

HISTORICAL BACKGROUND OF THE
SOUTH POINT AREA, KA'U, HAWAII

**BISHOP MUSEUM
AUTHORIZED
PHOTOCOPY**

Marion Kelly

PACIFIC ANTHROPOLOGICAL RECORDS NO. 6

Anthropology Department
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KALAE PLACE-NAME CHANT*

Translation by Mary Kawena Pukui. March 27, 1966

<p>Nani ka mana'o i hiki mai E naue a e 'ike ia Ka-lae. Ka-lae kaulana o ka 'aina E 'alo ana i ke ehu o ke kai. Noho ana Ka-'ilio-a-Lono Ho'oipo ana me Ka-lupe-nui O ke Koko-a-Makali'i He ali'i no 'oe e Kalalea Ka'ana nei me Wahine-hele Hele no a ia Ka-puhi-'ula Ki'ei i Ka-lua-o-ka-'iole Noho Poho-a-Hina i ka la'i. 'Au'au i ka wai o Palahemo Kahi wai 'awili me ke kai. Ui a'e ka mana'o o na hoa E 'ohu i ka lei kauna'oa. Nonono 'ula wena i ka la I ahona i ka lau 'ilima Noho mai Makalei i ke kapu La'au pi'i ona a ka i'a. Ha'ina ia mai ka puana No makou no a pau.</p>	<p>A wonderful thought arose, To travel and to see Kalae. Kalae, the famous point of land Facing the foamy sea. There abides Ka-'ilio-a-Lono Making love to Ka-lupe-nui. There too, Koko-a-Makali'i And the chief, Kalalea. Sharing (the scene) with Wahine-hele, Going on to Ka-puhi-'ula, Peering down Ka-lua-o-ka-'iole, Poho-a-Hina reposes in the calm. Bathe in the water of Palahemo Where fresh water mixes with the salty. Thoughts turn to the companions Adorned with leis of kauna'oa, Reddened by the sun, Cooled only by 'ilima leaves. Makalei abides in the kapu, That wood that attracts fish. This concludes our song in honor Of every one of us.</p>
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* This chant was given to Mary Kawena Pukui in 1935 by her aunt, Keli'ihue Kamali, a kahunalapa'au who lived in Waiohinu Village.

Ka-'ilio-a-Lono: Lono's dog, which Pele changed to stone.

Ka-lupe-nui (a-ka-aiwaiwa): The-great-kite-of-the-wondrous-one, is the imprint of a kite belonging to a legendary hero who lived in Hilo. It passed the house of a woman in Puna, who became interested in the cord for a fish line, so she cut it. That was how the place where she lived received the name of 'Oki'oki-aho (Cut-line-to-pieces). The kite fell at Kalae.

Koko-a-Makali'i: Makali'i's carrying net. This was said to be a portion of the great net in which he kept all food plants and which he hung in the sky. A rat ascended, gnawed it to pieces, and a piece of the net and the rat himself fell at Kalae.

Ka-lua-o-ka-'iole: The-hole-of-the-rat.

Kalalea: High-and-imposing; a heiau for fish to multiply and gather at Kalae.

Wahine-hele: A stone fish goddess, said to move from place to place when disturbed.

Ka-puhi-'ula: The-red-eel, a legendary eel.

Poho-a-Hina: Container-of-Hina, wife of Ku-'ula, god of fishermen.

Palahemo: A famous water hole.

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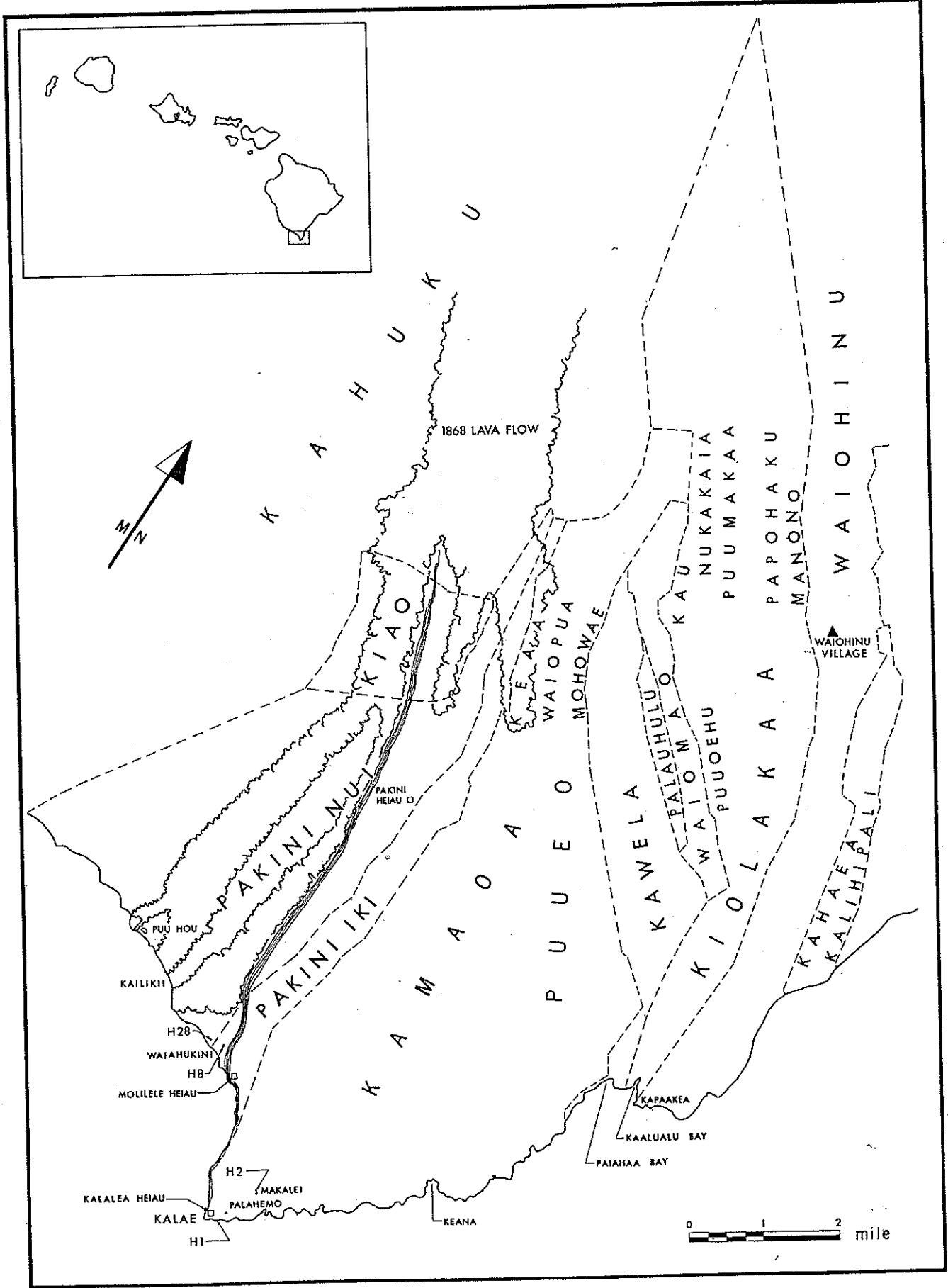


Figure 1. Map of portion of Ka'u District from Pakini-nui to Waiohinu, showing important archaeological sites and fishing villages prominent in early historic times.

I

INTRODUCTION

The primary purpose of this report is to present background material on the history of the South Point* area of Ka'u, Hawaii (Fig. 1). The richness of the available data on this area enhances our understanding of the lives of its inhabitants and provides a basis for interpreting certain phenomena of its archaeology. To preserve the uniqueness of each person's record of experiences and to avoid possible misinterpretations, many of the colorful descriptions by early visitors to Ka'u district are presented in their own words.

In addition, the report includes a brief history of the archaeological field work undertaken in the South Point area as well as a catalogue of published reports on this field work for the convenience of the serious student of Hawaiian archaeology.

The period covered by the historical outline begins about the time of Capt. Cook's visit in 1778-1779, and ends about 1868 with the violent volcanic eruptions of that year. The dominant themes of this period are the replacement of the Hawaiian subsistence economy with a Western market economy, and the decrease of the Hawaiian population. Accompanying religious, social, and political changes provided substantive support to these processes. The problems of the nature of the Hawaiian subsistence economy, the size of the pre-contact Hawaiian population, the subsequent changes in both the size and dispersal pattern of the population, the nature of pre-contact Hawaiian land tenure, and later land-tenure changes are dealt with only briefly, and primarily only as they relate specifically to the history of Ka'u. Much more detailed historical research needs to be done in these areas. Future archaeological research in agricultural systems and settlement patterns will undoubtedly increase significantly our understanding of Hawaiian culture.

A Brief Review of Archaeological Field Work in the South Point Area

Most of the field work in the three major South Point sites reported on in this volume was carried out between the years 1953 and 1958 by Bishop Museum with the cooperation of the University of Hawaii.

Early in 1953, Miss Amy Greenwell of Capt. Cook, Hawaii, found some fishhooks in a sea-eroded sand dune near Kalae, the southernmost point of Hawaii Island (Fig. 2; see also Underwood, this vol., Fig. 1). She brought them to the attention of Dr. Kenneth P. Emory, chairman of the Anthropology Department at Bishop Museum. These fishhooks, unlike

* In most early manuscripts, the term "Kalae" refers to the general area at the southernmost tip of Hawaii Island as well as to its headland. The Coastal Geodetic Survey maps use the term "Ka Lae" for the headland. The popular term is "South Point" for both the headland and the adjacent land and coastal areas.



Figure 2. Ka Lae, the southernmost tip of Hawaii Island extends beyond Kahuku Scarp (Pali-o-Kulani) out into the sea, forming a bay with a shoreline protected from the northeastern trade winds. Dark tongues of lava streak the coastal plains, silent evidence of ancient and historic volcanic eruptions. Dominating the scene is the massive volcano, Mauna Loa. Photo by R. Wenkam.

any in the ethnological collections, differed in certain features from those excavated in the Oahu sites (Emory and Sinoto, 1961:48-51, Figs. 43 and 44; Emory, Bonk, and Sinoto, 1968:41-42, Figs. 23 and 24). Inspired by these unusual discoveries, Emory obtained a modest grant from the McNerny Foundation which assured six months of archaeological work at Sand Dune site (H1).^{*} Volunteers and other small, but vital contributions helped to stretch the funds. The gift by Mrs. Elspeth Sterling of a second-hand, four-wheel-drive jeep in the early stages of the field work provided much-needed transportation to the isolated sites.

In 1954 a five-year Hawaiian archaeological program was launched with initial support from the McNerny Foundation, the Charles M. and Anna C. Cook Trust, and the Wenner-Gren Foundation. Additional grants from Mrs. Jon Wiig and the National Science Foundation made possible the continuation and subsequent completion of the South Point excavations. Finally, a Wenner-Gren Foundation grant in 1967 to Washington State University provided funds for the collection of additional radiocarbon samples and their dating.

Most of the field work was accomplished with volunteers during the summer months, school vacations, and weekends. Emory took the responsibility for the over-all supervision of the work and William J. Bonk, a graduate student at University of Hawaii at the outset, was field supervisor. Local U.S. Coast Guard authorities gave permission for the establishment of field headquarters at the unused light-station house, and permission to excavate the sites was obtained from the Hawaiian Home Lands office which manages the land in this area.

In 1954, Bonk and Ivan Rainwater, a volunteer, discovered the lava-tube shelter at Waiahukini (Fig. 3; see also Emory, Bonk, and Sinoto, this vol., Fig. 1), site H8, which eventually proved invaluable in the establishment of a chronological sequence for the South Point area.



Figure 3. Waiahukini beach and canoe landing viewed from the top of the *pali*.

^{*} In the published literature Sand Dune site is also referred to as Puu Ali'i.

In July of that same year, Dr. Yoshihiko H. Sinoto, a young student at the time, arrived from Japan and joined the work team for the summer. Inspired by the productivity of Sand Dune site and encouraged by Emory, he remained in Hawaii, attending the University of Hawaii, and continuing archaeological field work for the Museum.

The initial mapping of Sand Dune site (H1) was done by Mr. and Mrs. J. Halley Cox (see Emory and Sinoto, this vol. Fig. 1). Bonk and Sinoto mapped sites H2 and H8. In 1954, a day was spent mapping and testing some of the housesites at Keana on the coast between South Point and Kaalualu (Fig. 4).

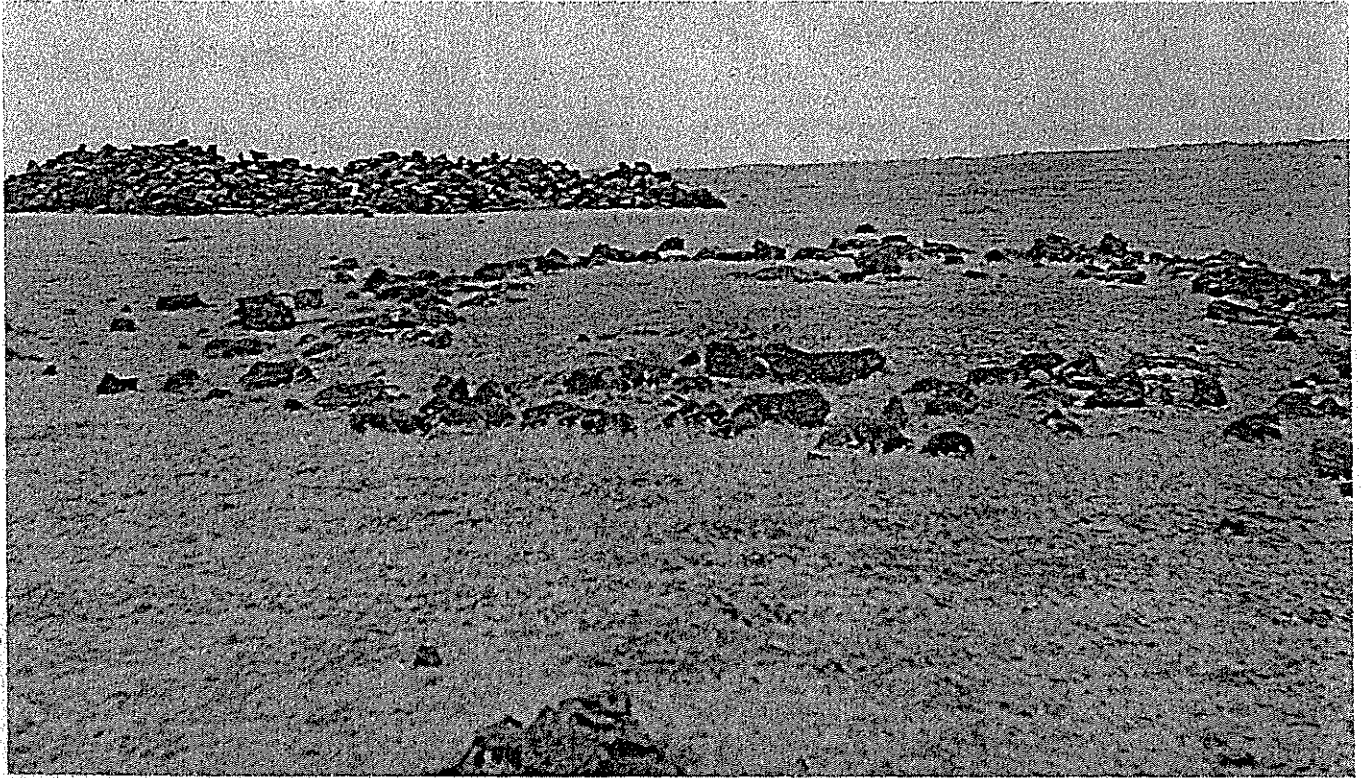


Figure 4. House sites at Keana, a coastal village between South Point and Ka'alu'alu Bay, Ka'u, Hawaii. Photo by Y. H. Sinoto.

Bonk's appointment to the University of Hawaii's Hilo Campus in September 1954 enabled the field work to proceed more rapidly. His students volunteered many hours of work at the sites, enhancing their academic studies with rich practical experience. The use of these sites as student "training grounds" in field techniques had some disadvantages. However, there are probably few sites that an archaeologist would dig the same way twice, if given the opportunity.

During the summer of 1955, while work continued at the South Point sites, a test trench was dug in a shelter at Pohue Bay in the land division of Kahuku, about eight miles west of Waiahukini.

The major portion of the field work in the South Point area was completed by the end of 1958. In that year two field expeditions put in several weeks of work at Waiahukini. They excavated at H8, mapped Waiahukini village (Fig. 5), and with a boat provided by Mr. and Mrs. Jon Wiig, visited several coastal sites west of Waiahukini, including Kailikii, Kahakahakea, and Pohue Bay. Sinoto excavated a test pit in a house site (H28) at Waiahukini during the summer's field expedition.

Mrs. Violet Hansen and William H. Meinecke, Bishop Museum Field Associates, maintain surveillance of sites in the area. No further work was undertaken there by the Museum until April 1965 when Dr. Roger C. Green, accompanied by Meinecke and Mrs. Hansen made a brief survey of the sites between Kaalualu Bay and South Point, and some sites in the

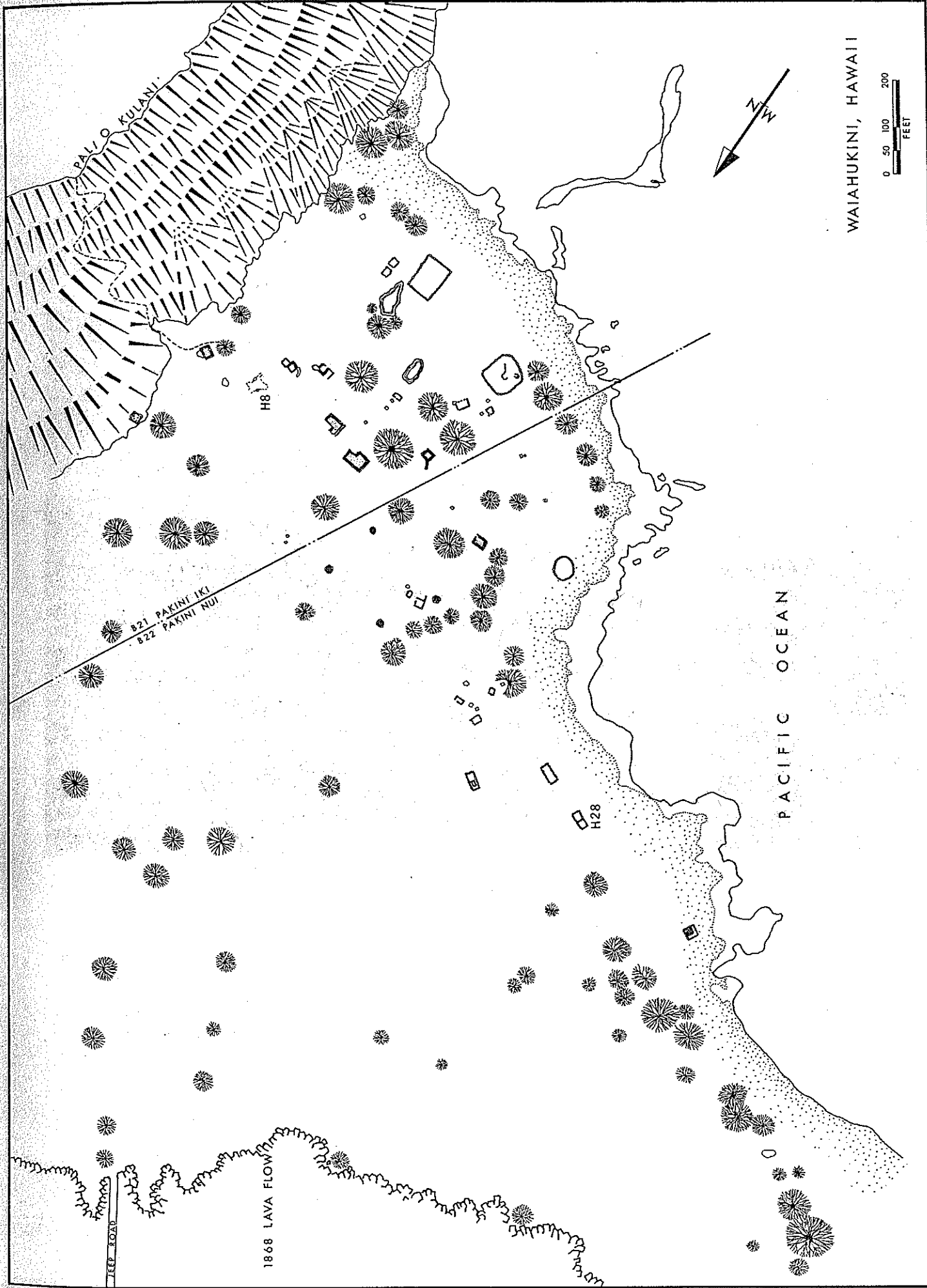


Figure 5. Map of Waiahukini Village ruins. Drawing by W. K. Kikuchi after B. Finney (1958) and V. Hansen (1967)

Kahakahakea area west of Kailikii. This resulted in the excavation of a shelter site (H65) at Kahakahakea (Soehren, ms.) that summer, and of three small sites (H24, H25, and H26) near Sand Dune site in November and December 1965, by William J. and Edith Taylor Wallace (Wallace and Wallace, 1969).

In February 1966, Emory and Dr. Roy M. Chatters, Washington State University, visited the major South Point sites to begin work on the C14 dating problems at H1. In August 1967 Dr. Lars Engstrand and Dr. Roald Fryxell visited the sites to collect additional radiocarbon-dating materials (Chatters, Crosby, and Engstrand, 1969).

The most recent field work in the area was the survey of a portion of Kapalaoa Bay Village (B20-18)* by Edmund J. Ladd (Ladd and Kelly, ms.) in October 1969 (Fig. 6).



Figure 6. Surveying the remains of Kapalaoa Bay Village. Photo by E. J. Ladd.

Mrs. Hansen continues to volunteer her time to the surveying, mapping, and photographing of surface sites and shelters on Hawaii Island, many of them in the South Point area. Funds for the field expenses of this site-recording program are provided by the University of Hawaii Committee for the Preservation of Hawaiian Culture, Language, and Arts. Her specific contribution to this report was the identification in the field of the site of a village drawn by Heddington, the artist on Vancouver's expedition (see this paper, pp. 50, 53, Fig. 19).

* All sites have received new designations in a recently adopted site-numbering and -recording system. The State Code = 50, Hawaii Island = HA, District of Ka'u = B, Kamaoa land division = 20, and Pakini-iki land division = 21. Thus, Sand Dune site (H1) is now designated 50-HA-B20-1, Makalei lava-tube shelter (H2) is now 50-HA-B20-2, and Waiahukini cave shelter (H8) is now 50-HA-B21-1.

Literature on Archaeological Sites in the South Point Area

Pacific Anthropological Records 7, 8, and 9. This volume contains three reports related to excavations in the South Point (Kalae) area on the island of Hawaii (see Fig. 1). The only previously published major report concerned with these sites (H1, H2 and H8) is the study of Hawaiian fishhooks (Emory, Bonk and Sinoto, 1959), which was re-printed in 1968 with Sinoto's analysis of Hawaiian fishhook head types (Sinoto, 1962: 162-166) added as an appendix.

The first paper, *Waiahukini Shelter Site (H8), Ka'u, Hawaii* by Kenneth P. Emory, William J. Bonk, and Yosihiko H. Sinoto, (this vol., PAR No. 7) is a brief excavation report of the lava-tube shelter which played a decisive role in solving the problem of dating Sand Dune site (H1).

The fifteen of the sixteen years since the first spade was set into an archaeological site in the South Point area, Sand Dune site (H1) eluded efforts to determine its age. The most recent attempt to establish the time span of its occupation is presented here as the second report, *Age of the Sites in the South Point Area, Ka'u, Hawaii* by Kenneth P. Emory and Yosihiko H. Sinoto (this vol., PAR No. 8).

The third report, *Human Skeletal Remains from Sand Dune Site (H1), South Point (Ka Lae), Hawaii: A Preliminary Examination* by Jane Hainline Underwood (this vol., PAR No. 9), provides an unusual insight into characteristics of a limited, ancient Hawaiian population.

Chronology of previously published articles. Several articles which refer to the South Point area sites have been published in the last ten years. In the first *COWA Survey* of archaeology in the Pacific Islands published by the Council of Old World Archaeology, Emory (1958, 21(1):4) provided a brief description of the three major sites of the area: 1) a fishermen's establishment covered with a large sand dune (H1); 2) a large shelter cave, Lua Makalei* (H2); and 3) a lava-tube shelter at Waiahukini** (H8). In this article he also referred to the problem of anomalous radiocarbon dates reported for Sand Dune site (H1).

In his article on the origin of Hawaiians, Emory (1959a, 68(1):30) cited one of the radiocarbon dates from site H8 and mentioned Sand Dune site briefly. Rather soon after the first dates were reported, it became clear that radiocarbon dates in Sand Dune site (H1) could not be explained easily, and Emory published a warning (1959b, 68(3):240-241) against accepting these dates at face value. In the second *COWA Survey* for the Council of Old World Archaeology, Emory (1960, 21(II):4-5) described in detail some of the unsolved problems of the South Point dates as they were viewed at that time.

In 1961, Bonk (1961:91-92) published an abundantly illustrated article which gave a generalized view of Hawaiian archaeology at that time. He mentioned the South Point sites and included a picture of excavations at H1 and a view of Waiahukini.

When additional dates from South Point sites became available, Emory published them in a brief note along with some dates from the Society Islands (1962, 71(1):105-106). He again pointed out the corrections that should be applied to the very early date (GRO-2225) for the Sand Dune site (H1). In his paper for the Tenth Pacific Science Congress held in Honolulu in 1961, Emory (1963, 72(2):97-99) discusses the significance of the archaeological data, including radiocarbon dates, in evaluating the linguistic data on

* Lua Makalei appears as Lua Makalai on old Geodetic Survey maps, but on the basis of a place-name chant, Makalei is probably the correct spelling.

