HAWAI I
ABORIGINAL CULTURE

National Survey of Historic Sites and Buildings
The National Survey of Historic Sites and Buildings

Theme XVI

Indigenous Peoples and Cultures

HAWAII ABORIGINAL CULTURE
A.D. 750 - A.D. 1778

1962

United States Department of the Interior
Stewart L. Udall, Secretary

National Park Service
Conrad L. Wirth, Director
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GENEALOGICAL FRAMEWORK OF HAWAIIAN CHIEFS.                                                64
Preface

The National Survey of Historic Sites and Buildings is a resumption of the Historic Sites Survey begun in 1937, under the authority of the Historic Sites Act of 1935. During World War II, and the emergency following, it was necessary to suspend these studies. The Survey has now been resumed as part of the National Park Service MISSION 66 Program.

The purpose of the Survey, as outlined in the Historic Sites Act, is to "make a survey of historic and archeologic sites, buildings, and objects for the purpose of determining which possess exceptional value as commemorating or illustrating the history of the United States." In carrying out this basic directive, each site and building considered in the Survey is evaluated in terms of the Criteria for Classification, which are listed in the appendix of this report.

When completed the Survey will make recommendations to the Director of the National Park Service and the Secretary of the Interior as to the sites of "exceptional value." This will assist the National Park Service in preparing the National Recreation Plan, including sites which may be administered by the National Park Service to fill in gaps in the historical and archeological representation within the National Park System. It will also recommend and encourage programs of historical and archeological preservation being carried out by state and local agencies.
The first part of this study - the analytical statement of the theme, was written by Mrs. Dorothy B. Barrere, Associate in Hawaiian Culture for the Bernice P. Bishop Museum, under contract for the National Park Service. Part Two of the study, the survey of sites in Hawaii, was made by Mr. Paul J. F. Schumacher, Regional Archeologist. The Site Survey section was written by Mr. Charles W. Snell, Historian, Dr. John A. Hussey, Regional Historian, and Mr. Schumacher, Western Region, San Francisco.

After completion, the study was presented to the Consulting Committee for the National Survey of Historic Sites and Buildings. The Committee consists of Dr. Waldo G. Leland, Director of the American Council of Learned Societies; Dr. S. K. Stevens, Executive Director of the Pennsylvania Historical and Museum Commission; Dr. Louis B. Wright, Folger-Shakespearean Library; Mr. Earl H. Reed, American Institute of Architects; Dr. Richard H. Howland, Head Curator, Civil History, Smithsonian Institution; Mr. Eric Gugler, American Scenic and Historical Preservation Society; Dr. J. O. Brew, Committee for the Recovery of Archeological Remains; Mr. Frederick Johnson, Robert S. Peabody Foundation for American Archeology; Mr. Robert Garvey, Jr., Executive Director of the National Trust for Historic Preservation; and Dr. Ralph H. Gabriel, Sterling Professor of History Emeritus, Yale University, and Professor of American Studies, American University.
The over-all Survey, as well as the theme study which follows, is under the general direction of John O. Littleton, Chief, National Survey of Historic Sites and Buildings, who works under the general supervision of Herbert E. Kahler, Chief, Division of History and Archeology, of the National Park Service.

Conrad L. Wirth
Director
ACKNOWLEDGEMENTS

The work of the National Survey profits from the experience and knowledge of a considerable number of persons and organizations. Assistance from the following people in Hawaii is gratefully acknowledged: Dr. Alex Spoehr, Chancellor, East-West University, University of Hawaii and former Director of the Bishop Museum; Mr. Ernest Almeida, Kauai Police Force #111, Koloa, Kauai; Mr. Robert Wenkam, 3578 Waialae Avenue, Honolulu, Cahu; Mr. Bill Meinecke, Waiohinu, Naalehu, Hawaii, Hawaii; Mr. Susumu Nishimura, Nishimura Bros. Standard Oil Station, Lanai City, Lanai; and Mr. Sam Coblenz, California Packing Company, Kualapuu, Molokai; the staff of the Bernice P. Bishop Museum, Honolulu, including: Dr. Roland Force, Director; Dr. Kenneth P. Emory, Curator of Anthropology; Mrs. Marion Kelly, Department of Anthropology; Mr. Lloyd J. Soehren, Assistant in Anthropology; and Dr. Yosihiko H. Sinoto, Museum Fellow in Anthropology, were particularly helpful.

