

HEI, HAWAIIAN STRING FIGURES: SPIRITUAL CONNECTIONS, LEARNING, AND RESEARCH

Kalani Akana

This article describes my discoveries as a Hawaiian researcher with hei (string figures) as the media of recovery. String and string figures have helped me connect back to my ancestors and their ways of knowing and doing and have reminded me of the importance of kuleana (responsibility) and ha'aha'a (humility), some of the values that have sustained my people with health and wholeness for generations. By connecting to the mo'okū'auhau (genealogy), mo'olelo (stories), and mele (chants) of my kūpuna (ancestors), I have been able to align my Indigenous research methodology with a more Hawaiian way of conducting research.

CORRESPONDENCE MAY BE SENT TO:

Kalani Akana, Office of Hawaiian Affairs
560 North Nimitz Highway, Suite 200, Honolulu, Hawai'i 96817
Email: kalaniana@oha.org

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Indigenous peoples created ways of knowing and doing that have sustained and contributed to their well-being over millennia. Unfortunately, through the processes of colonization, military occupation, and proselytization, many of these ways have been supplanted by Western ones. More often than not, the cultures of Indigenous peoples became fertile ground for the colonizers to harvest artifacts and knowledge through highly institutionalized disciplines like archaeology, anthropology, sociology, and biology. Ironically, new “authorities” on Indigenous peoples arose and were called upon to write and comment on the validity of Indigenous peoples’ claims to their own cultural beliefs, values, and ways of knowing and doing.

This paper speaks back to those who have trespassed and resets traditional boundaries. It also speaks for those whose lands, culture, and identity need to be reclaimed. I decided to voice these claims in academia because that is where I received my training and education and because that is where boundaries can be challenged and redefined. Hart (2007, p. 88) noted that Simpson (2000) encouraged Indigenous academics to use their privileged formal education to support Indigenous ways of knowing, methods of knowledge development, research, and social structures. I decided to write my dissertation with the encouragement of my advisor, a Māori, who was receptive to my research; this research included many of the twenty-five Indigenous projects listed by her colleague and countrywoman Linda Smith (1999, pp. 143–161), with claiming, remembering, connecting, restoring, and discovering at the core. I wanted to find a way to combine my training in academia with my training in traditional Hawaiian modes of performance like oratory, ceremony, chant, and dance. I also wanted to research a subject that would benefit my community, especially children in Hawaiian-language immersion schools, as language revitalization was a cause of much importance to me. While I made a deliberate choice to research *hei* (string figures), a relatively unknown and unrecognized Hawaiian practice, I was somewhat apprehensive about exposing my experiences with Hawaiian ways, especially spiritual ways, of learning and researching to the logic and scientific scrutiny of academia. Linda Smith (1999) best described my challenge:

The arguments of different indigenous peoples based on spiritual relationships to the universe, to the landscape and to stones, rocks, insects and other things, seen and unseen, have been difficult arguments for Western systems of knowledge to deal with or accept. (p. 75)

I had the opportunity to meet Linda Smith at a conference and discuss Indigenous beliefs on spirituality. She referred me to the work of Cajete (2000), who wrote in *Native Science* that Indigenous knowledge is place-based and holistic in nature and that dreams and visions are some of the “methodological elements and tools of Native science that have traditionally facilitated such learning” (p. 67). Practical applications of spiritual beliefs included reflecting on ceremonies (Cajete, 1999; Peat, 1994). These researchers piqued my interest, as dreams, visions, and ceremonies are also important in Hawaiian spirituality and learning. For example, the po‘opua‘a, or head student in a traditional dance school, hoped to receive a dream before the ceremonial graduation and was expected to teach this dream-dance to the other students.

I was subsequently led to the work of Castellano (2000), a Canadian First Nations researcher, who identified dreams and visions, along with revelation, cellular memory, and intuition, as sources of knowledge (p. 24). Ermine (1995) also wrote about this kind of spiritual knowing, saying that “indigenous knowledges” are born of relational knowing in that “the culture of the Aboriginal recognized and affirmed the spiritual through practical application of inner-space discoveries” (p. 110). The larger world of Indigenous research was being revealed to me. I was especially excited to read Kovach (2009) where she addressed the issue of direct instruction from ancestors:

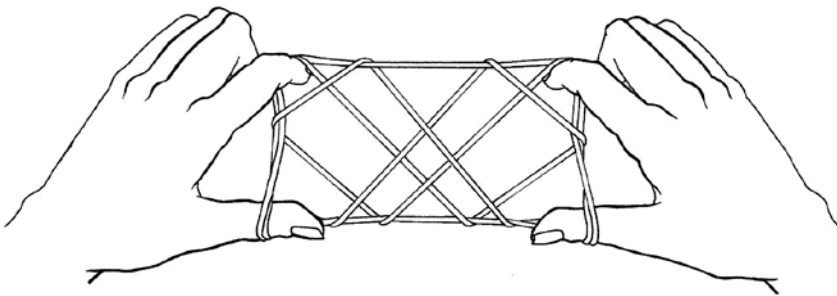
I can identify this knowledge source in my own life. Early in my research, I had a powerful dream that was particularly relevant. I knew, culturally, not to dismiss this knowledge coming to me in this form, for within Plains Cree knowledges dreams matter. (pp. 57–58)