** Waiahukini is a contraction of Wai-o-Ahukini (water-of-Ahukini). The most recent map (USGS, 1962) carries the incorrect name, Waiohukini.

the relationship of the Hawaiian language to other Polynesian languages. Only a brief mention is made of sites H1 and H8 in his third *COWA Survey* of Pacific Islands archaeology for the Council of Old World Archaeology (Emory, 1965, 21(III):4).

In an article which compares artifacts excavated from sites in the Hawaiian, Marquesas, and Society Islands, Sinoto (1967:341 ff) mentions the South Point sites briefly. Emory's paper for the Eleventh Pacific Science Congress held in Tokyo in 1966, refers to the adzes excavated from Sand Dune site (1968:163) and the fishhook form changes (pp. 165-167) which indicate Marquesas and Tahitian influences.

Future reports. Manuscripts presently being prepared for publication will provide additional basic data on materials from sites in the South Point area. Among these are two by Sinoto: one on Hawaiian ornaments, and another on artifacts (except fishhooks) from sites H1 and H8. In addition, Emory has a manuscript on tattooing implements in which he describes tattooing combs from the H1 site.

Radiocarbon dates published by the laboratories. Except for the most recent series of dates by University of Washington's laboratory, the publication of radiocarbon dates for the South Point sites by laboratories is complete. The first dates for Sand Dune site and Waiahukini were published in *Radiocarbon* in 1959 (Crane and Griffin, 1959:195) and four years later a single date for H8 appeared (Crane and Griffin, 1963:250).

The first early date for H1, reported in a letter to Emory at the end of 1959, was published by Groningen laboratory in 1964 (Vogel and Waterblok, 1964:359) along with dates from H2 and H8 (p. 360).

Carbon samples from South Point sites dated by Gakushuin laboratories were published first in 1965 (Kigoshi and Kobayashi, 1965:20). A series run by University of Pennsylvania was published in 1967 (Stuckenrath, 1967:340).

For a list of published and unpublished radiocarbon dates on the South Point sites, see Emory and Sinoto, this vol. pp. 5,6,8, and 12.

Other publications. The most detailed study of Hawaiian life in the district of Ka'u was done by Dr. E. S. C. Handy and Mrs. Mary Kawena Pukui (1958). Their monograph contains a summary chapter by Elizabeth Handy on the ecological and historical background of the district (pp. 207-252), and a chapter on the "dispersed community" which is particularly relevant for present archaeological research in Hawaiian settlement patterns.

II

SOME EARLY VISITORS TO KA'U

Resolution and Discovery, 1778-1779

In late December, 1778, when the *Resolution* sailed around the easternmost point of Hawaii (Fig. 7) and along the southeastern coastline toward South Point, Capt. James Cook recorded in his journal that Hawaiians came out in canoes as far as "five leagues" from land to trade. "But whether from a fear of lossing [sic] their goods in the Sea or the certainty of a Market, they never brought much with them, the Chief [sic] article we got was salt (Fig. 8) which was extremely good" (Cook/Beaglehole, 1967:486).

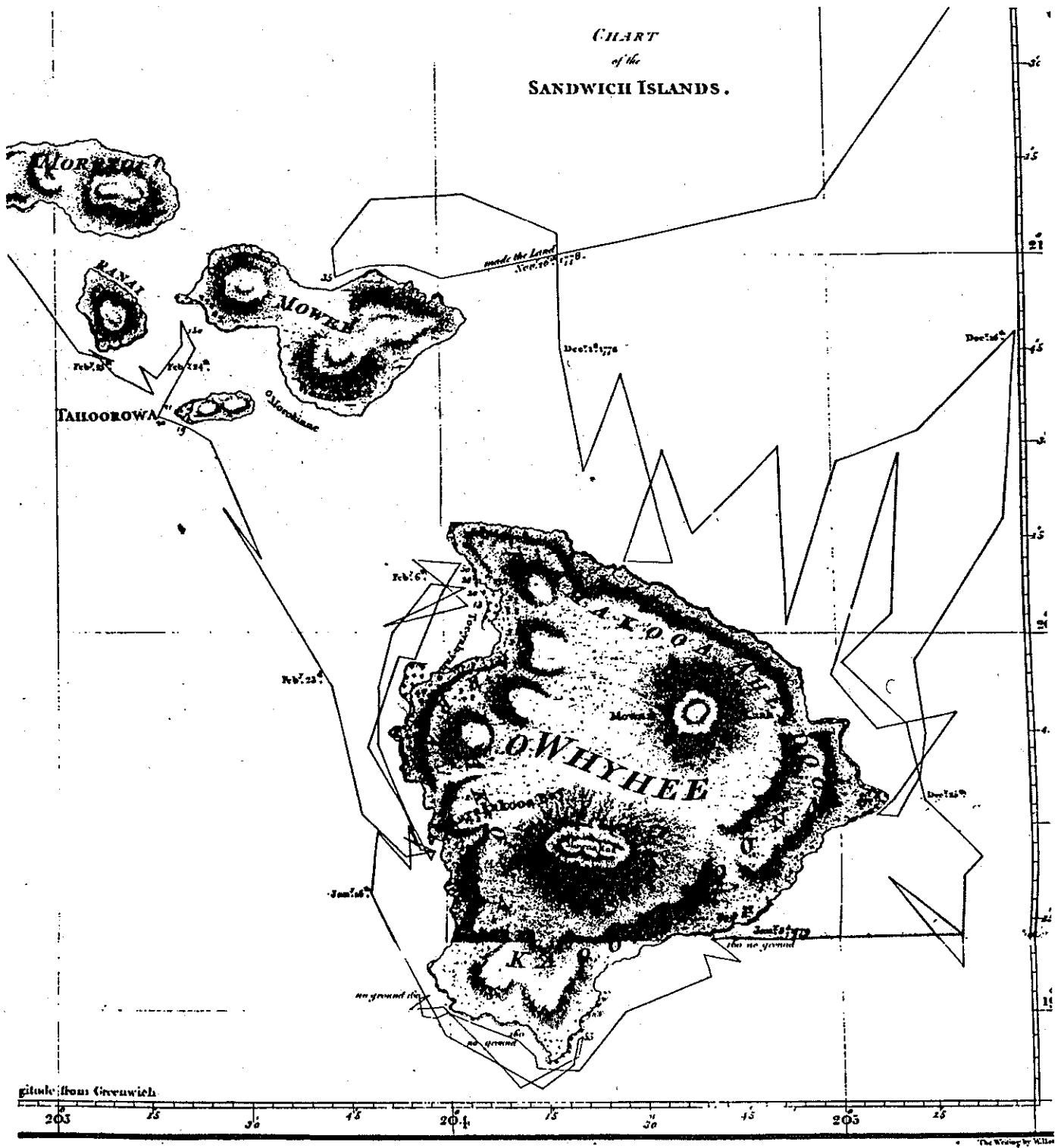


Figure 7. Chart of Capt. James Cook's route around the eastern and southern coasts of Hawaii Island in December 1778 and January 1779. Efforts to find a protected anchorage off the Ka'u coast resulted in the earliest recorded descriptions of the district and its inhabitants. This chart is a detail from the frontispiece map in the 1784 edition of the third voyage.



Figure 8. Salt pans carved in volcanic ash near Sand Dune site, South Point. Photo by H. Powers in 1930.

Cooks' journal entry for January 5, 1779, reported his ship had rounded the south point of the island:

On this point stands a pritty [sic] large village,* the inhabitants of which thronged off to the Ship with hogs and women... As we had now got a quantity of salt I purchased no hogs but what were fit for salting, refuseing [sic] all that were under size, in general they being no other at first, but when they found we took none but the large ones, several went a shore and returned with some, however we could seldom get one about 50 or 60 lb weight. As to fruit and roots we did not want and it was well we did not for it was very little of either they brought with them, indeed the Country did not seem capable of producing many of either having been destroyed by a Volcano...(486).

Some of the canoes that greeted Cook's ship may have come not only from the South Point village, but also from those at Waiahukini and Kailikii to the west and Keana and Kaalualu to the east (see Fig. 1).

In a supplement to Cook's Journal which contains descriptions of the districts of the island of Hawaii, Capt. James King wrote his impressions of Ka'u:

It is not only by far the worst part of the Island, but as barren waste looking a country as can be conceived to exist...

* * * *

* Only a few housesites have been recorded directly at South Point, but the remains of a village have been located on a lava flow northeast of sites H1 and H2, just inland from Kapalaoa Bay (Ladd and Kelly, ms.).

...we could discern black Streaks coming from the Mountain even down to the Seaside. But the s [southern] neck seems to have undergone a total change from the Effect of Volcanos, Earthquakes, etc...By the SE side were black honey combd rocks, near the s extremity were hummocks of a Conical Shape which appeared of a reddish brown rusty Colour, & we judged them to consist of Ashes. The s extremity, which projects out, has upon it rocks of the most Craggy appearance, lying very irregularly, & of most curious shapes, terminating in Sharp points; horrid & dismal as this part of the Island appears, yet there are many Villages interspersed, & it Struck us as being more populous than the part of Opoona [Puna] which joins Koa [Ka'u]. There are houses built even on the ruins lava flows we have describ'd. Fishing is a principal occupation with the Inhabitants, which they sold to us, & we also had a very plentiful supply of other food when off this end...(Cook/Beaglehole, 1967:606-607).

When describing the people who inhabited the district of Ka'u, Capt. King wrote:

...those we saw off Kao [Ka'u], are very tawny, thin, & small mean looking people, which doubtless arises from their constant exposure to the heat of the Sun, their being mostly employed in fishing or other hard labor on shore, & to their spare diet (Cook/Beaglehole, 1967:611).

Capt. Charles Clerke confirmed King's view of the southern part of the island of Hawaii when he wrote:

...On the Southern side the scene is quite altered, the land from the hills breaks off with a gentle descent quite to the Sea, and instead of the verdure which on the other side was most beautiful, you are here presented with a Country whose face is entirely covered with Cindars; this part of the Isle is merely the dregs of a volcano, the heart of the Country is fairly torn to pieces with it (Cook/Beaglehole, 1967:591).

Capt. Cook's journal recounts his attempt to locate a safe anchorage for the *Resolution* within the lee of South Point on January 5, 1779:

...This part of the Coast is sheltered from the reigning winds but we could find no bottom to Anchor upon, a line of 160 fathoms did not reach it at the distance of half a mile from the shore. Towards the evening all the islanders leaving us, we ran a few miles down the coast and there spent the night standing off and on (Cook/Beaglehole, 1967:487).

David Samwell, surgeon's mate, who was on the *Discovery* when it rounded South Point, made the following comments in his journal:

[January 5, 1779]...About 2 oclock in the Afternoon we saw some appearance of a Harbour upon which we brought the Ship to & sent the great Cutter ashore to examine it. Many Canoes came off to us. They did not bring much Provision but a great number of beautiful young Women. They sold us a few Bonetas.

The land hereabout has no Trees on it being almost entirely covered with lava. About 5 o'clock the Boat returned having found no Harbour. We stood off and on all Night (Cook/Beaglehole, 1967:1156).

The "harbour" mentioned by Samwell is probably the favorite Hawaiian fishing center, Kaalualu Bay. Samwell's journal continues:

January 6th. Running down along shore before the Wind, no Canoes came off to us nor could we account of the distance see any Houses. This part of the island is mountainous & entirely bare of Trees with large Patches here & there covered with streams of Lava extending from the Hills to the Sea. About 11 o'Clock we got round a point [South Point] where we found a fine Bay called by the Natives Atau [Ka'u]... (Cook/Beaglehole, 1967:1156).

At the head of this bay, which is protected from the prevailing winds by the extension of South Point (Fig. 9), and at the foot of the great scarp, Pali o Kulani, was the village of Waiahukini (just a few yards from the lave-tube shelter, site H8).

Archibald Menzies, 1794

After the departure of Cook's ships the next mention of South Point by European visitors is that made by Vancouver (1798, 3:8). He sailed around South Point on his way from Hilo (where he had picked up Kamehameha and other important Hawaiian chiefs) to Kealakekua Bay. Vancouver mentions dispatching a cutter to investigate the report of a "good anchorage and excellent shelter." However, a strong, westerly gale prevented his ship from anchoring there. Apparently distracted by his plans to have Hawaii ceded to Great Britain, Vancouver's journal reveals practically nothing about the character of Ka'u district or its inhabitants.

In contrast, Archibald Menzies, botanist with Vancouver provides comments about the expedition rounding the point as well as a detailed, first-hand account of his visit to this area.

Of the trip around the southern end of Hawaii Island during inclement weather in 1794, Menzies remarked:

January 11th... About noon we had some rain with light fluctuating wind and cloudy weather. Being then near the shore, Mr. Whidbey was sent in the cutter to examine a bay [Waiahukini Bay] on the west side of the south point, but such was the rough sea and rolling swell into it that he was unable to accomplish his object.

We met a fishing party off this point in a few single canoes. With these Kamehameha sent his orders on shore for some hogs to be brought off to us, which was instantly obeyed.

As the wind was from the N. W. quarter and a pretty fresh breeze, we pleyed against it all night without gaining much ground.

January 12th. Our distance from the land on the morning of the 12th was pretty considerable and as we stood in for it in the forenoon, some canoes came off to us. From these we understood that it was a taboo day on shore, on which account we could expect no refreshments... We had light airs and calms all day with slight showers of rain in the evening, so that our progress towards our intended port was very inconsiderable... (Menzies, 1920:142-143).

The ship finally anchored in Kealakekua Bay. After successfully scaling Hualalai mountain (Menzies, 1920:153-164), Menzies was anxious to climb Mauna Loa. Toward that end he left Kealakekua Bay by canoe on February 5, to start the ascent from the south (p. 175). The first port in Ka'u district was in the land division of Manukā, and he

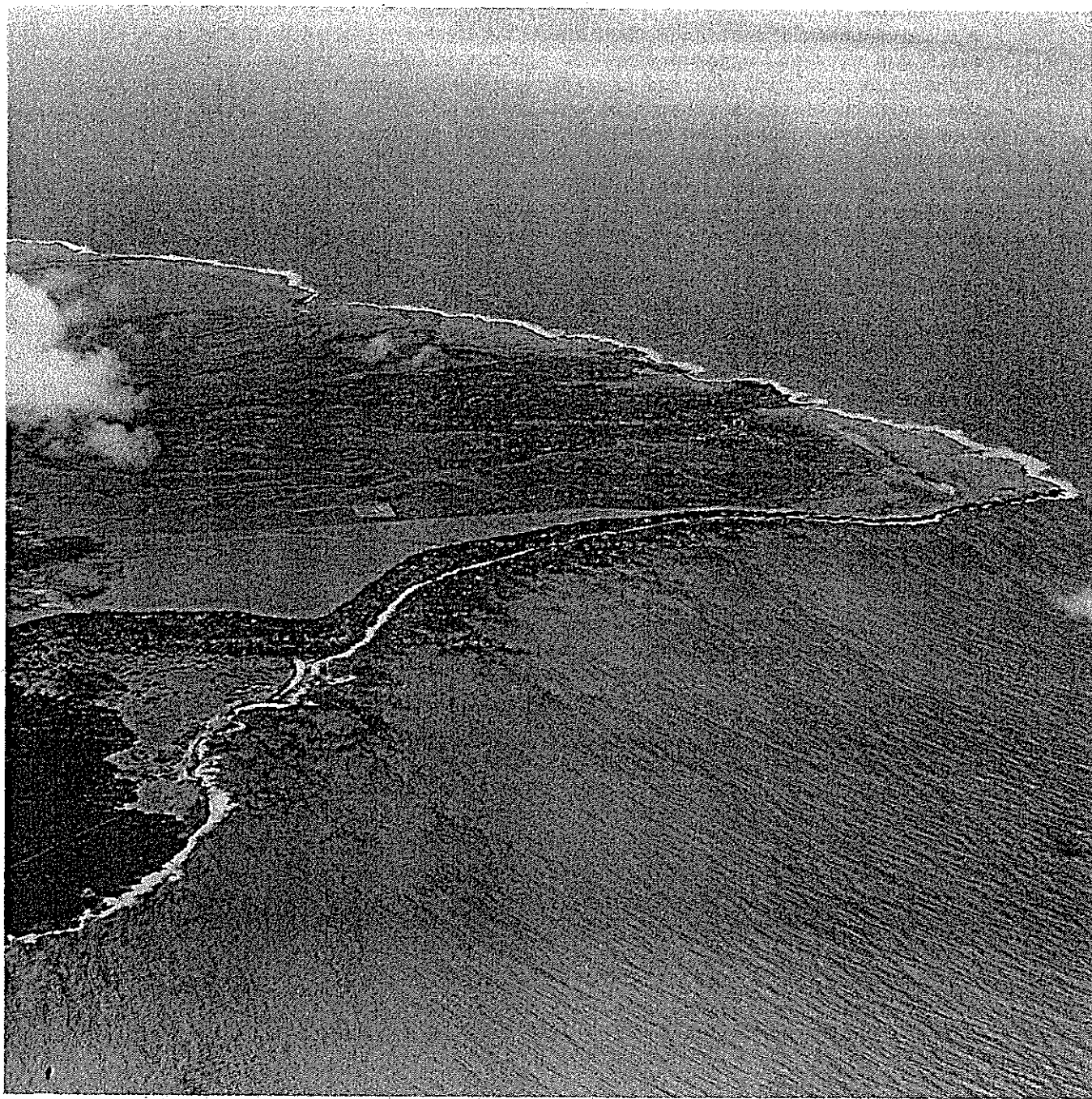


Figure 9. Waiahukini Bay in the lee of South Point, protected from the trade winds, offered a haven for west-to-east around the island travellers. The remains of Waiahukini Village site are scattered throughout the area just below the cliff in the left foreground. A tongue of aa lava from the 1868 flow may have destroyed some of its outlying structures. Photo by R. Wenkam.

reported landing at the village of "Manu-ka."* Certain environmental aspects of life in an eighteenth century Hawaiian fishing village are vividly recorded in Menzies' account of his experiences.

About noon we came to a small village named Manu-ka where we found our chief Luhea's residence, and where we landed before his house at a small gap between rugged precipices against which the surges dashed and broke with such violence and agitation and with such horrific appearance, that even the idea of attempting chilled us with the utmost dread. We however quietly submitted ourselves to their guidance, and were highly pleased to see the extra-ordinary dexterity with which they managed this landing. Having placed their canoe in readiness before the gap, they watched attentively for a particular surge which they knew would spend itself or be overcome in the recoil of preceding surges before it could reach the rocks, and with this surge they dashed in, landed us upon a rock from which we scrambled up the precipice, and in an instant about 50 or 60 of the natives at the word of command shouldered the canoe with everything in her and clambering up the rugged steep, lodged her safely in a large canoe house upon the brink of the precipice, to our utmost astonishment. The other canoe was landed in the same manner, and as the chief had some arrangements to make, we were obliged in compliance with his request, to remain at this dreary-looking place all night. A situation more barren and rugged can scarcely be imagined. The kind civilities and good treatment received from the natives were, however, unremitting. Here, as if to make amends for the dreariness of the situation, they particularly exerted themselves by every means in their power to amuse and entertain us. The chief and his people were equally eager and attentive in doing little acts of kindness and thereby assiduously displaying their unbounded hospitality.

* * * *

On seeing near the village a large pile of stones, built regularly up in a square form on the brink of the shore, curiosity prompted us to enquire what was the intent of it. When they informed us that it was erected to mark out the limits between the two districts of Kona and Ka-u, by which we found out that we had reached the southern limits of Kona (Menzies, 1920:178-180).

* * * *

The chief here packed up a quantity of dried fish to be carried with us, and presented each of us with a mat and a quantity of island cloth to lay on at night during our journey.

February 9th. After an early breakfast on the morning of the 9th, we were again launched in our canoes and proceeded to the southward, keeping close along shore within the recoil of the surges, where the water is much agitated, they conceive less danger of swamping, as their canoes are much more lively upon it than further out at sea....

* A characteristic of the names for villages reported by early visitors is that many times the name of the village is also that of the land division on which it stands.

This part of the coast is a dreary rugged tract composed of black porous rock of lava forming here and there grotesque arches, vaults and deep caverns into which the sea pushes in by the violence and agitation of the waves with great force, and frequently gushes up again several yards inland through chinks and crevices with a hissing noise into the form of fountains... (Menzies, 1920:180-181).

Menzies continued his narrative with a description of his second landing in Ka'u district at Pakini village.

Early in the afternoon we landed at a small village called Pakini,* near the south point of the island. We took up our abode in a house belonging to Keawe-a-heulu, and they told us that the village, which consisted of only a few fishermen's huts, belonged to Namahana, Keeaumoku's wife [see this paper, pp. 49-50]. The country between this and Manu-ka, the place we left in the morning, is one continued tract of loose, rough and peaked lava, the most dreary and barren tract that can possibly be conceived, so that it would be a tedious and fatiguing journey to come from thence by land, and such as even the natives themselves seldom attempt. For when they wish to visit the south side of the island, they generally come thus far in canoes from the west side and leave them here till they return again, so that this forms a common port at which there were several arrivals to and fro in the course of the evening.

Our chief advised us to remain here all night, and as we knew so little of the country, we were obliged to be entirely under his control. The afternoon was spent in covering up our canoes upon the beach to preserve them from the sultry weather and in preparing everything for our land expedition which was to commence the next morning. From thence we had a full view of the snowy summit of the mountain, which showed a remarkable glaring lustre from the sun's reflection. Some of the party that were dispatched across the country from Honomalino, met us here with cocoa nuts.

* * * *

February 10th. After giving our several attendants strict charge of their respective burdens, we left our canoes at Pakini and set out early on the morning of the 10th to prosecute the remainder of our journey by land. We had not travelled far when we found we had to ascend an elevated steep rugged bank [Pali-o-Kulani] that took its rise at the south point of the island and running along the southern side of Pakini Bay continued its direction inland behind the village. On gaining its summit, which was not an easy task, an extensive tract of the most luxuriant pasture we had yet seen amongst these islands rushed at once upon our sight, extending itself from the south point to a considerable distance inland...

From the summit of this bank we pursued a path leading to the upper plantations in a direct line towards Mauna Loa, and as we advanced the natives pointed out to us on both sides of our path, places where battles and skirmishes were fought in the late civil wars between the

* The name of the land, Pakini, is applied to the village. The specific name applying to the village area is Wai-o-Ahukini, or Waiahukini.

adherents of the present king and the party of Keoua, the son of the late Kalaniopuu, who was king of the island in Captain Cook's time. Kamehameha's warriors were headed by Kaiana, who at that time made free use of firearms, which obliged Keoua's warriors to entrench themselves by digging small holes in the ground, into which they squatted flat down at the flash of the musquets.* Many of these little entrenchments were still very conspicuous and they were pointed out to us by the natives with seeming satisfaction, as it was to them a new mode of eluding the destructive powers of firearms on plain ground. Here then we behold the first beginnings of fortifications amongst these people which they probably never thought of till these arms were introduced amongst them. We also see that the same mode of fighting naturally begets the same mode of defence in every part of the world. It was in these wars that Kaiana by his knowledge of firearms gained so much ascendancy on the island and became so powerful a chief. We continued our ascent through a rich tract of land which appeared to have laid fallow or neglected ever since these wars, till we came to a grove of kukui trees, and under their shade we stopped to rest and refresh ourselves in the heat of the day (Menzies, 1920:181-183).

Menzies wrote little more about this part of Ka'u. After arriving in the uplands he mentioned a nearby plantation named Kahuku that belonged to Kamehameha. The trail he followed took him through the plantations of upper Kamaoa "to the north-eastward at a distance of five or six miles from the shore" on a narrow winding path, which he described as "the public road leading to the east end of the island" (p. 184).

Menzies spent one night "at a village called Kioloku, on a rich plantation belonging to Keawe-a-heulu," (p. 184), and mentioned plantations called Punaluu (p. 186) and Kapapala (p. 187), which belonged to Kamehameha. It was from Kapapala that Menzies and his party began the last stage of the ascent. As he began the climb, Menzies observed the air heavily laden with smoke and cinders from Kilauea volcano (p. 188).

Rev. William Ellis, 1823

Rev. William Ellis, the second on-site visitor to leave a record, wrote at considerable length about the Ka'u portion of his tour around Hawaii (1825:97-102, 111-112). He was impressed, as were the historians of Cook's voyage, by the barrenness of the part of Ka'u that adjoins the Kona district. Just before daybreak on July 27, 1823, Ellis arrived by canoe at the small fishing village and canoe landing of Kailikii (Fig. 10a). It is located about a mile west of Waiahukini, where Menzies landed. Ellis wrote that they were "obliged to keep off the shore until day-light enabled them to steer between the rocks to the landing place" (1825:97):

At 10 A.M. Mr. Thurston preached to the people of Tairitii, and the neighbouring village of Patini [Pakini], all of whom are fishermen. They behaved with propriety, and appeared interested. We had sent out Makoia, our guide, soon after our arrival, to inform the people, that there would be a religious meeting, and invite their attendance. He had gone much farther than we expected he would; and, just as Mr. Thurston had finished his sermon, he returned, followed by a considerable company from an inland settlement...They seemed disappointed at finding the service over. As they said they could not wait till the evening, they and the people of

* Detail on these battles is given in the accounts by Ellis and Kamakau (this paper, pp. 23-24).