The cover was prepared by the Western Museum Laboratory, National Park Service, San Francisco, and the maps by the Division of Recreation Resource Planning, Western Region, San Francisco.
INTRODUCTION

The ancient Hawaiians were descendants of bands of venturesome Polynesian peoples who sailed their canoes over 2,000 miles and more of open sea in search of new lands to settle. They brought with them the items and concepts of culture, the language, and the gods that unmistakably stamp Hawaiian culture as Polynesian in origin.

At the time of the first arrivals, about A.D. 750, and in the 12th or 13th century, there are indications of sporadic contact with the old homelands. Then the contacts ceased, and Hawaii became an isolated area of Polynesian culture, with closest affinities to the eastern Polynesian cultures of the Society Islands and the Marquesas.

The dominant features of the Hawaiian culture were,

1) social structure based on blood ties and the acceptance of seniority as the criterion of right of leadership;

2) power attained by its ruling chiefs through belief in their direct descent in the senior lines from creator gods, as evidenced by their genealogies;

3) concept of the world as being controlled and watched over by spirit forces which constantly had to be propitiated or manipulated.

The Hawaiians utilized the limited variety of raw materials at hand so well that they lacked for nothing in the way of creature comforts. Food, clothing, housing, and material possessions were adequate and suitable to the climate and to their mode of life. Through craftsmanship and technical skill these same simple materials were used to fashion articles which provided a degree of luxury for the enhancement of prestige.
An aesthetic appreciation of the physical world was translated into personifications of natural phenomena and material objects that bound together men and spirit forces into one total and inseparable environment. In such an environment Hawaiian culture developed and expanded until the 19th century. Then, with its discovery and exploration by Captain Cook and others, the isolation of Hawaii ended. With the following inevitable turning to western ways and western tools, most of the physical aspects of Hawaiian culture ceased. But many concepts of the old social culture continued, taught through tradition and precept. Amongst themselves, the older Hawaiians of today still show traces of the ancient culture in their deference to seniority, yielding to authority, and belief in surrounding spirit forces.

**THE HAWAIIAN CHAIN**

**Geology:** The oceanic islands of the Hawaiian chain are the tops of a 2,000-mile long range of volcanic mountains whose base lies 18,000 feet below sea level. In physical type they fall into three zones: at the northwestern end of the chain they are low and sandy; in the middle zone they are small rocky pinnacles; and at the southeastern end they are high volcanic islands.

**Geography:** The entire chain lies in mid-Pacific in a northwest to southeast line from about $176^\circ 29'$ to about $154^\circ 51'$ west longitude, and between about $16^\circ 5'$ and $28^\circ 25'$ north latitude. The number of islands and islets total between 34 and 63, with a dry land area of 6,442 square miles.
The main group of islands lies at the southeastern end of the chain and has 99.9 per cent, or 6,435 square miles, of the total land area. Named in order of size they are: Hawaii, Maui, Oahu, Kauai, Molokai, Lanai, Niihau, and Kahoolawe. Approximately one-fourth of the land area of the main group lies below 650 feet, one-half below 1,950 feet, and one-fourth above 4,500 feet. Maximum elevation is reached at Mauna Kea, Hawaii, with 13,781 feet.

Climate: Because of marine influence and persistent east-northeast trade winds, the climate is subtropical rather than tropical. Outstanding features of climate are, the sharp differences in rainfall over adjacent areas; the sunniness of the leeward lowlands, and the persistent cloudiness over mountain peaks nearby; the remarkably equable temperature from day to day and from season to season; the persistence of the trade winds, except in a few areas where blocked by high mountains to the east; and the rarity of severe storms of any kind. Annual average rainfall ranges from well over 250 inches in certain mountain areas to 20 inches at the seashore. Average annual temperature ranges between 81° and 68° F. on the coast, with recorded extremes of about 92° and 42° F.

The tradewinds are the dominant feature of the Hawaiian climate. There are only two seasons; summer, from May to September, when the tradewinds blow over 65 per cent of the time, and winter, from October to April, when they blow over 65 per cent of the time.

