

KŪKANILOKO:

A HĀLAU OF ĀKEAAKAMAI OF KĀNE

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## DEDICATION

*No nā kia 'i e kūpale mau i nei pu 'uhonua kalana 'o Kūkaniloko, no nā hanauna e hiki mai ana e 'auamo ana i nei kuleana kaumaha loa, a no ko 'u 'ohana nāna e paepae mau i ka 'u mau hana, no 'oukou kēia wahi palapala li 'ili 'i. E ʻō nā Hale Mano a O'ahu nui a La 'ila 'i.*

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## ABSTRACT

Burgeoning beyond a sacred birthing space for O‘ahu’s *ali‘i*, the *heiau* of Kūkaniloko once stood as a *hālau ākeaakamai a Kāne*, a center of higher learning of Kāne-classed knowledge. It was here in the *piko* of O‘ahu that the highest of chiefly lines were groomed to skillfully rule, manage, and care for the islands and its people. This particular narrative offers a *kanaka ‘ōiwi Hawai‘i* perspective relevant to Kūkaniloko and its distinct connection to a Kāne methodology of knowing, doing, and being. It is with great hope that the intricate knowledge encompassing this vast complex may inspire a budding generation of scholars to embrace ancestral knowledge as the foundation for navigating the future.

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# CHAPTER I: KUMU HONUA

## SECTION I: KE KUMUHONUA

*Hanau La‘ila‘i he wahine  
Hanau Ki‘i he kane  
Hanau Kane he akua  
Hanau o Kanaloa, o ka he‘e-haunawela ia A-o  
Hanau ka pahu  
O Moanalaha  
Kawaoma‘aukele ko laua hope mai  
Ku-polo-li‘ili-ali‘i-mua-o-lo‘i-po kona muli  
O ke kanaka ola loa o lau a lau ali‘i  
O kupo, o kupo  
O kupa, o kupa, kupakupa, ku-pa  
O kupa kupa, keke‘e ka noho a ka wahine  
O La‘ila‘i wahine o ka po he‘e [nalu] mamao  
O La‘ila‘i wahine [o] ka po kinikini  
Hanau o Hahapo‘ele he wahine  
Hanau o Hapopo he wahine  
Hanau o Maila i kapa o Lopalapala  
O ‘Olohe kekahi inoa  
Noho i ka ‘aina o Lua  
Kapa ai ia wahi o ‘Olohelohe Lua  
‘Olohelohe kane hanau i ke ao...<sup>1</sup>*

According to an O‘ahu tradition, Ki‘i and La‘ila‘i, some of the first Hawaiian ancestors stood down from the heavens and issued forth the people known as the *Hū*. This occurred at a

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<sup>1</sup> Martha Beckwith, *The Kumulipo: A Hawaiian Creation Chant* (Honolulu: University of Hawai‘i Press, 1972), 203-204.

place called Kalua-a‘a-hū in Waikakalaua.<sup>2 3</sup> From this action, the island also became known as O‘ahunui-a-La‘ila‘i, “Great O‘ahu of La‘ila‘i.” This oral tradition also provides an interpretation of the meaning of the island’s name. The union of Ki‘i and La‘ila‘i brought together their two godly lineages, and it is this intertwining, or ‘ō‘ā, of their bloodlines that created the *Hū*.<sup>4</sup> Following their example, the people of O‘ahu, or perhaps more befitting, ‘Ō‘āhū, continued to mate with each other, further intermingling the bloodlines into one. This practice was common and was the preferred method of mating among the **ali‘i**<sup>5</sup> of all the islands. As scholar Lilikalā Kame‘eleihiwa explains:

The father-daughter incest of Wākea and Ho‘ohōkūkalanī transforms the *Akua* into a wondrous food - Hāloa-naka, the *kalo* plant, the life source of *Ka Lāhui Hawai‘i*. Through incest, the first *Ali‘i Nui*, Hāloa, was born and because *Ali‘i Nui* are *Akua*, incest is by definition a formula for creating divinity. And, as Wākea and Papa are *Akua*, incest is then an *Akua*-like attribute.<sup>6</sup>

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<sup>2</sup> Thomas Lenchanko and Jo-Lin Kalimapau, interview by author, September 30, 2014.

<sup>3</sup> Waikakalaua is an ‘ili kūpono, or a nearly independent ‘ili land division within the ahupua‘a of Waikele. State of Hawai‘i, Department of Accounting and General Services, Land Survey Division, *Oahu Government Survey 1876*, by W. D. Alexander (Honolulu: Kingdom of Hawai‘i, 1876). Soehren indicates that Waikakalaua was “returned by Haalilio at the Māhele, retained by the Crown.” He also indicates that a portion of Waikakalaua was taken by Wheeler Air Force Base in 1922 and made part of the Wahiawa district in 1925. Lloyd J. Soehren, “Waikakalaua,” Hawaiian Place Names, accessed October 26, 2014, <http://ulukau.org/cgi-bin/hpn?e=&a=d&c=mahele&cl=search&d=HASHcb5f3c140863273afb2b69>. Thomas Lenchanko indicates that Waikakalaua is located where Mililani Tech Park is today. Lenchanko and Kalimapau, interview.

<sup>4</sup> Lenchanko and Kalimapau, interview.

<sup>5</sup> Chief, chiefess, ruler, monarch. Mary Kawena Pukui and Samuel H. Elbert, *Hawaiian Dictionary*, Revised and Enlarged ed. (Honolulu: University of Hawai‘i Press, 1986), 20.

<sup>6</sup> Lilikalā Kame‘eleihiwa, *Native Land and Foreign Desires: Pehea Lā E Pono Ai?* (Honolulu: Bishop Museum Press, 1992), 40.

Wākea and Papahānaumoku were known in several genealogies to be common ancestors of **ka lāhui Hawai‘i**.<sup>7</sup> According to researcher and newspaper publisher of the early 20th century Joseph Moku‘ōhai Poepoe, Papa and Wākea were born in Ololo-i-Mehani and lived in the uplands of Kalihi at Kalihilihi-o-Laumiha.<sup>8</sup> Scholar Samuel Mānaiakalani Kamakau indicates that Lalolo-i-Mehani (perhaps a derivative of Ololo-i-Mehani) was an older name of the island of O‘ahu.<sup>9</sup> Whether or not the tradition of **nī‘aupi‘o**<sup>10</sup> mating was an O‘ahu creation is unclear. However, this tradition was celebrated and exalted within the *ali‘i* class.

Kame‘eleihiwa continues:

The search for Wākea’s *mana*, that divine or miraculous power which fathered islands, *kalo*, and Chiefs, led the *Ali‘i Nui* to carefully consider genealogical lines. This was particularly true when arranging the initial mating of a high female *Ali‘i Nui*, because it was most appropriate to mate her with a closely related *Ali‘i Nui* so that they would together create a child of the highest rank, an *Akua*. Any means of ascending the genealogy, by either the mother’s or the father’s side, was acceptable as long as the desired result was produced.<sup>11</sup>

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<sup>7</sup> The Hawaiian race. Pukui and Elbert, *Hawaiian Dictionary*, 190.

<sup>8</sup> Joseph Moku‘ōhai Poepoe, "Ka Moolelo Hawaii Kahiko - Mokuna III," *Ka Na‘i Aupuni*, April 30, 1906.

<sup>9</sup> Samuel Mānaiakalani Kamakau, "Ka Moolelo Hawaii - Helu 2," *Ke Au Okoa* (Honolulu), October 21, 1869.

<sup>10</sup> Offspring of the marriage of a high-born brother and sister, or half-brother and half-sister. Pukui and Elbert, *Hawaiian Dictionary*, 265.

<sup>11</sup> Kame‘eleihiwa, *Native Land and Foreign Desires*, 41.

## He aha ia mea he ali'i?

Scholars Mary Kawena Pukui and Samuel H. Elbert define the term *ali'i* as “chief, chiefess, officer, ruler, monarch...; to rule or act as a chief, govern, reign.”<sup>12</sup> Hawaiian society was one in which there were different positions and ranks that generally were separated into four distinct classes: *Ali'i* (royalty), *Kahuna* (priests/experts), *Maka'āinana* (commoners), and *Kauwā* (servants/outcasts).<sup>13</sup> Kamakau wrote:

Ua hooliloia o Wakea i haku, a i alii no ka ohana e loa ana mai a Wakea. O Lihauula, ua hooliloia kana poe mamo no ka oihana kahuna. O Makuu, ua lilo kana poe mamo i poe kauwa lawelawe ma ka hana.<sup>14</sup>

Wākea became a lord, a chiefly line for the family that would be born from Wākea. Lihau'ula, his progeny would become the priestly class. And as for Maku'u [also known as Mākulukulukalani by some accounts], his descendants would become servants in occupation.<sup>15</sup>

These descendants of Wākea, as notable *ali'i* were looked upon as **Akua**,<sup>16</sup> elemental forms of earth and sky; hence, they were endowed with great responsibility. It was not an easy task to be

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<sup>12</sup> Pukui and Elbert, *Hawaiian Dictionary*, 20.

<sup>13</sup> Samuel Mānaiakalani Kamakau, *Ka Po'e Kahiko, The People of Old*, trans. Mary Kawena Pukui, ed. Dorothy B. Barrère (Honolulu, HI: Bishop Museum Press, 1964), 4-8.

<sup>14</sup> Samuel Mānaiakalani Kamakau, "Ka Moololo O Hawaii Nei. Helu 7.," *Ka Nupepa Kuokoa* (Honolulu), July 29, 1865.

<sup>15</sup> My translation.

<sup>16</sup> God, goddess. Pukui and Elbert, *Hawaiian Dictionary*, 15. This definition of the word is somewhat problematic to Hawaiian practitioners as the terms “god, goddess” were introduced to us by Western missionaries whom I believe misunderstood the Hawaiian appreciation and reverence of the natural world and likened our practices to that of Greek and Roman mythology, which they believed to be polytheistic religions. To some Hawaiian practitioners, the word “akua” simply applies to anything that is beyond the capability of one human to create. In this case, anything in nature is considered to be akua. People are considered to be akua.

an *ali'i*. The *ali'i* were directly responsible for the health and the well-being of the 'āina<sup>17</sup> and the **kanaka**.<sup>18</sup>

Throughout this text, it is my intent to look at a particular place and space that was sacred to the *ali'i* of O'ahu, a place that I believe was the source of their **mana**,<sup>19</sup> their spiritual and political power. As the **mele**<sup>20</sup> and **mo'olelo**<sup>21</sup> indicate, these *ali'i* were descendants of Ki'i and La'ila'i, ancestors from the *pō Akua*, the elemental darkness from the beginning of time. These *Hū Ali'i* were born and raised in a place that not only confirmed their genealogical right to rule, but assured their success as proper *Ali'i Nui*. That place was Kūkaniloko.

## ***SECTION II: KŪKANILOKO - KAHIA NĀ ALI'I***

*O Kapawa o ke alii o Waiahua,  
I hanau i Kukaniloko,  
O Wahiawa ke kahua,  
O Lihue ke ewe,  
O Kaala ka piko,  
O Kapukapuakea ka aa,  
O Kaiaka i Maeaea,  
Haule i Nukea i Wainakia,  
I Aaka i Haleu,  
I ka lai malino o Hauola,  
Ke'lii o Kapawa hoi no,*

---

<sup>17</sup> Land, earth. Ibid., 11.

<sup>18</sup> Human being, man, person, population. Ibid., 127.

<sup>19</sup> Supernatural or divine power, mana, miraculous power; to have power, authority; authorization, privilege. Ibid., 235.

<sup>20</sup> Song, anthem, or chant of any kind; poem, poetry. Ibid., 245.

<sup>21</sup> History, tradition; historical account. Ibid., 254.

*Hoi no i uka ka waihona,  
Hoi no i ka pali kapu o na 'lii,  
He kiai Kalakahi no Kaka'e,  
O Heleipawa ke keiki a Kapawa,  
He keiki alii no Waialua i Oahu.*<sup>22</sup>

This *mele inoa* or name chant details the birth of Kapawa, a Waialua<sup>23</sup> district chief, at Kūkaniloko. When an *ali'i* of particularly high rank was born, certain parts of their birth form (i.e. the umbilical cord, the placenta, etc.) were taken to significant places to be buried or protected. In this chant, Wahiawā<sup>24</sup> served as the **kahua**<sup>25</sup> or foundation for the young chief. This is where he was raised to become a ruling *ali'i*. His **ēwe**<sup>26</sup> was taken to Līhu'e,<sup>27</sup> his **piko**<sup>28</sup>

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<sup>22</sup> Kamakau, "Ka Moolelo Hawaii - Helu 2," *Ke Au Okoa*.

<sup>23</sup> Waialua is one of the six traditional districts or *moku* set forth in the land division by Mā'ilikūkahi. Its boundaries extend from Ka'ena Point (the western most tip of O'ahu) to Waimea. "The ahupua'a of Waimea was transferred from the Koolau Loa district to Waialua in 1886. The ahupua'a of Wahiawa and Waianae Uka were taken from Waialua and placed in the new Wahiawa district in 1909." Lloyd J. Soehren, "Waialua," Hawaiian Place Names, accessed July 27, 2014, <http://ulukau.org/cgi-bin/hpn?e=&a=d&c=mahele&cl=search&d=HASH960cf93b87334ca089443e>.

<sup>24</sup> Wahiawā is an area in central O'ahu which was reconfigured into a district in 1913. "The Wahiawa district was created in 1913 by taking the ahupua'a of Wahiawa and Waianae Uka from Waialua. Part of Waikakalaua, an 'ili of Waikele in Ewa, was added in 1925. In 1932 it was enlarged by adding lands from Ewa to Waialua which had been included in the Military Reservation of Schofield Barracks." Lloyd J. Soehren, "Wahiawa," Hawaiian Place Names, accessed July 27, 2014, <http://ulukau.org/cgi-bin/hpn?e=&a=d&c=mahele&cl=search&d=HASHeabdccaf2222f5cbfbfd5>. As indicated in the previous footnote by the same author, it is likely that the process of creating the new district of Wahiawā began some years prior to 1913, and as this current footnote suggests, was not completed until 1932.

<sup>25</sup> Foundation, site, location. Pukui and Elbert, *Hawaiian Dictionary*, 113.

<sup>26</sup> Same as 'iewe, afterbirth. *Ibid.*, 43.

<sup>27</sup> Līhu'e is an area in central O'ahu, just below Kolekole Pass on the Wai'anae Uka side of the Wai'anae Mountain range that stretches from Honouliuli, through Kūkaniloko to Leilehua. Lloyd J. Soehren, "Lihue," Hawaiian Place Names, accessed July 27, 2014, <http://ulukau.org/cgi-bin/hpn?e=&a=d&c=mahele&cl=search&d=HASH7e5785bd5502d1d91694c4>.

<sup>28</sup> Umbilical cord. Pukui and Elbert, *Hawaiian Dictionary*, 328.



was placed at Ka‘ala,<sup>29</sup> and his ‘a‘a<sup>30</sup> was guarded at the **heiau**<sup>31</sup> of Kapukapuākea at Kaiaka in Māeaea.<sup>32</sup> Kamakau asserted that Kapawa was the first ruling chief, “and from then on, the group of Hawaiian Islands became established as chief-ruled kingdoms.”<sup>33</sup> According to Kamakau, Kūkaniloko served as a **heiau** dedicated to the birthing of O‘ahu’s highest chiefs.<sup>34</sup>

It is my contention, however, that the function of Kūkaniloko reaches beyond that of a place of birthing. As indicated in the *mele* noted above, Wahiawā, in which the birthing stones of Kūkaniloko reside, was the *kahua* or foundation for Kapawa. It was here that a young *ali‘i* learned everything he or she needed to know about ruling an island. The **pōhaku**<sup>35</sup> of Kūkaniloko functioned not only as birthing stones, but also as instructional tools for higher learning. Through this document, I present Kūkaniloko’s function as a center of higher learning,

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<sup>29</sup> Ka‘ala is the name of the highest mountain on O‘ahu at 4,020 feet high, and its corresponding gulch in the Wai‘anae range. Mary Kawena Pukui, Samuel H. Elbert, and Esther T. Mookini, *Place Names of Hawaii*, Revised and Expanded ed. (Honolulu: University Press of Hawaii, 1974), 60.

<sup>30</sup> Envelope for a foetus. Pukui and Elbert, *Hawaiian Dictionary*, 1.

<sup>31</sup> Pre-Christian place of worship, shrine. *Ibid.*, 64.

<sup>32</sup> Māeaea is a beach and landing near Waialua, O‘ahu. Pukui, Elbert, and Mookini, *Place Names of Hawaii*, 137.

<sup>33</sup> Kamakau, *Ka Po‘e Kahiko*, 3.

<sup>34</sup> Samuel Mānaiakalani Kamakau, *Tales and Traditions of the People of Old: Nā Mo‘olelo a Ka Po‘e Kahiko*, trans. Mary Kawena Pukui, ed. Dorothy B. Barrere (Honolulu: Bishop Museum Press, 1991), 38.

<sup>35</sup> Rocks, stones. Pukui and Elbert, *Hawaiian Dictionary*, 334.

a **hālau**<sup>36</sup> of the highest minds of O‘ahu who gathered to educate the *ali‘i* of the island to become effective land managers and motivators of people.



*Figure 1.1. The remnants of the once active heiau at Kapū‘ahu‘awa, Kūkaniloko. The remaining stones are nestled under a grove of eucalyptus trees. Photograph by author, 2013.*

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<sup>36</sup> Long house, as for canoes or hula instruction; meeting house. Ibid., 52. A hālau can indeed be a literal house, but in a larger sense, a hālau may also imply a place or even a group within which a particular type of deep knowledge is known, taught and preserved.

## Ke Kumu O Ia Noi'i Hana - The Rationale for this Research

Following the overthrow of the Hawaiian Kingdom in 1893<sup>37</sup> and the presumed annexation of Hawai'i to the United States of America in 1898,<sup>38</sup> there was a massive push by the imposed Territorial government to assimilate all citizens of Hawai'i to the American way of life. This shift attempted to promote the engagement of American ideals and Western educational systems. At the same time, it also pushed an abandonment of Hawaiian knowledge and customs. As a result, most *heiau* and other **wahi pana**<sup>39</sup> of Hawaiian importance were destroyed to make way for modern development. Kūkaniloko is one of the few places that, for the time being, remains visible and somewhat “intact.” It is my hope that this thesis document will aid in the protection of what is left of Kūkaniloko, uplifting its importance in the hearts and minds of Hawaiians and non-Hawaiians alike who inhabit our shores. It is also intended that this research shall aid the future reestablishment of a learning center of Hawaiian knowledge at Kūkaniloko by providing historical context and ancestral understandings which may serve as a basis for the creation of new curriculum for the learning center. With a learning center and curriculum in place, our Hawaiian children and grandchildren will know that the knowledge of

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<sup>37</sup> According to Queen Lili'uokalani's testimony to James Blount, the illegal overthrow of the Kingdom of Hawai'i by the newly created Provisional Government occurred on January 17, 1893. Liliuokalani, *Hawaii's Story by Hawaii's Queen*, 3rd Printing ed. (Rutland: Charles E. Tuttle Company, 1970), 387-388.

<sup>38</sup> The purported annexation of Hawai'i to the United States occurred on August 12, 1898. David Keanu Sai, *Ua Mau Ke Ea - Sovereignty Endures: An Overview of the Political and Legal History of the Hawaiian Islands* (Honolulu: Pū'ā Foundation, 2011), 90. I use the word “purported” because there are those, like Dr. Sai, who argue that the annexation was illegal according to both U.S. Constitutional and International Law.

<sup>39</sup> Legendary places. Pukui and Elbert, *Hawaiian Dictionary*, 377.

their **kūpuna**<sup>40</sup> is still as valid in understanding the universe today as it was over a thousand years ago.

### **He Ui, He Nīnau - A Query, A Question**

One of the **kahu**<sup>41</sup> of Kūkaniloko, Tom Lenchanko, indicates that the chiefs born and raised at Kūkaniloko were “ali‘i with divine status (*hoa ali‘i*; descendants of Kāne) and the highest genealogy (*ikupau*).”<sup>42</sup> As descendants of Kāne, I believe that the *hoali‘i* of Kūkaniloko used that space as a *hālau* of Kāne knowledge and praxis. Of all the *pōhaku* that currently live at Kūkaniloko, one stone in particular intrigues me. I have termed it the “Piko Stone.” It is a stone that has a diamond shape with ridged edges and has spiraled images etched into its surface. As a young boy, I was taught by Tom that this stone functioned as a marker and compass for the island of O‘ahu. Within the course of this narrative, I attempt to answer many questions that surround this particular stone and its companions. What was the function of this stone? How does this stone show evidence of a learning center of Kāne knowledge? What other evidence exists in the area around Kūkaniloko that supports this understanding?

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<sup>40</sup> Ancestors. Ibid., 186.

<sup>41</sup> Attendant, guardian, keeper, caretaker. Ibid., 113.

<sup>42</sup> Joseph Genz, *Ka‘ānani‘au of Kūkaniloko: An Expansive View of the Cultural Landscape on O‘ahu*, report (Cultural Surveys Hawai‘i, 2011), 4.

### ***SECTION III: KAHE NĀ MĀNOWAI***

When conducting research on any aspect of the Hawaiian experience, credible sources of pre-Western contact life are often difficult to find. A written or printed form of the Hawaiian language did not exist until the 1820s when New England missionaries needed to teach literacy.<sup>43</sup> Since Kūkaniloko is a place and space that predates the written form of ‘ōlelo Hawai‘i<sup>44</sup> by centuries, a main source of information about this *wahi pana* comes in the form of *mele*.

#### **Nā Mele Ku‘una - Ka Waihona o Ke Akamai**

For Hawaiians, our history and literature includes the broader category of “orature.” Orature, as defined by scholar Haunani-Kay Trask, includes “creations in oral form.” Trask asserts, “Given that Hawaiian language was only recently reduced to writing, the inclusion of orature guarantees the presence of Hawaiian voices amid hegemonic colonialist and non-Native writings.”<sup>45</sup> *Mele* were (and are) a method for our *kūpuna* to pass down important information about life from generation to generation thus creating a tradition of Hawaiian ways of thinking, doing, and being. As *Kumu Hula* Pualani Kanaka‘ole Kanahēle writes:

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<sup>43</sup> M. Puakea Nogelmeier, *Mai Pa‘a I Ka Leo: Historical Voice in Hawaiian Primary Materials, Looking Forward and Listening Back* (Honolulu: Bishop Museum Press, 2010), 68.

<sup>44</sup> Hawaiian language. Pukui and Elbert, *Hawaiian Dictionary*, 284.

<sup>45</sup> Haunani-Kay Trask, "Decolonizing Hawaiian Literature," ed. Vilsoni Hereniko and Rob Wilson, *Inside Out: Literature, Cultural Politics, and Identity in the New Pacific*, 1999, 168.

This form of literature [*mele*] is a resource for Hawaiian cultural information regarding rituals, place names, events, processes, and formulas that can - and should - be a foundation for diverse occupational lifestyles.<sup>46</sup>

*Mele* are repositories of ancestral information that are multilayered in nature. For example, the

**ko‘ihonua**<sup>47</sup> of ‘Ewauli-a-La‘akona and his wife Wehelani conveys several historical points:

*Hoi ae moe i ka Ewauli a Laakona,  
Na Ewauli a Laakona ka lakou,  
Na ia maka i puka o Kuihewa  
Oia hoi o Makakaialii,  
Ko kupunawahine,  
Hihia iloko o Kealohikikaupea,  
Kaohi Hina i ke kawelewele,  
Ulua lakou a kahi kahi-ana,  
O ka Ewaike o ka Ewanui,  
O Kukii ke kumu,  
O ka Ewa i laha mai,  
Ke kumu kumu, ke kumu,  
O ka Ewa i puka mai ai,  
I makamaka i makamaka mai ai lakou,  
Loaa Kailihonua ke kaeaea,  
O na eaea i noho pono i ke kapu,  
O na ‘kua kapu o Kalani,  
O kou kupuna io no ia,  
Lawea mai a pololei,  
Aohe kekee, he mio wale no.<sup>48</sup>*

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<sup>46</sup> Pualani Kanaka‘ole Kanahale, *Ka Honua Ola: ‘Eli‘eli Kau Mai* (Honolulu: Kamehameha Publishing, 2011), xiv.

<sup>47</sup> Genealogical chant. Pukui and Elbert, *Hawaiian Dictionary*, 160.

<sup>48</sup> Samuel Mānaiakalani Kamakau, "Ka Moololo O Hawaii Nei. Helu 8.," *Ka Nupepa Kuokoa* (Honolulu), August 5, 1865.

Kamakau indicated that the *ali'i* from Hawai'i to Kaua'i were united into one '**ohana**<sup>49</sup> due to the interweaving nature of La'akona's **mo'okū'auhau**.<sup>50 51</sup> Mary Kawena Pukui notes that 'Ewauli-a-La'akona was another name of high chief Muli'ele-ali'i, grandfather of Mō'īkeha. It was Mō'īkeha who was a famous navigator chief born on O'ahu, traveled to Tahiti and later became an ancestor to the Kaua'i line of chiefs.<sup>52</sup> Through the Muli'ele-ali'i pedigree of chiefs was born Kākuhihewa, one of the most famous *ali'i* of O'ahu.<sup>53</sup> Pukui further indicates that the *kāwelewele* or "dim recollection" in line 7 of this *mele* is the remembrance of the strife between the sons of O'ahu ruling chiefess Kalanimanuia that caused a great division of the people during the rule of her eldest son, Kū-a-Manuia.<sup>54</sup> This *mele* also recounts the life of Ka'ilihonua, a descendant of Kākuhihewa who lived in seclusion under a strict **kapu**<sup>55</sup> as was the practice and a sign of divinity among the chiefs of Kūkaniloko. In essence, this *mele* serves as a detailed historical account of a long line of 'Ewa chiefs; a history of O'ahu spanning centuries condensed into a mere twenty lines of poetry.

Each chapter of this thesis will discuss vital information contained within various *mele* which have been appropriated and painstakingly recorded in writing to preserve their knowledge.

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<sup>49</sup> Family, kin group. Pukui and Elbert, *Hawaiian Dictionary*, 276.

<sup>50</sup> Genealogical succession; pedigree. *Ibid.*, 254.

<sup>51</sup> Kamakau, "Ka Moolelo O Hawaii Nei. Helu 8."

<sup>52</sup> Kamakau, *Tales and Traditions of the People of Old*, 85, footnote 21.

<sup>53</sup> Kamakau writes of Kākuhihewa: "His name has been famous down to our times, and people nowadays frequently call O'ahu 'O'ahu-a-Kākuhihewa.'" *Ibid.*, 70.

<sup>54</sup> *Ibid.*, 85-86.

<sup>55</sup> Prohibition; privilege; consecration. Pukui and Elbert, *Hawaiian Dictionary*, 132.

Some of our *kūpuna* felt it was essential to record *mele* and *mo‘olelo* in the written form so that future generations would know of this knowledge. Editor of the newspaper *Ka Na‘i Aupuni*, Joseph Moku‘ōhai Poepoe wrote:

A o ke kanu mau ana aku o ia moolelo iloko o ka opio a kanaka makua wale ae oia, he hoomau ana aku no ia i ke aloha mawaena o ka hanauna hou a me ka hanauna i nalo aku, a e nalo aku ana hoi ma ka welelau komohana o keia ola ana. Ua olelo ae o Hoapililoahi (Longfellow) he mea pono ma ka nee ana imua me ke au o ka manawa: E waiho iho i hailona ma ka pu‘e one o ke au o ka manawa i loa ai ka ike i ou mau hoa e nee mai ana, he alahēle no keia ua hele mua ia, a loa no ke kupaa ana no ia nee ana aku imua.<sup>56</sup>

The continued planting of this history into the young until they are matured, this is indeed a perpetuation of love between the new generation and the generation that has long since passed, as well as those who will soon pass into the “sunsetting edge” of this life. Longfellow said, that it is important, as this age progresses: Leave a sign upon the sandbar of time so that your companions who will come along in time will find it and know that this is a path that has already been traversed, and so that they will have the fortitude to move forward.<sup>57</sup>

Each chapter of this narrative will include *mele* that describe various aspects of Kāne ways of thinking and praxis. These *mele* will help to build a deeper understanding of the importance of Kūkaniloko as a center of Hawaiian intelligence.