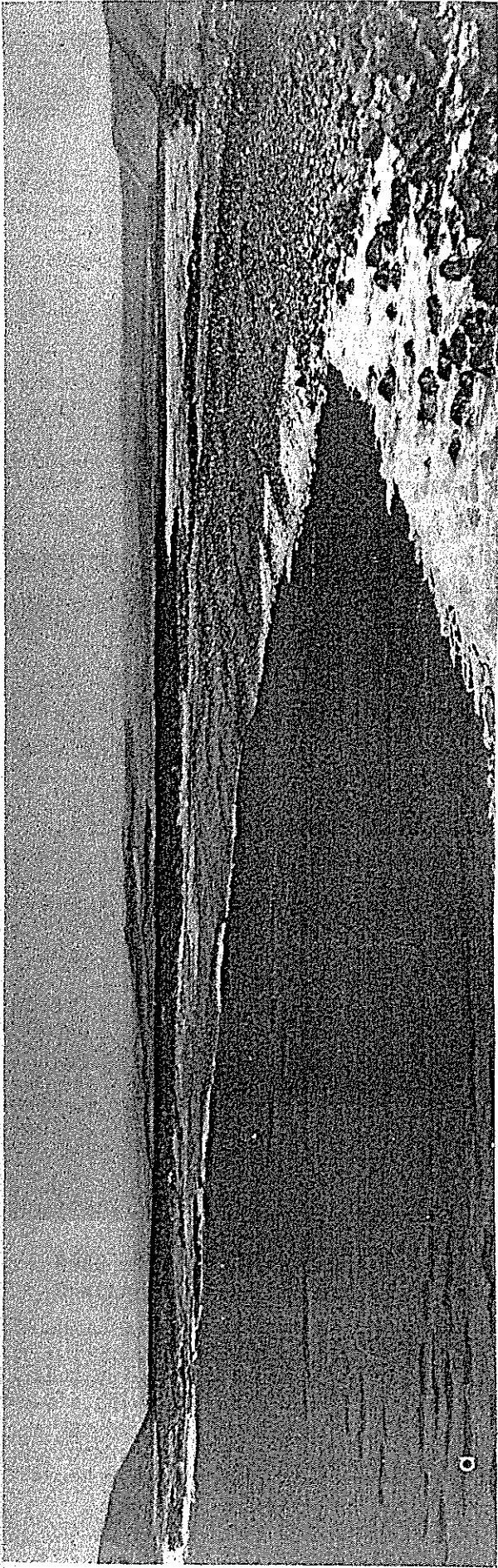


Figure 10. a. Kailikii canoe landing with Puu Hou at the left and Pali-o-Kulani in the right background.
b. Stone structures at Kailikii. Pali-o-Kulani in background.

the village assembled in a large canoehouse, and Mr. Thurston preached again...After they had spent an hour or two in conversation with us, they returned...In the afternoon, Mr. Thurston preached a third time. Between 70 and 80 were present...(Ellis, 1825:98-99).

Undoubtedly the "neighbouring village of Patini" was the village of Pakini mentioned by Menzies and now called Waiahukini (see Fig. 5). Presumably, Ellis' estimate of people numbering "between 70 and 80," who attended Thurston's third sermon, were the residents of both Kailikii and Waiahukini, for the residents of more distant villages had already left.

The residents from the "inland settlement" who arrived too late to hear Mr. Thurston's first sermon, probably came from the plains of Kamaoa above the *pali*. The "canoehouse" in which the second sermon was conducted may have been one whose remains can be seen at Kailikii today (Fig. 10b). This is not certain, however, because since Ellis' visit, the lava flow of 1868 destroyed at least part of Kailikii village and placed a barrier of aa over half a mile wide between it and Waiahukini (see this paper pp. 34-36). Puu Hou, a littoral cone west of Kailikii (Fig. 11), was never seen by Ellis, as it was created in the 1868 eruption (Moore and Ault, 1965:5,6).

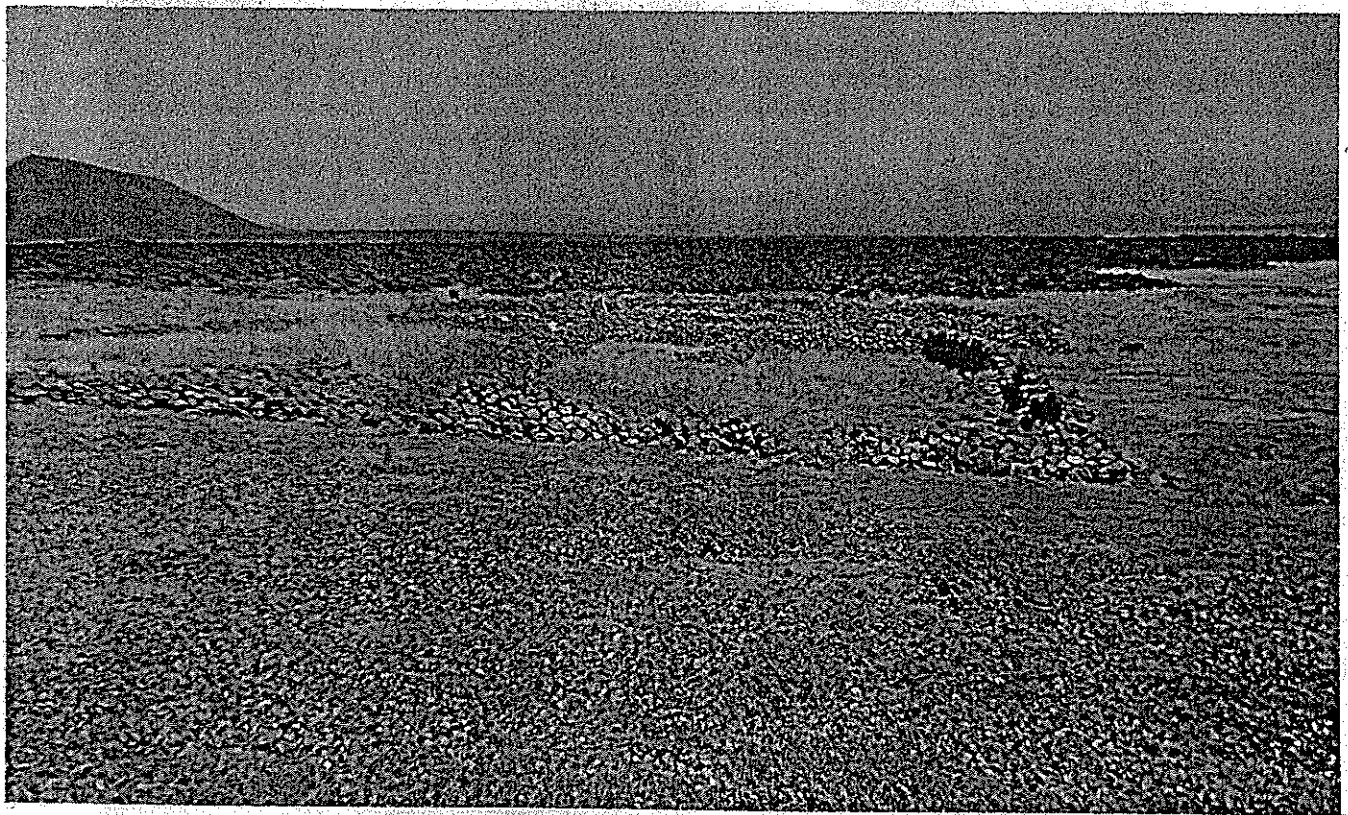


Figure 11. Stone structures at Kailikii. Lava flow in background is part of the 1868 flow that created Puu Hou (at left) and destroyed part of Kailikii Village.

The usual custom, we are told, was to leave the canoes at a coastal village such as Kailikii and proceed inland on foot. As Ellis explained, "The trade-winds, blowing along the shore very fresh and directly against us..." forced abandonment of the sea route around South Point. They placed the canoe hull in a shed, removed the outrigger, and left it, "together with the mast, sails, and paddles, in care of the man at whose house we had lodged..." (Ellis, 1825:99-100). Ellis continued his narrative:

Hitherto we had travelled close to the seashore, in order to visit the most populous villages in the districts, through which we had passed. But, here, receiving information that we should find more inhabitants a few miles inland, than nearer the sea, we thought it best to direct our course towards the mountains...

Makoa, our guide, procured men to carry our baggage, and at 9 A.M. we left Tairitii [July 28]. Our way lay over a bed of ancient lava, smooth, considerably decomposed, and generally covered with a thin layer of soil.

We passed along the edge of a more recent stream of lava, rugged, black, and appalling in its aspect, compared with the tract we were walking over, which here and there showed a green tuft of grass, a straggling shrub, or a creeping convolvulus. After travelling about a mile, we reached the foot of a steep precipice [Pali-o-Kulani]. A winding path led to its top, up which we pursued our way, occasionally resting beneath the shade of huge overhanging rocks. In half an hour, we reached the summit, which we supposed to be about 300 feet from the plain below.

A beautiful country now appeared before us, and we seemed all at once transported to some happier island...The rough and desolate trace of lava, with all its distorted forms, was exchanged for the verdant plain, diversified with gentle rising hills and sloping dales, ornamented with shrubs, and gay with blooming flowers. We saw, however, no streams of water during the whole of the day; but from the luxuriance of the herbage in every direction, the rains must be frequent, or the dews heavy.

About noon we reached Kalehu, a small village about four miles from Tairitii. The kind cottager brought us some fine watermelons, which afforded us a grateful repast, while we rested during the heat of the noonday sun (Ellis, 1825:101).

In an attempt to locate the site of the small village of Kalehu where Ellis rested, several old maps in the State Surveyor's office were consulted. While none of them carried that specific place name, a cluster of *kuleana** were located in the plains of the *ahupua'a*** of Kamaoa, about five miles from Kailikii. These *kuleana* probably indicate with a fair degree of accuracy where people lived at the time of Ellis' visit. An audience of 60 or 70 persons was addressed by Ellis during his short stay there.

Ellis describes the countryside through which they then travelled:

...beautiful country, which was partially cultivated, and contained a numerous, though scattered population. The prospect was delightful. On one hand, the Pacific dashed its mighty waves against the rocky shore, and on the other the *kua hevi* [mountain ridge]*** of Kau, and snow-topped Mouna Roa, rose in the interior, with lofty grandeur. Our path led us through several fields of mountain taro, [a variety of the *arum*]*** a root,

* A *kuleana* is a piece of land, ownership rights for which were awarded under the Kuleana Law of 1850 with the issuance of a Land Commission Award (LCA) from the Board of Commissioners to Quiet Land Titles and a Royal Patent secured from the office of the Minister of Interior (Alexander, 1890:114-115).

** *Ahupua'a* are the largest land divisions within a district. They usually extend from the uplands to the sea and may vary in size from 100 to 100,000 or more acres (Lyons, 1875:111).

*** Brackets are in Ellis' text.

which appears to be extensively cultivated in many parts of Hawaii. It was growing in a dry, sandy soil, into which our feet sank two or three inches, every step we took. The roots were of an oblong shape, generally from the inches to a foot in length, and four or six inches in diameter. Seldom more than two or three leaves were attached to a root, and those were of light green colour, frequently blotched and sickly in their appearance. Inside of the root is of a brown, or reddish colour, and much inferior to that of the *arum esculentum* or low land taro. It is, however, very palatable, and forms a prime article of food in those parts of the island, where there is a light soil, and but little water.

Between three and four o'clock in the afternoon, we reached Kauru, a small village, environed with plantations, and pleasantly situated on the side of a wide valley, extending from the mountains to the south point of the island (Ellis, 1825:101-102).

The maps were consulted again for the location of the village, which was apparently only a short distance inland from the first. About two miles inland from the first cluster of *kuleana* is another group located on and adjacent to one tongue of the 1868 lava flow, which was not there when Ellis made his trip. "Kauru" village may have been in this vicinity. Or, Ellis may have spent the night among the well-populated gardens of inland Kahuku, north of Kiao and west of the two Pakini lands (see Fig. 1).

A little before sunset "...about 150 people assembled in front of his house." To gather so many together the residents of the small village of "Kauru" must have augmented their numbers from the neighboring countryside where the population was scattered among the farms.

The following day the group continued their tour. They

...left Kauru, and, taking an inland direction, travelled over a fertile plain, covered with a thin, though luxuriant soil. Sometimes the surface was strewn with small stones, but in general it was covered with brushwood. The population in this part, did not seem concentrated in towns and villages, as it had been along the sea shore; but scattered over the whole face of the country, which appeared divided into farms of varied extent, and upon these the houses generally stood singly, or in small clusters, seldom exceeding four or five in number (Ellis, 1825:102).

They walked six or seven miles before entering "the district of Papapohaku." Early maps carry the place name, "Papohaku," which appears to have been either an *'ili** within the larger *ahupua'a* of Kiolakaa, or a small *ahupua'a*, about two miles west of Waiohinu village.

Ellis estimated that between 60 and 70 people collected around the visitors while they rested at the edge of this land division.

...Most of the children were naked, or at best had only a narrow strip of tapa fastened around their loins. Several of the men, on seeing us pass along, had left their work in the fields and gardens, and had come, covered with dust and perspiration, just as they were, and seated themselves in the midst, with their *oos*.*

* An *'ili* is a division of land smaller than an *ahupua'a*. It may be considered part of an *ahupua'a* (*'ili 'aina*), or a separate political entity (*'ili kupono*). An *'ili* may also be discontinuous (*'ili lele*) and have from two to as many as ten parcels of land (Lyons, 1875:118; Alexander, 1890:105).

*The *oo* ['o'o] is the principal implement of husbandry, which a Hawaiian farmer uses. Formerly it was a sharp pointed stick of hard wood. It is now usually pointed with iron. The best are made with broad socket chissels, into which they put a handle four or six feet long (Ellis, 1825:102-103).

They continued the journey, this time in a northerly direction on a path which "seemed to lead them towards a ridge of high mountains, but it suddenly turned to the east, and presented to our view a most enchanting valley, clothed with verdure, and ornamented with clumps of kukui and kou trees."

Ellis continues:

On the south-east, it [the valley] was open toward the sea, and on both sides adorned with gardens, and interspersed with cottages, even to the summits of the hills. A fine stream of fresh water, the first we had seen on the island, ran along the centre of the valley, while several smaller ones issued from the rocks, on the opposite side, and watered the plantations below. We drank a most grateful draught from the principal stream and then continued our way along its margin through Kiolakaa, walking on towards the sea till we reached Waiohinu [village], about 10 miles from the place where we slept last night.

Needless to say, if for no other reason than the presence of a stream of fresh water, Waiohinu valley would be important to the ancient Hawaiians. An early map (Wright, 1909) indicates a large number of *kuleana* awards in Waiohinu village and its environs as well as extensive taro gardens scattered along the stream which originates at Haao Springs, a mile and a half inland from the center of the village.

Ellis left Waiohinu village following the trail that continued through the valley where "mountain taro, bordered by sugar-cane and bananas, was planted in fields six or eight acres in extent...and seemed to thrive luxuriantly" (p. 147). Ellis passed a "*tahua pahe*"* (a game field) where a number of men were playing *pahe* "a favorite amusement with farmers and common people in general" (p. 147).

Where the trail again approaches the coastline, Ellis thought the surrounding country "appeared more thickly inhabited" than the upland areas he had walked through earlier. "The villages, along the sea shore were near together, and some of them extensive" (p. 149).

Ellis walked through a village named Kapauku which belonged to Naihe, son of Keawe-a-Heulu (p. 150), and stayed one night at Honuapo where some of the inhabitants had tattooing on their lips "after the manner of some of the New Zealand tribes" (p. 151). About 200 persons gathered there to hear the evening sermon (p. 151). Ellis mentions an excellent fresh water spring at Hokukano (p. 154), and he identifies Hilea village as belonging to Kuakini, governor of Hawaii. He describes the reproductive pebbles of Ninole and how they were prepared for presiding over the games. Farther inland he rested at a hamlet called Makaaka which contained four or five houses. Here two women were beating tapa and the men were hewing out a new canoe hull. Ones they had completed measured "upwards of sixty feet long, and between two or three feet deep..." The men said they were "making a pair of that size for Kaikioewa, the guardian of the young prince, Kauikeouli, whose tenants they were" (pp. 159-160). Ellis continued his tour through Kapapala, up to the volcano area, and on toward Puna.

* *Pahe*, a blunt, tapered, wooden dart two to five feet long thrown for distance or for accuracy between two uprights placed three to four inches apart at a certain distance from the thrower.

Edward Loomis, 1824

Edward Loomis, a member of the Protestant mission, set out by canoe from Kaawaloa to approach Mauna Loa from Ka'u in 1824, just a year after Ellis had made the trip. He landed at a small village which he identified as Kaulanamauna, and which is the name of the last land section of Kona, bordering Ka'u. From there he proceeded on foot along the coast, as strong head winds prevented them from continuing by canoe.

They walked about 20 miles to the village of "Haperoa."

The whole of the intervening country along the shore exhibits the most barren and rugged appearance conceivable. Streams of lava descending from the mountain have covered the whole of this part of the country rendering it impossible to be cultivated except at a considerable elevation some distance from the sea where the frequent rains have in some measure decomposed the lava and thus produced a soil. The inhabitants reside mostly on the seashore, subsisting in a great measure upon fish. The place where I have put up contains only a few houses, but these are well filled with inhabitants. The one which I am to sleep in is less than ten feet square, yet it has a fireplace in the center and accommodates eleven inhabitants. (Loomis, ms. p. 7.)

From there they took an inland trail and went up the *pali*.

I was delighted to find myself in a new region, where a thin but rich soil and luxuriant foliage concealed the lava from our view...Continuing our journey over a beautiful tract of country (but thinly inhabited)... (p. 12).

On his return from the summit of Mauna Loa he and his party slept at a place called Wailau. From there they went to "Taeletie" [Kailikii]. To avoid any notions that life in little fishing villages was dull or without entertainment, one needs only to read Loomis' description of a song and dance concert in Kailikii. On his arrival he found about 200 people gathered waiting for a dance concert to begin. It was a dance "performed by three or four females fancifully dressed with 20 or 30 folds of elegant tapa around the waist--a string of dog's [pig's?] tusks on each wrist, and a bandage to which was affixed loosely a great number of dog's teeth around the ankles. There were five or six musicians, who sang with all their might, beating at the same time upon calabashes..." (p. 13).

Summary

The most characteristic remarks of early European visitors to Ka'u, and particularly to its southwest portion, labelled it a barren, treeless wasteland covered with streams of black lava from the hills to the sea. The inhabitants are described as small, thin, sun-browned people employed with fishing in their seashore villages and with agriculture in their upland plantations. Villages, which today are deserted, were then thriving communities of a hundred, two hundred, or more people replete with productive and cultural activities. The accounts reveal the Hawaiians as extremely hospitable people.

Journals by visitors to the coastal fishing villages describe a continuous arriving and departing of canoes and people throughout the day and night. Friendly relationships between coastal villages and the upland plantations prevailed.

The desolate fields of lava below the Pali-o-Kulani were viewed in sharp contrast to the verdant rolling plains of the land above the *pali*. The upland plantations were laid out in small fields and cultivated with digging sticks by the farmers. Houses were scattered throughout the upland plantations, singly or in groups of two or three.

In spite of a great variation in environmental conditions between the seashore and the uplands, the barren lava fields and verdant plains, the inhabitants of Ka'u appeared to be people who neither produced large surpluses nor suffered from lack of food.

III

HAWAIIAN HISTORIANS ON KA'U

The writings of Samuel M. Kamakau

European visitors' appraisals of much of Ka'u as a devastated land is not reflected in the reports by Hawaiian historians. These records reveal much of Ka'u as a populous and active region in early post-European times.

When Capt. Cook visited Kealakekua Bay in 1779*, the high chief of the island of Hawaii was Kalaniopuu, a prominent chief from Ka'u. According to Kamakau, Kalaniopuu spent a considerable amount of time in Ka'u district during the nearly thirty years of his reign. He died at Waiahukini in 1782 (Kamakau, 1961:110; Stokes, 1935:22).

A Battlefield

Both Kamakau and Ellis tell the story of Kamehameha's struggle against Keoua, a high-ranking chief of Ka'u and half brother (but of lesser rank) of Kiwala'ō, the vanquished son of Kalaniopuu. Keoua and his supporters were on their way from Hilo to Kailikii in 1789, after having defeated and killed his uncle, Keawe-ma'u-hili, when explosive eruptions from Kilauea volcano killed some of his men. Continuing on their way, the remainder met Kamehameha's group under the leadership of Kaiana*. A battle took place at Kailikii in which Keoua was defeated. He retreated toward Hilo while "Kaiana and his warriors returned to Waiohinu to remain there till the place of his [Keoua's] retreat should be discovered" (Ellis, 1825:110-112). When Keoua finally gave himself up, he and the chiefs who escorted him embarked from Kailikii to make the trip to Kawaihae where Kamehameha awaited them.

Kamakau's version included a few more details. He said pointedly that Kaiana had been made leader "to make war upon Keoua Kuahuula" because Kamehameha's army, when "led by Ke'e-au-moku and the chiefs and accompanied by Young and Davis had been forced to flee both in Hilo and in Ka'u" (1961:153).

Kamakau also told where the battles took place:

...a war expedition was started off for Ka'u. The battlefield was laid out at Kalae, Paiaha'a, Kama'oa, and Ua'ohulelua, where the struggle was fiercest (153).

* It was Kaiana who had gone with Capt. Meares (Meares, 1791) to China in 1787 and had returned two years later with firearms and knowledge of how to use them. Recognizing the value of this knowledge, Kamehameha secured Kaiana's active support (Kamakau, 1961:153).

Kamehameha's successful bid for power after Kalaniopuu's death, eliminated two Ka'u chiefs, the half brothers, Kiwala'ō and Keoua. The battlefields on which Keoua fought to maintain his control over Ka'u involved the most prominent places in the southern portion of the district. Kamakau's mention of Kamaoa as a battlefield is confirmed by Menzies reference to the fox holes and trenches he saw and the explanation then given to him (Menzies, 1920:182, and this paper p. 15-16).

When Kaiana chose Waiohinu as a place to wait until Keoua revealed himself, he probably selected that village on the basis of two primary considerations. The first would have been the resources available. Here were the best wet-cultivation taro fields, the only abundant source of fresh water in the entire southern portion of Ka'u, and a community of people to provide for his army's needs. The second is its strategic location. The village of Waiohinu lies astride the best trail between northern and southern Ka'u. On the one hand, the mountain cliffs border the inland edge of the village and meet the sea at Honuapo, about four miles away. On the other hand, the plains southeast of Waiohinu slope gently to the sea and their surveillance from the cliffs is a simple matter.

The plains seaward of Waiohinu contain several large lava-tube shelters which today are called caves of refuge and are said to have been used in times of war. It seems most probable that these caves provided shelter for the local populace and supporters of Keoua during the time Kamehameha's warriors invaded the area. Built into these caves are stone walls which restricted entrance and provided additional protection to refugees (Bonk, 1969). Although there are no defensive walls in Lua Makalei (H2) at South Point, it seems probable that this large cave was used as a shelter by battle participants or by local residents seeking refuge during periods of turmoil (Fig. 12).

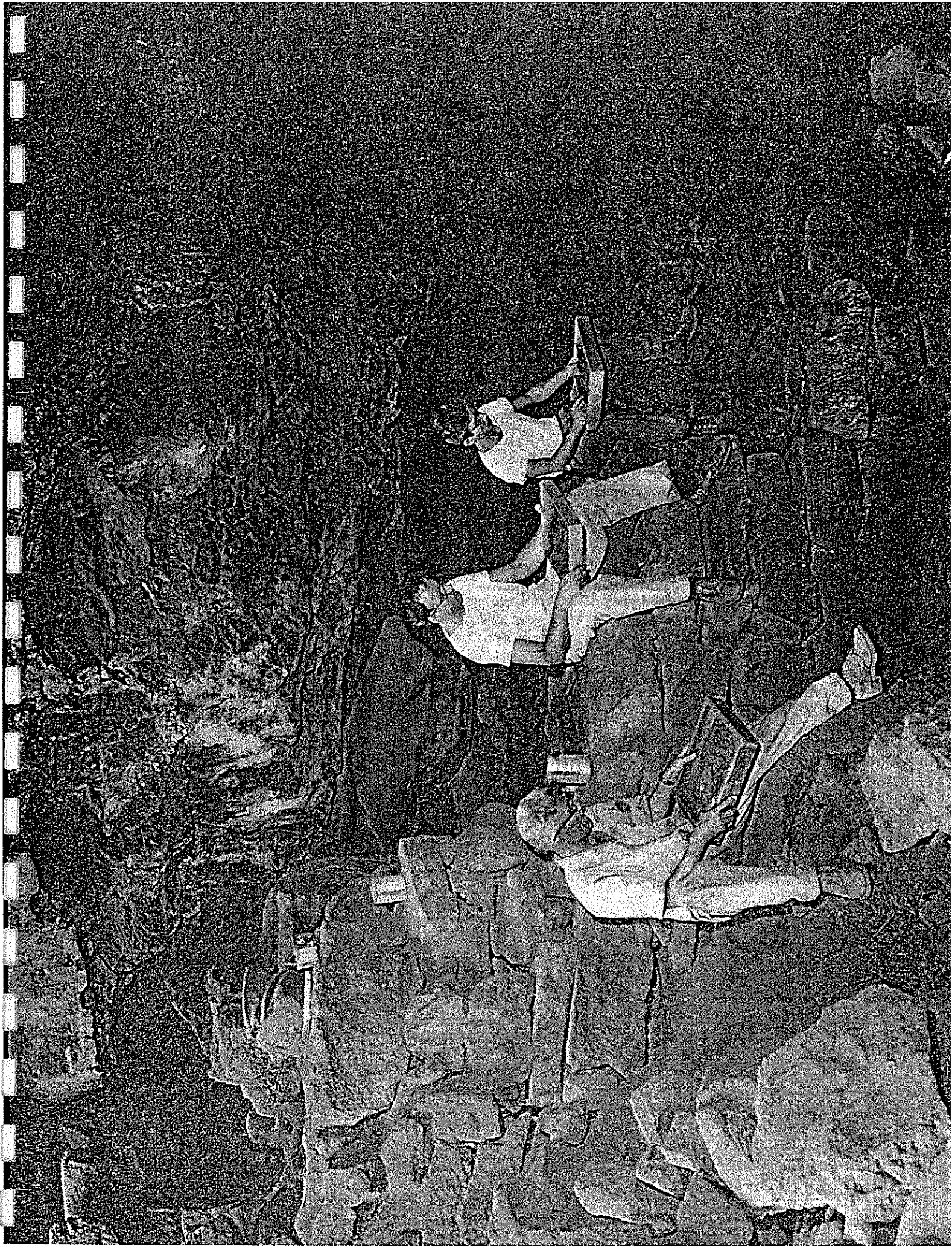
The prominence of Kailikii as a canoe landing and access to the uplands is evident also in Kamakau's writings. When Kamehameha sent Keoua's near relatives, chiefs Keawe-a-heulu and Kamanawa, to provide Keoua safe passage through the portion of the district controlled by Kaiana, the two chiefs "landed at Kailikii and began the ascent of Kahehawahawa along the plains of Ke'eke'ekai" (Kamakau, 1961:155).