The flora and fauna found in Hawaii support the evidence of its language that Hawaii was populated by Polynesians whose ultimate origin was in the west. The only edible food plants indigenous to the islands are the pandanus and some ferns; all other food plants were brought in, as were meat-producing animals. The introduced plants, with the exception of the sweet potato and possibly the gourd, are of western origin. The pig, the jungle fowl, and the stowaway rat are of definitely Indonesian origin, which is also the probable origin of the Hawaiian dog.

Plants:

Native (Endemic and Indigenous)

Some of the principal plants utilized by the Hawaiians are here listed:

<table>
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<td>koa</td>
<td>Acacia koa</td>
</tr>
<tr>
<td>maile</td>
<td>Alyxia olivaeformis</td>
</tr>
<tr>
<td>hapu'u</td>
<td>Cibotium chamissoni</td>
</tr>
<tr>
<td>wiliwili</td>
<td>Erythrina sandwicensis</td>
</tr>
<tr>
<td>'ie'ie</td>
<td>Freycinetia arborea</td>
</tr>
<tr>
<td>chi'a</td>
<td>Metrosideros collina</td>
</tr>
<tr>
<td>manaki</td>
<td>Pipturus albidus</td>
</tr>
<tr>
<td>olona</td>
<td>Touchardia latifolia</td>
</tr>
<tr>
<td>pili</td>
<td>Heteropogon contortus</td>
</tr>
<tr>
<td>hala</td>
<td>Pandanus odoratissimus</td>
</tr>
<tr>
<td>'iliahi (sandalwood)</td>
<td>Santalum sp.</td>
</tr>
<tr>
<td>kaula</td>
<td>Colubrina oppositifolia</td>
</tr>
<tr>
<td>uhuhi</td>
<td>Mezoneuron kauaiense</td>
</tr>
<tr>
<td>naio</td>
<td>Myoporum sandwicense</td>
</tr>
<tr>
<td>mamane</td>
<td>Sophora chrysophyila</td>
</tr>
</tbody>
</table>

Introduced

The following are twenty-five plants probably brought to Hawaii by the Polynesians of prehistoric times:
The pig, dog, and jungle fowl were brought by the Polynesians of prehistoric times.

The 70 to 77 endemic bird species of Hawaii represented eleven distinct avian families or sub-families, and are believed to have evolved through adaptive radiation from only fifteen or sixteen original immigrants. Several of the birds important to the Hawaiians for their flesh or feathers are now extinct. These include the honey creepers, mano (Drepanis sp.), the honey eaters 'o'o (Acruilocerus sp.), and a rail, moho (Penula millisi Dole). A goose, nene (Nesochen sandvicensis Vigors), very nearly became

<table>
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<tr>
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<th>English Name</th>
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<td>-</td>
<td>Alocasia macrorrhiza</td>
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<tr>
<td>'ava</td>
<td>-</td>
<td>Piper methysticum</td>
</tr>
<tr>
<td>'awapuhi kuahivi</td>
<td>wild ginger</td>
<td>Zingiber</td>
</tr>
<tr>
<td>hau</td>
<td>-</td>
<td>Hibiscus tiliaceus</td>
</tr>
<tr>
<td>hoi</td>
<td>bitter yam</td>
<td>Dioscorea bulbifera</td>
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<tr>
<td>ipu, ipunui</td>
<td>bottle gourd</td>
<td>Lagenaria siceraria</td>
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<td>kalo</td>
<td>taro</td>
<td>Colocasia esculenta</td>
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<td>kanani</td>
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<td>Calophyllum inophyllum</td>
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<td>ki, la'i</td>
<td>ti</td>
<td>Cordyline terminalis</td>
</tr>
<tr>
<td>ko</td>
<td>sugar cane</td>
<td>Saccharum officinarum</td>
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<td>kou</td>
<td>-</td>
<td>Cordia subcordata</td>
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<td>kukui</td>
<td>candlenut tree</td>
<td>Aleurites moluccana</td>
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<td>mai'a</td>
<td>banana</td>
<td>Musa paradisiaca</td>
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<td>mi lo</td>
<td>-</td>
<td>Thespesia populnea</td>
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<td>niu</td>
<td>coconut</td>
<td>Cocos nucifera</td>
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<td>noni</td>
<td>Indian mulberry</td>
<td>Morinda citrifolia</td>
</tr>
<tr>
<td>'oe</td>
<td>bamboo</td>
<td>Schizostachyum glaucifolium</td>
</tr>
<tr>
<td>'oh' a 'ai</td>
<td>mountain apple</td>
<td>Eugenia malaccensis</td>
</tr>
<tr>
<td>'olena</td>
<td>turmeric</td>
<td>Curcuma domestica</td>
</tr>
<tr>
<td>pia</td>
<td>Polynesian arrow-root</td>
<td>Tacca leontopetaloides</td>
</tr>
<tr>
<td>pi'a</td>
<td>wild yam</td>
<td>Dioscorea pentaphylla</td>
</tr>
<tr>
<td>'uala</td>
<td>sweet potato</td>
<td>Ipomoea batatas</td>
</tr>
<tr>
<td>uhi</td>
<td>common yam</td>
<td>Dioscorea alata</td>
</tr>
<tr>
<td>'ulu</td>
<td>breadfruit</td>
<td>Artocarpus incisus</td>
</tr>
<tr>
<td>wauke</td>
<td>paper mulberry</td>
<td>Broussonetia papyrifera</td>
</tr>
</tbody>
</table>