### **Nā ‘Atikala Nūpepa Hawai‘i**

From 1834 until 1948, Hawaiian-language newspapers published from Hawai‘i to Kaua‘i informed Hawaiian Kingdom citizens of current events, international affairs and became repositories of traditional *mo‘olelo* and *mele* preserved for future generations. Hawaiian

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<sup>56</sup> Joseph Moku‘ōhai Poepoe, “Ka Ipu Alabata,” *Ka Na‘i Aupuni* (Honolulu), December 22, 1906, quoted in Nogelmeier, *Mai Pa‘a I Ka Leo*, 102.

<sup>57</sup> My translation.



language scholar Puakea Nogelmeier estimates that this large collection of newspapers encompassed roughly 125,000 pages of information.<sup>58</sup>

The Hawaiian language newspaper archive is an incredible resource of information. Among the four major nineteenth century Hawaiian historians (Samuel Kamakau, Davida Malo, John Papa ʻĪʻĪ, and Kepelino) who published what has become the canon of Hawaiian historical literature, Kamakau is the only one who wrote newspaper articles regarding the *ali ʻi* of Oʻahu and the major significance of Kūkaniloko. His articles published in *Ka Nupepa Kuokoa* in 1865 have been an invaluable resource to the construction of this thesis narrative. Kamakau's scholarship provides Native insight into the lives of some of the *ali ʻi* who were born and raised at Kūkaniloko, thus allowing me to make inferences about the level of education these leaders must have had while residing in that space.

Editor Joseph Mokuʻōhai Poepoe himself published a series of articles in *Ka Na ʻi Aupuni* in 1906 that spoke to his interpretation of Hawaiian history, and in particular the *mo ʻolelo* of Haumea (Papahānaumoku) and Wākea, and their life in Kalihi, Oʻahu.<sup>59</sup> Understanding this *mo ʻolelo* aids in our comprehension of the structure of pre-Western contact Hawaiian society and why our *ali ʻi* were revered. By understanding the relationships held between *kanaka* and *akua*, it

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<sup>58</sup> Nogelmeier, *Mai Pa ʻa I Ka Leo*, 64.

<sup>59</sup> Joseph Mokuʻōhai Poepoe, "Ka Moolelo Hawaii Kahiko - Mokuna III," *Ka Na ʻi Aupuni*, April 30 - July 13, 1906.

allows for a deeper discernment of the cultural and historical importance of Kūkaniloko through the centuries.<sup>60</sup>

### **Nā Puke I Pa‘i ‘Ia**

David Malo is probably one of the earliest Hawaiian scholars to place his knowledge of Hawaiian history onto paper. He was born in Keauhou, Kona, Hawai‘i around 1793. According to Nathaniel Emerson, David Malo became associated with high chief Kuakini, who was the brother of Ka‘ahumanu, favorite wife of Kamehameha Pai‘ea. It is likely that Malo was raised in or around Kamehameha’s court, and privy to the *mo‘olelo* of the *ali‘i*.<sup>61</sup> Malo was then educated at the Lāhaināluna Seminary School and became a founding member of the Hawaiian Historical Society.<sup>62</sup> His work *Mo‘olelo Hawai‘i* was first written along with some other students of the school in 1835, revised by Rev. Sheldon Dibble in 1838, and published again in 1858 by Rev. J. F. Pogue.<sup>63</sup> It was later compiled into a volume known as *Hawaiian Antiquities* which was translated by Nathaniel B. Emerson in 1898 and then published by the Bernice Pauahi Bishop Museum in 1951.<sup>64</sup> *Hawaiian Antiquities* has gone through several reprints over the years and

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<sup>60</sup> Kamakau writes a series of articles entitled “Ka Moololo o Hawaii Nei,” and within it relates accounts of various *ali‘i* of O‘ahu, as well as a description of Kūkaniloko as a birthing *heiau* of those chiefs. Samuel Mānaiakalani Kamakau, “Ka Moololo o Hawaii Nei,” *Ka Nupepa Kuokoa* (Honolulu), August 5 & 26, September 2 & 23, 1865.

<sup>61</sup> David Malo, *Hawaiian Antiquities*, trans. Nathaniel B. Emerson, 2nd ed. (Honolulu: Bishop Museum Press, 1971), vii.

<sup>62</sup> *Ibid.*, xviii.

<sup>63</sup> *Ibid.*, xvii-xviii.

<sup>64</sup> *Ibid.*, iii.

remains Davida Malo's most revered scholastic work. Malo's manuscript is a valuable source of information regarding our *kūpuna*(s') organization and categorization of the natural Hawaiian world. His work will aid in a scientific understanding of the realms of Kāne presented in Chapter Two of this text. *Hawaiian Antiquities* also provides a detailed account of *heiau* construction which will add some context to the discussion of a Kāne-classed *heiau* in Chapter Three.

Samuel Mānaiakalani Kamakau was born on October 29, 1815 in Kamananui, Waialua. As a teenager, Kamakau was sent to the Lāhaināluna Seminary School to be educated by the missionaries. Subsequently, he began writing articles about Hawaiian history at the age of 26. He spent a great portion of his life interviewing several *kūpuna* who knew these stories, and along with Malo in 1841 helped to form the Hawaiian Historical Society.<sup>65</sup>

As much as possible, I used Kamakau's original newspaper articles for information. However, a large portion of his writings have been compiled and translated by the eminent scholar Mary Kawena Pukui. Kamakau's work currently spans six different book publications, three of which have lent themselves to my research: *Ka Po 'e Kahiko: The People of Old* (1964), *The Works of the People of Old: Nā Hana a Ka Po 'e Kahiko* (1976), and *Tales and Traditions of the People of Old: Nā Mo 'olelo a Ka Po 'e Kahiko* (1991). In particular, Pukui's footnotes on Kamakau's work have been of great assistance in making connections to various names of *ali'i* in O'ahu's distant past which were previously unknown to me. The inclusion of these *ali'i*

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<sup>65</sup> Samuel M. Kamakau, *Ruling Chiefs of Hawai'i*, Revised ed. (Honolulu: Kamehameha Schools Press, 1992), iv.

further added to the *mo'okū'auhau* of highly trained *ali'i* connected to Kūkaniloko, which then contributes to my assertion of Kūkaniloko as an educational center of the *ali'i*.

J. Gilbert McAllister was a cultural anthropologist from Texas who began working at the Bernice Pauahi Bishop Museum as an ethnologist from 1929 until 1931.<sup>66</sup> While working at the museum, he completed an archaeological survey of *heiau* and other sacred sites on the island of O'ahu. His survey of Kūkaniloko in his 1933 publication, *Archaeology of Oahu*, offered the first modern scientific glimpse into the remnants of the once active *heiau*. Although his descriptions were often limited and vague, McAllister provided a layout of several other *heiau* connected within the Kūkaniloko complex that may shed light on the full capability of the *ali'i* who were raised there.

Martha Warren Beckwith was a folklorist who moved to Hawai'i from Massachusetts when she was a young girl. While in Hawai'i, she garnered a fascination with hula and Hawaiian legends.<sup>67</sup> Beckwith stated:

My special interest in writing the mythology was to produce a book which covered what I conceive to be the province of a true mythology - not merely a series of tales, but, with the tales as major illustration or formal expression, to point out the ideas of the relation of man to the world he lives in, geographic, historic, social and political, which result in such expression, and to connect the particular forms of expression developed in Hawaii to those common with his throughout the known Polynesian area.<sup>68</sup>

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<sup>66</sup> E. Mott Davis and Claud A. Bramblett, *In Memoriam: J. Gilbert McAllister*, report, 1995, accessed July 27, 2014, <http://www.utexas.edu/faculty/council/1999-2000/memorials/mcallister.pdf>.

<sup>67</sup> Vassar Historian, "Martha Beckwith - Vassar College Encyclopedia - Vassar College," Martha Beckwith - Vassar College Encyclopedia - Vassar College, 2005, <http://vcencyclopedia.vassar.edu/faculty/prominent-faculty/martha-beckwith.html>.

<sup>68</sup> Martha Warren Beckwith, *Hawaiian Mythology* (Honolulu: University of Hawai'i Press, 1970), viii.

Through her work here in Hawai‘i, Beckwith developed a long-standing partnership with Hawaiian informants<sup>69</sup> including Mary Kawena Pukui. It was Pukui who helped Beckwith publish her translation of Kepelino’s *Hawaiian Traditions*, and undoubtedly a resource for her version of *The Kumulipo*. Both Beckwith’s *The Kumulipo* and *Hawaiian Mythology* texts aided me in developing a basic familiarity with Kāne from which a new Hawaiian analysis will be presented through the course of this text to broaden the scope of our understanding of this *akua*.

Pualani Kanaka‘ole Kanahele is a *kumu hula*, a keeper of hula traditions, and a cultural exponent of the Pele tradition that has been passed down through various generations within her family. Her recently published work, *Ka Honua Ola*, has been a guiding force in my analysis and new comprehension of the scientific inner workings of Kāne that I present in Chapter Two. With each *mele* presented in her book, Kanahele extracts concrete Hawaiian scientific ancestral understandings of the Hawaiian ecosystem.<sup>70</sup>

### **Nā Kahu o Kūkaniloko**

Most importantly, this thesis work would not have been possible without the assistance of two of Kūkaniloko’s current *kahu*, Thomas Joseph Lenchanko and Jo-Lin Lenchanko Kalimapau,

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<sup>69</sup> In her publication of *Hawaiian Mythology*, Beckwith credits “Joseph Emerson, Stephen Desha, Mary Pukui and her mother Mrs. Wiggin, Emma Olmstead, Laura Green, Pokini Robinson, Ernest and Pearl Beaglehole, Kenneth Emory, Katharine Luomala, Frank Stimson, David Malo Kupihea, Peter Buck, Edward Handy, Margaret Titcomb, Thomas Wahiako, Daniel Ho‘olapa, Hattie Saffrey Rhinehardt, Emma Taylor, Rachel Kekela Kaiwiaia, Jonah Kaiwiaia, Kilinahi Kaleo, William Pogue, Hezekiah Ikoa, Lyle Dickey, Ethel Damon, Marie Neal, Lahilahi Webb.” Beckwith, *Hawaiian Mythology*, xxxii-xxxiii. Although some of these informants were not Hawaiian, I do not currently know the individual biographies of each of them to blatantly discern the Native informant from the local informant. However, it is clear that many of her informants in this list were Hawaiian and were recognized scholars of their time.

<sup>70</sup> Kanahele, *Ka Honua Ola*, xiv.

members of the Hawaiian Civic Club of Wahiawā, the current official steward organization of Kūkaniloko. *Kahu* Lenchanko and Kalimapau are my relatives by blood, and it is that relation that triggered my desire to study this *wahi pana* from the beginning. I was first introduced to Kūkaniloko when I was a teenager, and at that time, most of what my cousins tried to teach me “flew over my head” and never sunk in. Many years later on another visit to the *heiau*, with my *hālau hula*, my cousins Tom and Jo-Lin just happened to be there at the same time giving an interpretation of the *pōhaku*. It was only then that the importance of this space really hit me in my **na‘au**.<sup>71</sup> From that moment, I knew that Kūkaniloko was going to be the inspiration of my studies.

*Kahu* Lenchanko and *Kahu* Kalimapau moved to the Wahiawā area with their *‘ohana* from Waikīkī in 1959, and over the last 40 years or so have devoted their lives to the study and perpetuation of the *mo‘olelo* of Kūkaniloko. Their knowledge of the area ascertained through years of archival research and interviews with various *kūpuna* descended from the Kūkaniloko chiefs is astounding. It became the basis of my research and will be presented throughout the entirety of this narrative. This work could not have evolved if it were not for their *‘āpono*, their blessing and consent. *Kahu* Lenchanko’s knowledge of the political and social history of the entire **kalana**<sup>72</sup> of Kūkaniloko is profound, and much of his research<sup>73</sup> serves as the basis of

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<sup>71</sup> Intestines, guts; mind, heart, affections. Pukui and Elbert, *Hawaiian Dictionary*, 257. For Hawaiians, we believe that all of your deepest thoughts, feelings and intuition come from your na‘au.

<sup>72</sup> Division of land smaller than a *moku* or district; county. *Ibid.*, 121.

<sup>73</sup> *Kahu* Lenchanko credits many sources of his knowledge, from the writings of Kamakau, Malo, Fornander, Thrum and Jane Lahilahi Webb, to personal experiences with scholars Will Kyselka and Rubellite Kawena Johnson. On *mo‘olelo* and important understandings of the Kūkaniloko area specifically, *Kahu* Lenchanko credits much of his knowledge to various *kūpuna* of the area such as Somerset Kalama Makaneole, Sarah Requillmen and Frances Keao. Lenchanko and Kalimapau, interview.

Chapters Three and Four of this thesis narrative. I am eternally grateful as well to *Kahu* Kalimapau as the historian of the Hawaiian Civic Club of Wahiawā for providing me with archival materials, published interviews and documents which were essential to the understanding of the genesis of Kūkaniloko as a *piko*, or spiritual center of O‘ahu.

#### ***SECTION IV: MAKAWALU - PEHEA E HANA AI KA NOI‘I?***

- 1778. *Laha Haumea i na mo‘opuna*
- 1779. *I‘o Ki‘o pale ka ma‘i, ka‘a ka lolo*
- 1780. *Oia wahine hanau manawa i na keiki*
- 1781. *Hanau keiki puka ma ka lolo*
- 1782. *Oia wahine no o ‘I‘ilipo o Nu‘umea*
- 1783. *I noho io Mulinaha*
- 1784. *Hanau Laumiha hana ma ka lolo*
- 1785. *O Kaha‘ula wahine hanau ma ka lolo*
- 1786. *O Kahakauakoko hanau ma ka lolo*
- 1787. *O Haumea o ua wahine la no ia*
- 1788. *Noho ia Kanaloa-akua*
- 1789. *O Kauakahi-akua no a ka lolo*
- 1790. *Ho‘ololo ka hanauna a ia wahine*
- 1791. *Ha‘ae wale ka hanauna lolo*
- 1792. *O Papa-huli-honua*
- 1793. *O Papa-huli-lani*
- 1794. *O Papa-nui-hanau-moku*
- 1795. *O Papa i noho ia Wakea<sup>74</sup>*

The basis of my research methodology is steeped in “*makawalu*.” Its implementation is likened to the process of deconstruction and reconstruction. *Makawalu* involves rigorous investigative procedures: 1.) breaking apart a concept, word, or phrase to purposefully study the various definitions of each individual component; 2.) rethinking how those individual

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<sup>74</sup> Beckwith, *The Kumulipo*, 232

components function and contextually fit together; 3.) recombining integral parts to distinguish deeper and relevant meanings according to your need.

The practice of *makawalu* is based on the 13th *Wā* or time period recorded in the Kumulipo, and it was taught to me by Pualani Kanaka‘ole Kanahale as part of her Papakū Makawalu project.<sup>75</sup>

### **Ka Papakū Makawalu - He Ala ‘Imi Na‘auao**

The beauty of a *makawalu* methodology is that it allows for a **wae**<sup>76</sup> or separation and sorting of knowledge, and then a **kūkulu**<sup>77</sup> or construction of knowledge on many different levels. The *makawalu* methodology is one of foundations and motion. Pukui and Elbert define “papakū” as a “foundation or surface, as of the earth; floor, as of ocean; bed, as of a stream.”<sup>78</sup> They also define “makawalu” as “numerous, much, many, in great quantities.”<sup>79</sup> Kanahale adds

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<sup>75</sup> Papakū Makawalu is a Native Hawaiian teaching methodology which attempts to demystify and de-mythify ancient Hawaiian practices and customs, making them more accessible to a Western society. According to the project’s website, “Papakū Makawalu is designed to convey intelligence and knowledge of the Hawaiian universe and everything within it, to the attention of Hawaiian practitioners, educators and eventually to the greater public whose interest lies in studying and maintaining Hawaiian dogma.” Papakū Makawalu, <http://papaku.smugmug.com>. According to the Edith Kanaka‘ole Foundation which runs the Papakū Makawalu project, “Papakū Makawalu is the ability of our kupuna to categorize and organize our natural world and all systems of existence within the universe. Papakū Makawalu is the foundation to understanding, knowing, acknowledging, becoming involved with, but most importantly, becoming the experts of the systems of this natural world.” Edith Kanaka‘ole Foundation, "Papakū Makawalu," Papakū Makawalu - Edith Kanaka‘ole Foundation, 2004, accessed July 26, 2014, <http://www.edithkanakaolefoundation.org/current-projects/papaku-makawalu/>.

<sup>76</sup> To choose, select, pick out, sort. Pukui and Elbert, *Hawaiian Dictionary*, 375.

<sup>77</sup> To build, as a house; to construct, erect, establish, organize, set up. *Ibid.*, 178.

<sup>78</sup> *Ibid.*, 317.

<sup>79</sup> *Ibid.*, 228.



a metaphorical description that when the *lehua mamō* bud is closed, it is an ‘ōpu‘u, and when the blossom begins to unfurl, that action is a *makawalu* movement:

This ‘ōpu‘u is a papakū. And the tree is even more of a papakū - and then you go back to the ground that the tree is on, that’s a papakū. So you have many foundations, you have many papakūs, and it keeps moving away from each other. Well when the flower begins to unfurl like this, and you have many many different lihilihis. . . that is the moment of makawalu. It is beginning to grow out from - and eventually you have all of these seeds that move out from that plant and blows out in the wind and finds its own ground to take root on - and that becomes a papakū. And then the trees coming out of it is a makawalu. Then the flower grows on it, that’s a papakū. When it opens out, that’s a makawalu . . . it repeats itself over and over. Foundation, moving out. Foundation, moving out. That’s a papakū makawalu.<sup>80</sup>

The process of *makawalu* will go through its natural cycle of Foundation - Movement - Foundation - Movement to establish, reinvigorate, stabilize, and nurture the knowledge gleaned from deeper meanings and understandings within this thesis narrative. Each chapter will begin with a *papakū* from which the discussion will *makawalu* outwards leading to the next *papakū*.

### **Kāne - ‘O Wai Ia?**

If Kūkaniloko and its *pōhaku* were used to study the knowledge and praxis of Kāne, then it is imperative to develop a foundational understanding of Kāne. Who or what is Kāne? Beckwith wrote that Kāne was a god who “formed three worlds: the upper heavens of the gods, the lower heaven above the earth, and earth itself.”<sup>81</sup> This description of Kāne portrays him as

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<sup>80</sup> *Papakū Makawalu Part 1*, dir. The Kohala Center, perf. Dr. Pualani Kanaka‘ole Kanahale, Vimeo, 2009, accessed July 26, 2014, <http://vimeo.com/4621142>.

<sup>81</sup> Beckwith, *Hawaiian Mythology*, 42.

some kind of mythical figure or pagan god<sup>82</sup> which has become a standardized view in Hawaiian Studies classroom texts.<sup>83</sup> However, in Chapter Two of this thesis narrative, I attempt to explore, analyze and synthesize Kāne not as a mythical figure, but as a Hawaiian scientific structure and method of understanding the celestial phenomena within the Hawaiian world. This information will then serve as a foundation to understand the function of the *pōhaku* at Kūkaniloko. By demystifying and de-mythifying the Kāne elements of our natural environment, it is my hope that this narrative will lead to further discussion within both the academic community and the community-at-large concerning the “myths” of Hawaiian history.<sup>84</sup>

### **Ka Pōhaku Piko - He Aha Ia?**

To begin the process of *makawalu* to the heiau at Kūkaniloko in Chapter Three, I will first present a cursory introduction to the *heiau* at Kapū‘ahu‘awa. After a brief description of the *heiau*, I take a critical look at the Pōhaku Piko, the central stone of the complex and its compass design to distinguish deeper meanings and levels of understanding. It is paramount to carefully scrutinize how that stone was used to study astronomy, meteorology, chronometry and cosmology from a Hawaiian ancestral viewpoint.

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<sup>82</sup> In Greek mythology, the goddess Gaea was born with her brothers Chaos and Eros, and the three together created the various classes of Greek gods which then created Greek society. In Egyptian mythology, it was Atum who created the world by creating Shu, the god of air, and his sister Tefnut the goddess of fertility. In similar fashion, Kāne is being described here as a figure who formed the heavens and the earth by his own hands.

<sup>83</sup> These texts include, but are not limited to Beckwith’s *Hawaiian Mythology*, Gavin Daws’ *A Shoal in Time*, David Malo’s *Hawaiian Antiquities*, and Kamakau’s collected works. There is nothing wrong with viewing Kāne through a spiritual context as is the case with these publications, but what I will present through this thesis narrative is a different lens of Kāne understandings.

<sup>84</sup> The portrayal of Kāne as a purely mythological figure may be a misinterpretation of Hawaiian scientific understandings. It may be possible to speculate then that other stories of other figures in Hawaiian history are also based on concrete scientific understandings rather than pure fantasy.

## **Ke Kahua o Kūkaniloko - He Kūkulu Hālau**

After looking at the scientific implications of the Pōhaku Piko, I will draw on other features within the *heiau* at Kūkaniloko which add to the evidence of academic study of Kāne knowledge. *Kahu* Tom Lenchanko indicates that Kūkaniloko was a space and place where thirteen **kahuna**<sup>85</sup> of different disciplines lived and taught the *ali'i* to become proper managers.<sup>86</sup> In Chapter Four, I widen the scope to meticulously observe other places surrounding the Kūkaniloko area that may shed some light onto these various disciplines that were integral in the education of our *ali'i*.

## **Ke Ao Lamalama - He Papakū Hou**

In the final chapter and with regard to the formidable knowledge attained to enrich a new *papakū*, I set forth some new possibilities and thoughts on what the next level of *makawalu* will be for Kūkaniloko. I intend to pose questions that perhaps may inspire further work and study of Kūkaniloko for the generations to come.

## **E Nauane Kā!**

Therefore, let me begin the exploration of this *wahi kūpuna* of Kūkaniloko by following in the footsteps of my ancestors, gazing up into the heavens to theorize and expound upon the

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<sup>85</sup> Expert in any profession; priest. Pukui and Elbert, *Hawaiian Dictionary*, 114.

<sup>86</sup> *Voices of Truth - Kūkaniloko - Birth of a Nation*, prod. Koani Foundation, perf. 'Ehu Kekahu Cardwell and Tom Lenchanko, YouTube, February 14, 2009, <http://www.youtube.com/watch?v=saIYC5Dzyyg>.

form and function of Kāne as a Hawaiian nomenclature: an analytical system of categorizing and organizing the universe.

## CHAPTER II: KĀNE IN THE KUMULIPO

### *SECTION I: WHO IS KĀNE?*

Kāne-i-ka-wāwahi-lani. Kāne-i-ke-ao. Kāne-i-ka-pahu-wai-nui. Kāne-moe-awakea.

These are but a few of the hundreds of names that are associated with Kāne. But who, or what, exactly is Kāne? According to Martha Beckwith, “Kāne was the leading god among the great gods named by the Hawaiians at the time of the arrival of the missionaries in the islands. He represented the god of procreation and was worshipped as ancestor of the chiefs and commoners.”<sup>87</sup>

One of the many mele or chants, associated with Kāne, is credited to the *akua* Pele titled “Kū mākou e hele me ku‘u mau pōki‘i aloha.” According to writer Nathaniel B. Emerson, it speaks about the migration of the Pele clan to the islands of Hawai‘i and chronicles their movement throughout the island chain before settling at Kīlauea on the island of Hawai‘i.<sup>88</sup> Within the forty-five lines of the mele that Emerson provides, a smaller section of it reads as follows:

*E Kanehoalani, e-e!*  
*E Kanehoalani, e-e!*  
*Aloha kaua!*  
*Kau ka hoku hookahi, hele i ke ala loa!*

*Where art thou, Kane-hoa-lani?*  
*O Father Kane, where art thou?*  
*Hail to thee, O Father, and hail to me!*  
*When rose the pilot-star we sailed away.*

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<sup>87</sup> Beckwith, *Hawaiian Mythology*, 42.

<sup>88</sup> Nathaniel B. Emerson, *Pele and Hiiaka: A Myth from Hawaii*, 2nd Tuttle printing (Rutland, VT: Charles E. Tuttle Company, 1982) xxvi-xxxii.

Referring to this particular portion of the mele, Pualani Kanaka‘ole Kanahale writes in her book, *Ka Honua Ola*, that “Kānehoalani, another male character, is the sun and is recognized in this chant for his significant role in this migration . . . this deity whom she [Pele] greets, Kānehoalani, the sun, is the purest and ultimate form of the volcano. The sun is the source of her persona, for she is the image of its reality.”<sup>89</sup>

In essence, the enumerations of Kāne and other *akua* like him are not “gods” per se, but rather they are names of elemental forms observed within the natural environment. Kānehoalani is literally the sun itself, and it is the ultimate form of a volcano. The sun is a huge burning ball of fire and gas. In the *Hawaiian Dictionary* written by Mary Kawena Pukui and Samuel H. Elbert, they contend that the term **pele** literally means “lava flow, volcano, eruption.”<sup>90</sup> An eruption is created by the heat of the sun warming up the core of the earth which then creates pressure in the layers of magma under the Earth’s crust, after which the molten rock is pushed through cracks and spews forth as lava, building new land.

The goal of the next few sections of this narrative is to explore Kāne through various oral accounts of our *kūpuna* to attain a deeper understanding of who or what, Kāne really is in our world today. From a Hawaiian lens, an understanding of *what* Kāne is can be achieved to provide relevant insights into the presence of Kāne and Kāne knowledge at Kūkaniloko.

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<sup>89</sup> Kanahale, *Ka Honua Ola*, 49.

<sup>90</sup> Pukui and Elbert, *Hawaiian Dictionary*, 323.

## ***SECTION II: OUR SURROUNDINGS***

For centuries, it has been taught that Western<sup>91</sup> discoveries and technologies have opened the eyes of our world to a greater expanse beyond the Earth's atmospheres. The Greeks are widely credited with the discovery of the Earth's true form as a sphere in the third century BC, rather than being a flat plane, as previously thought.<sup>92</sup> The Greeks are also credited with the discovery of the Earth being part of a larger universe. However, our ancient Hawaiian *kūpuna* also possessed this kind of knowledge, and passed that information down to the current generation through various *mele* like the cosmogonic epic, the Kumulipo.

In her book, *The Kumulipo: a Hawaiian Creation Chant*, Beckwith wrote:

The Hawaiian Kumulipo is a genealogical prayer chant linking the royal family to which it belonged not only to primary gods belonging to the whole people and worshipped in common with allied Polynesian groups, not only to deified chiefs born into the living world, the Ao, within the family line, but to the stars in the heavens and the plants and animals useful to life on earth, who must also be named within the chain of birth and their representatives in the spirit world thus be brought into the service of their children who live to carry on the line in the world of mankind.<sup>93</sup>

However, the Kumulipo is so much more than a mere cosmogonic genealogy connecting our people to the beginning of time. The Kumulipo is, in essence, a chant that contains the scientific knowledge that our *kūpuna* possessed about our environment, our universe. Within the 2,102 lines of the *mele*, our ancestors were able to categorize their concrete scientific understandings of Kāne, Haumea and other *akua* gathered and analyzed over centuries of lived experience.

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<sup>91</sup> By "Western" I am referring to Greek, Roman, English, French and other European scientific discoveries and technologies.

<sup>92</sup> Observatories of the Carnegie Institution for Science, "1610: Galileo Galilei Observes the Moons of Jupiter," *Everyday Cosmology*, accessed April 18, 2014, <http://cosmology.carnegiescience.edu/timeline/1610>.

<sup>93</sup> Beckwith, *The Kumulipo*, 7.