During the period of the rebellion of the Puna chief, I-maka-koloa (circa 1781), Kalaniopuu stayed "at Punaluu, at Waiohinu, then at Kama'oa in the southern part of Ka'u, and erected a *heiau* called Pakini (see Appendix), or Halauwailua, near Kama'oa" (1961:108). It was at the *heiau* of Pakini that Kamehameha symbolically usurped the right of Kalaniopuu's designated heir, Kiwala'ō, when he placed the body of the rebel chief, I-maka-koloa, on the altar, leaving Kiwala'ō a hog as his offering (Kamakau, 1961:108). After this event, called the "double freeing," Kamakau says that Kalaniopuu left Kamaoa and went to Kaalualu and Paiahaa to fish:

Then there came a school of *ahi* fish to Kalae, and all the chiefs went down to Kalae for the *ahi* fishing.

Fresh Water and Canoe-Mooring Holes

The problem of fresh water for coastal inhabitants was real. Most coastal wells are located within a few yards of the ocean and provide barely potable water at best. Numerous complaints by missionaries and other travellers (Ellis, 1825:83) on the effects of drinking water from these wells attest to the problem. In some areas, crevices in the lava provide natural openings through which fresh water flows. Fresh water sources in the Kailikii village area today are minimal. A crevice at Puu Lohena, which is located about half way between Kailikii and Waiahukini on the 1868 lava flow and just a few yards from the shore, provides some potable water. The present well at Kailikii is not a lavish source of fresh water. However, Kamakau implies that Kailikii had greater fresh water resources in Kalaniopuu's time, while South Point suffered from a lack of water.



...Since the distance to Ka'iliki'i after fresh water for bathing was so great, Ka-lani-'opu'u asked his kahunas who were skilled in pointing out proper locations, 'Is there water to be found on Kalae?' One kahuna said, 'There is water here. It is in front of the dog [a rock so called]...The water bubbles up within the sea, and one must dig deep for the waters of Mana' (Kamakau, 1961:109-110).

Efforts to find fresh water at South Point failed, and the *kahuna** forfeited his life.

A second story concerned with digging for water at South Point involves Kamehameha and another *kahuna*,

...an expert in telling locations (*kuhikuhi pu'uone*) named Wai-'anae, who was to tell him how and where to sink the well. The place was at the spot called Ka'ilio-a-Lono (Dog of Lono), and the digging was begun with energy, but the rock was too hard to work without foreign tools (Kamakau, 1961:205).

No water was found, but

...they did make the holes which ships putting in at this place can tie up to and which are called "The water dug by Kamehameha" (Ka-wai-ku'i-a-Kamehameha) (Kamakau, 1961:205).**

A few canoe-mooring holes have been located in Kona, but the group at South Point numbering about 80 are unique. That they are all located within a fairly restricted area (Figs. 13 and 14), would seem to support the claim that they reflect a need to have a large number of canoes moored in a relatively small area, which does not seem incompatible with a concerted effort to locate a submarine fresh-water stream. However, also reported in the sea at South Point is a confluence of ocean currents which provides a relatively narrow area for excellent fishing. And this may be part of the reason that South Point has such a famous reputation for good fishing grounds. If used for this purpose, the mooring holes for canoes fishing off the cliff also would tend to be concentrated in a fairly restricted area.

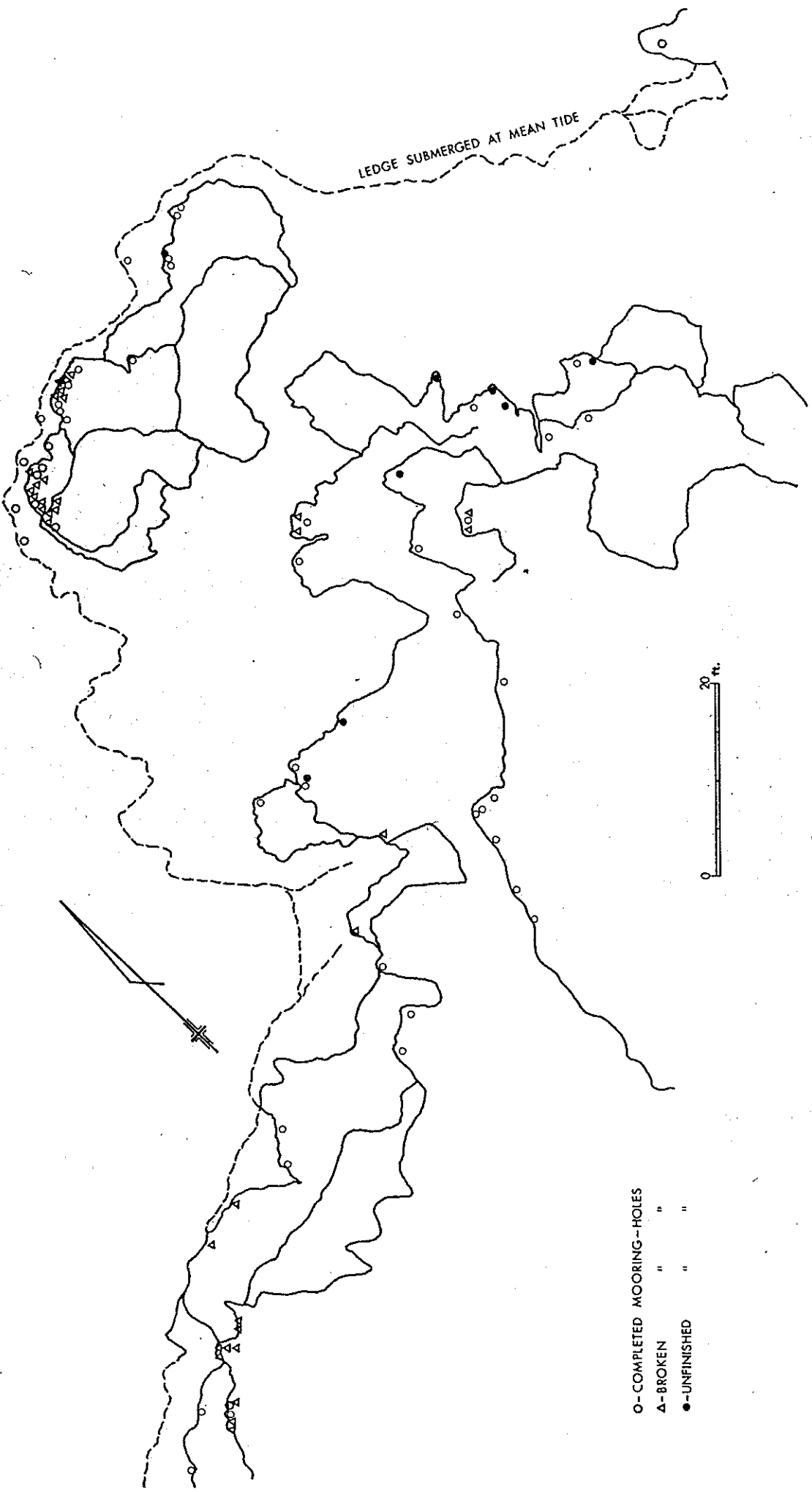
An article by Albert S. Baker described the place where the "canoe holes" are found and explained how he believed they were used:

The ocean is rough to the east of the Point. It is calm near the shore on the west. These holes toward Kona a bit from the end of the Point were to tie canoes where the wind would swing them off the junction of rough and calm water, for the best possible fishing...(1948, 118 (4):4).

It is also possible that these holes were used to tie up canoes, not primarily for the purpose of fishing, but merely while the canoes were not being used. For people living at South Point, such a canoe-mooring facility would have been a distinct asset.

* A *kahuna* is an expert in some particular area of knowledge.

** Another story about seeking water at South Point says that "Kamehameha tried to get water by...crumbling the rock by fire. He make a deep hole but found no water" (Henriques, ms.). This version does not mention the canoe-mooring holes, nor is it concerned with the search for a fresh water source under the sea, as using fire to crumble the rock is incompatible with seeking an undersea fresh water source. If this was another attempt entirely, it is not mentioned by Kamakau.



- O - COMPLETED MOORING-HOLES
- △ - BROKEN " "
- - UNFINISHED " "

Figure 13: Mooring holes at South Point (Kalae), Hawaii. Map by J. H. Cox.



Figure 14. Close-up of canoe-mooring holes.

The system of canoe mooring as it functions today in Kona is to use two land-based mooring lines off the bow and a single anchor line off the stern. Used in this way, the approximately 80 mooring holes would accommodate only half as many canoes. However, we are still burdened with the fact that tradition links the holes at South Point with Kamehameha's efforts to find fresh water.

An informant told Baker that she had first seen the holes "sixty years ago" and, "The Hawaiians living there then said that Kamehameha, with the help of his men, made them. They heard it from their parents..." (Baker, 1948:118(4):4). This information seems to confirm Kamakau's story, but it is relevant, I believe, to mention here that Kamakau's article was originally published in a Hawaiian language newspaper in 1867 (Kamakau, 1961:205-208), and could conceivably be the source for their information.

Where Chiefs Go Fishing

Kamakau provides additional evidence of other activity at South Point. He reports that Kalaniopuu at one time sent out a request for fish nets from Hilo and "lines for albacore fishing (*aho hi-ahi*) from Puna and from Kalae in Ka'u:.." (Kamakau, 1961:106). Such fish lines were usually made from the fibres of the *olonā* (*Touchardia latifolia*), a shrub which grew in the uplands (Neal, 1965:319-320).

Describing the late period of Kamehameha's rule, Kamakau said: "If word was brought that 'ahi were plentiful at Kalae, off went the chief to the 'ahi fishing, and he fished also at Kaulana, Ka'iliki'i, Pohue, Na-pu'u-o-Pele, Kapalilua, and at other places along the coast" (Kamakau, 1961:203).

The Writings of John Papa Ii

John Papa Ii was the constant companion of Liholiho, Kamehameha II, from the time he was a child, and his knowledge of the early Kamehameha period and the years that followed provides the basis for his writings. Concerned with the culture and activities of his time, he leaves us information about the famous surfing sites at Ka'u. One site named Kapuuone was located "on the east side of Kalae." Others were "the surfs of Paiahaa at Kaalualu and Kawa in Hilea" (Ii, 1959:134). He also identified the large *heiau* at Punaluu in Ka'u as one of the *luakini* class which was visited by Liholiho (p. 137).

Kamehameha's Youth

Concerned with the history of the Kamehamehas, Ii goes into considerable detail about the period of Kamehameha I's youth that was spent at Ka'u:

Upon their [Kalaniopuu, Kamehameha, and Kalaimamahu] arrival in Kau, Kalaniopuu placed Kamehameha with his wife, the chiefess Kaneikapolei, who put Kamehameha in the hands of her kaikunane relatives, Inaina ma. He was there for some time and was familiar with the life of the court by the time he became associated with his older cousin, Kiwalao, the son of Kalaniopuu and Kalola (Ii, 1959:6).

* * * *

...the woman took a great fancy to him, as they did also to his younger brother [half-brother] Kalaimamahu. They were the handsomest men of those days, and the chiefesses gave them many gifts. This led to trouble with their uncle Kalaniopuu, for they were taken by Kaneikapolei, wife of Kalaniopuu...It was probably in this way that Kaoleioku was conceived... (Ii, 1959:7).

Exactly where in Ka'u this took place is not mentioned by Ii. It may have been at Waiahukini and indirect evidence that Kamehameha did stay in Waiahukini is provided:

...Kalaniopuu...left his nephew [Kamehameha] with Keawe a Heulu... (Ii, 1959:8).

We already know that Keaweheulu had a house at Waiahukini, for it was there that Menzies stayed when he arrived by canoe from Kona (Menzies, 1920:181).

Kalaniopuu's Death

Ii also supports Kamakau's statement that Kalaniopuu died in Ka'u:

At last Kalaniopuu was laid low with sickness and died at Waioahukini, in Kailikii, a place on the other side of Pakini in Kau, Hawaii. Then Kamehameha set aside the place where his unclcd had died (Ii, 1959:11-13).

I's reference to Kailikii is probably as the name of a general area. Kamakau says that Kalaniopuu went to Kailikii where he fell ill and returned to Waiahukini where he died (Kamakau, 1961:110).

Ii Visits Ka'u

Ii describes two trips he made to Ka'u, one in 1843 and the other in 1853: On the first he went to settle a reported "fight in Kau between the Protestants and the adherents of the Pope." But, as it turned out, "By the time he reached Kau the disturbance was over" (Ii, 1959:168-169).

On the second trip, ten years later, he took with him Victoria Kamamalu, a granddaughter of Kamehameha. The implied purpose of this trip is to escape the outbreak of smallpox in Honolulu, but it may be that Kamamalu was visiting her recently acquired lands in Ka'u, including Pakini-nui (see this paper, p. 48-50).

They went next to Kaalualu in Kau and on up to Waiohinu, met with Kini ma who were there at the time, and spent the night with them. The ship Pauahi left Kaalualu that evening after they started for Waiohinu and sailed to Kalae to wait for them. The next morning they left Waiohinu to return to the ship but a third person of the group took a different way in order to arrive at Kailikii first.

So Kamamalu and Ii travelled together on horseback over that lonely but peaceful plain. They took the long trail called Puuone which ran along a sand ridge to Kalae, from the shores of Kaalualu and Paiahaa, and to the dust-leaping place of Kaumaea. That was where the Puuone trail met the trail going up the cliff of Molilele and the one leading down to Kailikii.

* * * *

...they continued until they reached the fork of the trail going straight down to the shore of Kalae, then went on to the ship...they spent the night there, and the next morning left to spend the second night at Kailikii (Ii, 1959:169-171).

Summary

The two primary Hawaiian sources for the history of Hawaii Island, Kamakau and Ii, provide ample references of the vital role played by Ka'u district, particularly its southern portion, in the political and economic life of the island. Many of the most influential chiefs of Hawaii Island were Ka'u chiefs and many important historical events took place in Ka'u. The accounts of life in Ka'u by Kamakau and Ii present a thriving, hard-working populace producing an adequate subsistence for themselves and a surplus, which provided for a hierarchy of chiefs and their families.

IV

KA'U AFTER 1840: VISITORS AND RESIDENTS

During the 1840's the visitors to Ka'u continued to make the canoe voyage from Kona to Kailikii or Waiahukini and then journey overland on foot or on horseback to Waiohinu or on around the island.

James D. Dana, U. S. Exploring Expedition

In late 1840, James Dwight Dana, geologist with Cmdr. Wilkes' expedition, and Midshipman Hudson set out from Kona, journeyed through Ka'u and Puna, and rejoined their ship at Hilo five days later. According to his published report (Dana, 1849:160-164), they apparently sailed by canoe to Kaulanamauna, the last land division of Kona, and then went overland through Manuka to Kailikii, Ka'u. However, because he failed to mention scaling the *pali*, it would seem that he turned inland early in the journey and approached Waiohinu through the Kahuku uplands, above the upper end of the great scarp.

Rev. John D. Paris, 1841

Some eighteen years after Ellis' trip, Waiohinu became the site of the first Protestant mission established in Ka'u district. Rev. John D. Paris landed from a schooner at Kaalualu Bay on September 10, 1841, and was met there by "hundreds of natives" (Paris, 1926:13) and by the headman or chief, Job Lilikalani. From Kaalualu village he and a large group of people followed Lilikalani about three miles inland "to the house of our leader which was prepared for our lodging for the night. Hale hookipa it was called, house of refreshing and rest. It was a large grass canoe house." (p. 14). When Paris returned with his family a month later, they travelled by canoe from Kailua, Kona, to Honaunau and then on to Kailikii. "Our double canoe was taken high and dry on to the Pahoehe by a large number of natives at Kailikii, near the South Point of Hawaii. Here we lunched and rested in the house of Pipi..." (p. 18). Mrs. Paris was placed in a *manele* (sedan chair) and carried by "four strong native men up the steep and rugged pali and thence three or four miles to the house of Job Lilikalani..." (p. 19).

Rev. Paris' journal indicates that Kailikii and Kaalualu were still thriving communities in 1841. He also recorded a visit by Kamehameha III and his entourage to Waiohinu in July 1849. A later resident missionary, Rev. Henry Kinney, (Ms.) recorded his arrival at Kailikii in a double canoe and his trip overland to Waiohinu in 1849.

Chester Lyman, 1846

In his journal, Chester Lyman (Ms. p. 19) remarked that the "country west of Waiohinu is delightful--the soil appears to be good and vegetation abundant." His is the first journal of the overland trip from Ka'u to Kona on the upland trail. Not until he had gone beyond the upper end of the *pali* on his way to Kona did he report a complete change in the environment--from abundant vegetation to desolate fields of aa lava on which grew only patches of lichen and isolated clumps of grass.

Samuel S. Hill, 1849

Reports of other travellers also attest to the use of the well-established round-the-island route--by canoe to Ka'u district and then overland. In 1849, Mr. Samuel S. Hill sailed in a small boat from Kealakekua Bay to Kailikii. They left Kealakekua Bay at sunset, "the usual hour of embarking upon a coasting expedition in these islands, on account of the prevalence of land breezes during the night..." (Hill, 1856:223). During a storm, he and his companions took shelter at a tiny harbor near Pohue Bay and explored the rough lava fields in the area before they continued their way to Kailikii:

...we hauled into the cove in which Kailili [Kailikii] is situated, and landed...near the hut of the government agent...

...the village of Kailili consisted of but three or four huts...The country immediate to the village was also of the rudest description... They gave us...fish, very good sweet potatoes, and dry taro...they seemed to be plentifully supplied (Hill, 1856:239-240)..

Hill and his party departed from Kailikii on horseback. About five miles inland they ascended the cliff to the upper plains of Kamaoa, and then rode to Waiohinu. On the way, they passed several hamlets of only "three or four huts" (p. 240). They probably used the farthest inland trail to scale the *pali*.

It should be mentioned here that one of the persons travelling with Hill was the owner of a coffee estate in Kona, a Mr. Hall, who had a Hawaiian wife and several children (Hill, 1856:220). He went with Hill as far as Waiohinu to transact some business there (p. 251), presumably in connection with his planting interests, and then returned to Kona.

Sophia Cracroft, 1861

Another first-hand account of the area was recorded by Sophia Cracroft in a letter dated May 1, 1861. She and her friends had arrived in Waiohinu the previous evening and departed that morning going toward Pali-o-Kulani. From the top of the cliff they looked down on the dry plains below:

...The shore was before us some few hundred feet below, with a native house at the edge of the water...there was nothing to be done but to descend the rocky cliff to the lava plain some two miles wide which intervened between the foot of it and the sandy rockstrewn beach...

...we reached the solitary house on the shore.

It proved to be a very excellent native one, of grass as usual, belonging to one of the lower Chiefs, by whom it was as a matter of course given up to one of Mr. Kalakaua's rank--the family of the owner moving into a small one usually occupied by the servants, adjoining which was the cooking place--a mere sloping thatch upon poles. Besides these buildings all of grass, there was a large canoe house. This made up the little homestead, distant from the nearest village by about two miles...

When once the sun was up, the heat was too great for exposure to it, as there was not a morsel of shade...During the two first days a good many natives from the nearest village probably Wai-ahukini came over to look at us and seated themselves in the doorway... (Korn, 1958:61-62).

"Mr. Kalakaua," who travelled with the group on this trip, eventually became the last king of the Hawaiian Islands (1874-1891).

Rev. Rufus and Mary Anderson, 1863

In 1863, the Rev. Rufus Anderson and his wife, Mary, travelled from Hilo to Ka'u [probably Kaalualu] by steamer and then by horseback about seven miles to Waiohinu. The Andersons reported that Mr. and Mrs. Gulick had established a boarding school for native girls and had nine pupils (Anderson, 1865:106).

Mark Twain, 1866

In 1866, the inveterate traveller, Samuel Langhorne Clemens, arrived at Kaalualu on the schooner *Emmeline* from Kealahou Bay. The rough trip experienced while rounding the southwestern and southern points of the island provides sharp contrast to the canoe and overland route of the ancient Hawaiians:

All day the next day we fought that treacherous point--always in sight of it but never able to get around it. At night we tacked out forty or fifty miles, and the following day at noon we made it and came in and anchored.

We went ashore...and landed in the midst of a black, rough, lava solitude, and got horses and started to Waiohinu, six miles distant. The road was good and our surroundings fast improved. We were soon among green groves and flowers and occasional plains of grass. There area a dozen houses at Waiohinu, and they have got sound roofs...(1938: 200-201).

Clemens also reported a sugar plantation "at Waiohinu, and 150 acres planted..." (p. 201).

Because he usually recorded his travels in considerable detail, it may be significant he wrote about landing "in the midst of a...lava solitude" and did not mention having been met by any residents of Kaalualu. In contrast Rev. Paris recorded having been met in 1841 by "hundreds of natives." Perhaps the earlier occasion fostered greater curiosity among the inhabitants, but the difference may also reflect a declining population.

Summary

After the establishment of a district mission station in Ka'u, visitors' journals describe the continued use, at least for the early half of the century, of the route from Kona by canoe to Kailikii and then overland to Waiohinu. After 1860, coastal schooners, bringing supplies to the mission station and other enterprises in the area, used harbors such as Kaalualu instead of small canoe landings like Kailikii.

A significant event in 1846 was Chester Lyman's trip from Waiohinu to Kona by land. The route led him across the uplands of Kahuku and Manuka and then down to the coast at Kapua in Kona. It was a harbinger of things to come. The land route was not popular at first, but it eventually came to replace the sea route, at least for much of the missionary traffic between Ka'u and Kona.

V

VOLCANIC DISTURBANCES OF 1868

It was not without cause that Capts. Cook and Clerke, and others who followed them, described the district of Ka'u as "destroyed by a Volcano" and "as barren waste looking a country as can be conceived to exist." Time and time again over the years, the land of Ka'u has been overlaid with new lava. The evidence is there of countless prehistoric lava flows and a dozen or more historic flows. Not always in historic times has the lava reached the sea as it did at Kailikii in 1868, but there is evidence that many of the earlier flows did.

Recognizing the ever-present possibility of eruptions, volcanologists prefer the term "dormant" to "extinct" even though no activity may have been recorded in a given volcanic area in historic times. On the island of Hawaii, we have even less assurance of any substantial length of time without volcanic disturbances, for Mauna Loa and Kilauea are acknowledged "active" volcanoes.

In 1868, the people of Ka'u experienced the full wrath of Pele. Beginning on March 27, a series of earthquake shocks were felt in Ka'u and as far away as Hilo and Kona. Rev. Titus Coan wrote:

Kau was startled by heavy explosions and roarings...The mountain was rent...from near the summit crater, Mokuaweoweo, half way down its southern slope, and jets of steam and smoke went up from many points, while four distinct streams of lava flowed out from separate fissures, and rushed down the mountain. One of these streams flowed nearly due south half way down the mountain toward Kahuku. At the same time a terrible earthquake shook down the large stone church at Kahuku, and also all the stone dwelling houses in that place, including the houses...at the foot of the mountain (Coan, 1868:106).

The quaking and throbbing continued day and night in Ka'u until April 2, at 4 p.m. when "a shock occurred, which was absolutely terrific" (Coan, 1868:107). About this incident, Frederick S. Lyman wrote:

Soon after four o'clock P. M. on Thursday we experienced a most fearful earthquake. First the earth swayed to and fro from north to south, then from east to west, then round and round, up and down, and finally in every imaginable direction, for several minutes, everything crashing around, and the trees thrashing as if torn by a hurricane, and there was a sound as of a mighty rushing wind. It was impossible to stand; we had to sit on the ground, bracing with hands and feet to keep from being rolled over...we saw...an immense torrent of molten lava, which rushed across the plain below...swallowing everything in its way;--trees, houses, cattle, horses, goats, and men, all overwhelmed in an instant. This devouring current passed over a distance of about three miles in as many minutes, and then ceased (Lyman, 1868:109).

Within minutes of the terrible quake, the ocean rose in a tsunami "some six feet above high water mark, and all the dwellings, stores, machine shops, etc., near the shore were in imminent peril"(Coan, 1868:108). Later Coan wrote, "...the sea rose twenty feet along the southern shore of the island, and in Kau 108 houses were destroyed and forty-six people drowned..." (1882:316).

Lyman added what he saw after the quakes subsided:

...All along the shore from directly below our place to Punaluu, a distance of three or four miles, the sea was boiling and foaming furiously. The waves covered the shore, and the water was red for at least the eighth of a mile from the land...

The villages on the shore were swept away by the great wave that rushed upon the land immediately after the earthquake. The eruption of earth destroyed thirty-one lives, but the waves swallowed a greater number (Lyman, 1868:110).

H. M. Whitney described the scene of the eruption in Kahuku:

...At the left were these four grand fountains playing with terrific fury, throwing blood-red lava and huge stones, some as large as a house, to a height varying from 500 to 1,000 feet...

