explain the connection between the huakaʻi and ʻike kūʻuna.
    - Retell the moʻolelo.
    - Describe the hana.
    - Identify the loʻina & lawena.
    - Explain how the loʻina & lawena connects to ʻike kuʻuna.
    - Recognize the connection between ʻike kuʻuna and ʻike hawaiʻi.

5. End Product(s):
    - ʻIke Kuʻūna Art Reflection 6x2ft poster board.
    - Each student will be given a square to draw and color their own reflection.
    - All squares will be joined together to form a Mosaic Art piece at the end of the specific curriculum.
    - The Mosaic-Art Reflection will be a visual board of the "self-reflection" that includes reactions from the driving question, moʻolelo, hana, loʻina/lawena, the importance of ʻike kuʻuna, understanding ʻike Hawaiʻi.

Appendix 4.5. Moon Phases Curriculum

Curriculum Objective:

- Understanding the moon phases.
- Understanding the significance of Anahulu Hoʻonui.
- Understanding the significance of Anahulu Poepoe.
- Understanding the significance of Anahulu Hoʻēmi.
- Able to sing the song identifying the moon phases.
- Connecting students to Hawaiian cosmology and genealogy.

Hana:

- Ipu Hoʻokele Waʻa (Navigational gourd)

Driving Question:

- How does voyaging connect to me as a Hawaiian and to my ancestors?

Lawena & Loʻina:

- ʻImi Naʻauao: To seek knowledge or education; ambitious to learn; one seeking education or learning, research (KSBE 2017).

Resources:

- Student workbook for literature.
- Student workbook for the wind pathways.
- Student workbook for the wind gourd.
- Flow map.
- Treemap.
- Mosaic-Art Reflection.

Literature

Bibliography:

Ke Kā o Makaliʻi (The Canoe-Bailer of Makaliʻi). Webpage at: archive.hokulea.com/ike/hookele/hawaiian_star_lines. Last seen on December 09, 2018.

Kyselka, Will. *Polynesian Stars and Men: The Puzzle of the Ancient Navigation of the Polynesians*. Bishop Museum Science Center. Honolulu, HI. 1969.

Makemson, Maud W. *American Anthropologist*. New Series. Journal Article, Vol. 40, No.3. 1938. 370-383.

Lesson:

1. Student Workbook (Kumu teaches curriculum on the moon phases & class recalls the names and directions to the winds in the area).

    - Draw the days of Anahulu Hoʻonui and where in the sky the student will see the moon at the Kuhikeʻe Navigational Platform.

    - Draw the days of Anahulu Poepoe and where in the sky the student will see the moon at the Kuhikeʻe Navigational Platform.

    - Draw the days of Anahulu Hoʻēmi and where in the sky the student will see the moon at the Kuhikeʻe Navigational Platform.

    - Draw the pathway of the moon from the Kuhikeʻe Navigational Platform.

2. Leadership Activity (4-5 students to a group)

    - Be able to explain the moon phases.
    - Be able to explain the days of the full moon.
    - Be able to explain the days of good fishing and farming.
    - Reflect on the importance of the elements of reference.
    - Reflect on the importance of wind for voyagers.
    - Individual Flow Map
        - Found in Workbook, pg. X.

3. Class Activity
    - Make a treemap of ʻike Hawaiʻi.
    - Peer mentoring & Talk Story.
    - Student Reflection.
        - Type or Write 1-2 page individual reflection.

4. Student outcomes

    - Define ʻike hawaiʻi.
    - Explain the connection between the huakaʻi and ʻike kuʻuna.
    - Retell the moʻolelo.
    - Describe the hana.
    - Identify the loʻina & lawena.
    - Explain how the loʻina & lawena connects to ʻike kuʻuna.
    - Recognize the connection between ʻike kuʻuna and ʻike Hawaiʻi.

5. End Product(s)
    - ʻIke Kuʻuna Art Reflection 6x2ft poster board.
    - Each student will be given a square to draw and color their own reflection.
    - All squares will be joined together to form a Mosaic Art piece at the end of the specific curriculum.
    - The Mosaic-Art Reflection will be a visual board of the "self-reflection" that includes reactions from the driving question, moʻolelo, hana, loʻina/lawena, the importance of ʻike kuʻuna, understanding ʻike hawaiʻi.

Appendix 4.6. Ipu Hoʻokele Waʻa Curriculum

Curriculum Objective

- Understanding the connection between the ipu hoʻokele waʻa and the Hawaiian Star Compass.
- Undertanding the connection between the ipu hoʻokele waʻa and the Kuhikeʻe Navigational Platform.
- Student learns to make their own ipu hoʻokele waʻa.
- Able to discuss how the ipu hoʻokele waʻa is connected to the Hawaiian Star Compass and the Kuhikeʻe Navigational Platform.
- Connecting students to Hawaiian cosmology and genealogy.