Before I began my research, I recognized that research in academia was dominated by Western rationalism and that there was tension with my Native Hawaiian ways of discovery and analysis. This tension was noted by Benham and Heck (1998), who commented that in the Western rational view, “Knowledge is measurable in some fashion or can be rationalized by some set of objective assumptions that are not linked to mythical origins” (p. 33). In the Hawaiian view, Benham and Heck noted, “the source of knowledge comes from the ‘aumakua and kumupa‘a (spiritual guardians). This spirituality is interwoven with knowledge and experience and context of knowledge” (p. 33). In addition, Pukui, Haertig, and Lee (1972a, 1972b), whom I will cite again later, and Kame‘eleihiwa (1992) commented on and

affirmed the validity of spiritual learning and instruction in Hawaiian life. They extended what nineteenth-century native writers and historians like Kamakau (1870), 'Ī'i (1959), and Malo (1951) had recorded on Hawaiian spiritual beliefs. These Native Hawaiians, past and present, provide the authority for this research.

This article describes my “inner-space discoveries” about hei and how they helped me to connect back to my ancestors and the ways of knowing that informed them for thousands of years. While I acknowledge the differences between Native Hawaiian ways of knowing and Western rationalism, this is not an argument for supremacy, as “[t]he globalization of knowledge and Western culture constantly reaffirms the West’s view of itself as the arbiter of what counts as knowledge and the source of civilized knowledge” (Smith, 1999, p. 63). Rather, this is meant to be a discussion opener to show that Indigenous peoples have methods and methodologies of research that have withstood the test of time and that can assist Indigenous researchers in their work today. Indigenous ways of knowing and doing have already contributed much to the world, especially in the domains of pharmaceuticals, healing, and sustainability. Indigenous learning and teaching through spiritual means might offer further help to individuals and society in our often disconnected and violence-filled world.

FIGURE 1 *Pō or Nā Hiku o Makali'i*



COMMISSIONED DRAWING BY KIMBERLIE WONG

AO MAI KA PŌ: NIGHT BECOMES DAY

E pō e pō ē kau mai nā hōkū Night, night, the stars are placed
 A ao mai ka pō, helele‘i iho nō. And night becomes day, as stars fall

(Keawe, personal communication, 1974)

The above chant accompanied one of the first heī, called *Pō* (see fig. 1), that I learned from ‘Āina Keawe, a respected kupuna (elder) in the Hawaiian community. As in other Indigenous communities, kŭpuna are revered as keepers of knowledge (Cajete, 1999; Peat, 1994). Aunty ‘Āina, as she allowed us to call her, taught me that at the conclusion of the chant, when “night becomes day,” I needed to trigger the lower lateral strings, which would cause the figure to disappear and the stars to “fall.” I use this chant and story as an opening for this article on learning heī with the hope that what is *Pō* (night, darkness, obscured) concerning the study and teaching of heī becomes *Ao* (day, light, known).

Over the decades, learning traditional heī figures has been an exciting process of discovery for me. My *Ao* experience in heī began when I learned “*Eia ke Kaula*,” a chant for making *Pāpio Maka Nui* (see fig. 2), known as Two-Eyes in common vernacular, from Mrs. Sarah Keahi, my first Hawaiian-language kumu (teacher) at Kamehameha Schools. *Ao* became lighter when, as a teenager, I was privileged to learn three more traditional heī from Aunty ‘Āina at a workshop sponsored by the City and County of Honolulu Parks and Recreation Hawaiiana division. These figures were *Nenuē*, *Pō*, and ‘*Upēna* (Nine-Eyes). Aunty ‘Āina was a patient and kind kupuna who taught us without paper and pencil. She said that this was how she learned and that this was how we should learn—by observing and doing. We had to practice the figures over and over to memorize the sequence of movements, and I remember going home with a brain freeze. At the end of the workshop, Aunty ‘Āina encouraged us to look for Lyle A. Dickey’s *String Figures from Hawai‘i* in case we forgot what was taught orally to us, and we would also learn other figures if we were interested. I purchased the book at the Bishop Museum’s shop for ten dollars, a large sum in 1973, and learned a few more heī on my own. More often than not, Dickey’s instructions were too complicated and technical as I attempted to learn other heī, and I found myself back in *Pō*. However, over the years I was reminded of and shown other ways of learning and researching to recapture and remember the ways and wisdom of kŭpuna such as ‘Āina Keawe and of the old ones before her.

These ways of learning and researching have already been described by other indigenous writers. In addition, Hawaiian scholars wrote about spiritual guides, signs, and omens as other sources of inspiration, guidance, and instruction. Nineteenth-century scholars, especially, left a huge archive of Hawaiian-language material, primarily in newspapers, that those of us involved in cultural reclamation and revitalization can now research. Fortunately, Native Hawaiian writers believed that if traditional knowledge was not recorded, it would be lost in the onslaught of Westernization. One of these writers, Joseph Poepoe (1906), wrote:

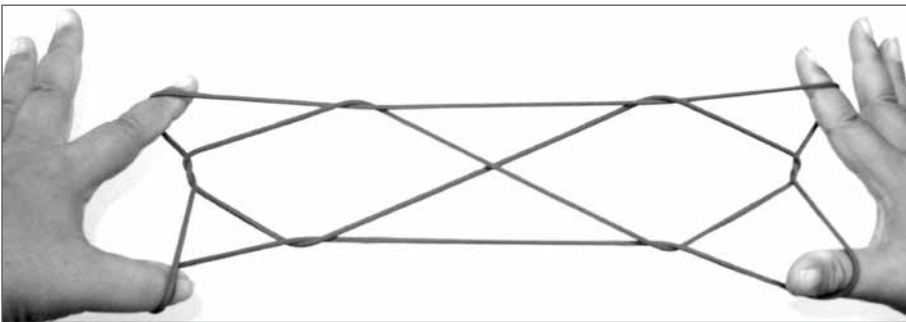
Aia maloko o ko lakou Moolelo Kahiko na Mele ame na Pule Wanana, na mele ha'i-kupuna a kuaauhau hoi. Aia hoi maloko o na hana maa i ko kakou mau kupuna, he mau mahele ike i komo nui iloko o ke kupaianaha ame ke kamahao; a ua kapaia aku hoi ia mau mea e ka poe e noho ana iloko o na olino ana a ka naauao, he mau hana pouli, hupo, hoomanamana a Pegana hoi. Aka nae, o ka mea oiaio, he mea pono ke malamaia kekahi oia mau ike o ke au kahiko o na kupuna o kakou, elike me ka ike kalaiwaa, kilo-hoku, ame na ike e ae he nui. (February 1, 1906)

Within their ancient stories and songs, prophetic prayers, genealogical chants and history, therein are the customs of our ancestors, domains of knowledge that are filled with wonder and amazement that has been labeled by those who claim to live in illumination and wisdom to be works that are dark, ignorant, and of Pagans. However, the truth is, it is right to care for these kinds of knowledge of ancient times of our ancestors like canoe building, astronomy and numerous other kinds of knowledge.

(translation by K. Akana)

While researching archives may not be considered a spiritual endeavor by many, I contend that any research in a native language is a spiritual endeavor because of the ability that native language has to connect the Indigenous researcher back in time to the life, thoughts, and spirit of the ancestors. If we expect to learn in spiritual ways from our ancestors, then we must speak and understand their language. I say this because I did not have the joy and privilege of having my Hawaiian-speaking grandparents in my life, which prevented my gaining access to their cultural wisdom. I thus had to invest many years in learning my native language. As a result, I have found that Hawaiian ancestral knowledge could be accessed through spiritual means when I knew my ‘ōlelo (native language), which then enabled me to find my mo‘okū‘auhau (genealogy) and to better appreciate and practice my mo‘omeheu (culture). Knowing my ‘ōlelo enabled me as a researcher to then understand and appreciate mo‘olelo (stories) with a native worldview. Today, I use mo‘olelo, mo‘okū‘auhau, and mele (song) as the chief methods in my research. Western researchers have tried and failed to access these vaults of knowledge because of their inability to connect and relate through these methods. Moreover, the “kuleana (right, responsibility, and authority) to make decisions on things such as policy related to an Indigenous or minority language and culture belongs to that indigenous or minority people from whom the language evolved” (Warner, 1999, p. 69).

FIGURE 2 *Pāpio Maka Nui* (Big-Eyed Skipjack) or Two-Eyes for “Eia ke kaula”



ANCESTRAL THREADS AND CONNECTIONS

One of the mo‘olelo that I searched for with possible connections to hei was “Ka‘ao no Kana ame Niheu” (Fornander, 1916), a traditional and popular story about a stretching man and his Samson-like brother. Because dreams are important sources of information and because they connect humans to spirits, I was especially drawn to the following portion of a much longer dream story:

He kanaka loa, he kanaka poko,	A long man, a short man;
He ui-aa-he alaneo,	A stunted youth, a male god.
a na maka pa i ka lani,	The eyes touched the heaven.
Malu ka honua,	The earth was overshadowed.

(Fornander, 1916, pp. 442–443)

The “long man” is Kana, and the “short man” is his brother, Niheu. Moi, a prophet of the chief of Moloka‘i, received the dream visitation described above on Pō Kāne, one of the sacred nights of the Hawaiian lunar calendar when departed ancestors reconnected to the world of the living and were known to march in processions along familiar routes called huaka‘i Pō Kāne. Pukui et al. (1972b) described dream visitation in the Hawaiian culture in this way:

The *hō‘ike na ka pō*, the revelatory dream, nearly always brought a message from the *‘aumākua*. These ancestor gods spoke clearly or in allusion; they appeared virtually in any of mystical plant, animal, or mineral forms; they hid their appearance in symbol and allegory. But, invariably, the *‘aumākua* revealed matters close and pertinent to the waking life of the dreamer and his family. (p. 172)

Kamakau (1870) adds to our understanding of the ‘aumākua and said that they dwelled in Ao ‘Aumākua,¹ a realm accessed by the spirits of the deceased via the tree of Leilono and leina ka ‘uhane.² Humans did not ordinarily access these realms to seek knowledge and information, for we belong in the Ao Kanaka, or the Realm of Man.³ Kamakau also described the many ways in which a kanaka (native person) could communicate directly with the ‘aumākua, such as through prayer, spirit travel, and noho akua, a sort of induced trance-like state in which the spirit of the god comes to noho (dwell) within the supplicant.

‘Aumākua communicated frequently through dreams. Special evidence of ancestral bonds and connection to them was revealed through names received in dreams. These names embodied a person’s identity and mana (spiritual power) and were so sacred that the recipient needed to be sensitive to the dream and obey the instructions, such as the naming of an unborn child. Pukui et al. (1972a, p. 95) described three types of spirit-given names: inoa pō, inoa hō‘ailona, and inoa ‘ūlāleo. In inoa pō, the ‘aumākua visited the family member in a dream at night with a specific name for the chosen one. In inoa hō‘ailona, a mystic sign or omen was given, and in inoa ‘ūlāleo, an audible voice gave the family member the name.