Then there was the rapid, rolling stream, rushing and tumbling like a swollen river, down the hill; over the precipice and down the valley to the sea, surging and roaring like a cataract, with a fury perfectly indescribable...(Whitney, 1868:113).

Simultaneously a "mud" flow was reported in the area of Hilea, east of Waiohinu:

...the earth suddenly opened, among the foot hills of the mountain, a mile or two above the road leading through Kau, and a mass of earth, stones and mud was thrown up two to three miles long, and two to three miles broad, where the opening commenced, and one half to three-quarters of a mile broad, at the terminus. This earthy eruption is said to be four to fifteen feet deep, and the disgorge-ment was so rapid that thirty people...were crushed, and all the houses of the village buried from sight...(Coan, 1868:108).

Another report given prominence at the time was that from the ship *Kona Packet*:

...passing the south point of the island, about three miles from the shore, a conical island, four hundred feet high, rose out of the sea, midway between the vessel and the land, emitting a column of steam and smoke...The Packet was so near when this island burst up, that the mud was spattered on the masts and sails of the vessel...(Whitney, 1868:114).

A history of Mauna Loa by William T. Brigham (1909) quotes a report written by a passenger on the schooner *Oddfellow*. At Keauhou boat landing in Ka'u, all eleven buildings, "were washed away; not a stick or stone of them left standing. Portions of the wreck washed inland over the flat about eight hundred feet." At Punaluu it was too rough to land, but he noted that the stone church and all other buildings near the sea had gone. At Ninole, three houses were left. At Kaalualu, "The houses, wharf, etc., all gone here, and the rocks inland strewn with the wreck for a distance of six or eight hundred feet."

The unnamed observer procured a horse at Kaalualu and rode along the coast to South Point. "The sea had been inland in some places, a hundred and fifty yards, and the whole coast was lined with house timbers, lumber, broken canoes, dead animals that had drifted ashore."

Shortly after the disaster, Coan visited the scene of the lava flows in the Kahuku, Pakini, and Kamaoa upland areas and also rode down to where Pali-o-Kulani overlooks Waiahukini and Kailikii. He recorded "...three houses standing near the shore...at Kailikii (Coan, 1869:95).

This example of volcanic activity in Ka'u helps to understand the profound respect accorded Pele by the inhabitants of the district (Handy and Pukui, 1958:29-31). The 1868 volcanic activity is remembered in considerable detail because of its extreme violence and the number of observers who conscientiously recorded their experiences. However, considerable evidence remains of many other lava flows (Palmer, 1931) testifying to other volcanic eruptions on which written history is silent.

VI

POPULATION CHANGES, 1778-1872

Population Estimate for Ka'u, 1779

There is no doubt that the Ka'u population declined drastically during the first half of the 19th century in keeping with the trend throughout the islands. What then was the original population of Ka'u?

Due to uncertain estimates by King and others in the early post-European period and to incomplete censuses of the early and mid-1800's, it is unwise to cite population figures for Hawaii based on census data alone. They should be evaluated in the light of the conditions under which they were gathered (Schmitt, 1968:49-54), and discussed in terms of what we know about life in ancient Hawaii, including the distribution of habitation sites in farming and fishing communities, dependence on fresh water sources, size of houses, size of families, and other similar considerations, and in terms of Hawaii's history from the time of Capt. Cook's first visit in 1778.

Captain King estimated the population of Hawaii Island at 150,000 (Cook/Beaglehole, 1967:620n). This estimate was based on a projection for the shorelines of an estimate he made for settlements at Kealakekua Bay;

...the interior parts of the country are entirely uninhabited; so that, if the number of the inhabitants along the coast be known, the whole will be pretty accurately determined. The other [point] is, that there are no towns of any considerable size, the habitations of the natives being pretty equally dispersed in small villages, round all their coasts. It is on this ground, that I shall venture at a rough calculation of the number of persons in this group of islands.

The bay of Karakakooa, in Owhyhee, is three miles in extent, and contains four villages of about eighty houses each; upon an average, in all three hundred and twenty; besides a number of straggling houses; which may make the whole amount to three hundred and fifty. From the frequent opportunities I had of informing myself on this head, I am convinced, that six persons

to a house is a very moderate allowance; so that, on this calculation, the country about the bay contains two thousand one hundred souls. To these may be added, fifty families, or three hundred persons, which I conceive to be nearly the number employed in the interior parts of the country, amongst their plantations; making in all two thousand four hundred. If, therefore, this number be applied to the whole extent of coast round the island, deducting a quarter for the uninhabited parts, it will be found to contain one hundred and fifty thousand.

It should be noted that King believed "...the interior parts of the country are entirely uninhabited" and his estimate was based on a coastline population projection. While he described a situation that was probably true for much of Kona, we now know that certain interior areas in Ka'u, such as Waiohinu Valley, Kapapala, Kahuku and Kamaoa, as well as the coastline areas were inhabited. Considering the dispersed plantation population of inland Ka'u recorded by Ellis, Loomis, and Menzies, King's estimate of 150,000 for Hawaii Island might have been conservative. If, on the other hand, King's projection of the population density of Kealahou was somewhat high for the coastal areas of other districts, then this fact might offset his failure to allow for a sufficient inland population and it might be possible that King's Hawaii Island figure could be fairly close to reality at that time. Most objections to King's population estimates were for islands other than Hawaii Island (Schmitt, 1968:20-24).

A rare head count in the early annals was recorded by Loomis at the coastal village of "Haperoa."

...The place where I have put up contains only a few houses but these are well filled with inhabitants. The one which I am to sleep in is less than ten feet square, yet it has a fireplace in the center and accomodates eleven inhabitants. With all these in this miserable hut swarming with vermin, I am to pass the night. The wind here is etrong and chilly, else I would sleep in the open air. As it is, I feel thankful that I am so well sheltered from the cold...(Loomis, ms. p. 7).

Although the presence of a foreigner may have drawn more than the usual number of persons to this habitation, Loomis specifically mentions all the houses in the village being "well filled with inhabitants." In a fairly remote, treeless area, such as this, which was exposed to winds with cool nighttime temperatures, a house might be expected to provide shelter for a greater number of people than one closer to sources of building material and firewood. In weather-exposed areas such as Loomis describes, the inhabitants probably welcomed, as Loomis said he did, the close sleeping quarters provided by a crowded house. Loomis' evidence appears reasonable and suggests that the head count per house in such fishing villages may have been somewhat higher than King's estimate of six.

What evidence has archaeology provided for an estimate of the population in Ka'u? The Museum's site-recording program continues to add visible surface structures to its list. In coastal areas affected by wind-blown sand, such as at Sand Dune site, ground-level, stone-paved house foundations are not easily located, except by extensive excavation; others have been covered by lava flows, as at Kailikii. In recent weeks a survey of part of a village site on a small aa lava flow at Kapalaoa near South Point recorded over a dozen shelter structures (Ladd and Kelly, ms.). As archaeological surveys continue to fill out the pattern of Hawaiian settlement, support grows for a large rather than a small population for Ka'u district.

Underwood's analysis of the skeletal material from Sand Dune site (1969, this volume) leads her to discuss the characteristics and possible size of the living population from which the burial site derived its population. On the basis of her findings at the site and the generally accepted population pyramid for pre-contact populations with high infant mortality, she estimates a total living population of about 190 or a range

of 150 to 250 persons (personal communication). This estimate is not out of line with early records of the number of people observed in villages scattered along the coastline and in the interior of Ka'u district.

In view of the fact that King himself described his dwelling head count as "very moderate," and in view of our present knowledge and state of archaeological research, it would appear prudent at this time not to revise downward King's original population estimate for Hawaii Island.

The only mention made by Capt. King specifically to the population of Ka'u is his opinion that this district seemed even more populous than Puna. He based his judgement on the observation that villages in Ka'u were interspersed even on the lava flows (Cook/Beaglehole, 1967:607). If later population figures for Puna and Ka'u are any indication of the population distribution between the two districts in prior years, King's judgement may be credible in this case as well (Schmitt, 1968:71).

Depopulation of Ka'u, 1800-1872

In the years following Cook's visit, little was recorded about the population of the islands until the missionaries made their first estimates in the 1830's. The early census figures for the district of Ka'u reflect the de-population that was general throughout the islands. An estimated population of 13,500 for Ka'u district (Fig. 15) for 1779 is based on King's original estimate of 150,000 inhabitants for the Island of Hawaii, and the assumption that Ka'u had about nine percent of that island's population.* The projected figure for Ka'u in 1779, in this case would be 13,500. If the usual revision of King's original population estimate for the islands is applied to this figure, it would be reduced to approximately 10,000.

In writing about the period before the missionaries arrived, David Malo said, "In the reign of Kamehameha, from the time I was born until I was nine years old, the pestilence (*mai ahulau*) visited the Hawaiian Islands, and the majority (*ka pau nui ana*) of the people from Hawaii to Niihau died" (Malo, 1839:125). Lorenzo Adams expressed the opinion that Malo was probably not far off in estimating the loss of about half of the population (Adams, ms. p. 117). The epidemic took place sometime between 1802 and 1807 -- probably around 1804 (Schmitt, 1968:36). It was known as *ma'i 'oku'u* and was likened to bubonic plague, or cholera.

In the 1830's the missionaries conducted censuses on some of the larger islands (Kuykendall, 1947:336). The first official census of the Hawaiian Kingdom was made in 1847 (Schmitt, 1968:17). It was not generally successful, and figures for only a few districts were published. For Ka'u 3,010 residents were reported (*The Polynesian*, 1847:1).

The census of 1849 was also incomplete. Inhabitants of the islands during 1848 and 1849 were plagued by a series of epidemics, including measles, whooping cough, influenza and dysentery. Census takers were afraid to go among the people. It is estimated by

* In 1853, the population of Ka'u district was about nine percent of Hawaii Island (Schmitt, 1968:71). The movement of people from outlying districts such as Ka'u to the trading centers of Hilo, Kealahou, and Kawaihae had been under way for quite a few years by that time, and the nine percent is probably a very conservative figure for the Ka'u proportion of the population in 1779.

Census figures for 1832 indicate that Ka'u had approximately 9.9% of the population of Hawaii Island. Figures for 1835 give Ka'u 11.6% of that island's population (Kittleson, ms.).

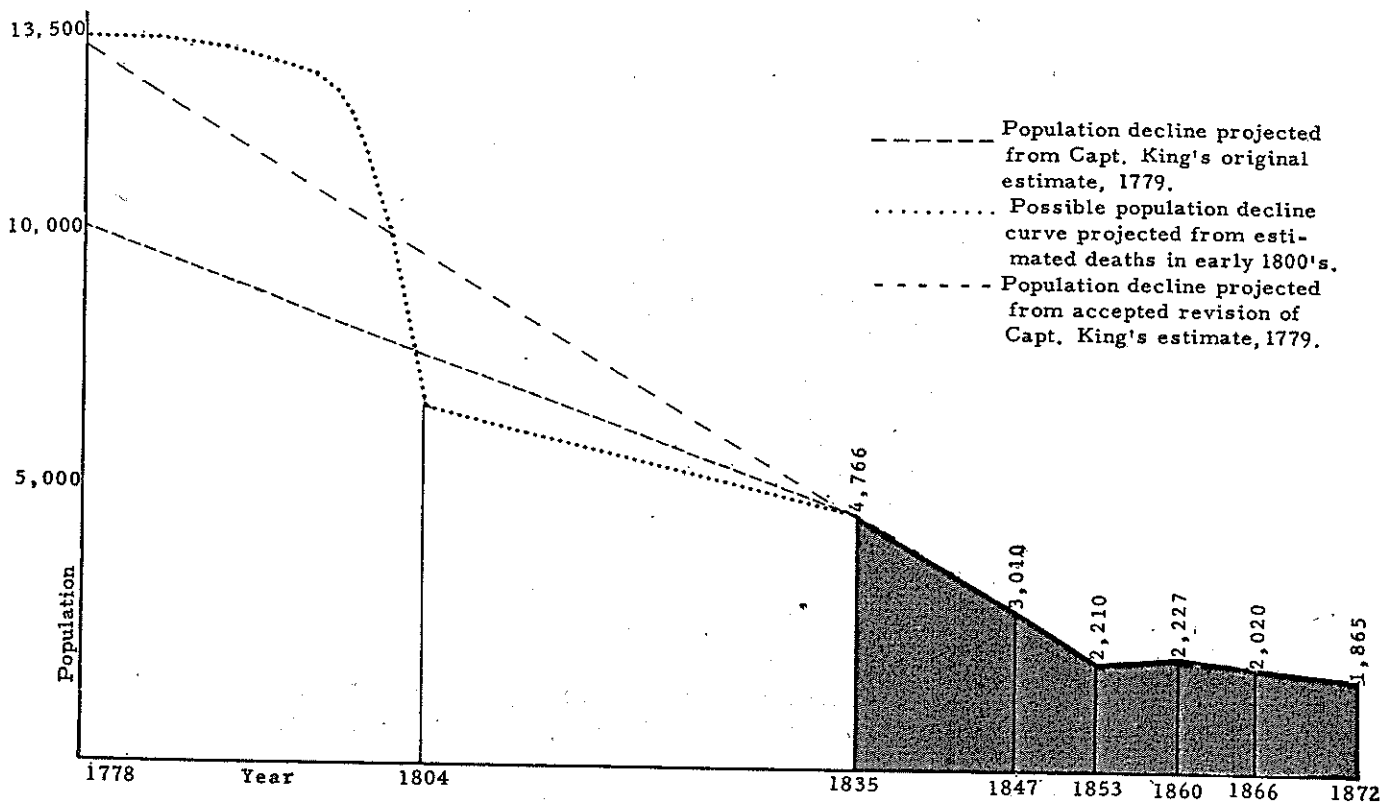


Figure 15. Depopulation of Ka'u, Hawaii, 1835-1872. The figure of 13,500 population for Ka'u in 1779 is based on Capt. King's original estimate of 150,000 inhabitants for the Island of Hawaii. The figure of 10,000 is based on the usually accepted revision of Capt. King's original population estimate for the Hawaiian Islands. The dotted line is a projection of the reported loss of approximately one-half of the population of the islands as a result of a bubonic plague-type epidemic (*ma'i 'oku'u*) about 1804-1805.

some that the population of the island group was reduced by about 10,000 people in those years (Schmitt, 1968:37). If Ka'u experienced a decrease proportionate to its population it would have meant a loss of over 300 people in those two years.*

Census records for 1853 appear to be considerably more reliable than those for earlier years. Table 1 sketches in the characteristics of the Ka'u population for that year.

In the eighteen years between 1835 and 1853, the population of Ka'u district dropped again by over one-half (53.1 percent). By 1872, the population had been reduced by over 60 percent of its 1835 estimate. Thus a survivor who was 50 years old in 1853, had seen the disappearance in his lifetime of three out of four family members and friends in his community. The disastrous consequences of this depopulation on the productive life of the remaining people, the resulting disintegration of interdependent relationships within

* According to the census figures, the population of Ka'u decreased by 800 people between 1847 and 1853.

Table 1. Census of 1853, Ka'u, Hawaii*

Total population		2,210
Foreigners	7	
Hawaiians	2,198	
Part-Hawaiians	5	
Hawaiians and Part-Hawaiians		2,203
Males	1,107	
Females	1,096	
Married persons	1,219	
Unmarried persons	984	
Persons under 20	876 ⁺	
Persons over 20	1,327 ⁺	
Protestants	1,575	
Catholics	628	
Blind	13	
Deaf	4	
Insane and idiotic	6	

⁺ Note: These figures indicate a high median age (about 30 years) which probably reflects a low birth rate and a high infant mortality rate in this period.

the human community and between the people and their environment, and the reduced capacity of the survivors to overcome new adversities which followed are difficult to appraise.

As early as 1853, the population figures for Ka'u include non-Hawaiians (foreigners). The slight rise in the total for 1860 may reflect this change, but in spite of immigration, the overall population continued its decline to 1872. After 1872, the rise in population probably reflects immigrants brought to labor in the cane fields (Schmitt, 1968:71).

School Attendance Records, 1847-1857

In the decade 1847 to 1857, the total number of students reported attending schools in Ka'u district decreased nearly 70 percent, from 764 to 235 and the number of schools from 18 to 8 (Table 2).

Church Attendance, 1842-1863

Reports from the mission station at Waiohinu reveal this same general downward trend from 1842 to 1863. Rev. Paris reported in 1842 an average attendance at church on Sundays to be about 300 persons; by 1846, it was 230. Some of this reduced attendance reflects the establishment of neighborhood churches in the outlying communities, but eventually many of these, too, were discontinued. By 1857, the average church attendance on Sundays was down to 150, a 50 percent drop from 1842. In 1863, the same number was given, but a note explained that over one-third of them were children (Mission Station Reports).

* Information in this table was taken from *The Polynesian*, April 15, 1854:196.

Table 2. Number of pupils and schools, Ka'u District, Hawaii, 1847-1857.

Location of Schools	Number of Students	
	1847	1857
Protestant Schools:		
Kahuku	55	31
Pakini	36	--
Pueo	32	--
Kiolakaa	18	--
Waiohinu	61	49*
Kahilipali	29	--
Naalehu	37	--
Honuapo	41	23
Kaalaiki	14	17
Ninole	50	--
Makaka	37	22
Keaiwa	50 (460)	17 (159)
Catholic Schools:		
Kamaoa	55	52
Honuapo	31	--
Makaka	36	--
Hilea	57	24
Kawela	76	--
Naalehu	49 (304)	-- (76)
Totals	764	235

* This figure includes 13 teachers who were being instructed at the Mission in Waiohinu.

Some Factors Contributing to Depopulation

A prime factor contributing to the depopulation of Ka'u district and one mentioned by Rev. Kinney was the pressure on able-bodied men and women to emigrate to the developing trade centers in search of jobs that would provide them with gold and silver coins demanded for tax payments by government agents.

Under the rule of Kamehameha I, taxes in kind--such as fish, taro, pigs, cordage, tapa and mats--were collected from the population on each island by tax collectors who were directly responsible to the king and his appointed governor for that island (Kuykendall, 1947:54). In previous times the material goods accepted as taxes were mainly items produced by the still basically subsistence-oriented economy of a farming and fishing population.

However, by 1826, the form of taxes demanded reflected the advancing transition from a subsistence to a market economy. Each man was now taxed one-half picul (about 70 lbs.) of sandalwood, or four Spanish dollars, or an equivalent "valuable" commodity; women were taxed a mat or tapa 6 by 12 feet, or one Spanish dollar (Kuykendall, 1947:92).

Using the threat of gunboats and armed marines, sandalwood traders pressed hard for payment of debts allegedly owed them. Under protest, but without alternatives, the king and chiefs increased the tax burden on the people. Great numbers of commoners were sent to the mountains to cut sandalwood and haul it down to the waiting ships.

Aboriginal exploitation of commoners by chiefs under conditions of the pre-contact subsistence economy had certain limiting factors. Because most districts produced the same subsistence items, barter between districts or between islands was minimal, and most exchanges took place in the form of gift giving. (No trade external to the Hawaiian Islands existed prior to 1778.) Without an external market the chiefs required only a limited amount of food and articles of use. However, as soon as local produce could be exchanged for goods of foreign manufacture, the level of exploitation rose and former restraints that operated to limit exploitation were for the most part discarded. In many cases exploitation was now limited only by the physical endurance of the people to bear the burden.

Taxation took the forms of poll tax, land tax, and labor tax (Kuykendall, 1947:272). The labor tax was six days a month--three for the landlord (chief) and three for the king. At unspecified times, an additional six days per month were added to accomplish some public work that would "benefit the people at large" (272). The payment of nine dollars a year could commute the labor tax for the landlord and the king, half of the money going to each. In 1839 a law was passed allotting water for irrigation of land in proportion to the taxes paid (Kuykendall, 1947:161).

In 1840, under pressure from the missionaries, a law was enacted for a national system of common schools to be supported by the government (Kuykendall, 1947:112). At first, the schools were subsidized from the king's share of the labor days and from the land tax. In 1846, the burden was transferred directly to the people (Kuykendall, 1947:352). Then, in 1850, when the government labor tax was abolished, a school tax of \$2 was levied on all taxable male subjects.

When land registration took place (see this paper p.47 ff) each person whose claim was judged by the Board of Land Commissioners to have met their requirements became the undisputed owner only after he paid a nominal fee for the land (about 50 cents an acre) for processing the claim and annual taxes.

By 1851, reports of the mission stations and other journals reflected additional effects on the back-country areas of centralized trade ports. They described some of the hardships experienced by the people as the market economy continued to make inroads into the subsistence economy. Trade boats shunned the smaller harbors of outlying areas, forcing farmers to carry their produce 70 or more miles to the port in Hilo. Families in search of gold and silver coins being demanded by the tax collectors were forced to send young able-bodied members to trade centers to earn tax money.

Some Hawaiians lived in fear of being pressed into hard labor or jailed because they had no money and no way to obtain cash to pay the taxes demanded of them. On the way from Kona to Ka'u, stormy weather forced Hill (1856:236-237) and his friends to seek refuge near Pohue Bay (see this paper, p. 32). Some of them attempted to make their way by land over the desolate lava fields. While wandering around, they came upon two men and two women hiding in a lava-tube cave.

...we inquired when they came, and how long they had been living in this condition...At these words, the whole party, as if they were suddenly relieved from some terror that had possessed them at our appearance, rose up from their bed of filth, and declared their willingness to give us the fullest information we could wish concerning them" (Hill, 1856:237).

Hill found that they had been living in grass houses a short distance away, but hid in the cave when they heard the travellers voices. They lived upon fish and the produce of a few coconut trees, but because they had no means of disposing of their products at

a market place, they had not been able to pay their poll taxes to the agent at Kailikii. They had thought that Hill and his party were government agents coming to take them to "prison and hard labour" (Hill, 1856:237-238).

Upon arriving at Waiohinu, Hill found a family dispossessed of its home. Two men and several women and children were huddled in a half-roofed house in the middle of a rain storm. They were the family of the late government agent of Waiohinu who had died suddenly. Being in arrears in his payment of taxes collected, legal authorities had evicted his family and taken possession of his house and effects in payment of his debt to the government (246-247).

Rev. Gulick also wrote in 1863 about a serious taro and poi shortage in Waiohinu that had been evidenced for two years. He said it was mainly due to drought, but also to free-ranging cattle and horses and to the *pulu** trade. The cool, damp forests of upper Ka'u were a rich source of *pulu*. The threat of having their houses and land seized by the government tax collector and of being forced to do hard labor in prison drove men and women into the distant forests to collect *pulu* for the traders. In this way they obtained money wages to pay the newly imposed taxes. *Pulu* exports began in 1851. By 1859, over 300,000 pounds were exported to the enrichment of chiefs and traders and the further dislocation of the old subsistence economy. The total effect on the labor force can only be surmised. The trade reached its climax in 1862 when 649,000 lbs. were sent to California. It declined after 1875 (Thrum, 1929:77-82).

Summary

In the customary discussion of the depopulation of the islands, emphasis is usually laid on the role of disease epidemics as natural calamities. However, other factors must be seen as part of the total picture. The disruptions of the subsistence economy of the Hawaiians played a major role. The consequent deteriorated social conditions laid the basis for the devastating effects introduced diseases had among the Hawaiian population. The Kamehameha wars of the 1790's; the increased demands on the people by the chiefs; and the odious sequestering of their land and homes for non-payment of over-burdensome taxes contributed to the social disruption. Increasing amounts of labor utilized in non-food-producing activities contributed directly to the disruption by depleting the food supplies. Compelled by the generally rising requirements of the encroaching money economy, the people were driven in ever larger numbers away from their farms and into the commercial centers.

Concomitant with these dislocations of the social fabric were the epidemics of diseases. We have already mentioned the devastating plague-like epidemic (*ma'i 'oku'u*) of the early 1800's (Ii, 1959:16, 46; Schmitt, 1968:36-37; Malo, 1839:112), and the epidemics of measles, whooping cough, and influenza in 1848 and 1849 which reduced the population of the islands by over ten percent within the period of a year (Schmitt, 1968:37). In addition, there was the island-wide smallpox epidemic of 1853 (Ii, 1959:169-174)** which reduced the population by an additional ten percent.

The district of Ka'u was immune to none of these events as the countless ruins of former habitation sites scattered throughout the countryside attest.

* *Pulu* is the soft, light silky material of the tree fern (*Cibotium*) which grows in the cool, damp mountain forests. *Pulu* was gathered commercially in post-European times and used for pillows and mattresses.

** Criticisms were leveled against government officials for allowing vessels to leave Honolulu where the epidemic was raging and to carry the disease to other islands ([Bates], 1854:394-395).

VII

THE PEOPLE AND THE LAND

Ahupua'a Boundaries

While most *ahupua'a* can be described as long, narrow strips of land extending from the mountain (usually a mile or two into the forest land) to the sea, there are exceptions. Some *ahupua'a* expand in their inland domain to include extensive portions of the mountain. In Ka'u examples of this type are the *ahupua'a* of Kahuku and Kapapala (Fig. 16). Kahuku not only stretches from the sea to the mountain, but includes the southern portion of the crater Mokuaweoweo at the top of Mauna Loa and the mountain's entire southern flank down to an irregular boundary at an elevation between 5,000 and 6,000 feet, which defines the inland boundary for most of the *ahupua'a* in Ka'u. The *ahupua'a* of Kapapala also includes a portion of Mokuaweoweo as well as the crater of Kīlauea. Lyons explains these inland extensions of territory are geographic reflections of rights possessed by the residents of that land to some particular resource. He gives the example of the extended *ahupua'a* of Kaohe in Hamakua district as reflecting the right of its residents to hew out canoes (*kalaiwa'a*) from the *koa* forests of Mauna Kea (Lyons, 1875a: 104). Perhaps a similar right was possessed by residents of Kahuku in Ka'u district.