Hana:

- Ipu Hoʻokele Waʻa (Navigational gourd)

Driving Question

- How do the ocean pathways connect to me as a Hawaiian and my ancestors?

Lawena & Loʻina

- Makaʻala: Alert, vigilant, watchful, wide awake; to attend to vigilantly (KSBE 2017).

Resources:

- Student workbook for literature.
- Student workbook for the ocean pathways.
- Flow map.
- Treemap.
- Mosaic-Art Reflection.

Literature

<u>Bibliography:</u>

Ke Kā o Makaliʻi (*The Canoe-Bailer of Makaliʻi*). Webpage at: archive.hokulea.com/ike/hookele/hawaiian_star_lines. Last seen on December 09, 2018.

Kyselka, Will. *Polynesian Stars and Men: The Puzzle of the Ancient Navigation of the Polynesians*. Bishop Museum Science Center. Honolulu, HI. 1969.

Makemson, Maud W. American Anthropologist. New Series. Journal Article, Vol. 40, No.3. 1938. 370-383.

Lesson:

1. Student Workbook (Kumu teaches curriculum on how to make the ipu hoʻokele waʻa and how to use it).

    - Draw the steps needed to make the ipu hoʻokele waʻa.
    - Draw where on the ipu hoʻokele waʻa the sun rises and sets.
    - Draw where on the ipu hoʻokele waʻa the pathway of the sun and moon.
    - Draw where on the ipu hoʻokele waʻa the starlines will appear while at the Kuhikeʻe Navigational Platform.

2. Leadership Activity (4-5 students to a group)

    - Be able to explain the significance of a Hawaiian Star Compass.
    - Be able to explain an ipu hoʻokele waʻa.
    - Be able to explain how to make an ipu hoʻokele waʻa.
    - Be able to explain the pathway of the sun and the moon on the ipu hoʻokele waʻa.
    - Be able to explain starlines on the ipu hoʻokele waʻa.
    - Reflect on the importance between the tangible (Ipu hoʻokele waʻa) and the relationship with the intangible (ʻike Hawaiʻi).
    - Individual Flow Map.
        - Found in Workbook, pg. X.

3. Class Activity

    - Make a treemap of ʻike Hawaiʻi.
    - Peer mentoring & Talk Story.
    - Student Reflection
        - Type or Write 1-2 page individual reflection.

4. Student outcomes

    - Define ʻike Hawaiʻi.
    - Explain the connection between the huakaʻi and ʻike kuʻuna.
    - Retell the moʻolelo.
    - Describe the hana.
    - Identify the loʻina & lawena.
    - Explain how the loʻina & lawena connects to ʻike kuʻuna.

- Recognize the connection between ʻike kuʻuna and ʻike Hawaiʻi.

5. End Product(s)
    - ʻIke Kuʻuna Art Reflection 6x2ft poster board.
    - Each student will be given a square to draw and color their own reflection.
    - All squares will be joined together to form a Mosaic Art piece at the end of the specific curriculum.
    - The Mosaic-Art Reflection will be a visual board of the "self-reflection" that includes reactions from the driving question, moʻolelo, hana, loʻina/lawena, the importance of ʻike kuʻuna, understanding ʻike Hawaiʻi.

Appendix 4.7. Water Quality Testing

Appendix 4.8. Learning the Moʻolelo of Place at the Loʻi ʻo Kānewai.

Appendix 4.9. Reflections in the classroom.

University of Hawai‘i Mānoa Residential Voyaging Camp: (Appendix 5.1 – 5.5)

Appendix 5.1. June 04, 2019 (Tuesday) Day 1 Schedule

8:00 – 9:00 A.M.: Check-in

9:00 – 9:30 A.M.: Piko; Opening and Introduction from me

9:30 - 11:30 A.M.: Get them into groups (CLASSROOM)

9:30 – 10:30 A.M.

-8 groups of 5 students

-Count off 1, 2, 3, 4, 5, and 6; Get them to go in their number group

:Name

:Where are you from?

:Hobby?

:What was the last movie watched? Do you like it or not?

:One person introduces another person and tells the A’s to above.

:They have 15 minutes to gather the A’s

:Give them 45 minutes to introduce everyone to each other.

10:30 – 11:30 A.M.

-Stay in the same group

-Ask them these Q's and they A in a group (same procedure as above)

-Questions:

:Who comes from a culture that has a voyaging history?

