CROSSING THE ‘A‘Ā: CONNECTING CULTURAL LANDSCAPES AND COMMUNITY VALUES ALONG THE KULA KAI TRAILS OF HĪLEA, KAʻŪ, HAWAIʻI

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For my tūtū wahine
Barbara “Baba” Bentley Myhrum (1928-2016)
who instilled within me a love of both heritage and trails
“I’m a Bentley Trail hiker”
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ABSTRACT

Western perspectives, as manifest in archaeological practice, have dominated the study of Hawai‘i’s ancestral places for more than a century. In recent years, cultural practitioners and indigenous Hawaiian scholars have begun to employ alternative methodologies for interacting with and interpreting Hawai‘i’s heritage landscapes. Here I examine the intersection of trails, cultural landscapes, and community values within the kula kai (seaward plain) of Hīlea, Ka‘ū, on the Island of Hawai‘i. I attempt to contextualize the trails within the physical setting of the ‘a‘ā landscape, the ethnohistoric past, and the sociopolitical environment of heritage management as it is currently practiced in Hawai‘i. By examining this landscape of movement in its various physical, sociopolitical, and culture historical contexts, I demonstrate how an understanding of movement and connection, both past and present, can create spaces for establishing communication and collaboration between archaeological and Kanaka Maoli communities in the future.
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I first arrived on Hawai‘i Island in January of 2000 with a banjo and a backpack. Walking from the Hilo Airport, I stuck out my thumb and ended up in Ka‘ū, a place that has held special meaning for me ever since. I recall that first trip to Ka‘ū every time I go there, remembering the places I went and the people I met along the way. I have now worked as an archaeologist in Hawai‘i for seventeen years, and have had the opportunity to visit many special places, but Ka‘ū has always remained close to my heart. As part of my archaeological career, I have been fortunate enough to spend time working in Ka‘ū, surveying the heritage landscape and learning about the ‘āina (land). Those experiences have further contributed to my love and respect for the place. When I entered the master’s program in heritage management at the University of Hawai‘i at Hilo in 2015, I knew just where I wanted to conduct my thesis research, and I’m glad I chose Ka‘ū, because it has given me a chance to meet the community and learn from them, providing me with new perspectives on the heritage of the place and its meaning to the people who live there.

I am also passionate about trails. As an archaeologist, when I find an ancient trail, I get excited. I feel as though I have walked into the past and that I am that much closer to knowing what it might have been like to reside there. Following trails often leads to new discoveries, to new adventures, and to chance encounters that make the journey worthwhile (Snead et al. 2009). With this thesis I hope to help close the gap that has developed between archaeological and Kanaka Maoli ways of knowing the past (Kawelu 2015). I would like to connect cultural landscapes and community values in Ka‘ū in a way that leads to more equitable, community-based approaches to heritage management in Hawai‘i. I chose the trails within the kula kai ‘a‘ā landscape of Hīlea as my research topic because of my previous experience conducting an archaeological reconnaissance there (Clark and Rechtman 2013), and because of the promise of
future community-based stewardship of the lands, which were acquired by the County of Hawai‘i using the Public Access, Open Space, and Natural Resources Preservation Commission (PONC) fund in 2008 and 2011.

Having worked as an archaeologist for nearly half my life, I have participated in more projects than I care to recall. Over the last fifteen years or so, I have spent much of my time drafting compliance reports for the State Historic Preservation Division (SHPD). While I really enjoy researching the history of the places I work, and I am proud of the studies I have produced, I did not want to do the same type of writing for my master’s thesis. Instead, in the following chapters, I have taken an experiential, self-reflective approach to documenting the trails that cross the kula kai landscape of Hīlea. In these pages I try to present something about who I am, as an archaeologist, and why I think it is important to move towards collaborative, community-based methods of archaeological study. My personal views on this matter have formed largely as a result of participating as an insider within the bureaucratic system of historic preservation in Hawai‘i for the length of time that I have, and seeing the shortcomings of the regulatory system as it is currently practiced. Returning to school has provided me with an opportunity to help affect positive changes in that system, and this thesis is the outlet I have chosen to do so.

I believe that we each travel our own unique path through life, and that no two people experience the world they move through in quite the same way. For this reason, in the prologue presented below, and in the introduction to each successive chapter, I provide a brief mo‘olelo (story) of a journey through the contemporary Hawaiian landscape. These vignettes weave together my personal experiences of travel with the stories of place that I have learned by through interacting with and researching the landscape as an archaeologist. While these stories provide a historical context for understanding the trails, paths, and roads that cross the kula kai of
Hīlea as part of a broader cultural landscape, I hope that will also convey how I (as an archaeologist) view the world around me, and encourage others to think about how they perceive movement through that same landscape. It is the combined stories of place that will ultimately help enrich the understandings of the various meanings of landscape, as we work together to move the production of archaeological knowledge towards a more equitable future of community-based methodologies.
Walking along seasonal pathways, a person part-knows the way, part knows that each time of return there will be change and unfamiliarity; part-fears, part-revels in the chance encounter, the possible adventure. Arriving is important but so are the stories woven around the travelling…(Bender and Winer 2001:6).

Today is a field day, a good day to be an archaeologist. A day spent outside beneath blue skies. A day on which the sun, the wind, and the crashing of the waves will be my companions. Another day spent in beautiful Kaʻū, walking the desolate shores of Hīlea, tracing the faint remnants of once well-traveled paths across the kula kai (seaward plains). Today is an opportunity to follow in the footsteps of those who came before. A chance to marvel at their accomplishments, to think about the realities of the past, and to ponder the many possible futures. It is another day spent crossing the ‘a‘ā (lava with a rough, jagged surface), one of many such days that I have enjoyed since first embarking on this journey in pursuit of a master’s degree in heritage management² almost a year and earlier.

On this particular morning in January it is cold in the predawn darkness. Steam billows from my coffee cup. There is no moon, but an infinite array of brilliantly shimmering stars illuminates the Hawaiian sky. I slip out of the dark house leaving my wife and children nestled in their warm beds. The dogs look up briefly, but even they don’t stir, or bother to say good-bye, as I back down the driveway and set out for Hīlea (Figure 1).³

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¹ Derived from “ala” (path) and “ula” (red); as defined by Andrews (1836:1).
² Heritage management is a field of study concerned with the identification, protection, and stewardship of cultural heritage in the public interest.
³ I use the name Hīlea throughout this paper to refer to the two adjacent ahupua’a (Hīlea Nui and Hīlea Iki) that encompass 6,415 acres on the southeastern slope of Mauna Loa volcano in the district of Kaʻū on the island of Hawaiʻi.
I live in Puna, so I approach Ka‘ū from the east. Passing through Kea‘au, I merge onto Māmalahoa Highway and climb slowly towards the summit of Kīlauea, the volcano I have called home since the first months of this new millennium. Leaving Kurtistown and Mountain View behind, the aging 4-Runner that carries me struggles to maintain the 55 m.p.h. speed limit. I have to downshift from fourth to third several times just to maintain my uphill momentum. While I might move slowly for this day and age, I think about what the same journey must have been like before the construction of the modern highway. I stare across the oncoming headlights into the
fading darkness where I know, somewhere off to the left, the old Volcano Road and its precursor the Volcano Trail (McEldowney 1979) wind through the tangled brush and the subdivisions that have sprouted from the former cane lands, planted during the late 1800s on the ravishes of even older fields and forests. I imagine making this journey by horse, or on foot. How differently I would have experienced the dawning landscape around me.

Reaching Volcano Village, the present intersects with the past, as the new Māmalahoa Highway crosses the old Volcano Road. I speed on, shifting into fifth gear. Anticipating the imminent descent into Kaʻū, I barely notice the long shadow of the 4-Runner as it briefly flits across the sign for Hawaiʻi Volcanoes National Park in the rays of the rising sun. I pass the entrance to the park, skirt Kīlauea Military Camp, and at an elevation of 4,024 feet above sea level, I round the bend into Kaʻū. Off to my left, a shifting white plume, lit pink and orange in the first light of the day, billows from the lava lake within Halemaʻumaʻu Crater, rising from the home of Pele-honua-mea (Pele of the sacred earth), the fiery goddess of the volcano (Emerson 1915). As I crest the summit of Kīlauea, the dense ʻōhiʻa and koa forests that buffer the Puna portions of the highway give way to the scrubby ʻōhiʻa lands of the Kaʻū desert, and the view ahead opens up.

The seemingly endless expanse of Kaʻū, like a scene from some older time, is now laid out before me. The long, windswept back⁴ of Mauna Loa, glowing a majestic purple in the rising sun, towers above it all. The piko of the district, Mokuʻaweoweo Crater (Handy and Handy 1991:554), touches the heavens, crowned in a dusting of cold white snow. The green pastures that cover the slopes of Kaʻōiki Pali where Kīlauea and Mauna Loa meet, remind me of the rolling hills of Vermont and the pastures of my childhood. The first glimpse of this magnificent

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⁴ Kiʻekiʻe Kaʻū, kua makani. He Umauma pāʻia e ke ʻAʻeloa. (Majestic Kaʻū, of the windswept back, whose chest is raised to meet the ʻAʻeloa wind.) From an old chant of Kaʻū chiefs; translated by Mary Kawena Pukui (Kelly1980:1).
'āina, the nurturing breast of Ka'ū, bathed in the rising sun, brightens my day, and I am overcome with a profound appreciation for the natural beauty of the island that I am fortunate enough to call home.

It is all downhill from here. The speed limit drops from 55 to 45 m.p.h., and again I have to downshift, this time to keep from going too fast. Coasting along the highway, I cross the rugged ‘a‘ā of the Ke‘āmoku flow (Figure 2), where Mauna Loa has reclaimed portions of the slope once lost to the encroachments of Kīlauea (Sherrod et al. 2007:Sheet 8). I have walked this gently meandering, eight-mile stretch of highway before. I have surveyed its edges and pondered the borrow pits of the prisoners of the early 1900s who, with wheelbarrows and picks, while housed at the Nāmakanipaio prison camp (now a campground), built an earlier version of the highway (Tuggle and Tomonari-Tuggle 2008:122; Duensing 2015:182). I have seen the old national park sign forgotten and rotten, decaying along the edge of the abandoned right-of-way, the adjacent road surface paved in the 1930s with four inches of bituminous macadam (Moskowitz 1939; Barna 2016:30), now disappearing beneath a growth of grass and trees. I have strolled sections of an even older road alignment, conceived of and built during the 1880s by Peter Lee, a Norwegian entrepreneur with a Hawaiian wife who lived at Punalu‘u (Moniz Nakamura 2003:32). Like a harbinger to the steady stream of national park-bound rental cars now beginning to climb past me in the oncoming lane of traffic, Peter Lee’s road once carried well-to-do Western tourists, in the comfort of a covered horse-drawn coach, from his hotel at Punalu‘u to the volcanic wonders at the summit of Kīlauea. I have documented the remnants of still older foot paths, extending mauka and makai on either side of the modern highway, their

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5 Handy and Pukui (1998:22) literally translate Ka‘ū to mean “the breast;” Pukui and Elbert (1986:91) note that “Ka‘ū is an ancient name, with cognates in Samoa (Ta‘ū) and Mortlock Islands (Takuu).”
routes interrupted by the passage of each of the later roads (Barna 2016), their ultimate destinations a mystery to me.

I know that off to the left of the highway, an even older route of travel, the ancient Kaʻū-Volcano Trail, snakes along the base of the Keʻāmoku lava flow. Used for many generations prior to Peter Lee’s arrival at Punalu‘u, the path is marked by the countless footprints of the Hawaiian men, women, and children that once passed this way (Moniz Nakamura 2003). It was here in 1790 that Keōua, the beloved aliʻi nui of Kaʻū, who for many years contested Kamehameha’s eventual rule over Hawaiʻi Island, lost a portion of his army to a violent eruption of Kīlauea (Westervelt 1916:140-141; Fornander 1996:326-327). The final steps of this ill-fated traveling party now preserved in the hardened volcanic ash, alternately covered and exposed by the shifting sands that blow across the smooth pāhoehoe. Not long after this untimely eruption—later called Keonehelelei, meaning the falling sands (Moniz Nakamura 2003)—the indomitable
Keōua, lured from Kaʻū to Kawaihae by his uncles, became Kamehameha’s first sacrifice at Puʻukohalā Heiau, ending more than a decade of warring for control of the island (Kamakau 1992:155). The pāhoehoe route of this earliest pedestrian trail is telling, as I imagine that bare-footed, or even sandaled, travelers were decidedly less fond of crossing the ‘aʻā than were later road builders with their booted feet, horses, and their economic desire for materials to build road beds wide enough to accommodate the wheeled vehicles of colonialism (Duensing 2015).

Shifting back into fifth gear as the speed limit once again increases to 55 m.p.h., I leave the open expanse of the Kaʻū desert and the national park behind, and enter the only slightly less open expanse of Kapāpala Ranch. Founded by William Reed and Charles Richardson in 1860 and sold to Charles Brewer in 1877, the ranch, now operated by the Cran family on 34,000 acres of state leasehold land, was once a stopping point for weary travelers passing through Kaʻū on their way to Kīlauea. Famed for its hospitality, it was said that room and board were always offered at Kapāpala Ranch, and that no traveler was ever turned away (Petrie 2012). Today, after 156 years of continuous operation, a nondescript gate along the highway, marked with an inconspicuous sign, leads to a narrow road that winds through rocky green pastures to the ranch headquarters.

It was here, on the fertile slopes of Mauna Loa along the route of the old Kaʻū-Volcano Trail, surrounded by the vast plantations of taro, sweet potato, sugarcane, and bananas, that the Hawaiian village of Kapāpala once stood (Ellis 2004:204-205). The last 19th century residents of the village, unable to maintain their old way of life in the wake of the land tenure changes brought on by the Māhele ‘Aina of 1848, were forced to move away, their fields eaten and

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6 Land division that defined the land interests of Kauikeaouli (King Kamehameha III), some 252 Ali‘i, Konohiki, and the Government. As a result of the Māhele, all land in the Kingdom of Hawai‘i was placed in one of three categories: (1) Crown Lands (for the occupant of the throne); (2) Government Lands; and (3) Konohiki Lands (Maly and Maly 2005).
trampled by cattle. It was from Kapāpala village, and the ranch after it, that journeys to the
summit of Mauna Loa once began (Menzies 1920:187-199; Apple 1973:1). The ‘Ainapo Trail,
established by the first intrepid Kānaka ʻŌiwi (Native Hawaiians) to venture to the summit
regions, once followed a winding, several day journey from Kapāpala to Mokuʻāweoweo.
Carefully laid out to ensure the availability of shelter, drinking water, and firewood along the
way, the ‘Āinapō Trail remained the primary route to the summit of Mauna Loa until 1915 when
the U. S. Army built new trail to Mokuʻāweoweo from the summit of Kīlauea (Apple 1973:17-
22). The new horse trail allowed impatient Westerners, most of whom were eager to study the
volcanic activity within Mokuʻāweoweo, to reach the summit region during the course of a
single day’s journey.

Passing the gate to Kapāpala Ranch, I cruise downhill in a straight line, riding the
geological divide between Kīlauea and Mauna Loa. Off to the right, the steep rise of Ipuʻu Ridge
and the indent of Wood Valley, traditionally known as Makākupu, serve as a backdrop to the flat
ranch lands bounding the highway. In 1794, the British artist Thomas Heddington passed this
way and stopped at Makākupu long enough to sketch a landscape scene portraying a small
village with the valley floor behind laid out in an endless patchwork of fields (Kelly 1980:46).
That tranquil scene would change horrifically on April 2, 1868 when an estimated 7.9 magnitude
earthquake, centered nearby, caused a mudslide that buried an entire village and 31 of its
residents within the valley at Kapaliuka (Hawaiian Volcano Observatory 1994). The earthquake,
often credited with knocking down every stone wall in the district, also triggered a devastating
tsunami that sent the ocean sweeping across the coastal villages of Kaʻū, taking another 46 lives
(Ka Nupepa Kuokoa 1868 [sec. 16]:2). Five days later, as aftershocks continued to shake the
frightened population of Kaʻū, a stream of lava erupted from the Kahuku plain, eventually flowing to the ocean near Ka Lae at the southern tip of the island (Sinoto and Kelly 1970:51-52).

Along the highway, the storied Nīnole Hills—Puʻuʻenuhe, Puʻukiki, Makanau, Pākua, Kaiholena, Puʻuone—loom into view in the distance, the dramatic skyline of their Mauna Loa rift zone origins (Zurek et al. 2015), marking my Hīlea destination. Coastal residents fled to these hills following the devastation of the 1868 earthquake and tsunami. With the coastal settlements of Kaʻū in ruin, many residents moved away, most never to return. Those that did return faced a devastated environment that was ripe for the rapid landscape changes of the burgeoning ranching and sugar industries. These new lifeways dominated Kaʻū for more than a century to follow (Kelly 1980:37-42). Waves of immigrants from across the globe arrived with the plantations, creating a multicultural society integrated within the framework of an indigenous Hawaiian ethnocultural template (McDermott and Andrade 2011). Today, the heritage of the Chinese, Portuguese, Japanese, and many other ethnicities blends with the more ancient Kanaka Maoli (Native Hawaiian) traditions of Kaʻū’s original inhabitants.

As the tree-choked pastures give way to fields of coffee, the highway parts ways with the lavas of Kīlauea and enters the ash covered slopes of Mauna Loa. For a moment, I briefly catch a glimpse of waves crashing against the kula kai ʻaʻā of Hīlea, before orchards of macadamia nut trees close in on either side of the road, obstructing my view. The highway then crosses, in rapid succession, four usually dry gulches spanned by bridges that had to be replaced after severe flooding in November of 2000 washed away their plantation-era forerunners. I slow down shortly after the last bridge as the car in front of me turns right into Pāhala, which until twenty years ago, for more than a hundred years, served as a center of a thriving Kaʻū sugar industry.
This morning, a thin layer of vog⁷ hangs low over the highway as I accelerate past the turnoff to Pāhala. The vog wafts, smoke-like through the macadamia nut trees on the makai side of the road, and shrouds a neatly kept Chinese cemetery surrounded by rows of recently trimmed coffee trees on the mauka side. The former plantation’s aging infrastructure is everywhere here.

There was a time, prior to the 1940s, that the main road through Ka‘ū followed a mauka course from Pāhala to Hīlea before dropping down to Honu‘apo. Now the highway continues in a straight line towards Honu‘apo, making only a slight course correction as it emerges from the last macadamia nut orchards surrounding Pāhala, and crosses the former railroad bed leading to Punalu‘u landing (Figure 3). Portions of the old mauka road are still there, but the village of Hīlea, once nestled on the slopes amongst the fields of sugarcane below the flat-topped hill of Makanau, is now gone. The Hīlea sugar mill was dismantled in 1907. The houses, like their former residents, moved elsewhere in 1938 at the whim of the sugar company (Campbell and Ogburn 2004). In those days a branch road split from the main mauka road, providing access to the landing at Punalu‘u (Kinney 1916:474).

Careening down the hill today in my 4-Runner, I barely notice the sign marking the turn to “Punalu‘u Park” on the left, or the forgotten road to the former Hīlea Village on my right. As I emerge from the koa haole-choked pastures that envelop the roadway below the orchards of Pāhala, the view ahead opens up, and I catch sight of my destination, the dark ‘a‘ā of Hīlea projecting out into the Pacific Ocean’s blue waters. Makanau, majestic and green, with the cloud draped crest of Kaiholena projecting towards the heavens behind, fills the mauka skyline. Blackened shrubs, charred by a recent brush fire, line the road makai. A recently replaced sign on a pedestal of stacked and concreted stones, alerts me that I have arrived at “Sea Mountain at

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⁷ From the words “volcanic,” “smog,” and “fog,” a form of air pollution emitted by an erupting volcano, in this case Kilauea.
Punalu‘u.” As I descend towards Nīnole Gulch, the road widens to a four-way intersection with ingress and egress lanes. I signal left, and pause to let an oncoming bus filled with Japanese tourists turn right into the resort.

Looking forward, through the dusty windshield, I follow the straight line of the highway as it crosses Nīnole Bridge, climbs the steep slope of the brush covered ‘a‘ā flow, enters Hīlea, and then disappears from view. I know that if I continue straight, in two-thirds of a mile the highway climbs onto yet another, younger ‘a‘ā flow. This flow is free of brush and allows for expansive coastal views, revealing the extent of the widening ‘a‘ā landscape makai of the highway. A third of a mile or so after that, the highway crosses Hīlea Bridge and exits the rugged ‘a‘ā before dropping into Kaʻalāiki, crossing the Kāwā flats, and continuing in a straight line to Honu‘apo. These days, depending on how fast you drive, you can cross the ‘a‘ā in just over a minute, but the journey was not always so quick and easy.

Today, I turn left off the highway into the Sea Mountain Resort, and follow Nīnole Loop Road as it meanders gently seaward. Peering over a low rock wall, through the planted trees and hedges that line the right side of the road, looking across the wilted brown fairways of a thirsty golf course, I can just barely make out the ‘a‘ā flow’s northeastern edge as it too follows a meandering course along Nīnole Gulch to the ocean (Figure 4). To my left, the blackened landscape reveals the extent of the recent, seemingly annual, and probably intentional, brush fire at Punalu‘u, which this time has burned only a few hundred feet in from the roadway. Passing a collection of time-share condominiums, aptly called “Colony 1,” their wood-shingle roofs in terminal disrepair, I turn right off of the loop road, and wind south along the edge of the parched golf course. The charred remains of koa haole, blackened by yet another brush fire, now line the makai side of the road.
FIGURE 3. Portion of 1924 U.S.G.S. 7.5 min. series quadrangle Honuapo, Hawaii, showing the alignment of the modern highway between Pāhala and Honu'apo (Available at http://geonames.usgs.gov/pls/topomaps/).
I pull into the nearly empty clubhouse parking lot at the Sea Mountain golf course. Avoiding a fallen lamppost and a stream of rocky debris that spilled across the pavement from Nīnole Gulch during the flooding of tropical storm Darby more than six months ago, I park beneath the shade, and falling seeds, of the false kamani trees. Exiting the 4-Runner just over an hour and 55 miles after I climbed in, I grab my field gear, walk quickly across the rock-covered pavement, and follow the track of a rutted four-wheel drive road as it disappears into the tall Guinea grass at the outlet of Nīnole Gulch. After a short hike, I emerge from the tall grass, alone, onto a pebble beach. The sun and the wind wash over me; the crashing waves bombard my senses. Turning right, I pause to look up at my destination, the kula kai ‘a’ā flow of Hīlea. An old road ascends from the beach to the ‘a’ā plain above, and carries me away to another time. I have arrived, but the journey has just begun.

FIGURE 4. View to the south of the Hīlea ‘a’ā flow from the Colony 1 condominiums, across a fairway of the Sea Mountain Golf Course (Photo by author, 2016).
CHAPTER ONE
HUINA—THE PLACE WHERE TWO ROADS MEET

. . . The paths traveled by archaeologists and Kanaka Maoli have intersected at various
points in the past, often resulting in collisions that left both communities damaged. Our
paths cross regularly because we seek to protect the cultural manifestations of the people
that came before us, and our similar trajectories put us in close proximity to one another.
We do not have to travel on the same path, but we must recognize that partnerships based
on our various skills and knowledge systems create space for reciprocal benefits to both
communities, and ultimately build our capacity to care for our heritage that sets our
foundation and sustains us.

Concluding lines to Kuleana and Commitment Working Toward a
Collaborative Hawaiian Archaeology by Kathleen Kawelu (2015:141)

When I initially approached the coastal ‘a‘ā flow of Hīlea (Figure 5), I peered up at the
path in front of me with the eyes of an archaeologist, wondering how I could unravel the
sequences of the past. How those sequences could inform me about the settlement patterns of
Kaʻū, and how a synthesis of that knowledge could ultimately contribute to the field of Hawaiian
archaeology. I thought that I could understand the Indigenous pathways crossing the ‘a‘ā flow of
the kula kai landscape using an empirical lens of Western pragmatism. That if I studied the
network of trails inscribed in the ‘a‘ā long enough, I could learn their secrets, piece together their
history, and begin to understand the cultural features along them. It took me awhile, but after
many long days spent in the hot sun, walking endless miles along rocky paths, searching for data
to support my initial suppositions, I have come to realize that I began in the wrong place. The
destination I sought was not accessible from the route that I had chosen. I needed to retrace my
steps and start anew. I needed to find a way for these paths to benefit not just the archaeological
community (myself), but the living, descendant communities of Kaʻū, whose kūpuna (ancestors)
originally created them, and benefited from their very existence. I needed to find a path to a more
equitable, community-based practice of Hawaiian archaeology (Kawelu 2015).

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8 As translated by Andrews (1836:54).
FIGURE 5. Google Earth image showing the kula kai ‘a‘ā flow of Hīlea and specific locations discussed in the text.
My involvement with the archaeology of this cultural landscape began shortly after the County of Hawai‘i, through the Public Access, Open Space, and Natural Resources Preservation Commission (PONC) program, completed the second of two land purchases (in 2008 and 2011) totaling 784 acres centered around Kāwā Bay (Figure 6). In October of 2012, the County of Hawai‘i decided to move forward with the eviction of a Kanaka Maoli man who had been living on the lands of his great-great-grandfather at Kāwā for more than two decades (Moulds-Car and Langlas 2005:27-32; Corrigan 2012; Kaʻū Calendar 2012). The eviction, a divisive event in the community, was carried out in the name of cultural stewardship for the expressly stated purpose of conducting an archaeological survey (Big Island Video News 2012). Following the eviction, as police maintained an around the clock vigil to limit public access to the property, the Hilo based archaeological consulting firm that I work for began to systematically survey the coastal lands of Hīlea and Kaʻalāliki ahupuaʻa (Clark and Rechtman 2013). The experience was bizarre. It was archaeology under police protection and archaeology as an excuse to limit public access. It was a type of archaeology that I had never experienced before, or since. This archaeology was completely removed from the descendant community. Today, nearly five years later, signs at the entrance to Kāwā, along the southwestern edge of the Hīlea ‘aʻā flow, still warn the public to “please stay on the pathway, as an archaeological survey continues” (Figure 7). Since I began my thesis research, I have even been asked by a community member at Kāwā, “Why the public isn’t allowed to be around while archaeologists are conducting survey?” That is a question that I cannot answer.

When I first proposed the topic for this thesis, I envisioned it as a way to begin to make right those things that I perceived as wrong with my first go around of archaeology within the County lands at Kāwā, and as a way to bring community back in to the discussion of heritage of
this wahi pana (storied place). While my initial foray into the archaeology of these lands was sorely lacking in community collaboration, it did provide me with a unique understanding of the landscape, and detailed knowledge of the type and distribution of the cultural sites present. I was particularly struck during the 2012 fieldwork by a network of trails that traverse a roughly 2.3 kilometer wide section of ‘a‘ā situated between Kāwā and Nīnole Bays (Figure 8). Unsure of how to begin a collaborative, community-based study in Ka‘ū, however, and not knowing the local or descendant communities of Kāwā, I decided to view the trails that cross the ‘a‘ā as potential routes of connection to community, as paths that could connect archaeology to community in a way that would ultimately benefit the people and heritage of Ka‘ū. This thesis, while it deals with trails and cultural landscapes, is really, for me, about the beginning step of community archaeology, finding community partners to collaborate with (Atalay 2012).

FIGURE 6. County of Hawai‘i lands purchased through PONC program at Kāwā in 2008 and 2011.
FIGURE 7. Sign warning beach goers at Kāwā to “Please stay on the pathway, as an archaeological survey continues” (Photo by author, 2013).

Atalay (2012:101) identifies three primary ways that archaeologists wishing to participate in community-based research connect with communities: (1) through existing relationships, (2) through communities seeking research partnership, and (3) through archaeologists seeking communities to partner with. I have relied primarily on the third method to begin a collaborative archaeological study in Kaʻū: finding communities to partner with. Working within the limited timeframe of this master’s thesis, I knew this would be difficult. I therefore took a hybrid approach to my research. I began by mapping the trails crossing the kula kai of Hīlea, examining them as potential routes to connect with community, and as starting points for collaborative archaeological research. In conjunction with the trail mapping, I made a concerted effort to get
out into the community, to meet people, to talk with them about Kaʻū and its heritage, to listen to their needs and concerns, and to help in whatever way possible, whenever I could. Consequently, connecting with community is part of my methodology that is a result of documenting the routes of the Kanaka Maoli trails within the kula kai of Hīlea. I do not view these methods as distinct, however, and I do not view the community as an object of study. Both have informed me of the importance of implementing community-based archaeological practices in Hawaiʻi, and in the process informed my understanding of the Kaʻū community and its particular heritage needs. With the trails of Hīlea as my starting point, I have found routes and connections to heritage and community across the entire district of Kaʻū, and made friendships that will last a lifetime.

Communication, bringing multiple voices into the discussion of heritage, is an essential first step for the establishment of alternative archaeologies. This step involves moving beyond the discipline’s colonial legacy, to help resolve the contested past, and create alternative histories that respect Indigenous historical values, but at the same time do not eschew scientific principles (Colwell-Chanthaphonh and Ferguson 2006). This step is often the most difficult and time consuming for archaeologists, especially if they are from outside a community (Atalay 2012:89-127). Trails, as their own distinctive category of social space within a landscape, offer potential routes of communication for archaeologists to follow as they move towards community-based archaeological practices. They act as liminal spaces—neither home nor away—structured by geography, action, and design, with rules and obligations of their very own (Snead 2002, 2009). They are places where people meet, linear spaces, often without beginning or end, that “weave together disparate elements of daily lives, bridging distance and obstacles to connect us to each other” (Snead et al. 2009:1).
FIGURE 8. Map of cultural features identified within a portion of the County’s Kāwā lands during the 2012 archaeological reconnaissance survey fieldwork (after Clark and Rechtman 2013:42).
The trails crossing the ‘ā‘ā of Hīlea not only provide potential routes of community connection, but as the physical manifestations of movement through the landscape, they reflect traditional Kanaka Maoli knowledge, worldview, memory, and identity, and provide a social context essential for understanding the connections between people and places in the past (Snead et al. 2009). This, in the modern era, is potent information for establishing rights and obligations as they relate to heritage management, including descendant communities’ inherent rights to claim and articulate their own past, and the archaeological community’s obligation to help them do so. In the following chapters, I contextualize the trails, paths, and roads that cross the kula kai of Hīlea within the physical setting of the ‘ā‘ā landscape, the ethnohistoric past, and the sociopolitical environment of heritage management as it is currently practiced in Hawai‘i. By examining this landscape of movement in its various physical, sociopolitical, and culture historical contexts, I hope to demonstrate how an understanding of movement and connection, both past and present, can create very real spaces for establishing communication and collaboration between archaeological and Kanaka Maoli communities in the future. Collaboration that will ultimately lead to the implementation of decolonizing methodologies for archaeological practice in Hawai‘i and result in the community taking control of their own heritage to manage it as they see fit. The goal of this thesis is to examine how archaeological study can align itself with community values in such a way that it will benefit the people of Ka‘ū.

Thesis Outline

Having thought about ways in which to begin to decolonize the study of Kanaka Maoli trails in Hawai‘i for the last sixteen months or so now, I have spent some time searching Hawaiian language sources for ‘ōlelo Hawai‘i (Hawaiian words) that relate to trails, their
construction, their use, their associated cultural features, and the experience of traveling along them. With only two semesters of Hawaiian language under my belt thus far, I have been unable to do much with the word lists that I have compiled, but for the chapter titles in this thesis, I have used words from the earliest colonial dictionary printed in Hawai‘i, Andrew’s (1836) *Vocabulary of Words in the Hawaiian Language*, that relate to Kanaka Maoli trails and the concepts of travel along them. In this chapter, I have introduced my research topic as a huina—a place where two roads meet (Andrews 1836:54)—represented by the intersection of archaeology and community, and my initial experience of travel across the kula kai ‘a`ā landscape of Hīlea. Below I briefly introduce myself as an archaeologist and then frame the research questions that helped guide me through this thesis, along the path of archaeology towards its intersection with community. In Chapter 2, I briefly stop to discuss the heritage management program at UH Hilo as I gather together ō—provisions for the journey, traveling food (Andrews 1836:21)—in this case consisting of an understanding of the problems that many Indigenous communities have with archaeological practice, and the need to find a path that leads towards decolonizing the production of archaeological knowledge through community-based methodologies. I then discuss the specific methods of my thesis research, including the methods used to map the trail network across the kula kai ‘a`ā flows of Hīlea, and the methods used to meet community in Ka‘ū.

In Chapter 3, I liuliu—get ready, prepare for the journey (Andrews 1836:86)—pausing at the eastern edge of the Hīlea ‘a`ā flow, at Kōloa Beach within the context of the Sea Mountain Resort, to discuss the history of archaeological research in Ka‘ū, the connections between cultural resource management and development, the archaeological study of trails in Hawai‘i, and the potential of trails to provide new routes towards community-based methodologies. The modern development landscape of Punalu‘u, Nīnole, and Wailau represent colonial
archaeological practices that can perpetuate ‘ghettoization of landscape’ (Major 2007), the privileging of archaeological, Western knowledge over Kanaka Maoli knowledge, and a political environment that favors economic development over heritage (Kawelu 2015). These themes provide a context for understanding the kula kai landscape of Hīlea as a divide between archaeological knowledge systems and Kanaka Maoli knowledge systems, between the cultural resource management practices of the past and the future of community-based heritage management, and highlight the need to find a path across the ‘a‘ā landscape to more inclusive practices of archaeological research.

In Chapter 4, I set out on a journey across the ‘a‘ā to Kāwā. Following the alanui aupuni (government road), I seek to ma‘a—gain knowledge by practice of the road often travelled (Andrews 1836:90)—the trails, paths, and roads of the kula kai of Hīlea by contextualizing them within the cultural landscape of their ‘a‘ā environment. Using various archaeological techniques, I document the physical expressions of movement across the ‘a‘ā flows of Hīlea, and describe these features through their origins and destinations, the landscape in which people constructed the trails, and the material culture left along their routes. I use the tangible evidence of movement inscribed within the landscape by generations of Kanaka Maoli to elucidate the connections that exist between disparate communities, through both space and time, within the kula kai of Hīlea and beyond, and to explain how an understanding of those connections can inform new methods of community-based archaeological research.

Finally, in Chapter 5, pausing at the ‘a‘ā flow’s western edge overlooking Kāwā Bay, I think about the path to a future of community based archaeology in Hawai‘i. Here, I ponder the concept of Kuamo‘o—the back bone, a road or path, street of a town; formerly the common word for path on Hawai‘i Island (Andrews 1836:75)—as I begin my journey back across the ‘a‘ā
along the coastal ala’alao to Nīnole. As I travel, I examine the ways in which the trails, paths, and roads can inform decolonizing practices within Hawaiian archaeology. Touching on themes such as Kanaka Maoli understandings of movement, I explore the intersection of archaeological and Kanaka Maoli knowledge, and how intersecting Western and Indigenous systems can inform one another in a way that will help decolonize archaeological practice, ultimately creating new paths to community-based methodologies of heritage management in Hawai‘i. Paths that will help connect community values and cultural landscapes together with one another and provide tangible community benefits for the people of Ka‘ū.

**Situated Scholar: Mo‘okū‘auhau of a Haole Archaeologist**

In order to clearly present the research topic covered in this thesis, it is important to provide a context for understanding who I am, as the author, and where my particular worldview as an archaeologist comes from. It is also culturally appropriate, especially as I endeavor to help shift the archaeological practice in Hawai‘i towards community-based methodologies, to begin by introducing myself to the community. I am a haole archaeologist; a white-skinned male, born on the mainland, who now makes his living studying the Kanaka Maoli past. For the last 17 years, since April of 2000, I have worked for a Hilo based archaeological consulting firm, and participated in a wide range of cultural resource management (CRM)9 projects across the Hawaiian Islands. I now have a business card in my wallet that says I am actually not just an archaeologist, but a “Senior Archaeologist” (whatever that means; it just makes me feel old). Before coming to Hawai‘i, I spent two years as an archaeological field technician (a.k.a. “dig  

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9 “Cultural resource management (CRM) entails the management of ‘cultural resources’ and the potential impacts to them as a result of land use and development” (Kawelu 2015:37). CRM archaeologist are typically contracted by landowners to help them comply with historic preservation laws. I use the term to refer to differentiate this type of archaeology from other types, such as academic, and to designate a particular context in which compliance archaeology is conducted. Like Kawelu (2015:11), I prefer the term “heritage management,” as it moves the discipline away from thinking of the Kanaka Maoli past as a resource. Thus, in most cases, I use CRM to refer to past archaeological practices, and heritage management to refer the goal of present and future archaeological practices.
on the mainland, traveling from dig to dig, working for various archaeological firms across the continent from Vermont to California.

My archaeological experience has provided me a working knowledge of historic preservation laws in Hawai‘i, and a detailed understanding how the bureaucratic system that regulates those laws currently works, and how it is supposed to work. It has also allowed me to experience and document a wide range of cultural landscapes across the Hawaiian Islands, and to meet many people affected by, and involved in, the historic preservation process, ranging from large landowners, to government employees, to cultural practitioners, to descendant families and communities. Working as an archaeologist, I have had the opportunity to explore many places in Ka‘ū. I have surveyed thousands of acres, researched the history of many ahupua’a (Clark et al. 2004a, 2004b, 2008, 2010, 2013; Clark and Rechtman 2004, 2013, 2016; Ketner et al. 2008), and developed a deep apprehension for the heritage of the district. However, during this time I have developed only limited connections within the community itself.