Some *ahupua'a* do not reach the sea. Examples of this type are Kiao, between Kahuku and Pakini-nui, and Palauhulu and Waimao between Kawela and Kiolakaa (see Figs. 1 and 16). Whether their etiology includes a shrinking process whereby a once prominent land became crowded out and separated from the sea by already present but expanding land divisions, or a generating process whereby a new land section was carved out of an already existing one, can only be guessed. Both seem possible.

The cases of Pakini-nui (the large Pakini) and Pakini-iki (the small Pakini) are probably examples of the generation of new land divisions by fission, assuming there once existed a land division called Pakini, which included both areas. Consistent use by Kamakau and other early writers of the general term Pakini, without modifiers, would tend to support this assumption.

Land boundaries generally follow prominent land contours. However, here in the two Pakini lands we find exceptions that appear to express the same concept of availability of resources on which the general *ahupua'a* land division was based. As distinct and seemingly appropriate for a boundary line as the great scarp, Pali-o-Kulani, appears to be, the eastern boundary of Pakini-iki avoids the *pali* and continues east of it to a point about a mile from the tip of South Point (see Fig. 16). The western boundary of Pakini-iki intersects Pali-o-Kulani about three-fourths of a mile inland from the sea.* Thus, at its seaward end, Pakini-iki contains a long coastline of cliff, a small section of ocean front with a beach and canoe landing, and the adjoining land on which at least part of a village was located (see Fig. 5). Its inland area is a long narrow strip of the rich agricultural land above the *pali*. This arrangement provided the inhabitants of this land with a share of coastal, plain, garden and forest lands--access to the sea and the inland trails--all basic elements of ancient Hawaiian land divisions.

* In her chapter on Ka'u history, Elizabeth Handy suggests the possibility of Pakini having been a land division previous to the volcanic disturbance that created the *pali* (Handy and Pukui, 1958:210).

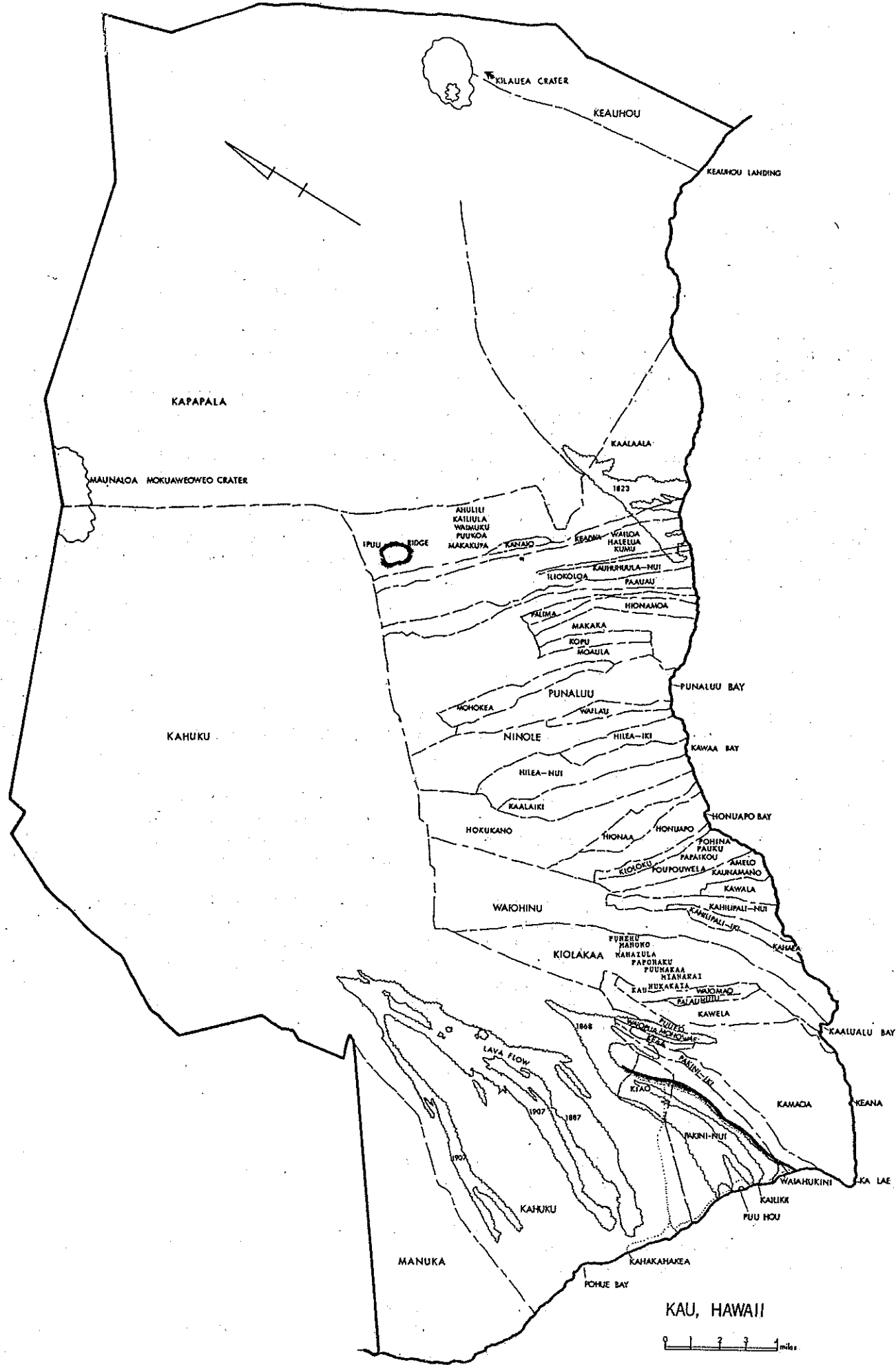


Figure 16. Map showing the largest land divisions of Ka'u District, Hawaii.

Pakini-nui includes the canoe landing and village of Kailikii, just a mile or so west of Waiahukini, and part of Waiahukini village itself. Its western boundary also intersects the *pali* and its inland domain continues above the *pali* in a long narrow strip of plantation land (see Figs. 1 and 16). Thus each Pakini land has access to the sea and to the upland gardens and trails.

The placement of the boundary between these two land divisions suggests at least two trails leading up the *pali*, and historical evidence supports this. Ellis landed at the village of Kailikii and Menzies at Pakini. Their reports inform us that both villages were populated by families engaged in fishing and located on well-used trails that led inland and on around the island. From Kailikii, Ellis followed a trail about a mile inland* before climbing the cliff to the gently rolling green plains of Kamaoa. From Pakini village, Menzies said the trail he followed went only a short distance before it led to the top of the *pali*** Thus, we have evidence that there were at least two trails in early post-European times. A third trail (farther inland and about five miles from the sea) is mentioned by Hill (1856:242).*** Because he travelled on horseback, the trail he used to scale the *pali* was probably better than those walked by Ellis and Menzies. This might have been the same *pali* trail taken by Loomis, who arrived at the foot of the *pali* from Hapeloa on the Kahakahakea trail.

One trail leads along the foot of Pali-o-Kulani all the way from the sea to the northern end of the scarp. Some trails connect coastal settlements with one another, and other trails connect coastal settlements with inland settlements. Undoubtedly many early trails are not found on today's maps.

Taxpayers of an *Ahupua'a*

Some insight into the population of an *ahupua'a* is provided by examining the records of taxes collected by the government agent of Ka'u for the five-year period, 1855 to 1859 (Table 3).

By 1855, a poll tax of 50 cents was levied on each male between 15 and 20 years of age and \$1 on each male over 20 years of age. The school tax was still \$2 per adult male. In addition, owners of horses were required to pay 50 cents for each horse over two years old, 25 cents for each mule or jackass, and \$1 for each dog.

In 1859, Kalae was listed as a separate land division with nine persons paying taxes. Four of the men owned one horse each. A person named Puhalahua *w.* (female) had three pieces of land in Waiopua, in addition to the one piece in Kalae. The Waiopua lands are listed as one '*aina mahi* (garden land), and two '*aina kula* (plains lands). In all, there were four houses on her lands. Two other people were listed as having houses at Kalae--Ailoloalii, who had three, and Paele, who had one. One person, Kaoo, is listed as having come to Kalae from Kei in Kona.

* A trail on the *pali* a little over a mile inland from the sea is indicated on the 1921 edition of the U. S. Coast and Geodetic Survey map.

** This is probably the trail used by the archaeological field team and by fishermen today. It is directly east of site H8, but is not indicated on the USGS maps. It is definitely not a trail for horses.

*** There is a trail marked on the 1921 USGS map that appears about one-third of a mile inland from the southern boundary of the land division of Kiao (approximately five and one-half miles from the sea at Waiahukini).

Table 3. Taxpayers of Pakini *Ahupua'a*, Ka'u, Hawaii, 1855-1859

Year*	Total number of names	Previously recorded names	New names	Names on tax receipts for:				Number of individuals
				1 yr.	2 yrs.	3 yrs.	4 yrs.	
1855	23	--	23	1	7	8	7	23
1856	23	14	9	6	2	1	--	9
1857	29	19	10	6	4	--	--	10
1859	32	11	21	11	--	--	--	11
Totals	107	54	53	24	13	9	7	53

* Taxpayers for 1858 were not identified by *ahupua'a*.

In the *ahupua'a* of Pakini, a total of 54 separate individuals paid taxes during four of five years from 1855 to 1859 (records for 1858 failed to identify the taxpayers by their lands and therefore are not included). Sixteen of the 54 paid taxes for three years; 29 paid for two years. Nearly half (43.5 percent) paid for only one year. By 1859, nearly twice as many new names (21) appeared on the records as previously recorded names (11).

Records indicate that in his tax-collecting function, the government agent was increasingly successful and got more people to pay taxes each year. Although he lost some of his former taxpayers each year, he found replacements from among people whose names had not been previously recorded as taxpayers.

The tax program served to accelerate the transformation of the subsistence economy into a market economy by forcing larger numbers of people to seek sources of money. Farmers transported surplus produce to markets, and those without cash crops had to market their labor. The alternative was direct appropriation in the form of forced labor by the government. Judging from the relatively few taxpayers recorded for Ka'u district in these early years, and assuming an effective penal program, a very large number of people, perhaps a majority, were engaged in forced labor.

Land Tenure Changes, 1846-1850

With limited investment opportunities in industrial and commercial pursuits, the successful American, English and French resident merchants sought to invest their capital in agriculture. Ownership of the agricultural lands was necessary to render their investments secure. Appropriate legal steps were soon devised to change the Hawaiian land tenure system into a private-property system.

In 1846, the Hawaiian Legislature set into motion the legal machinery that was to affect the lives of the Hawaiian people perhaps more than any other single act in their history. It established a Board of Commissioners whose duty it was to review and pass on the validity of claims to land titles. For the previous decade, land claims by foreigners, particularly by merchants in the seaport towns, had greatly increased in number, and conflicts over land ownership developed into international power struggles (Kuykendall, 1947:245-246). Under pressure from the resident merchants and ex-missionary advisors, the king and chiefs embarked on a program that established a new land tenure system based on private ownership as opposed to undifferentiated rights in the land under the Hawaiian system.

A notice was printed in the newspaper, *The Polynesian*, announcing that the Board of Commissioners would receive applications of claims to land for the next two years, after which time all unclaimed lands would revert to the government and claimants would "be forever barred of all right to recover" their lands. The notice also announced where and when the Board would conduct hearings and take testimony on the claims. For the first two years, the Land Commissioners devoted their time almost exclusively to settling leasehold claims of foreigners in and near the towns (Chinen, 1958:12).

Land Claims of Chiefs

The Great Mahele of 1848 (January 27 to March 7) was the name given to the act of dividing the lands on all the islands between the king and some 245 chiefs (Kuykendall, 1947:287). This had the effect of separating the rights of the king and the chiefs in the land. On March 8, the king divided his lands between crown lands (his personal lands) and government lands. Each chief then presented his claims to the Land Commissioners. In some instances, hearings were held and testimony taken on the basis of which the land board recommended which lands should be awarded to the chiefs. In other cases the award was made without a hearing. Upon payment of a commutation fee or forfeiture of some lands to the government, a chief received a Royal Patent giving him title to the remaining lands and silencing forever the claims of others, with the exception of the as yet undefined rights of the commoners who continued to live on the land and cultivate it.

The largest acreages awarded in Ka'u were the *ahupua'a* awards to six chiefs (Indices...1929:61,64,71,73,74,76,77,79,80):

- 1) Victoria Kamamalu: Pakini-nui (9,377 acres) and two parcels (*'ili 'aina*) of unstated size, one in Keauhou and the other in Kapapala.
- 2) Lot Kamehameha: Punaluu (5,360 acres) and Hilea-iki (2,015 acres).
- 3) W. P. Leleiohoku: Kahilipali-nui (2,155 acres), Hionamoa (1,950 acres), Hilea (unstated size), and Kahuku (unstated size).
- 4) W. C. Lunalilo: Honuapo (2,200 acres), Pakini-iki (2,357 acres), and Ninole (unstated size).
- 5) A. Keohokalole: Kawela (3,050 acres), Keaiwa (2,078 acres), Kaioula (unstated size), Kauhuula (unstated size), Pohina (unstated size), Puhalanui (unstated size), Wiliwilinui (unstated size), Makahakupa (2) (unstated size), and Papohaku (2) (unstated size).
- 6) Namauu no Kekuanaoa: Halelua (unstated size).

With the exception of the two parcels of unstated size to Victoria Kamamalu, the lands were all listed as *ahupua'a*. Those *ahupua'a* with unstated sizes were surrendered to the government in lieu of commutation fees (Indices...1929:73,76,79,80). The remaining lands were retained by the five chiefs to whom they were awarded. They total approximately 30,500 acres, and average about 6,100 acres to each chief.

The *ahupua'a* of Waiohinu and Kapapala were claimed in the Mahele by King Kamehameha III as Crown Lands (Indices...1929:25-26).

Land Inheritance of Chiefs

The land claims of the chiefs were based on rights inherited from previous owners. According to Menzies, the village of Pakini at Waiahukini was Namahana's village (Fig. 17). Today it is divided by the line between the *ahupua'a* of Pakini-nui and Pakini-iki (see Fig. 5). Namahana was the wife of the powerful Kona chief, Keeaumoku, who is recognized as having been the chief most responsible for Kamehameha's rise to power. Their daughters, Kaahumanu and Kaheiheimalie (Kalakua) were among Kamehameha's most influential wives.



Figure 17. Canoe landing and houses at Waiahukini about 1934. Pali-o-Kulani in background.

The *ahupua'a* of Pakini-iki was one of the lands claimed by Lunalilo, who in 1873 became the Hawaiian Kingdom's first elected king (Kuykendall, 1953:242-245). Lunalilo, an only child, was the great grandson of Namahana, a relationship which can be traced matrilineally (Fig. 18).

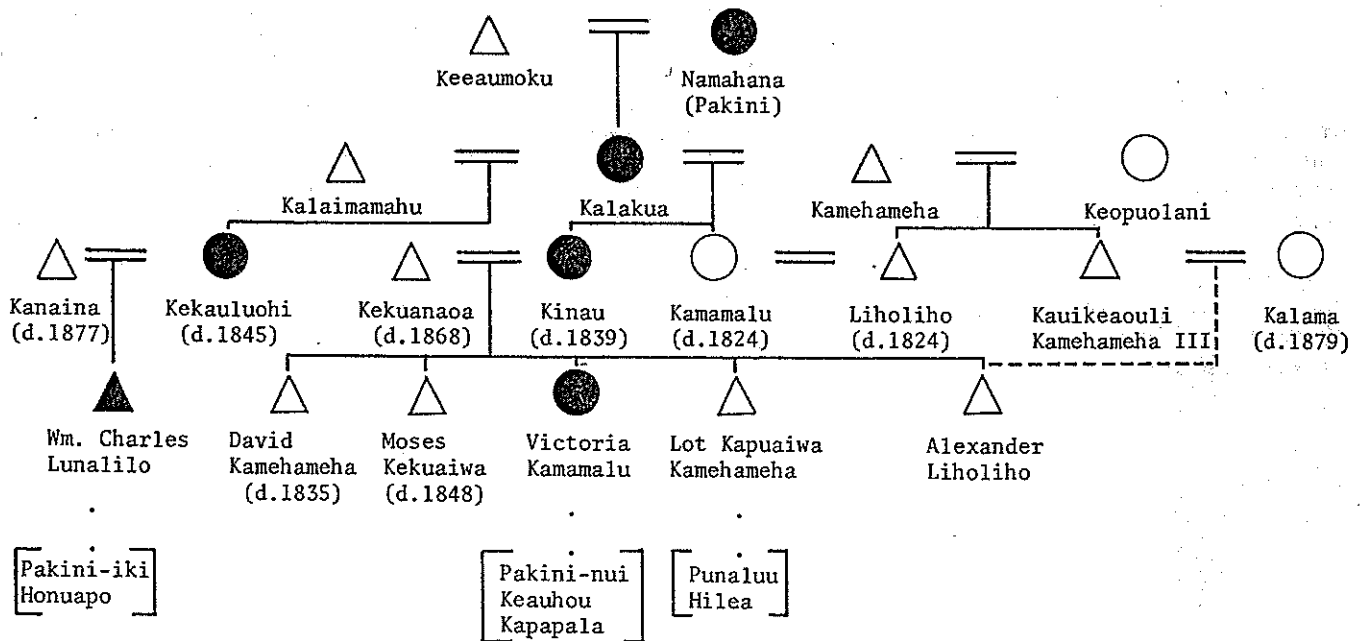


Figure 18. Genealogical chart tracing the relationship between Namahana and her great grandchildren, William Charles Lunalilo and Victoria Kamamalu.

Ii records gifts of land by a chief to his spouse. He wrote that Kalaimamahu presented land to Kalakua (Kekaheihimalie) while she was his wife and that this land was inherited by their daughter, Kekauluohi-o-Mano, and later by their grandson, Lunalilo (Ii, 1959:50). Pakini was not one of these lands.

The *ahupua'a* of Pakini-nui, in which the village of Kailikii is located, was claimed by Victoria Kamamalu, who was a great granddaughter of Namahana (Indices..., 1929:61; see also Fig. 18).

Keohokalole (mother of Kalakaua and Liliuokalani) claimed other lands in Ka'u which she surrendered to the government in lieu of commutation fees. One of these was the land of "Makahakupu" (Indices..., 1929:73), which is now called Makakupu.* When Menzies travelled through Ka'u in 1794, the artist, Midshipman Thomas Heddington, was with him. One of the pictures Heddington sketched on Hawaii was a pastoral hamlet entitled "Village of Macacoupah, Owhyhee" (Fig. 19). The question arose, could Makakupu and Macacoupah be the same?

Menzies' journal describes "a fine plantation at Kapapala belonging to the King [Kamehameha]," where preparations for the trip up the mountain were made (1920:187-188). Near the summit of Mauna Loa, the exploring party experienced very low temperatures for which they were ill-prepared. Heddington, on becoming ill, was forced to go back to the village to await the return of the others (pp. 192-194). During these days of waiting, it is possible that Heddington sketched the picture of a plantation on the land of Makakupu, which borders on the land of Kapapala. Additional support is provided by the tax map (Hawaii, Zone 9, Sec. 6) which indicates a small mountain ridge, Ipuu, extending into Makakupu. It has much the same form as the knoll in the background of Heddington's picture. Armed with a photograph of Heddington's sketch, a visit to this area recently convinced Violet Hansen that it was here, indeed, where Heddington recorded for posterity the lovely "Village of Macacoupah" and its adjacent plantations.

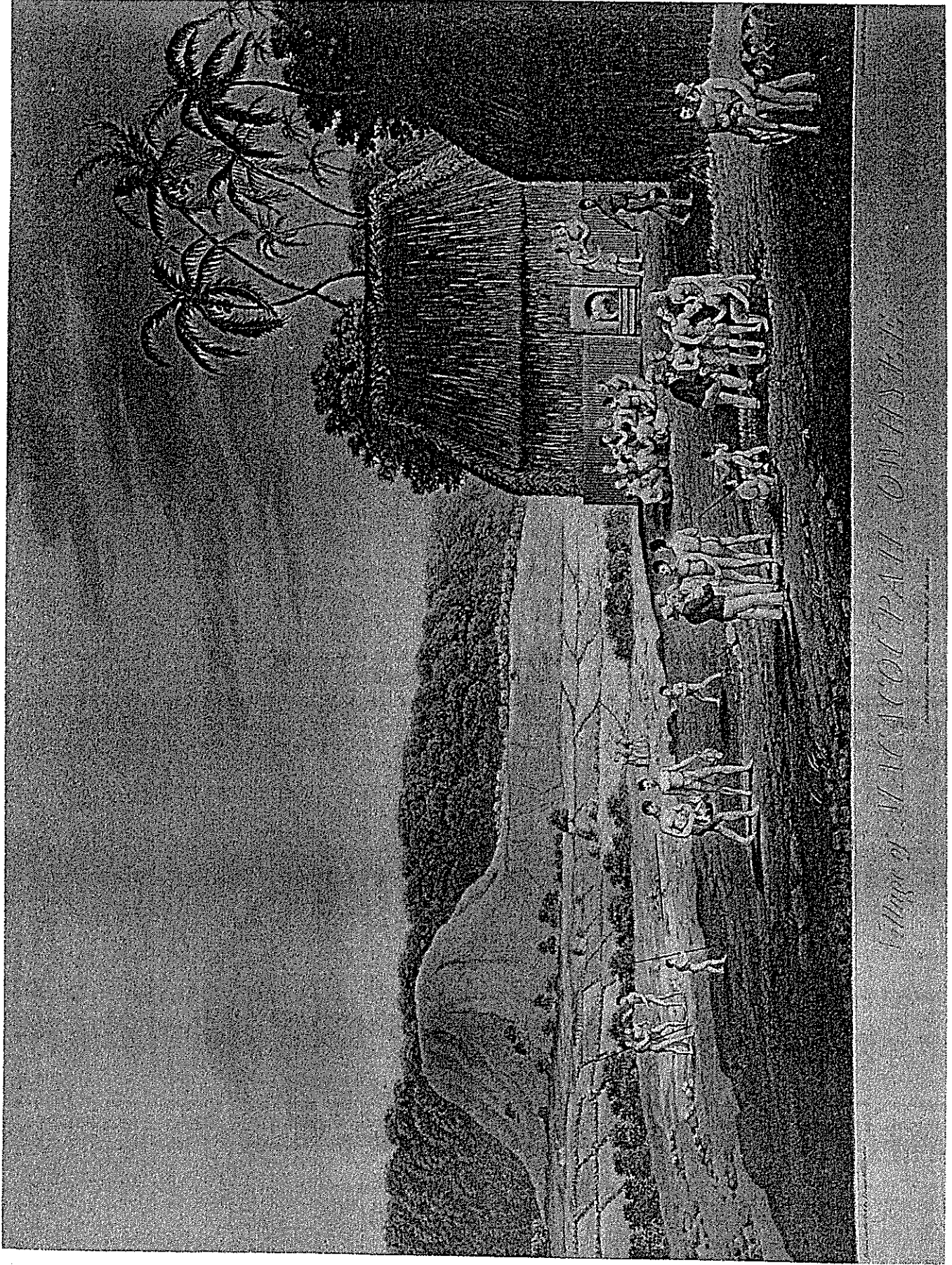
Menzies also mentioned the land division of Kahuku, which in its inland domain includes many acres of rich agricultural land (see Figs. 1 and 16). He reported that it belonged to Kamehameha. In the Mahele of 1848, the *ahupua'a* of Kahuku was claimed by the chief, W. P. Leleiohoku, who then surrendered it to the government in lieu of commutation fees (Indices..., 1929:76). Leleiohoku's claim to Kahuku could have been established either through his first wife, Nahienaena, who was a daughter of Kamehameha; or through Kuakini, who was a son of Namahana, and governor of Hawaii Island from 1820 to 1848, and who made Leleiohoku one of his heirs (Kamakau, 1961:395; and Fig. 20).

We find in Kamakau (1961:69) that ruling chiefs attempted to control the matter of who inherited their lands. Kekaulike, a high chief of Maui and father of Namahana and Kamehameha-nui, commanded that his lands descend to Kamehameha-nui. Kalaniopuu commanded "at Waio'ahukini [that], the rule over his lands in both Hawaii and Maui" descend to his son, Kiwala'ō.

The land divisions of Keaiwa and Kawela (the latter is one of three which share Kaalualu Bay) were awarded to A. Keohokalole, mother of the last Hawaiian king, Kalakaua (1874-1891), and of the last queen, Liliuokalani (1891-1893). The land of Kiolakaa was claimed by Kamehameha III and designated by him as government land (Indices..., 1929:26, 33,71).

In the testimony before the land commissioners it was stated that claims by A. Keohokalole to land in Kona were based on inheritance from her mother's side of the family (Foreign Testimony). Claims to her Ka'u lands also may have come from her mother's ancestors. Her great-grandmother was the daughter of Keawe-kekahi-alii-o-kamoku, a powerful chief who ruled Kohala, Kona, and Ka'u (Fig 21), and also her great-grandfather was the son of the same Keawe by another wife.

* The term Makakakupu is a land division in Ka'u named in the list of *Land Commission Awards* (Vol. 10). The term Makaakupu appears in the *Mahele Book* filed in the Hawaii State Archives.



Village of MACACOUPA OWHYEE.

Figure 19. Village of Macacoupa, Owhyee, by Thomas Heddington, artist with Capt. George Vancouver in 1794.