In my research of family genealogy, I have experienced the gift of knowledge from ‘aumākua through dreams and through ‘ūlāleo (spirit voices). One ‘ūlāleo experience occurred when I was searching through census data from the mid-1800s at the Hawai‘i State Archives on the grounds of the ‘Iolani Palace. After an exhaustive search for a particular ancestor, I took a break to pay the parking meter. As I passed the card catalog, a voice said, “Nānā mai” (“Look here”). I responded and reached toward the same file I had already searched many times that day. Because the card catalog file was long, I braced the bottom of the file tray with my left hand as I pulled it out with my right hand. My thumb braced the front, and my right forefinger slipped between the cards to maintain balance. I then took the file to a research table, and to my amazement, the very name of my kupuna kualua (great-great-grandfather) was there where my right finger had slipped. There he was, Ka‘īnana Makanui. This is an example of instruction through ‘ūlāleo, and I have learned to acknowledge this kind of spiritual assistance as essential to my Indigenous research.

MO‘OLELO OF A USELESS PIECE OF STRING

A Grandmother’s Prophecy

He pauku kaula o Kana o ka hanau ana, aohe kino maoli.

Kana was born as a piece of rope, and he had no human form.

(Fornander, 1916, p. 436)

Again, I return to the story of Kana for connections to hei. I found a prophecy that recounted his birth as a piece of string and how his father, thinking the string to be useless, threw Kana into a refuse pile. Uli, the grandmother, knew otherwise. She retrieved the string and cared for it on Hawai‘i Island. The piece of string grew to an enormous length, and Uli had a house built for it that stretched from the mountain to the sea. The rope grew, and it was called Kana.

Due to her great beauty, Kana’s mother, Hina, was abducted by a chief of the island of Moloka‘i and sequestered on a hill that was able to rise out of the waters on the back of a great turtle. Niheu, a strong and stout younger brother, called upon Kana to help him rescue their mother. They built a fleet of canoes to go to Moloka‘i, but none of them could carry the weight of the rope-like giant, so Kana sought the advice of his grandmother,⁴ Uli. She remembered an ancient canoe, Kamā‘eli‘eli, and began to chant it back into existence from the forested uplands of Paliuli. A portion of her chant foretells the outcome of the rescue operation. Take note of what Kana is playing—hei!

O Kanaloa i luna o ka pola e hei ana i ka heana.

Kanaloa is on the platform playing cat’s cradle with the dead.

(Fornander, 1916, pp. 440–441)

Niheu was first to breach the fortress with his strength and war club. He grabbed hold of Hina, but his sacred and empowering hair was snipped off by the birds Kōlea (plover) and ‘Ūlili (sandpiper), and he lost his grip on his mother. During this foray, Kana became hungry and stretched his body all the way back to Hawai‘i Island, about twenty-five miles away, and peered into his grandmother’s doorway searching for food. She advised him that if he ripped off the flippers of the turtle, it would fall. Niheu thumped on Kana’s lower body to get him to return. Kana returned and assisted in the battle, but the turtle-fortress rose upward. Simultaneously, Kana stretched upward to take hold of his mother while manipulating his string

body to parry rock projectiles hurled by the Moloka'i captors. Now this part of the story is revelation inspired by the grandmother's prophecy. Kana ensnared the flippers of the giant reptile by forming loops and knots that would snip off the hui (flippers) of the turtle, dropping the fortress back down to earth. Thus the Moloka'i chief and army were defeated, Hina rescued, and the prophecy fulfilled.

Thomas Thrum translated the "hei" in Uli's prophecy, one of only a few references in mo'olelo to hei, as "cat's cradle." Dickey (1928) believed that Kana was not playing hei and that Uli's prophecy simply referred to his rope body "stretching clear to the bow [of the canoe]" (p. 10). Dickey, however, did not appear to understand the kaona (deeper meaning) in the Hawaiian. He was a surveyor for the government and later became a judge who adjudicated a controversial claim to royal land that he happened to have surveyed himself years earlier. He chanced upon Native Hawaiians making hei while he was doing his survey work on native land and saw a connection to surveying, which was subsequently commented on by Akana (2013). Through his work, Dickey became part of a growing field of new authorities of the time: amateur ethnographers and collectors of string figures from Indigenous peoples of the Pacific and the world. The following excerpt from his collection of hei is revealing of his thoughts on Hawaiian knowledge:

These string figure chants, perhaps, were the literature of the common folk who from lack of memory could not enjoy the highest form of literature. Many Hawaiians have said to me that their grandparents would sit by the hour repeating these little chants as they made the figures. The underlying ideas of many of the chants are erotic. The references to mythology are not reverent, being made only for amusement. (Dickey, 1928, p. 11)

The story of Kana, however, showed that hei was more than casual amusement. Uli's chant predicted Kana's victory over the Moloka'i chief because she envisioned his elongated rope body performing as a hei figure ("e hei ana i ka heana") as it (A) toyed with the heana (corpses) of those he battled with within his hei body, (B) stretched upward, (C) parried projectiles, and (D) ripped off the flippers of the great turtle with loops and knots. Again, this is an interpretation based on spiritual contemplation of the prophecy and the nature of Kana as understood through my native language.