Now, I am enrolled in the Master of Arts (M.A.) in Heritage Management Program at the University of Hawai‘i (UH) at Hilo while I continue to work for a private archaeological consulting firm, and I hope to foster deeper connections with the Ka‘ū community. Entering the M.A. program has made me think a lot about why I became an archaeologist in the first place, about my role as an archaeologist in the field of contract archaeology, and about the ways in which I can use my position as an archaeologist to help shape a better future for the descendant communities of Hawai‘i and their heritage. I have wanted to be an archaeologist for as long as I can remember. I self-identify as an archaeologist, and I take pride in being an archaeologist. Now that I have worked as an archaeologist for half of my life, I also see the problems with archaeology, and the dissatisfaction that many Indigenous communities have with its reliance on
Western knowledge systems and methodologies (Atalay 2006). I too am often dissatisfied and disappointed with the field I work in, and with the bureaucratic historic preservation system that regulates its practice. I want to be a part of shifting the heritage management paradigm in Hawai‘i towards something more inclusive and better for everyone.

Western perspectives, as manifest in archaeological practice, have dominated the study of Hawai‘i’s wahi kūpuna (ancestral places) for more than a century (Kirch 1985; Kawelu 2015). Archaeologists, practicing within a Western colonialist framework, act as “gatekeepers,” controlling knowledge production, and appropriating the tangible manifestations of Kanaka Maoli cultural knowledge to create archaeological capital that serves to further their own careers, but often provides little benefit for the descendant communities to whom the heritage belongs (Hollowell and Nicholas 2007). Even worse, it seems to me that in some cases, that archaeologists working in the field of CRM in Hawai‘i, have produced studies containing incomplete archaeological data that still further their archaeological careers by aiding in economic development. These studies fail to document the tangible manifestations of the Kanaka Maoli past, often resulting in the destruction of irreplaceable cultural heritage. Meanwhile, for much of the past decade or so, the State Historic Preservation Division (SHPD), whose job it is to regulate and enforce Hawai‘i’s historic preservation laws, has been in such “a condition of unprecedented confusion and disarray,” that it is unable to fulfill its “cultural obligations and legislative mandates to manage historical properties for the benefit of the various descendent communities” (2008 Hawai‘i Senate Bill 2906 quoted in Mills and Kawelu 2013:130).

I used to think that by producing good quality archaeological reports, filled with “objective” data, I was helping communities by allowing those involved in the development process to make informed heritage management decisions. While archaeological knowledge
alone can provide a window to the Hawaiian past, and produce information that descendant communities value—helping them to maintain their cultural foundations in the face of widespread landscape changes—this is the exception rather than the rule (Cachola-Abad 2013). More often than not, the practice of CRM, typically occurring within the context of a proposed development, has created ethical dilemmas and negative impacts for the Kanaka Maoli communities (Cachola-Abad 2013; Mills and Kawelu 2013; Kawelu 2015). Cachola-Abad (2013) has laid out, and Kawelu (2015) has discussed at greater length, some common problems Kanaka Maoli communities have with CRM in Hawai‘i. These include the way in which archaeologists often delineate site boundaries, interpret site function, assess site significance, confute mitigation with preservation, and conduct consultation with cultural experts within the context of an impending development. These issues speak to larger problems of perceived conflicts of interests in the way that archaeological compliance studies are conducted, who they are conducted for, and how they are regulated. They also speak to a general lack of Kanaka Maoli input into the research questions and research methodologies in the first place.

In recent years, cultural practitioners and indigenous Hawaiian scholars have begun to employ alternative methodologies for interacting with and interpreting Hawai‘i’s heritage landscapes (Kawelu and Pakele 2014). This shift requires that we stop viewing heritage simply as an archaeological resource, and instead stipulates that “we must connect these wahi kūpuna to the present with a living, breathing, and dynamic society” (Nāleimaile and Brandt 2013:31). If archaeologists are to contribute to a more equitable system of heritage management, they must use their entitled positions as gatekeepers to tear down categories of privilege, end colonialist practices, and promote descendant community access to, and benefits from, the production of archaeological knowledge (Hollowell and Nicholas 2007). In the process of doing so, they will
transition from the role of gatekeeper to the role of facilitator, helping to open new gateways to past for descendant communities to move through, and creating new paths for the implementation of collaborative archaeological research. I, for one, am ready to use my position as an archaeologist to begin to change archaeological practice from within.

**Framing Research Questions**

Given that Hawaiian archaeology, by its very nature, through its developmental history and current practice, is a colonialist endeavor, and that the decolonizing methodology best suited to correct the underlying imbalance of power within the discipline lies in a shift to community-based archaeology (Atalay 2006, 2012; Kawelu 2015), then the question for me becomes how can this thesis contribute to that methodological shift? I had hoped, at this point in my thesis writing, to be able to articulate community driven research questions, and to be in the process of implementing a collaborative research design (Atalay 2012). However, three-plus semesters on either side of a summer field season, just over sixteen months, has proved not enough time to do so, and I am still in the beginning steps of community engagement. While I believe that I am following the right path—I view this thesis as only the representation of the early stages of community-based archaeology—I am still engaged in the process of connecting with community research partners, establishing relationships and trust, and learning about the particular needs of the stakeholder communities. The research questions I begin to address here, related to trail systems in Ka‘ū, are consequently more about the process of decolonizing Hawaiian archaeology and achieving an understanding of the practice of community-based archaeology, than they are about a successful *culmination* of a community-based project.

I want to know about the stepping-stones that lead to social justice (Kawelu 2015), the practical, engineered steps of the journey that create the physical route for achieving the final
destination. What I, as an archaeologist, can do to help decolonize the practice of Hawaiian archaeology, and what steps I can personally take to ensure that Indigenous and local communities are able to participate in heritage research in substantive ways. How successful, collaborative, community-based projects are conceived of and implemented within the complex sociopolitical environment that exists in Hawai‘i today, and how the principles of the largely academic field of community-based archaeology can be incorporated into the economically driven, regulatory practices of cultural resource management. This thesis, for me, is a way to internalize the principles of community-based archaeology so that I can effectively articulate those principles to the communities that I hope to work with in the future, and incorporate them into my work as a heritage manager. Paraphrasing Maguire (1987), instead of having a research problem with methods to solve it, I have a research approach in search of a problem.

I see this thesis more as an introduction to the community, as a way of sharing something about who I am as an archaeologist, and how I would like to contribute in a meaningful way to the descendant communities of Ka‘ū through a focus on cultural landscapes and the study of Kanaka Maoli trails. Within these pages, I record the steps taken and the physical routes travelled as part of my personal journey to participate in a collaborative, community-based archaeology in Ka‘ū. I use the ‘a‘ā flows that course from the southwestern rift of Mauna Loa to the coast at Hīlea as a metaphor for the current heritage landscape of Hawai‘i and the complex sociopolitical environment within which Kanaka Maoli communities and Hawaiian archaeologists interact (Kawelu 2015). I then examine the paths created by those who have previously crossed the ‘a‘ā, through different lenses, in an effort to understand the connections between people and places across space and through time. I pose the question: how can the physical trail routes that cross the kula kai ‘a‘ā of Hīlea connect us to each other and inform us
about decolonizing methodologies within Hawaiian archaeology in a way that will lead to community-based approaches, and ultimately to social justice?

**Crossing the ‘A‘ā: Community-based Archaeology and the Kula Kai Landscape of Hīlea**

As is true for many archaeologists seeking to shift the existing power structures within heritage management, my first steps along the path to community-based archaeology were filled with trepidation—fear mixed with the excitement of the unknown, with the promise of new experiences, the dread of conflict and politics, the uncertainty of voicing my own opinions and facing the difficulties of the road ahead (Kawelu 2007:226). I have come to regard this thesis as a journey in its own right. As with any journey, the path has been long and tiring, filled with trials and tribulations, ups and downs, trips and falls, wrong turns and U-turns, laughter and tears. As I near the completion of the M.A. program in heritage management at UH Hilo, I realize that it is not the final destination, but the stories woven around traveling, the chance encounters, that have made the trip worthwhile (Bender and Winer 2001).

I have approached the writing of this thesis as I approach the ‘a‘ā flow at Hīlea, as a journey conceptualized within a landscape. The landscape in this case includes not only the physical environment of the ‘a‘ā flows of the kula kai of Hīlea and the ethnohistorical past that they embody, but also the complex sociopolitical environment in which heritage management is currently practiced in Hawai‘i. By following the various paths that cross the ‘a‘ā, I attempt to find common ground between archaeological and Kanaka Maoli perspectives of the past, to connect the landscape from the past, to the present, to the future of heritage management, and to incorporate the values of the living, thriving communities of Ka‘ū into the production of archaeological knowledge.
As Kawelu (2015) has pointed out, if archaeologists are to create a more socially responsible discipline, we need to do a better job of understanding the people and culture of Hawai‘i, both past and present, rather than just the discipline of archaeology itself. We first need to spend time talking to people in the community, building trust, mutual respect, and partnership through communication. Then, we must work to incorporate indigenous perspectives into our research, moving the concerns of present-day community from the periphery to a more central position. If archaeology is to remain relevant and sustainable within the complex sociopolitical environment of Hawai‘i today, archaeologists must find research paths that lead to more inclusive, community-based methods. We need to remember that before the wahi pana of the Hawaiian cultural landscape were seen as archaeological sites—belonging to some static past, disconnected and disenfranchised from the present—they lived as Kanaka Maoli “cultural sites” (Nāleimaile and Brandt 2013).
CHAPTER TWO
Ō—PROVISIONS FOR THE JOURNEY, TRAVELING FOOD

If our goal is to decolonize archaeology, we must then continue to explore ways to create an ethical and socially just practice of archaeological research—one that is in sync with and contributes to the goals, aims, hopes, and curiosities of the communities whose past and heritage are under study, using methods and practices that are harmonious with their own worldviews, traditional knowledges, and lifeways. I believe this can be accomplished and that in working toward this goal we are responsible not only for critiquing past practices but also for building a path toward a better future for our communities and future generations to benefit from and improve upon…

From *Indigenous Archaeology as Decolonizing Practice*
By Sonya Atalay (2006:284)

The master’s degree in Heritage Management at the University of Hawai‘i at Hilo welcomed its first cohort of seven students to campus during the Fall semester of 2015. This program arose out of the long recognized need to increase indigenous leadership positions in archaeology and related fields of heritage management in Hawai‘i, and the argument that to make educational opportunities more accessible to those students training should be offered at smaller institutions of learning, rather than just at regional academic institutions (Mills 2001; Mills and Kawelu 2015:130-132). The program is designed for students seeking “heritage-related careers in a multitude of government agencies, private-sector consulting firms, educational institutions, and various other organizations engaged in the interpretation, preservation, and perpetuation of cultural heritage” (UH Hilo 2015:1). The goals of the program are to create a workforce of dedicated historic preservationists committed to the long-term management of cultural resources, to increase descendant community representation in the field of heritage management, to assist community planners in developing more sensitive methods of treating cultural sites, and to provide training for students who will meet state and federal professional standards and qualifications for leadership positions in heritage management related fields.

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10 As translated by Andrews (1836:21).
Participants in the program are required to perform community-based research while developing various skills related to heritage management. Successful completion of the M.A. degree requires that students prepare a thesis project based on original field research and community internships.

It is tough to advance to leadership positions within the field of heritage management without at least obtaining a master’s degree. By 2015, when the UH Hilo heritage management program began accepting applications for its inaugural class, I had reached the pinnacle of my career working as an archaeologist with a bachelor’s degree. Many of my friends who started working as archaeologists at the same time as I did, but who never went back to school, had already dropped out of the field by that point to search for better paying jobs with more room for advancement. I had often thought about going back to school to pursue a master’s degree in archaeology, but raising a family on Hawai‘i Island, and working full-time to support them, my options were limited. I did not want to uproot my family to set up a temporary life in some faraway place, while we struggled to get by.

Even when the program began accepting applications, I was hesitant to apply. I have worked in Hawai‘i long enough to understand the need for more indigenous representation in the field of heritage management, and I did not want to take a slot reserved for someone more deserving of the opportunity. Despite my reservations I did apply, and was accepted, and nearly twenty years after finishing college as an undergraduate, here I am, writing a thesis. I have appreciated this chance to learn new approaches to heritage management, new methods and theories, to conduct research because I want to, not because it’s my job. This experience has helped reinvigorate my passion for the field of archaeology, and sparked new interests and ideas that I have already begun to incorporate into my career as a contract archaeologist.
I have especially enjoyed the community-based aspects of the program, and the opportunity to work with such a diverse and dedicated cohort of fellow students, whose passion for heritage has given me great hope for the future of this island. From the first day of classes our cohort quickly became a community, each with our own individual strengths and weaknesses. We have worked closely together ever since, helping each other through the ups and downs of a fun, but at times challenging, program. In the process we have formed bonds that will last a lifetime. One struggle we have all faced is deciding upon a definition of community, and what constitutes community-based research. Being in the inaugural cohort of this heritage management program, we have had little precedent to go by, and only vague notions of what to expect. Left largely to our own devices, each of us has taken our own route to community-based research. I’m sure the next cohort, entering the heritage management program in the fall of 2017, will find these initial projects useful, and will learn from our successes and mistakes, to create even greater benefits for the communities they work with.

In choosing a route for my community-based research project, I was inspired by Kathleen Kawelu’s (2015) book *Kuleana and Commitment Working Toward a Collaborative Hawaiian Archaeology*. This book explores the sociopolitical history of Hawaiian archaeology and the attributes that characterize the contemporary relationships between Kanaka Maoli and archaeologists in the islands. As an ethnographic account of Hawaiian archaeological practice, based on her earlier dissertation research (Kawelu 2007), the book focuses on “the impact that Hawaiian archaeology has had on Kanaka Maoli communities, and conversely the impacts that those communities have had on the practice of archaeology” (Kawelu 2015:18). Having worked as an consulting archaeologist in Hawai‘i since 2000, the themes presented in her book resonate with me, and have fueled my desire to help shape the practice of Hawaiian archaeology into
something more inclusive for everyone. Here, I explore some of the issues that Kanaka Maoli communities in Hawai‘i, and Indigenous communities worldwide, have with archaeology. I then discuss the potential solution that Kawelu (2015) presents in the concluding chapter of her book, a shift to community-based practices of Hawaiian archaeology. Attempting to pick up where her research left off, to find ways to establish relationships that will lead to collaborative, community-based projects, I conclude this chapter with a presentation of the research methods I used for mapping the trails across the kula kai landscape of Hīlea and for connecting with community in Kaʻū. It is my sincere hope that this thesis will serve as a starting point for my participation in future, collaborative, community-based, heritage-related projects, not only on the lands acquired by the County at Kāwā, but throughout the district of Kaʻū, and across Hawaiʻi Island.

**Exploring Indigenous Issues with Archaeology**

When we speak of heritage and how to manage it, we are not only talking about the past and its implications for the present, we are really discussing the future, and deciding how things ought to be. In Hawaiʻi, decisions concerning the appropriate management of heritage often become entangled with issues of development and the transformation of landscapes (Kawelu 2015). In these situations, as discussed above, heritage managers—frequently cultural resource management specialists by trade and often archaeologists by training—end up as the gatekeepers of the past (Hollowell and Nicholas 2007). Governed by a myriad of federal and state laws administered by the State Historic Preservation Office(SHPO)/State Historic Preservation Division and the (SHPD), they are tasked with making recommendations concerning which cultural sites will be spared within the context of a proposed development, and which sites will ultimately be erased from a landscape altogether. Too often these decisions are made without
Indigenous communities to whom the heritage belongs, without incorporating Kanaka Maoli views, and without considering the landscape’s intangible qualities that provide the contexts for understanding the past in the present (King 2013; Kawelu 2015). Sonya Atalay, a Native American archaeologist who works as an Assistant Professor at the University of Massachusetts Amherst, has written extensively about this very issue, exploring the disciplinary boundaries of cultural anthropology, archaeology, heritage studies, and Native American and Indigenous studies. Much of the following discussion exploring the history of Indigenous issues with the practice of archaeology is summarized from Atalay’s 2006 article *Indigenous Archaeology as Decolonizing Practice*.

The discipline of archaeology has a strongly colonial history that has been built around, and relies upon, Western knowledge systems and methodologies (Atalay 2006). Archaeological practice privileges “the material, scientific, observable world over the spiritual, experiential, and unquantifiable aspects of archaeological sites, ancient peoples, and artifacts,” and thus promotes “Western ways of categorizing, knowing, and interpreting the world” (Atalay 2006:280). Archaeologists are not the only stakeholders who feel stewardship responsibilities for what they consider archaeological materials and sites, and they should not be the only ones with the authority to authenticate history. Indigenous and local communities around the world “have rights and responsibilities to the human material remains and to the knowledge, memories, and spiritual power that are intimately tied with the places studied by archaeologists” (Atalay 2006:280). Prior to European colonization these communities were the stewards of their own cultural materials, sites, and history. They were the ones who remembered, examined, learned from, taught, protected and managed their own heritage, and the ones that maintained the power associated with that responsibility. These practices were abruptly and irrevocably altered,
however, by colonialism and the egregious acts of cultural, spiritual and physical genocide that went along with it (Atalay 2006:281).

Within the context of colonialism “archaeologists and anthropologists began to take on the role of cultural and historical stewards, using the methods of their own Western cultures to examine, analyze, write, and teach about Indigenous lifeways” (Atalay 2006:281). Thus, once contextualized, archaeology cannot be viewed only as a tool for understanding the past. The current practices and realities of archaeology are not distinct from those of its colonial beginnings. They still serve to reinforce colonial structures that disrupted the ability, self-determination, and sovereignty of Indigenous communities to care for and govern their own heritage in a traditional way in the first place (Atalay 2006:282). This has powerful continuing implications for Indigenous peoples around the globe today, as archaeological practice of and “the knowledge it produces are part of the history and heritage of living people and have complex contemporary implications and relevance for those people in daily life” (Atalay 2006:283). If we are to decolonize archaeology, we must find ways to create ethical and socially just practices of archaeological research that consider and integrate multiple ways of knowing, studying, and managing the past and heritage. We must find methodologies that incorporate the goals, aims, hopes, and curiosities of those people whose past and heritage are the subject of study, and employ practices that are “harmonious with their own worldviews, traditional knowledges, and lifeways” (Atalay 2006:284).

The European colonization of Hawai‘i began with the arrival of Captain Cook in 1778. The Hawaiian monarchy was overthrown by American interests just over a century later, and Hawai‘i became a territory of the United States in 1898, then a state in 1959. The contemporary practice of Hawaiian archaeology is firmly rooted in the 20th century portion of this period of
colonization. In the beginning, anthropological researchers in the islands relied on the Indigenous population to obtain knowledge of Kanaka Maoli culture, but as the twentieth century progressed, later archaeological researchers came to rely increasingly on written documents produced by their Western counterparts, which effectively eliminated Indigenous participation in the discipline (Kawelu 2015). Thus, Indigenous perspectives were never systematically incorporated into the development of Hawaiian archaeology, and as a result, when viewed through the lens of critical theory, the discipline today is seen by many as “an instrument of Western ideology that has contributed to the subordination—intentional or unintentional—of Kanaka Maoli people and culture” (Kawelu 2015:6).

While early archaeological studies in Hawai‘i were largely museum and academic undertakings, beginning in the 1970s, with the adoption of federal and state laws regulating the management and protection of cultural heritage, much of the archaeology practiced became compliance driven with a focus on identifying and managing “cultural resources.” The budgetary and time constraints of this type of archaeology, with its goal of satisfying legal mandates rather than community needs, combined with the narrow purview of the laws that regulate it, and their emphasis on the scientific value of heritage over its spiritual and social values, has served as a source of tension between Kanaka Maoli and archaeological communities (Kawelu 2015; Kirch 1999). Adding to the strain of these relationships today are several high-profile, systematic failures of the regulatory process, that in recent memory have resulted in the loss and desecration of burials and other important Kanaka Maoli cultural sites. This has contributed to a general mistrust of the discipline within descendant communities, and led to a common perception that archaeological practice, especially as manifested in the field of CRM, is antithetical to Hawaiian values (Mills and Kawelu 2013).
Kawelu (2015) examines the sociopolitical issues that have led to strained working relations between Kanaka Maoli and archaeologists and the contemporary narratives that go along with those themes. She addresses ways in which the strained relationships can be improved to the benefit of both groups, and ultimately for the benefit, protection, and management of Kanaka Maoli cultural remains, and the vitality of Kanaka Maoli culture. The narrative themes that emerge, indicate that the relationships that have formed between these communities “are complex manifestations of the social and political histories of Hawai‘i” (Kawelu 2015:134). Although there is no such thing as a monolithic Kanaka Maoli or archaeological community, the stories of both groups, contain repeated calls for communication, respect, and partnership, and for a change in how archaeological knowledge is produced and incorporated into the wider field of heritage management (Sprigs 1990; Cachola-Abad and Ayau 1999; Cachola-Abad 2013; Mills and Kawelu 2013; Nāleimaile and Brandt 2013; Kawelu and Pakele 2014).

While the developmental history of the discipline of Hawaiian archaeology has contributed to some of the current mistrust within the Kanaka Maoli community, Kawelu (2015:13) is careful to point out that there is no vast divide between descendant communities and archaeologists, and she stresses that one must not be perpetuated. Rather, she positions these groups as potential allies, sharing a common goal of protecting cultural sites and perpetuating Hawaiian culture, with each bringing different strengths to the heritage management struggle. She believes that through mutual respect, by communicating these shared goals, by decolonizing the practice of Hawaiian archaeology, and by working together, these two groups can help change the current power structure in Hawai‘i, which at the moment favors economic development over historic preservation and culture. The perspectives of Kanaka Maoli and archaeologists, expressed through their personal stories in the book, suggest a new trajectory for
the discipline of Hawaiian archaeology, one that incorporates archaeology into wider community efforts of heritage management, called community-based archaeology.

**A Solution: Community Based Participatory Research**

Community-based archaeology, an application of community-based participatory research (CBPR), decentralizes the discipline as the primary beneficiary of archaeologically produced knowledge and situates it within a larger heritage management system that operates for the benefit of community groups (Kawelu 2015). It “begins with a mind-set situating archaeologists among communities of descendants and other stakeholders who value heritage” (Kawelu 2015:137), which serves to build partnerships and collaboration that resist forces that support entrenched power structures, and leads to increased disciplinary relevance, accountability, and sustainability. Sonya Atalay (2012), in her book *Community-Based Archaeology Research with, by, and for Indigenous and Local Communities*, identifies five guiding principles for archaeological CBPR: (1) utilizing a community-based, partnership process; (2) aspiring to be participatory in all aspects of research; (3) building community capacity; (4) engaging in a spirit of reciprocity; and (5) recognizing the contribution of multiple knowledge systems. By addressing these core principles, researchers and communities can work towards achieving a productive shift in the methodology of archaeological knowledge production, and they can begin to develop a program of heritage management that best suits their collective needs.

Kawelu (2015) points out that much overlap exists within the principles of archaeological CBPR as outlined by Atalay (2012). Within a Hawaiian context, she sees partnership and communication (collaboration), respect (incorporation of multiple knowledge systems), and seeking social justice as the necessary focus of community-based archaeology. She presents a
simplistic, but plausible scenario for how respect, communication, and partnership can increase opportunities for CBPR in Hawaiian archaeology, and how the practice of community-based archaeology can ultimately lead to social justice. Kawelu’s scenario begins with respectful communication between Kanaka Maoli, archaeologists, and other communities interested in the heritage of a place. Through communication, the communities become more engaged in the archaeological process, and archaeologists become invested in the needs of the communities. Through engagement and investment, community (public) support for heritage management increases. With increased public support, legislators become less willing to weaken laws governing historic preservation, and become more willing to provide legislative, administrative, and financial support for projects that protect cultural sites and landscapes. With increased protection for cultural sites and landscapes, “the assault on the Kanaka Maoli past is lessened, and the culture and people are strengthened” (Kawelu 2015:135). As the paradigm shifts, the dichotomy between Kanaka Maoli and archaeologist lessens, debates about who owns or controls the past lose relevance, and communities, with the help of archaeologists, begin to ask questions, develop, and investigate heritage in ways that they see fit.

**Research Methods**

I now discuss the various field methods utilized for this thesis research. I begin by presenting the archaeological methods used to map the trails crossing the kula kai ‘a‘ā flows of Hīlea. As mentioned above, working within the limited timeframe of this master’s thesis, lacking community contacts at the outset of this fieldwork, and taking on the role of a researcher looking for community partners (Atalay 2012), I was not able to implement a collaborative, community-based research design for my study of trails. I instead employed a hybrid approach to documenting the trails, using them as a starting point for connecting with community in Ka‘ū,
and mapping them as potential routes for future, community-based research if there is an interest in the community. As I began documenting the trails, I also began to get out in the community, making a concerted effort to connect with individuals and community groups in Ka‘ū, sharing my community-based research goals, listening to their ideas and concerns regarding issues of heritage, and helping wherever and whenever I could. I discuss the specific methods used, and the success of my community engagement, in the concluding section of this chapter. While I began my field research with the trails of Hīlea, and eventually spent 21 field days recording 14.5 km of trails across the ‘a‘ā, I spent countless more days meeting and working with the Ka‘ū community. Through community engagement, I have met many new people, and formed community relationships in Ka‘ū that have already begun to foster the seeds of true community-based, collaborative research.

*Documenting Trails Across the Kula Kai ‘A‘ā of Hīlea*

Initial archaeological documentation of the landscape of movement inscribed within the kula kai ‘a‘ā flows of Hīlea is presented in an archaeological reconnaissance report prepared for the County of Hawai‘i by Clark and Rechtman (2013). Fieldwork for that study, conducted by myself and four other archaeologists in February and March of 2013, included the systematic survey of the County of Hawai‘i owned portions of the ‘a‘ā flows makai of Highway 11. Survey was accomplished by walking straight line, pedestrian transects across the entire area. Features encountered during the reconnaissance, including the trails, paths, and roads, were plotted on a 1:1000 scale map using a Garmin 76s handheld GPS units (Figure 8). This information, augmented with data collected during earlier archaeological studies (Bishop Museum 1961; Ching 1967; Hansen 1968; Emory 1970; Mann and Bowen 1976; Stokes 1991; Tulchin et al. 2006; Clark and Rechtman 2013), was used by Clark and Rechtman (2013) to inform a discussion of the general archaeological settlement patterns of the area, provide the County of
Hawai‘i with an accounting of historic properties present on their lands, and to present recommendations concerning the future management, stewardship, protection, and documentation of the cultural features identified therein.

During the current thesis fieldwork, I revisited the network of trails, paths, and roads documented by Clark and Rechtman (2013) within the kula kai ‘a‘ā flows of Hīlea and mapped them in greater detail. The goal of the thesis fieldwork was to build a Geographic Information Systems (GIS) database of the trail network that could be incorporated into community stewardship and regional planning efforts, and used to aid in various archaeological analyses of the trail data. Using a Trimble® Geo 7x handheld GPS unit to record the GIS information, I walked each trail segment identified within the ‘a‘ā landscape, first in one direction, scouting the trail, clearing some of the obscuring vegetation, taking photographs, writing notes, and collecting points at various types of cultural material encountered along the way (i.e. water-worn stepping stones, coral fragments, marine shell, historic artifacts, cairns and other built features, etc.), and then returned following the same route, collecting a GIS path for the entire length of the trail segment. The collected GIS data was processed and analyzed using Trimble® GPS Pathfinder Office® and ESRI ArcGIS 10.1 software. The results of the archaeological trail documentation are presented in Chapter 4.

Finding Community Along the Kula Kai Trails of Hīlea

It is important to state that I am not in Ka‘ū to study the people in the community, but rather to learn from them. I spend time in Ka‘ū because I really enjoy being there and I want to become a contributing member of the community, who as an archaeologist can assist with issue of heritage and its management. While my work has afforded me the opportunity to spend a fair amount of time in Ka‘ū over the years, getting to know the landscape and the cultural sites it contains, for my thesis research, I have attempted to get to know the community better, rather
than just the archaeology (Kawelu 2015). As Atalay (2012:89-127) has described, making the initial connection with community, and building a solid foundation of communication and mutual respect is the most important and time consuming part of the CBPR process. It is not until community partnership is established that collaborative research questions can be asked.

This thesis reflects the early stages of community-based archaeology. It addresses the need for finding community and more inclusive methods of studying the Kanaka Maoli past, understanding the basic principles of CBPR, and examines one particular landscape in which this new trajectory for Hawaiian archaeology (Kawelu 2015) may be implemented. Not knowing many people in Kaʻū when I first began my research, I am still engaged in the process of connecting with community, establishing relationships, learning about the particular needs of the various stakeholders, exploring lines of communication, and building trust. Engaging the community has brought me outside of my comfort zone, but has also been the most rewarding part of the journey. Although I approached this first step along the path to community-based archaeology with some initial trepidation, I have found the Kaʻū community to be very open and welcoming, and deeply interested in issues of heritage and landscape. As I did not receive institutional review board (IRB) approval for research on human subjects, I do not go into great detail here concerning the particular communities that I have thus far met, or the early collaboration that has already begun. Instead, to help other archaeologists, who may be struggling with finding a community as I first was, I present a few of the basic steps that initially helped me meet people in Kaʻū, and discuss some of the connections I have made thus far. In the concluding chapter of this thesis, I attempt to connect what I have learned from the community, and their values, with the study of trails crossing the kula kai ʻaʻā flows of Hīlea.
I began the process of meeting community during the fall 2015 semester at UH Hilo, initially by attending public meetings and site visits in the district, showing up at community events and gatherings, contacting local non-profit organizations, and volunteering for community work days. The first meeting I attended in Kaʻū was put on by the Department of Hawaiian Home Lands (DHHL), and included an afternoon community site visit to the DHHL property at South Point, followed by a community meeting in Nāʻālehu that evening. That meeting opened my eyes, not only to the poor state of the DHHL lands and its infrastructure in Kaʻū, and the unfortunate position that the Kanaka Maoli homesteaders have been put in because of it, but also to issues of unfettered access and the impact it has had on natural resources and cultural sites of the district (Townscape 2016). As one of the few remaining rural areas on Hawaiʻi Island, residents of Kaʻū feel that is becoming overrun by outsiders who do not care for the land, the ocean, or the resources they contain. Access—who is allowed to access to lands and how they are allowed to do it—is one of the major issues facing the Kaʻū community at this time (Kaʻū CDP 2015). This is an issue that ties directly into heritage management and the study of trails.

Since the fall of 2015, I have met many individuals in the community at events and meetings, in the field on site visits, and even walking along the trails of Hīlea. The more events I attended, the more people I got to know. Soon, as community members began to recognize my face, conversations become easier and each new encounter reaffirmed an existing relationship. In this manner, I have slowly begun to establish a foundation of trust and mutual respect within the community. Now when I attend an event or meeting in Kaʻū I always see familiar faces. I believe this is the space from which my participation in collaborative, community-based approaches to heritage management will eventually grow. Time, or the lack of it, is one of the biggest obstacles to overcome when attempting to participate in community-based research. Everyone is busy with
their daily lives, and it is often difficult to find the time necessary to accomplish collaborative goals. This is why the first step of the CBPR process generally progresses quite slowly (Atalay 2012).

At the outset of this research I made a special effort to reach out to community groups working in the vicinity of the Hīlea ‘a‘ā flows, including Nā Mamo O Kāwā, who has applied twice for PONC stewardship grants of the county purchased lands there. Nā Mamo O Kāwā is a Hawaiian organization comprised of life-long Ka‘ū residents, whose members include Hawaiian cultural practitioners, academics, ecologists, educators, and natural resource managers. They regularly conduct beach clean-ups with youth groups at Kāwā (Figure 9), maintain the trails leading to the beach, and keep the fresh water springs free of sand and flowing into Ka‘alāiki Fishpond. They have also taken it upon themselves to install trash cans at the beach area, and to remove the rubbish on a regular basis. In their most recent PONC stewardship grant request, Nā Mamo O Kāwā proposed to hire a local community member to take care of the beach area, and to provide security and maintenance at Kāwā on a part-time, daily basis.

At the request of Nā Mamo O Kāwā, on their behalf, I have testified at a PONC commission committee meeting and a county council finance committee meeting in support of their stewardship grant request for 2017 (Nā Mamo O Kāwā 2017). Hopefully, the funds will be released soon and they will be able to move forward with their full vision for the community stewardship of Kāwā. Those plans include vegetation removal from, and periodic monitoring of, some the cultural sites along the existing access routes and near the beach, and reestablishing (clearing) the public access easement that follows the alanui aupuni from Kāwā to Hōkūkano. I have been asked to help with these tasks, and I am listed in the grant proposal as a consultant to the group. I have also spoken with the other non-profit organizations that applied for PONC
stewardship grants at Kāwā, including The Honu Project, Team Hawai‘i International Athletics, and the Hawai‘i Wildlife Fund, and I have offered to help with their projects as well. I have thus far attended a workday with the Hawai‘i Wildlife Fund, which is in the process of clearing invasive grasses from the Ka‘alāiki Fishpond (Figure 10), a project that they will resume again when the county PONC funds are made available later this year.

![Figure 9](image)

**FIGURE 9. Nā Mamo O Kāwā working with a community youth group to clean up the beach at Kāwā (Photo by author, 2016).**

I have also found community by chance. One day, while conducting summer fieldwork at Hīlea, I encountered a Kanaka Maoli man from Kaʻū hiking with a group of kids along the alanui aupuni. We stopped to talk, and found that we both had a common interest in trails. Since we first met during the summer of 2016, he and I have interacted on a regular basis throughout this thesis research. It turns out that he is actually the Kaʻū board member on the Nā Ala Hele Hawai‘i Trail & Access System (DLNR 1991) advisory council for Hawai‘i Island, and I have
attended one of their meetings at his invitation. He and his wife also run ‘Uhane Pōhaku Nā Moku O Hawai‘i, a Pāhala-based non-profit organization that works with at-risk youth from around the state by employing cultural-based learning strategies integrated within contexts of environmental education and traditional Kanaka Maoli food practices. Their mission in Ka‘ū is to restore and preserve natural environments and selected cultural sites through long-term stewardship agreements, to engage youth, family, and community in reconnecting with land, culture, and nature through those restoration and preservation efforts, and to create opportunities for place-based learning and healing through the concept of “Pu‘uhonua.”

FIGURE 10. Hawai‘i Wildlife Fund working with community members to remove invasive grasses from the Ka‘alāiki Fishpond at Kāwā (Photo by author, 2016).

To help accomplish these goals, they run Palehua Farm Site in Wood Valley and Hale ‘Ōhi‘a Pu‘uhonua, a house for at risk youths in Pāhala. ‘Uhane Pōhaku Nā Moku O Hawai‘i is currently engaged in an ‘Ō‘io Fishery Project designed to help youth develop business skills
through the preparation and marketing of dried fish, and the community restoration and
stewardship of Kohāikalani Heiau on Makanau (Figure 11) and Hilo‘e Fishpond in Nīnole. They
also organize the Ho‘okupu Hula No Ka‘ū Cultural Festival, a free, yearly event for community
in Pāhala, and offer free hula classes to the community there. I have been asked by ‘Uhane
Pōhaku Nā Moku O Hawai‘i to assist with the restoration of Hilo‘e Fishpond (located on state
land at Kōloa Beach, along the eastern edge of the Hīlea aʻā flow), and I currently serve as an
advisory member on the board of their non-profit organization. Additionally, ‘Uhane Pōhaku Nā
Moku O Hawai‘i has an interest in participating in a collaborative effort to clear some of the
trails along the Nīnole side of the Hīlea ‘aʻā flows so that they can once again be used by
community members for coastal access purposes.