Animals:

The pig, dog, and jungle fowl were brought by the Polynesians of prehistoric times.

The 70 to 77 endemic bird species of Hawaii represented eleven distinct avian families or sub-families, and are believed to have evolved through adaptive radiation from only fifteen or sixteen original immigrants. Several of the birds important to the Hawaiians for their flesh or feathers are now extinct. These include the honey creepers, mano (Drepanis sp.), the honey eaters 'o'o (Acruilocerus sp.), and a rail, moho (Penula millisi Dole). A goose, nene (Nesochen sandvicensis Vigors), very nearly became
extinct, but a conservation program is making what appears to be a successful attempt to save the nene through protected breeding.

**Historic Introductions of Flora and Fauna:**

1778 (Cook): goats, English-bred pigs, seeds of melons, pumpkins, and onions.

1787 (Barkley): turkeys.

1793-4 (Vancouver): cattle, grapevines, orange and almond trees, garden seeds.

1803 (Cleveland and Shaler): horses.

Fleas, mosquitoes, centipedes, scorpions, and cockroaches arrived by way of foreign ships, as did house rats.¹

**PREHISTORY OF HAWAII**

Origin of its people: Hawaiians belong to the great family of Polynesian peoples who occupy the so-called Polynesian Triangle. The Triangle stretches from Hawaii in the north to New Zealand in the south and to Easter Island in the east. Samoa and Tonga are at the middle of its base in the west. It would seem, on linguistic and archeological evidence, that beginning about 1000 B.C. or earlier, small groups of people from islands to the west came together in a western archipelago of the Triangle, perhaps Tonga, and became the progenitors of a hybrid people we know today as Polynesians.

These Polynesians spread to all the islands of the Triangle. On the basis of recent archeological findings, Emory estimates the following order of dispersal: from western Polynesia (Samoa and Tonga) to the Marquesas and Tahiti, in the center of the Triangle, at least by 500 B.C., from one or the other of these archipelagoes to Easter Island, by at least A.D. 500, to New Zealand (via Cook Islands), and Hawaii, by at least A.D. 750.  

Archaeological evidence: Scientifically conducted archeological digging was begun in Hawaii in 1950 by Dr. K. P. Emory of the Bishop Museum and the University of Hawaii; the first Carbon-14 date from any Pacific island was recorded; artifacts and evidences of human occupation collected.

In 1954 the Bishop Museum and the University of Hawaii began a five-year program of systematic excavation of archeological sites. Reports on the program began with publication of a study on fishhooks, and another on excavations made on the island of Oahu.

Carbon-14 dates from charcoal of hearths at the lowest levels showing human occupation have been recorded; there are 14 such dates for the island of Hawaii, two each for Oahu and Molokai, four for Kauai, and one for Nihoa.

Radiocarbon dates of sites occupied by the Hawaiians go back to A.D. 950, plus or minus 200 years, for confirmed dates of first habitation of those sites. (One date of A.D. 124, plus or minus 60 years, was obtained from an isolated campfire under the regular occupation of a fisherman's establishment on the southernmost tip of Hawaii island. This, however, may have been the campfire of castaways.)