My interpretation, of course, can be disputed, so let me offer more information for contemplation. According to Beckwith (1970, p. 466), Kana could transform his body into a spider's web or take the form of a human, a convolvulus vine, or a banana.⁵ In the Rice (1923) version of the same story, Kana uses his body forms in succession—human, rope, convolvulus vine (koali), and spider's web. We call these body forms kinolau. These are not magical or supernatural forms to the Hawaiian. They are natural and familial.

In addition to the kinolau evidence, Kana was the god of juggling and was prayed to for success in contests. Kana was probably prayed to for success in pū kaula⁶ (slip-knotting tricks), as these were wagered on in traditional society (Malo, 1951). I conclude that if there were a god of hei, it probably would have been Kana, given his many string and rope forms. Jugglers used the following prayer to Kana, which called upon his rope and fiber kinolau, depicted here as the hala root and hau tree bark:

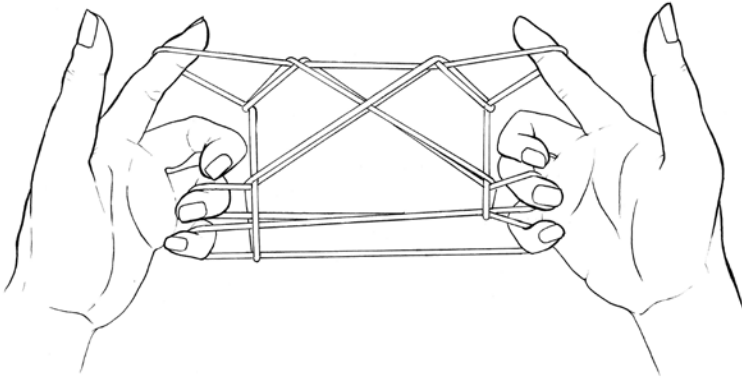
O Kana! O Kana!
Rough line of hala root or bark of hau tree
Point and declare as to the sleeper,
The foster child of Uli,
Put on your rope body,
Lay off your human forms
In this trick of yours and mine. O Kana!
(Malo, 1951, p. 298)

Thus it appears that Kana was not a useless piece of string after all. Similarly, the study and learning of hei are not useless or trivial. Hei is a storytelling tradition that connects us to our ancestors and to our Hawaiian heritage. Often these mo'olelo had difficult lessons within them—for the performer as well as the audience.

STRING THAT BINDS AND LOOSENS: DIFFICULT LESSONS

The first hei figure that I learned through spiritual instruction was *Ku e Hoopio ka La* or *Kuhaupio* (Dickey, 1928, p. 15), which was discussed in volume 8 of *Hūlili* (Akana, 2012). Another was *Lonomuku* (see fig. 3).

FIGURE 3 *Lonomuku*



COMMISSIONED DRAWING BY KIMBERLIE WONG

Here is my retelling of the mo'olelo of Hinahānaiakamalama, or Hina, and how she became known as Lonomuku, drawing on Kamakau's "Ka moololo no Kauwiki" in *Ka Nupepa Kuokoa*, November 18, 1865, and *Lonomuku*, a CD by Kahaunaele.

Ulupa'upa'u of distant Kahiki was her homeland. Hāna was the land of her betrothed, 'Aikanaka.

Hina and 'Aikanaka married and had a son, Puna, who by custom was taken and raised on O'ahu as a sacred chief. Many other children were born. Because of their high kapu

(sacred status), Hina was required to take their refuse many miles away, which tired her greatly.

‘Aikanaka neglected Hina for long periods of time, and this was observed by her children. In despair, Hina called upon the rainbow to take her to the sun, but her neck was burned by the extreme heat, so she returned to earth. Hina endured the abuse until she could take no more and called upon the rainbow to take her to the stars. But Hina did not know that the stars were ‘Aikanaka’s family. They laughed and ridiculed the beautiful chiefess, so she returned to earth dejected.

Again, Hina was neglected and abused by her husband. She called upon the rainbow to take her to the moon. To prevent her children from crying and giving her escape away, she changed them, except for Puna and Hema, into gourds and stuffed them into a *kōkō* (carrying net). Then she slung this *kōkō* over her shoulder.

‘Aikanaka woke to see his wife’s escape. In remorse, he called to her to stay, but she refused. Too late! ‘Aikanaka reached up and took hold of her leg in a last attempt to restrain her. Some say that he yanked her foot off, but others say that Hina loosened her foot free as does a trapped *mo’o* (lizard).

Thus Hina escaped to the moon. She is still seen limping about on one foot every thirty paces or so, waxing and waning with strength. Her gourd children are still with her, looking down upon us as circular crater-like beings.

To commemorate this event, our ancestors called her *Lonomuku*, or Maimed Lono.

For some inexplicable reason, Hina’s *muli loa* (youngest child), Hema, was left behind on earth. He grew in strength and became the progenitor of all the chiefs of Maui and Hawai’i islands. Her oldest child, Puna, became the progenitor of all the chiefs of O’ahu and Kaua’i islands (Kamakau, 1869; Beckwith, 1970, p. 241). Thus the string figure that we make for *Lonomuku* is a reminder of this tragic story

and is a genealogical mnemonic: the longer side of the figure represents Puna, the *kaikua'ana* or older sibling line of chiefs, and the shorter side represents Hema, the *kaikaina* or younger sibling line of chiefs.