FIGURE 11. ‘Uhane Pōhaku Nā Moku O Hawai‘i working with community members to
steward and restore Kohāikalani Heiau on Makanau (Photo by author, 2016).
I have also been working closely with the Ala Kahakai National Historic Trail (NHT) staff (National Park Service 2009) and the Ala Kahakai Trail Association (ATA) in Kaʻū throughout this thesis research. The mission of the ATA, whose board members are lineal descendants of the communities through which the Ala Kahakai NHT passes, is to support and guide a community-managed trail—by implementing protocols and respect for Hawaiʻi’s past, present, and future—in such a way that honors those who came before and perpetuates it for those to follow. I reconnected with the Kaʻū board member of the ATA, who I had previously met before while conducting an archaeological inventory survey in Kaʻū (Clark et al. 2013), at the Kaʻū Coffee Festival in May of 2016. Since that time we have met regularly, often spending weekends walking trails, looking for cultural sites, and discussing a diverse range of heritage issues in Kaʻū. I have also attended several Kaʻū site visits with ATA board members and the Ala Kahakai NHT staff during the last year (Figure 12). The ATA’s and Ala Kahakai NHT’s commitment to community is commendable, and I have learned quite a bit just through interacting with them and observing how they bring heritage alive through community involvement. The Kaʻū board member of the ATA, in particular, works tirelessly to protect lands and cultural sites in Kaʻū, and he has truly inspired me, through his commitment, drive, and actions, to strive to make a positive difference in the community myself. He is also a board member of Hoʻomalu Kaʻū, a local non-profit organization committed to perpetuating, protecting and conserving the lands, health, knowledge, culture and history of Kaʻū and its people. One of the goals of Hoʻomalu Kaʻū is to create a heritage center in Kaʻū that can become a repository for the knowledge, tangible heritage artifacts and documents of the district. There is a great need for this type of heritage planning in communities across Hawaiʻi, and I have offered to help their organization in any way that I can to make the heritage center a reality.
Creating a regional trail access system in Ka‘ū is a key component of the Draft Ka‘ū Community Development Plan (CDP) finalized in 2015, but still awaiting the approval of the County Council and the signature of the Mayor (Ka‘ū CDP 2015). I attended the last meetings of the CDP process, as it was winding up in 2015 after nearly ten years of diligent work by the Ka‘ū community putting it together in collaboration with the County of Hawai‘i. The plan, and its proposals, are thorough and thoughtful, and include very detailed recommendations for protecting and perpetuating the cultural sites and heritage of Ka‘ū through community-based, collaborative actions, and the role that trails can play in that effort (Ka‘ū CDP 2015: Chapter IV.1; Appendix V4A:10-13, 24-32, 57-64, 85-87, 124). Trail organizations, such as Nā Ala Hele and Ala Kahakai NHT, are tapped for a key role in making the regional trail system proposed in the Draft Ka‘ū CDP a reality, and my thesis research may help advance some of the CDP strategies arrived at by the Ka‘ū community. To see how the existing trail network in Ka‘ū is
currently interpreted and utilized, and to meet the communities that are using these trails presently, I have attended several guided trail hikes within the Volcano and Kahuku Units of the National Park (Figure 13). These hikes have provided me with a useful perspective, both in terms of dos and don’ts, regarding the potential management, interpretation, and community use of any regional trail network that may be developed in Kaʻū, inclusive of the routes crossing the kula kai ‘a‘ā of Hīlea.

![Figure 13](image.png)

**FIGURE 13.** A July 2016 guided hike along a section of the Puna-Kaʻū coastal trail through the Volcano Unit of the National Park (Photo by author).

During the course of my thesis research I have also worked with other groups in the community to help with issues of heritage that directly involve the State Historic Preservation Division (SHPD) and obtaining permitting for undertakings that will positively affect cultural sites. I assisted the Edith Kanakaʻole Foundation in preparing an archaeological inventory survey of a two-acre area surrounding ‘Imakakāloa Heiau, a hula heiau in the uplands of Kaʻalāiki Ahupua’a (Figure 14). The Edith Kanakaʻole Foundation is conducting research in this area in
collaboration with hula practitioners, other cultural practitioners, the community, Office of Hawaiian Affairs, the University of Hawai‘i at Hilo Heritage Management Program, State Historic Preservation Division, and private land owners in the area in an effort to restore the heiau for cultural uses (Mossman 2017). I have also been communicating with SHPD on behalf of Ka ‘Ohana O Honu’apo, a non-profit community group that stewards the county lands around Honu‘apo Beach Park, to help resolve issues regarding a never completed archaeological inventory survey of a portion of the property that is preventing the organization from moving forward with community plans for park development and the restoration of the marine estuary there.

Last, but not certainly not least, the fall 2016 and spring 2017 semesters I have spent interning nine hours a week with The Nature Conservancy (TNC) of Ka‘ū. My time spent with TNC has proved invaluable to this thesis research, and helped me better understand the Ka‘ū community and the issues of conservation and protection of resources that they are currently facing. The knowledgeable TNC staff, all members of the Ka‘ū community, and the Kaiholena forest preserve they manage in upper Hīlea Nui Ahupua‘a (Figure 15), has enabled me to learn about community-based approaches to natural resource conservation, and the importance of considering Kanaka Maoli connections to natural resources within a cultural landscape framework. It has also driven home for me the importance of the mauka-makai connection in Hawaiian land management, where the mauka rains supply the makai springs that bring life to the community; if we want to promote healthy thriving communities, we must also promote healthy thriving forests and watersheds.
FIGURE 14. May 2016 community site visit at ‘Imakakāloa Heiau, Ka‘alāiki Ahupua’a, conducted by the Edith Kanakaʻole Foundation (Photo by author).

FIGURE 15. TNC staff within the Kaiholena forest preserve (Photo by author, 2014).
I have been thinking a lot about this mauka-makai connection, and how Kanaka Maoli trails can inform us of past land use and resource conservation practices, bringing them together with present and future conservation efforts. I began thinking seriously about these ideas after attending a several day climate change boot camp in Kiolaka’a, Ka‘ū in August of 2016, where I was asked to speak about my trail research (Figure 16). In Hīlea, there is a clear connection between the springs at Kāwā and Nīnole, and the upland forest preserve managed by TNC, and there is consequently a need to maintain a close relationship between community groups working in all three areas. Understanding the ancient trail system can provide evidence of past connections between the coast and uplands, and can inform future management decisions. It could also provide routes of connection that will help illustrate this point to others, and perhaps even bring researchers and communities from many different backgrounds together in a way that will lead to real changes in how we perceive, deal with, and mitigate environmental degradation and change. The study of trails in Ka‘ū has certainly helped me connect with community, and all of this community interaction has allowed me to achieve a better understanding of the importance of heritage (including natural resources) to the people of Ka‘ū, and ways in which I can help with its management. Getting to know the community better, rather than just the archaeology, has further reinforced in me the importance of transitioning to the ideals of community-based archaeological practices in Hawai‘i (Kawelu 2015).
FIGURE 16. With participants in a climate change boot camp, at a petroglyph field in Waiʻōhinu Ahupuaʻa, along the route of the coastal alaloa (Photo by author, 2016).
CHAPTER THREE
LIULIU—TO GET READY, TO PREPARE FOR A JOURNEY\textsuperscript{11}

\ldots\text{After all these years,}
\text{we are being told that the road}
\text{will be closed. Those who propose it}
\text{don’t know the road is alive.}
\text{Give up the road they tell us}
\text{and it will be replaced}
\text{with a sign that says}
\text{we can get to the beach this way,}
\text{only don’t get off the path}
or cut across the grass,
\text{and hang on to your children}
\text{not to mention don’t loose your}
\text{cooler until you hit the sand.}
\text{For all your troubles}
\text{there’ll be a comfort station}
in the parking lot (a comfort to whom?)
\text{and even a concrete trail}
to mark where the old road once passed
between the hotel and the beach,
\text{open so many hours a day}
\text{and closed when the sun goes down…}

From \textit{Ka Mo`olelo o Ke Alanui}
The story of the road
By Dana Nāone Hall, 1985\textsuperscript{12}

Standing on the shores of Nīnole (Figure 5), on the sands of Kōloa (Figure 17),
\text{anticipating the ascent to Hīlea and the journey across the \textquotesingle\textquotesingle aʻā to Kāwā, I center myself and}
silently ask permission to enter, permission to seek the knowledge of this place and those in the
distance beyond, and the wisdom to understand that which is given to me. In return, I promise to
do all that I can to help protect and perpetuate this wahi pana, to help bring new life to the land,
to make it live again for future generations. The morning sun has disappeared behind a bank of
clouds low on the eastern horizon. The wind has gone silent. I continue to wait with nervous
anticipation. The beach pebbles pā paʻina (click) beneath my feet as I shift back and forth

\textsuperscript{11} As defined by Andrews (1836:86).
\textsuperscript{12} Full poem printed in Tengen (2013:36).
waiting, hoping to continue on my journey. The ‘ōlelo no‘eau “‘Ili‘ili hānau o Kō-loa, ka nalu ha‘i o Kāwā, birth pebbles of Kō-loa, breaking waves of Kāwā” (‘Ōlelo no‘eau # 1404, Pukui 1983:152), comes to mind. I am standing amidst the famed ‘ili‘ili hānau o Kōloa, the birth stones of Kōloa, male and female stones renowned for their ability to reproduce and multiply; the breaking waves of Kāwā (literally “the distance”)¹³ await on the other side of the ‘a‘ā flow (Kelly 1980). When the Reverend William Ellis passed this way in 1823, he was told by the residents of Nīnole that Kōloa was also:

…a wahi pana (place famous) for supplying the black and white konane stone; and also the stones for making small adzes and hatchets, before they were acquainted with the use of iron; but particularly for supplying the stones of which the gods were made, that presided over most of the games of Hawaii. Some powers of discrimination, they told us, were necessary to discover the stones, which would answer to be deified. When selected, they were taken to the heiau, and there several ceremonies were performed over them (Ellis in Kelly 1980:33-34).

Indeed, it was from this very beach that the stones used to build and pave the famed Kohāikalani Heiau were taken (Remy 1868; Kelly 1956:37, 1980:4-6; Stokes 1991:128). Named for the despotic chief of Ka‘ū, who oversaw its construction and then became its first sacrifice, this massive heiau luakini still stands, partially in ruin, in the uplands of Hīleia on the brow of the flat-topped hill of Makanau (Figure 11), two and a half miles from where I stand. In order to build it:

…All the men in the district were conscripted to transport stones from Koloa beach at Ninole. They formed a human chain and passed the stones up to the site in baskets. The taboo for building such a structure was strict. Not a word could be spoken. If a stone dropped, it could not be picked up. This work took several weeks…(Kelly 1956:37).

The work continued even after all the stones used to build the heiau structure were put in place. Without giving his people a break to tend to their crops, Kohāikalani ordered that they cut the largest tree in the forest so that it could be carved in the image of the god and erected at the

¹³ Translated place names are from *The Place Names of Hawai‘i* by Pukui et al. (1974) unless otherwise cited.
The weary maka‘āinana (literally “people that attend the land”) were forced to drag the tree several miles through the forest to Makanau, where they were told to pull it up the steepest side of the pu‘u to the heiau. This last order was one too many, and the people of Ka‘ū conspired with the high priest overseeing the construction to kill their oppressive leader. Ultimately, Kohāikalani was tricked and crushed to death beneath the image of the god he himself had ordered pulled up the steep pu‘u (Kelly 1956:37). It was through this action, and similar actions perpetrated against other abusive chiefs, that the people of Ka‘ū earned the moniker, “Ka‘ū Mākaha,” or “Fierce Ka‘ū” (Kelly 1980:1).

As I wait for a sign that my whispered request has been heard, that my journey across the ‘a‘ā of Hīlea can begin, I try to recollect more of the mo‘olelo of Nīnole. Glancing back towards the rutted four-wheel drive track that brought me to Kōloa, I think of the old fishponds at the
outlet of Nīnole Gulch. How they were once filled by abundant springs of icy, fresh water that sustained life within this formerly populous coastal fishing village (Lyman 1846:9-10; Handy and Handy 1991:605-608). The rutted road must cross the largest pond, Nīnole, and its inner pond, Hiloʻe. Both were nestled along the eastern edge of the towering ‘aʻā flow, filled by the springs of Pūhau (formerly Puaʻihau; literally, “icy-bubbling-water”) and Kauwale (literally, “useless-landing”), buffeted from the ocean waves by a wide wall of neatly stacked basalt (Handy and Handy 1991:607; Kelly 1980:24). These ponds are now gone, the springs buried beneath tons of soil and boulders that washed through Nīnole Gulch during severe flooding in the winters of 1979 and 1980 (Clark 1985:63; Rosendahl and Rosendahl 1986:18). The fishpond walls were flattened by large waves nearly a decade earlier (Kelly 1980:24). Only a thin channel of brackish water remains near the eastern edge of Nīnole Pond to attest to their storied existence. The pāhoehoe hummocks that once helped form the seaward extent of the wall protrude from the ocean depths 30 feet off shore. A third pond, filled by the springs of Kauhewa (Handy and Handy 1991:606), still remains, now weed choked and stagnant with no outlet to the ocean, near the boundary between the ahupuaʻa of Nīnole (literally, “bending”) and Wailau (literally, “many-waters”) to the east of the others. In the 1970s, the developers of Sea Mountain Resort built Nīnole Cove, a small landscaped park near its backshore edge (Clark 1985:64), but that too is gone, overgrown and forgotten, buried beneath Guinea grass and years of neglect.

I hear a faint rustling in the distance, and I nervously scan the tall grass, my eyes searching along edge of the ‘aʻā flow as it disappears up Nīnole gulch in a tangle of Java plum. Nīnole has a reputation as a notoriously bad place for male travelers (Beckwith 1940:264; Handy and Handy 1991:606-608; Maly 1992:145; Cordy 1994:20). The moʻolelo tell of a mysterious old woman named Luahinekaikapū (literally, “old hag”), who once lived not far from the
fishponds, in a cave called Ke Ana Kaualehu (literally “the cave of settled ashes”).

Luahinekaikapū is said to have been the mother of the namesakes of these lands, the beautiful, but cruel, Nīnole, and her sister, Wailau (Maly 1992:146). When they lived, the people of Punalu’u were afraid to get water from the springs (Handy and Handy 1991:608), because:

Luahinekaikapū and her family captured travelers along the trails and shore. Killing her victims, she stripped the flesh from their bones, and used the bones as fire wood for her cooking. The bones settled as ashes (Kau-a-lehu) in her fire pit (Maly 1992:142).\(^{14}\)

Even those traveling in canoes were not safe, as:

…Ninole the ogress used to go to the beach near this spring [Kauwale]. Where she could be seen by men passing in canoes. She would beckon to them and they would come ashore. She invited them to eat, and led them to the cave in which her mother lived. When they entered, the cave mouth would close. The men were trapped; some were eaten, some were tormented and starved (Handy and Handy 1991:608).

This is the reason that the spring along the east side of the Nīnole Pond is named Kauwale, or “Useless Landing” (Handy and Handy 1991:608). When Luahinekaikapū lived at Nīnole it was useless to land there because you would not survive.

The sudden sound of a wave breaking louder than its predecessors draws my attention back to the ocean. I recall another old saying, “Ua ku‘i pihe hanehane a ke kai, Kai Kōloa e nu nei i Kāwā e,” or “A ghost like murmuring rises from the sea, it is the ocean of Kōloa which rumbles at Kāwā” (Maly 1992:145). Recalling these words, I think of how the April 2, 1868 tsunami must have devastated this area. On April 18, 1868 the Hawaiian language newspaper, Ka Nupepa Kuokoa ([sec. 16] 1868), reported that all the coastal houses of Ka‘ū between Ka‘alu‘alu and Keahou were lost to the sea, and that at Nīnole two men, Kapuuhonua and Hanoa, and one woman, Kamoka, were swept away by the waves. A third man from Nīnole, Holoua, was also swept out to sea, but remarkably, found his way back to shore (Kelly 1980:40-

\(^{14}\) From Ka‘ao Ho‘oniua Pu‘uwai no Ka-Miki (The Heart Stirring Story of Ka-miki) originally published in the weekly Hawaiian-language newspaper Ka Hōkū o Hawai‘i over a four year period from 1914-1917. Compiled and translated by Maly (1992).
The story of his narrow escape, still well remembered in Kaʻū, is told by the School Inspector-General, Abraham Fornander, penned in an April 7, 1868 letter, published in the April 29, 1868 edition of the *Hawaiian Gazette*:

I have just been told an incident that occurred at Ninole, during the inundation of that place. At the time of the shock on Thursday, a man named Holoua, and his wife, ran out of the house and started for the hills above, but remembering the money he had in the house, the man left his wife and returned to bring it away. Just as he had entered the house the sea broke on the shore, and, enveloping the building, first washed it several yards inland, and then, as the wave receded, swept it off to sea, with him in it. Being a powerful man, and one of the most expert swimmers in that region, he succeeded in wrenching off a board or a rafter, and with this as a *papa hoo-nalu*, (surfboard), he boldly struck out for the shore, and landed safely with the return wave. When we consider the prodigious height of the breaker on which he rode to the shore (50, perhaps 60, feet) the feat seems almost incredible, were it not that he is now alive to attest it, as well as the people on the hillside who saw him (in Kelly 1980:40).

As part of Fornander’s duties as the School Inspector-General, he would have been familiar with the small one-room school house, formerly perched on the ‘a‘ā flow above Kōloa Beach (Hansen 1968; Orr 2006; Tulchin et al. 2006:126-133). Today, looking up at the edge of the flow, I can just make out the seaward face of the pā pōhaku (stone wall) that surrounds the stone foundation of the old school. The floor, once paved with ‘ili‘ili, now slowly disappearing beneath a blanket of scrubby Christmas-berry, hunkered down within the enclosure, hiding from the wind. Did the school survive the giant waves that rolled ashore on that frightful day at the beginning of April, nearly one hundred and fifty years ago? Was it destroyed and rebuilt, or was it left to deteriorate as the coastal residents of this part of Kaʻū, their houses gone, moved inland or elsewhere? The fishpond walls were surely damaged by the tsunami, but they were rebuilt, and endured for a hundred more years (Kelly 1980:24). What happened to the residents of Ninole? A passenger on board the schooner *Oddfellow*, which tried to land at Punalu‘u on April 6, 1868, but was deterred by rough seas, reported that only three houses remained there (Brigham 1909:103-104). Was one of these the house of a man named ‘Ai, who died at Ninole in 1887 (Kelly 1980:82)? He was the last caretaker of one of Kaʻū’s most famous sharks, Keali‘ikaua o
Kaʻū, who was born at Nīnole, and served its residents, and all the residents of the Hawaiian Islands, by killing sharks that ate human flesh (Kelly 1980:Appendix B).

At the thought of Kealiʻikaua o Kaʻū, a sudden gust of wind kicks up across the black sands of Kōloa and catches the brim of my hat. The sun bursts forth. Finally free from the parting morning clouds, it sends shimmering rays of light skipping off the surface of the churning ocean, radiating over the beach, climbing up and onto the ‘a‘ā, and dancing out across the pastures and forests that lie beyond. This is the sign that I have been waiting for. It is not an assurance of physical or spiritual safety, but an acknowledgement of my promise to respect the place, the people, and the kūpuna of Kaʻū, which I interpret as tacit permission for my journey across the ‘a‘ā to begin. Moving now, I trek slowly along the beach, and passing the remains of a recent camp fire tucked in a clearing of beach naupaka, I look mauka. My eyes linger on Makanau (Figure 18), a brilliant green in the morning sun, and I think of Keōua Kūʻahuʻula looking out across the lands of Kaʻū in 1791 (Kelly 1980:50; Green 1993; Ellis 2004:197-199). I imagine him solemnly surveying this windswept coast, the lands of his kūpuna and moʻopuna, his knowing eyes moving slowly from the ponds of Nīnole, across the dark, jutting ‘a‘ā of Hīlea, lingering on the crashing waves of Kāwā and the reflecting waters of Kaʻalāikiʻs fishpond, before greeting his uncles and departing one last time. As I climb the old road from Kōloa up the eastern edge of the Hīlea ‘a‘ā flow, I pause to look back along the shores of Nīnole, Wailau, and Punaluʻu, across the brown fairways of the Sea Mountain golf course, the concrete and the wood shingled roofs of the Colony I condominiums, and I wonder what Keōua would think if he could behold this once familiar landscape today.
Archaeological Research and Economic Development in Ka‘ū

In order to understand the paths that cross the ‘a‘ā of Hīlea as potential solutions to the problem of decolonizing the practice archaeology, the role that the discipline has played in shaping the current heritage landscape of Ka‘ū—and Hawai‘i in general—must first be examined. The following discussion provides an overview of archaeological research in Ka‘ū, from John Stokes 1906 survey of heiau in the district (Stokes 1991), to the first shovel test pit excavated by the Bishop Museum at Pu‘u Ali‘i Sand Dune (Emory and Sinoto 1969), to the parceling of cultural landscapes and the consulting archaeology projects of the present day. This discussion addresses the development of the regulatory system for heritage management in Hawai‘i, and examines the ties between archaeology and economic development, providing a context for understanding the kula kai ‘a‘ā of Hīlea as a metaphor for the complex sociopolitical
environment within which heritage management is currently practiced (Kawelu 2015). Finding a path to decolonizing archaeological practice requires an understanding of where the discipline has come from and why communities are often dissatisfied with it. Moving towards community-based practices of archaeology, if such methods are to be sustainable in the long run, necessitates not just creating an awareness of the problems within archaeological and Kanaka Maoli communities, but also coming up with solutions that address deficiencies in the entire system of heritage management from top to bottom. While this discussion is specific to Kaʻū, as discussed in Chapter 2, the basic issues being addressed are similar to those faced by Indigenous communities around Hawaiʻi Island, across the state, and throughout the world (Atalay 2012; Kawelu 2015).

Prior to the late 1960s, economic development in Kaʻū, driven largely by the sugar industry and its largest landowner, C. Brewer & Co., occurred without the hindrance of laws regulating environmental and historic preservation concerns. In this manner, over the course of roughly a century of unchecked economic growth, the landscape of the district was transformed into vast fields of sugarcane and ranchland with little regard for the heritage of those that came before (Handy and Pukui 1998:207-252). Many of the coastal lands of Kaʻū, prized for their rich nearshore resources, and once utilized for habitation purposes by generations of Kanaka Maoli, were not well suited to the agricultural development of the sugar industry due to the rugged nature of the terrain and the arid environment (Emory 1970; Kelly 1980; Handy and Handy 1991). By the mid-1960s, with the growth of the tourist industry, C. Brewer & Co. began to look for ways to capitalize on their coastal landholdings in Kaʻū, primarily through resort development (Kelly 1980). A site at the coast of Punaluʻu, with easy access to the highway, where a harbor, formerly used by the plantation, stood next to a beautiful black sand beach with
brackish ponds nestled amongst the coconut trees behind, was selected for the initial resort development. Today, nearly fifty years later, the Sea Mountain 18-hole golf course community (Figure 5), built by C. Brewer Properties, Ltd. in 1969 to 1972, stands out as the only coastal resort development along the entire shoreline of Ka‘ū (Group 70 International 2006).

The development of this roughly 435-acre resort property occurred in conjunction with the development of governmental laws and infrastructure that today regulate, and offer some limited protection for Hawai‘i’s cultural sites from modern development (Mills and Kawelu 2013). The history of archaeological research conducted at the Sea Mountain Resort, named for the Lō‘ihi seamount slowly rising towards the surface of the Pacific Ocean off the southeastern coast of Ka‘ū, also documents the rise of the field of cultural resource management (CRM) in the Hawaiian Islands, from its initial inception to its current position within the wider field of heritage management. Construction of the Sea Mountain Resort occurred following the passage of the National Historic Preservation Act (NHPA) in 1966, during a transitional period in the regulatory development of Hawai‘i’s historic preservation laws, prior to the effective implementation of the NHPA during the 1970s (Kirch 1999; Mills and Kawelu 2013; Kawelu 2015). The development of the resort property, and the involvement of archaeology in that process, provides a good starting point for illustrating why Hawaiian archaeology, through its historical development as a discipline, is viewed by some, especially as manifest in the field of CRM, as being in the pocket of developers, and antithetical to Kanaka Maoli concerns (Cachola-Abad and Ayau 1999; Cachola-Abad 2013; Mills and Kawelu 2013; Nāleimaile and Brandt 2013; Kawelu 2015). As with most of the archaeological projects conducted in Ka‘ū, and throughout Hawai‘i during the 1960s and 1970s, the earliest studies of the Sea Mountain Resort property were conducted by archaeologists from the Bernice Pauahi Bishop Museum (Kelly
Understanding the Bishop Museum’s role in the development of the archaeology of Ka‘ū provides a historic context for understanding later developments in the heritage landscape of the district.

Early Archaeological Research in Ka‘ū

The Bishop Museum’s initial foray into the archaeology of Ka‘ū occurred 60 years prior to the passage of the NHPA, when John Stokes began conducting fieldwork focused on identifying and describing major religious sites (heiau) on the Island of Hawai‘i (Stokes 1991). Stokes arrived in the Ka‘ū District in October of 1906 where, with the aid of an interpreter identified only as Meinecke, “he interviewed Hawaiian elders, seeking knowledge about the location and history of local heiau” (Stokes 1991:11). In his journals, Stokes describes an incident that occurred early on during his fieldwork, an incident in which he offended Hawaiian religious practitioners at Kalalea Heiau near the southern tip of the island by asking if he could pasture his mules within the heiau itself (Stokes 1991). While Stokes would later lament that this mistake cost him the chance to gather valuable information about the heiau of the district, looking back, that initial interaction between archaeologist and cultural practitioners in Ka‘ū, is emblematic of the general mistrust of the archaeological discipline that has developed within Kanaka Maoli communities through many subsequent interactions (Mills and Kawelu 2013; Kawelu 2015). Despite this setback, Stokes did ultimately manage to record a number of heiau within Ka‘ū, including two each in the ahupua’a of Hīlea (Ke‘ekū and Kohāikalni), Nīnole (Ka‘ie‘ie and Mokini), and Punalu‘u (Lamipao and Kāne‘ele‘ele), and one in the uplands of Ka‘alāiki (‘Imakakāloa). These early archaeological records have become an important source of information, not only for archaeologists practicing in Ka‘ū, but also for modern cultural practitioners wishing to reclaim and restore the traditional Hawaiian religious structures of their kūpuna (Mossman 2017).
In the 1930s, E. S. Craighill Handy and his wife Elizabeth Green Handy of the Bishop Museum began collecting ethnographic information on ancient Hawaiian agricultural techniques and related practices (Handy and Handy 1991). Much of their research took place in Kaʻū where, with the assistance of Mary Kawena Pūku‘i, they interviewed elder kamaʻāina of the district. Mary Kawena Pūku‘i was born in Kaʻū in 1895. She was the daughter of Mary Paʻahana Kealiʻi-kanakaʻole (a Hawaiian woman) and Henry Wiggin (a Caucasian man originally from Massachusetts). Initially raised as a punahele (favored child) by her Hawaiian grandmother, Poʻai-Wahine, in the traditional ways of Kaʻū, she developed a strong interest in ancient Hawaiian customs, hula, and the Hawaiian language, becoming well versed in the local lore of the district (Handy and Pukui 1998). Pūku‘i, who was taught reading and writing at the Hawaiian Mission Academy, started documenting Kanaka Maoli oral traditions and stories during her early teenage years. Around 1931, she began translating Hawaiian writings into English at the Bishop Museum, where she collaborated extensively with the Handys (Handy and Pukui 1998). In 1935, the three of them began to comprehensively record living oral accounts as told by Pūku‘i’s elder ʻohana and the kūpuna of Kaʻū. The work resulted in the publication of numerous books and articles, including two works that remain today of the upmost importance for understanding the past lifeways of Hawaiʻi, Native Planters in Old Hawaiʻi, published in 1940 (Handy and Handy 1991), and The Polynesian Family System in Kaʻu, Hawaiʻi, published in 1950 (Handy and Pukui 1998). As E. S. Craighill Handy notes in the forward to The Polynesian Family System in Kaʻu, Hawaiʻi, the 1935 interviews that formed the basis of the research for those books, were conducted at a time when there were still “enough old folk in Ka-ʻu . . . to enable us to construct a truly adequate record of many phases of the local heritage, traditions and culture of her ʻohana” (Handy and Pukui 1998:ix). By 1950, there remained only one elder kamaʻāina of Pūkuʻi’s
lineage “living in lonely solitude on the windswept plane of Kama'oa” (Handy and Pukui 1998:ix). While at the Bishop Museum, Mary Kawena Pūku‘i mentored and inspired many of the younger scholars there, instilling in them a deep respect for the Ka‘ū, and providing them with powerful knowledge for interpreting the Kanaka Maoli past of the district. As Marion Kelly writes in the acknowledgements to her ethnohistoric account of central Ka‘ū, *Majestic Ka‘ū: Mo‘olelo of Nine Ahupua‘a*:

For my introduction to Ka‘ū District, its people, places, history, and legends, I am indebted to Dr. Edward S. Craighill Handy and Dr. Mary Kawena Puku‘i. Twenty years ago, as a part-time researcher for Dr. Handy, I sat once a week with Dr. Puku‘i in her office at the Museum, talking with her about names of places in Ka‘ū, and the things she remembered about them. I recorded information she provided and located each place as accurately as possible on topographic quadrangle maps. It was from her that I first heard many of the stories about Ka‘ū and the people who lived there. Dr. Puku‘i’s infinite knowledge of Ka‘ū culture and history, and her faithful translations of Hawaiian materials over the past fifty years, have provided succeeding generations with a broad spectrum of basic data for an important time period (Kelly 1980:x).

In 1953, Amy Greenwell, a well-known resident of South Kona, discovered some unusual fishhooks eroding out of Pu‘u Ali‘i sand dune near Ka Lae (Emory and Sinoto 1969; Kelly 1969; Underwood 1969; Bonk n.d.). Ms. Greenwell, who in 1952 had volunteered with a Bishop Museum field crew excavating a rock shelter at Kuli‘ou‘ou Valley on O‘ahu (the first radiocarbon dated site in the Hawaiian Islands), brought the fishhooks to the attention of Kenneth Emory, then chairman of the Department of Anthropology at the museum. Emory dispatched an archaeological field crew to Pu‘u Ali‘i sand dune in July of 1953, where initial test pits within this ali‘i burial site revealed a well stratified cultural deposit containing artifacts, midden, and other cultural material (Bonk n.d.). By August of that year, the field crew was expanded, and put under the direction of William Bonk, a then graduate student at the University of Hawai‘i (UH) Mānoa. The following year, in 1954, the Bishop Museum launched a five-year archaeological program at the Ka Lae (Bonk n.d.). Yoshiko Sinoto, at the time a young student
from Japan, who would later receive his graduate degree from UH Mānoa, was put in charge of the overall project, and Bonk, who became a professor at UH Hilo in September of 1954, directed the fieldwork (Kelly 1969:3). The archaeological reputations of both Sinoto and Bonk, and to a lesser extent that of their mentor, Emory, grew out of these excavations in Kaʻū. As is the case with much of the archaeology practiced in Hawaiʻi (Kawelu 2015), the study of the Kanaka Maoli cultural sites at Ka Lae during the 1950s, furthered the archaeological careers of those involved, contributed to the accumulation of archaeological data, and helped build the collections and reputation of the Bishop Museum, but provided little tangible benefit to the descendant community of Kaʻū.

The fieldwork for the five-year project was conducted with volunteers during the summer months, on school vacations, and weekends (Kelly 1969:3). Two of the Bishop Museum field associates, Violet Hansen and William Meinecke, a resident of Kaʻū, kept an eye on the sites during the periods when the excavations were dormant. The study included additional excavation at the Puʻu Aliʻi sand dune (Site H1), survey and mapping of Keana, a coastal village between South Point and Kaʻaluʻalu Bay, site recording and testing at Makalei shelter cave (Site H2) in Kamāʻoa, and survey, mapping, and excavation at Wai ʻAhukini Village, below Pali o Kulani in Pākini. In particular, a lava tube shelter at Wai ʻAhukini Village (Site H8), containing a deep, stratified cultural deposit, was extensively excavated (Bonk 1969). The analysis of the archaeological data recovered from the cultural sites at Ka Lae took another ten years to complete, but in the end the collections contributed immensely to the archaeological understanding of prehistory, and they continue to contribute to more nuanced understandings of the Hawaiian past today (Lundblad et al. 2014; Mulrooney et al. 2014a).
The sequence of typological changes provided by rich quantities of bone and shell fishhooks recovered from the excavated sites were used by Emory, Bonk, and Sinoto (1959) to construct a master chronology for the Hawaiian Islands (Kirch 2011). Emory and Sinoto (1969) used radiocarbon dates generated from the sites to establish a chronological sequence for the South Point area, which at the time, was thought to be one of the earliest settled locales in the Hawaiian archipelago (Kirch 1985:81-87). Emory and Sinoto (1969), due to the large number of radiocarbon samples run (70 dates), and the number of anomalous dates obtained, were some of the first archaeological researchers in Hawai‘i to recognize issues associated with dating charcoal and other materials in the islands; problems such as old wood (i.e. drift wood collected from the coast and burned at the site that could give dates centuries older than its use) and, in the case of other materials (such as fish, marine shell, and sea urchin), the exchange of carbonate from seawater, which could cause scattered dates (Kirch 2011).

After accounting for the contamination of several samples, Emory and Sinoto (1969) suggested that Wai ‘Ahukini shelter was occupied as early as ca. A.D. 750, followed by the Pu‘u Ali‘i sand dune site between ca. A.D. 1000-1350, and the Makalei shelter sometime before A.D. 1600. Dates from Pu‘u Ali‘i sand dune and Wai ‘Ahukini shelter indicated that new fishhook forms were beginning to show up at both locations between A.D. 1250 and A.D. 1350 (Emory and Sinoto 1969), and Underwood (1969), who analyzed 97 sets of human remains recovered from Pu‘u Ali‘i, suggested that it was around the time that these new fishhooks began to be produced, that habitation in that area ceased, and the sand dune began to be used principally for burial purposes. Both the Wai ‘Ahukini and Makalei shelters continued to be utilized for habitation purposes throughout the early Historic Period.
The chronology initially proposed for the Ka Lae area by Emory and Sinoto (1969) has been reevaluated in recent years, however, and the dates of occupation have been adjusted upwards (Kirch 2011; Wilmshurst et al. 2011; Athens et al. 2014; Mulrooney et al. 2014a). Consequently, these sites are no longer considered by archaeologists to represent some of the earliest settled locales in the Hawaiian archipelago. Rather, Mulrooney et al. (2014a), who reexamined some of the earliest dates from the Wai ‘Ahukini Rock Shelter, suggest that the initial occupation of that site occurred sometime during the 14th or early 15th century A.D. and lasted through the 18th century A.D. Despite the revised chronology, the sites excavated at South Point by the Bishop Museum remain fundamental to the understanding of Hawaiian prehistory, and the materials excavated from those sites continue to offer tremendous research potential. As Mulrooney et al. (2014a:25) write, “today, over 60 years later, there is still great potential for renewed analyses of these and other legacy museum collections using modern techniques.”

The Bishop Museum conducted their reanalysis of the materials recovered from the South Point area, as part of the Ho’omaka Hou Research Initiative, a collaborative project focused on the analysis of older archaeological collections housed at the museum (Mulrooney et al. 2014b). The stated goal of Ho’omaka Hou (literally “to begin again”) is to encourage continued work with the museum’s archaeological collections by bringing together a diverse range of researchers and students for collaborative research purposes. The Bishop Museum has also made an effort to include the Ka‘ū community in this project by consulting with kūpuna of the district, conducting public presentations, and by creating a website where all of the 4,000 fishhooks recovered from the sites at South Point can be viewed and the archaeological reports for the excavated sites can be accessed (Ka‘ū Calendar 2015; Miner 2015). Visitors to the website can even play a memory

Following the early excavations of Pu‘u Ali‘i Sand Dune, the Wai ‘Ahukini and Makalei Rock Shelters, the Bishop Museum conducted additional archaeological survey, mapping, and ethnographical research at larger areas within the South Point region (Ladd and Kelly 1969; Sinoto and Kelly 1970, 1975; Landrum 1984) and beyond (Ayers 1970; Kelly and Cozier 1972; Kelly 1980; Handy and Handy 1991; Handy and Pukui 1998). These studies have also contributed immensely to the broader understandings of Hawaiian settlement patterns within the district of Ka‘ū, and across the island of Hawai‘i. It is clear from the writings of the Bishop Museum archaeologists working in Ka‘ū during the 1960s and 1970s that they were becoming increasingly concerned with the rapid pace of development, the growing number of people visiting archaeological sites, issues of looting, and the consequences it was having on the archaeological record (Ladd and Kelly 1969; Kelly 1969; Emory 1970). These concerns are largely voiced as archaeological pleas to stop the data loss, with no mention made of the cultural concerns that descendant communities at the time may have had, or how they may have felt about the archaeological excavation of their ancestral sites. As early as 1959, in the introduction to the first document produced after five years of excavation at South Point, Emory touched on the need for the better protection of the sites in the area, writing:

The future of Hawaiian archaeology depends heavily on the preservation of sites. Those remaining should be left undisturbed until examined. For the protection of these last sources of knowledge concerning ancient Hawaii we must rely upon the intelligence, understanding, and interest of the people in the area, and upon the collectors of artifacts…(Ladd and Kelly 1969:32).

In 1970, Emory prepared an inventory of archaeological and historical sites in the district of Ka‘ū for the Planning Department of the County of Hawai‘i. This was an attempt, as he puts it, to address the “very pressing need to record what survives of the Hawaiian occupation of
lands to be changed by modern developments, and to preserve and restore those sites which can illustrate the Hawaiian heritage” (Emory 1970:II). Emory notes that in Kaʻū, “because of lava flows, the aridness of the lands approaching the coast, the lack of suitable harbors and the remoteness from Hilo and Kailua harbors, the remains of Hawaiian occupation…have been so little disturbed that a well-rounded picture of its Hawaiian past can be constructed through archaeological and historical research” (Emory 1970:1). Given this excellent preservation, and the potential for the collection of archaeological data, he recommended that prior to any development, the Planning Board insist on (1) at least a general walk through by an archaeologist; (2) that if much of significance is encountered, an archaeological survey of the land be undertaken; (3) that if a developer desires to incorporate any of the encountered remains into a planned development, archaeologists “be engaged to supervise stabilization and restoration operations” (1970:III); and (4) that if the destruction of any ruins is necessary, salvage archaeology be undertaken prior to the development. Emory does not mention the cultural importance of these sites to the Kanaka Maoli community, or the concerns they may have over the loss of their heritage in the face of the impending development (Kawelu 2015).