References: Emory, 1959; Emory, 1961.
References: Emory, 1953; Emory, Bonk and Sinoto, 1959.
Language evidence: The Hawaiian language belongs to the family of Malayo-Polynesian languages. More specifically, it is one of the Eastern Polynesian languages, the others in this sub-group being those of the Society Islands (Tahiti), Marquesas, Tuamotus, Mangareva, Easter, Cook, and New Zealand. Its closest affinity is to the Tahitian language, with whom it shares nearly 86 per cent of its basic vocabulary. It also shares 85 per cent with New Zealand and Mangareva, and 62 per cent with the Marquesas, as compared with 63 per cent with Tonga and Samoa.

Elbert's glottochronological study, based on the known rate of change of European languages, indicated that the Hawaiian and Tahitian languages had been separated for at least 1,000 years. Radiocarbon dates indicate a longer separation, and a slower rate of change than in the case of the European languages.¹

Genealogical evidence: Fornander's invaluable collection of genealogies of the Hawaiian chiefs has been the basis of two genealogical studies attempting to arrive at some approximate time for the settlement of Hawaii.

Fornander himself, using 30 years to a generation, counts back to Wakea, "the common ancestor of all Hawaiian chiefs." He places first Polynesian settlement in Hawaii in the fifth century. Unfortunately, Fornander's acceptance of Wakea, the mythical Sky Father of Polynesia, as a human ancestor makes it impossible to accept his conclusions.

Cartwright traced the genealogies of various Hawaiian chiefs along different lines until each converged upon a single pedigree. He

¹Reference: Elbert, 1953b; Emory, 1961.
concludes that the ancestor at that point of convergence was the pioneer colonizer of the line in Hawaii. His tabulations go back, at the most, thirty-four generations from A.D. 1900, which, figured at the modern count of 25 years to a generation, reaches back to A.D. 1050.\textsuperscript{1}

Summary: The methods of establishing the time of occupation of Hawaii have been by genealogical count, by rate of change in vocabulary, and by radiocarbon dating. The last is the most scientifically correct, and as more Carbon-14 dates are established, they will provide a firm basis for dating Hawaii's occupation within a definite time span. Also, they will provide a scale from which a rate of language change may be established for Polynesia. The use of genealogies alone as a measure of time is inadequate if for no other reason than that there is no correct computation of the Polynesian generation count by years.

Studies of the evidence provided by the three sources makes it certain that Hawaii was well populated by a thousand years ago. The time of first arrivals would be several hundred years earlier. In other words, the first arrivals in Hawaii date back to A.D. 750, or earlier, and by A.D. 950 there was wide-spread occupation of the main group of the Hawaiian islands.\textsuperscript{2}

\textbf{PHYSICAL CHARACTERISTICS}

There is infinite variation and wide range in the physical characteristics of each of the Polynesian peoples, yet the similarities among them set them apart as one ethnic group. The indications are that the few original progenitors of the Polynesians who came together in West

\textsuperscript{1}References: Cartwright, 1939; Fornander, 1878.
\textsuperscript{2}References: Emory, 1961; Stokes, 1932; Suggs, 1960a.
Polynesia were a blend of ancient Caucasoid, Mongoloid, and Oceanic Negroid genetic strains. Isolation and interbreeding resulted in a new mixture, in which family characteristics became racial characteristics. In Hawaii, as in other Polynesian island groups, the original family characteristics are evident in varying degree, thus there is no one Hawaiian type, but rather several Hawaiian types.

Following are the results of observations made by Emory and Sullivan of several hundred allegedly pure Hawaiians in 1920:

**Stature:** among the tall people of the earth; the average height of the men was 5'6\(\frac{1}{4}\)", of the women, 5'2-1/3".

The tallest man measured 6'4", and the shortest, 5'3\(\frac{1}{2}\)\".

**Head:** average shape is round. (Observations have since been made on skeletal material of some 500 burials, showing a large number of skulls that were distinctly Caucasoid, a large number distinctly Mongoloid, and some Negroid.)