## The Realm of Kāne in this World

*E Kane Kanaloa!*  
*E Kane-kauila-nui-makeha-i-ka-lani,*  
*E Kane-i-ka-wawahi-lani*  
*E Kane-i-ke-pohaku-ka 'a,*  
*E Kane-i-ka-puahiohio,*  
*E Kane-i-ke-anuenue,*  
*E Kane-i-ke-pili,*  
*E Kane-i-ka-ua,*  
*E Kane-i-ke-ao-lani,*  
*E Kane-i-ka-maka-o-ka-opua,*  
*E Kane-i-ka-maka-o-ke-ao-lani,*  
*E Kane-i-ke-ao-luna,*  
*E Kane-i-ke-ao-lewa-lalo,*  
*E Kane-i-ke-ao-pali-luna,*  
*E Kane-i-ke-ao-pali-lalo,*  
*E Kane-i-ka-hoku-lani,*  
*E Kane-i-ke-ao,*  
*E Kane-i-ka-opua,*  
*E Kane-i-ka-punohu-ula,*  
*E Kane-i-ka-makani-nui,*  
*E Kane-i-ka-makani-iki,*  
*E Kane-i-ke-aheahe-malie,*  
*E Kane-i-ka-pa-kolonahe,*  
*E Kane-i-ka-pahu 'a-nui,*  
*E Kane-i-ka-pahu-wai-iki,*  
*E Kane-i-ka-holoholo-kai,*  
*E Kane-noho-uka,*  
*E Kane-noho-kai,*  
*E Kane-noho-pali-luna,*  
*E Kane-noho-pali-lalo,*  
*E Kane-ha-lo-luna,*  
*E Kane-ha-lo-lalo,*  
*E Kane-ha-lo-lewa-luna,*  
*E Kane-ha-lo-lewa-lalo,*  
*E Kane-moe,*  
*Kane-moe-awakea,*  
*Kane-kokala,*  
*Kane-kokala-loa,*  
*Kane-kokala-lu-honua,*  
*Kane-kokala-ku-honua,*  
*Kane-kokala-i-ke-kiu,*



*Kane-kokala-i-ke-ahe,  
Kane-i-ka-holo-nui,  
Kane-i-ka-holo-iki,  
O Kane!  
O Kane! O Lono!  
E ola no au ia 'oukou a pau e o'u mau akua.*<sup>94</sup>

In her text *Hawaiian Mythology*, Beckwith provides the *mele* noted above, “Ka Pule a Kane.” She suggests that it is one of three *mele* that is used in ceremonies to honor Kāne.<sup>95</sup> Beckwith indicates that her source for this *mele* is “an old Hawaiian from Kauai named Robert Luahiwa to Mr. Theodore Kelsey . . .”<sup>96</sup> Beckwith asserts that this chant is “little more than an enumeration of the names of Kane as the subordinate forms by which the one god who embraces them all is worshipped.”<sup>97</sup> However, this *mele* also indicates to scholars what some of the various **kinolau**,<sup>98</sup> or physical forms, of Kāne are in our physical environment. Through this particular chant, **uila** (lightning), **pōhaku ka‘a** (thunder), **puahiohio** (whirlwinds), **ānuenuē** (rainbows), **ao** (clouds), and **hōkū** (stars) are all physical manifestations of Kāne.

The beauty of *‘ōlelo Hawai‘i* is that within these names a scientific nomenclature exists. All of these phenomena are connected because they are all created by atmospheric conditions. Thus, all of these names begin with Kāne. Kāne is quite literally a reference to the different levels of atmospheric space and all the physical phenomena and celestial bodies that inhabit it.

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<sup>94</sup> Beckwith, *Hawaiian Mythology*, 53-54.

<sup>95</sup> *Ibid.*, 51.

<sup>96</sup> *Ibid.* Beckwith does not indicate how she received the *mele*.

<sup>97</sup> *Ibid.*, 52.

<sup>98</sup> Forms taken by a supernatural body. Pukui and Elbert, *Hawaiian Dictionary*, 153.

### ***SECTION III: THE SCIENCES OF KĀNE***

The *kūpuna* developed branches of science to study the various aspects and attributes of the *honua nui a Kāne*. Over the course of thousands of years, Hawaiians became intimately familiar and connected with their natural environment. They became *kahuna* or experts in every field of study - agriculture, horticulture, marine biology, climatology. For everything that existed in the natural world, there was also a *kahuna* who studied it.

#### **A Brief Explanation of the Papa**

The Kumulipo is a repository of Hawaiian scientific knowledge. In Wā ‘Umikumamākolū, the *mo‘olelo* of Haumea is told. Haumea was the *akua* of all things female. In Wā ‘Umikūmākolū, the Kumulipo indicates that Haumea created three Papa, three “houses of knowledge,” if you will, of all of her knowledge as a female: Papahulilani, Papahulihonua, and Papahānaumoku. A *papa* is by definition, a “foundation,” whether physical, spiritual or intellectual. *Papa-huli-lani* is a branch of Hawaiian science that observes and categorizes the heavens and its connection to the physical earth. *Papa-huli-honua* is the science that studies the evolution of the earth itself - the creation and destruction of land and ocean by natural forces. *Papa-hānau-moku* is the examination of all living things on this earth - it is the science of birth itself.<sup>99</sup> All of these things are very female **kuleana**<sup>100</sup> - they all involve **hānau** or birthing which is something that only a female can do.

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<sup>99</sup> Edith Kanaka‘ole Foundation, “Papakū Makawalu.”

<sup>100</sup> Concern, responsibility. Pukui and Elbert, *Hawaiian Dictionary*, 179.

## The Foundations of Kāne

In many of the *mo‘olelo* relating to the beginnings of the Hawaiian people, Papa (or Papahānaumoku) and Wākea are acknowledged as the progenitors from which comes *ka lāhui Hawai‘i*.<sup>101</sup> In a *mele inoa* to Kamehameha, the prominent chanter Pāku‘i links the great chief back to Papa and Wākea.

*O Wakea Kahiko Luamea,  
O Papa, o Papahanaumoku ka wahine,  
Hanau Tahiti-ku, Tahiti-moe,  
Hanau Keapapanui,  
Hanau Keapapalani,  
Hanau Hawaii;  
Ka moku makahiapo,  
O Wakea laua o Kane,  
O Papa o Walinuu ka wahine . . .*<sup>102</sup>

In this chant, it conveys that Hawai‘i Island was one of the first born children of Wākea and Papa. It then states that Papa or Walinu‘u was the female and that Wākea and Kāne were the males. In the book *Tales and Traditions of the People of Old*, Samuel Mānaiakalani Kamakau wrote: “Papa, or Walinu‘u is called Haumea by some people, but Haumea was an entirely different person . . . It is said that Papa went to Kahiki because her parents, Kū-ka-lani-‘ehu and Ka-haka-ua-koko were of Nu‘umealani, a land of tall cliffs.”<sup>103</sup>

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<sup>101</sup> Kame‘eleihiwa, *Native Land and Foreign Desires*, 23.

<sup>102</sup> Abraham Fornander, *Fornander Collection of Hawaiian Antiquities and Folk-lore.*, trans. Thomas G. Thrum, vol. 4 (Honolulu, H.I.: Bishop Museum Press, 1916), 13.

<sup>103</sup> Kamakau, *Tales and Traditions of the People of Old*, 91.

Although Kamakau contends that Papa is not Haumea, the composers<sup>104</sup> of the Kumulipo disagree as evidenced in the following verses:

1763. *Hanau o Kahakauakoko he wahine, i noho ia Kulani‘ehu*

1764. *Hanau o Haumea he wahine, i noho ia Kanaloa-akua<sup>105</sup>*

Accordingly, Haumea is the daughter of Kahakauakoko and Kūlani‘ehu. This understanding would make sense as there are other mo‘olelo which speak of Haumea and Wākea living as husband and wife at Kalihilihi‘ula-o-Laumiha.<sup>106</sup> Therefore, if Papa and Haumea are indeed one in the same, and the lines of the *mele* of Pāku‘i indicate that Papa is also known as Walinu‘u, then by the same token, it is possible to deduce that Wākea is Kāne, as stated in Pāku‘i’s chant.

As previously mentioned, in the thirteenth Wā of the Kumulipo, Papahānaumoku is a creation, a *papa* of Haumea. In the fourteenth Wā, Wākea is a creation and a *papa* of Kāne. Through the course of Wā ‘Umikumamāhā (lines 1814 - 1843), the *kūpuna* outline the the form of the universe with its orbiting paths, various layers of atmospheres, and celestial bodies.

1844. *O Kupulanakehau he wahine*

1845. *I noho ia Kahiko, o Kahiko-luamea*

1846. *Hanau o Paupaniakea*

1847. *O Wakea no ia, o Lehu‘ula, o Makulukulukalani*

*Pau-pani-ākea* in line 1846 implies that there is now a completion of the great expanse of the cosmic universe and everything within it. All the building of the many layers of the

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<sup>104</sup> Although Keaulumoku is credited as being the single composer of the Kumulipo, Beckwith states that this is unlikely since Keaulumoku is also credited with composing a *mele* for Kamehameha in 1782, a full 82 years after supposedly composing the Kumulipo in 1700. It is more likely plausible, as Beckwith indicates, that the name Keaulumoku is one that was passed down from court chanter to court chanter as more of a title than an actual name. Beckwith, *The Kumulipo*, 25.

<sup>105</sup> Beckwith, *The Kumulipo*, 232.

<sup>106</sup> Joseph Moku‘ōhai Poepoe, “Ka Moolelo Hawaii - Mokuna III,” *Ka Na‘i Aupuni*, May 1, 1906, 1.

atmospheres, the emergence of stars, of star paths, of everything that is *ʻīnana* in the atmospheres is now complete and established.

*1847. O Wakea no ia, o Lehuʻula, o Makulukulukalani*

As this line suggests, this *Pau-pani-ākea* is Wākea, Lehuʻula and Mākulukulukalani. Beckwith writes in *The Kumulipo*: “Born with Wakea are two others, Lehuʻula, generally written Lihauʻula and sometimes identified with Kanaloa, and Makulukulu. The three, according to a perhaps late tradition, represent the ancestors of the three classes of Hawaiian society: chiefs, priests, and commoners.”<sup>107</sup> However, Beckwith’s statement represents only one aspect of Hawaiian thought.

It might also be accurate to say that what is represented by these names is a mapping of the heavens. The term *wākea* or **ākea** refers to anything that is “broad, wide, spacious,” or “open.”<sup>108</sup> Within the context of this map, Wākea is the name of the entire expanse of the heavens. The *Kumulipo* states that Wākea is indeed *Pau-pani-ākea*, the complete inclusion of the entire universe. The term *lehuʻula* implies a “multitude of redness.” Lehuʻula, then, is representative of that “level” of heavens which contains the celestial bodies that burn brightly. **Makulu** refers to a “dripping, as of water.”<sup>109</sup> Perhaps it is that our *kūpuna* likened the stars to drops of water in the night sky, and thus termed that layer of the heavens where the stars spread like water drops as “Mākulukulukalani.”

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<sup>107</sup> Beckwith, *The Kumulipo*, 120.

<sup>108</sup> Pukui and Elbert, *Hawaiian Dictionary*, 13.

<sup>109</sup> *Ibid.*, 231. See also *nakulu*. *Ibid.*, 259.

## SECTION IV: THE SCIENCES OF KĀNE: WĀKEA

*O Wakea Kahiko Luamea,  
O Papa, o Papahanaumoku ka wahine,  
Hanau Tahiti-ku, Tahiti-moe,  
Hanau Keapapanui,  
Hanau Keapapalani,  
Hanau Hawaii; . . .*<sup>110</sup>

Wākea is the totality of all atmospheric levels from the bosom of Papahānaumoku to the **ho‘oku‘i**,<sup>111</sup> the *lolopua* of the cosmic universe. In the first **paukū**<sup>112</sup> of the *mele* presented by Pāku‘i, famed chanter of Kamehameha, equality between Kāne and Wākea is set forth in that Wākea is a *kinolau*, a form of Kāne; Wākea is a house of knowledge of Kāne.

What furthers this realization are the lines that come before that comparison. When Wākea and Papa come together, there is a *hānau* of Kahiki-kū and Kahiki-moe. David Malo describes these two terms as delineations of levels in the atmosphere:

Eia kekahi kapa ana aku i na Kukulu, o kahi mai ka honua aku, a mai ka moana aku, e moe aku ana ma ka nana ana aku a kumaka, a pili aku i ka alihi aouli, ua kapa ia o ka hikimoe ia poai. A o ka alihi aouli e hui ana me ka alihi moana e pii ae ana iluna ua kapa ia aku o Kahikiku ia poai a maluna ae, o kahiki kepapanuu ia poai, iluna ae o kahiki keapapalani ia poai, a maluna pono iho, o kahikikapuiholanikekuina ia.

Furthermore, [of] the naming of the cardinal points from the earth onwards and from the ocean onwards, which is still visible [to the naked eye] and close to the sky’s edge; it is called Kahikimoe (*the horizon, or lit., prostrate Kahiki*). And the sky’s edge that meets the ocean’s rising upwards is called Kahikikū (*lit. upright Kahiki*), and just above it is Kahikikeapapanu‘u (*lit., Kahiki the elevated stratum*), just on top is Kahikikeapapalani (*lit., Kahiki the sky or god stratum*), and directly

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<sup>110</sup> Fornander, *Fornander Collection of Hawaiian Antiquities and Folk-lore*, vol 4, 13.

<sup>111</sup> Zenith. Pukui and Elbert, *Hawaiian Dictionary*, 174. See *ku‘i*.

<sup>112</sup> Verse, stanza. *Ibid.*, 320.

on top is Kahikikapuihōlanikekuina (*lit., sacred Kahiki at Hōlani the meeting place*).<sup>113</sup>

What Malo is trying to say is that ancient Hawaiians knew that there were different levels of sky within our own atmosphere, as well as levels that extended out into space. This is what the science of Wākea is all about: the form and function of our atmospheric universe.

### The Form of the Universe

In Wā ‘Umikumamāhā of the Kumulipo, the *kūpuna* outline an understanding of the universe as being a realm containing orbiting paths, the emergence of stars and constellations, and comprised of various atmospheric levels in cosmic space. All of these things make up the form or body of the cosmos. All of these things refer to the essence of Wākea.

1831. *Pokinikini Polelehu*

1832. *Pomanomano Pohakoikoi*

These lines indicate that the *Pō* or cosmic space is vast and multilayered. The terms **kini**, **lehu**, and **mano** all enunciate multiplicity. Each of those words also correspond to a multiple of four. Our *kūpuna* held the number four in high regard in terms of the four cardinal directions, four directions of a meridian, four phases of time, and so forth. *Kini* applies to forty-thousand. *Lehu* applies to four hundred thousand. *Mano* applies to four thousand. In these lines, the terms presented are in their reduplicated forms which indicates a doubling of intention. In essence, the *kūpuna* are saying that the size of the universe is virtually immeasurable. There are millions of

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<sup>113</sup> Davida Malo, *Ka Mo ‘olelo Hawai‘i: Hawaiian Traditions*, trans. Malcolm Nāea Chun (Honolulu: First People's Productions, 2006), Hawaiian 8, English 10-11.

things in it! *Pōhāko 'iko 'i* also implies that the cosmic night is *hāko 'iko 'i*, billowing and surging forth.

1837. *Hiona*                      *Makulu*

1838. *Milipomea*              *Hanahanaiau*

*Hi 'ona* refers to the general appearance or form of the universe. It is a major function of Wākea. *Hanahanaiau* speaks to the study of time or chronometry, and specifically the movement of stars, planets and other celestial bodies through time. The tracking of time was essential for conducting ceremonies, for navigation, and most certainly for the birth of an *ali 'i* child. However, *Hanahanaiau* also applies to the tracking of the movement of clouds and wind patterns through time to better assess weather conditions, as those things were important for daily life. All of these things are functions of Kāne and involve the study of Wākea.

## ***SECTION V: THE SCIENCES OF KĀNE: MĀKULUKULUKALANI***

In Western science, the general study of the universe outside the Earth's atmosphere is called *astronomy*. In a Hawaiian mind, this is the study of Wākea. However, within astronomy, there are other branches as well. The field of *cosmology* deals with the origins and ultimate fate of the universe. This is where the Kāne science of Mākulukulukalani comes in. As discussed in an earlier section, the word *makulu* is a variation of *nakulu* which speaks of spreading, circulating and cosmic/atmospheric movement. Similar to *cosmology*, Mākulukulukalani is the understanding of how the universe came to be, how it grows, and what will become of it in the future. As the Kumulipo advances through the cycle of the universe beginning with the



manifolds of the atmospheres of *Pō*, the process and study of Mākulukulukalani broadens perception.

1831. *Pokinikini*                      *Polelehu*  
1832. *Pomanomano*                  *Pohakoikoi*  
1833. *Kupukupuanuu*                *Kupukupualani*

In one level of understanding, *Pōkinikini*, *Pōlelehu*, and *Pōmanomano* describe the form of the universe as multi-layered and multitudinous. At the same time, these terms also indicate a growing of the universe itself. *Pōhako 'iko 'i* indicates that the cosmic night “billows” and “surges” forth.<sup>114</sup> As the universe continues to “fold” itself and grow into the *Pōkinikini*, the *Pōlelehu*, line 1833 informs us that it also *kupukupu-a-nu 'u*, that these levels of the universe continue to grow to new “heights” and to new levels of “heavens.”

1834. *Kamoleokahonua*                *Keaaokahonua*

As new levels of atmospheric space are created and expanded, it allows for the creation of new worlds - new stars, planets, solar systems and galaxies. This is expressed in the terms *ka-mole-o-ka-honua* and *ke-a 'a-o-ka-honua*, the “root” or beginnings of worlds. It is interesting that with a minor addition of another ‘okina, the new term - *ke- 'a 'a-o-ka-honua* implies that the new world at this point is in an embryonic state, much like the fetus of a child within its amniotic sac in the mother’s womb. When adding a kahakō, the term *ke- 'a 'ā-o-ka-honua* implies that the world is in a state of continual fire. This is not unlike the nova phase of stars and planets as they are just beginning to form.

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<sup>114</sup> According to Pukui and Elbert, the term *hāko 'iko 'i* is a reduplication of the term *hāko 'i*, which is itself another term for *hakuko 'i*, which they define as “to surge, excite, rush.” Pukui and Elbert, *Hawaiian Dictionary*, 50.

1835. *Paiaalani*

*Kanikekoa*

*Paia 'a-lani* then suggests that the cosmic space or that the things in it are not yet fully grown, but are in the process of growing, like the embryo of a child within the womb. *Paia-a-lani* also suggests that the “walls” or boundaries of the universe have come to fruition. *Kanikē-ko 'a* implies that chemical reactions are now taking place. Atoms are clashing, creating new material and new worlds.

1836. *Hemoku*

*Panainai*

The term *moku* implies that the next step in the process of cosmic growth involves some kind of severing or separation of elements. As celestial bodies grow during the nuclear fusion process, some matter is always lost and converted into energy which is burned off in the process. In essence, this matter becomes separated, or cutoff from the whole.

*Pāna 'ina 'i* implies, that after the *moku* process and nuclear fusion is complete, that a *pāna 'ina 'i* or grafting of two separate elements is occurring. Modern science now understands that after hydrogen fuses with lithium and other light metals in the star, that the contraction of the star begins again. This process leads to the main life cycle of a star, the red giant phase.<sup>115</sup>

Like everything else in the Kumulipo, these terms can also be applied to the end of a celestial body's life. As the burning phases of a star, for example, end, the star begins to contract, implode, and then separate and spread into nebulae - or they can supernova in an explosive process.

*Kahuna* in Mākulukulukalani have studied the origins of our universe for centuries. As there was no written form of the Hawaiian language until the 1800s, all of this information

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<sup>115</sup> “Life Cycle of Stars,” Life Cycle of Stars, Oracle Education Foundation, <http://library.thinkquest.org/17940/texts/star/star.html>.

needed to be passed down orally through detailed accounts and compositions created by the *kahuna* themselves. Queen Lili‘uokalani indicates in the title page of her translation of the Kumulipo that the Kumulipo was composed by the highly-regarded *kahuna* Keaulumoku in 1700.<sup>116</sup> Therefore, the Kumulipo itself is a documenting of this *kahuna* knowledge - their understanding of the creation of the universe, while also chronicling the *lāhui Hawai‘i*’s presence in this world since the beginning of time.

## ***SECTION VI: THE SCIENCES OF KĀNE: LEHU‘ULA***

*Lehu‘ula* speaks of the plethora of red in the heavens. In one way of understanding, this speaks of the levels of cosmic space in which the stars and the planets orbiting around them exist. In a more common understanding, *Lehu‘ula* is the study of the form and function of the stars and the planets themselves. In modern science, this Hawaiian field of study combines many Western branches: astronomy, astrophysics, and planetary sciences.

In Lohi‘au’s ‘*awa* chant to Kāne in the *mo‘olelo* of Hi‘iakaikapoliopole, Lohi‘au speaks of the *moana nui o Kāne*, the great ocean of Kāne, and what is contained within it:

*O na lalani hoku a Kane  
O na hoku i ka nuu paa,  
O na hoku i kaiaia  
I paa —  
I paa i ka ili lani a Kane  
O na hoku i Kahakahakea  
O na hoku kapu a Kane  
O na hoku lewa a Kane  
O kini, o ka lau, o ka mano o ka hoku*

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<sup>116</sup> Lili‘uokalani, *An Account of the Creation of the World According to Hawaiian Tradition* (Boston: Lee and Shepard, 1897), ii.

*O ka hoku nui  
O ka hoku iki  
O na hoku ula a Kane  
He lewa<sup>117</sup>*

This mele speaks of the various *hōkū* of Kāne - stars, planets, comets, etc. that inhabit the great ocean of outer space. This is the focus of Lehu‘ula. Our *kūpuna* charted within various *mele* the positioning and the travel patterns of all of the most important *hōkū*.

*1837. Makulu        Hiona*

The *kahuna* of Lehu‘ula studied the *makulu* or growth of celestial bodies along with their *hi‘ona* or physical form.

*1838. Milipomea    Hanahanaiau*

Kamakau remarks that *Mili-pō-mea* belongs to Lehu‘ula:

Ua hooakaawale ia o Wakea ma ke kuamoo kupuna alii, a o Lihauula ma ke kuamoo kahuna o Milipomea a ma o Kahiko Luamea na kahuna kiekie o ke akua.<sup>118</sup>

Wākea was separated in the ancestral lines of ancient chiefs, and Līhau‘ula in the expert lineages of Milipōmea and through Kahikoluamea, the highest experts of the elements.<sup>119</sup>

The term *mili-pō-mea* alludes to an examination of the reddish night. It is the study of red and yellowish-white things that burn in the heavens - the stars, planets, comets. It is befitting then, that this study of all of these things belong to Līhau‘ula (or Lehu‘ula, as he is referred to in the

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<sup>117</sup> Joseph Moku‘ōhai Poepoe, "Ka Moolelo O Hiiakaikapoliopole: Ka Wahine I Ka Hikina a Ka La, Ka Ui Palekoki Uwila O Halema‘uma‘u," *Ka Na‘i Aupuni*, November 8, 1906.

<sup>118</sup> Samuel Mānaiakalani Kamakau, "Ka Moolelo Hawaii - Helu 23," *Ke Au Okoa* (Honolulu), March 24, 1870.

<sup>119</sup> My translation.

Kumulipo). The term *līhau* refers to a type of “gentle, cool rain”<sup>120</sup> and *‘ula* refers to the color red.<sup>121</sup> These burning objects are like red raindrops in the night sky.

The study of *Hanahanai-au* focuses on the study of time or chronometry, and how the hot celestial bodies move through space as time progresses. This was an essential study for many reasons: the birth of a child, the marking of important ceremonies and celebrations, to aid in navigation, and to distinguish the changing seasons - just to name a few.

1839. *Hookumukapo*            *Hoao*

*Ho ‘okumu-ka-pō* speaks of the very beginning of celestial life. The experts in this field study the creation of celestial objects as they relate to the general expanse of the universe. This is what Western scientists would term *astrophysics*.

*Ho ‘āo* speaks of the creation and establishment of stars and planets - their general form, composition, movement through space, and gravitational pulls.

1840. *Lukahakona*            *Niaulani*

The study of *Lū-ka-hākona* refers to several events. It is the study of what happens when celestial bodies fall out of orbit and streak across the sky; and it also studies the end processes of those celestial bodies. The term *hākona* means “to cast off,” or “to scatter.” At the end of a star’s (or a planet’s) life, the star goes through what Western science terms the *Planetary Nebula* phase. It is the phase when the star (or planet) begins to collapse into itself, and the outer layers of the star shift away from the core as a gaseous shell.

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<sup>120</sup> Pukui and Elbert, *Hawaiian Dictionary*, 205.

<sup>121</sup> *Ibid.*, 367.

*Niau-lani* speaks of the flowing of the heavens, and in some cases, the passing of the heavens. It can be interpreted as the final stage of a star - that of the white or black dwarf stage. After a star has expanded into a nebula, the star cools and becomes a smaller star called a *white dwarf* which then will continue to burn until it eventually cools completely, becoming a *black dwarf*, and then dies.

This whole process of a star becoming a *planetary nebula*, or in the case of larger stars going through a *supernova*, creates surges of energy that is pushed out into the galaxy. This is what is explained in the term *nī'au-lani*, or the “billowing” of the heavens.

## ***SECTION VII: A SUMMARY OF KĀNE***

In Wā 'Umikumamāhā of the Kumulipo, Hawaiian ancestral understandings of the cosmic universe around our planet intend to heighten our consciousness. It is *ka honua nui a Kāne*, the great realm of Kāne. The three sciences of Kāne: Wākea, Lehu'ula, and Mākulukulukalani focus on different parts of a whole universe. At the same time, as indicated in just ten lines of the Kumulipo (lines 1831-1840) these three sciences intersect and intertwine - and they are meant to be so. In a Hawaiian view, all things in this universe are interconnected and fused together. Wākea is Lehu'ula, Lehu'ula is Mākulukulukalani, and all three are Kāne.

Such expertise was certainly necessary in matters of the atmosphere and things that lay beyond our planet in order to understand Earth's connection to the universe itself. The general term used for the people who studied these matters were **kilo hōkū** or “stargazers.” The Piko Stone at Kūkaniloko with its intricate etchings and carved *pu'u*, along with its exact alignment to

the four cardinal directions, highly suggests that the *kahuna kilo hōkū* were much more than star gazers. They were keen observers of the movement of the stars across the sky, and thereby sharp observers of the movement of time itself. In the next chapter, I take a deeper look into the *heiau* at Kapū‘ahu‘awa, the focal point of Kūkaniloko, and its role in the study of this Kāne knowledge, educating our *ali‘i* in atmospheric sciences.

## CHAPTER III: KA PIKO

### *SECTION I: KŪKANILOKO MA KAPŪ‘AHU‘AWA*

The epicenter of the Kūkaniloko complex is situated in an area just north of Wahiawā Town traditionally known as **Kapū‘ahu‘awa**<sup>122</sup> (or Kapa‘ahu‘awa).<sup>123</sup> This area of the Wahiawā plateau is located between the Po‘amoho Stream Gulch to the North, and Kaukonahua Stream Gulch to the South. When visitors come to Kūkaniloko today, what they usually see is a group of old rocks strewn across a plain full of weeds, shaded by a grove of eucalyptus and coconut trees. The site is barely noticeable from the road, and these stones are generally viewed as remnants of a bygone era.

However, to people who **mālama**<sup>124</sup> this **wahi pana**,<sup>125</sup> the *heiau* at Kapū‘ahu‘awa represents our *mo‘okū‘auhau*, our genealogical connection to all those who came before us, to the island of O‘ahu itself, since time immemorial.

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<sup>122</sup> Kamakau, *Tales and Traditions of the People of Old*, 57. “Kapū‘ahu‘awa” is possibly a shortened form of “Keōpū‘ahu‘awa.” According to Mary Kawena Pukui, “Ōpū‘ahu‘awa hānau” means to be “born in a clump of ‘ahu‘awa [of a humble birthplace].” An *ōpū* also refers to the growth of a fetus, a newborn child. Thus, *Kapū‘ahu‘awa* can also refer to a “child cloaked in ‘awa.” ‘Awa is historically known as the drink of the gods. A child born here would be cloaked in ‘awa, signifying his/her extreme high rank.

<sup>123</sup> The area is known as “Kapa‘ahu‘awa” by its current kahu, Tom Lenchanko and Jo-Lin Kalimapau. Lenchanko and Kalimapau, interview.

<sup>124</sup> To take care of, care for, preserve, protect. Pukui and Elbert, *Hawaiian Dictionary*, 232.

<sup>125</sup> Legendary place. *Ibid.*, 377.



## Ka Piko o O‘ahu

Kūkaniloko was established at Kapū‘ahu‘awa as a birthing *heiau* in 760 AD by Nanakāoko and Kahihokalani for the birth of their son, Kapawa.<sup>126</sup> Being that Kapawa was a descendant of the Nanaulu and Kumuhonua line of *ali‘i*, his birth was not an ordinary occasion in the minds of the O‘ahu chiefs. Accordingly, it is highly likely that the plains of Kapū‘ahu‘awa were chosen as an appropriate location because of its centrality within the island of O‘ahu.