The Sea Mountain Resort at Punalu‘u

The steps laid out by Emory (1970) were followed precisely when C. Brewer Properties, Ltd. first proposed to construct the Sea Mountain Resort at Punalu‘u (Barrera and Hommon 1972). Bishop Museum conducted the archaeological work for the Nīnole-Wailau portion of the development in 1970 to 1972 at the request of the Kaʻū Historical Society, with funding from C. Brewer Properties, Ltd. While Bishop Museum Associate Violet Hansen had previously conducted some limited site recording in the vicinity of Nīnole Pond in October and November of 1968 (Hansen 1968), the initial archaeological site survey of the larger area proposed for the resort development did not occur until March and April of 1970 (Hommon n.d.). This fieldwork,
undertaken by a crew of seven Bishop Museum archaeologists, under the direction of field supervisor Robert Hommon, resulted in the identification of 115 archaeological sites, containing a total of 216 features, with most of the features occurring in the seaward portion of the survey area. The sites were plotted on a map, assigned Bishop Museum site numbers, and briefly described, generally using no more than one or two sentences (Hommon n.d.). In June to July of 1971, Bishop Museum archaeologist William Barrera, Jr. returned to Nīnole-Wailau, with a crew of three paid workers and two volunteers, to conduct “salvage archaeology” at selected sites within the resort development (Barrera and Hommon 1972). The salvage archaeology included generating detailed descriptions of 18 of the sites identified by Hommon (n.d.), and the mapping of four sites. Excavations, undertaken at 12 of the sites, contained evidence primarily of historic era habitation activities, which Barrera and Hommon (1972:33) interpreted as an indication that the 1868 tsunami had removed “almost all traces of a fairly intensive prehistoric exploitation” from the shores of Nīnole-Wailau. Barrera and Hommon ultimately proposed eight of the habitation sites for stabilization and integration “into an interpretive plan exemplifying the history of Ka‘ū District [that] would provide a valuable amenity to the resort development to be enjoyed by visitors and residents alike” (Barrera and Hommon 1972:33). They also recommended preservation of five burial sites that local residents requested remain undisturbed. Following the salvage excavations, bulldozers removed the remaining cultural features from the Nīnole-Wailau landscape, even though no additional study had occurred at more than 100 of the recorded sites.

Archaeological study of the Punalu‘u portion of the resort property, which had not been part of the originally planned development, proceeded similarly. Violet Hansen conducted an initial site survey in 1971, Neal Crozier conducted additional survey and testing with a team of
six fieldworkers in May of 1972, and William Barrera, Jr. returned in November of 1972 and January of 1973 with various field personnel to prepare plane table maps of the recorded sites (Crozier and Barrera 1974). While the site descriptions and maps of this portion of the resort are generally more detailed, the fieldwork was less comprehensive, and only included three small areas within the overall planned development. By the time that Crozier and Barrera (1974) returned to Punalu‘u to conduct their field investigations, several previously known cultural features had been either partially or completely destroyed by bulldozers, and four of the habitation sites recommended for preservation by Barrera and Hommon (1972) in Nīnole-Wailau had also been destroyed (PBR Hawai‘i 1988). Crozier and Barrera (1974), who strongly condemned the bulldozing of sites at Punalu‘u, laid out a series of recommendations for the developer to follow in the future to help prevent any additional mishaps. They also recommend that Area I of the study, the area closest to the coast, where Kāne‘ele‘ele Heiau and numerous other adjacent structures are still present today, be pulled from any subsequent development plans. The recommendations of Crozier and Barrera (1974) came too late for many of the sites at Punalu‘u, however, as much damage had already been done, and once a site is destroyed, whether by bulldozer or archaeological excavation, it is very difficult to bring it back again. Issues with the inadvertent bulldozing of cultural sites have yet to be adequately addressed, and are still widespread in Hawai‘i today.

As Cozier and Barrera (1974) finished their report on the archaeological survey of Punalu‘u, C. Brewer Properties, Ltd. finished the initial stages of construction on the Sea Mountain Resort development. By that time, they had graded ninety percent of the of the property and removed eighty percent of the recorded cultural sites from the landscape (PBR Hawai‘i 1988; Tulchin et al. 2006). The development, once home to two coastal fishing villages
and generations of Kanaka Maoli residents, became the home of an 18-hole golf course, pro-shop, club house, the Colony I condominiums, the Aspen Institute’s conference facility, a restaurant, a gift shop, a county beach park, and a cultural center, with very little tangible evidence of heritage left on the ground to connect the new residents to the past. Today, the beach park, condominiums, and golf course are minimally maintained and still used, but the other facilities sit abandoned due to the lack of economic viability and the costs of maintenance (Group 70 International 2006). The restaurant and its parking lot are slowly disappearing beneath a tangle of vegetation as trees grow through the holes in its collapsing roof. A 20-foot long mural, depicting a scene of Punalu’u as it may have appeared prior to the arrival of Westerners more than 200 years ago, painted by famed Hawaiian painter Herb Kane in 1973, disappeared from the cultural center in 2005, stolen, along with the curved wall of the structure it had been painted on (Thompson 2005).

At the time of the initial Sea Mountain Resort development, as with many development projects in the Hawai‘i of that era (Mills and Kawelu 2013), there was a general lack of community protest, at least vocal protest covered in the media. More recent plans to revamp the resort development, after two subsequent sales of the property to new owners, however, have met with strong community opposition and have been shelved, at least for the moment (Group 70 International. 2006; Nā Maka o ka ‘Āina 1988; PBR Hawai‘i 1988). The latest Draft Environmental Impact Statement (DEIS) prepared for the resort development in 2006, proposed the construction of as many as 1,823 new residential and hotel units on the property, prompting one science student at Ka‘ū High School, among many who wrote letters in response to the draft EIS, to question “Why do you want to build on Punalu‘u? Why do outsiders have to change Hawai‘i so much?” (Group 70 International 2006).
An archaeological survey conducted in 2006 for the most recently proposed redevelopment plan, found that only 32 cultural sites remain on the Sea Mountain Resort property (Tulchin et al. 2006). While the information collected during the early 1970s by the Bishop Museum was considered sufficient to mitigate the ultimate destruction of the other 100+ identified sites, Tulchin et al. (2006:41) indicate that “any attempt to reconstruct the archaeological landscape at Nīnole and Wailau is hindered by the brevity of the information reported [in the Barrera and Hommon (1972) study].” In hindsight, the loss of these irreplaceable cultural sites that stood on the land for centuries prior to the development of a resort that may not last 50 years, seems rather short sighted, and speaks to criticisms within Kanaka Maoli communities of archaeologists confusing mitigation with preservation (Cachola-Abad 2013; Kawelu 2015). The cultural landscape of Punalu‘u, Wailau, and Nīnole has been irreversibly affected by development. This development, aided by archaeological salvage excavations, has resulted in a tremendous loss of Kanaka Maoli heritage. While these losses cannot be undone, they can help inform the future of heritage management in Ka‘ū.

Historic preservation laws and regulations enacted in the United States and Hawai‘i since the mid-1970s (King 2013) have attempted to address some of the issues with archaeological practice typified in the development process of the Sea Mountain Resort. These new laws and regulations have helped create a bureaucratic infrastructure in Hawai‘i that is meant to help protect “significant” cultural sites from the effects of modern development (Cachola-Abad 2013; Mills and Kawelu 2013). Despite steps in the right direction, the bureaucratic approach to “cultural resource” management has also had its ups and downs over the years. In recent years, a grassroots movement led by Kanaka Maoli communities wishing to take on more active roles in
the management of their own heritage has pointed out many flaws in the current system of heritage management (Mills and Kawelu 2013; Nāleimaile and Brandt 2013; Kawelu 2015).

*The Statewide Inventory of Historic Places*

As demonstrated in the example of the Sea Mountain Resort above, by the early 1970s the rapid pace of economic development was threatening to severely impact the cultural heritage of the Hawaiian Islands. To comply with the federal regulations stipulated by the passage of the NHPA in 1966, the Hawai‘i legislature delegated a State Historic Preservation Officer (SHPO) and established a State Historic Preservation program, administered through the Division of State Parks (Emory 1970). Francis Ching, served as the first staff archaeologist (Kawelu 2015), and in 1967 he journeyed to Ka‘ū to examine several sites to determine where to place National Historic Landmark plaques, stopping at the Hīlea ‘a‘ā flow to examine Ke‘ekū and Ka‘ie‘ie heiau (Ching 1967). In 1967 and 1969 the State Historic Preservation program, authorized by the state legislatures (Kawelu 2015), began to conduct a Statewide Inventory of Historic Places (SIHP) in an effort to document the important heritage sites of Hawai‘i, determine the significance of those sites, and assess their eligibility for listing on the Hawai‘i Register of Historic Places (HRHP). This initial statewide inventory documented thousands of historic properties, many of which had been previously recorded by the Bishop Museum (Kawelu 2015), and assigned each an SIHP site designation. The archaeologists conducting the survey filled out HRHP site forms for each of the sites and plotted their locations on a master set of USGS quadrangles meant to aid researchers, planners, state and county agencies in managing the diverse heritage of the islands. In 1970, a master bibliography of historic places containing more than 4,000 previously identified cultural sites was published by the HRHP (Newman et al. 1970). Following this, additional survey work was undertaken to add to the inventory, and in June of
1973, State Parks’ archaeologists began to document the historic resources of the Ka‘ū District, including sites with associated trails on the ‘a‘a flows of Hīlea (Clark and Rechtman 2013).

The Bishop Museum had conducted some limited site recording along the Kāwā edge of the ‘a‘a in 1961 (Bishop Museum 1961) and along the Nīnole edge in 1968 (Hansen 1968), mapping several features, including Ke‘ekū Heiau and a nearby house site overlooking Kāwā Bay and several trails with associated habitation structures to the southwest of Nīnole Cove. During the 1973 fieldwork conducted by the State Parks’ archaeologists these sites were assigned SIHP designations and the boundaries of the complexes (the “Kuhua Bay Complex” and the “Luu [Lu‘u] Complex”) were expanded, with the fieldworkers who conducted the survey noting that “other sites are undoubtedly to be found on the lava flow occupied by the Luu and Kuhua Bay Complexes, and a thorough survey should be made before any major alteration is made in this area” (HRHP Supplementary Feature Description Form for site 50-10-74-4370; Clark and Rechtman 2013:30). In assessing the significance of the Luʻu Complex, which was recommended for listing on the state register, archaeologists noted that:

This complex provides an excellent counterpoint to the elaborate Koloa Complex, and it may be that it shows social class differentiation. It shows an intensive use of a very barren appearing and rugged terrain, with the lava practically alive with individual features. It is quite similar to the Kuhua Bay Complex in most respects. Like the Kuhua Bay Complex, excellent research material on site distribution, feature function, and possibly even social stratification could come from a detailed mapping and excavation of the complex. Its interpretive potential is moderate, especially as a counterpoint to the Koloa Complex (HRHP Supplementary Feature Description Form for site 50-10-74-4370; Clark and Rechtman 2013:29-30).

While this initial statewide inventory was an admirable attempt to document the heritage of Hawai‘i at a time when it was becoming increasingly threatened by modern development, archaeologists conducting the survey also encountered some problems. One challenge was overcoming public perceptions of how the new laws regulating heritage would affect the rights of private property owners. This issue is illustrated in an incident that occurred just southwest of
Hīlea near the coastal boundary of Kaʻalāiki and Hōkūkano ahupuaʻa. Here, in 1973, the State Parks’ archaeologists encountered a landowner who was hostile towards having the cultural sites on his property inventoried. Two complexes on the property, the “Hawaloa Burials” and the “Wailea Complex,” known through aerial photographs and an earlier Bishop Museum study (Bishop Museum 1961), were assigned SIHP designations as part of the statewide inventory, but they were not inspected in 1973. The HRHP site forms filled out for those sites indicate that “the state survey team contacted the landowner…for permission to enter, but was unequivocally refused,” and that, “the landowner threatened to bulldoze the sites if they ever caused him any trouble” (HRHP Supplementary Feature Description Form for site 50-10-74-4374; see Clark and Rechtman 2013:31-32). In 1978, the landowner actually conducted his own archaeological survey of the property, and then had an archaeologist confirm his findings during a one day field visit (Ewart 1978). No mentions of the Hawaloa Burials or the Wailea Complex were included in the 1978 study, and only one burial feature was noted, in an area where the Bishop Museum had previously recorded 19 such features. Despite community objections, a grading permit for the construction of a single-family residence on this property was signed by SHPD during the early 2000s without requiring any additional archaeological survey (Lim 2000). Today, the fate of the Hawaloa burials, and the wisdom of allowing a house to be built on the Hōkūkano ʻaʻā flow, is still discussed by some residents of Kaʻū.

The above examples illustrate a general problem with the information collected as part of the Statewide Inventory of Historic Places during the 1970s, and the bureaucratic system set up to manage it: the records are not well maintained or accessible, which has indirectly resulted in a tremendous loss of Hawaiʻi’s heritage over the years. Currently, a single set of the original HRHP forms for the entire state are stored in a filing cabinet at the SHPD office in Kapolei.
While the master set of USGS maps has been copied, and is more widely distributed, the site records themselves are slowly disappearing from the filing cabinet (Clark and Rechtman 2013; Rechtman 2016). Many of the original HRHP forms for Ka‘ū, and across the state, are missing and only the locations of those sites are now known, not the specifics of the cultural features they contained. This is the case for the “Kailiilii (Seaward) Complex II” along the shore of Ka‘alāiki Ahupua‘a, near Hīlea, where the original site records cannot be found. Fortunately, at that location, at least the features are still present (Clark and Rechtman 2013). At site 50-10-74-7358 located in Kaunāmano Ahupua‘a within the town of Nā‘ālehu, all that remains today is a dot with an associated number in the SHPD GIS database. The HRHP records for the site have been lost, and a recent inspection of its former location did not reveal the presence of any existing historic properties, just conjectures about what the dot may have once represented (Rechtman 2016).

**Historic Preservation, Cultural Resource Management, and the Trails of Ka‘ū**

A review process for development projects conducted under the purview of the state and counties of Hawai‘i was established in 1976 when the state legislature passed Chapter 6E of Hawai‘i Revised Statutes (Mills and Kawelu 2013; Kawelu 2015). This legislation declared that “the historic and cultural heritage of the State is among its important assets and that the rapid social and economic developments of contemporary society threaten to destroy the remaining vestiges of this heritage”, and, “that it shall be the public policy of this State to provide leadership in preserving, restoring, and maintaining historic and cultural property…for future generations, and to conduct activities, plans, and programs in a manner consistent with the preservation and enhancement of historic and cultural property” (Hawai‘i Revised Statutes 1976). The passage of Chapter 6E, which initially helped fund the State Historic Preservation
program administered by the Division of State Parks, eventually led, by 1990, to the creation of a separate State Historic Preservation Division (SHPD) with its own staff of professional preservation specialists administered by the Department of Land and Natural Resources (DLNR) (Collins 2010; Mills and Kawelu 2013). The state mandated laws addressing the protection of historic properties, and the SHPD requirements that developers complete archaeological surveys of their properties prior to development, eventually led to the establishment of private archaeological consulting firms in Hawai‘i. The 1970s saw the formation of the first of these firms, including Francis Ching’s Archaeological Research Center Hawai‘i (ARCH) on Kaua‘i and Paul H. Rosendahl, Inc. (PHRI) in Hilo, and in the mid-1980s the Bishop Museum even began its own consulting archaeology program, Applied Research Group, headed by Paul Cleghorn and Aki Sinoto (Kawelu 2015). The number of archaeological consultants licensed in the state steadily increased throughout the 1980s, until by the 1990s there were more than 26 firms operating in Hawai‘i, a number that has remained fairly steady up to the present day (Mills and Kawelu 2013). As a result of SHPD requiring archaeological inventory surveys of parcels prior to development, many additional cultural sites across the Hawaiian landscape began to be documented by archaeologists, and today the number of listings in the State Inventory of Historic Places for the County of Hawai‘i alone exceeds 30,000 sites.

Regional Syntheses and Settlement Patterns

Despite the number of sites recorded, historic preservation conducted for the purposes of economic development has a narrow purview, focusing on specific parcels of land rather than the overall heritage landscape. Archaeological inventory surveys tend to record pieces of many overlapping landscapes, yet rarely capture the full scope of past activities within a parcel (Bender and Winer 2001). Often archaeologists conduct historic documentary and ethnohistorical research after conducting fieldwork, and thus fail to anticipate and record important cultural
features within their limited study areas (Cordy 1994a). By the late 1980s, the State Historic Preservation program, operating under the Division of State Parks, recognized the growing need for regional planning efforts in order to provide a data base for the overall management of heritage beyond simply the inventory of archaeological and historical sites within specific parcels (Tomonari-Tuggle 1988). In North Kohala, on the island of Hawai‘i, where proposed resort and housing developments during the late 1980s were potentially going to have major impacts on the community, the state hired Myra Jean Tomonari-Tuggle of International Archaeological Research Institute, Inc. (IARI) to prepare a regional study of the heritage landscape “as part of a broader effort to design a strategy for the management and protection of cultural, natural, scenic, and outdoor recreation resources in the district” (Tomonari-Tuggle 1988:i). That study was groundbreaking in many ways, not only because it provided a regional historical context that could be used for interpreting and managing the sites recorded by archaeologists, but also, more importantly, because it attempted to connect the cultural significance of that tangible heritage to the living community of North Kohala. The introductory paragraph to that report, in which Tomonari-Tuggle takes the view that the structural remains of heritage are a form of material continuity to which are added the various understandings of the past, is just as true today as it was thirty years ago:

The substance and strength of a community are founded in the cultural and historical traditions shared by the individuals who comprise the community. These traditions are the heritage which provide a sense of identity with which the community builds its place within a broader geographic and cultural context. Planning for the management of resources in an area necessitates an understanding of the community, and the processes which create a sense of identity among a group of individuals to each other, to a place, and to a common history (Tomonari-Tuggle 1988:i).

Although, the community based tone of the North Kohala study did not carry over into later studies conducted by the State Historic Preservation Division, at least regional planning efforts on Hawai‘i Island did continue into the mid-1990s, as former SHPD archaeologist Ross
Cordy, seeing a need for more cohesive heritage management and development planning, prepared reports synthesizing the regional settlement patterns of the Hāmākua and Central Kona Districts (Cordy 1994a, 1995). In his more comprehensive regional synthesis of the Hāmākua District, Cordy (1994a) calls for taking a combined approach to heritage management, albeit a more strictly archaeological approach than proposed by Tomonari-Tuggle (1988), but nonetheless one that situates the specific parcels and cultural sites studied by archaeologists within the context of a wider cultural landscape, he writes:

> The point advocated here is that this research can result in a model of site patterns for an area before any archaeological fieldwork is done. Site types and locations can be identified, and general land use can be understood. This information is critical for all aspects of historic preservation planning: site inventory, evaluation of site significance, research to recover significant information, and preservation concerns. When the former site patterns in an area are known, then one can comprehend the context of identified archaeological sites within the former land use patterns, can assess the extent of the inventory in an area, and can predict what will be found during the survey of a specific parcel…(Cordy 1994a:19).

While Tomonari-Tuggle’s (1988) and Cordy’s (1994a, 1995) regional syntheses of the heritage landscape provided predictive models for three areas of Hawai‘i Island, they have not been updated since they were first published, nor have they been systematically tested against the findings of more recent archaeological surveys conducted within those regions, limiting their utility for current heritage planning. Overworked and understaffed (Mills and Kawelu 2013), SHPD archaeologists have not undertaken any additional regional planning efforts since the 1990s. Although a regional synthesis examining the settlement patterns of the Ka‘ū District was never prepared by SHPD, Handy and Pūku‘i’s 1950 publication, *The Polynesian Family System in Ka‘u, Hawai‘i* (Handy and Pukui 1998) provides a detailed ethnohistoric context for the entire district, and later reports, such as Marion Kelly’s (1980) *Majestic Ka‘ū: Mo‘olelo of Nine Ahupua‘a*, covering the central portion of the district, Jim Landrum’s (1984) Bishop Museum synthesis of the of settlement patterns within the South Point region, and a more recent
archeological overview, assessment and research design for the Hawai‘i Volcanoes National Park (Tuggle and Tomonari-Tuggle 2008), which all contribute baseline settlement information that could be used in the preparation of just such a document.

*Contract Archaeology and the Kanaka Maoli Trails of Ka‘ū*

Archaeological surveys conducted for the purposes of economic development examine only small portions of wider cultural landscapes, and therefore rarely capture the full range of past activities that occurred within a given area. The understanding of Kanaka Maoli trails, like the study of movement in general, suffers from the parceling of cultural landscapes and the way that archaeologists working within the current system of historic preservation in Hawai‘i attempt to record features (Snead et al. 2009). Often pieces of trails are followed for short distances within a specific project area, but rarely are the full extent of trail networks mapped across the landscape. This has to do largely with the parceling of landscape, but also with issues of differential preservation, obscuring vegetation, and archaeological methodology (Snead et al. 2009). Today, Kanaka Maoli trails crossing modern property boundaries are often inaccessible due to the laws of Western trespass. Russell Apple found, when he tried to follow the ‘Āinapō trail from Kapāpala Ranch to Moku‘āweoweo Crater in 1952, that “Cattle fences of barbed wire, and numerous lost segments, caused difficulty” (Apple 1973:23). He later wrote, in examining a portion of the trail within Hawai‘i Volcanoes National Park for listing on the National Register of Historic Places, “The Ainapō Trail is now blocked. Most of it lies on private land” (Apple 1973:4). Numerous trail sections have been documented through contract archaeology in Ka‘ū (c.f. Landrum 1984; Haun and Walker 1987; Rosendahl 1991; McDermott et al. 1993; Moniz Nakamura 2003; Haun et al. 2006; Tulchin et al. 2006; Tuggle and Tomonari-Tuggle 2008; Borthwick and Hammatt 1990; Clark et al. 2010, 2013; Clark and Rechtman 2013), but the an
understanding of the landscapes that they are part of suffers from the lack of a regional synthesis for the district.

Settlement Models for Ka‘ū

In their comprehensive ethnographic study of Ka‘ū, Handy and Pūku‘i (1998:2) write “[t]he fundamental unit in the social organization of the Hawaiians of Ka-‘u was dispersed community of ‘ohana, or relatives by blood, marriage and adoption, living some inland and some near the sea but concentrated geographically in and tied by ancestry, birth, and sentiment to a particular locality which was termed the ‘āina.” They relate that the concepts of ‘āina (literally “that which feeds”) and ‘ohana (literally “off-shoots [specifically of a taro plant]”) essentially belong to an agricultural people. The Kanaka Maoli of Ka‘ū viewed the land as a source of sustenance and life (Handy and Pukui 1998:3). In this model, termed the ‘ohana model by Allen and McAnany (1994), the ahupua‘a and ‘ili sub-divisions, which often extend from the sea to the mountain slopes, played key roles in the economic support of the ‘ohana, providing all that they needed for survival, and creating surpluses for the coffers of the Ali‘i. Handy and Pūku‘i (1972:18), who concentrate on the central Ka‘ū District (where Mary Kawena Pūku‘i was from), attribute the unique physical environment of Ka‘ū with playing a central role in determining the form and nature of the dispersed ‘ohana community they describe. They write, “[t]he dispersal of the households comprising the extended family (‘ohana), the types of structure constituting the domiciles, the means of livelihood and exchange of products of sea, land, and handcraft between individuals and households were all affected by topography, rainfall and vegetation, the nature of the shore and the sea offshore, by climate and weather and the cycle of seasons” (Handy and Pukui 1998:18). This exchange relationship detailed by Handy and Pūku‘i (1998) in the ‘ohana model offered increased access to geographically dispersed resources, while at the same time buffering against environmental and social perturbations (Allen and McAnany 1994:47).
The time depth of the ‘ohana model, and its applicability to areas other than the central Kalapana District, however, is debated by Allen and McAnany (1994). In examining the relationship between environmental variability and settlement patterns in Manukā Ahupua’a, at the western extent of Ka‘ū, they write, “[b]oth the magnitude of population loss and the integration of Hawai‘i into the world economy calls into question the appropriateness of Handy and Pukui’s (1972 [1998]) ethnographic model for the prehistoric past” (Allen and McAnany 1994:21). Allen and McAnany instead propose their own model for how settlement patterns were affected by the spatial distribution and abundance of critical resource in Manukā specifically, and pre-European Ka‘ū generally. Their “mobility” model acknowledges that the ahupua’a was the fundamental geographic and economic unit in Hawaiian society at the time of European contact, but predicts that colonization of the islands proceeded “clinically from areas of high productivity to low productivity” (Allen and McAnany 1994:47). That is to say that at the outset of colonization, whether resources occurred in areas of low or moderate productivity (such as at Manukā), or were concentrated but dispersed (such as in the central Ka‘ū District), residential and logistical mobility (negatively correlated with resource productivity) may have been an important strategy for resource production. Allen and McAnany have predicted that as the environment filled and the population density increased, competition for resources led to permanent settlements being established across all environmental zones, and thus increases in productivity within those zones, which in turn led to a decrease in mobility. In areas of low productivity, increased population eventually created exchange networks that replaced mobility as a socioeconomic strategy.

During the historic period, with the introduction of new (foreign) competition, the pattern of reduced mobility then intensified, and codified itself essentially as the ‘ohana model described by Handy and Pūku‘i (1998). For this reason, as acknowledged by Allen and McAnany
(1994:22), the ‘ohana model remains an important ethnographic contribution to the understanding of the origins, time depth, and persistence of land use patterns in Kaʻū and Hawaiʻi as a whole. Trails are key to an understanding of settlement patterns, as knowing where people moved is potent information for understanding connections between people and places in the past (Snead et al. 2009). Testing these settlement models for Kaʻū requires taking a wider landscape view of the heritage of the district, rather than concentrating on single parcels and sites as is often done by archaeologists within the current regulatory system.

**Landscape Archaeology**

In recent decades, archaeologists have begun to rely on landscape to provide a context for understanding the sites they study. The rise of landscape theory in archaeology has provided new opportunities for understanding trails, paths, and road, as the “concept of landscape bridges methodological barriers and regional differences, creating a flexible analytical framework in which previously overlooked archaeological data can be seamlessly integrated into a broader discussion” (Snead et al. 2009:3). By concentrating on landscape archaeologists can focus on issues of pattern, scale, context, and association, rather than on categories and typologies of the features of movement themselves. Within a landscape paradigm, the ancient foot path and the highway are both meaningful as part of a broader context. “Taking a new look at trails, paths, and roads is thus a logical outgrowth of the paradigm shift towards the archaeology of landscape” (Snead et al. 2009:3), as movement is a key component of any cultural landscape. For this particular this research, landscape also provides a context for understanding the routes of movement across the ‘a‘ā flows of Hīlea as potential solutions to the problem of decolonizing Hawaiian archaeology by incorporating community-based practices of knowledge production into the discipline.
Kepā Maly (2001), in *Mālama Pono I Ka ‘Āina – An Overview of the Hawaiian Cultural Landscape*, has made a case for the treatment of the entire island, or even the entire island chain, as a unified cultural landscape. He argues that in a traditional Hawaiian context there is no division between nature and culture, that they are one in the same, and that they embody all aspects of the environment from the skies to the mountain peaks, from the watered valleys to the plains, and from the shores out into the ocean (Maly 2001). In this worldview, the land (‘āina), water (wai), ocean (kai), and sky (lewa) are the foundation of life and the source of the spiritual connection between the Hawaiian people and their islands (Maly 2001). The sense of place for the Kanaka Maoli population of today cannot be separated from the landscape because it comes from generations of “evolving ‘cultural attachment’ to the natural, physical, and spiritual environments” (Maly 2001:1). While many island residents, given the cultural diversity of our island community, now view the natural and cultural resources around them in different ways and apply different values to the landscape (Maly 2001), any discussion of management, to be culturally sensitive and situationally appropriate, must take into account the descendant communities’ connections, be those physical or spiritual, to the natural environment and their ancestral lands. Dialogue between diverse communities is key in this process, and can lead to fruitful collaborations, as Kanaka Maoli work to address the well-being of the island through issues such as food sovereignty, education, language revitalization, and political sovereignty (Kawelu 2015:136). Preservation of cultural landscapes, not just of individual sites, is seen by many Kanaka Maoli as an important first step in achieving systematic changes that could bring about tangible differences in how the people and landscape of Hawai‘i are viewed (Cachola-Abad 2013; Kawelu 2015). In the context of the Hawaiian cultural landscape, trails can help
Kanaka Maoli communities and archaeologists find a common path that connects them together with issues of access, preservation, interpretation, and cultural heritage.

Despite the optimistic ideal of paths leading to common ground, landscapes are not always neat and ordered with everything in place as it “should be,” often landscapes are conflicted (Bender and Winer 2001), like the heritage landscape of Hawai‘i, where the alternate claims to the past of archaeological and Kanaka Maoli communities reside (Kawelu 2015). The Western, elitist notion of landscape is often that of a visual scape, in which the observer stands back and views the land from afar, creating a sense of everything being in place (Bender and Winer 2001). This detached view ignores the labor involved in creating the landscape in the first place, and obscures the connections between multiple overlapping landscapes. Bender and Winer (2001) define landscape as the way in which all people understand and engage with the material world around them. According to their definition, landscapes are always moving, always in the process of becoming, and always potentially conflicted. They are a political part of a turbulent world, untidy and uneasy, viewed differently by different people within different frames of reference. “Landscapes contain traces of past activities, and people select the stories they tell, the memories they evoke, the interpretive narratives that they weave, to further their activities in the present-future” (Bender and Winer 2001:4).

Landscapes embody multiple meanings and alternative histories at the same time within the same place. As landscapes interact and conflict with each other within overlapping social spaces, the familiar gives way to the unfamiliar (Bender and Winer 2001). In this setting, there are always other places, real or imagined, encountered or heard of, with which even the people most familiar with a landscape have no experience. It is the unknown aspects of the landscape, the part-familiar, the chance encounter, the fear and excitement of adventure that make the
journey across the landscape, not just the destination, worthwhile. Just as neither place nor context nor self ever stays put, people’s understanding of their place in the world is historically and spatially contingent (Bender and Winer 2001). “Landscapes are made up clusters of connections between people and places, and being embedded in these relations make us the people we are” (Thomas 2001:187). Paths form the physical connections that bind these clusters of people and places together within the landscape. “By moving along familiar paths, winding memories and stories around places, people create a sense of self and belonging” (Bender and Winer 2001:5).

When it comes to studying trails, paths, and roads, “landscape is a liberating strategy” (Snead et al. 2009:18). By taking a landscape approach to the study of these features of movement, archaeologists can side step the questions of their definitions (Snead et al. 2009). Looking at the pattern, scale, context, and associations of these features, rather than the type, provides a stronger source of knowledge for inference and interpretation, and makes the question of whether something is a “trail, path or road,” largely irrelevant (Snead et al. 2009; Snead 2012). For too long, the archaeological understandings of paths, trails, and roads have been “imprisoned by structures of data and structures of knowledge” (Snead 2012:105). This is certainly the case in Hawai‘i, where the only systematic study of trails is a classification developed by Apple (1965) that creates a typology based largely on the physical characteristics and age of the features themselves, rather than an understanding of how they form an integral part of the fabric of the cultural landscape. This classification of Hawaiian trails, in the fifty years since it was first proposed, has been often cited, but never adequately tested (Mills 2002). It is worth looking at the particulars of the Apple (1965) typology, however, to demonstrate how
understanding movement within a broader context of landscape can help decentralize the role
archaeology plays in the production of knowledge of the past.

**From Stepping Stones to Kerbstones: Apple’s (1965) Classification of Hawaiian Trails**

Russell A. Apple (1965), during his tenure as the Pacific Historian of the National Park Service, conducted the first (and only) systematic study devoted to the classification of Hawaiian trails. Apple initially intended to interpret the trails of the Pu‘uhonua O Hōnaunau National Historical Park in South Kona in an effort to “provide usable information for an accurate restoration of the area to what it was in prehistoric times” (Apple 1965:vii). He eventually expanded his goals to encompass a wider study of the evolution of land routes around the Island of Hawai‘i. While Apple writes that he would have liked to rely on primary ethnographic information to answer these questions of chronology, he laments that trails were once so commonplace and obvious in Hawaiian society that they were largely taken for granted and ignored by early Hawaiian historians. Lacking extensive ethnographic information on Hawaiian trails, Apple (1965:1) instead turned to secondary historical sources and “the great deal of evidence left on the ground."

It was in the written descriptions left by early historic visitors to Hawai‘i Island, and along the trails of the coastal lands of South Kona, that Apple found information he was looking for. During an aerial reconnaissance of South Kona in 1962, Apple noted the presence of three parallel trails crossing a coastal ‘a‘ā flow, all in close proximity to one another. The most inland trail, a Jeep road, he interpreted as a recent improvement to a cart road; the middle trail, a narrow path lined with rocks on either side (kerbstones), he interpreted as a horse trail; and the trail nearest the sea, a narrow path set with stepping stones, he interpreted as a foot trail. It was these trails, each suggesting different modes of travel (foot, horse, and wheeled vehicle), that led
Apple to propose a classification system for estimating the dates of construction for each type of trail. His classification of Hawaiian trails, although somewhat arbitrary, takes into account not only the physical characteristics of the trails themselves, and the modes of transportation that they facilitated, but also the social and economic conditions under which they were constructed.

To make the classification system more accessible to those unfamiliar with the Hawaiian language, Apple purposefully avoided using Hawaiian terms to classify or describe trails. He instead used an alphabetical designation system, and assigned letters chronologically to each successive trail type.

To clarify the basic components of the classification scheme, Apple (1965) provided two explanatory appendices in his study that define the different types of Hawaiian trails and summarize their basic characteristics. The appendices include (1) a generalization of the history of trail building in the Hōnaunau area, and (2) a summary of the characteristics of the different types of trails included in the classification scheme. While the trail sequence proposed by Apple is specific to the Hōnaunau area, he suggests that, with the exception of the dates, it is also applicable “to the rest of Kona, and to the districts of Kaʻu, Puna, and South Kohala” (Apple 1965:viii). Apple (1965) designates all traditional Hawaiian foot trails built prior to 1819, under the kapu system, as Type “A” trails. He designates traditional foot trails modified for horse travel between 1820 and 1840 as Type “A-B” trails. Straight line horse trails built between 1820 and 1840, he designates as Type “B” trails. Wider, straighter horse trails built under the direction of the King, Island Governors, and the territorial government between 1841 and 1918 (typically inland of the Type “B” trails) he designates as Type “C” trails, and Type “C” trails, modified for use by wheeled vehicles subsequent to 1918, he designates as Type “D” trails. While Apple’s (1965) classification system generally does a good job of describing the evolution of trail
typology during the historic period (post-1819), it lumps all trails created prior to the abolition of
the kapu system into a single homogenous group (Type “A”) that spans the majority of Kanaka
Maoli settlement in the Hawaiian islands.

Despite these limitations, in a later, expanded compilation of his initial work, Apple
(1994) found his earlier study cited twenty-two times in B. P. Bishop Museum reports produced
between 1965 and 1988, leading him to conclude that the academic community had generally
accepted his classification scheme for Hawaiian trails (Mills 2002). Kenneth Emory, the
preeminent Bishop Museum archaeologist of the time, did indeed credit Apple (1965) with
focusing attention on these often overlooked, but integral, features of the Kanaka Maoli cultural
landscape, and with providing a powerful tool for archaeologists “to identify the old, the older,
and the prehistoric trails and know where to find them” (Apple 1965:v). Apple’s (1965) typology
remains today, more than fifty years after it was first proposed, the only attempted systematic
classification of Hawaiian trails available in the archaeological literature. While the longevity of
this classification scheme is noteworthy, it is not a testament to its unchallengeable veracity. As
Peter Mills (2002) has pointed out, although the typology serves as a reasonable preliminary
classification of Hawaiian trails, archaeologists have yet to verify many of its underlying
assumptions. As discussed above, trails are also better understood within the context of a
landscape, rather than within the narrowly defined categories of a typology (Snead et al. 2009).