I had difficulty deciphering the complex written instructions in Dickey (1928) for *Lonomuku*. Due to its asymmetry, the motions for learning *Lonomuku* were complicated and literally full of twists and turns. However, after many dismal attempts, I remembered how *kūpuna* once counseled me to pray for guidance, so I chanted “E Hō mai i ka ‘Ike” (“Grant Insight”), a prayer chant I had learned from Edith Kanaka‘ole, an esteemed elder, composer, and teacher. I went to sleep. That night, I dreamed of a big, bright moon and a lady draped in a white *kihei* (shawl). She carefully and gingerly stepped over tree roots and rocks in the moonlight. That was all.

The next day, I reattempted to decipher Dickey’s written directions to *Lonomuku* but soon found myself ignoring his instructions altogether. I allowed my fingers to move and manipulate the string as if they had a memory of their own—my fingers seemed to mimic the moon lady stepping over the roots and rocks. The cellular memory within my fingers is a phenomenon that Wilson (2008) discussed as he remembered a conversation with a Lakota elder, Lionel Kinunwa, who said: “We have memories. Our ancestral memories are in our blood, they’re in our muscles, they’re in our bones, they’re in our hair.”

He said that many of us do not pay attention to these memories because we are too busy paying attention to what’s going on in the modern world. We don’t pay attention to our history memory. This is why when we hear the drum, our spirit is moved. These memories come out of the molecular structure of our being. This is also why when you hear someone speaking your language, your molecular structure picks up those vibrations, because each language has its own peculiar patterns, and you feel good that somebody is speaking your language (in Steinhauer, 2002, p. 5).

Spiritual learning caused me to pay attention to the memories in my fingers. I attribute the DNA memories possessed within my hands and fingers to my Kekaula (the string, the prophet) ancestors. In fact, I have come to know the lady who visited me in my hō'ike na ka pō as my kumupa'a (spiritual guide). I affectionately call her Kaluahine (the old esteemed woman), which is also an ancestral name. My dream of Kaluahine stepping over roots and rocks was an instruction to my fingers—a spiritual instruction. I have also come to realize that my guide may have been Lonomuku herself.

O Honuaula, O Kuawalu!	O Honuaula, O Kuawalu!
O ke alai a Kaupo!	O, the hindrance to enjoyment!
Pale Kaupo!	O, the obstacle to enjoyment!
Ku mai la o Lonomuku.	There rose Lonomuku.
O Lonomuku kai luna, kai lalo!	O Lonomuku, sky above, sea below,
Kai ke ka'e ka ma'i o ka wahine	O, the woman's body,
ohe la, ohe la!	Ascending, ascending!
Apa, apa a hewa ana mākou	We have done great evil.
He iwi no kakou a mea la, 'ohe la	A bone of us ascending.

(Dickey, 1928, p. 55)

So why would we want to remember this painful story of Lonomuku? I believe that in remembering the story of Lonomuku through hei and chant, we are reminded of an age-old but unresolved problem of spousal abuse and neglect. We remember the story so that we do not repeat the hewa (wrongdoing) of selfish, uncaring, and abusive husbands. We are reminded of this story whenever we look upon the moon and see Lono's inanimate children, or when we plant or fish according to the phases of the moon. In our yearnings for the past, we not only remember Lonomuku, but we also transfigure that painful past into a collective memory of admiration and thankfulness to Hina. We remember because we are her living descendants through her sons, Puna and Hema. The string figure reminds us that even though these ancestors have returned to Pō, we cannot let go of our ways of knowing and the knowledge of Ao. When we do, we lose track of our well-being as Hawaiians.

HEI KUPUA: STRING FIGURES OF CULTURAL HEROES

The mo'olelo of Kana led me to research other figures in which the subject was also born as pieces of rope. I found *Kinikuapu'u*, which was made on the islands of Hawai'i, O'ahu, and Ni'ihau, and *Palila*, which was made on Ni'ihau. Kinikuapu'u and Palila are two kupua (cultural heroes) who have hei associated with them and, just like Kana, they were born as pieces of string. The string figure for both is bent twice in the middle, alluding to Kinikuapu'u's hunched back and to Palila's birth as a piece of rope (Fornander, 1916, p. 136). The figure is then converted or slides into another figure called either *Nā keiki pi'i niu* (the children climbing coconut trees), as in the previous version of *Kinikuapu'u*, or *Malo o Pua'ula* (the loincloth of Pua'ula), which refers to Palila's malo pua'ula (red flower loincloth) that was stained with the flowers of the hau (*Hibiscus tiliaceus*). Wherever Palila spread his malo to dry, the hau plant would not grow. This was in respect for Lupea, his nursemaid and mother's sister, who became a hau tree to supply medicine, wood, and fiber to future generations of Hawaiian people.

Kinikuapu'u is comprised of three distinct sliding figures: (A) *Kinikuapu'u*; (B) *Nā keiki pi'i niu*, children climbing for coconuts; and (C) *Nā keiki kōhi pā'ō'ō*, children digging for sweet potatoes. I learned *Kinikuapu'u* quite easily. The other sliding figures were elusive; I could create them one day but not the next. Remembering that kupua were elusive and transformative beings, I again chanted “E Hō mai i ka 'Ike.” This time I received neither hō'ike na ka pō nor instruction by 'ulāleo, my usual means of spiritual instruction. This bothered me. What was blocking my reception?