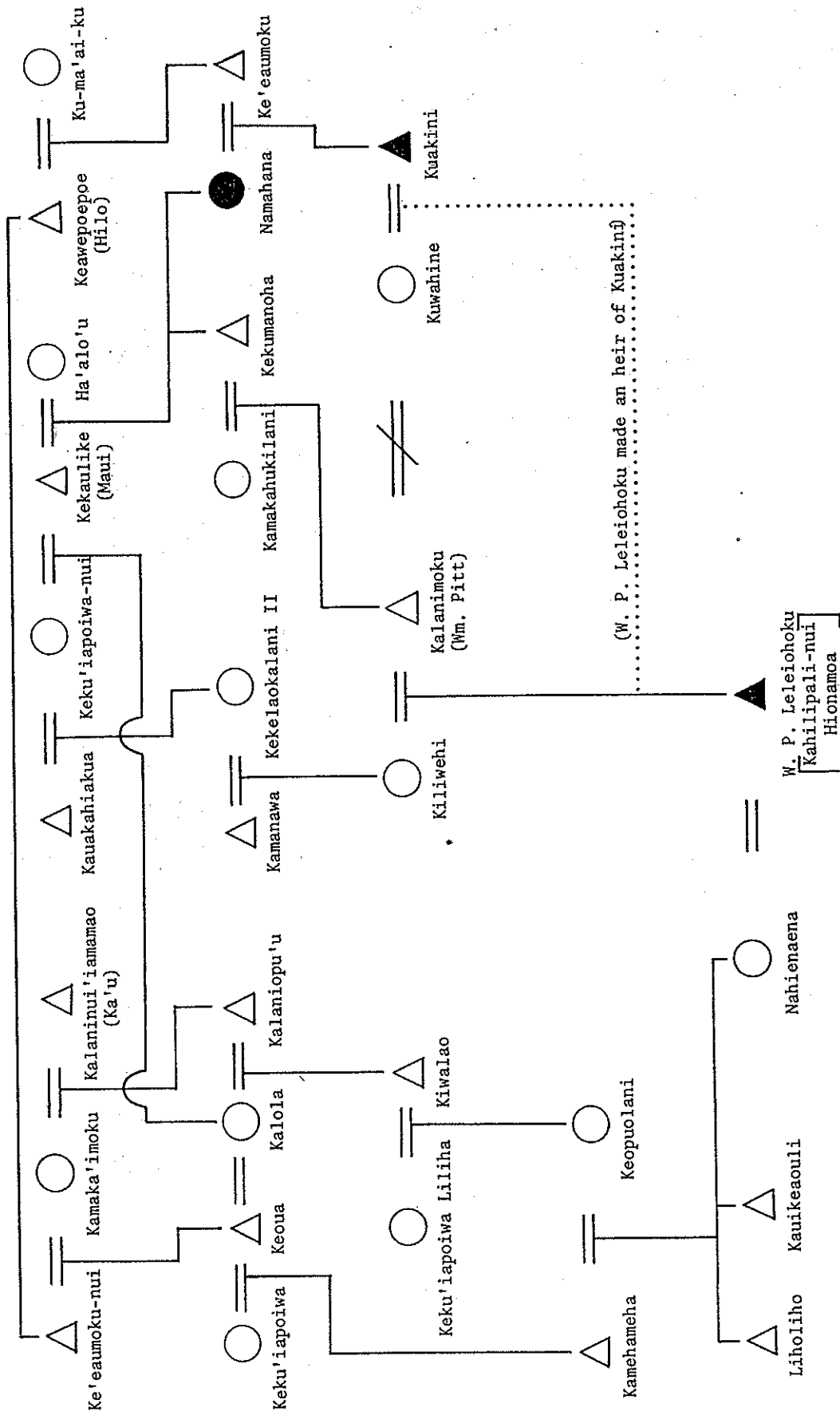


Figure 20. Genealogical chart tracing relationship of William Pitt Leleiohoku to Kamehameha I and Namahana, the wife of Ke'eaumoku.

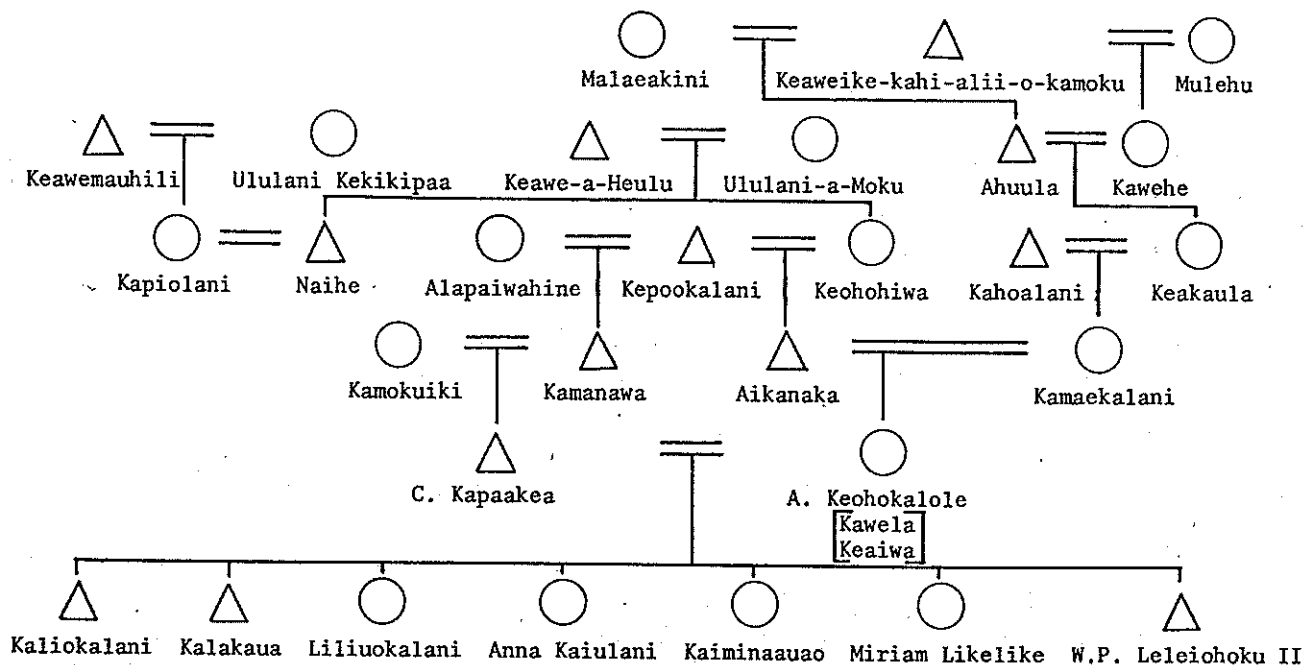


Figure 21. Genealogical chart of Ane Keohokalole, showing her relationship to Keaweikekahialiokamoku and to Keaweheulu.

The chiefs were provided additional time to make their claims to land after the 1848 closing date. They were still allowed to file applications for Royal Patents with the Minister of the Interior as late as 1860. They could also obtain land grants from government lands with the payment of 50 cents or less per acre.

An additional bit of Ka'u history provided by Kamakau is that Kekuiapoiwa (Liliha), daughter of Kalola and Keoua (Kamehameha's father), died in 1815 at Kapaakea, close to Kaalualu in the land of Kiolakaa. She had been the wife of Kiwala-o and a member of Kamehameha's household as his half-sister, wife, and the mother of his most high-born wife, Keopuolani (Fig. 22). Kekuiapoiwa's last husband, Pueo, lived at Waiohinu (Kamakau, 1961:306). The name Pueo appears as an awardee of 10.5 acres (LCA 10,654) of land in Hilea.

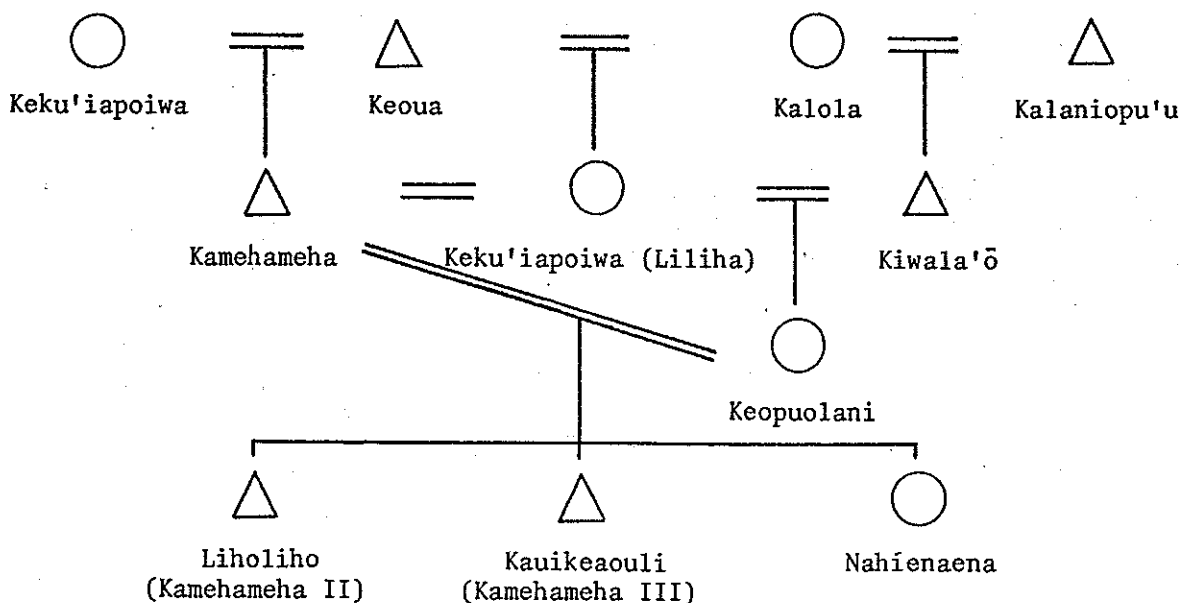


Figure 22. Genealogical chart showing the relationship between Keku'iapoiwa (Liliha) and Kamehameha I.

Land Claims of Lesser Chiefs and Commoners

A little over four years after the enactment of the statute creating the Land Commission (Dec. 10, 1845), and nearly two years after the Mahele Act of 1848, the King and the Privy Council, after much discussion, adopted on December 21, 1849, a resolution that gave the Land Commission permission to rule on claims made by commoners and to grant or withhold awards on the basis of testimony taken in hearings (Privy Council, 1849b:417-419). Because the Privy Council was merely advisory, the resolution did not become law until it was passed by the legislature on August 6, 1850.

In contrast to the average of over 6,000 acres in Ka'u awarded to each of five high chiefs, the remaining claimants (lesser chiefs or headmen and commoners) of Ka'u were some 260 individuals to whom awards made averaged 6.95 acres (Table 4). The acreage awarded ranged from a high of 30.9 acres to a low of .25 acre; only 66 people were awarded over 10 acres. The average of 6.95 acres of land awarded in Ka'u is higher than the average of 2.5 acres for *kuleana* grants throughout the islands (Lind, 1938:47). Fewer awards were made in Ka'u than in most districts* and probably many of these went to well-established sub-chiefs and headman whose claims were larger than average.

Of the lesser chiefs and commoners who claimed land in Ka'u about 45 did not obtain their Royal Patent titles and eleven failed to get title for at least one of their claims. This resulted in only about 220 persons receiving final title (Royal Patents) to their lands. Quite a few of these could be said to be in the category of lesser chiefs or perhaps elite commoners in that they were headmen or agents for the chiefs. For example, while not listed as one of the high chiefs, Mr. S. Laanui was apparently a man of considerable consequence. He received title to two parcels of land, one in Kamaoa, 7.60 acres (RP 7868) and the other in Kahilipali, 5.50 acres (RP 4406) (Indices..., 1929:106). When the government lands were offered for sale in 1852 at nominal prices (see Land Grants, this paper, p. 55), the name S. Laanui appears that year as the purchaser of 293 acres (LG 996) and in 1855, of 460 acres (LG 2771) in Kahilipali (Index..., 1916:146).

In 1841, Rev. Paris rested and lunched in Kailikii at the house of Pipi (Paris, 1926:18). The name D. Pipi appears as an awardee (LCA 10,683) of 16.13 acres of land in Waiohinu. Paris also mentioned the headman, Job Lilikalani, at whose rest house he stayed twice (1926:14,19). The name Lilikalani appears as an awardee to 5.07 acres of land (LCA 9955-B) in Honuapo.

Other elite commoners included those who became agents of the church or the government. In 1847, the supervising principal of schools in the Ka'u district was Namakelua. He received an award of 11.57 acres (LCA 10,450) in Waiohinu. Two people with the same surname purchased land grants in 1852: S. Namakelua, 45.30 acres (LG 813) and J. Namakelua, 49.40 acres (LG 815).

Of the twelve Protestant school teachers under Namakelua in 1847, the names of seven appear as recipients of land awards: S. Kuula, 11.20 acres (LCA 11,028-B) in Kiao; Kaia, 10.80 acres (LCA 7279 and 7215) in Puueo; Keawe, 4.7 acres (LCA 7600-B and 7600) in Waiohinu; Komaia, 4.75 acres (LCA 9167) in Ninole; Kekahuna, 7.5 acres (LCA 9659) in Kiolakaa; Okule, 6.3 acres (LCA 10,552) in Manienie. The names of only two of the six Catholic school teachers listed for 1847 received awards: Ewaliko, 10.40 acres (LCA 10,059) in Keaa; and Koo, 5.5 acres (LCA 9249) in Kamaoa.

Of the fourteen school teachers listed for Ka'u in 1855, only four of them received awards for land: J. Palau (LCA 10,755); Awihi (LCA 8032); Kaweheana (LCA 9174) and Wawa (LCA 10,979). Five of them purchased land from the government (LG 1736, 2371, 2657, 2573, 2693) for amounts from 24 to 230 acres.

* Ka'u is the largest district on the Island of Hawaii (1,034.1 sq. mi.), but in 1853 it contained only nine percent of that island's population (Schmitt, 1968:71).

Table 4. Land Commission Awards, Ka'u, Hawaii*

Ahupua'a	Awards to Konohiki, Government, or Crown Land	Acreage	Awards to Others	Awarded Acreage	Awarded Average Acreage	Awarded Acreage Range
Aemalo	Government	--	6	38.79	6.465	.78-11.88
Halekaa	--	--	1	6.50	6.50	6.50
Halelua**	Namau'u no Kekuanaoa	--	--	--	--	--
Hilea-iki	Lot Kamehameha	2,015	23	143.32	6.231	1.80-12.40
Hilea**	W. P. Leleiohoku	--	--	--	--	--
Hionaa	--	--	4	16.50	4.125	3.00- 5.60
Hionamoa	W. P. Leleiohoku	1,950	--	--	--	--
Hokukano	Government	--	6	18.85	3.141	2.00- 4.00
Honuapo	Lunalilo	2,200	21	99.27	4.727	.30-11.00
Kaalaala	Government	--	4	26.04	9.01	7.68-10.58
Kaalaiki	Government	--	6	37.51	6.251	1.34-11.30
Kahaea	Government	--	--	--	--	--
Kahilipali-nui	W. P. Leleiohoku	2,155	10	89.13	8.913	3.75-20.39
Kahilipali	Government	--	--	--	--	--
Kahuku**	W. P. Leleiohoku	--	7	67.60	9.657	6.20-15.20
Kaioula**	A. Keohokalole	--	--	--	--	--
Kalae	--	--	1	4.00	4.00	4.00
Kamaoa	Government	--	23	200.83	8.731	4.04-18.25
Kapapala	V. Kamamalu	'Ili-'aina	--	--	--	--
Kapapala	Crown Land	Ahupua'a	--	--	--	--
Kau	Government	--	--	--	--	--
Kauhuula**	A. Keohokalole	--	2	10.18	5.09	4.18- 6.00
Kaunamano	Government	--	8	49.89	6.236	3.47-10.30
Kawela	A. Keohokalole	3,050	3	4.70	1.566	1.20- 1.80
Keaa 1, 2	Government	--	3	30.00	10.00	8.80-11.80
Keaiwa	A. Keohokalole	2,078	6	24.88	4.146	1.20- 6.35
Keauhou	V. Kamamalu	'Ili-'aina	--	--	--	--
Keekakai	--	--	4	38.15	9.537	8.75-11.60
Kiao	Government	--	8	60.90	7.612	1.40-10.75
Kiolakaa	Government	--	5	76.40	15.28	7.75-30.90
Kioloku	--	--	1	7.50	7.50	7.50
Kopu	Government	--	--	--	--	--
Kowala	--	--	10	54.49	5.449	.36-10.00
Kukui	--	--	2	14.18	7.09	6.75- 7.40
Makahakupa**	A. Keohokalole	--	--	--	--	--
Makaka 1, 2	Government	--	7	47.38	6.768	3.13-13.50
Manienie	Government	--	4	23.82	5.955	5.50- 6.30
Manuka	Government	--	--	--	--	--
Moauala	Government	--	16	176.63	11.039	5.65-18.80
Mohowae	Government	--	2	13.40	6.70	6.10- 7.30
Ninole**	W. C. Lunalilo	--	21	136.43	6.496	1.38-11.22
	Government	--	--	--	--	--
Nukakaia	Government	--	--	--	--	--
Paaau	--	--	2	26.20	13.10	13.00-13.20
Pakini-iki	W. C. Lunalilo	2,357	--	--	--	--
Pakini-nui	V. Kamamalu	9,377	--	--	--	--
Papaikou 1,2,3	Government	--	3	12.53	4.176	.40 6.93
Papohaku	Government	--	--	--	--	--
	A. Keohokalole	--	--	--	--	--
Paukui	--	--	1	11.25	11.25	11.25
Pohina**	A. Keohokalole	--	--	--	--	--
Poupouwela	Government	--	11	93.14	8.467	2.60-16.40
Puhalanui**	A. Keohokalole	--	--	--	--	--
Punaluu	Lot Kamehameha	5,360	9	39.69	4.41	.25-15.20
Puueo	--	--	2	20.90	10.45	10.10-10.80
Puulena	Government	--	--	--	--	--
Puumakaa	--	--	2	11.55	5.775	1.25-10.30
Puuhoeu	Government	--	1	15.25	15.25	15.25
Wailau	Government	--	8	41.16	5.145	2.30- 8.10
Wailoa	Government	--	--	--	--	--
Waimuku	Government	--	--	--	--	--
Waiohinu	Crown Land	Ahupua'a	41	236.83	5.776	.80-16.13
Waiomao	--	--	2	19.20	9.60	9.00-10.20
Waiopua	Government	--	7	54.80	7.828	6.70- 9.80
Wiliwilinui**	A. Keohokalole	--	2	10.70	5.35	5.10- 5.60
Totals			305	2,120.47	6.95236	

* Material presented here is from the Indices of Awards, 1929.

** Lands surrendered to government in lieu of commutation fee.

Kaonohi is a name that appears as a successful claimant for 14.58 acres (RP 6986) in Keaiwa-Kaalaala and in 1859 purchased 179.10 acres (LG 2457) in Kaalaala (Index..., 1916:145). Similarly, the name Honokoa appears as having been awarded 8.26 acres (RP 6909) in Moaula and having purchased 433.33 acres (LG 2934) in 1864 (Index..., 1916:147). Kalua is a claimant for two parcels of land, one for 5.75 acres (RP 6663) in Ninole and the other for 9.30 acres (RP 7931) in Keaiwa. This name re-appears in 1861 as purchaser of 165 acres (LG 2808) in Kauio and Kaapahu (Index..., 1916:146). Another successful claimant, Kawaa, was awarded 11.38 acres (RP 7002) of land in Keaiwa and Kaalaaka, and then in 1852, the name appears as a purchaser of 516.30 acres (LG 995) in Makaka (Index..., 1916:147). There may be as few as a dozen or as many as forty recipients of Royal Patents that also purchased lands under the land grant program.

While visiting Waiohinu in 1847, John Papa Ii and Victoria Kamamalu stayed at the house of "Kini ma," the Kini family (Ii, 1959:169). There is a record of Kini having been awarded 4.63 acres (LCA 7538) in Waiohinu, but no record of any land grant having gone to anyone by that name.

Of the twenty-three persons listed as taxpayers for the *ahupua'a* of Pakini in 1855, the names of only four are among those who received awards (LCA 9226, 10,680, 8787-C, and 10,190).

There is only one award listed for Kalae (Indices..., 1929:105). It was a 4-acre parcel of land awarded in 1852 to a person by the name of Kuaipalahalaha. Without mention of any effective reference point in the description made by the original surveyor and surrounded by government land, it was never located on a map by the later surveyors.

The earliest land claim and land title issued in Ka'u was awarded to the Protestant mission church for 16.07 acres (LCA 387; RP 1958) in Waiohinu (Indices..., 1929:453).

No Land Commission awards were made within the *ahupua'a* of Pakini-nui, Pakini-iki, or Hionamoa. However, many were made in the *ahupua'a* of Waiohinu (see Table 4).

In 1853, the total population of Ka'u district was 2,210. By 1855, about 260 persons had received land awards, but only about 220 had been issued Royal Patents. Census reports record 1,327 persons over 20 years of age. If we consider that both men and women were eligible for land awards,* approximately 1,100 (about 80 percent) of the citizens of Ka'u over 20 years of age failed to obtain land under the Kuleana Law.

Land Grants

Under the Kuleana Law, commoners were required to present their land claims to the Board of Commissioners to Quiet Land Titles by February 14, 1848. For those who for any reason failed to make application by the closing date, government lands were made available for purchase. The usual price in the outer islands was 50 cents per acre. However, the going rate on Oahu in 1849 was \$2 per acre for uplands, and \$5 per acre of taro land (Privy Council, 1849a:255). After 1855, large grants were sold for as little as 10 or 20 cents per acre.

In the district of Ka'u, between 1852 and 1879, one hundred and forty-eight land-grant purchases were made (Index..., 1887:90-94). The 148 grants went to 135 individuals: one received three land grants, eleven received two each, and 123 received one each. Forty of the grantees had also received Land Commission Awards and four of these were among those who obtained two land grants each.

Grants to 31 grantees exceeded 200 acres each. Only four grantees received more than 1,000 acres each (Table 5).

* In records made by Chief Justice William Lee of the first 1,100 awards approximately two-thirds of the claimants were males and one-third were females.

Table 5. Some of the largest Land Grants in Ka'u district, 1855-1879

Name	No. of grants	Acres	Year	Ahupua'a
Harris, C. C.	1	184,298	1861	Kahuku
Lyman, F. S.	3	7,737.33	1859,1860 1864	Halelua, etc; Palima & Paaau; Kauhuluula.
Shipman, W. C.	2	1,648.08	1858,1861	Puumakaa; Kiao.
Martin, W. T.	1	1,290	1879	Kiolakaa
Kealiinui	2	821.7	1852,1862	Kopu, Moaula; Kopu, Makaka
Laanui, S.	2	753	1852,1861	Kahilipali
Kawaa	1	516.3	1852	Makaka
Keawe, M.	1	442.5	1854	Moaula
Honokoa	1	433.33	1864	Moaula
Kahalewai	2	410.75	1857,1860	Keaa 2; Waiopua & Mohoae
Kawaiponia & Hao	1	380.4	1876	Kahaea & Kahilipali
Malailua, Noa	1	350	1857	Kaalaiki
McComber, L. R.	1	349	1862	Palauhulu
Papai	1	340.9	1855	Hionaa
Hilinoi & Naonoaina	1	336	1860	Popowela & Aemalo
Holoua	2	332.65	1852,1858	Ninole; Wailau
Ilama	1	298.5	1858	Kawala
Kahawai	1	280	1864	Moaula, Kopu, Makaka
Kaiahua	1	264	1859	Poohina
Palau, J.	2	254	1857	Makaka
Nakauaau	1	247.5	1858	Kaalaiki
Kipi, S.	1	247.33	1860	Kailiula
Keanu	1	245.33	1856	Kawala
Kalimapahana	1	242.08	1856	Kawala
Sanford, D. D.	1	225	1854	Kawala
Puukaua	1	228	1859	Manono, Kiolakaa
Nakaikuaana	1	219	1861	Nukakaia
Haalulu	1	216	1862	Moaula
Maigret, L.	1	206.9	1855	Makaka
Kalakuniai	1	205.5	1859	Paukunui
Kalama	1	202.33	1854	Kaunamano

A search through the records in the Royal Patent files turned up a few of the original claims applications filed with the Land Commissioners by people living in Ka'u. Of those that were found, the earliest was dated January 23, four were dated January 24, one January 25, and one as late as January 27, 1848. Written on mere scraps of paper, they were all dated within three weeks or less of the February 14, 1848 deadline for filing applications.

One application (Fig. 23)* was signed by Namakelua, the head of the district's schools. Another (Fig. 24)* was from a woman. In October 1849, Land Commissioners S. M. Kamakau and Mr. Pelham heard testimony on applications in Ka'u. On Namakelua's claim (LCA 10,450) fifteen lines of testimony are recorded (Native Testimony, 8:427), and for Ku, five lines (8:434). Namakelua claimed his two *ili 'aina* in Waiohinu were his from Kapiolani in 1819 and that he had lived there since then. Ku's claim (LCA 7314) dated from Kuaana in 1832. Both claims were surveyed by J. Fuller in July 1851 and the awards signed on November 19, 1851, nearly six years after the enactment of the law creating the Land Commission (Dec. 10, 1945).

* Translations of land applications (Figs. 23 and 24) by Namakelua and Ku were made by Mrs. Mary Kawena Pukui.

Januāri 24 1848 - I kōhea o
 Kōu ana ke kōānāina o ka
 Iōka pūni o ka o ka
 ka hi me ke kōānāina o ka
 ka Iōka pūni o ka
 he mau ili aīna o ka
 ka pōāna o ka
 ke olona a hiki i ka
 ka ke kōānāina o ka
 i ho'i mai ke
 he ke pā-hale ke
 ka hi me ke mau ili
 ke hi me Pūnāluu
 E mau Iōka pūni
 - Kahuku 1 & Hīpa 2
 Kau

Figure 23. Application for *kuleana* land in Ka'u by Namakelua, head of the Ka'u school district, dated January 24, 1848. "Hearken all of you surveyors (ana 'aina) of the island of Oahu, also the surveyors of the island of Hawaii, here. There are two land areas (mau ili 'aina) from the place where the olona cease to grow (Ma ka pau ana o ke olona) to the shore (a hiki i kahakai); from the place where the nets are lowered (ke ku'una) to the places where one turns to go back (na kākana i ho'i mai) a house lot (he pā-hale), three farming places (kihapai ekolu) in some parts. Also some taro patches in Punaluu, two parcels. (Written) by Namakelua. Kahuku 1 and Hīpa 2, Kau." (Translated by M. K. Pukui).