:What are some traditions tied to voyaging?

:Do you know the name of a voyaging canoe?

:What are some roles on a canoe?

-One group at a time comes up and writes the answers; The next group adds their answers under the group before.

:After all groups have added their answers, we go over them

11:30 A.M.

-Clean, bathroom break & prepare for lunch

12:00 – 12:40 P.M.

-Lunch at Gateway Hall @ UH Mānoa

12:40-1:00 P.M.

-Walk to QLC 412

1:00 – 2:30 P.M.

-The Kuhikeʻe Navigational Platform Curriculum (Appendix 1)

-Reflection

-Gather and offer 3 Q's; one at a time (~30min)

:One: What if one person didn't do their job onboard?

:Two: Is it important to get along?

:Three: What role would you be in?

2:30 – 2:45 P.M.

-Break

2:45 – 4:00 P.M.

-Arts & Crafts

-Back into your groups

-Make individual 4x4 pictures of their best moments discussing voyaging.

-Each group joins together their pictures to make a collage.

4:00 – 5:00 P.M.

-Debrief

:Group reflection and shares:

-What they made.

-How it connects to them.

:Individual Reflection; go around the circle and say what they liked best from today's events.

5:00 – 5:30 P.M.

-Written Individual Reflection.

-Clean, bathroom break, & prepare for dinner.

5:40 – 6:30 P.M.

-Dinner at Gateway Hall @ UH Mānoa

6:30 – 7:45 P.M.

-Shower

7:45 – 9:30 P.M.

-Leadership Activity:

:Preview the next day's activities.

:Peer Mentoring/Talanoa/Talk Story.

10:00 P.M.

-Lights out.

Appendix 5.2. June 05, 2019 (Wednesday) Day Two Schedule

6:00 A.M.	Rise & Shine
7:00 – 8:00 A.M.	Breakfast at Gateway Hall @ UH Mānoa
8:00 A.M.	Piko: Gathering together while waiting for the bus.
9:00 A.M.	Depart UH Mānoa campus for Coconut Island
9:00 – 10:00 A.M.	Bus to Coconut Island

10:00 – 12:00 A.M.	Coconut Island Huakaʻi
	Have a Biologist from UHM talk about water quality on the boat ride over to Coconut Island
	Collect samples of water on the boat ride over to Coconut Island
	On Island: Break into 3 groups: 1. Tour of the island, fishpond, shark pond, science buildings, outside classroom, science lab 2. Science Lab: look at water collected on the boat ride over to the island and see what is in it through a microscope. Share with the class what is in their water. 3. Hands-on experiment at the Outside Classroom with sea urchins, crabs, cucumber, etc.
12:30 – 1:30 P.M.	Lunch
1:00 – 2:00 P.M.	Bus back to UHM
1:30 - 2:30 P.M.	The Hawaiian Star Compass Curriculum (Appendix 2).
	Reflection -What we learn at Coconut Island?
2:00- 2:30 P.M.	Break
2:30 – 4:00 P.M.	Arts & Crafts -Back in groups -Draw the Hawaiian Star Compass in the workbook. -Identify the houses in the compass
4:00 – 4:45 P.M.	Group Debrief: (Each group shares) -What they made. -How it connects to where they come from. -How it connects to voyaging traditions.
4:45 – 5:30 P.M.	Mentorship Time
5:30 – 5:40 P.M.	Clean, bathroom break, & prepare for dinner.
5:30 – 6:30 P.M.	Dinner @ Gateway Hall
6:30 – 7:45 P.M.	Shower.

7:45 – 8:30 P.M.	Leadership Activity:
	*Preview the next day's activities.
8:30 – 9:30 A.M.	*Peer Mentoring/Talanoa/Talk Story.
10:00 P.M.	Lights out

Appendix 5.3. June 06, 2019 (Thursday) Day Three Schedule

6:00 A.M.	Rise & Shine
7:00 – 8:00 A.M.	Breakfast at Gateway Hall @ UH Mānoa
8:00 A.M.	Piko: Gathering together
8:30 – 11:30 A.M.	Loʻi ʻo Kānewai
	*3 Stations: (45 minutes each with a 15-minute break/water break):
	Station 1: Learn Parts of Loʻi
	-Learn parts of the Kalo (Workbook pp. 30-31).
	-Individual/Group Activity (Workbook p. 34).
	-Learn parts of the stream (Workbook pp. 32-33).
	-Individual/Group Activity (Workbook p. 35).
	Station 2: Tour of the Kahawai (stream)
	-Workbook pages 36-40
	-Learn the water parts
	-Understand the functions
	Station 3: Plant Kalo
	-Hands-on experience with collaborator.
11:30 A.M.	Clean, bathroom break, & prepare for lunch.
12:00 – 1:00 P.M.	Lunch at Gateway Hall @ UH Mānoa
1:00 – 2:30 P.M.	The Rising and Setting Sun Curriculum (Appendix 3)
	Reflection; gather as a group and share what they liked
	*First time in a loʻi?
	*What did you like about it?
2:30 – 2:45 P.M.	Break