According to geologist Will Kyselka, Kūkaniloko is 7 miles east of Mt. Ka‘ala, 9 miles west of the Ko‘olau Mountains, 8 miles south of the ocean at Hale‘iwa, and 10 miles north of the sea at Pu‘uloa.<sup>127</sup> This estimated triangulation roughly confirms Kapū‘ahu‘awa’s location at the center of the island.

By establishing a *heiau* of birthing<sup>128</sup> at the very center of the island, Nanakāoko and Kahihokalani may have been trying to harness the natural energy of the island’s spiritual center. According to Hawaiian tradition, our *piko* are spiritual centers on our bodies that connect us with those generations that have come before us and those who will come afterward.<sup>129</sup> Similarly, the

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<sup>126</sup> The estimation of the exact date of the founding of Kūkaniloko is based on a 25-year generational gap. According to various genealogies that have been recorded, there were roughly 39 generations between the high chief of O‘ahu, Kapawa, and the high chief of Hawai‘i, Kamehameha Pai‘ea. Although some scholars may debate the 25-year generational gap as being too long of a time span considering the importance of giving birth to a suitable heir as quickly as possible, this 25-year estimate is an approximation based on accounts of chiefs of O‘ahu’s history who were known to live very long lives and have children at a rather advanced age.

<sup>127</sup> Will Kyselka, *Thoughts on Kukaniloko (Draft)* (Honolulu, May 24, 1993), 3.

<sup>128</sup> Only one other *heiau* is known to be set aside for birthing. *Holoholokū* in Wailua, Kaua‘i was established by Mō‘īkeha for the birth of his children upon his return to Hawai‘i from Tahiti. Frederick B. Wichman, *Kaua‘i: Ancient Place-Names and Their Stories* (Honolulu: University of Hawai‘i Press, 1998), 64-66. It should also be noted that since Kapawa was born generations before Mō‘īkeha, that Kūkaniloko existed prior to Holoholokū.

<sup>129</sup> Mary Kawena Pukui, E. W. Haertig, and Catherine A. Lee, *Nānā I Ke Kumu (Look to the Source)*, vol. 1 (Honolulu: Hui Hanai, 1972), 182-183.

'āina itself has *piko* that connect it to the natural universe, and Kapū'ahu'awa is one of those *piko*.

### **Ke Kino o Kapū'ahu'awa**

When Kūkaniloko was first surveyed by the Bishop Museum in 1933, archaeologist J. Gilbert McAllister recorded his observations:

There is now little to see at Kukaniloko. It is an inclosed[sic] area about one-half acre in size, with many large stones, some just visible, some protruding to a height of 3 to 4 feet, scattered about on a well-kept lawn. Tall trees border the site. To the old Hawaiians these stones were all named and represented alii, but now the only name remembered is Kahamaluihi, a flat stone near the center of the group.<sup>130</sup>

In another survey conducted in 1992 by Paul H. Rosendahl, Inc., there were 180 *pōhaku* that were marked and accounted for within a 0.5 acre plot of land at Kapū'ahu'awa, an area approximately "50 m (east-west) by 25 meters (north-south but when the eucalyptus and coconut trees around the stones are included, the site encompasses about a half acre (70 m by 30m)."<sup>131</sup>

Due to the invasion of the pineapple and sugar industries which began in the late 1800s - early 1900s, it is not currently known how many of the 180 stones were part of the original *heiau* at Kapū'ahu'awa, and which were deliberately discarded there by the plantations as adjacent lands were being cleared for planting. The 1992 survey indicates that some of the stones are

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<sup>130</sup> J. Gilbert McAllister, *Archaeology of Oahu, Bulletin 104* (Honolulu: Bernice P Bishop Museum, 1933), 136.

<sup>131</sup> Jack Henry, Alan Walker, and Paul Rosendahl, *Archaeological Inventory Survey of Galbraith Trust Lands, Lands of Kamananui and Wahiawa, Waialua and Wahiawa Districts, Island of Oahu*, report, Prepared for Helber, Hastert and Fee, Planners (Paul H. Rosendahl, 1992), quoted in Martha Yent, *Interpretive Plan: Kūkaniloko Birthstones State Monument, Wahiawā, O'ahu (State Site No. 50-80-04-218)*, report (Honolulu: State of Hawai'i DLNR, 1999), 14.

entrenched into the ground while others rested on the surface. In previous surveys or in the writings of scholars, there is a lack of description of the complete form and structure of the *heiau* at Kapū‘ahu‘awa as it may have existed during its prime. However, it could be plausible that those stones firmly entrenched in the soil existed centuries before the plantation era, and most likely prior to the point of Western Contact.

### **Kūkaniloko - Ka Pōhaku Hānau**

Accounts given by Samuel Mānaikalani Kamakau, John Papa ‘Ī‘Ī, and Abraham Fornander of Kūkaniloko remark that this was the *heiau* in which the highest chiefs of O‘ahu were born. One of the 180 stones is named Kūkaniloko<sup>132</sup> upon which the high *ali‘i wahine kapu* would rest and give birth to her child. Kamakau writes in 1865:

Ua hoonohoia he lalani pohaku ma ka lima akau, a ma ka lima hema, e huli ana ke alo i ka aoao akau, a malaila e noho ai na‘lii he 36, a he kuapuu ma uka mai. O Kukaniloko ka pohaku i ka hilinai. Ina e komo, a hilinai, a ka lele i na paepae, la hoouka na uha i na Liloekapu, a hanau ke keiki i ke alo. Ua kapaia kela he Alii, he akua, he ahi he wela.<sup>133</sup>

A line of stones was erected on the right-hand side and on the left-hand side, facing north, and it was there that 36 chiefs would sit, and there was a groove-backed stone inland from them. Kūkaniloko was the stone which was leaned upon for support. If [the chiefess] were to enter [into the heiau of Kūkaniloko], and trust, and lean upon the supports; if her thighs were held up in accordance to the Līloekapu, and the child was born in the presence [of the 36 ali‘i] - then that child was called an Ali‘i, a force of nature, a fire, a heat.<sup>134</sup>

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<sup>132</sup> “Kū-kani-loko” means “to anchor the cry from within.” Lenchanko and Kalimapau, interview. *Kū* is defined as “to stop, halt, anchor,” *kani* means “to sound, to cry out,” and *loko* references “within.” Pukui and Elbert, *Hawaiian Dictionary*, 167, 128, 210 respectively.

<sup>133</sup> Kamakau, "Ka Moolelo O Hawaii Nei. Helu 8."

<sup>134</sup> My translation.

Scholar June Gutmanis remarks in her book, *Pohaku: Hawaiian Stones*, that the birth of an ali'i at Kūkaniloko was an event unlike any other:

When a child was to be born at Kukaniloko many people accompanied the expectant parents. It is said that a thousand maka'ainana (commoners) would be assembled on the east side of the Kuakikua stream, which flows near the heiau, while personal servants of the chiefs waited on the south side of the stream. Facing the stone on which the mother-to-be would deliver were two rows of eighteen stones each. Tradition has it that the stones were inhabited by 'aumakua (guardian spirits) who had the power to absorb pain. A chief stood in front of each stone.<sup>135</sup>

Gutmanis cites several sources for her article on Kūkaniloko but is not specific as to where this “tradition” of the stones being inhabited by 'aumākua comes from. However, the belief by Gutmanis that these thirty six *pōhaku* were indeed inhabited by some form of spirit to “absorb pain” might not be impossible. The meaning of the name “Kūkaniloko” is to “anchor the cry from within.” The birth of the new *ali'i* was intended to be painless, and it is plausible that the 'aumākua were called upon to “absorb pain.” The greater value of Gutmanis' work is that she indicates that the *maka'āinana* and the *kauwā* were also “present” at the birth of the new *ali'i*. A birth at Kūkaniloko was not an ordinary *ali'i* birth. With a prescribed amount of *ali'i* in attendance, and thousands of *maka'āinana* and *kauwā* situated yards away, a birth at Kūkaniloko was a massive undertaking.

This information represents the bulk of what led to Kūkaniloko being protected as a “historic place” on the U.S. National Register of Historic Places.<sup>136</sup> However, in the next section of this text, the function of Kūkaniloko extends beyond the birthing of chiefs.

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<sup>135</sup> June Gutmanis, *Pohaku: Hawaiian Stones* (Laie: Brigham Young University-Hawaii, 1986), 16.

<sup>136</sup> United States, Department of Interior, National Park Service, *National Register of Historic Places Registration Form - Kukaniloko Birth Site (Boundary Increase)* (Washington, DC: NPS, 1995).

## ***SECTION II: KA PŌHAKU PIKO - KA HO‘OLĀLANI O KA MOKU***

The building of a *heiau* was no simple task. It was overseen by *kahuna* who specialized in **papa hulihonua**,<sup>137</sup> the configurations of the earth; and by those who were experts in **kuhikuhi pu‘uone**,<sup>138</sup> how to locate appropriate sites on the landscape.<sup>139</sup> According to Abraham Fornander, the *kuhikuhi pu‘uone* were the “temple architects for the weighty matters of the mind, in the locating and designing of *heiaus* to insure the favor of the gods on the aims and ambitions of the king.”<sup>140</sup> As to the meaning of the declination of *kuhikuhi pu‘uone*, Fornander offers this insight: “On a selection of the proper site by the *kuhikuhi puuone* whether for questions of war or other serious subject, he would trace out its form and plan upon a surface of sand, hence the name *puuone*, sand heap.”<sup>141</sup>

### **Ka Heiau No Kāne**

*O Wakea la ko Waolani*  
*O ku ka lepa la i Waolani*  
*O ka pae-humu la i Waolani*  
*O ka ilii i la i Waolani*  
*O ka anuu la i Waolani*  
*O ka mana la i Waolani*  
*O ka hale pahu la i Waolani*

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<sup>137</sup> Profound study of the earth; geology. (Hulihonua) Pukui and Elbert, *Hawaiian Dictionary*, 89.

<sup>138</sup> Seer, soothsayer; a class of priests who advised concerning building and locating of temples, homes, fishponds, hence a professional architect. *Ibid.*, 173.

<sup>139</sup> Kamakau, *Ka Po‘e Kahiko*, 8.

<sup>140</sup> Abraham Fornander, *Fornander Collection of Hawaiian Antiquities and Folklore*, trans. Thomas G. Thrum, vol. 6 (Honolulu: Bishop Museum Press, 1919), 68.

<sup>141</sup> *Ibid.*

*O ka Moi la i Waolani*  
*O ke kupala la i Waolani*<sup>142</sup>

The mele “*O Wākea lā ko Waolani*” is one of the few sources that speaks to the building of a Kāne *heiau* and its various parts. The *lepa* was a type of flag or ensign used to mark an area that was prohibited to all those of inappropriate rank. The *paehumu* was an enclosure or a platform that surrounded the *heiau* indicating the boundaries of the most *kapu* part of the *heiau* - crossing the *paehumu* would lead to certain death. The *‘ili ‘ili* was perhaps a stone line that followed the design of the *heiau*. Pukui says that in some cases, *‘ili ‘ili* stones were arranged on a mat “in the shape of a man and his vital organs, to teach anatomy.”<sup>143</sup> Perhaps they were used similarly in the building of a *heiau* as the physical blueprint that the people could follow in its construction.

According to Pukui, an *‘anu ‘u* was “a tower in *heiau*, about 7m high and 5.5m square, as enclosed with white *‘ōloa tapa*.”<sup>144</sup> Kyselka surmised that the *‘anu ‘u* at Kapū‘ahu‘awa could have also functioned as a gnomon, tracking the movement of the sun’s shadow.<sup>145</sup> The *mana* was a *kapu* house in the *heiau* where praying and ceremony by the *kahuna* for the consecration of the

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<sup>142</sup> Poepoe, "Ka Moolelo Hawaii Kahiko - Mokuna III" *Ka Na ‘i Aupuni*, May 2, 1906.

<sup>143</sup> Pukui and Elbert, *Hawaiian Dictionary*, 98.

<sup>144</sup> *Ibid.*, 26. In feet, the *‘anu ‘u* was 22 feet high and approximately 18 feet square.

<sup>145</sup> Kyselka, *Thoughts on Kukaniloko (Draft)*, 5.

*heiau* would occur.<sup>146</sup> The *hale pahu*, naturally, housed the drums of the *akua* of the *heiau*.<sup>147</sup> The *Mōʻī* of the *heiau* perhaps refers to the temple images that were kept in the *heiau*, in this particular case, probably those of Kāne.

The final part of the *heiau*, according to the *mele*, is the *kupala*, and remains somewhat of a mystery to me. The word *kūpala* refers either to a particular type of gourd, a *kākū* (barracuda), or a variety of wild sweet potato or morning-glory. There is no mention of *heiau* or ceremonial connection to this word. Interestingly though, the term “*kua pala*,” which perhaps may be an extended form of “*ku pala*,” also refers to the *kākū* - but it also refers to a rank of taboo chief who “had the right to carry a *pala* fern in ceremonies.”<sup>148</sup> In Malo’s account of the building of the *luakini heiau*, a Kū-classed *heiau*, there was a purification ceremony conducted after the *lana-nu ‘u-mamao* was erected in which the *kahuna* would utter prayers to Kāne while cleansing the *heiau* and the people with a bowl of water using a *pala* fern.<sup>149</sup> It stands to reason, perhaps, that this ceremony is the same as the “*kūpala*” mentioned in “*O Wākea lā ko Waolani*,” as it would serve to cleanse and purify all of the previously erected structures mentioned in the *mele*.

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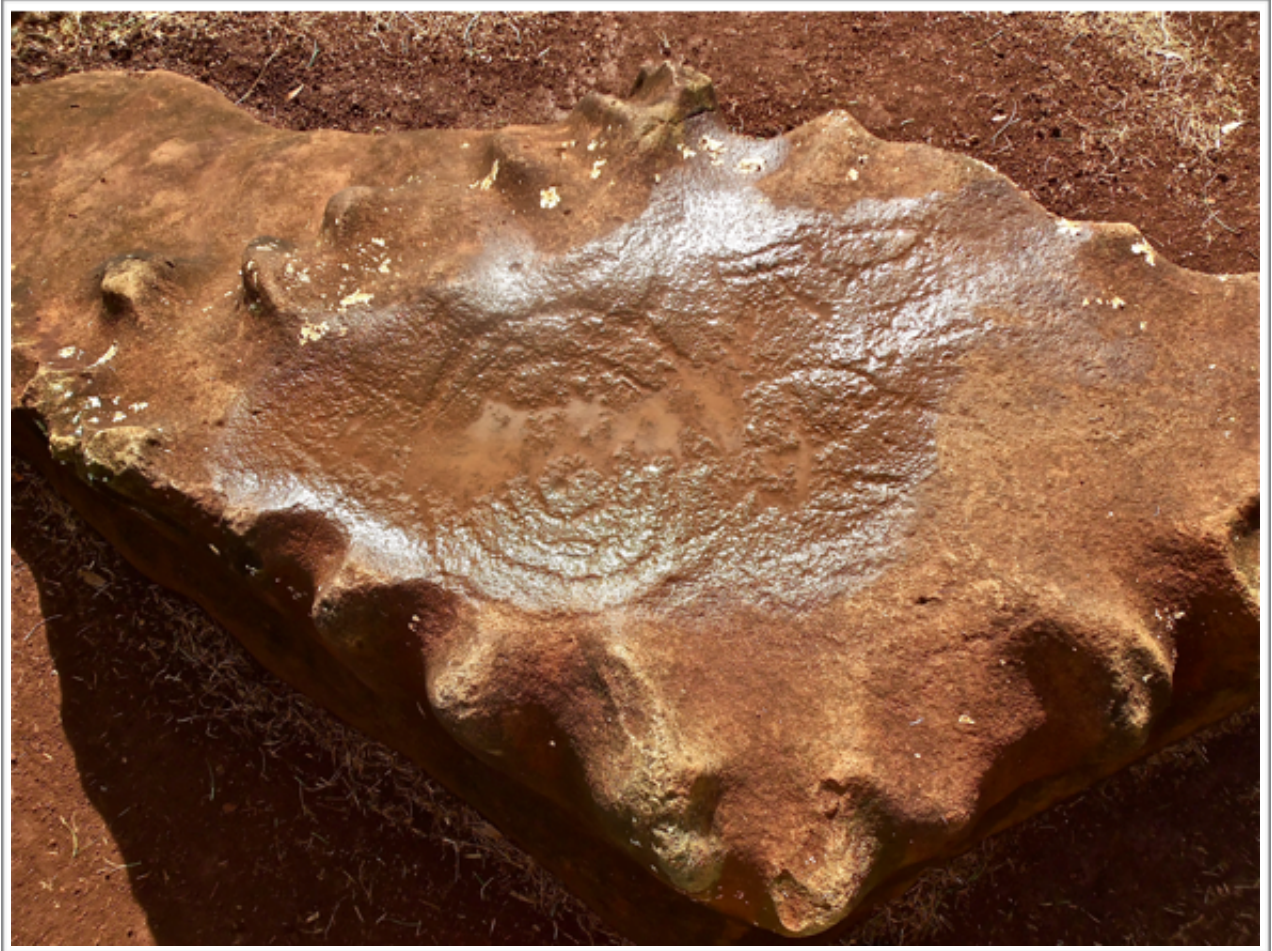
<sup>146</sup> ‘Ī‘Ī indicates that the *kuili* ceremonies were done in the *hale mana*. John Papa ‘Ī‘Ī, *Fragments of Hawaiian History: As Recorded by John Papa ‘Ī‘Ī*, trans. Mary Kawena Pukui, ed. Dorothy B. Barrere (Honolulu: Bishop Museum Press, 1959), 43. Unfortunately, ‘Ī‘Ī does not indicate the function of the *kuili* ceremony in terms of the consecration of the *heiau*.

<sup>147</sup> ‘Ī‘Ī recalls, “These drums, which were sounded every morning at dawn, were kept in the gods’ houses by their keepers, who did the drumming. It was also said that the drums were sounded in the Hale Pahu when the king did not utter the *‘amama* prayer.” Ibid., 35.

<sup>148</sup> Pukui and Elbert, *Hawaiian Dictionary*, 171.

<sup>149</sup> Malo, *Hawaiian Antiquities*, 163-164.

## Ka Pōhaku Piko



*Figure 3.1. The Pōhaku Piko at Kapū‘ahu‘awa with its spiraled designs revealed with the use of water. Photograph by author, 2013.*

I bring up this discussion of *heiau*, in particular Kāne-classed *heiau*, because in addition to its function as a birthing center, this thesis narrative contends that Kūkaniloko was a *heiau* dedicated to the study of Kāne knowledge. A few feet away from the *pōhaku hānau* sits another rather peculiar-looking *pōhaku*. The *pōhaku* is diamond-shaped with “fluted” points along its edge. In the center of the stone are two concentric circular designs, each with a *piko* in the middle. Whether this stone was man-made is unclear. However, as each side (east-west) has



twelve evenly spaced **pu‘u**<sup>150</sup> on its edge, and considering the circular designs etched into the *pōhaku*, clearly the stone has been modified by human hands for a purpose outside of the birthing process.

### **Ka Pōhaku Piko - Alignment**

According to the Global Positioning System, the current position of the Pōhaku Piko is at 21° 30’ 13” North by 158° 2’ 39” West. This roughly puts the *pōhaku* at the center of the island of O‘ahu, and as *kahu* Tom Lenchanko suggests, the *piko* etching at the center of the stone “marks the center of O‘ahu.”<sup>151</sup>

Using a compass, a researcher can also witness that the Pōhaku Piko is perfectly aligned to the four cardinal directions: North, South, East and West. When standing at the eastern edge of the *pōhaku* and looking West, the western edge point is aligned to Mt. Ka‘ala, the *kuahiwi ki‘eki‘e* or highest point of the Wai‘anae Mountain range.

### **Ka Pōhaku Piko - Function**

With such a unique design and alignment, what was the purpose of this stone? If not used directly in the birth of *ali‘i*? What was its function? In the following sections, it is important to investigate some of the functions of this unique *pōhaku piko* within a portion of the Kūkaniloko complex that resides at Kapū‘ahu‘awa.

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<sup>150</sup> Any kind of protuberance from a pimple to a hill; hill, peak, cone hump, mound, bulge. Pukui and Elbert, *Hawaiian Dictionary*, 358.

<sup>151</sup> *Voices of Truth*.

### **SECTION III: KA PŌHAKU PIKO - KA MO‘OALEWA A KĀNE**

*O Kane  
O Ku-ka-pao  
Me Lono nui noho i ka wai  
Loaa kalani honua  
Hoeu, kukupu, inana  
Ku i luna o ka moku  
O ka moana nui a Kane  
O ka moana i kai oo  
O ka moana i ka i‘a nui  
I ka i‘a iki  
I ka mano, i ka niuhi  
I ke Kohola  
I ka i‘a nui hihimanu a Kane  
O na lalani hoku a Kane  
O na hoku i ka nuu paa  
O na hoku i kakia ia  
I paa --  
I paa i ka ili lani a Kane  
O na hoku i Kahakakea  
O na hoku kapu a Kane  
O na hoku lewa a Kane  
O kini, o ka lau, o ka mano o ka hoku . . .<sup>152</sup>*

With a perfect alignment to the four cardinal directions, scholars have surmised that the Pōhaku Piko functioned as both a compass and as a sundial. In a study completed in 1993, Will Kyselka discerned that the markings on the stone as well as the twelve *pu‘u* along each side of the *pōhaku* indicated that the stone could have been used to track the movement of the sun during the year through the use of a gnomon.<sup>153</sup> Gnomons were frequently used by many civilizations throughout history until the invention of the modern clock and wrist watch to tell time.

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<sup>152</sup> Poepoe, “Ka Moolelo o Hiiakaikapoliopole,” *Ka Na‘i Aupuni*, November 8, 1906.

<sup>153</sup> Kyselka, *Thoughts on Kukaniloko (Draft)*, 5.

## Ke Ke‘e a Kānehoalani



*Figure 3.2. Kānehoalani setting over Mauna Ka‘ala on the Autumnal Equinox, 2014.  
Photograph by author.*

Along with tracking the sun during any given day, the Pōhaku Piko was also used to track Kānehoalani’s movement throughout the year. During the vernal equinox for example, the sun will rise from Pu‘u Ka‘aumakua on the Ko‘olau Mountains and set over Mauna Ka‘ala on the Wai‘anae range. Tracking the sun throughout the year, Kyselka was able to confirm that the sun’s path moved from its setting into Kolekole Pass during the winter solstice, over Mauna

Ka‘ala during the vernal equinox, and into the Unulau cliffs toward Mokulē‘ia during the summer solstice.<sup>154</sup>

Further studies also indicate that the *pu‘u* markings on the *pōhaku* delineate this circuit of the sun through the middle corridor of the stone. Using a straight edge of some sort (a *lā‘au* or branch perhaps) placed into the center *piko* of the concentric circular petroglyph design, and taking measurements of the resulting shadows, the *kahu* of Kūkaniloko have been able to determine that the sun moves 0.25 degrees each day, traversing north - south between each *pu‘u* on the *pōhaku* over an *anahulu*, a period of 10 days; a 2.5 degree movement of the sun in the arch of the sky.<sup>155</sup>

### **Ka Leipu‘u o Nā ‘Āwela**

In the same way that the stone is configured to trace the movement of the sun, the Pōhaku Piko can be used to track the movement of various star lines and constellations through the O‘ahu sky. Unlike Western civilizations, Hawaiian society followed a nightly lunar calendar termed the “Kaulana Mahina.” Generally speaking, similar to the solar Gregorian calendar, the *Kaulana Mahina* also has twelve months throughout the year. The difference is that the Hawaiian calendar follows the position or *kaulana* of the moon, or *mahina*. This means that the “days” or “nights” of the Hawaiian calendar are limited to 29-30, rather than 30-31 in the Gregorian calendar. Since the moon circuits around the earth every 29.5 days, it also means that every three to six years, an additional month must be inserted to reset the Kaulana Mahina

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<sup>154</sup> Ibid., 2.

<sup>155</sup> *Voices of Truth - Kūkaniloko - Birth of a Nation.*

(whereas in the Gregorian calendar, an extra day is added every four years to the month of February to reset that particular calendar).<sup>156</sup>

In the *Kaulana Mahina*, each of the twelve (or thirteen) months of the year is named after a distinct star that is predominate in the night sky of that particular month. Perhaps, it may also indicate why the names of the months reserve a different order from island to island as a **hōkū**<sup>157</sup> may shift its position in the sky throughout the year. For example, according to one comparative list provided by Poepoe, the month corresponding to mid-December to mid-January was termed “Makalii” on Hawai‘i Island, while on O‘ahu that particular month was termed “Hilinama.” The month of “Makalii” did not occur on O‘ahu until mid-April to mid-May.<sup>158</sup>

Kamakau indicated that the months of the year between the various islands were indeed different, and that over time, the names were changed according to the astronomical calculations of the Hawai‘i island people.<sup>159</sup> As Kamehameha Pai‘ea, a Hawai‘i Island *ali‘i* continued his conquering campaign across the islands, his traditions and practices followed him and were implemented as he came to power in each island.

Poepoe also pointed out that the names of the months of the Hawaiian year could change even within the island itself. In another calendar entry, Poepoe noted that the December -

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<sup>156</sup> Joseph Moku‘ōhai Poepoe, "Moolelo Hawaii Kahiko, Mokuna V, No Ka Mahele O Na Wa," *Ka Na‘i Aupuni*, October 20, 1906.

<sup>157</sup> Star. Pukui and Elbert, *Hawaiian Dictionary*, 76.

<sup>158</sup> Joseph Moku‘ōhai Poepoe, "Moolelo Hawaii Kahiko, Mokuna V, No Ka Mahele O Na Wa, No Na Makahiki.," *Ka Na‘i Aupuni*, October 18, 1906.

<sup>159</sup> Kamakau, *Ka Po‘e Kahiko*, 19-20.

January month on O‘ahu was termed “Kaulua” and the month of “Makalii” occurred between mid-October to mid-November.<sup>160</sup>

What all of this seemingly confusing data says is that even on an individual island, the position of any particular *hōkū* could appear differently to the *kilo hōkū* of a particular district of the island. Unfortunately, Poepoe did not indicate his sources and informants for these different calendars. It is difficult to know at the current time whether these names were widespread differences between island traditions, or whether they were isolated incidences.

What is understood is that the movement of individual *hōkū* and *huihui hōkū* (constellations) were very important to our *kūpuna* as many of the important ceremonies conducted at various *heiau* around each island were governed by the rising and setting of various *hōkū* and *huina hōkū*. For example, the Makahiki ceremonies and season were a time of rejoicing and paying tribute to the *akua* Lono for the bountiful harvest of the year. This Makahiki celebration was the start of the new Hawaiian year. According to both Abraham Fornander and Davida Malo, on Hawai‘i Island specifically, the Makahiki began on the first Hilo night after the rising of the Makali‘i (Pleiades) in the east at sunset during the month of ‘Ikuwā (usually mid-October to mid-November).<sup>161</sup> This celebration was very important in that it was ruled by the political control of Lono, which means that it was a time of peace - no warring was allowed.

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<sup>160</sup> Joseph Moku‘ōhai Poepoe, "Moolelo Hawaii Kahiko, Mokuna V, No Ka Mahele O Na Wa.," *Ka Na‘i Aupuni*, October 19, 1906.

<sup>161</sup> Malo, *Hawaiian Antiquities*, 33.

According to scholar and Hawai‘i-island based *kilo hōkū* Kalei Nu‘uhiwa, when the *hōkū* ‘A‘ā (Sirius) is at our zenith as the *hōkū* Lehua-kona (Antares) is rising in the East, then the Makahiki is over and the political season of Kū begins.<sup>162</sup>

### **Ke Kilokilo Hōkū ma Kapū‘ahu‘awa Nei**

As part of his study (1993), Kyselka was able to create a chart based on the positioning of the Pōhaku Piko that marked the setting azimuths of the sun during the solstices along with the setting of several *hōkū* that are prominent in the Hawaiian sky. Until the time of Mā‘ilikūkahi (circa 1440 AD), the seat of government on the island of O‘ahu was maintained at Kūkaniloko. The celestial movements would have certainly been tracked by the *kahuna kilo hōkū* to plan the various ceremonies and celebrations throughout the year that were held within the Kūkaniloko region, if not the entire island of O‘ahu. However, the *kilo hōkū* of Kūkaniloko did not only use the Pōhaku Piko as a means to plan out the tasks of the lunar year.