Landscapes of Movement

Trails, paths, roads, and other related phenomenon of movement are essential structures
of the human landscape. They constitute what Snead et al. (2009) have termed “landscapes of
movement.” This idea originates from the premise that these features, incorporating everything
from faint traces of daily strolls to superhighways, are the physical manifestation of human
movement through a landscape and are therefore central to achieving an understanding of that movement and the significance of the landscape (Snead et al. 2009). James Snead, a professor of anthropology at California State University Northridge, has written extensively about prehistoric trails and in particular landscapes of movement. Here I cite many of Snead’s works, but rely primarily on an edited volume he helped prepare titled *Landscapes of Movement Trails Paths and Roads in Anthropological Perspective* (Snead et al. 2009). That volume, which grew out of a 2006 Penn Museum International Research Convention of the same name, documents trail routes across different times and cultures, from hunter-gatherers in the Great Basin of North America to causeways in the Bolivian Amazon to Bronze Age towns in the Near East. In the book, Snead (2009) and his fellow authors examine trails through aerial and satellite photography, surface survey, historic records, and archaeological excavation. They take into account many factors in the development and use of trails, paths, and roads, including labor, technology, terrain characteristics, landscape features, access, and ownership, and address diverse scales of movement, ranging from paths between home and fields to roads used for long-distance journeying. The book makes the case for considering the centrality of paths, trails, and roads as an organizing element of human lives throughout the history of human kind. A view that I have taken in studying the trails crossing the kula kai landscape of Hīleia.

Trails, paths and roads fundamentally structure and reflect human life, thus they help articulate the complex relationship that exists between movement, space, place, people, and culture (Weiner 1991). The study of these features engages several intellectual domains, including history, geography, environmental science, anthropology, and archaeology, but leads to “a better understanding of infrastructure, social, political, and economic organization, and the way trails, paths, and roads materialize traditional knowledge and engineering, world view,
memory, and identity” (Snead et al. 2009:xv). This can help reveal social contexts essential for understanding the connections between people and places in the past, which in the modern era, is potent information for establishing the rights and obligations of the present (Snead et al. 2009). I contended that landscapes of movement inscribed in the ‘a‘ā of Hīlea can provide important information about decolonizing archaeological practice, and even help direct the discipline towards more inclusive, community-based methodologies of knowledge production.

Trails, paths, and roads evolve over time through action and design (Snead et al. 2009). Once inscribed within a landscape, they help structure movement through that landscape. The process of inscription, describing the “marking” of landscapes with features such as trails, paths, and roads, is linked with the concept of materialization, and these linked concepts provide a frame of reference useful for evaluating movement within an archaeological context (Snead 2009). Inscription occurs both as an inadvertent result of people going about their daily lives and as a product of conscience action” (Snead 2009:46). Materialization, representing “the relationship between ideology and material culture, of which landscape is a critical element” (Snead 2009:46), involves the construction of monuments and other features that highlight particular sociopolitical relationships and reinforce the connection between the conceptual and physical worlds. While this concept has been used to explain how elites naturalize their positions of power (De Marrais et al. 1996), Snead (2009) sees the process of materialization as more fundamental, representing a wider range of social relationships which, although they may transcend time, are linked by specific circumstances and ambitions to a particular context within a certain time and place. He writes:

Both inscription and materialization have direct relevance to the understanding of paths and trails. As movement through the land becomes more deeply inscribed, views and perspectives along the way become fixed, in effect framing the experience of the traveler. Over time this experience becomes more complex and more laden with meaning. As the relationship between movement and meaning becomes particularly associated with such
an inscribed landscape, it creates an opportunity for materialization, since in effect the “signature” that has evolved can be also be constructed. Investing labor into landscapes of movement can have the effect of replicating a landscape that would not otherwise have the deep associations of others that had been inscribed over time. The fact that the symbolism associated with such places, real or created, was experienced through constant movement strikes me as particularly important (Snead 2009:47).

Understanding landscapes of movement involves contextualizing the features of movement within a certain time and place (Snead 2009; Snead et al. 2009). These essential structures of the human landscape are created by human agency through the practice of everyday life, yet once established, they also serve to channel movement and structure the lives of those agents that created them (Erickson 2009). Trails, paths, and roads simultaneously enhance and inhibit circulation through a landscape, thus they influence how people view the world, and provide a mental and physical template for a proper existence within that world (Snead et al. 2009). Movement through a landscape is a process of engagement with the physical and social environments of a certain place and time. To interpret these routes of travel, one must partake equally in the structures of culture and structures of movement, an approach that Snead (2009) has described as contextual experience. He writes that “from this theoretical perspective, context includes not only topography, architecture, and other factors of the physical environment, but also the cultural knowledge required to interpret such a setting” (Snead 2009:44). Gaining an understanding of a place requires more than simply being in that place, “it requires constructing a perspective analogous to those for whom the place had significance,” thus, “contextual experience is a landscape archaeology of cultural traditions, an ethnography of the past” (Snead 2009:44).

Trails, paths, and roads form their own distinctive category of social space within the landscape. They act as liminal spaces—neither home nor away—structured by geography, action, and design, with rules and obligations of their very own (Snead 2002, 2009). Landscapes
of movement serve as a medium for the routing of social relations (Tilley 1994), and to some extent, as the physical expressions of movement, they reflect the social relationships of the societies that created them (Snead 2002). These manifestations of human movement through the landscape “weave together disparate elements of our daily lives, bridging distance and obstacles to connect us to each other” (Snead et al. 2009:1). There is a tendency, in the modern era, to romanticize and conceive of older trails, paths, and roads as we want them to be, rather than how they actually were (Snead 2012). While these routes of travel are imbued with significance of events that once took place along them (Snead 2009), the journey in the present “belongs to the one making it rather than those who passed before” (Snead et al. 2009:18).

Despite the undeniable significance of trails, paths, and roads and the important role they play in forming and framing cultural landscapes, substantive discussions of these ubiquitous features appear rather infrequently in the archaeological literature prior to the 1990s (Snead et al. 2009). Landscapes of movement are notoriously difficult to identify, date, and conceptualize within standard archaeological frames of reference (Snead 2011). Unlike most sites studied by archaeologists, trails, paths, and roads are not bounded in space, and often they have no beginning or end (Snead et al. 2009). Complex webs of local and regional networks of movement are difficult to map and to bound as archaeological data. They are often discontinuous and segmented by property boundaries within the modern landscape, with the more ephemeral of the features no longer evident, and others built over. It is only within the last twenty years or so that new empirical studies have demonstrated creative approaches to the problem of evaluating archaeological data for trails, paths, and roads (Snead et al. 2009; Snead 2012). Studying landscapes of movement requires maintaining “a critical balance between empirically based research and nuanced cultural understanding through context, ethnography, and history” (Snead
et al. 2009:xvi). To contextualize the trails crossing the kula kai ‘a‘ā of Hīlea within a broader cultural setting, I briefly explore previous research concerning the landscapes of movement on the island of Hawai‘i.

*Landscapes of Movement on the Island of Hawai‘i*

Kirch (1985:266) has written that Hawaiian trails “form an important component of settlement landscapes, and their study provides important data on linkages between individual communities.” He notes that while heavy loads could be carried by canoe between Hawaiian coastal areas, the expansive terrestrial trail networks of each island allowed people, information, and material goods to travel overland to virtually any location, providing an important network of communication. In North Kohala, studies of the Leeward Kohala Field System in Lapakahi and neighboring ahupua‘a have found that trails connected the upland agricultural fields with the coastal settlements, and that many of the trails actually coincided with known boundaries between land divisions, such as ahupua‘a and ʻili (Peterson 1968; Rosendahl 1972; Kaschko 1973; Cordy and Kashko 1980; Field et al. 2011). In Kaʻū, Landrum (1984) found that within the coastal to mid-elevations of Kamāʻoa and Puʻuʻeo ahupuaʻa, networks of trails extended mauka from the densely populated coastline to eventually join together and form a few primary mauka-makai trail routes that continued inland beyond his study area, likely to access agricultural fields and settlements in more mauka regions. Landrum suggests that the trade networks indicated by these trail routes supports the ʻohana model of settlement and exchange (1984:101-107) first proposed by Handy and Pūkuʻi (1998) for central Kaʻū. In Hawaiʻi Volcanoes National Park, Tuggle and Tomonari-Tuggle (2008:164) note that although no integrated trail study has been completed, trails are “a vital element in understanding the patterns of use of the region, including settlement, resource collection, and island communication.” They categorize the trails within the park boundaries that are known through ethnohistorical accounts of travel as “major trails,” trails
that linked villages and resource areas as “local trails,” and trails that accessed the summit regions of Kīlauea and Mauna Loa as “high mountain trails” (Tuggle and Tomonari-Tuggle 2008:164-169).

Cordy (1994b), who prepared an archaeological and historic perspective of the Ala Kahakai National Historic Trail (literally “trail by the sea”; more appropriately termed the “alaloa”), provides a broad overview of the trail routes once used to travel the island of Hawai‘i. He writes:

Throughout the years of late prehistory, A.D. 1400s-1700s, and through much of the 1800s, communication within the Hawaiian kingdom was by canoe and/or by major trail systems. The major trails linked the 600 or so communities (ahupua‘a) of the kingdom’s six districts on Hawai‘i Island...Canoes and the major trails also served as the ruler’s and high chiefs’ avenues to send messages, gather taxes, summon warriors to battle, and travel about the kingdom (Cordy 1994b:1).

According to Cordy, the alaloa served as the primary interaction route between people of adjacent communities. It was also used less commonly for long distance travel, for chiefly affairs, and tax collection during the Makahiki season (Cordy 1994b; Mills and Irani 2000; Mills 2002). Although in most ahupua‘a, residences were found near the shore, and could be accessed by the alaloa, the actual network of trails on Hawai‘i Island was much more complex (Cordy 1994b, 2000). In addition to the nearshore alaloa there were a number of inland trail networks with major branches that followed more mauka routes between communities, including one through the uplands of Kona and Ka‘ū that approximated the route of the current Hawai‘i Belt Road (Highway 11) for much of its length. That trail, known as “Keala‘ehu” (literally “the path of Ehu”), was built by the Kona chief Ehu in circa 1520-1540 A.D. (Kamakau 1992:429; Maly and Maly 2004). Cordy (1994b) considers the inland trail routes that circled the Island of Hawai‘i, such as Keala‘ehu, branches of the alaloa. He notes that in addition to mauka-makai trails linking coastal residences with inland agricultural fields within most ahupua‘a, there were
also major cross island routes that connected the various moku (districts) of the island through a network of mountain trails. Cordy (1994b:8) emphasizes that the trail system of Hawai‘i Island was not static. Although it may have been largely in place by the 15th century, it continued to evolve into the historic period as new resources were discovered, new communities were established, and settlement patterns consequently shifted. He provides an example near the boundary between the district of Kohala and Kona, where he hypothesizes that a trail, extending parallel to an older coastal trail, was built to bypass several small coastal settlements sometime between A.D. 1400 and 1600. After European contact, trail construction techniques and routes shifted dramatically to accommodate new modes of travel and historic settlement patterns (Apple 1965; Cordy 1994b).

Mills (2002:149), who discusses social integration and exchange along the alaloa, writes that “one reason for the limited archaeological research on the Ala Loa may be the way that archaeologists think about Hawaiian landscapes.” He sees the ahupua‘a model, which typically dominates how archaeologists interpret traditional Kanaka Maoli landscapes, as a form of “tyranny” that acts to limit research on trails by segmenting them into small sections:

…Although virtually all scholars recognize that Hawaiians were capable of traveling beyond their own ahupua‘a, the economic self-sufficiency of ahupua‘a has been emphasized. This is what is meant by a “tyranny”; by focusing on ahupua‘a as self-sufficient analytical units, important integrative forms of exchange beyond the ahupua‘a have been somewhat neglected, despite a general acknowledgment that such exchanges occurred. Coastal trail systems (and the sites associated with them) can be viewed as integrative archaeological features that permeate ahupua‘a boundaries…(Mills 2002:149-150).

Kanaka Maoli created trail networks that fit their cultural patterns of settlement and livelihood, and these trails often crossed ahupua‘a boundaries. Although maka‘āinana seemingly travelled outside of their respective ahupua‘a less often than chiefs, archaeological data indicates that there was significant exchange of domestic goods beyond the boundaries (Mills 2002).
Instead of focusing on the self-sufficiency of the ahupua’a as an economic unit, Mills (2002:153) suggests that “studying coastal trails can help us investigate how people living in various ahupua’a involved themselves in integrative networks through lateral exchange systems.” To test this hypothesis along a roughly two mile section of the alanui aupuni in North Kona (Mills and Irani 2000), in an effort to understand if the historic road had been built upon an older alignment of the alaloa, Mills (2002) looked at such factors as the associations with prehistoric features, the presence of waterworn stepping stones, and sources of drinking water along the route. He found that the alaloa and alanui aupuni in that case were essentially the same route, indicating that the coastal trail reflected “high investments in social integration across ahupua’a boundaries” (Mills 2002:161), supporting domestic exchange along the Kona coast. These findings did not fit with Apple’s (1965) typology for Hawaiian trails, nor the concept of maximally self-sufficient, repetitive ahupua’a model (Earle 1977), but they did provide important information for “understanding the structure of Hawaiian exchange systems and the relative permeability of ahupua’a boundaries” (Mills 2002:163). A pattern that also appears to be evident on the kula kai ‘a‘ā flows of Hīlea (Clark and Rechtman 2013).
CHAPTER FOUR
MA‘A—TO GAIN KNOWLEDGE BY PRACTICE, TO ACCUSTOM ONE’S SELF;
APPLIED TO THE KNOWLEDGE OF A ROAD OFTEN TRAVELLED

Archaeological understanding of paths, trails, and roads is imprisoned by structures of
data and structures of knowledge. The empirical evidence is thin and difficult to come by.
Signatures of travel through the country are often faint, the landscape is Balkanized by
modern property boundaries, and the palimpsest of routes that have been perceived is
confounding (Snead 2012:105).

From the beach at Kōloa, a short climb up the rutted track of the old alanui aupuni
(government road) brings me at last on to the surface of the kula kai ‘a‘ā flow (Figure 19).
Nestled at the top of the slope, overlooking Nīnole Cove, Wailau, and Punalu‘u beyond, sits
Kaʻieʻie Heiau, a low platform in the midst of a pavement of ‘ili‘ili surrounded by rock walls.
John Stokes of the Bishop Museum, who passed this way in 1906 while documenting the heiau
of Hawai‘i Island, noted the conspicuous absence of walls at Kaʻieʻie (Stokes 1991:131). Unable
to find knowledgeable local informants, Stokes did not even venture a guess as to its former use.
Russel Apple (1987:36) has suggested that stones from the nearby Kōloa Beach may have been
taken by “selecting priests” to Kaʻieʻie Heiau, where they were transformed through ceremony
into “game gods.” The walls surrounding the heiau were present when Violet
Hansen mapped
the structure in 1968, and today they are periodically maintained, along with the interior space of
the heiau, by members of the community. A trail extends makai along the southwestern edge of
the heiau to join with the alignment of the alaloa that formerly passed below it, along the coast of
Hīlea and Nīnole to Kōloa Beach. The eastern end of that trail, along with an earlier alignment of
the alanui aupuni, were destroyed by the tsunami of 1868 (Barrera and Hommon 1972; Kelly
1980:107-110; Rosendahl 1991). Fisherman occasionally park along the alanui aupuni adjacent
to Kaʻieʻie Heiau, and use the trail along its western edge to access the coast (Figure 20).

15 As defined by Andrews (1836:90).
FIGURE 19. Map of trails and features within the eastern portion of the Hīlea ‘a’ā flows (after Clark and Rechtman 2013:121). The black shapes represent stone constructions and the gray shading represents paved surfaces.
Passing the heiau, moving west along the ‘ili‘ili paved surface of the 4WD road, widened by the U.S. military during World War II for coastal defense purposes (Sportsman’s Club of Ka‘ū v. Okuna 1980), subtle structures belonging to the former Kanaka Maoli residents of the Nīnole-Kōloa area (Figure 21) begin to appear in the ‘a‘ā on either side of the roadway (Hansen 1968; Tulchin et al. 2006). This Nīnole portion of the ‘a‘ā flow, near Kōloa Beach, extending makai of the road to Kokoahau Point, contains numerous such structures spread along both sides of the former alaloa. A short distance beyond the heiau, a branch of the alanui aupuni (Figure 19), built after the older road across Kōloa Beach was destroyed by the tsunami of 1868, splits off to the north and extends past the old Nīnole school house (Hansen 1968), before descending the edge of the ‘a‘ā flow to Nīnole Gulch and disappearing beneath the parking lot of the Sea Mountain Resort golf course (Rosendahl 1991).
FIGURE 21. Alanui aupuni approaching Nīnole Cove, view to northeast (Note the subtle habitation surfaces lining the right side of the roadway; Photo by author, 2013).

Shortly after the split in the alanui aupuni, I come to the boundary of Hīlea Iki Ahupua‘a, and crossing from a state-owned parcel into a county-owned parcel, I enter the kula kai ‘a‘ā landscape of Hīlea. Here, tucked into the jagged ‘a‘ā against the mauka edge of the alanui aupuni, is a large accretionary boulder with a flat, smooth surface (Figure 22). This boulder, in the 1873 Boundary Commission testimony for Hilea Iki, is referred to as Pōhaku a Kamāmalu (literally “the rock of Kamāmalu), and described as “a rock at the road where Kamamalu slept” (Boundary Commission Vol. A, No. 1, pg:432). I have always been intrigued by this statement, but have never been able find any additional information regarding it. Why did Kamāmalu sleep on this rock? When? Was it Victoria Kamāmalu?16 Did she pass this way in 1853 when she

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16 Victoria Kamāmalu (b. Nov. 1, 1838-d. May 29, 1866); the daughter of Ka‘ahumanu II and her third husband Governor Mataio Kekuanaoa; Kuhina Nui of Hawai‘i and its crown princess.
traveled to Kaʻū with John Papa ʻĪʻī (1963:168-171)? Or was it Queen Kamāmalu17 before her? Today a rusted metal spike protrudes from the center of the boulder marking the boundary between Hīlea Iki and Nīnole, and a faint “X”, pecked into its surface can just be seen, left over from the original survey of the ahupua'a boundaries in 1873.

Crossing into Hīlea, I think of the meaning of the name and the saying “Hīlea i kalo ʻekaʻeka,“ or “Hīlea of the dirty taro,” applied to anyone careless or inefficient in work (Pukui and Elbert 1986:70). According to Pukui and Elbert’s (1986:70) Hawaiian Dictionary, the stative verb “hī.lea,” defined as careless or shiftless, derives its meaning from the people of Hīlea village in Kaʻū, who apparently received this moniker by bringing poorly prepared (dirty) poi to

17 Queen Kamāmalu (b. ca. 1803–d. July 8, 1824 in England), a.k.a. Kalani-Kua’ana-o-Kamehamalu-Kekūaiwa-o-kalani-Keali’i-Ho'opili-a-Walu; Daughter of Kamehameha I and Kaheimaile; wife of Kamehameha II.
a chief. When I think of this meaning, I can’t help but wonder about the circumstances leading up to the long ago incident of poor food preparation immortalized in the name of Hīlea. My mind wonders back to the story of Kohāikalani (Kelly 1980), the deposed, abusive chief of Kaʻū, whose own people plotted his death after he severely overworked them while building a heiau on the flat-topped hill of Makanau (literally, “twinkling of eyes”). I wonder about the twinkle in the eyes of those former residents of Hīlea who served the unknown aliʻi dirty poi. Were they simply careless in the washing of the taro, or was this an act symbolic of the deeper resistance to authoritarian rule that the people of Kaʻū are so widely known for (Kelly 1980; Handy and Handy 1991; Handy and Pukui 1998)? Could this chief have been Kohāikalani, or some other despotic aliʻi famed in the moʻolelo of Kaʻū, such as Halaʻea, who was killed for repeatedly demanding too great a share of his fishermen’s catch, or Koihala, who was lost his life after taking advantage of his people’s willingness to serve him (Kelly 1980:1-6).

The name Hīlea, and its meaning, hints at the historically contested nature of this landscape (Bender and Winer 2001). The adjoining lands of Hīlea Iki and Hīlea Nui (Figure 23), once valued largely for the ample rains and soils of their rich agricultural uplands (Kelly 1980:62), were awarded to Lot Kamehameha (Kamehameha V) and William Pitt Leleiohoku, respectively, during the Māhele ‘Āina of 1848 (as ‘Āpana 14 of LCAw 7715 and ‘Āpana 11 of LCAw 9971). When Leleiohoku died of measles on October 21, 1848 Hīlea Nui went to his second wife Princess Ruth Keʻelikōlani (Six 2010:54). Hīlea Iki, on the other hand, was sold by Lot Kamehameha in 1857 to a hui (group) of fourteen Kanaka Maoli residents living in the ahupuaʻa at that time. The contested nature of the Hīlea landscape becomes apparent in the

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18 The Māhele book (pages 13 and 29) actually lists both lands as “Hīlea” and does not specify Nui or Iki (Omerod v. Heirs of Kaheananui 2007).
19 The names of the residents listed on the 1857 deed are: Kahaku, Puhi, Apiki, Kea, Moanalua, Kalakolohe, Ikiiki, Kapewa, Manuhaaipo, Kahooioi, Helehewa, Keamo, Kamana and Mahuka (Omerod v. Heirs of Kaheananui 2007).
Boundary Commission testimonies collected for the two ahupua‘a in October of 1873 (Boundary Commission, Vol. A, No. 1, pgs:419-426, 430-435). During these hearings, the boundaries of both ahupua‘a were alternatively said to extend mauka of the forest to Ke ‘Ā Pōhina (literally, “the gray [‘a‘ā] lava”), where they were cut off by Kahuku Ahupua‘a. Some witnesses claimed that Hīlea Nui cut off Hīlea Iki before getting there, while others claimed that Hīlea Iki cut off Hīlea Nui before getting there. In the end—after a changed testimony by one of the witnesses, Kaele, who claimed that he had been induced to lie by others in his earlier statement (Boundary Commission, Vol. A, No. 1, pgs:424)—the boundaries of Hīlea were decided, with Hīlea Nui extending further inland than Hīlea Iki, and both ahupua‘a being cut off by Ka‘alāiki Ahupua‘a (belonging to the government), well below Ke ‘Ā Pōhina. By the mid-1880s, following the settlement of the boundaries, ownership of both ahupua‘a fell to the Hutchinson Sugar Plantation. Janet Six (2010), in her doctoral dissertation for the University of Pennsylvania, extensively documents the contested nature of this land transfer and the related litigation concerning land rights within Hīlea that have arisen in the last 20 years because of it.

Moving through Hīlea Iki, the kerbed edges of alanui aupuni become choked with Christmas-berry, as I follow old tire tracks along the grass covered surface of the old road bed. This route has become familiar to me through repeated journeys. I now recognize specific structures of the ‘a‘ā and the hills I pass as I travel, and I reaffirm my relationships with these landmarks along the way (Snead et al. 2009), using them to gauge my progress towards Kāwā. Passing the first prominent hill along the route from Nīnole, where a series of older mauka-makai trails intersect and cross beneath the alanui aupuni on their way to more inland locations, the Christmas-berry tapers off for a moment, and the view makai opens to the ocean. Off to the left, paralleling this portion of the road, is a wide, but rough section of trail, perhaps an older
alignment of the alanui aupuni, abandoned during the 1940s or earlier. This older trail section continues to the edge of a younger ‘a‘ā flow, rising ahead of me in the distance, 0.9 km from the beach at Kōloa and 0.75 km west the Hīlea boundary (Figure 19).

FIGURE 23. Portion of an 1887 Map of a Section of Ka‘ū Hawai‘i from Kiolaka‘a to Punalu‘u showing the makai sections of Hīlea Nui and Hīlea Iki with the kula kai study area outlined in red (Hawai‘i Registered Map No. 1455 prepared by M. D. Monsarrat, available at Land Survey Division, Department of Accounting and General Services).
Reaching the steep edge of the younger ‘a‘ā, where the present and older alignments of the alanui aupuni join back together again, I pause to catch my breath. Here, another mauka-makai trail, one that I have followed from the eastern edge of Kuhua Bay to Highway 11 (Clark and Rechtman 2013:135), passes beneath the alanui aupuni, as it follows a course towards the western edge of Makanau, the prominent flat-topped hill of Hīlea (Figure 19). Looking mauka, I note the first clouds, carrying their life sustaining rains to Ka‘ū, slowly beginning to gather around the summit of Kaiholena, nestled behind Makanau (Figure 18). As I ascend the steep incline of the road up onto the younger ‘a‘ā, my eyes follow its distinct boundary all the way to the ocean, and I catch a glimpse of an ‘ili‘ili paved terrace down below the alanui aupuni, slowly disappearing beneath a growth of Christmas-berry. Topped with upright waterworn stones, this structure is possibly the remains of a small heiau (Clark and Rechtman 2013:135). Its location, near the intersection of two trails, at the divide between two lava flows, makes me wonder about the “tyranny” of the ahupua’a model (Mills 2002), and the realities of past political boundaries within the kula kai of Hīlea—were they the same as those captured in the Māhele and Boundary Commission records of the already “Westernized” politics of 19th century Hawai‘i, or did this distinctive flow boundary serve as a political boundary at some point in the forgotten past?

Achieving the summit of the younger flow, the vegetation disappears from the edges of the alanui aupuni, and I can now see the waves breaking at Kāwā, more than a kilometer in the distance (Figure 24). Off to the right, a three-sided enclosure with stout rock walls lined along their interior edge with a bench of waterworn cobbles, occupies a prominent position beside the road, perched on the elevated eastern edge of the younger ‘a‘ā flow (Clark and Rechtman 2013:125-126). I have often wondered about this enclosure and its unusual bench construction. Could it have been a rest area used by travelers along the alanui aupuni? Or perhaps even
something akin to a “bus stop,” where travelers, or even school children, would wait for their ride to Nīnole or Kāwā, or some destination beyond? In general, very few structures are present on this portion of the younger Hīlea ‘a‘ā flow, either along the coast or near the historic roadway. The few structures that do exist (primarily terraces, pavements, and pits) are found along the makai edge of the alanui aupuni, and are accessed by short trail segments leading out into the ‘a‘ā (Clark and Rechtman 2013). The cultural material on the surface of the isolated structures found in this harsh environment, is mostly indicative of precontact (coral, marine shell, ‘ili‘ili) or limited early historic use (a few bottle glass fragments, some rusted metal, a couple of horseshoes). Understanding the age of these structures, through further study, could help date the initial use of the alanui aupuni across the Hīlea ‘a‘ā, and provide information about its development as a road during 19th century. Shedding light on the question of whether it followed the alignment of an older trail or not (Mills 2002).

FIGURE 24. Alanui aupuni crossing the younger of the Hīlea ‘a‘ā flows to Kāwā, view to the southwest. Note the enclosure with an interior “bench” located along the right side of the roadway at the bottom of the image (Photo by Shalan Crysdale, 2016).
FIGURE 25. Map of trails and features within the western portion of the Hīlea ‘a‘ā flows (after Clark and Rechtman 2013:89). The black shapes represent stone constructions and the gray shading represents paved surfaces.
As I approach Hīlea Gulch, at the Kāwā side of the younger ‘a‘ā flow, the features along the alanui aupuni slowly become more numerous until, roughly 0.4 km from the gulch edge, as I cross the boundary from Hīlea Iki into Hīlea Nui, I walk through a veritable village (Figure 25). Here, until the gulch edge is reached by the road, both sides of the alanui aupuni are lined with connected leveled surfaces in the ‘a‘ā once used by the Kanaka Maoli residents of the area for habitation purposes (Clark and Rechtman 2013:105-110). The features of this settlement cluster, which are connected to a nearby coastal settlement by a network of mauka-makai trails, extend primarily inland from the alanui aupuni. The more inland feature locations, where feature density decreases, are also connected by mauka-makai trail routes and by a series of four lateral trail routes that extend parallel to the alanui aupuni and one another for varying distances from the edge of Hīlea Gulch out into the ‘a‘ā flow, before terminating near the boundary between Hīlea Nui and Hīlea Iki (Clark and Rechtman 2013). Although I have walked these trail routes repeatedly, marking the locations of waterworn hammerstones found along their wider than necessary paths (typically ranging between 2 and 4 meters wide), I am still no closer to understanding their purpose than I was when I first mapped them four years earlier. Instead of answers, I have suggestions and more questions, ones that can hopefully be answered through collaborative community-based methods of archaeology.

Continuing the journey southwest, I arrive at last at Hīlea Gulch, where the alanui aupuni abruptly ends in a tangle of Christmas-berry at the top of a steep incline (Figure 26). The road below, washed away by flooding within the gulch many years before, continues hidden through the tall grass and dense thickets of Christmas-berry that blanket the older pāhoehoe flows along the western edge of Hīlea Nui Ahupua‘a and Ka‘alāiki Ahupua‘a beyond. It then emerges onto the Hōkūkano ‘a‘ā flow and continues west into Hi‘ona‘ā Ahupua‘a, where it disappears once
again at a series of ponding basins created by sugar plantation during the 1970s to capture wastewater from the Honu‘apo Sugar Mill (Ayres 1970; Clark et al. 2010). Turning left, away from the alanui aupuni, I step onto a more modern trail route that winds through a complex of Kanaka Maoli cultural sites to accesses the beach at Kāwā.

FIGURE 26. Alanui aupuni at the western edge of the younger ‘a‘ā flow where it meets Hīlea Gulch, view to the southwest (Photo by Shalan Crysdale, 2016).

As I travel this route, I think more about the trails of the kula kai ‘a‘ā of Hīlea and how they can inform decolonizing practices in Hawaiian archaeology, ultimately leading to the implementation of community-based methodologies (Kawelu 2015). My mind wanders back to where my journey across the ‘a‘ā began, to Punalu‘u and the Sea Mountain Resort, and the archaeology of the past. Looking forward, catching a glimpse of the ocean through the spires of the now familiar ‘a‘ā that surrounds me, I think about the many possible futures of the heritage embodied in this landscape and the tangible promise of community-based stewardship within the County-owned lands of Kāwā (Clark and Rechtman 2013). I suddenly realize that just standing here, at the edge of the ‘a‘ā flow without a map, I can visualize how these places, their pasts and
their futures, the various communities that they embody, are all connected by the landscape of movement inscribed within the ‘a‘ā landscape, and it seems to me that just recognizing the potential paths to connect archaeology with community is an important first step.

**The Arrival of Polynesian Voyagers to the Shores of Kaʻū**

The cultural landscape of Hīlea, like all of Hawaiʻi, has evolved through generations of human interaction with the environment. The moʻolelo of this wahi pana began more than a millennium ago, in time immemorial, when Polynesian voyagers from Kahiki (the ancestral homelands of the Hawaiian gods and people), first made their way across the vast Pacific Ocean, to set foot upon the remote shores of the Hawaiian Islands (Kirch 2010, 2012). These intrepid voyagers arrived sporadically, in small groups, their canoes loaded with all that they would need to transform the nurturing environment of the islands into a landscapes suitable for the cultivation, growth, and prosperity of a uniquely Hawaiian culture. They brought with them not only the foodstuffs that they would need to survive, but also their ‘aumakua (ancestral family gods), the major deities of Kāne, Kū, Kanaloa, and Lono, the kapu system, the concept of mana, and an ingrained cultural knowledge of island landscapes (Fornander 1969; Handy and Pukui 1998:31-35; Kirch 2010, 2012). Hīlea, as a political division of the island landscape, did not yet exist during the initial colonization period of the Hawaiian Islands, but the land and sea of this general area—with its rich coastal fishery, numerous freshwater springs, plentiful rain and soils in the uplands, and vast forests—contained valuable resources, eagerly sought out by the first settlers to the southern shores of Hawaiʻi Island (Kirch 1985, 2012).

According to the Kaʻū mele inoa (name chant of Kaʻū), a group of fierce warriors under the direction of Kua, the red shark, a mano aliʻi (shark chief) who was huge and thick skinned, led the first settlers to the shores of Kaʻū directly from Kahiki (Handy and Pukui 1998:35-37).
Oral traditions relate that these settlers, likened to a great company of sharks, arrived in nine single canoes (or four double canoes), each under the command of one of Kua’s male relatives. Preceded from Kahiki to Hawai‘i by Pele, the fiery goddess of the volcano (Handy and Pukui 1998:29-30), Kua and his flowers stepped out of their canoes on to the lava streaked slopes of Mauna Loa, the largest and one of the most active volcanoes on the planet (Zurek et al. 2015). This towering landmass, first glimpsed from many miles away, seen rising out of the ocean seascape on which they had travelled for countless days and nights, must have been the answer to their prayers. The people named their new found land Ka‘ū, “the breast,” both for its shape when viewed from sea, and for the nurturing qualities of its lands (Handy and Pukui 1998:118). On her shores they, and others that followed, established new homes near sheltered bays with access to fresh water (Kirch 2010, 2012), such as those found at Nīnole and Kāwā, on either side of the Hīlea ‘a‘ā flow. From there, countless generations of Kanaka Maoli spread across the Ka‘ū landscape, multiplying and transforming the island’s natural environment into an anthropogenic landscape capable of sustaining a large populations (Parks 1997). The paths of this transformation are captured in landscapes of movement etched into the slopes of Mauna Loa, crossing the ‘ā‘ā flow of Hīlea, and connecting, like mo‘okū‘auhau, to nā wahi kūpuna o Ka‘ū (“the ancestral places of Ka‘ū”).

**A Brief Geological History of Hīlea**

Rising from the Pacific Plate, nearly 8 miles (13 km) below the ocean’s surface, to a height of 13,678 feet (4,170 km) above sea level, Mauna Loa is the largest and one of the most active volcanoes on the planet (Sherrod et al. 2007:50; Zurek et al. 2015). Although its most recent eruption ended on April 15, 1984, the volcano has erupted more than 30 times in the last 200 years, and 90% of Mauna Loa’s surface has been covered with fresh lava during the past
4,000 years (Lockwood and Lipman 1987). An older geologic record is preserved within the Hīlea Landscape, however. The Nīnole Hills, a modern name applied collectively to the unique and verdant pu‘u that create the dramatic skyline of Ka‘ū between Pāhala and Honu‘apo (Figure 27), are remnants of the second oldest volcanic structure exposed on Hawai‘i Island (Restrepo et al. 2003). It has been previously theorized that these pu‘u are evidence of an earlier volcanic summit, a separate rift zone, or former faulting and landslides, but Zurek et al. (2015) have demonstrated that the Nīnole Hills actually formed, approximately 100 to 200 thousand years ago (ka), as part of a failed southwest rift of Mauna Loa. Soon after their formation, a geologically rapid reorganization of the southwest rift zone occurred, and as the zone migrated west, it left a topographic high along the axis of the failed rift that, for a time, sheltered the lands seaward of it from any further lava inundations (Zurek et al. 2015). Over several millennia, this topographic high, formed of Nīnole Basalt and shaped by the forces of wind and rain, became dissected terrain through which younger lava flows of Mauna Loa have subsequently flowed (Sherrod et al. 2007:50). The Nīnole Hills, each of which has its own name and mo‘olelo, demarcate the upper ridges of what were once three main valleys approximating the present day ahupua‘a of Hīlea, Nīnole-Wailau, and Punalu‘u (Stearns and Macdonald 1946:50).

Approximately 30 to 50 ka, Mauna Loa lava flows of Kahuku Basalt, emanating from the reorganized southwest rift zone, found their way into these valleys and began the process of infilling along the edges of the Nīnole Hills. On the lower southwestern flank of Mauna Loa, these lava flows were then covered, approximately 30 to 13 ka, by a thick layer of ash, consisting of both primary and reworked (windblown) tephra-fall deposits originating primarily from eruptions of the Kīlauea and Mauna Loa volcanoes (Sherrod et al. 2007:51). The weathered ash, now commonly referred to as Pāhala Ash for the area from which it is best known, eventually
formed deposits of deep, rich soil overlaying the Kahuku Basalt (Kelly 1980:7). These soil deposits are still exposed today across wide swaths of central Kaʻū, between Pāhala and Nāʻālehu, including in the uplands of Hīlea, where the topographic high, created along the axis of the failed southwest rift, has continued to protect them from more recent lava flows. It was these well-weathered ash deposits that allowed the life sustaining crops carried in the canoes of the early settlers to the southern shores of Hawaiʻi Island to thrive on the lower slopes of Mauna Loa (Handy and Handy 1991:543-559; Kelly 1980:7). Over a period of centuries, the initial upland gardens planted by these settlers grew into an extensive dry-land, rain-fed, agricultural system that became central to the pre-European economy of Kaʻū, and provided the primary source of food for the people of the district (Ellis 2004; Menzies 1920; Kelly 1980; Handy and Handy 1991; Handy and Pukui 1998; Ladefoged et al. 2009).