Over a span of a week or two, I was impressed with a feeling that I needed to approach my research and learning with humility, just like “children climbing coconut trees” or “children digging for sweet potato fragments” for daily sustenance. It seemed that in my quest to achieve a doctoral degree, my 'ano (nature) had reverted to the learned methods of dominant academia. Our kūpuna would call this nature ho'okano (conceited). I was reminded of the work of a respected Hawaiian elder and scholar, Peter Hanohano (2001), who wrote that the ethic of Hawaiian researchers was to approach and respect elders and ancestors with humility. I was also reminded by him to reread Wilson's (2008) chapter on “relationality,” a term coined to describe the important relationships one has with (A) people, (B) the environment/land, (C) the cosmos, and (D) ideas.

Thus it was only after approaching learning these kupua string figures with humility and respect that I was able to learn them. With a more ha‘aha‘a (humble) attitude, I also began to see the hō‘ailona (symbols) within the hei, just as Pukui et al. (1972b) described when they wrote that the ‘aumākua “hid their appearance in symbol and allegory” (p. 172). Our elders have often told us to be ha‘aha‘a. This attitude, they say, enables one to receive messages and interpret hō‘ailona more readily and easily.

A discussion of hei and kupua would not be complete without mentioning Māui, a pan-Polynesian demigod and superhero. He was also born as a piece of rope, or, in well-known sources such as the Kumulipo,⁷ he was born of a malo. The string figure associated with Māui is *Kīpuka Hele Lā a Māui* (Sun-Snaring Lasso of Māui), which commemorates his most well-known feat.⁸ Māui has a strong traditional connection to string, cord, and rope. According to the Kumulipo, the knowledge of string technology was given to the supernaturally gifted Māui by his father, ‘Akalana, as passed down to him by Hili, Wili, Milo, and other ancestors named in the same source. His mother, Hina, gave him fourteen ‘aha (sennit ropes) to snare the legs of the sun, but he needed to search out his grandmother, who would give him the fifteenth and most powerful ‘aha to weigh down the sun, thereby slowing his movement across the sky. The grandmother, Wiliwili-pūhā,⁹ is erased from many retellings of the story in modern literature but is essential in the cultural memory of our ancestors because this one name shows the connection to our past and the importance of elder knowledge and wisdom.

STRING AND HEALING

Earlier I spoke of those who have trespassed into our cultural territory and have anointed themselves as cultural experts and authorities. Here are two questionable claims by such trespassers:

It has been said that the spirit of the string figures was a guardian spirit of shaman. It is now the time for me to tell the story of how I met this ancestral spirit and how my husband and I became caretakers of a knowledge so ancient that it appeared to have been lost and forever forgotten. We have been given a gift from the ancestors and we want to acknowledge it as a living treasure and share its mystery with you (Stokes, n.d., b).

The questionable claims are the author's assertions that (A) she received this knowledge from my Hawaiian ancestors and that (B) the author and her spouse are the caretakers of hei. As a living descendant of Hina, Māui, and Kana, I must counter the author's claims and attempts to appropriate and reduce hei into a "shaman game" or a "tool of a shaman" (Stokes, n.d., a) and in also linking hei to the pseudo-Hawaiian phenomenon being promoted in Hawai'i as huna (Stokes, n.d., c). These claims are hewa (wrong) and counter the otherwise benign belief that hei has, as I also assert, spiritual relationships and healing potential.

Indeed, string was used in healing but as pū kaula (slipknots), not as hei. In *Hana ka Uluna* (Dickey, 1928, pp. 143–44), a chain of slipknots was placed over a patient from the navel to the head and pulled apart five times. This action represented the loosening and freeing of the problem or disease. This procedure was repeated across the chest and over any area of the body needing healing and always over the four axis points of the body known as nā kihi 'ehā o ke kino (the four corners of the body). If all chains were loosened, the healing was a success. If any hitch in the chain occurred, the healer's treatment would fail.

The ability to unravel and loosen these knots was highly significant and important in healing. When a knot occurred in hei, the chanter uttered, "Elepaio¹⁰ kau mai, kaukau mai" ("Flycatcher, rest upon this knot and give counsel") and the knot would unravel easily. My research into hei reminded me of encountering "knots." The first knot-obstacle was the complexity of *Lonomuku*. Just as the old ones chanted "Elepaio kau mai, kaukau mai," chant and prayer assisted me, and through direct spiritual instruction and muscle memory, the figure was learned. The second knot was *Ku e Hoopio ka La*. It was, in fact, a life's goal of mine to learn the hei figure for *Ku e Hoopio ka La*, because Dickey (1928) found that "the chant is known to many Hawaiians who do not know how to make the figure" (p. 14). By actively using the language of the kūpuna and through spiritual assistance, the knot was unraveled and the figure learned.

Meyer (2003) quoted Luana Busby-Neff as saying, "We don't learn new tools, we remember them" (p. ix). Hei is a tool left to us by our ancestors to remember them and the places and people they touched. Thus, in performing hei, I remember my first teacher of 'ōlelo and hei, Sarah Quick (Sarah Keahi). I remember 'Āina Keawe of Hilo, a tireless laborer in the City and County of Honolulu Parks and Recreation Hawaiiana division devoted to perpetuating all things Hawaiian. She once told me that she gathered all of her medicines from nature and disdained hospitals, and she lived to a ripe old age.

I also remember and honor my kumupa'a, Kaluahine, who stepped into my dreams as Lonomuku herself and assisted my fingers in manipulating the strings to form hei. Through dreams, cellular memory, intuition, and direct spiritual instruction, I was able to learn *Lonomuku*, *Ku e Hoopio ka La*, and other hei.