### ***SECTION IV: KA PŌHAKU PIKO - NĀ KUHINA HOLO MOANA***

*Mai Kahiki mai ka wahine ‘o Pele,  
Mai ka ‘āina ‘o Polapola,  
Mai ka pūnohu a Kāne,  
Mai ke ao lalapa i ka lani, mai ke ao ‘ōpua.  
Lapakū i Hawai‘i ka wahine ‘o Pele.  
Kālai i kona wa‘a Honua-i-ākea,  
Kō wa‘a, e Kamoho-ali‘i, holoa mai ka moku.  
Ua ‘okī, ua pa‘a ka wa‘a o ke akua,*

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<sup>162</sup> *E Mau Ke Ea - June 2011 - Papahulilani Part 1*, perf. Kalei Nu‘uhiwa, Vimeo, 2011, <http://vimeo.com/30705393>.

*Kō wa 'a e Kālai-honua-mea,  
Holo mai ke au . . .*<sup>163</sup>

We are an ocean people. Whether one believes that Hawaiians migrated here thousands of years ago from South East Asia, South America, or were born right from the coral beds of these islands, it should be said that Hawaiians were highly-skilled ocean navigators. *Mele* and *mo'olelo* abound with stories of vast open-ocean travels between islands in the Moananuiākea (Pacific Ocean).

As the *mele* “*Mai Kahiki Mai Ka Wahine 'O Pele*” documents, one such voyage was made by the Pele family from Kahiki, “from the land of Polapola,” aboard the canoe “Honua-i-ākea,” guided by their master navigator, Kamohoali'i. It is not known for certain where Kahiki or Polapola is located. Some linguists may remark that “Kahiki” and “Polapola” are references to “Tahiti” and “Borabora,” but as Pukui, Elbert, and Mo'okini indicate in *Place Names of Hawai'i*, “The word [Polapola] is cognate with Borabora, the name of the island in the Society Islands, but this is probably a coincidence.”<sup>164</sup> What is known through these lyrics is that the Pele family traveled a great distance. The lyrics indicate that Pele comes from “ka pūnohu a Kāne, mai ke ao lalapa i ka lani, mai ke ao 'ōpua.” A *pūnohu* is a mist that rises, particularly out at sea, which is often tinged red in the glow of the sun. An *ao lalapa* is a cloud that is rigid, bubbling out of the ocean and blazing like fire. An *ao 'ōpua* is a row of clouds that usually forms on the horizon. Furthermore, Malo indicated that our *kūpuna* categorized and labeled the zones of the sky through which the sun would travel. He explained that the zone in which “the

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<sup>163</sup> Mary Kawena Pukui and Alfons L. Korn, *The Echo of Our Song: Chants & Poems of the Hawaiians* (Honolulu: University Press of Hawaii, 1973), 53.

<sup>164</sup> Pukui, Elbert, and Mookini, *Place Names of Hawaii*, 188.



eye traverses in looking to the horizon is called *kahikimoe*.<sup>165</sup> He then indicated that the zones above the *kahiki-moe*, all the way to the highest point in the sky directly overhead were called *kahiki-kū*, *kahiki-ke-papa-nuu*, *kahiki-ke-papa-lani*, and *kahiki-kapui-holani-ke-kuina*, respectively.<sup>166</sup> All of the images in just the first four lines of this *mele* suggest that the Pele family has traveled from somewhere beyond the visual scope of the horizon across many miles of ocean. Another account suggests that this travel may not have been limited to just the Hawaiian ocean. Kamakau writes:

Eia kekahi mea kupaianaha i ka poe kahiko ma Hawaii nei, ua paa naau loa ka mimilo o Norewai, ua kapaia o ka mimilo o Manawaikaioo . . . O ke kaieleele, ke kaiomaomao me ke kaiula, ua loa no i ka poe kahiko . . . Ua nui no ka poe o Hawaii nei i holo i na aina o Nuuhiva, o Bolapola o Upolu, o Sawaii, o Holaniku, o Holanimoe, o Haukake, o Lalokapu, o Kuukuu, o Malimali, o Muliwaiolena, o Maokuululu, a me na aina e ae i holo ia e ka poe kahiko, o Hawaii i ka makaikai, aia ma na kaa, a me na mele wanana a me na pule e loa no ka nui o na aina.<sup>167</sup>

Here is a strange thing about the *po'e kahiko* in *Hawai'i nei* - they had knowledge of the Maelstrom of Norway, *ka mimilo o Norewai*. They called it Manawaikaioo . . . A black sea, a green sea, and a red sea were known to *ka po'e kahiko* . . . Many people of *Hawai'i nei* went to the islands of Nu'uhiwa,<sup>168</sup>

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<sup>165</sup> Malo, *Hawaiian Antiquities*, 10.

<sup>166</sup> *Ibid.*

<sup>167</sup> Samuel Mānaiakalani Kamakau, "Ka Moolelo O Kamehameha I - Helu 7.," *Ka Nupepa Kuokoa* (Honolulu), December 22, 1866.

<sup>168</sup> Marquesas Islands. Pukui and Elbert, *Hawaiian Dictionary*, 273.

Bolabola,<sup>169</sup> ‘Ūpolo, Savai‘i,<sup>170</sup> Hōlani-kū, Hōlani-moe,<sup>171</sup> Haukake, Lalokapu, Ku‘uku‘u,<sup>172</sup> Malimali, Muliwai‘olena,<sup>173</sup> Ma‘o-kū‘ululū,<sup>174</sup> and others. Most of the lands they visited are mentioned in the *ka‘ao, mele, wānana, and pule* of the *po‘e kahiko*.<sup>175</sup>

Kamakau’s article makes one point obvious - ocean voyages taken by Hawaiians throughout history were never by chance. Many *mo‘olelo* speak of long ocean voyages that the *kūpuna* routinely took across the Moananuiākea: Pele’s elder brother Kamohoali‘i knew the pathways to Polapola, the great *ali‘i* Mō‘īkeha traveled to Ra‘iātea, the young **ali‘i manō**<sup>176</sup>

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<sup>169</sup> Tahiti, Borabora. Ibid., 338.

<sup>170</sup> Pukui and Dorothy Barrere indicate that ‘Ūpolo and Savai‘i refer to Taha‘a and Ra‘iatea, islands in the Tahitian island group. Kamakau, *Tales and Traditions of the People of Old*, 90-91. However, it should be noted that Savai‘i and ‘Ūpolo are also the names of the two islands that make up Sāmoa (formerly Western Sāmoa).

<sup>171</sup> Kawena Johnson indicates, “Fornander associates this name [Hōlani-kū] with the island of Ceram (Serang) in Indonesia.” Rubellite Kawena Johnson and John Kaipō Mahelona, *Nā Inoa Hōkū: A Catalogue of Hawaiian and Pacific Star Names* (Honolulu: Topgallant, 1975), 5. However, in Fornander’s own publication of the *mo‘olelo* of ‘Aukelenui-a-Iku, he simply remarks that Hōlani-kū and Hōlani-moe “refer to a land of origin, as East and West Holani.” Fornander, *Fornander Collection of Hawaiian Antiquities and Folk-Lore*, vol. 4, 40 footnote 2.

<sup>172</sup> It is yet unknown where Ku‘uku‘u is an exact reference to. However, one of the many names given to the equator was “Ke-ala-‘ula-a-ke-Ku‘uku‘u,” or “The bright road of the spider.” Abraham Fornander, *An Account of the Polynesian Race: Its Origins and Migrations and the Ancient History of the Hawaiian People To The Times of Kamehameha I* (London: Trubner & Co, Ludgate Hill, 1878), 127. It is possible that Ku‘uku‘u refers to this area of the Moananuiākea.

<sup>173</sup> According to the *mo‘olelo* of Ka‘ehuikimanōpu‘uloa, Muliwai‘olena is a famous river in the Tahitian islands, homeland of Kua, an *ali‘i manō* of Kona Hawai‘i. William Henery Uaua, *He Mo‘olelo Ka‘ao No Ka‘ehuikimanōpu‘uloa Ke Keiki Manō a Kapukapu Mā lāua ‘o Hōlei* (Hilo: Hale Kuamo‘o, 1994), 34.

<sup>174</sup> The exact location of Ma‘okū‘ululū is currently unknown. In *mele*, it is mentioned as being a homeland of the akua Lono. David Malo, *Hawaiian Antiquities*, trans. Nathaniel B. Emerson, 2nd ed. (Honolulu: Bishop Museum Press, 1951), 146. In the *mo‘olelo* of Kepāka‘ili‘ula, Ma‘okū‘ululū is described as a “he aina anu, he aina ua noho ia, aohe manawa ha-o o ka ua, ua paa ka aina i ka ohu a hiki i ka moana.” [a cold land, a land encased in rain, there is no time when rain is lacking, the land is covered in mist all the way to the ocean.] “Ka Moolelo O Kepakailiula! - Mokuna XXXIV,” *Ka Nupepa Kuokoa* (Honolulu), June 8, 1865.

<sup>175</sup> Kamakau, *Tales and Traditions of the People of Old*, 90-91.

<sup>176</sup> “Shark chief”

Ka‘ehuikimanōopu‘uloa traveled between Hawai‘i and Muliwai‘olena, the legendary rascal Maui sailed all the way to Aotearoa (New Zealand) - the list goes on and on.

### **Nā Ala o Nā Hōkū**

Before the widespread usage of satellite Global Positioning System information, an essential skill required in ocean navigation was a deep knowledge of stars and star lines. Our *kūpuna* were able to travel throughout the *Honua Nui a Kanaloa*<sup>177</sup> by having an intimate knowledge of *hōkū* and *huihui hōkū* and how they moved across the sky.

Naturally, it would not make sense to throw someone into a canoe, and to tell that person to sail to another island without first showing them how to do it - what currents to put your **wa‘a**<sup>178</sup> into, what cloud forms to look for, and especially what stars to follow.

Likened to the Sun, all stars “move” across the sky in a counter-clockwise fashion - rising in the East and setting in the West at some declination on the horizon. Therefore, at a basic level, if one sails towards a star and sees that it is getting higher and higher in the sky without moving left or right, then that person is traveling in an easterly direction. If the star is descending as one travels toward it, then one is moving west.

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<sup>177</sup> “*Ka Honua Nui a Kanaloa*” is my poetic reference to the great Moananuiākea ocean. In chants to Kāne, the outer universe with its many layers of stars and planets is often referred to as “*ka honua nui a Kāne*.” As Kanaloa is viewed as the essence of the oceans by many cultures (i.e. Kanaloa in Hawai‘i, Ta‘arua in Tahiti, Tangaroa in Aotearoa, etc.), I believe this reference to Kanaloa is applicable.

<sup>178</sup> Canoe. Pukui and Elbert, *Hawaiian Dictionary*, 375.

## **Ka Pā Kuhikuhi Hōkū**

Before any voyage upon the unforgiving expanse of the ocean, navigators trained for years studying the movement of the stars and constellations across the sky from *‘āina*. Knowing that the Pōhaku Piko can be used to track the movement of the Sun, it is also possible to track the movements of the stars and star lines for the purposes of navigation.

Modern-day navigators study the movement of the stars with a star compass originally learned from master navigator Mau Piailug but modified for a Hawaiian perspective.<sup>179</sup> The star compass is divided into four quadrants based on the four major winds of Hawai‘i: Ko‘olau (the Northeast quadrant), Malanai (the Southeast quadrant), Kona (the Southwest quadrant), and Ho‘olua (the Northwest quadrant).<sup>180</sup>

It is plausible to assert that the Pōhaku Piko at Kūkaniloko could have been used as a star compass, as it is also divided into four quadrants that align with the quadrants indicated on the star compass used by our modern navigators.

It should be noted that master navigator Nainoa Thompson spent many hours studying astronomy with Will Kyselka.<sup>181</sup> Judging by the alignments of the various *hōkū* indicated on the star compass, it is probable that Nainoa Thompson incorporated Kyselka’s knowledge of the

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<sup>179</sup> Nainoa Thompson, "On Wayfinding / Nainoa Thompson," On Wayfinding / Nainoa Thompson, accessed March 24, 2014, [http://pvs.kcc.hawaii.edu/ike/hookele/on\\_wayfinding.html](http://pvs.kcc.hawaii.edu/ike/hookele/on_wayfinding.html).

<sup>180</sup> Polynesian Voyaging Society, "How the Wayfinder Holds the Canoe's Course," How the Wayfinder Holds the Canoe's Course, The Star Compass, accessed February 10, 2014, <http://www.pvs-hawaii.com/navigation/course.htm>.

<sup>181</sup> Polynesian Voyaging Society, "Will Kyselka, Teacher (1921-2012)," Hawaiian Voyaging Traditions, accessed February 11, 2014, [http://pvs.kcc.hawaii.edu/index/founder\\_and\\_teachers/will\\_kyselka.html](http://pvs.kcc.hawaii.edu/index/founder_and_teachers/will_kyselka.html).

rising and setting azimuths of the stars into the star compass now used by the *Polynesian Voyaging Society*.<sup>182</sup>

By learning and memorizing star positions through the use of the Pōhaku Piko, students of navigation would have been able to memorize O‘ahu’s exact position in the ocean. *Kahu* Tom Lenchanko also indicates that the Pōhaku Piko works in conjunction with neighboring stones to point out various navigational points leading to other destinations around *ka honua nui a Kanaloa*.<sup>183</sup> With this knowledge, our *kūpuna* were able to set sail from O‘ahu and navigate the world.

### ***SECTION V: KA PŌHAKU PIKO - A SUMMARY***

*No Lihue ka lani, no Kuaikua,  
O ka pawa o ke lii o Wailua,  
I hanau i Kukaniloko,  
No Wahiawa ka kalani no Halemano,  
No ka uka aikanaka,  
Na paakani lea ka ke ‘lii,  
He poe hoali lau palai hilahila,  
Na Kaiona nana o Piliwale,  
Na Ewa, na kike nui a Ewa,  
Na ka la kapu o Laakona,  
Na Kuihewa, nana Kakuhihewa,  
Na Manuia, nana ka lani Manuia,  
Na Lupe na ke aho kaakula kalani,  
Na Kualu, Kahakoililani,*

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<sup>182</sup> The *Polynesian Voyaging Society* was created in 1973 “to show that the ancient Polynesians could have the[sic] purposefully settle[sic] the Polynesian Triangle [the area of ocean between Hawai‘i, Aotearoa, and Rapa Nui] in double-hulled, voyaging canoes using non-instrument navigation.” Polynesian Voyaging Society, “About PVS,” Polynesian Voyaging Society, History of the Polynesian Voyaging Society: 1973-1998, accessed May 05, 2014, <http://www.pvs-hawaii.com/about.htm>.

<sup>183</sup> *Voices of Truth*.

*O ku o ke kai mahunehune,  
Me he kai ea mai ana la ku,  
E ku aku au e nana ilaila,  
E ake no au e hea mai oe,  
Alaila, hele pu aku kaula,  
Me ka milimili a ke lii o Kalani,  
Owau hoi—e . . .*

- *Na Kamaikui*<sup>184</sup>

Today, Kūkaniloko is often shrugged off as a dilapidated site where chiefs were once born. As the Hawai‘i Island chiefs began to “conquer” each of the northern islands, their beliefs and histories followed them and were ingrained into the psyche of the population of these islands.<sup>185</sup>

However, as the mele to Kūnuiākea at the beginning of this section indicates, Kūkaniloko was held in a position of high esteem by the Kamehameha line of *ali‘i* through the 1860s. “He Inoa no Kūnuiākea” was composed by Kama‘iku‘i, who was perhaps Grace Kama‘iku‘i Young, the aunt of Prince Albert Kūnuiākea, son of Kamehameha III and Jane Lahilahi Young. The mele pays tribute to Kūnuiākea by connecting him to the *ali‘i* who were born at Kūkaniloko. This is a common theme throughout many of the **mele inoa**<sup>186</sup> composed for the *ali‘i* of the 1800s. Even Kamehameha Pai‘ea himself knew of the spiritual center at Kūkaniloko, as Kamakau explains:

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<sup>184</sup> Kamaikui, "He Inoa No Kunuiakea," *Ka Hoku O Ka Pakipika* (Honolulu), January 16, 1862.

<sup>185</sup> As Kamehameha and his Hawai‘i chiefs came through the islands in his warring campaign, he established his rule on each island. On O‘ahu, for example, after the battle of Nu‘uanu, Stephen Desha wrote that Kamehameha replanted all of the taro and sweet potato patches, and that he went around the island in a clockwise manner, carrying with him, his Makahiki god, Kaho‘āli‘i. As he passed through each district, he reorganized each district and established *konohiki* of each *ahupua‘a*. He also decreed certain prohibitions (possession of guns, burning of *kukui* lamps at night, the *kānāwai māmalā hoā*), all to prevent an uprising against him, and to persuade the people of O‘ahu to follow him. Stephen L. Desha, "He Moolelo Kaa No Kekuhaupio, Ke Koa Kaulana O Ke Au Kamehameha Ka Nui - Ke Kaua O Nuuanu," *Ka Hoku O Hawaii* (Hilo), February 21, 1924.

<sup>186</sup> Name chant, i.e., chant composed in honor of a person, as a chief. Pukui and Elbert, *Hawaiian Dictionary*, 245.

Ua manao nui no o Kamehameha e hanau o Keopuolani iloko o Kukaniloko. Aka ua pii no, aole i hiki, ua hoihoi e ia no. Hookahi Alii o Maui i komo iloko o Kauleahea ke kane, o Kapohanaupuni ka wahine.<sup>187</sup>

Kamehameha greatly desired for Keōpūolani to give birth inside Kūkaniloko. However, when she went there, she couldn't, and therefore she went back. Only one chief of Maui entered - Ka'ulahea the husband, Kapōhānaupuni the wife.<sup>188</sup>

Kūkaniloko was however, not merely a place of chiefly birth - evidence suggests that several disciplines and practices were studied there. In this chapter, an initial discussion of two of the one hundred and eighty *pōhaku* that currently live at Kapū'ahu'awa has unveiled that our kūpuna were able to study the stars as astronomers, study chronometry through the movement of the sun, and become great navigators on the vast open oceans. In the next chapter, the scope and discussion will be broadened to include some of the other possible functions of Kūkaniloko as a center of higher learning - a Kūkaniloko that spans 36,000+ acres across the center of O'ahu.

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<sup>187</sup> Kamakau, "Ka Moolelo O Hawaii Nei. Helu 8".

<sup>188</sup> My translation.

## CHAPTER IV: KALANA KŪKANILOKO

### SECTION I: KALANA 'O KŪKANILOKO

In modern-day Hawai‘i, Kūkaniloko is listed by the State of Hawai‘i as the “Kūkaniloko Birthstones State Monument,”<sup>189</sup> which encompasses a 5-acre parcel of land that was once owned by the George Galbraith Estate,<sup>190</sup> preserved by the Daughters of Hawai‘i in 1925, and placed on the National Register of Historic Places in 1995.<sup>191</sup> The five acre allotment is claimed, according to the federal application, on the basis that “this is the boundary historically associated with Kukaniloko that is still intact.”<sup>192</sup> However, according to the *kahu* of Kūkaniloko, five acres is a mere fraction of the entire complex. According to their<sup>193</sup> research, the five-acre parcel of land at Kapū‘ahu‘awa is only a part of the 36,000+-acre complex of Kūkaniloko.<sup>194</sup>

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<sup>189</sup> State of Hawai‘i, *Kūkaniloko Birthstones State Monument* (Honolulu: DLNR, 1998).

<sup>190</sup> According to the Deed found in Liber 104 on pages 91-92, this property was sold to George Galbraith by the Board of Education, totaling 216.2 acres for a sum of \$1.00 as part of a land swap for lands owned by Galbraith that were adjacent to this property. Deputy Registrar of Conveyances, *Board of Education to G. Galbraith*, January 31, 1887, Deed, Bureau of Conveyances, Honolulu. Unfortunately, I have been unable to find a record of the transaction of this piece of land from the Crown or any *ali‘i* to the Board of Education.

<sup>191</sup> It should be noted that the 1995 register includes the 5-acre parcel as it stands today. However, the stones at Kapū‘ahu‘awa were originally put on the National Register as a 1-acre parcel in 1973. United States, Department of Interior, National Park Service, *National Register of Historic Places Registration Form - Kukaniloko Birth Site* (Washington, DC: NPS, 1973).

<sup>192</sup> United States, Department of Interior, *National Register of Historic Places Registration Form - Kukaniloko Birth Site (Boundary Increase)*.

<sup>193</sup> The *kahu* consulted for the purposes of this thesis were *Kahu* Tom Lenchanko and *Kahu* Jo-Lynn Lenchanko Kalimapau.

<sup>194</sup> Cultural Surveys Hawai‘i, *Summary of Interview with Tom Lenchanko Re: Cultural Impact Assessment for the Proposed In-Vessel Composting Facility, Kamananui Ahupua‘a, Waialua District, O‘ahu Island (TMK: [1] 6-5-002:026)*, report (Honolulu: Cultural Surveys Hawai‘i, 2011), 1.



## Ke Kālai ‘Āina

In ancient times, the ‘āina of the Hawaiian Islands was divided up (*kālai ‘āina*) into what is known as the *ahupua‘a* system<sup>195</sup>- a comprehensive geopolitical division of land designated by **moku**,<sup>196</sup> **ahupua‘a**,<sup>197</sup> and **‘ili ‘āina**,<sup>198</sup> as a means to allow our *kūpuna* to effectively manage and care for the natural resources of both the ‘āina and the **kai**.<sup>199</sup> Much of the credit of this *ahupua‘a* system goes to an O‘ahu *ali‘i* named Mā‘ilikūkahi. Kamakau wrote of this achievement:

I ka noho Aupuni ana o Mailikukahi. Ua noho huikau ka aina; aole maopopo ke Ahupuaa, ke Ku, ka Iliaina, Ka Mooaina, ka Pauku aina a me na Kihapai. No laila, kauoha aku o Mailikukahi i na’Lii me na kaukualii, me na puali alii a me na Luna, e mahele i ka aina i moku, a me na Ahupuaa, a me na kupono me ka Iliaina a me na Mooaina a puni o Oahu - Eono moku. Eono alii nui Aimoku; a hoonoho aku la ia i na’lii i Ahupuaa, he Ahupuaa nui, he alii nui, he kaukau alii, he ku-pono ka aina, he puali, he Iliaina - Haawiiia ka aina i na makaainana a pau loa, a puni o Oahu.<sup>200</sup>

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<sup>195</sup> Each *moku* was managed by an *ali‘i ‘ai moku*. Each *moku* was comprised of several *ahupua‘a* which were each maintained by an *ali‘i ‘ai ahupua‘a* also known as a *konohiki*. Likewise, each *ahupua‘a* was made up of ‘*ili ‘āina*, which was maintained by an another *ali‘i*. There was no “ownership” of land, but rather a system of management of natural resources to ensure both productivity and conservation for future generations.

<sup>196</sup> District. Pukui and Elbert, *Hawaiian Dictionary*, 252.

<sup>197</sup> Land division usually extending from the uplands to the sea, so called because the boundary was marked by a heap (*ahu*) of stones surmounted by an image of a pig (*pua‘a*), or because a pig or other tribute was laid on the altar as tax to the chief. *Ibid.*, 9.

<sup>198</sup> A land division whose chief pays tribute to the chief of the *ahupua‘a* of which it is a part, rather than directly to the king. *Ibid.*, 97. Within an *ahupua‘a*, the land is divided up into smaller sections named either ‘*ili ‘āina* or ‘*ili kūpono*. As Pukui and Elbert indicate, the taxes of the ‘*ili ‘āina* were paid to the *konohiki*, the chief of the *ahupua‘a*. In their entry of the ‘*ili kūpono*, Pukui and Elbert indicate that tribute from the ‘*ili kūpono* went directly to the ruling chief, not the chief of the *ahupua‘a*. *Ibid.*, 98.

<sup>199</sup> Sea; sea water. *Ibid.*, 114.

<sup>200</sup> Kamakau, "Ka Moolelo O Hawaii Nei. Helu 12.," *Ka Nupepa Kuokoa*.

During the reign of Mā'ilikūhahi. The division of land was unclear; the Ahupua'a, Kū, Mo'o'āina, Paukū 'āina and Kīhāpai were not clearly established. Therefore, Mā'ilikūhahi ordered his chiefs and the lesser chiefs, the warrior chiefs and the overseers to divide the land into moku (districts) and ahupua'a, and kūpono, with 'ili 'āina and mo'o'āina all over O'ahu - Six districts. Six district chiefs; and then he established chiefs for the ahupua'a divisions - if it was a large ahupua'a, then a high chief; if it was a kūpono, then a kaukauali'i would be assigned; the 'ili 'āina would be assigned to a pū'ali, or warrior chief - the commoners were given all of the lands all around O'ahu.<sup>201</sup>

It may be surprising to know, that at least on O'ahu, Mā'ilikūhahi was not the first *ali'i* to *kālai 'āina* in such a way. Nine generations before Mā'ilikūhahi, the *ali'i* Māweke made a similar division of the island. According to archaeologist Patrick Kirch, Māweke partitioned O'ahu into three districts: Kona, Ko'olau, and 'Ewa/Wai'anae/Waialua.<sup>202</sup> However, O'ahu had been reconfigured at least one more time before that with **ka'ānani'au**.<sup>203</sup>

### **Ka'ānani'au - Boundaries of the Hālau**

Hawaiian language scholars Mary Kawena Pukui and Samuel H. Elbert define *ka'ānani'au* as "Same as ahupua'a, the altar marking the land division. O'ahu. *Rare*."<sup>204</sup> Joseph Genz presents a more comprehensive explanation he learned from *kahu* Tom Lenchanko that "...the ka'ānani'au are an approximate concentric alignment of rock pilings (*kuahu*, or altar)

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<sup>201</sup> My translation. Diacriticals ('okina and kahakō) have been added to match modern orthography.

<sup>202</sup> Genz, *Ka'ānani'au of Kūkaniloko*, 3.

<sup>203</sup> Same as *ahupua'a*, the altar marking the land division. O'ahu. *Rare*. Pukui and Elbert, *Hawaiian Dictionary*, 108. *Kahu* Tom Lenchanko indicates that the term *ka'anani'au* also means "a beautiful period of time," a *mana'o* handed down to him by the *kūpuna* of the Kūkaniloko area. Lenchanko and Kalimapau, interview.

<sup>204</sup> Pukui and Elbert, *Hawaiian Dictionary*, 108.

placed throughout the landscape of O‘ahu [which] demarcate a broad area of Kūkaniloko, with the current State of Hawai‘i five-acre Kūkaniloko Birthstones State Monument at its center.”<sup>205</sup>

*Kahu* Lenchanko estimates that these *ka ‘ānani ‘au*, which stretch from Mauna Lahilahi in Mākaha to ‘Ō‘io at Kualoa, encompass an area of over 36,000 acres across the central plane of O‘ahu.<sup>206</sup>

Perhaps the “*Rare*” quality has been attached to this term because the *ka ‘ānani ‘au* were not simply *ahupua‘a* boundary markers, as suggested by Pukui. According to a report by Christopher Monahan and Alike Poe Silva, “*ka ‘ānani ‘au* do indeed function similar to *ahupua‘a* for the dividing of resources, but are also a specific kind of religious place, a ‘place where heaven and earth meet’.”<sup>207</sup> These *ka ‘ānani ‘au* “simultaneously embrace natural resources and their management, the religion of Kāne, and a cosmology that places Kūkaniloko at the center of O‘ahu, the Hawaiian archipelago, and the entire world.”<sup>208</sup> This is an interesting observation, as

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<sup>205</sup> Genz, *Ka ‘ānani ‘au of Kūkaniloko*, 4.

<sup>206</sup> *Kahu* Lenchanko indicated that these 36,000 acres only encompass the inner boundaries of the *kalana* of Kūkaniloko marked from the *ka ‘ānani ‘au* of Mauna Ka‘ala to Mauna Kapu on its western borders, stretching across the central plain to Waianu, then north to Pu‘u Kaluanui, and then coming back across to Ka‘ala. These boundaries are indicated on a 1929 Territory of Hawaii survey map. Lenchanko and Kalimapau, interview.