Januali 23. 1848 Kau Hawaii
 Aloha oe e ka luna hoona ku
 leana hira he ili aina o
 Kau o Kanepoiakua ma ka
 hikina o ka Pili ma ke kono
 hana o ka Akau a elepaio
 o ka hema a ka lae kaha
 kai. Oua no me ka ma
 haw

Ku ma Ku
 he Wahene hane ole

Figure 24. Application for *kuleana* land in Ka'u by Ku, a woman without a husband, dated January 23, 1848. "Greetings to you Land Commissioners for the land divisions in Kau. Kanepoiakua on the east, Pili on the west, Elepaio on the north and the beach point on the south. I am, with gratitude, Ku, an unmarried woman." (Translated by M. K. Pukui).

When an application was received by the Land Commissioners, it was given a number. These are listed in the Indices (1929:855-1382) and there are some 11,300 of them. However, over 4,000 (35.4 percent) are marked "Not Awarded." There is no way of telling from the published indices how many of these were from the district of Ka'u because the lands in which the claims were made for these have not been identified.

Thus the Great Mahele of 1848 and the Kuleana Law of 1850, often billed as an act of largess and generosity on the part of the Hawaiian King, Kamehameha III, who, it is frequently said, "gave one third of the land to the people," (Kuykendall, 1947:282), proves to be something considerably less (Blackman, 1899:159)* Perhaps there were other districts where the division of the land was more equitable, but on the whole, the great majority of the common people received nothing and those who did receive land got very little. The overall figures indicate that approximately 11,000 persons received about 28,000 acres of land (an average of about 2.5 acres per person); 245 chiefs received something more than 1,600,000 acres (an average of about 6,500 acres per chief); the king received more than 900,000 acres as crown lands; and the Hawaiian government more than 1,500,000 acres (Hobbs, 1935:52). In 1853, there were about 42,500 persons over 20 years of age (Schmitt, 1968:72). With only 28,000 people receiving land awards, about 60 percent of the total population over 20 years of age failed to receive land.

* The Mahele laid the foundation for the substitution of private-property rights for previously undifferentiated rights to land, and thus provided the legal framework for making land a commodity to be bought and sold. The result was that those who had access to money could buy land, while those who didn't, couldn't. The majority of the Hawaiians were still operating mainly on a subsistence economy. As Kenui (1845:119) put it,

If anyone of us becomes assistants of the chiefs, his pay for the most part is in goods; the most of the dollars are for the foreign chiefs...Foreigners come on shore with cash, ready to purchase land; but we have not the means to purchase lands; the native is disabled like one who has long been afflicted with a disease upon his back...we are not prepared to compete with foreigners.

A large number of Hawaiians did not receive land, either under the Mahele or under the Land Grant policy of the Hawaiian Kingdom. Many of those who did receive land were unable to keep it and their lands were alienated in many different ways, in lieu of taxes, for commercial debts, and by outright sale. Two measures were designed to stem the tide of land alienation: 1) the king was to attach a statement to each land award telling the people not to sell their lands for an inadequate consideration, and 2) Chief Justice Lee, the author of the *Kuleana* law, prepared a newspaper article in which he informed the people of their newly acquired rights. He concluded his discourse, "Two courses then are open to you. Either to secure your lands, work on them and be happy, or to sit still, sell them and then die. Which do you choose?" (Lee, 1850:1). In view of the complete inadequacy of these measures, the only conclusion that can be drawn is that the Mahele and the *Kuleana* laws, as they were structured, were not intended to prevent land alienation, but rather were designed to speed alienation of the land from the Hawaiians.

Without the security of his farm and houselot, the common Hawaiian became alienated from the source.

The Upland and the Shore Dwellers

In 1959, the Museum field team, Mary Kawena Pukui and Eleanor Williamson, assisted by William Meinecke, taped an interview (1959:H-41x1) with Mr. George Kawaha of Waiohinu who provided the following story about a trip from Waiohinu to Waiahukini village in his youth (circa 1900). This is an example of the continuing function of the Hawaiian family system ('*ohana*'), which even at that late date still recognized and kept active relationships between the upland dwellers (*ko a uka*) and the shore dwellers (*ko a kai*) of the family ('*ohana*):

Because I was younger and our horses were accustomed to the trail I used horses rather than unshod donkeys. When I returned from school [in Hilo], my father asked me when I would like to go down to see the elder members of my family who resided at Waioahukini. I went to look for horses to ride and to use as pack animals. I nailed on the shoes, but not too tightly.

Then we went up to the food gardens where we pulled up taro, enough to fill 10 bags. When we returned, two bags of taro were cooked and pounded for poi. We took this along with the other bags of raw taro. Raw taro can be taken, dampened and buried in the sand so it won't dry too quickly and spoil.

We took along salt salmon that we got here [from the Waiohinu store]. At that time, salmon was inexpensive. One could purchase a small keg. They were large salmon; you picked out what you wanted, just 40 cents.

* * * *

When I go to the beach [at Waiahukini], I gather all these things. I go and buy one bag of daikon [turnips], leaves and all, fresh leaves, good and green leaves. Count forty and take this to the shore with shoyu and coffee, whole coffee [beans] that had not been hulled, still white, but dry. Take two bags for the beach dwellers. Four bags of flour. Some cans of baking powder and a bag of sugar, take enough for several weeks [supply]. And the pancakes, the dried bread. That's the food, that's the flour bread cooked over the ashes.

The animals groan [under the weight].

* * * *

The animals groan on the descent and also from the burden on the return. Weighted with fish coming back, with salt, dried fish, (tuna, *ulua* and *kawelea*) all dried, which weighted the bags.

When we arrived at the shore [Waiahukini], relatives would greet us, "How are you?" "The Kalua boy has returned from school." They come to greet us. And here we divided the bundles, the food parcels. The poi bundles are separated. This belongs to Pa'akai. This is for Maunalei and others, and so-and-so, this is for the household. This was my Aunt Panila, Kama'alo, Kukaula, and his family. Pa'akai, his wife and children, Manuea and others. Manuea was the child of Pa'akai.

The old man, Pa'akai, would come to greet me and then he would say nothing more...He made a gesture of the neck [turning his head slightly], a sign [to go fishing]. Then they came to my Auntie Panila and they began to go out with the fishnets, two at a time. They go straight down and lower the nets.

The Japanese would be preparing the fire on which to broil the fish. All of the catch had been divided. These women perhaps know the signals made by the old man. It was Keawekuhia who carried the nets. When the net was a wide one, we would swim first toward one side and then the other side. Then those people who did the thrashing [who splashed the water and made noise] would start kicking. With one drawing of the net, there would be 7 bags of fish. All kinds of fish.

* * * *

Plentiful fish! Prepare those to be eaten raw, those to be broiled. Put some into a tub, salted and left there. The remaining fish are taken lower down [along the coast] and scaled and gutted. Salt those fish to be salted.

Wonderful! Then this old man comes back with his companion, the net was spread over the small pebbles. We had one house in which all of us ate our meals. Tell so-and-so to mix the poi that we brought down.

We take down four packages of unmixed poi...When they make preparations for eating, the bottles of samsu [a rice wine] which my father sent down to Pa'akai: two bottles for Pa'akai and two for Holokahiki. My Auntie got four. Then at mealtime, they take two. Pa'akai put out one bottle; Umi brought one. We had a little *luau*.

After eating poi, then we drank coffee with our fried pancakes. Sometimes sweet potatoes. The stomach is well filled.

* * * *

During a discussion about Waiahukini, Kawaha told Emory that there were between fifteen and twenty people living there in his youth; Pa'akai, wife and family; Naihe and wife; Ikupuna with his son, I-lulii; Keawekuhia, Kaanapu, and George Kaholokahiki, who lived at the place where the shack still (1958) stands. Pa'akai had a big (*pili*) grass house. A Japanese had one. They grew watermelon, and sweet potatoes which they planted just before the rainy season. Sugar cane and taro were planted in the hollows and they had some wild pinapples (Emory, notes).

Discussions about Kalae always included something about its fame as a good fishing place. The following comments were taken from the same tape:

The old man would fish by tossing a baited hook and line. When he caught an ulua, he'd let out a haloo. By the time he grew tired of fishing, he'd have about 6 fish. He'd count four spending the night, the first night. But the people are entirely gone. So it was with Kalae. There were plenty of fishermen at Kalae. Plenty before. When those people worked, they went in the morning.

* * * *

No comments about Kalae are complete without mentioning the water hole, Palahemo:*

You haven't seen Ka'u until you have seen Palahemo. Go there and dive. Bathe in the waters of Palahemo. Deep. When you try to stand, you can't touch bottom. Only shrimps inside, tiny shrimps. That's the thing that the 'opelu [mackerel] fishermen come to get to mix with other foods. Cook thoroughly and mix with bait ingredients; the inside skin scrapings of taro are also used. That's the bait they use to fish for 'opelu.

At the conclusion of the Kawaha interview, some general remarks were made which reveal something about the agricultural pursuits in the area inland from Kalae in the days long gone by:

Those days are done, those people are gone. What they worked at has not been and cannot be duplicated in these times. The things they did, the work they planned, nobody knows now how to do those things... [They were] a very patient people, those who tilled the very worst places that you could see, but to the elders this was food-producing land. Plant for eating, cultivate for eating, and also growing for giving-sharing with the shore dwellers. Take to share....These days, as I look about, the land is changed. Perhaps, we are going on to further changes, who knows? In the days when those parents and the seniors were living at Kamaoa, to see them when we passed the lava which separated the place of Kahoalii and others inland. The family of Kele Pinao and others were *makai* and beyond, facing seaward. That area was planted with sweet potatoes, Chinese bananas, and the Hawaiian sugar cane on the inner land.

* Palahemo is a waterhole covering about a quarter of an acre, surrounded by steep and irregular banks of lava rock. The water is salt and is supposed to have underground connections with the sea (HEN, I:616).

APPENDIX

PROMINENT HEIAU AND FEATURES IN THE SOUTH POINT AREA

Heiau

Pakini: In a survey of *heiau* structures on the island of Hawaii in the early 1900's, Mr. John G. Stokes reported he couldn't locate the *heiau* of Pakini mentioned by Kamakau in the story of the rebel Puna chief, Imakakoloa (see this paper p.24). Fornander wrote that Kalaniopuu stopped "at Kamaoa, where he built the *heiau* of Pakini in expectation of the capture of Imakakoloa" (1878, II:201,202-203). Perhaps Kamakau was more correct than Fornander when he said the *heiau* of Pakini was built "near Kamaoa" (1961:108). It would seem more probable to have a *heiau* named "Pakini" built on the land division of the same name.

While researching for their Ka'u study, Elizabeth and Edward Handy were guided by William Meinecke to a site in the land of Pakini-nui above the *pali* in pasture land used by a ranch at that time. The structure they found seemed to be more like a *heiau ho'oulu'ai*, i.e. a place to make offerings which insure the productivity of the crops (Fig. 25; Handy, 1940:130). A stone in the northern wall has a petroglyph on it.

Kalalea: Stokes described the *heiau* of Kalalea at Kalae between the lighthouse site and the sea (Figs. 26 and 27). He said:

This *heiau* was...43 by 35 ft., with platforms outside...adjoining its western wall....

Various large stones were found inside and outside the *heiau*...Two of them were on the platforms on the west and near the wall. That on the main platform on the north was called Kanemakua (a male). Two others were 12 ft. north of the *heiau*, the more northerly was called Aiai, the stone of Kuula, and the name of the next was not known. Inside the *heiau*, near the northwest corner was another rock called Kuula. Kuula was the god of fishermen. Hina, his wife, was to be found in a cave in the sea and to the south of the *heiau*. Five feet to the west of the beach-worn stones were the skeletons of three large fish...from the appearance of the skeletons they had not been there more than three or four weeks. Just inside the entrance, on the west was the body of another fish, an 'opelu, *Decapterus pinnulatus*, which had not been there more than two days. (Ms.)

When Stokes visited the *heiau*, an informant told him that "the *heiau* was Kamehameha's and was very sacred."

Ten years later another informant told Stokes the following:

[This is the] history of the *heiau* of Kalalea at Kalae, and of Kuula, Wahinehele and Aiai. Kuula (a male) married Wahine (a female) and they had a son Aiai. They left Kahiki and came to these islands, settling on Kauai. Aiai left his parents on Kauai and went on a sight-seeing tour to the islands of Oahu, Molokai, Maui and Hawaii. When he reached Kalae, he looked around and saw that it was a fine country, and a nice place to live in and well supplied with fish. He returned to Kauai and brought his parents back with him, and they all lived at Kalae. While his parents were living at Kalae, Aiai set out for Kahiki and brought back many people,--kilokilo (seers), kuhikuhipuone (architects who made plans in the sand), and ai puupuu (stewards). He also brought back many different kinds of food, such as breadfruit, bananas, awa, coconuts, sugar cane, sweet potatoes, kalo, papaya, the hapuu and pala, both edible ferns

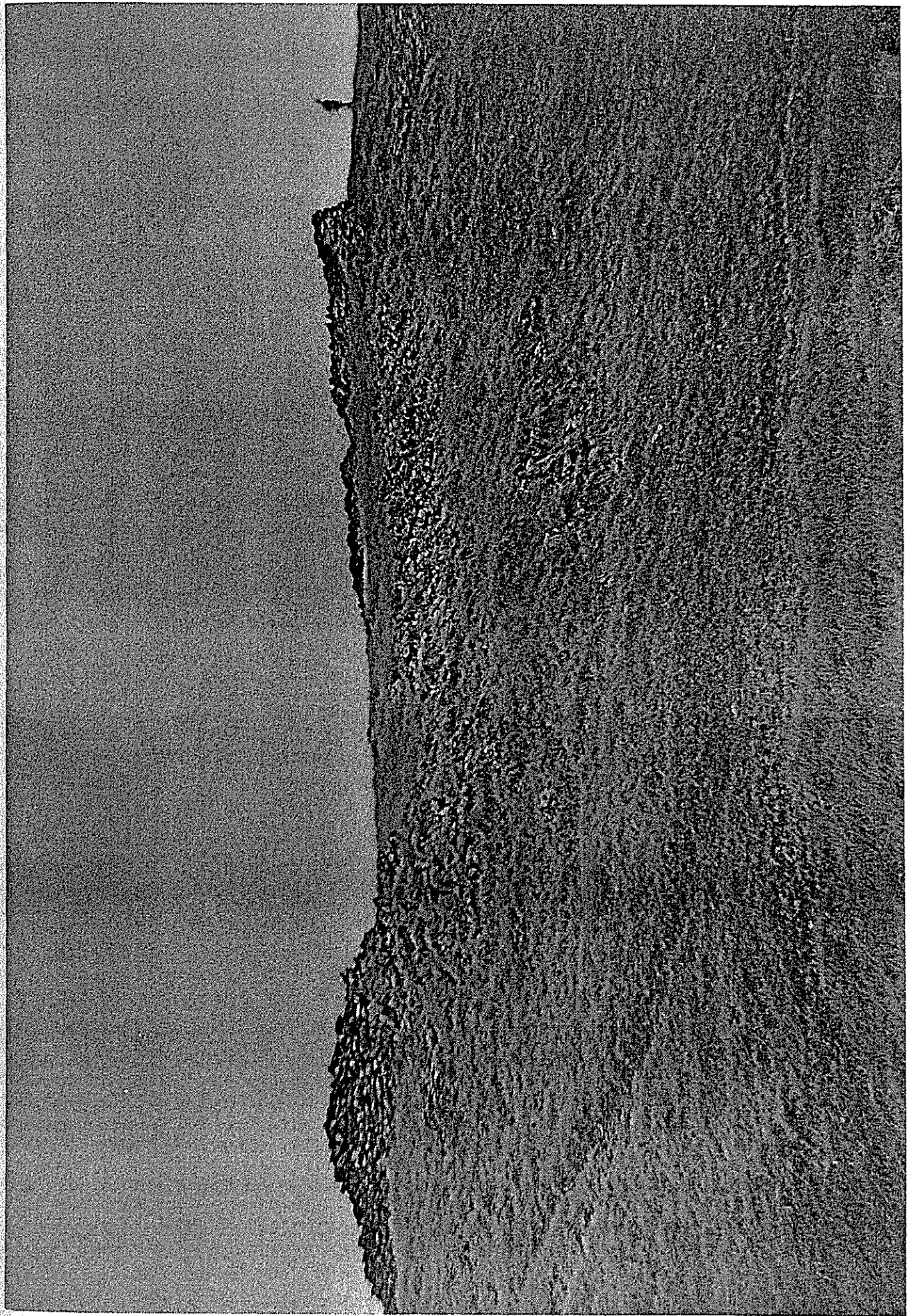


Figure 25. *Heiau* ruins on land division of Pakini-mui, 1957.

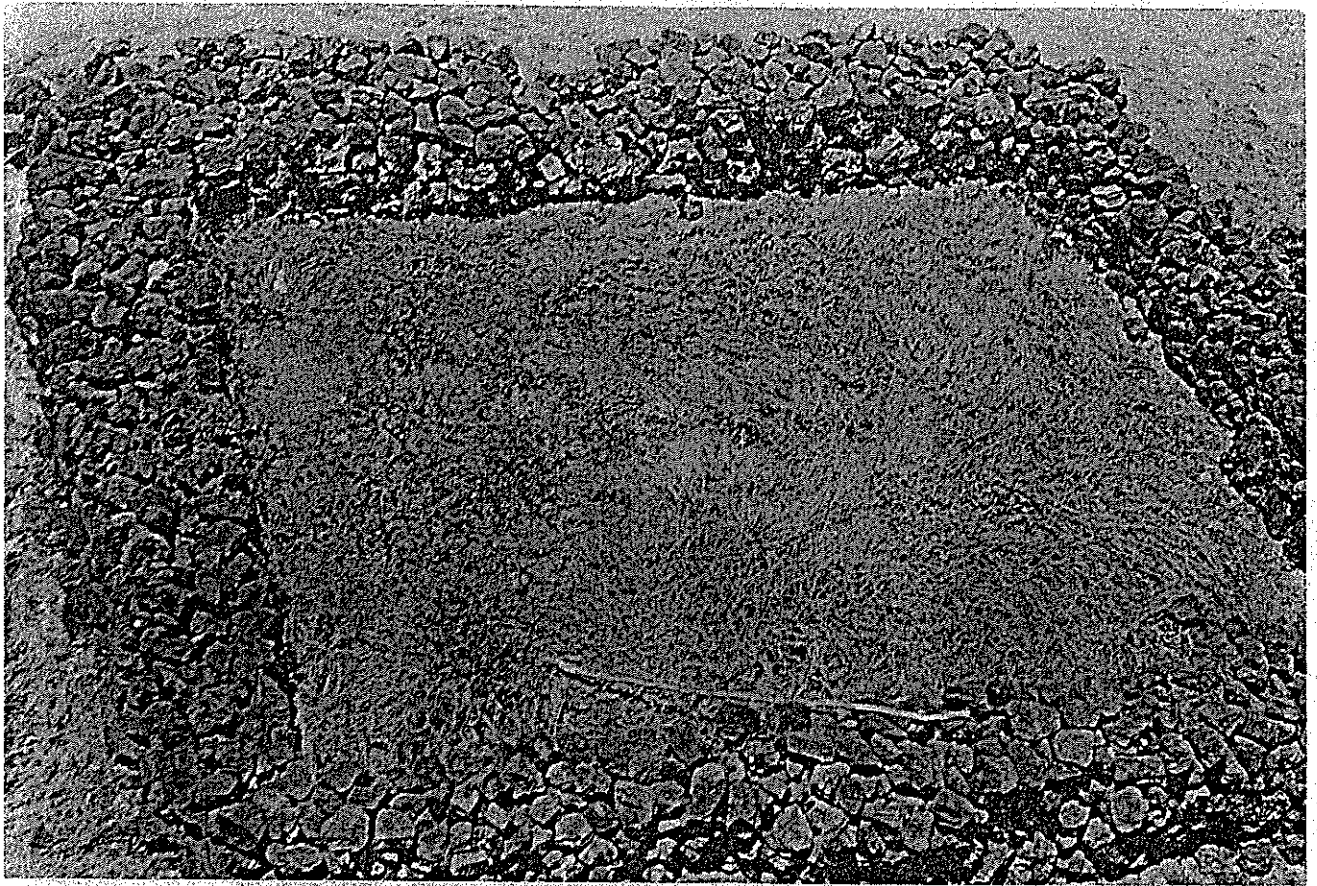


Figure 26. Heiau Kalalea between the light station and the sea, South Point. Photo by Y. H. Sinoto, 1955.

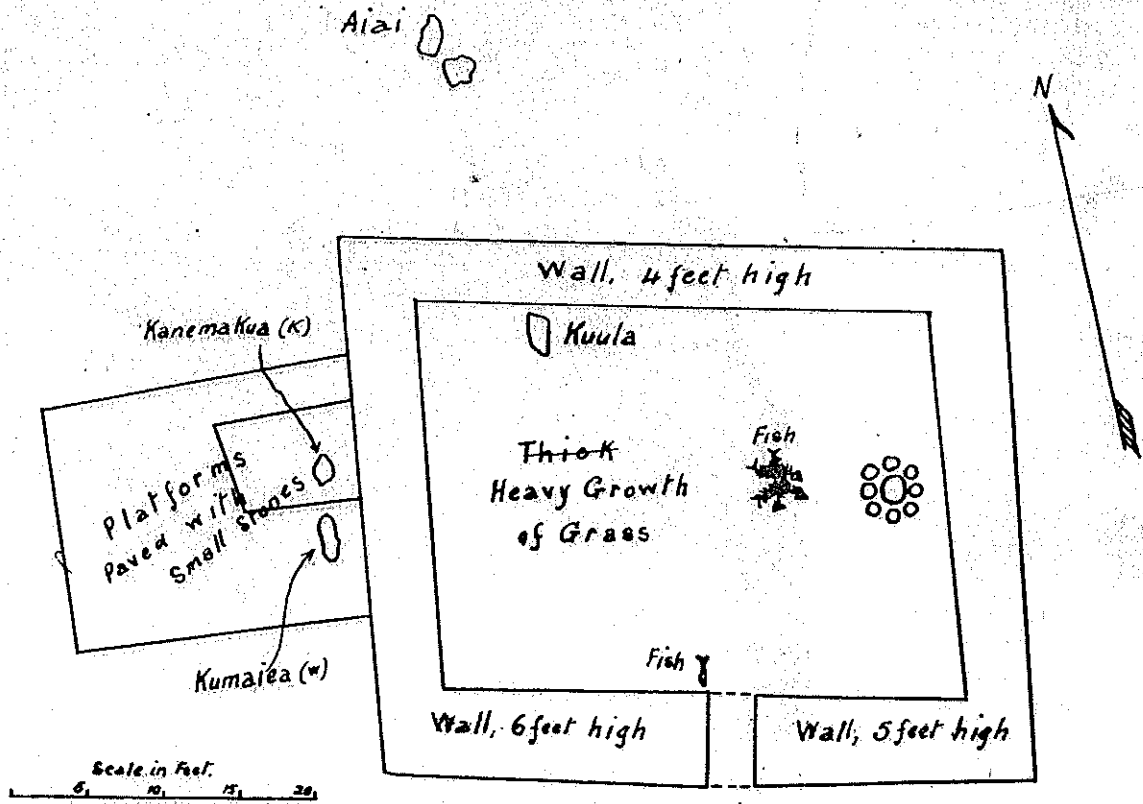


Figure 27. Heiau of Kalalea at South Point. Drawing by J. G. Stokes.

(*Cibotium Chamissoi*), and *Marattia Douglassii*), and other foods in great quantity. And when Aiai saw that the food and the men were ready, he gave commands to all the Menehune and the erection of the heiau went on until the walls were completed. It was named Kalalea, which name still stands today. As for the mana of the people previously mentioned, Kuula, Wahinehele and Aiai, their mana cannot be maintained in these enlightened times.

Other notes in records made by Stokes mention this *heiau* as

...a real fishermen's heiau (*heiau kuula a-i-maoli*) made by unseen people, menehune perhaps, like the menehune's water course at Waimea, Kauai. It was not a heiau made with the hands of mortals, as were those of the chiefs of the ancient times for sacrificing human beings, such as the heiau at Napoopoo in Kona, which was well-known formerly.

Stokes comments:

The most interesting matter in connection with the place is the unusual veneration attached to the heiau. This class of heiau, or a stone post set up to Kuula, formerly existed on nearly every prominent headland in the group, and many are still in existence...

In 1953 Emory obtained the following information from Mary Kawena Pukui: "One must not wear red on the beaches at Kalae where Kalalea Heiau is located. Women never went inside the *heiau*. The *ku'ula* of this *heiau* is a shark. It is a *heiau ho'oulu* (to increase) *opelu* (mackerel), *malolo* (flying fish), and *ahi* (tuna).

Molilele: Located on the edge of the *pali* at a vantage point that overlooks the sea and Waiahukini is the *heiau* Molilele (Fig. 28). The platform of this *heiau* is nearly level with the ground. It measures 52 feet across its northern end, and 113 feet along its eastern side. Its western side and part of its southern end are gone. While the remains of this *heiau* are not impressive, its situation on the most prominent part of the cliff commands a view extending many miles in all directions (Stokes, ms. 538).



Figure 28. *Heiau* of Molilele on land division of Pakini-iki, 1969. Photo by E. J. Ladd.

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