Sometimes learning was guided by reminders to be humble in my approach to learning, such as with the kupua figures *Kinikuapu'u* and *Palila*. As an Indigenous researcher, I must always be mindful to be humble before my elders and ancestors and the legacy that they left for me and my generation.

Spiritual guidance and instruction are now the keystones of my Indigenous research methodology. Other elements include mo'olelo, mele, and mo'okū'auhau. All of these elements, especially spiritual guidance, necessitate knowledge of and proficiency in 'ōlelo Hawai'i. Pereira (2009) wrote: "The Hawaiian language is *the* receptacle of ethnic Hawaiian knowledge. It is in the language that the vitality of all cultural practices is truly realized" (p. 25). In order to access the knowledge of my ancestors, I have had to learn my own language. In doing so, I believe that I have been enabled and assisted to learn hei and perform my own *Hana ka Uluna* in achieving a sense of wellness and wholeness as a Hawaiian person—a Kanaka.

THE CORD VIBRATES STILL

Although hei media have changed from 'olonā fiber to yarn, kite string, or nylon, the vibrations of the hei that were made long ago left "string" imprints to help us recreate hei today and create new ones for tomorrow. When coupled with the stories and chants of yesterday, the maker of string figures also continues to recreate the poetic visions of our ancestors held in our mo'olelo, mele, and mo'okū'auhau. By remembering these poetic visions, we are educated and inspired by the deep knowledge of the old ones, which is still accessible to us descendants today.

As more and more of our elders pass away, Native Hawaiian researchers like me are further cut off from our cultural sources of knowledge and wisdom. However, direct instruction from our ancestors is one way we can remain connected to those who have passed on to ke ao pōpolohiwa a Kāne (the deep purple clouded realm of

Kāne). To reestablish this connection, researchers must know their own genealogy, because the ‘aumākua share information with family members through hō‘ike na ka pō. If the researchers cannot identify their ancestors, the validity of any kind of claimed information received is highly questionable. It is implausible, for example, for a Hawaiian to receive spiritual information from the ancestors of the First Nations peoples, as we have no known genealogical ties to them and we do not speak the language of their ancestors. Spiritual information is privileged information that cannot be accessed by people not belonging to the Indigenous group. There is no getting around it and no political correctness about the spiritual privilege, connection, and relationships that indigenous people have.

Lastly, was the learning of hei just for amusement? Amusement was one of the purposes, to be sure. More importantly, however, hei was a means by which our stories and history were perpetuated. The chants and symbolic figures that were created made a lifeline connecting one generation to another. As a result of performing hei, our language can be further revitalized. As a result of teaching hei, learning can be enhanced.

All of us engaged in Indigenous research have an obligation or kuleana to employ the knowledge gained from our ancestors to benefit our communities. This kuleana, I believe, is the Indigenous way of testing the validity and reliability of the research. Thus, just as the old ones left their memories, I leave my thoughts in writing, and this paper is now left open to your criticism. ‘Elepaio kau mai, kaukau mai!

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ABOUT THE AUTHOR

Iola and Kaheakūlani are my parents. Kāheakūlani, Kekaula and Ma‘inane are some of my kūpuna who have gone to another place. Anahola, Manana, and Mōkae, Hāna are my kulāiwi. Aloha kākou.

My dissertation title is “Hei: String Figures: Traditional Ways of Knowing and Doing.” I took up hei nearly forty-five years ago. In the beginning, no one was doing hei, and kūpuna were dying. That is why ‘Āina Keawe and Kaluahine Kekaula taught me hei.

My other passions are ‘ōlelo Hawai‘i, mele oli, mele hula, and performance thereof. If we don’t teach, how can these ho‘omau?

NOTES

- 1 “‘Aumākua” is plural for “ancestor”; ‘aumakua is singular. The cognate of ‘aumākua in Māori is “kaumātua,” but this word refers to living elders.
- 2 The breadfruit tree of Leilono is in Moanalua near Kapūkahiki. Leina ka ‘uhane, or leina for short, are leaping-off points for the spirits to enter into the realm of the ancestors. On O‘ahu, a famous leina is at Ka‘ena point, the westernmost cape where the sun sets.
- 3 There are many stories of extraordinary attempts to journey to Milu or some other realm to restore to life people such as Hiku and his wife, Kawelu; Hi‘iaka and Lohi‘au; Keanini; and others.
- 4 The Hawaiian hero always consults the grandmother for advice. Other hero types were Māui, who goes to his grandmother to receive power to slow the sun, and ‘Aukelenui-a-‘Ikū.
- 5 It should be noted here that the stringy fiber from the outer skin of the banana plant could be used as kaula (string) for hei, as two long fibers could be quickly rolled into a simple twine to be used for hei making.
- 6 Dickey (1928) includes a section on pū kaula at the end of *String Figures from Hawai‘i*.
- 7 Hawaiian creation chant.
- 8 Other feats included finding the secret to fire making, pulling islands together, and rescuing his mother.
- 9 The grandmother’s name varies in different versions. This is a Maui Island version of the story, explaining how Māui slowed the sun.
- 10 The ‘elepaio is a helpful and inquisitive forest bird. If it landed on a tree, the canoe builder took it as a sign not to cut the tree down. The bird was a messenger sent by the goddess Lea.