<sup>207</sup> Christopher M. Monahan and Alike Poe Silva, *New Perspectives in Hawai‘i: Using the ‘TCP Paradigm’ to Benefit the Hawaiian People and Environment: A Traditional Cultural Property Study of Kāne‘ikapualena (Kamaile), Wai‘anae, O‘ahu, With Recommended Changes to State of Hawai‘i Revised Statutes Chapters 6E & 3 43*, report (Honolulu: Office of Hawaiian Affairs, 2007), 131, quoted in Genz, *Ka ‘ānani ‘au of Kūkaniloko*, 3.

<sup>208</sup> Hawaiian Nationals Mana‘o I‘o, “*Ka ‘ānani ‘au*,” accessed September 20, 2011, <http://www.hnmio.org/kaananiau/kaananiau.html>, quoted in Genz, *Ka ‘ānani ‘au of Kūkaniloko*, 3.

the *kahu* of Kūkaniloko indicate that the *ka ‘ānani ‘au* seem to be aligned in the shape of the constellation Orion,<sup>209</sup> also known as Wākea, a form of Kāne (discussed in Chapter 2).

In deconstructing the term *ka ‘ānani ‘au*, several interesting ideas emerge. As “ka‘ana-nī‘au,” the term refers to a division of coconut midribs which were often used as *kapu* markers at the end of a *hālau*. If the *kuleana* of Kūkaniloko was indeed that of a *hālau* of Hawaiian knowledge as this thesis suggests, then the meaning of “ka‘ana-nī‘au” makes perfect sense. These stone altars mark the boundaries of the *hālau*.

In a deeper spiritual context, the term “ka‘ā-nā-nī‘au” refers to a twisting of the aforementioned coconut midribs together, as if to suggest that perhaps Kūkaniloko is a space where many different *hālau* possessing various kinds of ‘**ike**<sup>210</sup> are twisted together as one. Knowing that Kūkaniloko is located at the physical center of the island, and is marked by spiritual meeting points of heaven and earth, then all of this may suggest that Kūkaniloko was at one time seen as the center of knowledge of O‘ahu - a place where experts in various disciplines of the **wā kahiko**<sup>211</sup> gathered to discuss scientific and philosophical observations and practices much like the Egyptian and Greek philosophers would gather in the streets of Alexandria, creating a hub of intellectual discourse.

*Kahu* Lenchanko and Kalimapau indicate that the *kalana* of Kūkaniloko is encompassed by two distinct layers of *ka ‘ānani ‘au*, known as the ‘*Aha-i-loko* and the ‘*Aha-i-waho*, the “inner sennit cord” and the “outer sennit cord” which demarcates the boundaries of the *heiau*

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<sup>209</sup> Cultural Surveys of Hawai‘i, *Summary of Interview with Tom Lenchanko*, 1.

<sup>210</sup> To see, to know, to feel, to experience, to understand; knowledge. *Ibid.*, 96.

<sup>211</sup> Ancient times.

complex.<sup>212</sup> For the purpose of this thesis narrative, focus will be given to the inner boundary of the *kalana*, which encompass the areas of Līhu‘e, Wahiawā, and Halemano. These are the lands that comprise the initial 36,000 acres of the Kālana Kūkaniloko.

## **SECTION II: KILO LANI, KILO HŌKŪ A KILO HELU**

*Ke hoi ala i ke kula ilima,  
Nopu wela i ka la e,  
Ka la e kau nei iluna,  
Aloha wale olua e a ‘u kama,  
Kamalei a Kapaihilani,  
A kuu kaikuahine haku,  
O Kapaihi-poele-i-ke-kihi-o-ka-malama-o —  
Ikuwa ka leo o ka hekili  
Ikuwa ka leo o ke kai  
Ikuwa ka leo o ka manu  
Ikuwa ka leo o ka makani  
Ikuwa ka leo o ke Akua  
Akua ka la o Kona  
O Ikuwa ka Poha-koeleele.<sup>213</sup>*

In the story of Kamiki, chants abound with descriptions of astronomical and meteorological observations made by our *kūpuna* over the centuries. The last seven lines of this *mele* (noted above) clearly indicate: “Ikuwā is the voice of the thunder, ‘Ikuwā is the voice of the sea, ‘Ikuwā is the voice of the birds, ‘Ikuwā is the voice of the wind, ‘Ikuwā is the voice of the environment, the sun of Kona is the prevailing element, ‘Ikuwā is bursting forth in storm.”<sup>214</sup>

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<sup>212</sup> Lenchanko and Kalimapau, interview.

<sup>213</sup> "Kao Hooniua Puuwai No Ka-miki," *Ke Au Hou* (Honolulu), January 4, 1911.

<sup>214</sup> My translation.

The month of ‘Ikuwā was regarded as a time of storms, heavy rains, and wild wind conditions. On Hawai‘i Island this occurs usually during the months of October and November. According to one calendar (discussed in Chapter 3), the month of ‘Ikuwā happens on O‘ahu in August. The natural phenomena consistently observed during each particular month of the Hawaiian year were documented through various *mele* recorded in the Hawaiian newspapers.

As discussed in previous chapters, other chants (“‘*O Kāne, ‘o Kū ka pao,*” “*E Kāne-Kanaloa,*” and Kumulipo Wā ‘Umikumamāhā) provided some insight into various kinds of knowledge acquired by the *kilo hōkū*, the **kilo lani**,<sup>215</sup> and the **kilo helu**<sup>216</sup> - and it should never be understated that these men and women were experts in their field. It has also been discussed that contributing to the study of those sciences was the use of the Pōhaku Piko at Kapū‘ahu‘awa. However, what other evidence exists that speaks to the expertise and the study of *kilo hōkū*, *kilo lani*, and *kilo helu* within the 36,000+-acre *kalana* of the Kūkaniloko complex?

### Pu‘u Pauao

Not much is currently known about this *pu‘u* which stands at the corner of the Wahiaiwā, Punalu‘u and Kahana *ahupua‘a* on the Ko‘olau range, but its name certainly possesses celestial applications. As “Pauao,” it is a peak that is “completely consumed by light.” As “Pā‘ūao,” this peak is “covered or clothed in light.” These understandings certainly apply within the context of

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<sup>215</sup> Soothsayer who predicts the future by observing the sky. Pukui and Elbert, *Hawaiian Dictionary*, 152. Although “soothsaying” was a function of a *kilo lani*, the *kilo lani* would also function as an ancient Hawaiian equivalent to a modern-day meteorologist, observing and forecasting the weather.

<sup>216</sup> People who reckoned the time. Samuel Mānaiakalani Kamakau, *The Works of the People of Old: Na Hana a Ka Po‘e Kahiko*, trans. Mary Kawena Pukui, ed. Dorothy B. Barrere (Honolulu: Bishop Museum Press, 1976), 14.

Pu‘u Pauao being a marker for the rise of the sun during *Ke Ala Polohiwa a Kāne*, the summer solstice. It is the time in which Kānehoalani makes his longest appearance in our skies, and his effects are felt the strongest, completely bathing the ‘āina in light.

### **Pu‘u Kānehoa**

Similarly to the Ko‘olau range, the Wai‘anae range also has a *pu‘u* named for the sun, Kānehoa in Līhu‘e. This *pu‘u* lies between Pu‘u Hāpapa to the North, and Pu‘u Kaua to the South. Archaeologist J. Gilbert McAllister indicates that there is “a small inclosure[sic] said to be a heiau, on a slight elevation in a gulch at the foot of Puu Kanehoa.”<sup>217</sup> The exact function of this *heiau* is unclear at this time. However, it is logical to deduce that its historic name and geographic positioning clearly refers to the movement of the sun. Therefore, it is plausible to assert that this *pu‘u* and its *heiau* may have served as a celestial observatory.

### **Pu‘u Kūmakali‘i**

A couple of peaks north of Pu‘u Kānehoa stands Pu‘u Kūmakali‘i on the north end of Kolekole Pass. McAllister indicates that a *heiau* also existed there:

Kumakalii heiau, once located in Pukaloa Gulch, not far from Kolekole Pass. Nothing remains of the heiau now, for the stones were used in the building of the Wahiawa dam. Thrum (79,4) says: “An important heiau in its day, and of large size; visited by Kalakaua in the ‘70s.”<sup>218</sup>

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<sup>217</sup> McAllister, *Archaeology of Oahu*, 107.

<sup>218</sup> *Ibid.*, 133-134.

It is always difficult to ascertain the function of *heiau* when they have been completely destroyed, but the name “Kūmakali‘i” provides one possible clue. It refers to the “Appearance of Makali‘i.” As discussed in Chapter Three, the Makali‘i or Pleiades is a central constellation cluster whose rising marks the beginning of the Makahiki season, the beginning of the Hawaiian calendar year. According to Genz, “Several pōhaku on the plain close to the northern edge of Schofield Barracks and Pu‘u Makali‘i form an astronomical alignment used for sighting the setting of the seven stars of the constellation Makali‘i (Pleiades), which are etched upon one pōhaku.”<sup>219</sup> It is therefore plausible that Pu‘u Kūmakali‘i and its corresponding *heiau* were places in which *kilo hōkū*, and in particular, the Makali‘i was studied.

### **Pu‘u Kālena**

North of Pu‘u Kūmakali‘i is Pu‘u Kālena. McAllister noted another *heiau* resting beneath it:

Site 217. Approximate location of a *heiau* in Kalena Gulch on the land of Mohiakea. This *heiau* is said by Kapano of Waikele and Baptiste of Waimalu to have had a tunnel artificially dug underneath the platform, containing burials . . . The *heiau* was in the area used as an artillery range and was destroyed by the government.<sup>220</sup>

A definite pattern arises when considering that yet another *heiau* within the area was destroyed for modern purposes. When this occurs, it becomes very difficult to understand the purpose and function of these *heiau* in a social context. In addition, these particular *heiau* are located on military lands, therefore access to them is limited. However, the meaning of the place name

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<sup>219</sup> Genz, *Ka ‘ānani ‘au of Kūkaniloko*, 5.

<sup>220</sup> McAllister, *Archaeology of Oahu*, 134.



associated with this site may provide some insight. “Kalena” means “to radiate outwards, like the sun”; “Kā-lena” implies being “struck by yellow.” Both reference the astronomical positioning of the sun.



*Figure 4.1. Kolekole from Kapū‘ahu‘awa. To its right: Pu‘u Kūmakali‘i, Pu‘u Kalena, and Mauna Ka‘ala covered in clouds. Photograph by author, 2014.*

Indeed, if one was to study all the names of every *pu‘u* that surrounds Kapū‘ahu‘awa, there seems to be one major connecting factor: the rising and setting of celestial bodies. As the movement of the sun and the stars dictated the changing of the environmental and political seasons, it would have been imperative to track those movements. The study of *kilo lani*, *kilo*

*hōkū*, and *kilo helu* was essential to the proper function of society, and it is here at Kūkaniloko that those sciences were taught, making it a large center for celestial knowledge.

### ***SECTION III: KILO HOLO MOANA***

*Holo mai Kane mai Kahiki,  
Holo a i-a iloko o ke kai,  
Kekekeleau i ka moana,  
O Haumea ke kaikuahine,  
O Kanaloa ia me Kane,  
E kii e ka ia kea i kai,  
Laa i kuemaka o Kane,  
Laahia i ke kanawai,  
He mau lawaia i ka moana,  
O Kuheleimoana o Kuheleipo,  
E kaka ana i ka malie,  
I ka lai ku pohu malino,  
I na lai malino a Ehu,  
Hukia i ka upena luelue.  
E hoi kakou i ka uka,  
E alana i ka pu awa hiwa,  
Haawi i ke kaikuahine,  
Elua olua ko Haumea i ke keiki,  
I hanau i kana hiapo,  
O Kaulawena Konohiki Wawanakalana.<sup>221</sup>*

Kāne-i-ke-kōkala-loa: Kāne in the long dorsal spine. Kāne-i-ke-kōkala-iki: Kāne in the short dorsal spine. Kāne-i-ka-holoholo-kai: Kāne in the ocean sail. These and other names of the Kāne nomenclature indicate that Kāne was also an *akua* of long ocean voyages. Kamakau noted that Kāne, Kanaloa and Haumea traveled from Kahiki to Hawai‘i and were first seen and

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<sup>221</sup> Samuel Mānaiakalani Kamakau, "Ka Moololo Hawaii - Helu 24," *Ke Au Okoa* (Honolulu), March 31, 1870.

honored by Kūheleimoana and Kūheleipō, two fishermen off the coast of Ke‘ei, Kona.<sup>222</sup>

Notably, in the *mele* above, Kāne traveled in the form of a fish and was the navigator of currents (*ke kekele ‘au i ka moana*). In the Pele tradition, Kānekamohoali‘i was the navigator who assumed the form of a shark and guided the volcanic family to their home at Kīlauea.

*E Kanaloanuiākea,  
Kanaloa Haunawela,  
Kanaloa i ke ala mā‘awe ‘ula a ka lā,  
Kāne i ke ala ‘ula a ka lā . . .*<sup>223</sup>

*Oh great expansive Kanaloa,  
Kanaloa of the searing net  
Kanaloa of the red woven path of the sun,  
Kāne of the red path of the sun . . .*<sup>224</sup>

In this *mele* to Kanaloa (*akua* of the ocean), which speaks of the various *kinolau* and levels of ocean attributed to him, Kāne is also honored.<sup>225</sup> Kanaloa is mentioned in the lines above as a great net, and one who exists in a reddish path of the sun. Why? Kanaloa is the essence of the ocean - its depth, its seemingly limitlessness. The word “kana-loa” itself implies that there is a great expanse which almost seems to have no boundaries. One way of interpreting this *mele* is to view Kanaloa, the ocean, as a series of passages woven together, lit up by the sun

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<sup>222</sup> Kamakau, “Ka Moolelo Hawaii - Helu 24”.

<sup>223</sup> This *mele* was taught to me by *Kumu Hula* Pualani Kanaka‘ole Kanahale as part of an advanced chanting class in 2009. This *mele* comes from her family’s collection.

<sup>224</sup> My translation.

<sup>225</sup> In *mele* and *mo‘olelo*, Kāne and Kanaloa are often paired together. From an astronomical/navigational standpoint, Kāne is associated with the northern hemisphere and Kanaloa is associated with the southern hemisphere. Kāne is also associated with the east, where the sun rises, and Kanaloa with the west and the setting of the sun. Kanaloa is often associated with things of the *pō* (darkness, night) and Kāne with the *ao* (light, day).

which travels upon a burning path across the sky. Kāne is the navigator and Kanaloa is the pathway.

Kāne is also mentioned in many ocean chants because fresh water springs, *kinolau* of Kāne feed directly into the ocean - this is what caused marsh lands along the coasts which were plentiful in ancient Hawai‘i before the development of modern Hawai‘i. Kāne exists in the ocean as fresh water, and when that fresh water emerges from the spring directly into the ocean, it carries with it all the sediment and nutrients of the *lepo*, the earth. This action turns the water murky and reddish-brown - that **ala ‘ula**<sup>226</sup> in the ocean currents. Our *kūpuna* would often remark of the ocean as being the *kai pōpolohua mea a Kāne*, the reddish purple sea of Kāne.<sup>227</sup>

### Ho‘okele Wa‘a at Kapū‘ahu‘awa

As a **hālau ho‘ona‘auao**<sup>228</sup> to Kāne, it makes sense that the art of navigation was also taught within the Kūkaniloko complex. The previous chapter of this text discussed the importance of the Pōhaku Piko at Kapū‘ahu‘awa as a specific tool to study navigation by observing and tracking the stars. Another stone, which I will refer to as the “Navigator’s Chair,” is positioned at the south end of the **pā pōhaku**<sup>229</sup> and faces in a northwestern direction. Another *pōhaku* approximately forty feet in line with the Navigator’s Chair indicates the length of the

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<sup>226</sup> Reddish earth.

<sup>227</sup> The phrase “*Kai pōpolohua mea a Kāne*, the purplish-blue reddish-brown sea of Kāne” was used by Pukui & Elbert as an example to illustrate the meaning of the word “pōpolohua” - purplish-blue, as the sea. Pukui and Elbert, *Hawaiian Dictionary*, 34.

<sup>228</sup> A place of higher learning, scholarly contemplation and educational pursuit.

<sup>229</sup> Field of stones.

deck of a double-hulled canoe.<sup>230</sup> This configuration allowed students of navigation to learn and memorize the alignment of stars in relation to a canoe as the *wa'a* sailed to or from O'ahu.

### **Ko'iahi at Mauna Ka'ala**

As important as *ho'okele* or navigation is to our people, equally important is the making of a canoe which was done by a specific class of experts known as the *kahuna kālai wa'a*. Malo described a detailed and elaborate process of the selection of the appropriate tree to be carved. If the *kahuna* selected a tree and that night dreamt of a completely naked person, then the tree would be unsuitable for carving.<sup>231</sup> Once a proper tree was selected, several ceremonies were performed during the cutting process which included offerings of pigs, coconuts, red fish and *'awa*.<sup>232</sup> Prior to the hewing of the tree, the axe itself was prayed over:

Alaila, lalau ke kahuna i koi, pohaku, a kaumaha aku i ke akua, me ka i aku, e kupulupulu, kualanawai, kumokuhalii, kukaieie, kupalake, kukaohialaka, pau na [a]kua kane, alaila kahea i na [a]kua wahine, e lea, kapuaowalakai, e hoolohe mai oukou, i ke koi, o ke koi keia, e kuakua ana i ka waa, pau keia kaumaha ana.<sup>233</sup>

Then, the master grabbed the adze, made of stone, and made an offering to the *akua* by saying, "E Kūpulupulu, Kūlanawai, Kūmokuhāli'i, Kūka'ie'ie, Kūpalakē, Kūka'ōhi'alaka." When he was finished with the male deities, he then called upon the female deities, "E Lea, Kapuaalaka'i, heed the axe, this is the axe, which will hew the canoe," this was the end of the offering.<sup>234</sup>

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<sup>230</sup> Polynesian Voyaging Society, "Daily Life Aboard Hōkūle'a," Daily Life Aboard Hōkūle'a, accessed March 15, 2014, [http://pvs.kcc.hawaii.edu/ike/canoe\\_living/daily\\_life.html](http://pvs.kcc.hawaii.edu/ike/canoe_living/daily_life.html).

<sup>231</sup> Malo, *Hawaiian Antiquities*, 126.

<sup>232</sup> Ibid., 127.

<sup>233</sup> Davida Malo, *Ka Mo'olelo Hawai'i*, 36.

<sup>234</sup> My translation.

In referencing axes, Malo indicated that the stones used to make axes were of the following types: *ke-i*, *ke-pue*, *ala-mea*, *kai-ali'i*, *humu-'ula*, *pī-wai*, *'awa-li'i*, *lau kea*, and *mauna*. In his notes, Emerson included the *'alā* stones, adding:

*A-la* is the hardest and densest kind of basalt to be found on the islands. It is the stone from which the best axes are made. It seems unaccountable that Mr. Malo should omit this most important of all the stones from his rambling and very unsatisfactory list. If any stone might be considered to have escaped the melting action of Pele's fires by reason of its hardness it would certainly be this one. In the Maori language the same dark, close-grained basalt is named *ka-ra* and is used in making the finest axes.<sup>235</sup>

Whether or not Malo willfully dismissed the *'alā* stone as a source of adze material, it was clear that on O'ahu there existed a quarry of *'alā* stone within the Kūkaniloko complex. At the top of Mauna Ka'ala there existed a quarry named Ko'iahi which literally translates to "fire adze." This may indicate indeed that the adzes fashioned from this place were of hard dense stone that were able to cut through trees like fire. A resource such as this would have been essential to the ability to navigate the world's oceans.

#### ***SECTION IV: HULIHONUA A KUHIKUHI PU'UONE***

*He u-i, he ninau:  
E u-i aku ana au ia oe,  
Aia i-hea ka Wai a Kane?  
Aia i ka hikina a ka La,  
Puka i Hae-hae;  
Aia i-laila ka Wai a Kane.  
E u-i aku ana au ia oe  
Aia i-hea ka Wai a Kane?  
Aia i Kau-lana-ka-la, I ka pae opua i ke kai,*

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<sup>235</sup> Malo, *Hawaiian Antiquities*, 20.

*Ea mai ana ma Nihoa,  
 Ma ka mole mai o Lehua;  
 Aia i-laila ka Wai a Kane.  
 E u-i aku ana au ia oe,  
 Aia i-hea ka Wai a Kane?  
 Aia i ke kua-hiwi, i ke kua-lono,  
 I ke awawa, i ke kaha-wai;  
 Aia i-laila ka Wai a Kane.  
 E u-i aku ana au ia oe,  
 Aia i-hea ka Wai a Kane?  
 Aia i-kai, i ka moana,  
 I ke Kua-lau, i ke anuenue,  
 I ka punohu, i ka ua-koko,  
 I ka alewa-lewa;  
 Aia i-laila ka Wai a Kane.  
 E u-i aku ana au ia oe,  
 Aia i-hea ka Wai a Kane?  
 Aia i-luna ka Wai a Kane,  
 I ke ouli, i ke ao eleele,  
 I ke ao pano-pano,  
 I ke ao popolo-hua mea a Kane la, e!  
 Aia i-laila ka Wai a Kane.  
 E u-i aku ana au ia oe,  
 Aia i-hea ka Wai a Kane?  
 Aia i-lalo, i ka honua, i ka Wai hu,  
 I ka wai kau a Kane me Kanaloa—  
 He wai-puna, he wai e inu,  
 He wai e mana, he wai e ola,  
 E ola no, e-a!<sup>236</sup>*

Kāne-i-ka-papa-honua. Kāne-huli-honua. Kāne-noho-pali-luna. Kāne-noho-pali-lalo.

Kāne-lū-honua. These names along with many more describe elemental forms of Kāne associated with the earth. Kāne is predominantly associated with the atmospheres of the sky and the outer universe, but is in fact also connected to the inner workings of the earth itself. For as there is a Kānehoalani a sun to shine down upon the earth, there is also a Kānelūhonua a sun

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<sup>236</sup> Nathaniel B. Emerson, *Unwritten Literature of Hawaii: The Sacred Songs of the Hula*, Facsimile Paperback ed. (Hilo, HI: Edith Kanaka'ole Foundation, 2006), 257-258.

within the earth itself. The earth's core - a burning, flaming, round mass of gas which melts rock and creates hot magma which oozes through fissures and explodes upon the earth as *pele*, lava.

The *kahuna* or experts of Kāne were not only concerned and well-versed with matters of the sun and the stars, but they were also quite adept at the movement and form of the earth itself. These men (counterparts to the women of the Haumea knowledge of Papahānaumoku, Papahulilani, and Papahulihonua) were trained geologists, geographers, and architects.

The chant featured at the beginning of this section, “*Ka Wai a Kāne*” is a perfect example of this knowledge. Each verse of this *mele* begins with a question: *Aia i hea ka wai a Kāne?* Where are the waters of Kāne? Each verse then begins listing places where that water can be found: in the East, in the West, in the clouds, in the mountains, rivers and streams, in the oceans.

In the context and prose of this chant, *Ka Wai a Kāne* also speaks of the hydrologic cycle of water as it was understood by the *kahuna*. Verses 1 and 2 speak of the waters of Kāne being in *ka hikina a ka lā puka i Ha'eha'e*, and in the *Kaulanakalā i ka pae 'ōpua i ke kai*. Our *kūpuna* understood that plants and animals breathe, and that when the sun rises, the heat from the sun causes transpiration within plant cells which is then evaporated into the atmosphere forming clouds. When the sun comes out, animals begin to sweat under its heat. Our sweat evaporates as well and is carried up into the clouds. This daily cycle of the sun and its interaction with plant and animal life is essential to the creation of water.

Verses 3 and 4 speak of the precipitation phase of the hydrologic cycle. *Aia i ke kuahiwi, i ke kualono, i ke awāwa, i ke kahawai*. When clouds interact with land, water molecules are released, creating rivers and streams that course through the landscape and eventually feed into the ocean. *Aia i kai, i ka moana, i ke kualau, i ke ānuenue, i ka pūnohu, i ka ua koko, i ka*



*‘ālewalewa*. Once in the ocean, the sun heats the water again causing all sorts of phenomena due to evaporation: ocean rain showers, rainbows, rising ocean mists, sprays hued in red caused by sunlight shining through, high water content in the upper atmospheres.

The final two verses remind us that fresh water is stored both above and below. *Aia i luna ka wai a Kāne, i ke ao uli, i ke ao ‘ele‘ele, i ke ao panopano, i ke ao pōpolohuamea a Kāne*. Water molecules build up in the form of clouds, and as those clouds move higher and more water molecules accumulate in the clouds, they seem to begin to turn dark. They become dark blue clouds, black clouds, blue-black clouds, and even to some extremes they become purplish-blue with tinges of red and brown. *Aia i lalo, i ka honua, i ka wai hū, i ka wai kau a Kāne me Kanaloa, he wai puna, e wai e inu, he wai e mana, he wai e ola*. Our *kūpuna* understood that some of the water as it comes down in the streams and rivers seeps into the ground and becomes part of a water table. These fresh waters are accessible as springs. In various *mo‘olelo*, it is Kāne and Kanaloa that create these springs.

Knowledge of water, its properties and how it flows within the natural environment is essential to the survival of any species on this planet. One would need to know where to find water and how to harness it to sustain the life of an entire society.

### **Ka Pōhaku Mokupuni ma Kapū‘ahu‘awa**

Among the many pōhaku situated at Kapū‘ahu‘awa is a very distinct one in the shape of the island of O‘ahu. The stone is buried deep into the ground indicating that it probably has been in this position for centuries. The outer edges of the pōhaku delineates the shores of O‘ahu, and its raised edges distinguish the ridge lines of the Ko‘olau and Wai‘anae Mountain ranges. This

stone serves as a map of the island and was perhaps used for varied purposes. As a gnomon, the sun casts shadows along this stone throughout the year which correspond to its rising and setting along certain *pu 'u* both on the *pōhaku* and on the corresponding mountains themselves. As a map, this *pōhaku* would have been an essential tool to learn the geographical layout of the island. It is noteworthy that at the center of the stone, where Kūkaniloko would be located on the island, is a bowl-like depression that contains several *kahaki 'i pōhaku* or petroglyph markings. *Kahu* Tom Lenchanko indicates that these markings may give the layout of the **kūlanakauhale**<sup>237</sup> of Mā'ilikūkahi,<sup>238</sup> which will be discussed later in this chapter, as well as the celestial pathways of the heavens.

Kamakau indicated that the *kuhikuhi pu 'uone* were the architects, the builders of the *heiau*.<sup>239</sup> However, they were also the architects of any major building project. They were the experts who knew the appropriate places to build terraces for **lo'i kalo**<sup>240</sup> or where to construct a **kauhale**.<sup>241</sup> They were the designers of all major land projects, ensuring that the structures were built to stand the test of time and be physically aligned to the movement of the earth and sky.

These highly trained men and women would also need to have an intimate understanding of the geologic formation of the island, so that they could instruct the people on where the water

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<sup>237</sup> Village, town, city. Pukui and Elbert, *Hawaiian Dictionary*, 179.

<sup>238</sup> *Voices of Truth*.

<sup>239</sup> Kamakau, *The Works of the People of Old*, 130.

<sup>240</sup> Irrigated terrace, especially for taro, but also for rice; paddy. Pukui and Elbert, *Hawaiian Dictionary*, 209.

<sup>241</sup> Group of houses comprising a Hawaiian home. *Ibid.*, 136.

ways and the natural springs could be found. Construction of a *lo'i* or a *kauhale* was not only a matter of knowing where a river was, and building the *kauhale* next to the river, the *kahuna* also needed to know the slope of the land and the chemical composition of the water in the river or the spring in order to feed the water properly into an **'auwai**<sup>242</sup> system leading to a complex *lo'i* system to ensure the delivery of proper nutrients to the crops and fish located within that system. Essentially, the *kuhikuhi pu'uone* were experts in hydrology and engineering as well.



*Figure 4.2. The Pōhaku Mokupuni at Kapū'ahu'awa. Photograph by author, 2013.*

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<sup>242</sup> Ditch, canal. *Ibid.*, 33.

The study of *papahūhōnua* and *kuhikuhi pu‘uone* was multi-layered and complex. It is probable that the *pōhaku mokupuni* at Kapū‘ahu‘awa allowed students of these sciences to gain an understanding of the physical geography and alignment of the island before being sent out into the field to complete the work.