2:45 – 4:00 P.M.	Arts & Crafts
	-Back into their groups.
	-Draw a kalo plant on a 4x4 card
	-Each group joins their pictures together to make a collage.
4:00 – 4:45 P.M.	Each group shares:
	-Shares their picture of the loʻi and what they liked best in the loʻi
	-How the loʻi connects to them.
4:45 – 5:30 P.M.	Mentorship Time
5:30 – 5:40 P.M.	Clean, bathroom break, & prepare for dinner.
5:40 – 6:20 P.M.	Dinner at Gateway Hall @ UH Mānoa
6:20 – 7:20 P.M.	Shower
7:20 – 9:30 P.M.	Leadership Activity:
	*Preview the next day's schedule.
	*Peer Mentoring/Talanoa/Talk Story.
8:00 – 9:00 P.M.	Leadership Activity.

Appendix 5.4. June 07, 2019 (Friday) Day 4 Schedule.

6:00 A.M.	Rise & Shine
7:00 – 8:00 A.M.	Breakfast @ Gateway Hall
8:00 A.M.	Piko: Gathering together while waiting for the bus.
8:15 A.M.	Depart UH Mānoa campus for Bishop Museum.
8:30 – 9:15 A.M.	Hawaiian Hall to view the voyaging canoes, sails, and tools.
	-Guided by teacher
	-During the tour, have students find 3 things (canoe, sail, tool) that symbolize where their ancestry comes from and/or they find interesting.
9:30 – 10:00 A.M.	Planetarium
	-Wayfinders video: discuss navigation, observation of the night sky, & weather conditions.
10:00 – 10:30 A.M.	Restroom Break / Break

10:30 – 11:15 A.M.	Pacific Hall to view the voyaging display of Oceania.
11:30 A.M.	Depart Bishop Museum for UH Mānoa campus.
12:00 – 1:00 P.M.	Lunch @ Gateway Hall
1:00 - 2:30 P.M.	The Four Starlines Curriculum (Appendix 4) & The Ipu Hoʻokele Waʻa (Appendix 6)
	Reflection; gather as a group and share what they liked
	-What did they like about the canoe, sail, and tools?
2:30- 2:45 P.M.	Break
2:45 – 4:00 P.M.	Arts & Crafts
	-Back into their groups.
	-Draw canoe, sail, and tool.
4:00 – 4:45 P.M.	Each group shares:
	-What they made.
	-How it connects to where they come from.
	-How it connects to voyaging traditions.
4:45 – 5:30 P.M.	Mentorship Time
5:30 – 5:40 P.M.	Clean, bathroom break, & prepare for dinner.
5:40 – 6:20 P.M.	Dinner @ Gateway Hall
6:20 – 7: 20 P.M.	Shower
7:20 – 9:30 P.M.	Leadership Activity:
	*Preview the next day's schedule.
	*Peer Mentoring/Talanoa/Talk Story.
10:00 P.M.	Lights out.

Appendix 5.5. June 08, 2019 (Saturday) Day Five Schedule.

6:00 A.M.	Rise & Shine
	The Moon Phases Curriculum (Appendix 5)
7:00 – 8:00 A.M.	Breakfast @ Gateway Hall

8:00 A.M.	Piko: Gathering together.
8:30 – 11:30 A.M.	Group Activities
	Section 1: Scavenger Hunt.
	Section 2: Get into their groups & Prepare to present their work to their families in the afternoon.
	-Gather their arts & crafts from the week.
	-Each person has to prepare to say "one thing" about each day for the activity with their families.
	Section 3: Group Reflection on what the week meant to them, the friendships they've made, and what they will take away from the experience.
11:30 A.M. – 12:00 P.M.	Clean, bathroom break, & prepare for lunch
12:00 – 1:00 P.M.	Lunch at Gateway Hall @ UH Mānoa
1:00 – 1:30 P.M.	Pack bags & clean dorm room.
1:30 – 4:30 P.M.	Practice with their groups for the presentations in front of their families.
5:00 – 7:00 P.M.	Hōʻike
	Families to arrive between 4:30 – 5:00 P.M.
	Presentation to start at 5:00 P.M.
8:00 P.M.	Aloha! Until next time…