FIGURE 27. The Nīnole Hills with Highway 11 crossing the Hīlea ʻaʻā flows in the foreground and the summit of Mauna Loa in the background, view to the north (Photo by Shalan Crysdale, 2016).
Most of the surface of Mauna Loa is now covered by lavas of its youngest volcanic series, Kaʻū Basalt (Zurek et al. 2015). These lava flows, for the most part, post-date the tephra deposits of Pāhala Ash, and are generally less than 11 ka (Sherrod et al. 2007:51). The Kaʻū Basalt flows, as they occurred, covered large swaths of Hīlea, further infilled the former valleys between the Nīnole Hills, and created the coastline that the earliest Polynesian voyagers encountered when they first set foot on the southern shores of Hawaiʻi Island (Figure 28). Hīlea is actually somewhat unique in this regard, as it contains the only two Mauna Loa lava flows, between Punaluʻu and Ka Lae (South Point), that are younger than 1.5 ka (Sherrod et al. 2007: Sheet 8). These two lava flows stretch from vents along the southwest rift of Mauna Loa, along the eastern and western edges of the present day ahupuaʻa, and enter the ocean on either side of Kāwā Bay. The more western of the flows, consisting of pāhoehoe lava, dates to approximately 1.5 to 0.75 ka, while the more eastern, ‘a‘ā lava flow, dates to approximately 0.75 to 0.2 ka. The younger flows are separated within the coastal portion of Hīlea Nui by an elevated section of older pāhoehoe dating to between 5 and 3 ka. Hīlea Gulch, which intermittently carries rain waters from the uplands of Hīlea to coast at Kāwā Bay, has eroded a deep channel along the geological divide between the 5 to 3 ka pāhoehoe flow and the 0.75 to 0.2 ka ‘a‘ā flow near the Hīlea Nui/Iki boundary. To the east, within Hīlea Iki, the youngest ‘a‘ā terminates at an older ‘a‘ā flow, dating to approximately 3 to 1.5 ka, that extends east all the way to Nīnole Gulch within Nīnole Ahupuaʻa. Together these two ‘a‘ā flows form the kula kai landscape of Hīlea.
FIGURE 28. Mauna Loa lava flows and ash deposits prior to A.D. 1800 (after Sherrod et al. 2007).
Hīlea’s Kula Kai Landscape

The kula kai landscape of Hīlea, as defined for the purpose of this study, consists of two distinct ‘aʻā lava flows that form the seaward portion of the ahupua‘a makai of Highway 11, at elevations ranging from 0 to 50 m (0 to 163 ft.) above sea level (Figure 5). The lava flows, comprising a total area of 267 ha (660 ac.), extend from Hīlea Gulch within Hīlea Nui Ahupua‘a across Hīlea Iki Ahupua‘a to Nīnole Gulch within Nīnole Ahupua‘a. This land area extends 1.3 to 1.65 km between the coast and the highway, 1.65 km along the edge of the highway between Hīlea Gulch to Nīnole Gulch, and 2.2 km at the coast between Kāwā Bay and Kōloa Beach. Currently, 54 ha (133.5 ac.) of the overall area are privately owned, 29.5 ha (73 ac.) are owned by the State of Hawai‘i, and 183.5 ha (453.5 ac.) are owned by the County of Hawai‘i (Figure 6). Terry et al. (2014:3) describe the climate of this area as warm to hot and semi-arid, with a mean annual temperature of approximately 80 degrees Fahrenheit, and annual rainfall ranging from about 36 to 40 in.

The eastern portion of the kula kai, containing 143 ha (353.5 ac.), consists of the older, 5 to 3 ka, ‘aʻā flow, and the western portion, containing 124 ha (306.5 ac.), consists of the younger, 0.75 to 0.2 ka, ‘aʻā flow (Figure 27). The eastern edge of the younger lava flow is delineated by steep ‘aʻā slope that rises on average 10 to 12 m above the surface of the older flow. As is typical of Mauna Loa ‘aʻā, both of these flow surfaces are exceedingly rough and jagged with spinose, clinkery surfaces containing numerous accretionary lava balls20 (Macdonald 1943; Wentworth and Macdonald 1953). Due to the relative age difference between the two flows, the surface of the older, eastern flow is more heavily weathered and vegetated than the younger, western flow.

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20 Wentworth and Macdonald (1953:64) describe accretionary lava balls as “the balls found on the surfaces of many aa flows, formed by rolling up of viscous lava around some fragment of solidified lava as a center, in much the same way as a snowball rolling downhill gains in diameter through the accretion of additional snow.”
The younger, western flow consists of a dark, nearly black, ‘a’ā with very little vegetation cover, while the 3 to 1.5 ka eastern flow has a lighter, brownish hue and vegetation cover that ranges from light to moderate to dense with increasing distance from the coast.

Gagne and Cuddihy (1990) classify the natural, pre-human vegetation of areas with a similar geology, elevation and rainfall to the kula kai landscape of Hīlea as Coastal Mesic Forest. While a number of native plant species are still found within coastal, lowland vegetation regime of Hīlea, such as ‘ōhi’a lehua (*Metrosideros polymorpha*), ‘alahe’e (*Psydrax odoratum*), pili (*Heteropogon contortus*), ‘uhaloa (*Waltheria indica*), ilima (*Sida fallax*), naio (*Myoporum sandwicense*), maiapilo (*Capparis sandwichiana*), and others (Terry et al. 2014), introduced species such as Christmas-berry (*Schinus terebinthifolius*) and koa haole (*Leucaena leucocephala*) are today dominant, and create a nearly impenetrable growth of vegetation across the inland portion of the older ‘a’ā flow near Highway 11.

While the geologic map of the Island of Hawai‘i prepared by Sherrod et al. (2007:Sheet 8) classifies the youngest ‘a’ā within the kula kai landscape of Hīlea to a general, 550 year time span, this flow is thought to have occurred towards the earliest portion of that time period. Rubin et al. (1987) have tentatively dated this lava flow—through radiocarbon age determination of a sample collected at roughly 5,000 feet above sea level—to 640±45 years before present (B.P.), suggesting that it may have reached the coast of Ka‘ū sometime around A.D. 1300.21 This date indicates that the ‘a’ā flow is likely to have occurred sometime after the arrival of the first Polynesian settlers to the southern shores of Hawai‘i Island (Kirch 2011), and limits the age of the earliest human use its surface to about 700 years ago. Attesting to the likelihood of the flow event having occurred within the collective memory of the kūpuna of Ka‘ū is its association with

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21 Pressling et al. (2009) have reexamined 30 of the radiocarbon dates obtained by the Rubin et al. (1987) study, and have found small errors in the reported dates for 73% of the sample.
an apparent name (Oliveira 2009). The younger ‘a‘ā flow is frequently mentioned in the 1873 Boundary Commission testimony for Hīlea Nui and Iki ahupua‘a because of the role it served in defining the respective boundaries of those two land divisions (Boundary Commission, Vol. A, No. 1, pgs. 419-435). In the testimony, knowledgeable Kanaka Maoli residents of the time refer to the upper boundary of Hīlea, where it formerly met with the ahupua‘a of Kahuku and Punalu‘u, as “A Poohina”, or Ke ‘Ā Pōhina (literally, “The Gray [‘a‘ā] Lava”) (Boundary Commission Vol. A, No. 1, p. 420, 422, 431, 432). The lands of the Hīlea and Punalu‘u ahupua‘a were ultimately cut-off below the boundary point referred to as Ke ‘Ā Pōhina (Boundary Commission, Vol. C, No. 3, pgs. 259-267), but the name still appears on the 2013 U.S.G.S. Pu‘u’oke‘oke‘o Quadrangle, at an elevation of roughly 1,920 m (6,300 ft.) above sea level, within Kahuku Ahupua‘a, seemingly marking the upper portion of this lava flow.

**Trails, Paths, and Roads Inscribed within the ‘A‘ā Landscape of Hīlea**

It is rare in Hawai‘i, and probably only possible within the context of arid ‘a‘ā terrain, to find such an intact and extensive network of trails, paths, and roads as exists within the kula kai landscape of Hīlea, Ka‘ū (Figure 29). Movement through this rugged ‘a‘ā essentially dictates the necessity of path creation. Reaching each new destination, if it is to be visited repeatedly, would be facilitated by creating a new path. Movement without a path, while it must have occurred to scout potential routes and destinations, is at best difficult and slow going—even in the modern era with booted feet—as each successive step across the deeply fissured surface of the loose ‘a‘ā matrix requires careful consideration and intense concentration to avoid potential falls and serious injury. Once a path becomes inscribed within the ‘a‘ā landscape, it is there to stay. The more use it receives, or the more work that goes into its initial construction, the more recognizable it may become, but unlike some paths that cross pāhoehoe lavas and soil surfaces,
routes inscribed within the ‘a‘ā do not require sustained movement, external markers, or definitive built attributes to remain identifiable. Thus, the paths of the kula kai of Hīlea embody the totality of movement across this specific landscape, spanning a period of perhaps 700 years or more (Rubin et al. 1987), and represent a connection to the collective ancestral knowledge of this ‘āina.

These routes of movement are more than simply just a means to an end. They are places themselves, integral parts of the landscape, imbued with the significance of activities that occurred along them, and synonymous with themes of movement, travel, connection, and separation (Snead 2009). Movement along the paths that cross the kula kai landscape of Hīlea involves engaging with, and reaffirming relationships to the landmarks and places of the kūpuna encountered along the way. Here I examine the landscape of movement inscribed within the kula kai ‘a‘ā flows of Hīlea by archaeologically documenting the physical routes of travel as they appear today. While the trails, paths, and roads crossing this ‘a‘ā terrain may represent 700 years of movement through the landscape, the dating of prehistoric trail systems using standard archaeological techniques “remains somewhat problematic due to the scarcity of items that can be directly dated on or under the trails themselves, and the fact that later use and modifications of trails often obscure evidence of earlier uses”(Mills 2002:148). To begin to untangle the landscape of movement inscribed within the kula kai ‘a‘ā of Hīlea, I examine these routes of travel through their origins and destinations, the physical attributes of their construction, and the associations of material cultural evidence associated with them. I begin here by summarizing the archaeological evidence for trail development, use, and meaning within Hīlea in an effort to contextualize these trails within the physical landscape.
FIGURE 29. GIS map of trails crossing the kula kai ‘a’ā of Hīlea.
Documenting the Landscape of Movement within the Kula Kai of Hīlea

Initial archaeological documentation of the landscape of movement inscribed within the kula kai ‘a‘ā flows of Hīlea is presented in an archaeological reconnaissance report prepared for the County of Hawai‘i by Clark and Rechtman (2013). As part of the current thesis fieldwork, I revisited the previously identified trail network and further documented their routes and the cultural material found along them using a Trimble® Geo 7x handheld GPS unit (specific field methods are presented in Chapter 2). In this manner, I have thus far mapped 14.5 km, or roughly 9 mi., of trails, paths, and roads within the kula kai landscape of Hīlea (Figure 29). Not all trails have been followed to their furthest possible extent within this portion of the landscape, largely due to the hindrance of obscuring vegetation cover, and the resulting difficulty of locating the actual trail route, particularly within the more mauka portions of the 3 to 1.5 ka ‘a‘ā flow. Most of the trail routes were previously documented by Clark and Rechtman (2013), but some newly identified segments have been added to the existing inventory, and some previously recorded segments have either been eliminated, or had their routes amended. For the thesis fieldwork, I chose to record the landscape of movement within the kula kai of Hīlea at more of a macro scale. Concentrating on the trails, paths, and roads that connect to distinct local, community, and regional destinations, rather than the shorter paths that connect to distinct features within a single settlement cluster. While I collected some information on features external to the trail routes themselves, I rely primarily on personal observations, the information contained within the Clark and Rechtman (2013) study, and those earlier studies conducted within this landscape, to inform my discussion of feature distributions, densities, and types found within the settlement clusters connected by the recorded trail segments.
As my interest lies in the trail network as a whole, and its potential to inform community-based methods of archaeological practices in Hawai‘i, I do not present individual archaeological descriptions of each trail segment. Rather, I discuss the general characteristics of the entire recorded landscape of movement inscribed within the kula kai landscape of Hīlea, first by summarizing the origins and destinations of the trails themselves, and then by addressing the landscape considerations of trail construction. As Snead (2009:48) has written, to more fully appreciate the nature of trails, paths, and roads, “they must be looked at through frameworks that allow them to be considered as influencing an experience as inscribed landscapes and as potential materialized ideology.” Movement along the paths that cross the kula kai landscape of Hīlea involves engaging with, and reaffirming relationships to the landmarks and places of the kūpuna encountered along the way. I contend, that by following the trails crossing the ‘a‘ā, and by remembering the names of the people, places, and things found along them, by unraveling the landscapes of movement, deciphering their meanings and understanding their contexts both past and present—by listening to each other and working together—archaeologists and Kanaka Maoli communities can move beyond the issues that have created tensions within the sociopolitical environment of the Hawaiian heritage landscape, and begin to establish collaborative, community-based approaches to heritage management that decentralize the role of archaeology, redistribute existing power structures, and ultimately lead to social justice (Kawelu 2015; Oliveira 2009; Snead et al. 2009). This summary of the landscape of movement crossing the ‘a‘ā of Hīlea, although not a collaborative effort itself, is intended to examine the possibility for future community-based, collaborative heritage research within the county lands at Kāwā.
Trail Origins and Destinations

To situate the landscape of movement crossing the kula kai ‘aʻā flows of Hīlea within the broader cultural context of Kaʻū it is important to examine the origins and destinations of the various trail routes themselves. Archaeologically, based solely on surface observations, the origins and destinations are essentially indistinguishable from one another, and are often one and the same. Unravelling the network of trails is akin to answering the old question regarding the chicken and the egg: which came first? Do these trails lead from human settlements outward, or was it the construction of the trails that created opportunities for human settlement on the ‘aʻā in the first place? The answers likely lie somewhere in the middle, with elements of both having occurred in the past. Unlike the chicken and the egg, however, the construction of trails is an undertaking of human agency, and careful examination of these tangible manifestations of movement, once appropriately contextualized within the Kanaka Maoli cultural landscape, should lead to deeper understandings of when, how, and why these routes developed (Snead 2009). Interpreting the landscape of movement, while not the primary focus of this thesis, involves understanding not just the archaeological settlement patterns, the landscape and its resources, but also the people, both past and present, who invested generations of labor into creating the cultural landscape in the first place. The trails inscribed in the ‘aʻā of Hīlea tell a diachronic story of the Kanaka Maoli of Kaʻū, who as they moved through the landscape, with an eye towards the future, created the paths that connect, like moʻokūʻauhau (genealogies), back to the places from whence they came. These paths, if followed to their ultimate origins, will eventually lead to the initial coastal settlements of Kaʻū, and the open ocean travelled by the first voyagers to reach its volcanic shores.
It is important not to conflate the idea of trail origins and destinations, with the beginnings and ends of the trails themselves. Trails, as pieces of a larger networks of movement, often have no definitive beginning or end (Snead et al. 2009), but journeys made by human actors along them do. Travel utilizing trails, paths, and roads can therefore be said to originate in one location and achieve an intended destination at another location. This situates the discussion of origins and destinations in the realm of culture, and within the purview of human choice. The physical routes of travel that result from movement across the landscape thus inform us of those choices, and the various decisions made along the way to achieve an intended destination from a given point of origin (Snead et al. 2009). Such choices could include the selection of route, the time of day chosen to travel, material items carried along the way, or even the accompaniment of traveling companions. As trails become more deeply inscribed within a landscape through continued use, a cumulative process of materialization occurs along their routes, and each journey then involves engaging with, and reaffirming relationships to the landmarks and places of the kūpuna encountered along the way, consequently structuring how those making the journey perceive the world around them (Snead et al. 2009). Thus, an understanding of the origins and destinations of movement through a landscape can reveal much about people’s perceptions of the world they lived in.

Given the rocky, arid nature of the ‘ā‘ā terrain, and the lack of terrestrial food opportunities and fresh water resources, select locations within the kula kai landscape of Hīlea were likely first sought out by the Kanaka Maoli residents of the area as destinations, accessed in an effort to retrieve marine resources from the rich nearshore environment (Clark and Rechtman 2013). This access may have begun independently along both edges of the ‘ā‘ā, with initial incursions occurring from the Kāwā and the Nīnole sides of the flows. William Ellis (2004:195-
200), who crossed the ‘a‘ā following the route of the nearshore alaloa in 1823, noted the presence of coastal villages with ample freshwater resources and large fishponds at both locations (Kelly 1980:22-33). The earliest residents of these two villages, given their proximity to the ‘a‘ā flows, were likely the first humans to explore the rugged terrain of the kula kai of Hīlea. As they familiarized themselves with these coastal lands and its ocean resources, they may have also established the first camps and then settlements on the ‘a‘ā flows. The differential ages of the two lava flows that form the kula kai of Hīlea (Rubin et al. 1987; Sherrod et al. 2007:Sheet 8)—depending on the timing of initial settlement in the central portion of Ka‘ū, which is still poorly understood due to the lack of radiocarbon dates—could indicate that use of the 3 to 1.5 ka eastern ‘a‘ā flow adjacent to Nīnole predates that of the roughly 0.7 ka western flow adjacent to Kāwā. It is also possible, if settlement of the area occurred prior to 0.7 ka, that evidence of earlier cultural use of an older landscape was buried beneath the younger of the two lava flows.

To explore how the landscape of movement inscribed within the kula kai ‘a‘ā of Hīlea may have developed, the overall impressions of the trail network and the various types of trail routes it contains are described below.

**The Landscape of Movement Inscribed within the Kula Kai ‘A‘ā of Hīlea**

Accurately interpreting how the inscription of trails on to the ‘a‘ā landscape of Hīlea may have proceeded following the initial incursion from the coastal settlements along either edge of the flows is virtually impossible without first establishing a detailed settlement chronology for the features they access (Mills 2002; Snead et al. 2009). Nevertheless, the pattern of trails originating at the edges of the flows indicates that movement across the ‘a‘ā may have occurred either in a direct manner to preferred destinations, or along the coast from one destination to another, or most likely as a result of both. As trails and settlements became established within the ‘a‘ā, trail building may have then begun to originate from those locations, radiating outwards to
additional resource areas and later settlements, eventually connecting the kula kai of Hīlea to the wider trail network of Kaʻū. Movement may have also occurred differentially from each side of the ‘a‘ā, given the differences in terrain and the possibility of acquiring varied resources on each of the two flow surfaces, and in the ocean waters fronting them. The trail network does, in fact, seem to suggest alternative settlement strategies for each of the two lava flows. Here, to begin to address settlement patterns within the kula kai landscape of Hīlea, I briefly discuss three general trail types that are integral to movement through the ‘a‘ā, including lateral coastal trails, mauka-makai trails, and local resource or connector trails.

The Nīnole side of the ‘a‘ā, on the older flow, presents a greater opportunity for ocean access and also contains a larger number of dispersed feature clusters, with each typically organized around a narrow inlet containing a small cobble beach (Clark and Rechtman 2013). These dispersed settlements extend southwest from Nīnole Cove along the coast for roughly 1.2 km to the eastern edge of Kuhua Bay, and are connected by a well-developed network of trails (Figure 29). Conversely, along the coastal margin of the younger ‘a‘ā flow there is a single large settlement cluster roughly 0.2 km east of Kāwā Bay adjacent to the only inlet with a cobble beach that offers potential ocean entry. This coastal settlement, at Kaikainawana, is connected to a more inland cluster of features adjacent to Hīlea Gulch, and is associated with scattered features, connected by a loose network of trails, that extend another 0.2 km to the east, along an area fronted by coastal cliffs. A faint coastal trail is present in sections to the east of the outlying features, but it only extends as far as Puuainako Point (another 0.2 km) before terminating at Lae o Puu, a stone ahu marking the seaward boundary between Hīlea Nui and Hīlea Iki ahupua‘a.

With the exception of the presumably historic alignment of the alanui aupuni (described at the beginning of this chapter), the only lateral coastal trail that actually crosses the entirety of
the kula kai ‘a‘ā of Hīlea, referred to here as the alaloa, appears to have been constructed independently from either of the flow edges, eventually joining in the middle of the ‘a‘ā near the boundary between the two flows (Clark and Rechtman 2013). On the older flow, extending south and west from Nīnole Cove, the alaloa begins as a single trail that follows the coast for 0.1 km before splitting into two parallel alignments, one of which stays fairly close to the ocean (roughly 50 to 100 m inland) for most of its length, and the other of which maintains a similar course roughly 50 m further inland. The trails join again 0.7 km after they split, and a single trail alignment continues west for 0.4 km to meet the western alignment of the alaloa. On the younger ‘a‘ā flow, extending northeast from Kāwā Bay, the alaloa alignment does not follow the contours of the coast, but extends in a relatively straight line (roughly 100 to 300 m inland) for 1.1 km to the aforementioned intersection. Interestingly, this western branch of the alaloa continues for approximately 0.35 km beyond the intersection with the eastern portion of the alaloa, eventually terminating near a small cave shelter within the older ‘a‘ā flow (Hīlea Iki Cave Shelter). The area surrounding the natural cave has been extensively modified (Clark and Rechtman 2013:137), and this shelter could represent the initial destination (or origin) of the western branch of the alaloa. Caves such as this are rare in ‘a‘ā settings, and this particular shelter cave would have certainly been valued by the earliest Kanaka Maoli to venture onto the kula kai ‘a‘ā flows of Hīlea due to its central position within the rugged coastal landscape, and the natural protection it offers from the sun, wind, and rain.

Trails extending mauka-makai are also an essential part of the landscape of movement within the kula kai of Hīlea. Each settlement location within the ‘a‘ā has one or more mauka-makai trail routes that presumably provided access to inland agricultural, habitation, and resource areas (Kelly 1980; Handy and Handy 1991; Handy and Pukui 1998; Clark and Rechtman 2013).
The mauka-makai trail routes near the coast coalesce as they progress inland, forming fewer primary routes to mauka destinations (Landrum 1984). The most developed of these routes across the ‘a’ā extends inland from the eastern edge of Kuhua Bay, originating within a settlement cluster makai of the natural cave shelter discussed above (the Kahua Bay Complex). This trail initially traverses the older ‘a’ā flow, extending northwest for 0.5 km to the alanui aupuni. It then continues on the opposite side of the historical era roadway, extending 0.34 km to the edge of the younger ‘a’ā flow, where it traverses the slope and continues for 0.45 km to an area of thick vegetation adjacent to Highway 11. Another mauka-makai trail, connected to three of the more eastern settlement clusters along the coast of the older ‘a’ā flow (the Kuhua Bay, Hīlea Iki Middle, and Lu‘u Complexes) extends inland to a point 0.37 km above the alanui aupuni where it too disappears beneath tangle of thick brush. A lateral connector trail (originating near the mauka edge of the alanui aupuni) extends 0.35 km from this trail to the more western trail it parallels. At the very eastern edge of the older flow, a discontinuous mauka-makai trail approximates the boundary between Hīlea Iki and Nīnole ahupua‘a from the alaloa and the alanui aupuni (within the Kokoahu Point Complex), before shifting to a more northerly route, and exiting the ‘a‘ā at the Nīnole Gulch, 0.4 km above the historic roadway.

On the younger ‘a’ā flow adjacent to Kāwā Bay four mauka-makai trail routes connect the primary settlement cluster along the coast (the Kaikainawana Settlement) to the more inland settlement adjacent to Hīlea Gulch. Mauka of the alanui aupuni, two primary routes extend short distances (0.05 km and 0.22 km respectively) through the more inland settlement area to Hīlea Gulch, where they presumably leave the ‘a‘ā and continue mauka across a 5 to 3 ka pāhoehoe flow on the opposite side of the intermittent drainage channel. The continuation of these trails, however, could not be confirmed across the pāhoehoe landscape through the thick vegetation on
the opposite side of the gulch by Clark and Rechtman (2013). On the 1.5 to 0.75 ka pāhoehoe flow 0.34 km west of Hīlea Gulch, a partially kerb-lined trail, is seemingly a historical era roadway that was perhaps modified from an earlier foot trail. It extends mauka from the alanui aupuni, along the boundary between Hīlea Nui and Hīlea Iki ahupua'a, for 0.37 km before becoming untraceable in thick vegetation near Highway 11. This mauka-makai roadway, said to have once accessed the inland town of Hīlea, is referred to in the court documents for a 1980 judgement (Sportsman’s Club of Ka‘ū v. Okuna 1980) that established public access rights to the Kāwā area, as the “Hīlea Trail” (Clark and Rechtman 2013; Townscape 2017).

In addition to lateral coastal trails (the alaloa) and mauka-makai trails, the landscape of movement inscribed within the kula kai ‘a‘ā flows of Hīlea also contains numerous shorter trail segments the appear to have been built for the purposes of local resource extraction and connection (Clark and Rechtman 2013). These, often shorter, trail segments connect settlements, longer trails, and resource areas in various combinations. Some of the shorter trail segments also access coastal locations, suggesting they were used to acquire nearshore marine resources. Others simply end in the ‘a‘ā at locations where there may have been resources important to the Kanaka Maoli population that formerly resided on these lava flows. Such resources could include plants, animals, lithic materials, or even locations of spiritual significance. These latter types of trails, where there are no obvious resources or settlements associated with them, are extremely difficult to interpret archaeologically, and they highlight the need to decentralize the dominant role of etic archaeological interpretations in producing knowledge of the past. Emic knowledge systems may instead help develop a deeper understanding of Kanaka Maoli communities and their choices in the past (Kawelu 2015).
Features of the Hīlea ʻAʻā Flows: Settlement Locations

To provide specific examples of the origins and destinations of the various types of trails discussed above, I have defined eight discrete locations within the ʻaʻā landscape that appear to mark the initial origins or intended destinations of travel along those trail routes (Figure 29). The “settlement locations” defined here represent nodes of past, present, and future activity within the kula kai ʻaʻā of Hīlea. While they are connected to one another within the overall context of the landscape of movement, each has had its own part to play in shaping how the network of trails across the ʻaʻā developed. Chronological control will eventually improve our understanding of the landscape of movement crossing the kula kai ʻaʻā of Hīlea (Mills 2002; Snead et al. 2009).

The tangible evidence of Kanaka Maoli settlement locations also offer potential opportunities for the application of community-based archaeological projects if they are wanted by the community (Atalay 2012). The trails across the ʻaʻā, as the only connections to these locations, represent routes that archaeologists, Kanaka Maoli, local communities, and other stakeholders can travel together as they seek a mutual path—through communication, collaboration, and respect—towards a more inclusive system of heritage management in Hawai‘i; one that incorporates multiple knowledge systems into the discussion of heritage and how to manage it.

The eight specific settlement locations discussed here were defined using several lines of evidence, including relative feature proximity and isolation, the presence of mauka-makai trail connections, previous archaeological groupings, and the natural and political boundaries contained within the kula kai ʻaʻā of Hīlea (Clark and Rechtman 2013). A name, representative of a specific geographic location, or of a specific type of use, has been applied to each of the defined settlement locations. The brief descriptions presented below contain information about the location and size of the settlement, the general number and type of features present, and a
discussion of the specific trails that access and connect the various locations to other features, trails, resources, and locales both internal and external to them. The discussion of settlement locations proceeds from southwest to northeast across the Hīlea ‘a‘ā flows, beginning adjacent to Kāwā Bay with the Kakainawana (Hīlea Nui Coastal) and Hīlea Gulch (Hīlea Nui Inland) settlements, and then moves to the opposite side of the younger ‘a‘ā flow to the Kuhua Bay (West) Fishermen’s Camp, before addressing the Hīlea Iki portion of the older ‘a‘ā flow and the Hīlea Iki Cave Shelter, the Kuhua Bay (East) Complex, the Hīlea Iki Middle Complex, and the Lu‘u Complex, and ends at the eastern edge of the older flow in Nīnole Ahupua‘a within the Kokoaahu Point (Nīnole) Complex. The specific feature information is summarized largely from Clark and Rechtman (2013), but is augmented with discoveries and impressions from this more recent trail research and fieldwork.

*Kakainawana (Hīlea Nui Coastal) Settlement*

The most western of the coastal settlements on the Hīlea ‘a‘ā occurs near a small cobble beach to the east of Kāwā Bay (Figures 30 and 31), at a location labeled “Kakainawana” on a map of a portion of the Kaʻū District prepared by M.D. Monsarrat in 1887 (Hawai‘i Registered Map No. 1455; Figure 23). Mann and Bowen (1976) report that this “beach” was once used as a canoe landing when adverse surf conditions blocked the preferable landing at Kāwā. Along the coast in the vicinity of Kakainawana, Clark and Rechtman (2013:113-117) identified more than 100 distinct features with surface attributes and cultural debris indicative of use by former Kanaka Maoli residents for habitation. The features are concentrated at the inland edge of the cobble beach, but extend along the coast for roughly 400 m from Keʻekū Heiau to Puuoloaa, and inland from the coast for a maximum distance of 180 m. The Kakainawana settlement cluster occupies a total area of roughly 5 ha.
FIGURE 30. Map showing the locations of the Kakainawana and Hīlea Gulch Settlements (after Clark and Rechtman 2013:103).
A well-defined lateral trail extends east from Kāwā Bay to the primary concentration of features at Kakainawana, passing near the mauka wall of Keʻekū Heiau along the way. This trail forms the westernmost end of the alaloa, the primary route of which branches from it as it approaches Kakainawana and continues in a northeasterly direction across the remainder of the younger ʻaʻā flow, skirting the mauka edge of the settlement. From the feature concentration at Kakainawana, a network of connector trails, including one well-marked route, and a series of less well defined routes nearer to the coast, connect east to the more scattered, less formalized features of an area labeled “Puuoloaa” on the 1887 prepared by M.D. Monsarrat (Hawaiʻi Registered Map No. 1455). Those features are, in turn, connected inland to the alaloa by another well-defined trail, and to Puuainako Point, further to the east, by a faint, discontinuous trail. In general, the features at Puuloloaa have an appearance of less-permanence than those clustered
around the cobble beach at Kakainawana, suggesting that the former may represent temporary “fishing” structures occupied recurrently, while the latter may represent more permanent house constructions (Clark and Rechtman 2013).

Two mauka-makai trails extend inland from the main cluster of features at Kakainawana. Beginning roughly 45 m apart from one another, the eastern trail extends in a northwesterly direction, and the western trail extends in a northerly direction. These trails both cross the alaloa and intersect each other at the base of a small hill, roughly 100 m inland of the main feature concentration. At the intersection, a wider than usual trail, created by pounding the surface of the ‘a‘ā with waterworn hammerstones, extends 400 m to the northeast, parallel to the alignment of the alanui aupuni, before terminating in the ‘a‘ā. Beyond the intersection, the mauka-makai trails continue inland to the alanui aupuni, and then through the more mauka settlement cluster to Hīlea Gulch. At the western extent of the Kakainawana settlement cluster, where a few scattered features are near the eastern edge of Ke‘ekū Heiau, two additional mauka-makai trails extend inland from the alaloa to the alanui aupuni. These trails, which do not intersect, but meet the alaloa nearby one another, parallel the other two mauka-makai trails, creating two sets of parallel trail routes extending inland from the Kakainawana settlement cluster to the Hīlea Gulch settlement cluster.

*Hīlea Gulch (Hīlea Nui Inland) Settlement*

Inland of Kakainawana, adjacent to Hīlea Gulch, is another large settlement occupying roughly 5 ha at the western edge of the younger ‘a‘ā flow (Clark and Rechtman 2013:106-110). Within this area, extending in a roughly 200 m wide band, east along the alanui aupuni for nearly 400 m, are more than 200 potential habitation surfaces (Figure 30) that:

…range from crude, indecipherable constructions and small, opportunistic pavements to neatly stacked enclosures and large ‘ili‘ili paved surfaces. Many of the features take advantage of natural aspects of the ‘a‘ā flow (such as large accretionary boulders,
bedrock outcroppings, and overhangs) to block the often strong trade winds, provide shelter, and create elevation for better view planes. Often times the features are difficult to discern, as they blend in with the surface of the surrounding lava flow [Figure 32]. Along the edge of the Old Government Road nearly the entire lava flow surface has been modified and leveled (Clark and Rechtman 2013:107).

Four mauka-makai trail alignments connect between this settlement and the Kakainawana settlement area at the coast. Two of those trails continue mauka of the alanui aupuni through the Hīlea Gulch settlement cluster to the gulch edge, where they presumably continued inland, but their routes are now difficult to follow across the densely vegetated surface of the adjoining pāhoehoe flow (Clark and Rechtman 2013). While these two mauka-makai trails provide access to some of the features within the inland settlement area, which are concentrated primarily near Hīlea Gulch and along the alanui aupuni, they also provide access to a series of four, lateral trails that extend parallel to one another and the alanui aupuni through the settlement, providing access to some of the outlying features.

All four of the lateral trails are crossed by the more eastern of the two mauka-makai trails. Where they intersect that trail, they are spaced 25 m, 50 m, 110 m, and 130 m from the mauka edge of the alanui aupuni, respectively. These lateral trails, like the one that extends east from the intersection of the two mauka-makai trails between the Hīlea Gulch and Kakainawana Settlements, extend from near the gulch edge, out into the ‘a‘ā, and then simply end. The lengths of all four trails vary, with the most mauka one being the shortest (155 m), and the next most mauka one the longest (645 m). The two nearest the alanui aupuni measure 395 m and 495 m in length, respectively. All four trail surfaces are also quite wide, certainly wider than required for walking, and wider than most of the other trails identified within the kula kai landscape of Hīlea. The intended destination of these lateral trails, if there was one, or if it was reached, is not clear based solely upon the archaeological evidence.
Kuhua Bay (West) Fishermen’s Camp

Along the coast at the western edge of Kuhua Bay (Figure 33) is a cluster of five features, contained within a 0.1 ha area of the younger ‘a‘ā flow (Figure 29) that contains five leveled ‘a‘ā surfaces shielded from the prevailing trade winds by stacked cobble walls (Clark and Rechtman 2013:127). These features (Figure 34), given the prevalence of modern bottles, cans, batteries and fishing supplies associated with them, are either modern constructions, or older constructions adapted by fisherman to modern camping use. PVC fishing pole holders are present along the cliffs overlooking Kuhua Bay at the seaward edge of the feature cluster, indicating that fishing is the primary reason for accessing this location. Access to this area is facilitated by a mauka-makai trail, also seemingly of more recent origins than other trails identified within the kula kai of Hīlea, that extends from a prepared parking area for 4WD vehicles along the makai edge of the
alanui aupuni, roughly 0.55 km to the coast, intersecting the route of the alaloa along the way. From the camp, a roughly 50 m long trail segment extends west to an area interpreted as the lua (toilet). Although these features do not appear to possess the same antiquity as the features contained within the other settlements described in this section, the Kuhua Bay Fisherman’s Camp is included in this discussion because of its connection to the present community of Kaʻū, and the potential of these features and those who use them to provide ethnographic information relative to the construction, marking, and maintenance of trails across the kula kai of Hīlea, short-term residency on the ‘aʻā flows, and the nearshore marine environment and its resources.

FIGURE 33. View across Kuhua Bay (to the northeast) from the fisherman’s camp (Photo by author, 2016).
Hīlea Iki Cave Shelter

Within the older ‘a‘ā flow, roughly 200 m east of the edge of the younger flow and 260 m inland of the coast, is a small cave shelter that has been modified for habitation purposes (Clark and Rechtman 2013:137). The shelter occurs along the western edge of a slight depression in the flow surface (ca. 0.05 ha) that is surrounded by steep ridges of uplifted basalt (Figure 35). This shelter is not a lava tube, but a roughly 15 m long bedrock overhang with cobbles forming its eastern edge, giving it the appearance of a narrow cave with an opening at its northern end. A roughly 10 m by 10 m artificially leveled area to the east of the opening consists of fitted basalt boulders, and two additional smaller shelters, walled with stacked cobbles are present against the bedrock ridge in the northeastern corner of the overall settlement area. Cultural material within the shelter—ranging from marine shell to a fishhook fashioned using a cut metal nail—indicates
traditional to early historic Kanaka Maoli use. The shelter, because it offers natural protection from the elements, may have been one of the earlier destinations accessed by Kanaka Maoli within the kula kai ‘a’a of Hīlea.

The Hīlea Iki Cave Shelter is directly accessed by two trails (Figure 36). The first connects from the shelter, 75 m southwest, to a well-worn mauka-makai trail that extends inland from the settlement along the eastern edge of Kuhua Bay. Beyond the mauka-makai trail the lateral connector trail continues west-southwest to meet with alignment of the alaloa that extends east from Kāwā Bay. The other trail, extends roughly 75 m to the southeast to connect directly with the mauka most features of the Kuhua Bay Complex. There is no direct access to the shelter from the east or northeast. The cultural deposit contained within this shelter could include early Kanaka Maoli habitation, and could provide insight into the span of human occupation on the older of the Hīlea ‘a’a flows.
FIGURE 36. Map showing the locations of the Hīlea Iki Cave Shelter, Kuhua Bay Complex, Hīlea Iki Middle Complex, and Lu’u Complex (after Clark and Rechtman 2013:131).
Kuhua Bay (East) Complex (Site 50-10-74-4369)

The Kuhua Bay Complex, a few features of which were first recorded by the Bishop Museum in 1968 (Hansen 1968), was assigned the site designation 50-10-74-4369 during the Statewide Inventory of Historic Places survey in 1973 (Clark and Rechtman 2013:136-140). The complex contains more than 90 features (enclosures, pavements, terraces, and platforms) that appear to have been utilized for Kanaka Maoli habitation related purposes (Figure 37). Clark and Rechtman (2013:136) note that “the main body of features occurs at the center of the overall site area,” and that they “appear to be situated in at least seven spatially related groupings that could represent former households” (Figure 36). This primary settlement area occupies roughly 1.8 ha on the older ‘a‘ā flow at the eastern point of Kuhua Bay, near the edge of the younger flow. It is 20 m to 200 m inland of a steep-sided, narrow coastal inlet; a cobble beach with relatively easy ocean access is present within another narrow inlet along the coast roughly 100 m west of the primary settlement area (Figure 38). The flow surface within the settlement is littered with marine shell, coral, sea urchin, and lithic material. Some evidence of historic use (lamp glass and rusted metal) is also present at the site.