### ***SECTION V: LAPA‘AU***

*Hoeueu mai ana o Kane ia‘u  
Aloha oe e Hiiaka, i ka wai hana a ka palai  
I haua i ka ihu o ka puaa  
I molia i ka pu-awa hiwa  
He ma‘u uku ia ia oe, e Kane  
Eia ka wai la —  
Ola loa no hoi.<sup>243</sup>*

Kāne-i-ka-wai-ola. Kāne of the living waters. Kāne-ka-pō-lei. Kāne of the encircling night. These were forms of Kāne associated with medicine. Life was sacred to Kāne, and as such, intentional killing for the purpose of human sacrifice was not allowed in Kāne practices.<sup>244</sup> Conversely, Kāne was often sought out to heal and revive the terminally ill. This *mele* was one of the many prayers chanted by Hi‘iakaikapoliopole in order to revive her sister’s lover, Lohi‘au. It was a plea to Kāne to aid Hi‘iaka in the process of bringing Lohi‘au back to life using a variety of medicinal herbs.

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<sup>243</sup> Joseph Moku‘ōhai Poepoe, "Ka Moololo O Hiiakaikapoliopole: Ka Wahine I Ka Hikina a Ka La, Ao Ka Ui Palekoki Uwila O Halema‘uma‘u," *Ka Na‘i Aupuni*, March 10, 1906.

<sup>244</sup> Fornander, *Fornander Collection of Hawaiian Antiquities and Folklore*, vol. 6, 266.

## Po‘amoho

**Lā‘au lapa‘au**,<sup>245</sup> particularly lā‘au that pertained to **ho‘ohānau keiki**<sup>246</sup> was practiced and perfected at Kūkaniloko. According to *kahu* Lenchanko, the *ali‘i wahine kapu* would be brought to a residence in Po‘amoho, a short distance from Kapū‘ahu‘awa for a period of 7-10 days before and after she was to give birth.<sup>247</sup> While she was there, the *ali‘i wahine kapu* would be given medicines to ease the opening of the birth canal and to provide the body with additional lubrication to make the child’s birth as painless as possible. Kamakau discussed these *lā‘au*:

I ka hapai ana o na‘lii a me na keiki punahele, a hiki i ka hiku a me ka walu o na ku, alaila, kii ka hoopahee, he wale mamaki paha he wale kikawaioa paha, he wale palau paha, a he wale hau paha, alaila, hoohainu pinepine i ka apu ka wahine hapai, o ke kumu o keia pahee ana i na wahine hapai keiki, i ole e eha i ka manawa e hanau ai i ke keiki, a ewalu a eiwa no ku aole e hiki i ka puni, alaila, o ka hanau no ia o ke keiki me ka eha ole o ka makuahine i ke nahu a me na kuakoko hoi i ka pilikia, a o na keiki i hoopahee ia, aole e ike ka makuahine i ka eha o ka hanau keiki ana, aole hoi e like me na leo kumakena e uwe ai me ka pilikia.<sup>248</sup>

When the chiefesses or the favored daughters became pregnant, and when they had reached seven or eight months of pregnancy, then, the “slippery” medicine was gathered; the sap from the mamaki perhaps, or the sap from the kikawaioa, or maybe the sap from the palau, or even the sap from the hau; then, it would be fed [in liquid form] often in a small cup to the pregnant woman, and this is the reason for giving this slipperiness to the pregnant mother - so that the moment of birth would not be painful; and when she was in her eighth or ninth month of pregnancy, but not at the end of her term, the child could be born with no pain to the mother from either contractions or birthing pains. As for the child who had

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<sup>245</sup> Medicine. Pukui and Elbert, *Hawaiian Dictionary*, 188, 194.

<sup>246</sup> Delivery of children. *Ibid.*, 56. See *hānau*.

<sup>247</sup> *Voices of Truth*.

<sup>248</sup> Samuel Mānaiakalani Kamakau, "Ka Moololelo Hawaii - Helu 38.," *Ke Au Okoa* (Honolulu), August 25, 1870.

been slid, the mother would not notice any indication of pain during the birth, nor go through any wailing caused by difficulty of the birthing process.<sup>249</sup>

Perhaps then, this waiting process at Po‘amoho was even longer than a few days. As Kamakau discussed, the process and residency of the *ali‘i wahine* in Po‘amoho could have started as early as the seventh or eighth month of pregnancy to prepare for a smooth birth at Kapū‘ahu‘awa. Hence the meaning of “Kūkaniloko” - “to anchor the cry from within” became an appropriate and critical reflection of that intended process.<sup>250</sup>

### Ho‘olonopahu Heiau

A few hundred yards from the **pōhaku hānau**<sup>251</sup> ‘o Kūkaniloko was the **waihau**<sup>252</sup> of Ho‘olonopahu. It was here where Kamakau indicated that the newly born child and his/her mother were taken immediately after birth to be cleansed and the cutting of the umbilical cord was to be witnessed by forty-eight **ali‘i nui**.<sup>253</sup> Upon witnessing this procedure, the drums (hence the meaning of the name Ho‘olonopahu referring to the sounding of the drums) were struck, announcing the birth of the *ali‘i* child:

I ka hemo ana o ke keiki, e lawe koke ia iloko o ka waihau o Hoolonopahu;  
malaila na’lii he 48, ia lakou ka hooponopono o ke keiki, a moku ka piko, aia ma

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<sup>249</sup> My translation.

<sup>250</sup> *Voices of Truth*.

<sup>251</sup> Birth stone.

<sup>252</sup> A heiau where hogs, bananas, and coconuts were sacrificed, but not human beings; a heiau for *mo‘o* [lizard] spirits. Pukui and Elbert, *Hawaiian Dictionary*, 378. Waihau are sometimes ascribed to Lono, the akua of agriculture, but I believe they were also ascribed to Kāne, as *mo‘o* are also associated with Kāne.

<sup>253</sup> High chiefs. *Ibid.*, 20.

ka aoao hema o Kukaniloko he segatia me hapa. Mai Kukaniloko aku ma ke komohana elua segatia, aia malaila ka pahu kapu o Hawea e kani ai. He hoailona no ke Alii.<sup>254</sup>

When the child was removed, it was immediately taken into the *waihau* of Ho‘olonopahu; there were 48 chiefs who took care of the child, severing the umbilical cord, two and half furlongs (approx. 550 yards) southward of Kūkaniloko. From Kūkaniloko, two furlongs (approx. 440 yards) west, there the sacred drum Hāwea would sound. It was the sign of a Chief.<sup>255</sup>

Although this was certainly the practice prescribed under the Kapu Līloe for royal births, I do not believe that Ho‘olonopahu and the residence at Po‘amoho were strictly used only for the births of the highest of *ali‘i*. The Kapu Līloe was very specific and restrictive as to what must occur in order for the child to be born at Kūkaniloko and to receive the afforded **kapu**,<sup>256</sup> but it does not make sense that the *ali‘i* of Kūkaniloko would erect an entire *heiau* explicitly for that purpose.

Throughout history, *heiau* have been used for multiple purposes whether in times of war or peace. It has been argued that the *pōhaku* at Kapū‘ahu‘awa were utilized in a variety of different ways. Similarly, I also believe that Ho‘olonopahu was used for more than the cutting of **piko**<sup>257</sup> of keiki *ali‘i*. With skilled doctors and nurses available at both Ho‘olonopahu and Po‘amoho, it would seem more likely that these two places functioned as hospitals and clinics for the *ali‘i* who lived in the nearby areas of Kaukonahua, Halemano and Waipi‘o. It would not make sense to open the *heiau* or the residence only in times of birthing. That would be a waste

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<sup>254</sup> Kamakau, "Ka Moolelo O Hawaii Nei. Helu 8."

<sup>255</sup> My translation.

<sup>256</sup> Taboo, prohibition; special exemption from ordinary taboo; sacredness. Pukui and Elbert, *Hawaiian Dictionary*, 132.

<sup>257</sup> Navel, navel string, umbilical cord. *Ibid.*, 328.

of space and time. The men and women who worked and lived in these spaces were highly trained individuals who were adept at saving lives and promoting a healthy lifestyle. Additionally, students of *lā'au lapa'au* would need practice and real-life experience before they would be qualified enough to handle a child born under the Kapu Līloe. Perhaps then, Ho'olonopahu and the residence at Po'amoho functioned more broadly as centers of prenatal care and pediatric medicine.

## **SECTION VI: KŪPALE KAUA**

*E Kauilanuimakehaikalani e!*  
*E Kamohoalii*  
*E Kahuilaakalani*  
*E Kaekaokalani*  
*E ke ao loa, e ke ao poko*  
*E ke ao hoopua i ka lani*  
*E ka ohu kolo mai i uka*  
*E ka oho kolo mai i kai*  
*E Kane iluna, e Kane ilalo*  
*E Kane loa, e Kane poko*  
*E ola hoi kau pulapula*  
*E ka opua nui, e ka opua iki*  
*Haiki ka opua e —*  
*Ua e—! Ua la—!*  
*E ka ua, e ka La,*  
*E kukuna o ka La i Ha'eha'e*  
*E iho e ka u—a*  
*Iho mai ana i lalo nei i o'u nei*  
*I ola ka pulapula i puka i ke ao*  
*E ola e—! A ola la—!*<sup>258</sup>

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<sup>258</sup> Joseph Moku'ōhai Poepoe, "He Moololo No Hiiakaikapoli-o-Pele," *Ka Na'i Aupuni*, August 13 & 16, 1906.



Although not usually associated with matters of war and the use of force, Kāne was often invoked during war times to seek protection for those who may have deemed it necessary to use warlike tactics. Kānehekili, Kānepōhāka‘a, Kānekauilanuimākēhāikalani - these were all forms of powerful celestial phenomena of thunder and lightning which were often placated during times of battle by our *kūpuna*.

### Kāne as a Protector

In the *mo‘olelo* of Hi‘iakaikapoliopole, youngest sister of Pele, Hi‘iaka encountered a large **mo‘o**<sup>259</sup> named Pana‘ewa who tried to impede upon her task to fetch Lohi‘au, with intentions to destroy her. In the *mele* above, Hi‘iaka called out to her siblings Kānekauilanuimākēhāikalani, Kānekamohoali‘i, Kānekauluakalani, and Kāneka‘ekaokalani to provide her with the ability to subdue Pana‘ewa in battle.<sup>260</sup> She summoned the elemental forms of Kāne: the lightning, the rain, the clouds, and the wind to protect and guide her through the difficult task.

In their book, *Lua: the Art of the Hawaiian Warrior*, **lua**<sup>261</sup> masters Richard Paglinawan, Mitchell Eli, Moses Elwood Kalauokalani, and Jerry Walker write:

Before Pā‘ao’s arrival, Hawaiians had no war god, but worshipped Kāne, the god of creation, Kū and Hina, and later Lono, all gods of agriculture and healing . . .

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<sup>259</sup> Lizard, dragon, serpent. Pukui and Elbert, *Hawaiian Dictionary*, 253.

<sup>260</sup> Poepoe, "He Moolelo No Hiiakaikapoli-o-Pele."

<sup>261</sup> A type of dangerous hand-to-hand fighting in which the fighters broke bones, dislocated bones at the joints, and inflicted severe pain by pressing on nerve centers. Pukui and Elbert, *Hawaiian Dictionary*, 213.

When the priest Pā‘ao arrived in Hawai‘i, he introduced the war god Kūkā‘ilimoku, the personified war aspect of Kū.<sup>262</sup>

I am uncertain whether I agree completely with this statement, as it has already been stated earlier that Kāne and his progeny were in fact called into battle during the time of Pele mā.

However, Pā‘ao does bring the practice of human sacrifice and attributes that action to Kū.

When Kū as a force for war comes into the consciousness of our *kūpuna*, a specific type of *heiau* was built - the *luakini*. The rules of Kū and this type of *heiau* were so strict that human sacrifice was needed.<sup>263</sup>

To Kāne and the *ali‘i* of Kūkaniloko who followed a Kāne practice, life was sacred and unnecessary bloodshed was strictly forbidden. To defend oneself and one’s *‘āina* was one thing, but to willfully plan an attack upon a people which lead to a massacre was quite another matter entirely. Kamakau wrote of Mā‘ilikūkahi’s rise to power:

He alii pono ole keia, a he alii aua no hoi. Aohe hoi he malama i na’lii a me na makaainana. A no keia mea, kipi iho la na’lii ia ia, a kua iho la. O Haka hoi, ua noho aku oia maluna o ka puu kua o Waewae, aia ma Lihue. O ke keiki kiai puu nae, ua ohumu oia i kona hooneleia i ka haawina waiwai, nolaila, kuko iho la ke keiki e make ua ‘lii nei. I ka hiki ana nae i ko ia nei manawa kiai o ke aumoe, ua pauhia loa nae ke alii i ka hiamoe nui, a me ka poe koa no hoi. Kahea mai la hoi ua keiki nei penei: “E Haka, E Haka, E Haka, Hiamoe. Pii mai elua e, waiho a ka lua e, pii mai hoi ekolu e, waiho a ke kolu e, pii mai eha e.” E pii mai ana na’lii olalo a me na koa, paapu olalo o ka hulili. O Haka wale no ka mea i make.<sup>264</sup>

This was an unruly chief [referring to Haka], and indeed a selfish chief as well. He had no care for the chiefs and the commoners. And for this reason, the chiefs rebelled against him, and sought to do battle against him. As for Haka, he lived

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<sup>262</sup> Richard Kekumuikawaiokeola Paglinawan et al., *Lua: Art of the Hawaiian Warrior* (Honolulu: Bishop Museum Press, 2006), 13-14.

<sup>263</sup> Malo, *Hawaiian Antiquities*, 160.

<sup>264</sup> Kamakau, "Ka Moolelo O Hawaii Nei. Helu 11.," *Ka Nupepa Kuokoa*.

on top of the war hill known as Waewae, which was in Līhu‘e. However, the young hill guardian, he grumbled having never receiving any resources, and therefore, had a great desire to kill the aforementioned chief. When it was time for the young guard to assume guard in the middle of the night, the chief had fallen into a deep slumber, along with his warriors. The young child called out thus: O Haka, O Haka, O Haka, Sleep. Two climb, the second stay behind, three ascend, the third stay behind, four come up.” The chiefs below were climbing up with warriors, the bottom of the fortress was crowded. But, only Haka was the one who died.<sup>265</sup>

When Kāne was associated with the *kālaipahoa* or poison deity in his elemental forms of Kāne-kaulana-‘ula or as Kāne-i-ka-huila-o-ka-lani, he was prayed to as a protective entity rather than an *akua* who promoted massacre of life for personal gain.<sup>266</sup>

### **Kūpale Kāua at Kūkaniloko**

I would argue that the arts of *kūpale kāua* or defense were indeed taught at Kūkaniloko. One of the very first laws Mā‘ilikūkahi decreed when he came to power as *Ali‘i Nui* of O‘ahu was that all the first-born children of all the families of O‘ahu should be his children to raise. Kamakau wrote:

Eia ka‘u kauoha i na‘ii me na kaukualii me puali alii me ka puali, a me na makaainana - O na keiki makahiapo a pau loa - na‘u e hanai, a o ka‘u poe keiki ia, ia‘u ka malama. . . Mai Halahape a Oahunui, oia ke kulanakauhale o Mailikukahi. A malaila i hanai iho ai oia i na keiki makahiapo a na makaainana me na‘Lii. . .<sup>267</sup>

Here is my command to the chiefs, the lesser chiefs, the warrior chiefs, the warriors, and the commoners - All the first-born children shall be mine to raise, as

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<sup>265</sup> My translation.

<sup>266</sup> In fact, Kamakau wrote that at up until the time of Peleioholani, “It was kapu to use Kalaipahoa for sorcery or for praying to death (*hana ‘ino a me ka ‘ana‘ana*).” Kamakau, *Ka Po‘e Kahiko*, 131.

<sup>267</sup> Kamakau, "Ka Moolelo O Hawaii Nei. Helu 12.," *Ka Nupepa Kuokoa*.

my own children to care for . . . From Halahape to O‘ahunui, that was the city of Mā‘ilikūkahi. And it was there that he raised the firstborn children of the commoners and the chiefs.<sup>268</sup>

*Kūpale kaua* was one of the skills that Mā‘ilikūkahi taught to all of these children:

Ua hoonoho aku o Mailikukahi i na kumu lonomakaihe na na keiki makahiapo, kela kumu ike keia kumu ike ma ka lakou Oihana.<sup>269</sup>

Mā‘ilikūkahi gathered experts in spear-throwing to teach the first-born children, teaching them every little bit of knowledge of their craft.<sup>270</sup>

### **The Lua Masters of Līhu‘e**

Līhu‘e is the name of the region which encompasses the uplands of the Wai‘anae side of Wahiawā.<sup>271</sup> According to field notes by John F.G. Stokes, the Līhu‘e area was known for its *lua* practitioners:

The place where the young students, who were studying art of war, would go, and wait for people and practice the Lua on them; the lua was the art of dislocating joints and replacing them; all along the plains of Leilehua, students would lay in wait for travelers to practice on. (Lihue)<sup>272</sup>

Even the name itself “Līhu‘e,” gives an image of the cold chill of battle, which was often alluded to in *mele* commemorating chiefs in war. Interestingly, as “Līhue,” the new meaning

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<sup>268</sup> My translation.

<sup>269</sup> Kamakau, “Ka Moolelo o Hawaii Nei. Helu 12.”

<sup>270</sup> My translation.

<sup>271</sup> Abraham Fornander, *Fornander Collection of Hawaiian Antiquities and Folklore*, trans. Thomas G. Thrum, vol. 5 (Honolulu: Bishop Museum Press, 1919), 274, footnote 2.

<sup>272</sup> Elspeth P. Sterling and Catherine C. Summers, *Sites of O‘ahu* (Honolulu: Bishop Museum Press, 1978), 135.

also has connotations of *lua*, as “līhue” means “to observe stealthily.” This *mana ‘o* would match the notes given by Stokes of the *mo ‘olelo* of Leilehua, a section of the Līhu‘e region.<sup>273</sup>

In addition to these accounts, the physical land features within and around the Līhu‘e region possess names that may allude to connections to defense capabilities and training within that region.

### **Ka‘ala, Kālena & Hale‘au‘au**

Mauna Ka‘ala is the highest peak of O‘ahu at 4,020 feet. In her notes, Pukui offered:

Kaala - (an archaic word) can mean — Lizard — widow or widower — (forbidding aspect, aloof, not friendly) — This latter may be the meaning that applies.<sup>274</sup>

When searching for a *mana ‘o* of this name in *Place Names of Hawai‘i*, none is given by Pukui, Elbert, or Mo‘okini. This may certainly correlate with the age of this name. Therefore, it may be impossible to know its exact origin. However, in a discussion relating to *kūpale kaula*, “Kā-‘alā” could be interpreted as “to strike with ‘alā stones.” As previously mentioned in Section Three of this chapter, there was once a quarry of *pōhaku ‘alā* named “Ko‘iahi” on top of Mauna Ka‘ala. “Ko‘iahi” refers to a “fire adze,” or how the stones of the place cut like a fiery adze. Would it also be possible then, that since one major skill of *kaula* is *ma‘a ‘alā* or stone slinging, that the people who lived in this area of Ka‘ala were skilled fighters in *ma‘a ‘alā*?

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<sup>273</sup> Sterling and Summers list the *mo ‘olelo* presented by Stokes as “Leilehua Plains,” although Stokes’ notes also indicate this information relates to Kolekole Pass and Līhu‘e as well.

<sup>274</sup> M.K. Pukui, June 1954, quoted in Elspeth P. Sterling and Catherine C. Summers, *Sites of O‘ahu* (Honolulu: Bishop Museum Press, 1978), 133.

Pu‘u Kālena, the peak just south of Ka‘ala, could very well also have been an area where *lua* or hand-to-hand combat was studied. It was previously mentioned that the term “kā-lena” could refer to being “struck by yellow.” Pukui and Elbert also indicate that the term “kalena” refers to a *lua* fighting stroke. McAllister mentioned that a *heiau* was situated in the gulch just below Pu‘u Kālena. Although McAllister did not record the classification or purpose of this *heiau*, it could be possible that references to “striking” within the terms *kalena* and *kālena* speak to the existence of a center of *lua* located in the vicinity.

Directly west of Kapū‘ahu‘awa, below Ka‘ala, is the *awāwa* or valley of Hale‘au‘au. Pukui, Elbert, and Mo‘okini define “hale‘au‘au” as “bathhouse.”<sup>275</sup> However, in *mele* and *mo‘olelo* of great warriors, references to ‘au‘au and wai ‘au‘au take on a whole new meaning. Fornander provided a *mo‘olelo* of the O‘ahu warrior Pe‘ape‘a:

A hiki o Peapea i kahi o ka poe kaua o Kahahana, komo aku la o Peapea i loko o na kanaka, o kona manawa ia i puni ai i ka lehulehu. Ia wa, o ka ihe, ka pololu, ke kuia, ka laau palau, nou ka pohaku, maa ka mea maa, hahau ka laau, aka he wai auau ia no Peapea, a he mea ole ia i kona ikaika nui. Pela no kona hele luku ana a hiki i Luakaha, a Nuuanu.<sup>276</sup>

When Pe‘ape‘a reached the warriors of Kahana, Pe‘ape‘a entered into the fray, at which time he became surrounded by the masses. In that moment, the spear, the long spear, the dagger, the war club; stones were thrown, stones were slung, clubs were struck, but all of these things were bath waters to Pe‘ape‘a, and nothing compared to his great strength. Thus he continued his massacre up into Luakaha, in Nu‘uanu.<sup>277</sup>

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<sup>275</sup> Pukui, Elbert, and Mookini, *Place Names of Hawaii*, 36.

<sup>276</sup> Fornander, *Fornander Collection of Hawaiian Antiquities and Folklore*, vol. 5, 462.

<sup>277</sup> My translation.

In this context, the throwing of spears and various forms of battle were highly ineffective and appeared to be more like mere bathing waters or *wai 'au 'au* to skilled opponents. Perhaps then, “Hale‘au‘au” is a reference to the “bathing house” as a center of training in spear parring or dodging. The definition of Hale‘au‘au as “bathhouse” may certainly be a reference to all the sources of water that existed there at one point in time. However, because of Hale‘au‘au’s location just below Mauna Ka‘ala with its *pōhaku 'alā* quarry, its proximity to Kālena and Līhu‘e, and this additional interpretation of the term *'au 'au*, it is certainly plausible to assert that Hale‘au‘au and these other areas within the Kūkaniloko complex were the centers of *kūpale kaua* that Mā‘ilikūkahi brings together in his *kūlanakauhale*.

### **Kūpale Kaua on O‘ahu**

Mā‘ilikūkahi was very wise to train all the first-born children in the art of *lua*, because when the chiefs of Maui and Hawai‘i heard of what Mā‘ilikūkahi had done, they attempted to invade O‘ahu. Kamakau wrote:

Manao iho la o Hilo, ke keiki a Hilokapuhi, me Hilo a Luukapu me Punaluu,  
na‘lii o Hawaii, me Luakoa ke Alii o Maui, e holo mai e kaua me Mailikukahi.  
Ua holo mai lakou a pae i Waikiki, a hiki i Kapuaikaula, ka piha i na waa . . . I ka  
pii ana iuka, ua puni o hope i ke kaua oki; i ka hee ana i na keiki hanai a  
Mailikukahi. O na‘Lii o Hawaii me Maui, ua make o Punaluu i ke kula, oia ke  
kula o Punaluu; a ua kipapaia ka heana i kahawai. Ua kapaia o Kipapa; a o ke  
koena, ua lukuia a hiki i kai o Ewa, i Waimano, kini kahawai, he lau ka mano. Ua  
okia ke poo o Hilo ma, a ua lawe ia i Honouliuli, oia o Poohilo.<sup>278</sup>

Hilo, the child of Hilo-kapuhi, Hilo, Luukapu, and Punalu‘u, the chiefs of  
Hawai‘i, with Luakoa the chief of Maui, went to war with Mā‘ilikūkahi. They  
sailed and landed, from Waikīkī to Kapua‘ikāula, it was filled with canoes . . .  
When the battle began inland, the rear was cut off, fleeing because of the adopted

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<sup>278</sup> Kamakau, “Ka Moolelo O Hawaii Nei. Helu 12.”

children of Mā‘ilikūkahi. Of the chiefs of Hawai‘i and Maui, Punalu‘u died upon the plains, which was named for him, Punalu‘u;<sup>279</sup> and the bodies were packed tightly together in the river. It was called Kīpapa; and as for the rest, they were massacred all the way down to the ocean of ‘Ewa; at Waimano, the rivers were filled, hundreds and thousands of men. The heads of Hilo and his entourage were severed, and taken to Honouliuli, to a place now known as Po‘ohilo.<sup>280</sup>

It was not the custom of the chiefs of Kūkaniloko to invade other islands, at least not during or prior to the time of Mā‘ilikūkahi, but rather to ward off invaders who encroached upon the sands of O‘ahu. This was perhaps because of their practice of Kāne rather than Kū in matters of war. Take Kamehameha’s war god, Kūkā‘ilimoku, for example: *kā‘ili* means “to snatch, grab, take by force, seize, abduct, usurp.”<sup>281</sup> *Kahu* Lenchanko indicates that this kind of action is perhaps why Kamehameha was unable to have his sacred child Liholiho born at Kūkaniloko.<sup>282</sup> For the *kahuna* of Kūkaniloko, life was sacred and unnecessary bloodshed was forbidden. As indicated at the beginning of this section, Kāne was viewed as a protective entity invoked in defense rather than seizure. This was the decree of the Kūkaniloko chiefs and their *kāhuna*.<sup>283</sup>

## ***SECTION VII: HE HA‘INA***

*Nani Kaala, he kiowai na ke kehau,  
Ke linoa mai la no e ka po‘e o Lihue,*

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<sup>279</sup> Kahu Lenchanko indicates that Punalu‘u is roughly located where Mililani Mauka exists today. Lenchanko and Kalimapau, interview.

<sup>280</sup> My translation.

<sup>281</sup> Pukui and Elbert, *Hawaiian Dictionary*, 116.

<sup>282</sup> Lenchanko and Kalimapau, interview.

<sup>283</sup> *Ibid.*



*O ka lena ma no i hale auau.  
Auana ka lae o Maunauna i ke kula,  
I ke kula wale la o Waialua.  
He mea e no ka noho a Puaena.  
Maika 'i wale ke kaha ia o Maeaea,  
Ea mau ole ke kai la e Moku-paoa,  
I paoa no oe he maunu ai ole  
I laka no ka uku i ka pakali  
E kali a'e ana i ka hoa la o ke anu,  
Ka hoa kuka olelo o ka po me ke ao,  
E a'o a'e ana ka hana a ka makua,  
Ka hana kauoha mai na kupuna mai.<sup>284</sup>*

Kūkaniloko is much more than the one hundred and eighty *pōhaku* that reside in the designated five acres it has been limited to outside of Wahiawā Town. Kūkaniloko should be observed, not as a “birthstones monument,” but as a much larger space - a center for education of several disciplines of ancient Hawaiian knowledge that were maintained and shared by the *kāhuna* of the entire *kalana* complex. Through the use of *ka 'ānani 'au*, our kūpuna demarcated and established a large complex of *hālau* stretching some 36,000+ acres across O‘ahu focused on the education of our leaders through various sciences and skill sets needed to maintain a flourishing society.

From at least 760 AD, one of the primary functions of Kūkaniloko was to birth the island’s highest *ali 'i*. In the final chapter of this thesis document, all the pieces of the puzzle will be brought together in a discussion of the *Lō Ali 'i*, the chiefs who maintained the *kapu* of Kūkaniloko as an educational stronghold at the center of the island of O‘ahu, creating an environment that was held in high esteem by Hawaiian society for centuries.

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<sup>284</sup> "Nani Kaala, He Kiowai Na Ke Kehau," in *Hawaiian Ethnological Notes*, comp. Joseph S. Emerson, vol. 3 (Honolulu: Bishop Museum), 194.