Numerous trails feed into the Kuhua Bay Complex, including two potential alignments of the alaloa, one that extends through the middle of the settlement, and another that skirts the makai edge of the features, joining up with the other alignment to the northeast and southwest of the complex. Two mauka-makai trail routes also extend inland from the site. The more well-formed of these two routes extends in a northwesterly direction all the way to Highway 11. The other extends in a northerly direction to meet with trails extending inland from the Hīlea Iki Middle and Luʻu complexes makai of the alanui aupuni. The makai end of this route, nearest the settlement area, is well-formed and obvious, but the trail becomes more discontinuous and difficult to follow as it progresses inland. A third trail extends 75 m mauka from the complex to
the Hīlea Iki cave shelter. Other branch trail segments lead from the primary trail routes in the vicinity of the Kuhua Bay Complex to a few outlying features at the periphery of the main settlement cluster. Within the Kuhua Bay Complex, the features are connected to one another, and the nearby coastal resource areas, by a network of short trail segments, and in some areas, the ‘a‘ā has a “groomed” appearance, as if cleared of large cobbles and obstacles, especially surrounding several of the potential households, where it is fairly easy to walk, even without following a trail.

FIGURE 37. Habitation surface within the Kuhua Bay Complex, view to the north (Photo by author, 2016).

Hīlea Iki Middle Complex

Along the coast of the older ‘a‘ā flow, between the Kuhua Bay and Lu‘u complexes, is a fairly deep inlet that culminates in a narrow beach of waterworn cobbles (Figures 36 and 38). A roughly 1 ha portion of the ‘a‘ā flow to the north and east of this inlet appears as if it was
inundated by large waves at some point in the past, perhaps during the 1868 tsunami. The ‘a‘ā surface in this coastal area is distinct from that of the surrounding flow surfaces (more jumbled and mixed with waterworn boulders), indicating disturbance by wave action. Only three cultural features remain in close proximity to the inlet (an enclosure and two remnant ‘a‘ā pavements), all at the inland edge of the seemingly wave scoured area, perched on naturally elevated landforms (Clark and Rechtman 2013:142-143). Additional Kanaka Maoli features that may have once been present within the complex were likely destroyed by the large waves.

Two potential alignments of the alaloa access this middle complex between the Kuhua Bay Complex (to the southwest) and the Lu‘u Complex (to the northeast). The more makai of these trail alignments is no longer evident for a distance of 95 m where it crosses the wave scoured ‘a‘ā along this section of coast. The more inland route (50 m to the northwest) extends along the inland edge of the wave scoured flow surface, and is mostly intact where it can be seen, although it disappears for 50 m beneath a thick growth of Christmas-berry directly inland of the
narrow inlet and cobble beach. A mauka-makai trail extends inland from the more mauka alignment of the alaloa to meet with trails extending inland from the Kuhua Bay and Lu‘u complexes makai of the alanui aupuni. This mauka-makai trail, although well-formed in sections, is discontinuous for much of its length and difficult to follow across the up and down terrain through the numerous, thick patches of Christmas-berry. The presence of the inland trail route suggests that the Hīlea Iki Middle Complex may represent its own formerly distinct destination (or point of origin) within the kula kai ‘a‘ā of Hīlea. It is likely that direct, primary access, for the purpose of visiting this location, lessened following the destruction of portions of the settlement by large waves (possibly in 1868).

FIGURE 39. Narrow coastal inlet fronting the Hīlea Iki Middle Complex, view to the southeast (Photo by author, 2016).
Lu‘u Complex (Site 50-10-74-4370)

The Lu‘u Complex, first identified by the Bishop Museum in 1968 (Hansen 1968), was assigned the site designation 50-10-74-4370 during the Statewide Inventory of Historic Places survey in 1973, and named for the location of a historic survey marker (“Luu”) erected on a small hill within the site area (Clark and Rechtman 2013:140-143). Other, perhaps more ancient, names associated with this general area include Ahunui and Kapukini, two points of land that jut out into the ocean on either side of an ana kai (coastal inlet) marking the Hīlea Iki/Nīnole boundary (Boundary Commission Vol. A, No. 1, pg. 432). The complex contains 110 artificially leveled surfaces with indications of use for Kanaka Maoli habitation related purposes (enclosures, pavements, terraces, and platforms; Figure 40). The features, concentrated within a roughly 125 m wide band that extends along the coast for 325 m, occur in two primary clusters, a northeastern cluster near two steep-sided, narrow coastal inlets, and a southwestern cluster adjacent to a wide inlet with a cobble beach (Figure 36). Clark and Rechtman (2013:141) note that “the northeastern cluster contains at least thirty-five potential habitation surfaces (many of which are connected to one another) that likely represent five or more discrete households.” In the southwestern portion of the complex, where at least 75 potential habitation surfaces were identified, they note that the features “are all generally well-constructed and fairly large, but are built very close to one another making it difficult to divide them into potential households based on spatial proximity alone” (Clark and Rechtman 2013:142). Marine shell, coral, urchin remains, and lithic materials are common across the entire ‘a‘ā the surface of the roughly 3 ha complex.

Both potential alignments of the alaloa pass through the Lu‘u Complex, one near the coast, and the other 80 m further inland, near the mauka extent of the settlement area. Two mauka-makai trail routes also extend inland from the complex, one from the northeastern feature cluster, and another from the southwestern feature cluster. Both mauka-makai trails begin at the
coastal alignment of the alaloa and extend across the more inland alignment. The mauka-makai trail accessing the northeastern feature cluster within the Lu‘u Complex approximates the boundary between Hīlea Iki and Nīnole ahupua‘a. Interestingly, in the 1873 Boundary Commission hearings for Hīlea Iki Ahupua'a, the shoreline boundary between Hīlea Iki and Nīnole is described as a “point of roads at an awaawa [awāwa-ravine] on the Kona side of Kokoahu [a point on the Nīnole side of the boundary]” (Boundary Commission Vol. A, No. 1, pg. 432). This point of roads appears to be where the northeastern mauka-makai trail meets the coastal alignment of the alaloa, and several connector trails branch off to access various features within the complex itself.

FIGURE 40. A coastal enclosure within the Lu‘u Complex, view to the northeast (Photo by author, 2016).
The trail heading inland from the southwestern portion of the Luʻu Complex joins with the mauka-makai trails extending inland from the Kuhua Bay and Hīlea Iki Middle complexes makai of the alanui aupuni. Roughly 200 m mauka of the Luʻu Complex, a well-built connector trail extends north from the mauka-makai trail out into the ‘a‘ā for 60 m before terminating near a dense growth of Christmas-berry. The intended destination of this trail is not clear based solely upon its termination point, but clearing of the Christmas-berry near that location may provide additional information regarding its purpose of construction. A roughly 170 m long trail segment that extends makai from the southwestern feature cluster at the Luʻu Complex accesses a large tide pool with protected water access that is shielded from breaking waves by a projecting point of ‘a‘ā lava.

*Kokoahau Point (Nīnole) Complex*

A roughly 5 ha area along the eastern edge of the older ‘a‘ā flow, extending from the Luʻu Complex to Kokoahau Point, along the coast to Kaʻieʻie Heiau, and southwest along both sides of the alanui aupuni in Nīnole to the Hīlea Iki boundary, contains scattered habitation features located within a state-owned parcel. This area has not been thoroughly documented or mapped by archaeologists, but some features and trails within it were previously recorded by Hansen (1968) and Tulchin et al. (2006). The mapping of trails through the ‘a‘ā for the current study indicates that the Kokoahau Point Complex (Figure 29) contains dispersed settlement clusters accessed by the alaloa and various other connector trails. No accounting of the specific number of features was undertaken, but general impressions suggest that feature density is greatest to the west of Kaʻieʻie Heiau along the alanui aupuni, where roughly three dozen features with indications of Kanaka Maoli habitation are found. Perhaps sixty additional habitation surfaces are dispersed throughout the remainder of the area, generally found in groupings of three to five features a piece. The feature clusters are fairly evenly spaced along the
coast, generally in relative close proximity to the alaloa and a few primary branch trails. The most western features of the complex occur near the eastern edge of the mauka-makai trail that extends inland from the northeastern end of the Lu’u Complex to the alanui aupuni. That trail continues on the mauka side of the alanui aupuni, where it leaves the ahupua’a boundary to extend northwest through Nīnole Ahupua’a. No habitation structures were identified in the ‘a’a to the west of the mauka-makai trail below the alanui aupuni.

The Kokoahau Point Complex contains the eastern portion of the alaloa that crosses the kula kai ‘a’a flows of Hīlea. This trail is currently accessed from the alanui aupuni along the western edge of Ka‘ie‘ie Heiau, but may have formerly extended makai of the heiau directly to Kōloa Beach. Kelly (1980:107) has suggested that the beach used to extend further seaward prior to the 1868 tsunami. Currently, the beach can be directly accessed from below Ka‘ie‘ie Heiau only at low tide by following a short branch trail north from the alaloa. At high tide access is blocked by the ocean. Another branch trail that begins near the southwestern corner of the heiau structure, and accesses several habitation features, connects from the alaloa (at two points) to the mauka-makai trail that approximates the Nīnole/Hīlea Iki boundary. The alaloa itself, begins as a single trail alignment, but splits within the Kokoahau Point Complex, 140 m from (south of) Ka‘ie‘ie Heiau, with the mauka branch directly accessing the southwestern portion of the Lu‘u Complex, and the makai branch accessing the northeastern end of that complex. A branch trail from the makai alignment of the alaloa connects to Kokoahau Point east of the Lu‘u Complex, where the absence of habitation structures, but the presence of modern fishing debris, indicates that nearshore resources may have once been collected by the Kanaka Maoli residents of the area. Both alignments of the alaloa continue through the Lu‘u Complex and the Hīlea Iki Middle Complex to the Kuhua Bay Complex, where they join back together again.
Landscape Considerations of Trail Construction

To provide an understanding of why specific trail routes may have been chosen by Kanaka Maoli in the past, to portray a sense of the labor invested in the creation of the trail network, and to present a picture of what those trail routes look like today, I examine the specifics of trail construction through the lens of landscape. It is an understanding of the physical characteristics of the trail routes themselves—how they were created in the past within this particular environment—that will facilitate a discussion of how communities and archaeologists can work together to blaze new paths across the sociopolitical landscape of heritage management. Any consideration of trail construction within the kula kai of Hīlea must take into account the ‘a‘ā terrain. This rugged landscape necessitates trail construction in the first place, limits travel across areas where trails do not exist, and consequently structures movement through the ‘a‘ā along a set number of prescribed routes (Snead 2009). Therefore, understanding the landscape of movement inscribed within the kula kai of Hīlea requires some understanding of the physical processes through which the trails are created. The following discussion is based upon general observations of the trail routes made while conducting the current fieldwork. It is intended to provide an overview of some of the considerations of trail construction that are related to landscape, but is by no means an exhaustive study of all the different aspects of construction embodied within the kula kai ‘a‘ā flows of Hīlea.

Landforms and Trail Routes

Sociopolitical aspects of Kanaka Maoli trail construction undoubtedly played a significant role in how trails were built and maintained in pre-European Hawai‘i (Apple 1965). Understanding if the trails across the Hīlea ‘a‘ā flows were created and maintained on a periodic basis by Kanaka Maoli communities under the direction of a konohiki, or if they were cared for by the families that used them regularly, would help clarify why specific trail routes were
selected and the manner in which they were constructed. For instance, was the entire length of a trail prepared by a group of laborers from a specific origin to a certain destination all at one time through an organized effort, or did routes develop slowly as the trails supported repeated use. I suspect that the trail network crossing the ‘a‘ā of Hīlea developed in both manners, with some trails created and maintained, by the individuals that used them, and others, such as the wide trails within the Hīlea Gulch Settlement and perhaps the longer public trails like the alaloa, created, or at least maintained under the direction of a konohiki. While the mapping of trails across this kula kai landscape has not provided definitive answers to questions of the sociopolitical aspects of Kanaka Maoli trail building, it has provided some limited insights into why trail routes may have been chosen in the first place.

Factors for selecting lateral trail routes across the kula kai ‘a‘ā of Hīlea, as discussed above, appear to be related to the distribution of coastal resources and settlements. These routes, while dictated to some extent by the topography of the coast and landforms, are generally comprised of short segments that likely developed into the current trail network as settlements on the ‘a‘ā expanded and became more permanent. The primary concern in building these lateral trails appears to be keeping enough distance from the coast to avoid its constant meanderings and maintain a straight line path from one point to another. Secondary considerations, after settlements were established, likely included maintaining appropriate distance from already utilized space.

Mauka-makai trails on the other hand, typically extending from the coast to inland agricultural fields, resources, and residences (Apple 1965; Kirch 1985; Cordy and Kashko 1980; Cordy 1994b), must travel greater distances in a single shot across the landscape to reach an intended destination. As Snead (2009:25) has written “pedestrian trails are generally
characterized by straight routes that pass directly through rugged terrain,” and it is typically not until mules, horses, and wheeled vehicles are introduced that trails begin to widen and meander to create more gradual gradients and avoid breaks in topographical features, resulting in less direct routes. Within the kula kai of Hīlea the mauka-makai trails certainly constitute straight pedestrian routes heading inland from the coastal settlements. Observations made while collecting the trail data during the current fieldwork suggest that the routes for the mauka-makai trails were selected by sighting on distant landforms, usually ones that are visible when looking from makai to mauka, indicating that trail construction may have proceed in an inland direction from coastal origins. Looking makai through the ‘a‘ā fields, unless on top of an elevated landform, it is often difficult to see a specific destination from any distance. Looking mauka, however, the upslope pu‘u are almost always visible in the distance as a landmark to sight on, and they may have provided guidance for the Kanaka Maoli who built and used the mauka-makai trails.

While the data supporting this hypothesis is admittedly limited within the kula kai landscape of Hīlea, and should be tested further, the mauka-makai trails from the coastal settlements on the older lava flow of Hīlea Iki provide an example of sighting on distant landforms. The three trails that extend inland from the Lu‘u, Hīlea Iki Middle, and Kuhua Bay complexes, all converge with an older alignment of the alanui aupuni, and a branch trail that connects to the other mauka-makai trail from the Kuhua Bay Complex, at the base of a small pu‘u that is easily sighted on from all three of the coastal settlement locations (Figure 41). The intersection of five trail segments near this small pu‘u, one of the only prominent hills within the kula kai of Hīlea, is certainly more than coincidental, and suggests that the landform once served as a marker for directing travel through the region.
FIGURE 41. GIS map showing the trail topography within the kula kai ‘a‘ā of Hīlea.
Taking this one step further, when walking along the mauka-makai trails through the ‘a‘ā landscape, one cannot help but look up at the dramatic skyline of the Ninole Hills and think that any trail route heading in a mauka direction must have been sighted on some particular aspect of one of those prominent hills. Especially, as many of the trails seem to maintain direct courses towards particular geological features as they progress inland. Further testing of this hypothesis could be accomplished by continuing to follow the trail routes further inland (across private property), or through calculating “cost pathways” with GIS software to predict the continued routes of the trails within a landscape model (Snead et al. 2009:11-12).

Creating Trails in the ‘A‘ā

Creating trails across the ‘a‘ā typically involves the combined processes of material removal, infilling, and dressing. Pedestrian paths, generally 30 cm to 1.0 m wide, are prepared by removing obstacles from the selected route, by infilling to compensate for elevation changes along the way, and then by dressing the path with smooth stones (in some cases stones may also become smooth from use over time). These processes are evident to varying degrees along all of the trail routes identified within the kula kai of Hīlea. Removal, the most universally applied construction technique, may represent the initial step of path construction. Removal involves discarding larger cobbles and other obstacles from the route of a path. The removed cobbles are either tossed to the side, placed along the edge of the route, or used to infill along the pathway. Removal results in a slightly depressed walking surface that contains ‘a‘ā material with a smaller grain size than would be found within an unmodified flow surface.

In some areas, removal is the only process of construction applied to the trail route. Simply removing larger clinkers from a path is not always enough to achieve an adequate walking surface, however. Generally, low spots within the flow surface along a trail route also require infilling. Or, in some cases steep slopes and high spots require infilling against one edge
to create a smooth transition up from a lower surface. Infilling can be as simple as placing cobbles in a hole to level the trail surface, but it can also involve creating stone bridges across cracks and crevices, or creating terraced surfaces for trails that extend cross-slope. Infilling is terrain-specific and is only applied to the degree that any certain situation dictates.

Once a trail is prepared through the processes of cobble removal and infilling it is typically dressed to improve the walking surface. Within an ‘a‘ā landscape, dressing a trail often involves placing smooth steppingstones along the route of the path, but it can also include the addition of pebbles and gravels to the walking surface to achieve the same result. Smooth steppingstones are generally set into the prepared surface of the trail at regular intervals, while pebble/gravel fill is dumped on top. Steppingstones across the ‘a‘ā are usually conceived of by archaeologists to mean dense waterworn basalt stones called ‘alā in the Hawaiian language (Apple 1965). Within the kula kai landscape of Hīlea, however, most trail routes, if they are dressed at all, are dressed with smooth stones of locally available source material (Figure 42), such as small accretionary boulders found ubiquitously across the surfaces of the lava flows, and dense cobbles of angular basalt removed from the lavas underlying the clinker surface of the ‘a‘ā flows (Wentworth and Macdonald 1953).

Mapping of the distribution of the ‘alā found along the trail routes within the kula kai ‘a‘ā flows of Hīlea indicates that only a small portion of the overall trail network includes waterworn steppingstones (Figure 43). Only a few sections of trails exhibit sustained ‘alā dressing, including (1) along the more inland alignment of the alaloa at its eastern end between the Kokoaahu Point and Lu‘u complexes (Figure 44); (2) along the mauka-makai trail routes that extend inland from the Kaikainawana, Lu‘u, and Kuhua Bay complexes (especially in the vicinity of the alanui aupuni; Figure 45); and (3) along the more eastern of the mauka-makai
trails that extends through the Hīlea Gulch Complex. ‘Alā are actually most prevalent along the edges the alanui aupuni within the kula kai landscape of Hīlea, where they were used to create much of the kerbing and the road base. The surface of that road, improved during the 1940s by the U.S. military for Jeep travel and coastal defense purposes, is paved with ‘ili‘ili for most of its length. The individual ‘alā stones found along the alanui aupuni, due to their sheer numbers, were not mapped as part of this study, but appear to be fairly evenly and consistently distributed along both edges of the roadway between Kōloa Beach and Kāwā Bay.

FIGURE 42. Mauka-makai trail across the older ‘a’a flow dressed with locally available source material (Photo by author, 2016).

The alignment of the alanui aupuni is one example of a trail within the kula kai of Hīlea that differs from the typical construction techniques described above. That road was built during the historic period (around the mid-1800s and last modified during the 1940s) after new modes of transportation that required new, wider routes of travel (hooved animals, wheeled vehicles)
had already been introduced to the Hawaiian Islands. While the question remains whether this historical era road, which was built with the aid of Western tools, followed the alignment of an older trail or not, the time frame for the construction of other wide trails inscribed within the ‘a‘ā landscape of Hīlea, built with traditional tools, is not so clear. Five sections of wider-than-usual trails, all extending parallel to one another, and the alanui aupuni, were identified at the western edge of the younger ‘a‘ā flow near Kāwā Bay, within the Kakainawana and Hīlea Gulch settlements. These trails are unusual not only for their width (ranging from 2 m to 4 m), but also for the technique used to build them, and their terminations at seemingly unutilized space within the ‘a‘ā flow.

The five parallel trails all appear to have been built through a process of reduction, rather than removal. Given the prevalence of large waterworn hammerstones (with percussion marks) found near to the eastern ends of each of these paths (Figure 46), it is suggested that they were each built from west to east by reducing the flow surface through repeated blows with the ‘alā stones. The distribution of stones indicates that more than one person was working at this task at any given time. The fact that the hammerstones were left along the routes, seems to indicate that they may have never been completed to the point of an intended destination. While the reduction of the ‘a‘ā surface has occurred consistently throughout each route, and low spots were infilled, high areas of the dense basalt were only partially reduced and left in place, as if whoever was doing the work intended to come back to finish the removal of the high areas later, or to infill against them to create more gradual grades onto and off of them.
FIGURE 43. GIS map showing the distribution of ‘alā stones along the trails within the kula kai ‘a‘a of Hīlea.
The widths of these paths are indicative of historic modes of travel, but the tools used to create them, and the features found along them (within the Hīlea Gulch Settlement) suggest that they may date to an earlier period of Kanaka Maoli history. Two other sections of similarly wide trails were noted within the ‘a‘ā flows, one 340 m long section extending parallel to the alanui aupuni (20 m makai) across the older ‘a‘ā flow, where the historic road may have been realigned at some point in the past, and another 560 m long section where the mauka-makai trail at the eastern edge of the older flow leaves the Hīlea Iki/Nīnole boundary to extend across Nīnole Ahupua‘a. These sections of wide trails, with a single exception, do not have associated hammerstones.
FIGURE 45: ‘Alâ stepping stones along the route of a mauka-makai trail (Photo by author, 2016).
Cultural Material Evidence of Travel: Trail Marking

In addition to waterworn stepping stones, GIS data was collected for other types of material culture found along the trail routes crossing the kula kai ‘a‘ā of Hīlea, including built items such as cairns, and transported goods such as marine shell and coral, and two types of historic artifacts, bottle glass and horseshoes. These objects, found in direct association with the trails themselves, provide data about the processes of trail marking, travel along the trail routes, and the people who created and used the landscape of movement inscribed within the kula kai ‘a‘ā of Hīlea. GIS data for the cultural material was not collected within the settlement locations defined above, where such items are much more numerous, except when in direct association with a trail route. Examining the distribution of the cultural material items across the trail network provides useful information about the creation of the trail routes, the primary routes of
travel, and the relative time periods of trail use. It also provides insights into ways of identifying trails archaeologically when tangible evidence across the landscape may be scant. Here I briefly touch on three categories of material cultural items: (1) cairns, (2) marine shell and coral, and (3) historic artifacts.

Cairns are stone constructions used to mark routes of travel. Within the kula kai ‘a‘ā flows of Hīlea, cairns range from single cobbles set on top of large accretionary boulders, to two or three cobbles stacked on top of one another, to loose piles of stones, to larger, circular constructions with neatly stacked edges. Point locations were collected for 238 cairns found along, and nearby, the examined trail routes (Figure 47). The plotted distribution of cairns within the study area indicates that they are primarily used to mark mauka-makai trail routes, and less frequently used to mark lateral trail routes. This may be because mauka-makai routes are more difficult to follow through the ups and downs of the ‘a‘ā flows than lateral trails, and it helps to have a visual marker in the distance to keep track of the trail direction ahead. Interestingly, trails between the alanui aupuni and the coast are frequently marked with cairns, but only the more western mauka-makai trail from the Kuhua Bay (East) Complex is well marked with cairns above the historic roadway. In a few cases, cairns are also seemingly used to mark routes of travel through the ‘a‘ā that do have corresponding prepared trail surfaces. It is not clear if these cairns were placed along the routes of unfinished trails (marking the route to be taken), or if they were placed by individuals moving through the ‘a‘ā, without following a trail, who wished to find their way back to a specific point of beginning. In these instances, and along well marked trails, cairns are placed in such a manner that as one cairn location is reached the next cairn location comes into view.
FIGURE 47. GIS map showing the distribution of cairns along the trails within the kula kai ‘a‘ā of Hīlea.
Marine shell and coral, while they may have been transported and discarded along a trail for any number of reasons—including consumption in the case of marine shell—most often appear placed on high spots, sometimes next to cairns, to mark the trail routes themselves. A total of 739 point locations were taken at coral and marine shell fragments found along the trails crossing the kula kai ‘a‘ā flows of Hīlea (Figure 48). These materials, because of their white color, can be seen at night by the light of the moon, and are used by fisherman to mark routes to coastal fishing spots. For this reason they occur fairly ubiquitously along the lateral, coastal trails and mauka-makai trails seaward of the alanui aupuni. Coral found along these trails typically occurs in small waterworn chunks, although a few instances of branch coral were also noted, and marine shell species identified along the trail routes included primarily *Cellana* sp., *Cypraea* sp., and *Drupa* sp.

It can be assumed that trails marked with coral and marine shell received (and continue to receive) at least some nighttime use. The coastal trail from Kāwā Bay to Puuoloaa within the Kaikainawana Settlement is particularly well marked for nighttime travel, as is the more modern trail between the alanui aupuni and the Kuhua Bay Fisherman’s Camp (Figure 49). The more western mauka-makai trail heading inland from the Kuhua Bay Complex is also fairly well marked with coral and marine shell, along with the route of the alaloa from that settlement to the Kaikainawana Settlement, and the northeastern end of the alaloa nearest to Kōloa Bay. This type of trail marking is conspicuously absent from the other mauka-makai trails that extend inland from the Kuhua Bay, Middle, and Luʻu Complexes, and within the Hīlea Gulch Settlement, indicating that nighttime travel was likely not very frequent along those routes.
FIGURE 48. GIS map showing the distribution of marine shell and coral along the trails within the kula kai ‘a‘a of Hīlea.
Kirch (1985:267) and Hommon (2013:107) suggest that the practice of marking trails with white objects for nighttime travel has some antiquity in Hawai‘i, and Sinoto and Kelly (1975:137) document that the practice continued to occur in Ka‘ū during the early 20th century. Much of the marine shell and coral noted along the kula kai trails of Hīlea, especially along the well-marked trails discussed above, appears even more recently placed, perhaps within the last decade or so. The continued occurrence of more recent trail marking makes the antiquity of the nighttime trail use within Hīlea difficult to determine. As a modern modification to this practice, sometime prior to 2013, fishermen also marked the alaloa from Ka‘ie‘ie Heiau to the Kuhua Bay (East) Complex, and the more western mauka-makai trail from that complex up to the alanui aupuni, with white paint (Figure 50), indicating an even more recent method of finding and following trails at night (Clark and Rechtman 2013).
Historic artifacts identified along the trail routes within the kula kai ‘a‘ā flows of Hīlea include 22 glass bottles (mostly broken) and four horseshoes (Figure 51). The bottle glass, dating to a period from perhaps the late-1800s to the mid-1950s, is distributed primarily along the coastal alaloa, the alanui aupuni, and the western mauka-makai trail that extends inland from the Kuhua Bay (East) Complex. Three of the identified horseshoes were found along the route of the alanui aupuni, while the fourth was found inland of the alanui aupuni along the route of the mauka-makai trail that coalesces from the Lu‘u, Hīlea Iki Middle, and Kuhua Bay (East) complexes. The distribution of historic artifacts within the kula kai of Hīlea indicates which trails may have either been created during a later time period (such as the alanui aupuni), or which may have received continued use as lifeways in Hawai‘i began to drastically change during the middle to late 19th century.
FIGURE 51. GIS map showing the distribution of historic artifacts along the trails within the kula kai ‘a‘ā of Hīlea.
Interpreting Human Use of Hīlea’s Kula Kai Trail System

The cultural landscape of Hīlea has evolved through generations of human interaction with the environment. The paths of the kula kai embody the totality of movement across this specific landscape, and provide a connection to the collective ancestral knowledge of the ʻāina. Movement through the rugged ʻaʻā of the kula kai essentially dictates the necessity of path creation, and can tell us a lot about the human use of the trail system. Three general trail types are integral to movement across the kula kai of Hīlea, including lateral coastal trails, mauka-makai trails, and local resource or connector trails. Trails are generally inscribed within the ʻaʻā landscape through the combined processes of removal, infilling, and dressing. Above I have examined these routes of travel through their origins and destinations, the physical attributes of construction, and the associated material cultural evidence found along them. What I have found is that the inscribed trail network seems to suggest that movement across the kula kai of Hīlea may have occurred differentially from each side of the two ʻaʻā flows.

Based on the collected data, it appears that differences in terrain and the possibility of acquiring varied resources on each of the two flow surfaces, and in the ocean waters fronting them, may have played a part in determining how the trail network evolved through time. I hypothesize that the northeastern portion of the ʻaʻā was initially settled, and that the trails there were consequently created, by residents of the Nīnole side of the flow, and that the southwestern portion of the ʻaʻā was initially settled, and the trails there were consequently created, by residents of the Kāwā side of the flow. The settlements on the ʻaʻā could essentially be viewed as extensions of the former villages at Nīnole and Kāwā, where the presence of fresh water springs, fishponds, and easy ocean access helped support sizable Kanaka Maoli populations in the past.
As discussed above, I believe that eight primary settlement locations within the kula kai ‘a‘ā flows of Hīlea represent the origins and destinations of the recorded trail network. The defined settlements include the feature clusters at coastal Kakainawana and inland adjacent to Hīlea Gulch, the Kuhua Bay (West) Fishermen’s Camp, the Hīlea Iki Cave Shelter, the Kuhua Bay (East) Complex, the Hīlea Iki Middle Complex, the Lu‘u Complex, and the Kokoahuhu Point Complex in Nīnole (Figure 29). The most southwestern (Kakainawana and Hīlea Gulch Settlements) and northeastern (Kokoahuhu Point and Lu‘u Complexes) of these settlements, found along either edge of the ‘a‘ā, are the most clearly associated with the former villages at Kāwā and Nīnole, respectively. The habitation related features within those settlement areas, and the trail network connecting them, may have developed gradually over time, moving inward from the outer edges of the flows across the ‘a‘ā, as connector trails and local resource trails coalesced into the current landscape of movement. The wide trails identified inland of the alanui aupuni at the Hīlea Gulch Settlement certainly suggest inward movement for trail creation, as the ‘alā hammerstones used to construct those seemingly unfinished trails were left close to their terminations within the younger of the two ‘a‘ā flows, near their northeastern ends (Figure 43).

The four settlement locations situated near center of the ‘a‘ā flows, in close proximity to Kuhua Bay (the Kuhua Bay Fishermen’s Camp, the Hīlea Iki Cave Shelter, the Kuhua Bay Complex, and the Hīlea Iki Middle Complex), may have developed independently of the settlements along the flow edges. Kuhua Bay appears to be a preferred destination for fishing along the ‘a‘ā coastline of Hīlea, as indicated by the presence of a large precontact to early historic settlement along the eastern side of the bay (the Kuhua Bay Complex), and a modern fishermen’s camp along the western side (the Kuhua Bay Fishermen’s Camp). The Kuhua Bay Fishermen’s Camp contains primarily modern fishing debris, and the trail leading to it from the
alanui aupuni appears to be a more recent (perhaps modern) construction. The trail is well marked with coral, and may receive primarily nighttime use. The fisherman’s camp represents a unique opportunity to collect ethnohistorical data concerning the creation and marking of trails across the ‘a‘ā landscape and the collection of nearshore marine resources found there. The Kuhua Bay Complex contains a fairly dense deposit of surface midden and could provide insights into earlier subsistence activities in the vicinity of Kuhua Bay. The Hīlea Iki Middle Complex, once located to the northeast of the Kuhua Bay Complex, is hypothesized to have been destroyed by large waves (perhaps during the 1868 tsunami), and could provide data on the effects of sea level rise and natural disasters along the Ka‘ū coast. Inland of the Kuhua Bay Complex, the Hīlea Iki Cave Shelter is an interesting site. This location, because it offers natural protection from the elements, may have been one of the earlier destinations accessed by Kanaka Maoli residents of the area, and the cultural deposit contained within the shelter could provide insights into the span of human occupation on the Hīlea ‘a‘ā flows.

The alignment of the alaloa from the Kāwā Bay side of the ‘a‘ā directly accesses the Hīlea Iki Cave Shelter, further reinforcing the idea that it may have been an early settlement destination. The alaloa from the Nīnole side of ‘a‘ā branches into two alignments within the Kokoaahu Point Complex. The more makai branch follows the coast more closely as it winds through the features of the Lu‘u Complex, continues through the Hīlea Iki Middle and Kuhua Bay Complexes to meet with the alaloa from the Kāwā side of the flow. The more mauka alignment passes the along the mauka edge of the Lu‘u and Hīlea Iki Middle Complexes to directly access the Kuhua Bay Complex. Cordy (1994b:8-9) has described a similar branching of the alaloa near the Kohaha/Kona boundary on the western side of Hawai‘i Island where he suggests that a trail, extending parallel to an older coastal trail, was built to bypass several small
coastal settlements sometime between A.D. 1400 and 1600. As the trail system crossing the Kula Kai ‘a‘ā of Hīlea continued to evolve into the historic period an even more inland, direct route across the ‘a‘ā was built between Kāwā and Kōloa Beach. While this trail may have older origins (Mills 2002), by the mid-19th century it had become part of the alanui aupuni, or government road system, on the island of Hawai‘i (Apple 1965). The use of the alanui aupuni as a primary route of travel was superseded by more modern, and further inland, road (highway) alignments during the late 19th to early 20th centuries, but was improved for coastal defense purposes between Kōloa and Kāwā by the U.S. military during the 1940s (Sportsman’s Club of Ka‘ū v. Okuna 1980).

The route of the alanui aupuni carries it across several older mauka-makai trails within the kula kai ‘a‘ā flows of Hīlea. Mauka-makai trails are an essential part of the landscape of movement in Hīlea. Each settlement location within the ‘a‘ā has one or more mauka-makai trail routes that presumably provided access to inland agricultural, habitation, and resource areas. The mauka-makai trail routes near the coast coalesce as they progress inland, forming fewer primary routes to mauka destinations. The routes of these generally straight, primarily pedestrian, trails may have been selected by sighting on distant landforms, while looking in a mauka direction. The combined distribution of cultural material found along the kula kai trail network of Hīlea (Figure 52) indicates that the mauka-makai trail leading inland from the Kuhua Bay Complex, passing the Hīlea Iki Cave Shelter, is not only the most well marked of the mauka-makai routes, but also contains the greatest diversity of cultural material along its route, with indications of use spanning the precontact and historic periods. Mauka-makai trails from the Hīlea Iki Middle and Lu‘u Complexes join with this trail mauka of the alanui aupuni. Within the Kokoaahu Point Complex a mauka-makai trail that initially follows the Hīlea Iki/Nīmole boundary turns north,
mauka of the alanui aupuni, where it may have joined with another inland trail route within Ninole Ahupua‘a prior to the construction of the Sea Mountain Resort. Mauka-makai trails that access the Kakainawana and Hīlea Gulch Settlements are difficult to follow as they exit the younger of kula kai ‘a‘ā flows at Hīlea Gulch, but it is hypothesized that those trails may have once joined with a trail to Hīlea Village (formerly located at the base of Makanau) that follows the Hīlea Nui/Kaʻalāiki boundary across the pāhoehoe flow inland of Kāwā Bay. This trail is referred to in court documents as “Hīlea Trail,” and it remains today a legal public easement to the beach at Kāwā (Sportsman’s Club of Kaʻū v. Okuna 1980). As mentioned above, the trail extending inland from the Kuhua Bay Fisherman’s Camp terminates at the alanui aupuni, indicating that it is a later addition to the kula kai landscape of movement inscribed within the ‘a‘ā flows of Hīlea.
FIGURE 52. GIS map showing the distribution of cultural material along the trail s within the kula kai ʻaʻa of Hīlea.
CHAPTER FIVE
KUAMO‘O—THE BACK BONE, A ROAD OR PATH, STREET OF A TOWN…
THE COMMON WORD FOR PATH ON HAWAI‘I ISLAND

‘She is yours,’ said the chief. ‘She is the daughter I promised, and you have won her. For whoever makes the path easier for those who follow him has travelled it the best.’

from A Pacific Island Parable for Trail Users (DLNR 1991)

Arriving at last at the western edge of the younger of the two Hīlea ‘a‘ā flows, I look out across Kāwā Bay and the fishpond of Ka‘alāiki beyond (Figure 53); the verdure of this landscape stands in stark contrast to the desolation of the ‘a‘ā flows I have just crossed. Here, the massive stone structure of Ke‘ekū Heiau still maintains its silent vigil, perched on the ‘a‘ā of Pōhakuahalulu Point above the crashing waves of Kāwā. Once a symbol of chiefly dominance dedicated to the war god Kūkali‘imoku (Stokes 1991:128), the heiau—through the leadership, prayer, and sacrifice of the ali‘i, kāhuna, and maka‘āinana who resided nearby—helped ensure the spiritual well-being and general welfare of the Hawaiian people and the continuity of the Hawaiian chiefdom (Valeri 1985; Cachola-Abad and Ayau 1999). Today, nearly two centuries after the last sacrificial rite at Ke‘ekū, the heiau has been rededicated and a stone altar erected near the entrance to receive the offerings of the modern visitors to the site (Figure 54).

The County of Hawai‘i’s purchase of the coastal lands of Hīlea and Ka‘alāiki in 2008 and 2011, using funds from the Public Access, Open Space, and Natural Resources Preservation Commission (PONC) program, has created new opportunities for community stewardship of Ke‘ekū Heiau and the 784 acres surrounding it, including the lands encompassed by the kula kai ‘a‘ā flows of Hīlea (Townscape 2017). Local non-profit organizations, interested in stewarding the natural resources and cultural sites of the Kāwā area, have applied for stewardship grants

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22 As defined by Andrews (1836:75).
23 Source: Maui the Demigod (Goldsberry 1984).
through a PONC maintenance fund administered by the Department of Parks and Recreation. When these funds are made available, they will help provide an economic means to support community stewardship of the lands, and present an excellent opportunity to establish a community-based program of heritage management, one that helps build community capacity, decentralizes the role of archaeology, and promotes collaborative approaches to understanding and interpreting the past (Kawelu 2015). By studying the trails that cross the kula kai ‘a‘ā flows of Hīlea, I have attempted to find ways to connect the archeology of this place to the future of community stewardship at Kāwā, to build meaningful community partnerships, and to establish relationships with community stakeholders that are built on mutual trust and respect. It is these relationships that will eventually serve as the foundation for any community-based research paradigm that is established at Kāwā, and that will help me, as an archaeologist, become part of the wider community effort to protect, preserve, and perpetuate the heritage of Kaʻū.

FIGURE 52. Kāwā Bay from the edge of the Hīlea ‘aʻā flow (Photo by author, 2016).
FIGURE 53. Ke‘ekū Heiau, view to the east showing the modern path and altar erected at the entrance (Photo by author, 2017).

The ownership of the Kāwā lands purchased by the County of Hawai‘i, and the access rights to them, have long been contested (Six 2010). Several disputes regarding these lands were previously heard in the Third Circuit Court of the State of Hawai‘i (Omerod v. Heirs of Kaheananui 2007; County of Hawai‘i v. Lui 2012; Olson v. Lui 2012; Morgan v. County of Hawai‘i 2016), including a landmark case that helped set precedence for granting public shoreline access rights across private property in Hawai‘i (Sportsman’s Club of Kaʻū v. Okuna 1980):

In February 1977 a very important legal question concerning public access to Kawa was addressed in a class action suit filed by several individuals and the Sportsman’s Club of Kaʻū. The private owner of the extensive expanse of low-lying pastureland behind Kawa Bay had denied all access to the shoreline across his property. The plaintiffs alleged that they had a legal right to cross the defendant’s land without fear of prosecution for trespass and to use the beach and the adjoining shoreline, primarily for fishing and surfing. One of their basic contentions was that they had inherent rights through ancient Hawaiian tradition, custom, practice, and usage, which entitled them to unobstructed access to the beach.
After a week-long jury-waived trial, the Third Circuit Court on October 14, 1980, awarded the plaintiffs four easements: to Kaʻalaiiki fishpond, to Keʻeku Heiau near Kawa Bay, and to Kawa Bay. By ruling in favor of the plaintiffs Judge Ernest Kubota upheld the public’s traditional rights of access to the shoreline, a landmark decision for the Big Island, where many miles of shoreline backed by private property are not conveniently accessible to the general public (Clark 1985:64-65).

The public access easements awarded by the ruling were created following various historic roads and trails, including the nearshore alaloa and the alanui aupuni across the kula kai ‘aʻā flows of Hīlea. Some of these same easements are still used regularly for public access to Kāwā today, but others, such as the alaloa across the ‘aʻā, and the overgrown section of the alanui aupuni across Kaʻalāiki to Hōkūkano are not as well known. With County’s purchase of the Kāwā lands, members of the community have expressed interest in reestablishing the older access routes across the property.

These easements could also be claimed for the purposes of public access by the Nā Ala Hele Program of the State of Hawai‘i, Department of Land and Natural Resources under the Highways act of 1892 and Chapter 264-1(b) of the Hawai‘i Revised Statutes (HRS). The Highways Act of 1892, approved by Queen Liliʻuokulani in October of that year, determined that the Hawaiian Government owned in fee simple all public highways in the Hawaiian Kingdom, including all existing public trails and roads at that time. This law carried over to the Territorial Government and ultimately to the present State Government. Chapter 264-1(b), HRS, clarifies the intent of the Highways Act, stating that, “all trails, and other nonvehicular rights-of-way in the State declared to be public rights-of-way by the Highways Act of 1892, or opened, laid out, or built by the government or otherwise created or vested as nonvehicular public rights of way at any time hereafter, or in the future, are declared to be public trails.” This means that if the State can document the existence of a trail prior to 1892, they may claim it, even if it crosses private property. At Punaluʻu, the State gave up its rights to the trails across the Sea Mountain Resort in
favor of the modern paved roads (Rosendahl 1991; Group 70 International 2006), but between Nīnole and Honu‘apo, the lateral trail easements still exist, are protected, and at least one alignment will eventually be incorporated in the Ala Kahakai National Historic Trail (National Park Service 2009). Mauka-makai trail easements from the coast at Hi‘lea to more inland locations could be claimed by Nā Ala Hele, however, reopening old trails for modern public access.

Kāwā is perhaps best known for its surf. It was here, on the bent waves of Kāwā, that Nu‘uanupahu, a chief of Ka‘ū during the reign of Kalani‘ōpu‘u, developed his considerable skills as a surfer. Remembered in mo‘olelo as “ke keiki haehae pok o Nā‘ālehu” (the cut-worm tearing son of Nā‘ālehu), he earned the admiration of the ali‘i and maka‘āinana alike by surfing his way through sharks on the waves of Kauhola in Hala‘ula, North Kohala (Clark 1985:64). The surf break at Kāwā, sometimes referred to as “Windmills” for a small wind turbine that once stood behind the beach, is still frequented by surfers today. It is one of the few accessible locations along the entire coast of Ka‘ū with consistent waves (Clark 1985). Community surf contests, once held regularly at Kāwā prior to the County’s purchase of the lands, will hopefully resume again in the near future. It is the traditions shared by the individuals that comprise a community, founded in the cultural and historical heritage such as surfing, that give substance and strength to the community (Tomonari-Tuggle 1988).

Turning away from the sparkling sands and beckoning waters of Kāwā, I look back across the rugged ‘a‘ā landscape that stretches east as far as the eye can see. The sun, now directly overhead, has reduced my shadow to a small patch of shade beneath my feet. This is the only shade found on the barren ‘a‘ā flow at this time of day. I pause to take a long, thirsty drink of water, and for a brief moment, as the heat becomes almost unbearable, doubt begins to creep
into my mind. Perhaps I picked the wrong environment in which to try to establish community connections. Why would anyone be interested in this desolate landscape with the sand, shade, and freshwater of Kāwā so temptingly close? Then a cool breeze begins to blow off the ocean and I remember the heritage inscribed in the ‘a‘ā, the mo‘olelo of generations of Kanaka Maoli whose movement, residency, and actions of daily life are embodied in this place, and I think of how the trails that cross the kula kai of Hīlea connect to other parts of Ka‘ū and the other districts of this island landscape. How my journey along these trails has carried me far beyond the ‘a‘ā of Hīlea into the midst of a thriving Ka‘ū community deeply dedicated to perpetuating its own heritage. How seventeen years spent as an archaeologist working for a private consulting firm in Hawai‘i, has convinced me of the importance of moving away from colonial archaeological practices towards more inclusive, community-based methodologies, and how the M.A. program in Heritage Management at UH Hilo has inspired me to seek a path in that direction. To find community to work with.

**A Path to Community-Based Hawaiian Archaeology**

Kawelu (2015) has convincingly argued that the next step for Hawaiian archaeology, if it is to remain relevant within contemporary society, is a transition to the principles of community-based participatory research (CBPR) as laid out by Atalay (2012). Community-based archaeology decentralizes the discipline as the primary beneficiary of archaeologically produced knowledge and situates it within a larger heritage management system that operates for the benefit of community groups. Community engagement, respect, and communication are the basic tenets of this approach. However, no two paths to community-based research are ever the same. Whatever route is chosen, the path will always be unique, and the destination arrived at will often be unexpected. Atalay (2012:63-65) stresses that making the initial connection between
archaeologist and community, and building a solid foundation for research partnerships, is the most time consuming part of the journey. This part of the CBPR process also presents the most complex challenges for archaeologists because it often carries them outside of their normal area of expertise into areas with which they are less familiar, and where they typically have much less experience. These initial steps of the journey are arguably the most important however, as asking collaborative research questions and implementing a community-based research design requires first establishing a solid foundation of community partnership.

In discussing the methodological approaches needed to decolonize archaeological practice—in order to initiate the transition from the historically colonial-based approaches to more equitable and egalitarian community-based approaches—both Atalay (2006, 2012) and Kawelu (2007, 2015) use a common metaphor, that of the “path.” For instance, Atalay, in her article, *Indigenous Archaeology as Decolonizing Practice*, writes that Indigenous scholars “are working to find new paths for a decolonized archaeological practice” (Atalay 2006:283), and she discusses the importance of “building a path toward a better future for our communities and future generations to benefit from and improve upon” (Atalay 2006:284). In her book length treatment of community-based archaeology, the path metaphor shows up a number of times, especially when referencing the “different path” that each CBPR project takes (Atalay 2012:12, 15, 25), or how, in her experience, “each project has followed its own path toward a research design” (Atalay 2012:180). She also discusses how “research within a CBPR paradigm builds two-way paths of learning” (Atalay 2012:77) as communities participate in scientific approaches to knowledge production and researchers gain an understanding of traditional knowledge systems.
Atalay, as both an Anishinabe woman and an archaeologist, even explains her own personal inspiration for understanding how archaeology might benefit from CBPR using the metaphor of a path. In the preface to her book, she writes that she was personally inspired to explore the principles of community-based archaeology after hearing an Ojibwe oral history that tells of a time when the Anishinabek people, and Indigenous people globally:

…will face a choice between two paths. One path is made of scorched grass, signifying short-term success but eventual destruction. The other path is a lush trail that leads to a future of lasting peace. The teaching states that the second path is one of compassion. Choosing this path involves finding ways to combine our Indigenous systems of knowledge and traditional ways of understanding with those of western science. Joining these forms of knowledge can increase our strength as a society. Our spiritual leaders tell us we have reached the time to choose paths. The challenge for our generation is to work cooperatively—to use the diverse knowledge of all to build strength on the path to mutual success and peace (Atalay 2012:ix-x).

Atalay goes on to describe how it was this teaching that first set her on a course to find sustainable practices of archaeological research, ones that would benefit communities by helping them to regain and strengthen their connections to their cultural heritage. The journey led her to CBPR and its methodology of braiding archaeological science with community knowledge, which she equates with the lush path that leads to a future of lasting peace.

Kathy Kawelu (2015) picks-up on this theme in the concluding paragraph of her book. Using the metaphor of a path to encourage archaeologists and Kanaka Maoli communities to actively pursue collaborative research partnerships together, she writes, “we do not have to travel on the same path, but we must recognize that partnerships based on our various skills and knowledge systems create space for reciprocal benefits to both communities, and ultimately build our capacity to care for our heritage that sets our foundation and sustains us” (Kawelu 2015:141). As part of this foundation, in her earlier dissertation work, Kawelu (2007:21) refers to negotiating “a path between indigenous and scientific values, rights, and responsibilities, toward a goal of empowering indigenous people,” and of “embracing more of a native Hawaiian
system of knowing” within the discipline of archaeology. At the conclusion of her dissertation, using the metaphor of a path, she sums up her personal experiences exploring the sociopolitical aspects of Hawaiian archaeology. She writes, from the perspective of a Kanaka Maoli woman and an archaeologist, that:

…I encourage native peoples to participate in the discipline of archaeology in ways that honor their sense of self. The path I find myself on is not one that I had imagined I would be walking. I have never been one for conflict, politics, or broadcasting my opinions; yet here I am. I suspect the path has been chosen for me, because I have continued on it despite my struggles to navigate the unfamiliar territory. The journey has been long, but it has been worthwhile (Kawelu 2007:226).

**Connecting Metaphorical and Literal Paths in Heritage**

In the above examples, Atalay (2006, 2012) and Kawelu (2007, 2015) use the metaphor of the “path” to represent a solution that leads to a specific goal (i.e. decolonizing archaeological practice, implementing community-based methodologies, incorporating multiple knowledge systems, etc.). Path—meaning a way to get from one place to another, but representing a means of achieving a goal—is a simple and intuitive metaphor that is widely employed cross-culturally (Keller 2009; Kohls 2012; Snead et al. 2009). All of us travel paths regularly as we move about our daily lives, going from home to work, to school, to the store, and home again. Paths connect us to each other and the places around us. They pattern how we move through the world and shape how we see the landscapes around us (Snead et al. 2009). Paths work well as a metaphor largely because they are part of a landscape, bound, by their very existence, to a particular natural and cultural environment. The embedded forces of that environment shape the form of the potential problems that might be encountered along the route of a given path, and therefore provide a context for understanding the possible solutions (Kohls 2012). The metaphorical paths discussed above are part of the heritage landscape. They are bound to a complex sociopolitical
environment shaped by the forces of indigeneity, colonialism, archaeology, politics, economics, historic preservation laws, and the competing claims to the past that those forces represent.

At first glance, landscapes may appear fixed and static, but they are actually dynamic and constantly changing (Bender and Winer 2001; Kohls 2012). Understanding paths as a metaphor within the context of a landscape depends on understanding the dynamic nature of the landscape itself. Not just the natural changes that occur with the seasons, the time of day, the tides, and the weather, but also the history of anthropogenic changes embodied within overlapping heritage landscapes, and the multiple, often conflicting, understandings of a place and its contexts in the present (Bender and Winer 2001).

Kawelu and Atalay are just two of many indigenous scholars who have begun to blaze new paths across the heritage landscape in recent years. The paths that they have travelled are potential solutions to the goal of decentralizing archaeological practice, of bringing multiple voices into the discussion of heritage, and of implementing community-based research paradigms that lead to tangible benefits for indigenous and local communities. These new paths lead heritage managers away from the historically colonial endeavor of archaeological practice towards a more equitable and socially just, community-based practice. The established paths provide inroads to community-based archaeological research that help guide those who follow across the, at times, rocky terrain of unfamiliar territory.

**Connecting Cultural Landscapes and Community Values**

The representation of a path on a map is a useful way to visualize the metaphor of a path. A map provides a bird’s eye view of a landscape, its physical features and environment, and some combination of the established paths, settlements, cultural heritage, and natural resources that it contains. Although a map does not provide the exact sequence of steps taken along a path
to achieve a specific goal, it does offer guidance as to directions and constraints (Kohls 2012).
By studying a map, we can plan a route of travel through a landscape from a particular beginning point to a desired end. We can visualize the potential difficulties of the journey along the way, and we can adjust our path accordingly. “If we know the advantages (values) and disadvantages (costs) of a path we can better decide which one fits the problem at hand” (Kohls 2012:8).
Kawelu (2007, 2015) has started the process of creating a map for archaeological and Kanaka Maoli communities to follow as they move along a path away from the colonialist history of Hawaiian archaeology towards a future of a more equitable, decentralized, community-based paradigm of heritage management. She has surveyed the complex sociopolitical landscape of Hawaiian archaeology, mapped the opportunities and constraints of the terrain, and gauged the environmental forces that travelers will contend with during the journey. Her map of the Hawaiian heritage landscape is currently populated with the exploratory paths of those who have ventured this way before, and with the theoretical routes to community-based archaeology proposed by Atalay (2012) and others.

I have created a map of the trails that cross the kula kai ʻaʻā flows of Hīlea. This map, while more narrowly focused than the map of the wider heritage landscape, provides a potential starting point for community-based archaeology on the County-owned lands at Kāwā. The map I have depicts the landscape of movement across the rugged ʻaʻā terrain, connecting issues of heritage from the development of the Sea Mountain Resort to the future of community stewardship at Kāwā. Along the way, these paths intersect with nodes of Kanaka Maoli settlement and heritage. It is these intersections—representing countless such similar intersections that occur along trails throughout the district of Kaʻū and across the Hawaiian
Islands—that will provide windows to understand the Kanaka Maoli use of the ‘a’ā landscape in the past and open doors to community-based archaeological practices in the future.

The trails that lead to these settlements are places where people can meet to ponder the various understandings of the past in the present, and discuss the future management of this heritage landscape. These trails, which traverse ‘a’ā terrain metaphorically similar to the at times rocky heritage landscape of Hawai‘i, connect with many aspects of community well beyond the ‘a’ā flows of Hīlea. As I have demonstrated in this thesis, these paths have helped connect me from contract archaeology, to UH Hilo, to the Ka‘ū community and the principles of community-based archaeology. I believe that they can also help connect the Ka‘ū community together in a way that will ultimately benefit not only the heritage of the place, but the people themselves. Here I address how the trails crossing the kula kai ‘a’ā landscape of Hīlea can specifically inform a shift in archaeological practices towards the three basic principles of community-based archaeological practice: collaboration, incorporation of multiple knowledge systems, and seeking social justice (Kawelu 2015:138).

Collaboration

Community-based archaeology begins with collaboration, which depends on establishing community partnerships and opening lines of communication that decentralize the role of archaeology in producing knowledge of the past (Kawelu 2015:138-139). This principle speaks specifically to changing the dynamic of research, shifting from Kanaka Maoli communities from the subject of archaeological study to partners in the production of knowledge (Agbe-Davies 2011). Archaeologists must be self-reflexive, and recognize the existing power imbalances in the current system of heritage management, where they are often viewed as “the experts” in the field. “Local and descendant communities are best equipped to situate heritage projects within larger spheres of interest for a given community” (Kawelu 2015:138). Determining the relevance
of community-based archaeological projects is the kuleana of the contemporary descendants of the Kanaka Maoli who created the cultural sites in the first place. For true collaboration to occur, it should be the descendant communities asking the research questions, rather than the archaeologists. The role of the archaeologist in this process is as a facilitator, to help the community address the questions that are asked. By working together, and asking collaborative research questions, archaeologists and Kanaka Maoli communities can resist forces that reaffirm entrenched power structures, and move towards more inclusive methodologies of heritage management, to eventually find a system of historic preservation that works for all stakeholders.

In documenting the trails that cross the kula kai of Hīlea, I have purposefully left the descriptions of the settlements they access vague. I have tried to leave room for others to interpret their meanings both past and present, and to ask the questions they want answered. Throughout this thesis research, I have concentrated instead on finding existing routes that can connect these activity areas to the descendant communities to whom the heritage belongs. The trail routes provide a context for understanding how settled places on the ‘a‘ā, and along its edges, were once connected (Snead et al. 2009). They also navigate the rocky terrain between modern economic development and community-based cultural stewardship, and therefore provide a venue for discussing the delicate balance between maintaining the essential character of a place and creating economic opportunities for its residents, which is already a topic of discussion in the community (Ka‘ū CDP 2015). It is my hope that the trails documented here might one day serve as spaces where communication and partnership can begin, where community members can walk together with archaeologists and experts in other fields, as they work to collaboratively address questions about the past and future of the heritage in this area, and even broader questions of rising sea levels and environmental change. While my mapping of
the trails across the Hīlea ‘a‘ā flow has admittedly lacked meaningful collaboration thus far, through communication and partnership, I have begun to meet community members with specific questions of heritage, and I believe having a map of these routes can provide a useful guide to planning collaborative projects in the near future.

_Incorporation of Multiple Knowledge Systems_

Incorporation of multiple knowledge systems is about respect. Archaeologists, typically most comfortable with the one way flow of knowledge produced by them, must learn to acknowledge multiple ways of knowing and understanding the past, if they are to move towards more inclusive community-based archaeological practices (Kawelu 2015:139-140). They must respect others views of the past and incorporate them in a meaningful way into their research. I personally look forward to incorporating multiple knowledge systems into the understanding of the Kanaka Maoli trails that cross the ‘a‘ā flows of Hīlea. Despite walking these trails repeatedly, documenting the material culture found along them, and examining their potential origins and destinations, I am almost no closer to understanding the landscapes of movement they represent archaeologically then I was at the outset of this thesis research. I believe that the study of trails in particular would benefit greatly by viewing these tangible manifestations of movement as part of a broader, Kanaka Maoli cultural landscape, where everything from the ocean to the mountains, including the plants and people, is connected (Maly 2001). Archaeological ways of describing and interpreting trails are extremely limited, but exciting possibilities exist for understanding these routes of movement within the context of the ethnographic past (Snead et al. 2009).

Walking the trails with the living community of Kaʻū, with the people that still cross this landscape and fish along its shores, could also provide an invaluable ethnographic information for interpreting the past lifeways of the Kanaka Maoli residents of the area, and the marine resources that that they once sought to sustain life along this desolate coastline.
The archaeological study of trails in Hawai‘i within the current regulatory system of heritage management has been hindered by the balkanization of landscape, and a single, limited typology, more than fifty years old, used for categorizing these features into relative time periods (Apple 1965; Mills 2002). I believe that the next step in the study of Hawaiian landscapes of movement should involve finding Hawaiian terms to describe these cultural features and the acts of movement along them (Keller 2009). Whereas in English we have any number of discrete terms to refer to trails, paths, and roads—track, street, drive, lane, avenue, boulevard, promenade, highway, thoroughfare, etc.—in the modern Hawaiian dictionary these words mostly share the root term “ala” (Pukui and Elbert 1986). This common root may be modified to make distinctions between the types of routes being traversed, but those distinctions are more a matter of degree than of kind. The term ala itself conveys deeper meanings than simply (1) path, trail, or road. It can also mean (2) to waken, stay awake, or be awake, and (3) to rise up, or come forward, such as a new generation of people (Pukui and Elbert 1986). “Ala” is even used with “ke” in the present (far away) tense of the Hawaiian language to indicate great distance from the speaker in both time and space (Elbert and Pukui 1979). These alternative meanings suggest that the term ala describes not only the physical structures of movement inscribed upon the Hawaiian landscape, but also serves as a metaphor for time and the connections between generations of Kanaka Maoli.

As a representation of time, ala is also found in poetic Hawaiian sayings that reference life and death, such as: “Ala ho‘i ‘ole mai, a pathway on which there is no returning [death]; Ala a ka manu, a bird’s trail [a life difficult to emulate]; Ala iki a kāhuna, the small path of priests [a difficult way of life]” (Pukui and Elbert 1986:16). Archaeologists are not able to speak directly with people of the past, or to see the world through their eyes, “but we may arrive at a closer
approximation of their beliefs if we do not rely solely on English words and categories” (Keller 2009:134; Oliveira 2009) to describe the features of the landscape they created. Not being a Hawaiian language speaker myself, I am ill-equipped to take on a study of the Hawaiian meanings of trails. This type of study however, would benefit greatly from community, and the input of Native Hawaiian speakers in that community. Sources of words to describe trails could include the modern Hawaiian Dictionary (Pukui and Ebert 1986), but also the colonial Hawaiian Dictionaries (Andrews 1836, 1865) prepared when the Hawaiian language was still commonly spoken by those who used the trails. Having searched through the 1836 Vocabulary of Words in the Hawaiian Language for my chapter titles, I am aware of several Hawaiian words involving trails and travel for which the meanings have subtly changed over the years. Also, going back to the writings of indigenous scholars of the early nineteenth century, such as Malo (1951), who provides detailed descriptions of the Makahiki, or Kamakau (1976:10), who includes an entire section dedicated to Hawaiian terms for roadways, might provide insights into the meaning of Kanaka Maoli trails to those that used them. Meaning that could provide new understandings of trails in the present. However, indigenous knowledge cannot be employed in a piecemeal way if true collaboration is to occur between Kanaka Maoli and archaeological communities is to occur (Kawelu 2015:140). It must be fully integrated into all aspects of heritage research if community-based methods to be successful.

Seeking Social Justice

The CBPR process rejects “value neutrality,” and asks that researchers direct their studies towards some applied purpose for the greater good of the community (Kawelu 2015:140). This is also about sharing power. Archaeologists clearly benefit from the practice of archaeology. They gain knowledge, earn jobs, and build reputations by studying a past that is often not their own. Indigenous communities should also benefit from archaeology and the study of their past.
Providing reciprocal benefits through research is a form of social justice. Archaeological work can benefit the community in many ways, including by protecting cultural sites, helping with land claim and repatriation issues, and even building local economies through cultural tourism. However, archaeologists practicing within a community-based research paradigm seek to provide even more concrete benefits to the descendant communities that they work with.

One way of providing community benefit is through building community capacity. This type benefit is a very real possibility within the kula kai lands of Hīlea and Kaʻalāiki surrounding Kāwā Bay. Here, stewardship grants from the county’s PONC stewardship fund are available for non-profit organizations within the community. These monies can be used to care for the land, its natural resources and cultural sites, and by extension the community that uses the places. While the process used to provide the grants certainly has its flaws (only one group on Hawaiʻi Island has thus far been awarded a stewardship grant, though many have applied), these kinks are being ironed out, and grants for the Kāwā area should be made available to community non-profit organizations soon.

While, groups such as Nā Mamo O Kāwā (2017) and the Hawaiʻi Wildlife Fund have proposed modest plans for caring for the heritage of the area in their most recent PONC stewardship grant requests, I see the potential for great benefits in the future. The county must comply with state laws regulating heritage, and detailed studies of the cultural sites within the county lands still need to be completed. I would like to work with the Kaʻū community to help them conduct their own archaeological-cultural study of the Kāwā lands. I believe that instead of hiring an outside archaeological firm to come in and conduct and archaeological inventory survey at the exclusion of the community, the county should provide funds to community members to conduct their own research with the help of qualified professionals who could
provide guidance. While this would represent a departure from the normal process of the historic preservation, and SHPD would have to be onboard for it to work, I see it as the next step in community-based archaeological practice, and as a way to build community capacity, while at the same time providing community benefit. This general idea of community involvement regarding the identification and recording of cultural sites at Kāwā was one of the proposals contained in the recent management plan prepared for the county-owned lands in Hīlea and Kaʻalāiki (Townscape 2017).

Taking this idea one step further, I believe that the Kaʻū community has the capacity to play an even larger role in how heritage within the district is defined, documented, and studied. By organizing a Kaʻū heritage council, similar to the County of Hawaiʻi’s Cultural Resource Commission, made up of a certain number of knowledgeable residents from across the district, community members could begin asking landowners, developers, contract archaeologists, SHPD, or whomever, to consult with them prior to any archaeological or cultural studies taking place in the district. I believe this would be a win-win situation for everyone involved. The heritage council could provide recommendations to consultants regarding who to consult with in the community, provide insights into the types of resources that might be present in certain areas, give voice to community concerns regarding a given project, and even suggest strategies for conducting fieldwork in a culturally sensitive and productive manner. The council could also review historic preservation documents, and comment on them, prior to SHPD approval and make recommendations regarding the ultimate disposition of cultural materials collected in the district. They could even provide training to community members interested in participating in heritage studies, and maintain a list of local community members that contract archaeology firms could hire to help with fieldwork.
While this proposal may appear, on the surface, to add another level of bureaucracy to the already bureaucratic historic preservation process in Hawai‘i, I believe that archaeological consultants and land developers alike would jump at the opportunity to begin a dialogue such as this early in the development process. Early and consistent communication would lead not only to the community having more of a voice in decisions affecting their heritage, but potentially to more amicable relationships between archaeologists and Kanaka Maoli communities, to a higher quality of archaeological and cultural studies, and even to developers, who work with the community, having an easier time receiving permits and completing developments. I truly believe that if the community can organize and work towards a common goal, the existing power structure within the field of heritage management can be turned on its head, and social justice can be achieved for the benefit of all.

**Kuamoʻo: The Return Trip**

Thinking of the kula kai trails of Hīlea and how they might help connect archaeology with community, the Hawaiian term “kuamoʻo” comes to mind, which Lorrin A. Andrews (1836:75) translates literally as “the back bone,” but glosses in English as “a road or path, street of a town,” noting that “this is the common word for path on Hawaii [Island].” The use of this word to refer to paths specifically on the island of Hawai‘i appears to have waned during the middle part of the nineteenth century as the definition of kuamoʻo included in Andrews later 1865 dictionary reads “this was the word used formerly on the island of Hawaii for path or road; the word alanui is now used” (Andrews 1865:299). The term kuamoʻo, suggesting regional (island by island) differences in how routes of travel were once referred to and perceived, is loaded with potential significance of meaning and possible insights into the study of Hawaiian landscapes of movement.
From the root words “kua,” meaning “back,” and “mo‘o,” meaning “lizard or dragon,” kuamo‘o (literally “lizard back”) could be interpreted, as was done by Fornander (1916:80), as the “ancient name of mountain paths, which usually followed the ridges, hence the lizard back term.” However, this word also invokes deeper connotations that reinforce the generational connections symbolized by trails, paths, and roads. “Kua” can also mean “to carry on the back, as a child,” or as a numeric prefix (kua-), “generations back,” specifically indicating two more than the suffixed number (Pukui and Elbert 1986:168), and “mo‘o” can indicate a succession or series of a genealogical line or lineage, a story, legend, or tradition, and even (by itself), a narrow path or track (Pukui and Elbert 1986:253). Following this line of thought, kuamo‘o, when combined with ‘ōlelo (meaning language, speech, etc.), refers to a continuous record, history, or story that describes a succession of events, a “kuamo‘o ‘ōlelo” (Pukui and Elbert 1986:171).

Sharon Wianecki, in her 2012 article, The Sacred Spine, explores the deeper symbolic meanings of the moʻo (lizard/dragon) in Hawaiian lore. She too identifies the important links between past, present, and future generations embodied in the curving spine of the moʻo:

...Hawaiian-language authority Mary Kawena Pukui defines moʻo not only as a dragon or lizard god, but also as a spine, succession, and lineage. A moʻolelo, or story, is a progression of words strung like vertebrae along a cord of meaning. Likewise moʻokūʻauhau, the word for genealogy, suggests that Hawaiians viewed the lizard’s interlocking bones as symbolic of their own sacred lineage.

Genealogy—the litany of where people come from—is of supreme importance in the Hawaiian culture. As its emblem, the moʻo is indisputably significant.

Revered Hawaiian artist and cultural leader Sam Kaʻai gave a discourse about the moʻo before an international audience in 1987. The dragon is a major force of life, he said. Its head peers into the future, the white dawn yet to come. Its front feet are the ʻopio (youth), reaching, touching, examining. Next come the makua (parents), the stable hind legs of the dragon, and beyond them, the kupuna (elders). The kupuna form the spine, the collective song of all that came before. They tell how other dawns were and how this dawn will be (Wianecki 2012).

Sam Kaʻai’s reiterative use of the word dawn as a metaphor for time in the above passage is also relevant to the current discussion, as “alaula” (literally “red path or flaming path”), which
describes the streak of light seen during the rising of the sun (i.e. dawn), contains the Hawaiian root term for trail, path, and road, “ala.” Ala‘ula (with an ‘okina) has also been more recently translated to mean “red dust in a road” (Pukui and Elbert 1986:19). When viewed as a physical manifestation of time, trails, paths, and roads transform into more than routes simply meant to get from one place to another, they become representative of the lineages of Kanaka Maoli communities who have travelled along them. These routes are not simply linear connections to the past, but are places deeply inscribed into the landscape, where the past, present, and future coexist, where the past is kept alive and strong (Burke and Smith 2010), and where Kanaka Maoli of today can walk side by side with their kūpuna of yesterday and their moʻopuna (grandchildren) of tomorrow.

Realizing the importance of community, starting on my return journey, I have begun to see the rugged ‘a‘ā landscape of the kula kai of Hīlea as an allegory for the issues of colonialism that have plagued archaeological practice in Hawaiʻi, and to think of it as a symbol of the rocky divide—real and imagined—that has often developed between Kanaka Maoli and archaeological communities (Kawelu 2015). On the eastern side of this divide are the lands of Nīnole, Wailau, and Punalu‘u, transformed during the early 1970s into the Sea Mountain Resort. Here, much of the tangible evidence of the Kanaka Maoli past—first documented and salvaged by archaeologists (Barrera and Hommon 1972; Crozier and Barrera 1974; Rosendahl and Rosendahl 1986; Tulchin et al. 2006)—was erased from the landscape all together for the purposes of economic development. This process of archaeological salvage and development, repeated again and again in the Hawaiian Islands in recent decades, has led many in the Kanaka Maoli community to view archaeological practice as synonymous with development and the loss of heritage (Cachola-Abad 2013; Kawelu 2015). On the western side of the divide lies Kāwā and
the lands of Hīlea and Ka‘alāiki, protected from any future development through the County’s PONC program. On the ‘a‘ā flow and at Kāwā, the tangible evidence of Kanaka Maoli heritage is still pervasive (Clark and Rechtman 2013), and the County is in the process of awarding grants to community groups for the stewardship of these lands. The management of heritage at Kāwā awaits a new possible future, hopefully one that operates for community groups and decentralizes the discipline of archaeology as the primary beneficiary of archaeologically produced knowledge (Kawelu 2015).

If the ‘a‘ā represents the rocky divide of colonialism that has often strained relations between Kanaka Maoli and archaeologists within the current heritage management system in Hawai‘i, then the trails that cross the ‘a‘ā are paths to potential solutions (Kohls 2012). These physical manifestations of travel offer existing routes to connect archaeology from the landscape of economic development at Punalu‘u to the landscape of community stewardship at Kāwā, and move the discipline away from its colonial past towards a decolonized future. Trails as places where people meet, as routes that connect us to each other, as repositories of traditional cultural knowledge of landscape, as data on linkages between individual communities of the past, and as phenomenological features of the landscape, provide us with a means of decolonizing the practice archaeology, incorporating multiple views into the production of archaeological knowledge, as we move towards a more inclusive heritage management of the future.

The Final Leg of the Journey: A New Beginning

Turning away from Kāwā and Ke‘ekū Heiau, I begin my return trip to Kōloa following the narrow track of the alaloa through the Kanaka Maoli habitation structures that line its edges within the settlement at Kakainawana. I cross first one, and then another mauka-makai trail, tangible connections to the inland settlement at Hīlea Gulch. Both intersections are marked with small cairns to alert the passing traveler to their presence. Leaving the cluster of habitation
features behind, I enter a barren stretch of ‘a‘ā, as the trail carries me in a straight line away from the projection of Puuainako Point and the cooling ocean breezes. The route of the alaloa is difficult to see in the afternoon light, but the occasional bit of coral and piece of marine shell lets me know that I am on the right track. As I travel, I think of the term kuamo‘o and generational connections embodied in this landscape. How I have inserted myself into a new chapter of the story of this place, how my youngest children at ages 6 and 4 have walked this same path with me, and what that means, the kuleana and commitment it entails. Like the sun, now at my back—slowly sinking in the west, illuminating with its golden light the bewildering array of shapes in the ‘a‘ā in front of me, casting my shadow on the surface of the alaloa—the future of the tangible heritage embodied in this landscape appears bright. I am filled with hope, but the heat of the sun and the long day spent hiking have begun to wear on me, and I stumble a bit on the loose ‘a‘ā of the alaloa as I cross the more recent trail to the Kuhua Bay Fishermen’s Camp.

Continuing on, staying right as the trail branches (the left branch continues straight to the Hīlea Iki Cave Shelter), I arrive at the edge of the younger ‘a‘ā flow. I pause briefly to drink water and look out from its heights across the settlements of the older ‘a‘ā flow towards Kōloa, Nīnole, Wailau, and Punalu‘u in the distance beyond. Descending the steep slope I arrive at a narrow coastal inlet along the eastern edge of Kuhua Bay, the ocean breezes now offer some relief from the heat as I move on. Passing quickly through the Kuhua Bay (East) Complex, and the wave washed ‘a‘ā of the former Hīlea Iki Middle Complex, I turn seaward and leave the alaloa, seeking out the cooling waters of a tide pool that I know of on the point to the southwest of the Lu‘u Complex. When I arrive, I am met by disappointment, a low tide, and an empty pool. There will be no refreshing swim here for me today.
I instead turn away from the empty tide pool and follow a faint connector trail back towards the alaloa within the Lu‘u Complex. As I travel I recall the story of Kiilani, who once lived somewhere nearby this spot:

In a small place between Koloa and Kawa in Ka‘u lives a very beautiful woman named Kiilani. Kiilani’s favorite occupation was to bathe in the sea pools every day. The sea gods admired her whenever she went bathing. They desired to have her [with them] because she was so happy in her sea bathing. One day as Kiilani was absorbed in her happy bathing in the sea pool, a great wave rose up and washed her out to sea. She turned into a shark. When she was seen, she was easily recognized by the way she swam hither and thither as though full of joy (translated from the Bishop Museum’s Ethnographic Notes by Mary Kawena Pūku‘i in Kelly 1980:81-82).

Pausing once again, I turn briefly to look out to sea, but there is no sign of Kiilani on this day. I think about how happy I would have been bathing in that pool, and then turn continue on my way. Walking more quickly now, my destination at hand, I pass through the connected habitation structures of the Lu‘u Complex, arrive at the more mauka alignment of the alaloa, and follow its ‘alā stepping stone path through the Kokoaahu Point Complex, across the rocks exposed at low tide below Ka‘ie‘ie Heiau, out on to the beach at Kōloa.

Here I pause. I am by myself on the beach once again. In the distance a lone fisherman stands with his back to me, intently studying the brackish water channel where the famed Ninole Fishponds once stood, a throw net over his shoulder. My journey has come full circle, but I have not returned to the same place that I left hours before. A day’s worth of fieldwork and two school years have passed, I still have the same job and the same family, but I am somehow different, everything is different. I have made new friends and found a new path to follow. I have begun a journey towards collaboration and community-based practices of archaeological research. Facing the ‘a‘ā, I silently whisper a prayer of thanks for my safe travels on this day. Then I turn and trudge back across the beach towards the future.
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