## CHAPTER V: E MAU ANA

### SECTION I: NĀ ALI'I LŌ

In referencing the term “ali'i,” Kamakau stated that not all *ali'i* were of equal rank. Each *ali'i* was “classified according to their birth and the height at which each *ali'i* stood, *ka nu'u i kū ai*, that is, his status was clear.”<sup>285</sup> Kamakau documented many commonly understood ranks throughout Hawaiian history: *Ali'i Nī'auipi'o*, *Ali'i Pi'o*, *Ali'i Naha*, *Ali'i Wohi*, etc. However, he also included the ranking termed “Lō Ali'i.” About the *Lō Ali'i*, Kamakau wrote:

Papa 5. Lo Alii. -- Ua kapa ia na Alii o Lihue o Wahiawa a me Halemano. No ka noho mau ana o na'lii o keia mau wahi me ka malama i ko lakou mau kapu; me he Akua la, me ka ike ole ia, ku e kanaka. Ua kapaia'ku lakou he Lo Alii.<sup>286</sup>

Classification 5. Lō Ali'i. The Chiefs of Līhu'e, of Wahiawā and Halemano were named. Because of the eternal residence of the chiefs of these places preserving their *kapu*; they were like Gods, unseen, resembling men. They were termed Lō Ali'i.<sup>287</sup>

According to Pukui and Elbert, the term “Lō” also served as a “prefix, perhaps short for lo'o-, to obtain.”<sup>288</sup> Henry H. Parker indicated that the term “lo” referred to “an order of priests who lived on the mountain Helemano and consecrated the bodies of the dead.”<sup>289</sup> Whether true chiefs or priests, it was clear that the *Lō Ali'i* of Kūkaniloko were special enough to deserve their own specific title and rank.

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<sup>285</sup> Kamakau, *Tales and Traditions of the People of Old*, 39.

<sup>286</sup> Kamakau, "Ka Moolelo O Hawaii Nei. Helu 8."

<sup>287</sup> My translation.

<sup>288</sup> Pukui and Elbert, *Hawaiian Dictionary*, 209.

<sup>289</sup> Lorrin Andrews, *A Dictionary of the Hawaiian Language*, comp. Henry H. Parker (Honolulu: Board of Commissioners of Public Archives of the Territory of Hawaii, 1922), 376.

*O ewa uli ka lani ewa laakona  
 O kike nui a ewa kena,  
 O ke kuihewa makua kuihewa,  
 He mau alii kapu no ka pali Lihue,  
 He kini hoa 'wahia lala koa,  
 He poe hanu honi palai no Halemano,  
 O Paa kani a nui kani a weke,  
 He lani hoohuoi e Palakoa,  
 No mokihemo i ka uka o Kahui,  
 O oe kai huia ihola e ke aloha,  
 Hoomaloe i ke kino, kaoo ka noho,  
 Hoole i ke aloha ia e noho nei,  
 I aha la hoi ia i kuawe ai?  
 Eiae hoi e...*

- Kamehameha I<sup>290</sup>

This *mele*, *He Inoa no Kauikeaouli*, is a very rare composition. Of the numerous *mele* found within the volumes of the Hawaiian language newspapers, few were composed by the ruling *ali'i*. Even more rare are *mele* composed by Kamehameha I, Kamehameha Pai'ea, the father of Kauikeaouli. In this chant, Kauikeaouli's pedigree is exalted and connected to that of the 'Ewa chiefs, the chiefs of Kūkaniloko. The chant speaks of the *ali'i kapu no ka pali Līhu'e*, the sacred chiefs of the cliffs of Līhu'e, the large area below Ka'ala stretching across the plains to the Ko'olau. The chant describes these chiefs as "*he kini hoa 'awahia lala koa, he po'e hanu honi palai no Halemano*," a multitude of people who befriend the bitter cold yet remain strong-

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<sup>290</sup> Kamehameha I, "He Inoa No Kauikeaouli," *Ka Hoku O Ka Pakipika* (Honolulu), October 3, 1861.

limbed, a people who breathe in the scent of the **palai**<sup>291</sup> fern of Halemano.<sup>292</sup> These chiefs were no ordinary chiefs. They embraced the hardships of the environment, and in so doing, were prepared for any situation.

The mele goes on to say, “*Ho ‘omalo ‘e i ke kino, kāo ‘o ka noho, hō ‘ole i ke aloha ‘ia e noho nei, i aha lā ho ‘i ia i kuawe ai? Eia a ‘e ho ‘i ē.*” These chiefs were hard workers but were also well cared for, their bodies being massaged and stretched, raised together in seclusion, and carried upon the backs of men. Even though Kauikeaouli was clearly not a *Lō Ali ‘i*,<sup>293</sup> Kamehameha mentions all of these attributes of those chiefs as a means to liken his child to those rulers. If one can claim genealogical ties and character traits inherited from the *Lō Ali ‘i*, there would be no need to question one’s right to rule as a proper chief.

In their translation of Kamakau’s writings, Mary Kawena Pukui and Dorothy Barrere add a bit of insight into the meaning of *Lō Ali ‘i*:

Because the chiefs at these places lived there continually and guarded their *kapu*, they were called *lō ali ‘i* [from whom a “guaranteed” chief might be obtained, *loa ‘a*].<sup>294</sup>

The *Lō Ali ‘i* were a rank of chiefs who were “guaranteed” of high pedigree and a “guaranteed” ability to rule. These *ali ‘i* were raised at Kūkaniloko and trained to be leaders of entire islands of

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<sup>291</sup> A native fern (*Microlepia setosa*), growing wild and cultivated, 95 to 130cm high. Pukui and Elbert, *Hawaiian Dictionary*, 307

<sup>292</sup> Halemano, also known as Helemano, or sometimes as Halemanu, is a large ‘*ili ‘āina* (land section within an *ahupua ‘a*) in the *ahupua ‘a* of Pa‘ala‘a-uka, Waialua, O‘ahu. Lloyd J. Soehren, “Helemano,” *Hawaiian Place Names*, accessed July 31, 2014, <http://ulukau.org/cgi-bin/hpn?e=&a=d&c=mahele&cl=search&d=HASH017fd52ecb817a7b03fd3d28>.

<sup>293</sup> Kākuhihewa was the last known *ali ‘i* to have fulfilled the requirements of a Kapu Līloe birth.

<sup>294</sup> Kamakau, *Tales and Traditions of the People of Old*, 40.

people. If ever an island or a district lost their ruler, a guaranteed ruler could be found among the *Lō Ali'i* of O'ahu. There are limited amounts of available records of the various *Lō Ali'i*, but of those that can be found, it is clear that the *Lō Ali'i* were highly skilled individuals with a wide breadth of knowledge and application.

### Nā Ali'i o Kūkaniloko - Mā'ilikūkahi

In Chapter Four, the *mo'olelo* of one of the *Lō Ali'i* was introduced - the *mo'olelo* of Mā'ilikūkahi. Kamakau expressed:

O Puaa a Kahuoi ka makuakane, a o Nononui ka makuahine. Ua hanauia o Mailikukahi ma Kukaniloko, a ua kapaia he alii kapu no ka aina, no ka mea, ua hoolaa na'lii a me na kahuna a me na makaainana, a ua hoohikiia hoi imua o ke Akua me ka poniia hoi e na kahuna. O ke Alii e hanau i Kukaniloko, oia hoi ke Akua o ka aina, oia no hoi ke Alii kapu.<sup>295</sup>

Pua'a-a-Kahuoi was the father, and Nononui was the mother. Mā'ilikūkahi was born at Kūkaniloko, and was declared an *ali'i kapu* for the land, because the chiefs, the lords and the commoners consecrated him, and he was dedicated before the *Akua*, anointed by the priests. An *Ali'i* who is born at Kūkaniloko is an *Akua* on land, and most certainly a sacred chief.<sup>296</sup>

Mā'ilikūkahi spent his formative years in the Kūkaniloko area and likely because of his rank and training he received at Kūkaniloko, he was chosen by the chiefs to become the **Mō'i**<sup>297</sup> of the island of O'ahu at the age of twenty nine.<sup>298</sup>

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<sup>295</sup> Kamakau, "Ka Moolelo O Hawaii Nei. Helu 11."

<sup>296</sup> My translation.

<sup>297</sup> Sovereign, monarch, majesty, ruler. Pukui and Elbert, *Hawaiian Dictionary*, 251.

<sup>298</sup> Kamakau, *Tales and Traditions of the People of Old*, 54.

In Chapter Four, I spoke of Mā‘ilikūkahi’s decree that he would raise all the first-born children of the families of O‘ahu as his own; he gathered experts in all forms of *lua* to instruct his children in the arts of war. However, as discussed in that chapter, *kūpale kaua*, or the art of defense was only part of his training. His upbringing also included instruction in land management, the sciences, ocean navigation and medicine.

When Mā‘ilikūkahi was installed as *mō‘ī* of O‘ahu, he was taken to Waikīkī to rule.

Kamakau distinguished that Mā‘ilikūkahi quickly established a *kūlanakauhale* at Kūkaniloko:

I ka wa o Mailikukahi. Ua piha ka aina i kanaka. Mai ka Lae o Kulihemo a ka Lae o Maunauna -- Mai Maunauna a ka Lae o Puukua; ua piha i na’Lii me na kanaka. Mai Kanewai a Halemano. Mai Halemano a Paupali -- Mai Paupali a Halawa; ua piha i na’Lii me na kanaka. He okoa na’Lii, na makaainana ma kai o ka aina. Mai Halahape a Oahunui, oia ke kulanakauhale o Mailikukahi. A malaila i hanai iho ai oia i na keiki makahiapo a na makaainana me na’Lii.<sup>299</sup>

In the time of Mā‘ilikūkahi. The land was filled with people. From the headland of Kulihemo to the brow of Māunauna -- From Māunauna to the point of Pu‘ukua; it was filled with the Chiefs and the people. From Kānewai to Halemano. From Halemano to Paupali -- From Paupali to Hālawa; it was filled with Chiefs and people. The Chiefs were separated, the commoners lived towards the shore of the land. From Halahape to O‘ahunui, that was the city of Mā‘ilikūkahi. And it was there that he raised all the first-born children of the commoners and the royalty.<sup>300</sup>

Kamakau explained that, “Ua ao ia na oihana ike a pau,”<sup>301</sup> every piece of knowledge of every industry was taught. It is interesting that although Mā‘ilikūkahi himself ruled from his home in Waikīkī, all of these first-born children were raised and educated at Kūkaniloko.

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<sup>299</sup> Kamakau, "Ka Moolelo O Hawaii Nei. Helu 12."

<sup>300</sup> My translation.

<sup>301</sup> Kamakau, "Ka Moolelo O Hawaii Nei. Helu 12."

It has been discussed that several disciplines were studied within the Kūkaniloko complex: cosmology, navigation, medicine, defense, natural resource management, and politics. Prior to Mā'ilikūkahī, this knowledge was reserved for the *ali'i* of Kūkaniloko, but Mā'ilikūkahī decided that all of his people should have this kind of education. Most likely, there were certain areas of knowledge within each discipline that was reserved for the *ali'i* just as certain types of knowledge was required for certain professions. It allowed the experts at Kūkaniloko to extensively educate each O'ahu familial member skills that would benefit Mā'ilikūkahī's government and increased a loyal entourage among his people as all of his people would then be highly educated and therefore loyal to him as well.

### **Nā Ali'i o Kūkaniloko - Kalanimanuiā**

Several generations after Mā'ilikūkahī, a high chiefess named Kalanimanuiā was born at Kūkaniloko. She was the daughter of Lua'ia and the high O'ahu chiefess named Kūkaniloko. According to Kamakau, Kalanimanuiā was raised at Kūkaniloko and when she was a grown woman, she was taken to the *ahupua'a* of Kalauao, where she made her new home at Kūki'iahu.<sup>302</sup> Kamakau wrote:

I kona noho Aupuni ana. He Alii maikai, a ua noho oia ma Kalauao wale no. Ua noho na'lii me na makaainana a puni ka aina me ka oluolu. Aole auhau maluna o na kanaka a me na'lii, aole ikeia ke kua ma kona Aupuni.<sup>303</sup>

Concerning her Rule. She was a good Chief, and she lived only at Kalauao. The chiefs and the commoners all over the land lived in peace and harmony. There

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<sup>302</sup> Kamakau, *Tales and Traditions of the People of Old*, 57.

<sup>303</sup> Kamakau, "Ka Moolelo O Hawaii Nei. Helu 12."

were no taxes placed upon the people or the chiefs, and war was unknown in her Kingdom.<sup>304</sup>

I bring up the *mo'olelo* of Kalanimanuia because like her *kupuna* Mā'ilikūkahi, she and her husband Lupekapu-i-ke-aho-makali'i became parents to the *maka'āinana*, and were beloved by all.<sup>305</sup> It was said that Kalanimanuia's rule was a peaceful one and one that focused on the building of *heiau* for the people to pray, and the building of fishponds making O'ahu a land full of cultivation.<sup>306</sup> Like Mā'ilikūkahi, Kalanimanuia chose a political path of peace. By building fishponds and *heiau* for the people, Kalanimanuia cemented her right to rule and secured the loyalty of her people by providing food and places of spiritual worship.

### **Nā Ali'i o Kūkaniloko - Kākuhihewa**

Kākuhihewa, the grandchild of Kalanimanuia through her son Ka'ihikapu-a-Manuia, was perhaps the last *ali'i* to be born under the *Kapu Līloē* at Kūkaniloko. He was then raised in Waipi'o, Waiawa, and Mānana. He was trained in all forms of *lua* and raised to be a ruler befitting his rank as a *Lō Ali'i*. It was said of O'ahu and Kākuhihewa's rule:

Aole hoohalahala ia Oahu a puni, he momona mauka, he momona ma kai, he lani iluna he honua ilalo, no laila, aloha no na'lii Oahu ia Oahu, aole hua i ka hiki o palawale . . . I ka noho Aupuni ana o Kakuhihewa he Alii kaulana ia no kona mahiai, ku ke pilo i Kauai, o ka mahiai nui . . . No laila, ua lilo o Kakuhihewa he Alii kaulana, mai Hawaii a Kauai. Maloko o na mele o na'lii o Hawaii, o Maui, a me Kauai. Ua komo no Kakuhihewa me na'lii o Oahu i na mele kupuna. No

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<sup>304</sup> My translation.

<sup>305</sup> Kamakau, *Tales and Traditions of the People of Old*, 58.

<sup>306</sup> *Ibid.*, 57-58.



kona Alii nui a me kona lokomaikai, a me kana mau oihana, nolaila ua kapa ia aku o Oahu “ke one o Kakuhihewa.”<sup>307</sup>

There was nothing to criticize about all of O‘ahu, for the uplands were fertile, and the seas full of fish, the heavens above and the earth below [everything was full and bountiful], therefore, the chiefs of O‘ahu truly loved O‘ahu, for there was nothing spoiled to be found . . . In the rule of Kākuhihewa, he was a famous Chief for his cultivation, so much so that the scent of his labor reached Kaua‘i . . . Therefore, Kākuhihewa became a famous Chief, from Hawai‘i to Kaua‘i. In the chants and songs of the chiefs of Hawai‘i, Maui and Kaua‘i, Kākuhihewa and the chiefs of O‘ahu were included in the ancient poems. Because of its High Chief and his generosity, and because of his deeds, O‘ahu was referred to as “the sands of Kākuhihewa.”<sup>308</sup>

Kākuhihewa, as a *Lō Ali‘i* of Kūkaniloko, was expected and educated to maintain the glory of O‘ahu. It was the *kuleana* of the *Lō* chiefs. They were responsible for the well-being and prosperity of the entire island. It solidified why the *Lō Ali‘i* rank was so sought after by the *ali‘i* even up to the time of Kamehameha Pai‘ea. It served as the reason why Kamehameha decided to compose the mele at the beginning of this section to Kauikeaouli. To be able to connect your progeny to the elite ranking of the *Lō Ali‘i* of Kūkaniloko meant that your children would be viewed as equally capable and beloved by all the people.

## ***SECTION II: KŪKANILOKO FOR THE FUTURE***

*No Kukaniloko ko‘u aloha  
Ke kupa noho kula a o Kalakoa,  
Kahi hanau hoi o na alii,  
Wohi hoi a o Hawaii nei;  
Walea i ke kui lei Ahihi,*

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<sup>307</sup> Kamakau, "Ka Moolelo O Hawaii Nei. Helu 14.," *Ka Nupepa Kuokoa*.

<sup>308</sup> My translation.

*Lei hookipa no ka malihini;  
Paa mai uka i ka uhi wai,  
O ke kehau anua ko ke kahawai;  
Halihali mai ana i ke ala,  
Ke ala o maile Nohoanu;  
Auau aku i ka wai o Kuaikua  
Wai hooheмо a na 'lii;  
Na mamо hoi a Kakuhihewa,  
A na pua a ka Na 'i Aupuni;  
Nana i rula mai a pololei,  
Me ka ihe laumeki i ka lima;  
A he puuwai koa me ka wiwoole;  
Imi maluhia no ka lahui;  
Hui pau ia mai na ailana,  
Mai Hawaii a Niihau,  
Noho hoomalu ia me ke kaulike  
Mamalahoа kanawai;  
Hainaia mai ana ka puana,  
No Kukaniloko ko 'u aloha.<sup>309</sup>*

Although Mā'ilikūkahī established his **hale ali'i**<sup>310</sup> at Waikīkī, and Kalanimanuiā her home at Kūki'i'āhu, both chiefs were raised first within Kūkaniloko. This process was quite common for most if not all the ruling chiefs of O'āhu. In the *mo'olelo* of Lā'ieikawai, her twin sister Lā'ielohelohe was taken by her *kahu* to Kūkaniloko to be raised, and when Lā'ieikawai proved to be an inadequate partner for Kekalukaluokēwā the *ali'i* of Kaua'i, Lā'ielohelohe was sought out as an equal replacement.<sup>311</sup>

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<sup>309</sup> Gutmanis, *Pohaku: Hawaiian Stones*, 17.

<sup>310</sup> Royal residence; palace. Pukui and Elbert, *Hawaiian Dictionary*, 52.

<sup>311</sup> S. N. Hale'ole, *Ke Ka'ao O Lā'ieikawai* (Hilo: Hale Kuamo'o, 2001), 116

Kūkaniloko was the education center of the highest minds of O‘ahu, an “Alexandria” of the Hawaiian world.<sup>312</sup> As evidenced throughout this text, Kūkaniloko was a center of enlightenment. Astronomers, navigators, doctors, land managers, people managers - all of these attributes were essential in O‘ahu *Ali‘i*. *Kahu* Tom Lenchanko has indicated that the complex was run by *kāhuna* of thirteen disciplines of Hawaiian knowledge,<sup>313</sup> some of which have been discussed in this thesis. It was imperative that the highest *ali‘i* of O‘ahu were highly-trained in each of these disciplines in order to rule as a proper *ali‘i*.

### **What of the Future?**

It is often said that history repeats itself. In a Hawaiian worldview, ‘o ke au i hala ka lamakū i ke kupukupu. The past is the beacon to the future. As Lilikalā Kame‘eleihiwa asserts, “It is as if the Hawaiian stands firmly in the present, with his back to the future, and his eyes fixed on the past, seeking historical answers for present-day dilemmas.”<sup>314</sup> Liholiho Kamehameha II was once quoted as saying, “Na wai ho‘i ka ‘ole o ke akamai, he alanui i ma‘a i ka hele ‘ia e o‘u mau mākua?” “Why shouldn’t I know, when it is a road often traveled by my

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<sup>312</sup> Alexandria was a powerful city established in Egypt by the Greek ruler Alexander the Great in 331 BCE. It was a city that was focused on the accumulation of knowledge, so much so that its fabled library endeavored to house all the knowledge of the world, and was considered one of the seven wonders of the ancient world. *Alexandria: The Greatest City*, by Bettany Hughes, perf. Bettany Hughes (London: Channel 4, 2010), DVD.

<sup>313</sup> Lenchanko and Kalimapau, interview.

<sup>314</sup> Kame'eleihiwa, *Native Land and Foreign Desires*, 22.

parents?”<sup>315</sup> It has always been the way of our *kūpuna* to pay close attention to the deeds of our ancestors to know what worked and what did not work in any situation.

### **Ancestral Curriculum**

In Chapter Two of this thesis, I discussed some of the possible interpretations of Kāne through one small section of the Kumulipo, a cosmogonic genealogy of the Hawaiian people. Besides being a genealogy, the Kumulipo provided stepping stones to glean scientific understandings of Kāne through the form, function and process of the astronomical universe. I do not know what it may be like in other parts of the world, but growing up as a *kanaka maoli* on O‘ahu, it was always very difficult for me to understand all the Latin classification terms that were presented in my various science classes. However, to my mind, it was quite easy to understand the difference between *honua-lalo* and *honua-po‘i-luna* - a realm below (troposphere) and a realm covered above (stratosphere). These Hawaiian terms and many others in the Kumulipo explain specific Kāne processes from a Hawaiian understanding - based on centuries of keen observation and analysis. For Hawaiian students, it is plausibly easier for them to understand complex scientific theories and observations when it is presented to them in their own ancestral language, which carries with it understandings of the Hawaiian way of life.

The true value of Kūkaniloko today is that it provides a venue, a physical space in which the natural sciences of the Hawaiian world can be explored and documented. Let us rebuild the forests of Leilehua, and in so doing, teach our *haumāna* lessons in Kāne-lū-honua, that of

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<sup>315</sup> Mary Kawena Pukui, *‘Ōlelo No‘eau: Hawaiian Proverbs & Poetical Sayings* (Honolulu: Bishop Museum Press, 1983), 251, no. 2301.

horticulture, biology, geography, geology and chemistry. Replanting medicinal herbs that were used at Kūkaniloko would bring the world of medicine into the classroom as real-world applications. Why could we not bring in **kahuna lapa‘au**<sup>316</sup> to teach about Hawaiian medicines? The science is no less complex or applicable, and in a world that is slowly beginning to embrace traditional methods of healing, why would we not want our students to become *kahuna lapa‘au* themselves? With the *Hōkūle‘a* currently on its four-year voyage around the world, there is a continual need for crew members to complete this monumental task. Let us teach the knowledge of Kāne-i-ka-holoholo-kai (ocean navigation) in our schools, both traditional and modern, to mold the next generation of seafarers. In an age where disciplinary problems are rampant in schools, let us return to the roots of *lua* training - that of the mindset of discipline, respect, and control. *Lua* is not just about fighting, it is, like most martial arts, about learning to control one’s own urges and internal conflicts. Let us teach our students how to rebuild and manage fishponds. In that activity, they will learn about biodiversity, and how what happens upstream in the forest and on the plains affect what happens to our food source in the ocean.

### **The Building of Hawaiian Leaders**

One of the primary functions of Kūkaniloko over the centuries has been to serve as an amalgamation of the greatest minds of O‘ahu to educate and mold the future leaders of the island, and to a greater extent, leaders who can effectively manage whole islands.

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<sup>316</sup> Medical doctor, medical practitioner, healer. Pukui and Elbert, *Hawaiian Dictionary*, 114. A *kahuna lapa‘au*, for the purposes of this text, is used to refer to a medical doctor who uses traditional Hawaiian medicines and healing techniques.

Civic groups like The Friends of Kūkaniloko and the Hawaiian Civic Club of Wahiawā are working to increase awareness about the history of Kūkaniloko in the hopes of opening a dialogue to reestablish the learning center that once produced some of the greatest leaders in O‘ahu’s history. In this tumultuous time of failing economies, unsteady political relations and climate change impacting all corners of the earth, perhaps now is as good a time as any to take a look back at what kept our *kūpuna* thriving in these islands since time immemorial. Let us begin to retrain our **keiki**<sup>317</sup> and our **‘ōpio**<sup>318</sup> to think and behave, not just as land stewards, but as effective Hawaiian land managers, as *konoiki o ka ‘āina*.

Let us take the classroom out into the natural environment. Teach our *haumāna* how to plan and execute, for example, a successful **lo‘i**<sup>319</sup> system in various environments on the island to create a sustainable food supply using both modern and traditional materials. Such an engineering feat can also teach the biology and chemistry of plant crops, the rivers, the springs, and all life within the natural system. One can use mathematics and physics to determine the proper slope and flow of waters and nutrients. By reestablishing the forests of Leilehua and Līhu‘e, it may attract the native birds who populate those forests, create the canopy to promote the growth of lower plants and organisms, and restore the water shed.

On a larger scale, we would then be able to teach valuable skills in forestry management, housing and food planning. The natural environment here on O‘ahu and in the Hawaiian Island

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<sup>317</sup> Children. Ibid., 142.

<sup>318</sup> Youth; juveniles. Ibid., 292. To my understanding, an *‘ōpio* is generally older than a *keiki*, usually in his/her teenaged years.

<sup>319</sup> Irrigated terrace, especially for taro. Ibid., 209.

chain is unique and its resources are finite. We cannot afford to have all of our supplies shipped in on barges and flown in large crates for too much longer. Our water table is being drained by mismanagement of resources. It is time that we teach our students how to be effective resource managers. That was and *is* the goal of Kūkaniloko. Kūkaniloko is the **piko**<sup>320</sup> of life on O‘ahu.

### ***SECTION III: FINAL THOUGHTS***

Kūkaniloko is just a beginning. There are many more avenues for future scholars to explore and develop. What is the function or purpose of all the sites within the *kalana* ‘o *Kūkaniloko*? What is the function of *heiau*? Are *heiau* for pure religious function - or are they, like Kūkaniloko, centers of knowledge and inquiry where generations could be educated and groomed to be managers of ‘*āina* and *kanaka*? What other kinds of information do our *mele* contain? Are there solutions hidden within the chants to modern problems?

*E iho ana o luna;*  
*E pii ana o lalo;*  
*E hui ana na moku;*  
*E ku ana ka paia.*<sup>321</sup>

The words of the noted **kāula**<sup>322</sup> Kapihe remind us of our *kuleana* to our people. That which is above shall fall. That which is below will rise. The islands will unite. The walls will rise. Now

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<sup>320</sup> Center, as of a fishpond wall, or *kōnane* board. Ibid., 328. According to Hawaiian tradition, our *piko* are spiritual centers on our bodies and in the environment that connect us with those generations that have come before us, those who are around us, and those who will come afterward. Pukui, Haertig, and Lee, *Nānā I Ke Kumu*, 182-183.

<sup>321</sup> Malo, *Hawaiian Antiquities*, 115. This *mele* is said to be a *wānana* or prophecy of the *kaula* (prophet) Kapihe of Kona Hawai‘i who lived during the time of Kamehameha’s uncle, Kalani‘ōpu‘u.

<sup>322</sup> Prophet, seer. Pukui and Elbert, *Hawaiian Dictionary*, 136.

is a time of **hulihia**,<sup>323</sup> of revolutionary change. No, I am not necessarily referring to wars or earthquakes, but rather to the *hulihia* of the mind. This thesis has been a personal *hulihia* of my own being. It has been a reawakening of the ancestral mind.

It is my hope that this thesis will create an even larger *hulihia*, an opening of academic discussion of Hawaiian ancestral knowledge and its possible applications in a modern context. For many years, generations of Hawaiians were taught to let go of their ancestors and to embrace the conventional wisdom of writers and historians who possessed a Western viewpoint. Now is the time to incite *hulihia* and reconnect *kūpuna* wisdom. *Wahi pana* like Kūkaniloko need to be preserved and protected, yes . . . but they should also be used appropriately so that these ancestral sites become more than relics or mere stories on a page. By breathing new life into these places, we breathe life into the *‘āina* itself - and in doing so, we breathe life into ourselves.

*E ola mau ka lāhui ‘ōiwi o Kākuhihewa!*

*O Lolo ka mehani kau kehakeha,  
O Lalo kupu wai kumu o Kahiki,  
O ke oho kā pala ‘ā i ka maka,  
Hū a‘e ke ‘ō‘ā i ka ‘ena‘ena!  
Hū! Hā!<sup>324</sup>*

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<sup>323</sup> Overturned; a complete change. Ibid., 89.

<sup>324</sup> This *mele* entitled “O‘ahu Ka ‘Āina” is one of my own compositions that was commissioned for the World Indigenous Peoples Conference on Education held on O‘ahu in June 2014. It is an honorific chant to the island of O‘ahu and its position as a place of the gathering of knowledge and wisdom through the ages. By establishing the boundaries of *oluna* and *olalo*, and the boundaries of Ke-Kua-o-Ka-Lā and Ke-alo-o-Ka-Lā, we also hoped to establish that meridian between ourselves and the universe, thus opening the lines of communication between the generations in order to know how to move our people of the world forward. It is my hope that this thesis may add one more drop of *wai* to the waters of deep intellectual discussion on how best to care for our *‘āina* for future generations.



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