**Face:** high and very wide; brows relatively very narrow.

**Nose:** high and wide, consistent with the large face, and characterizing the Hawaiians as generally large featured; medium height to the nose bridge; straight in profile, with main axis of nasal openings oblique or transverse, a dominant hereditary feature. However, the nasal proportions were those of a rather narrow nose.

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1 Any statement made on "body weight" would have to be on the basis of traditions or hearsay. Certainly it would not apply to the Hawaiians in general. The large men and corpulent women were found only amongst the highest ali'i, and not generally throughout the people.

Photo, 1921, Courtesy Bishop Museum.
Forehead: sloped back in 54 per cent, but vertical in 43 per cent. (Formerly, this slope was accentuated by artificial moulding.)

Eyes: wide open and brown. Some 15 per cent had an epicanthic, or Mongoloid, fold over the eye.

Lips: moderately thick, although in a good percentage they were medium.

Teeth: some of the incisor teeth were shovel-shaped, caused by an inner rim along the edge.

Chin: well developed.

Hair: the hair of 69 per cent was straight, and of 16 per cent wavy. The hair was black, except when viewed through light, when it appeared as reddish brown. Many individuals had streaks of blond hair, a feature called 'ehu in Hawaiian, and some individuals had light brown hair entirely. Many of the men had quite heavy beards.

Skin Color: light brown.¹

LANGUAGE

The Hawaiian language was firmly in writing in 1626 by a committee of missionaries who used letters to represent the sounds as they heard them. They found difficulty in distinguishing between l and r, k and t, and w and y, and, by vote, chose l, k, and y to represent these sounds. Had the committee chosen r, t, and y instead, the resemblance of the Hawaiian language to the Tahitian, which uses these letters, would be even more striking.

¹Reference: Sullivan, 1927.
The sounds of the Hawaiian language are represented by eight significant consonants: h, k, l, m, n, p, v, and ', a glottal stop formed by closing the vocal cords, and five vowels: a, e, i, o, u, plus vowel length sounds indicated by a macron. The glottal stop, ', was not indicated in early writings, and is not always indicated in present writings. However, the sound is of utmost importance in distinguishing meanings, as for instance in uku meaning "pay," and 'uku meaning "louse." The same is true of vowel length sounds, as in wahine meaning "woman" and wahine meaning "women."

In structure, the language cannot be put into a European mold of tenses, cases, declensions or conjugations, and gender indicated by the form of the word itself. The term "we" either excludes or includes the person addressed. Interest is in place and direction, as in aku, away from the speaker; mai, towards the speaker; completion or incompletion of an act, by the use of such particles as ua or e; and relation of possessed objects and possessor, an important clue to the values placed by the Hawaiians on items in their culture.

The newest lexicon of the Hawaiian language is the result of some eighteen years of compilation by Mary Kawena Pukui, the outstanding Hawaiian authority of today. She, in collaboration with Samuel Elbert, professor of linguistics at the University of Hawaii, has produced a Hawaiian-English dictionary containing some 25,000 words that is the definitive work on Hawaiian grammar and vocabulary. A companion work, of English into Hawaiian, is now in progress.¹

¹References: Buck, 1938, pp. 242-243, Elbert, 1953a; Pukui and Elbert, 1957.
At the time of his discovery of the Hawaiian islands in 1778, Captain Cook estimated the population to be 400,000, a figure somewhat in excess of that computed by Emory, who gives 300,000. Emory apportions the population among the islands at that time as follows:

<table>
<thead>
<tr>
<th>Island</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawaii</td>
<td>120,000</td>
</tr>
<tr>
<td>Maui</td>
<td>70,000</td>
</tr>
<tr>
<td>Oahu</td>
<td>65,000</td>
</tr>
<tr>
<td>Kauai</td>
<td>30,000</td>
</tr>
<tr>
<td>Molokai</td>
<td>10,500</td>
</tr>
<tr>
<td>Lanai</td>
<td>3,000</td>
</tr>
<tr>
<td>Niihau</td>
<td>1,500</td>
</tr>
</tbody>
</table>

In 1823, William Ellis estimated the total population to be between 130,000 to 150,000, and accounted for the rapid depopulation since Cook's time as being mainly due to frequent wars, and three pestilences. The Hawaiians had no tuberculosis, venereal diseases, influenza, mumps, small pox, or measles. The introduction of such diseases, against which the Hawaiians had no immunity, quickly made great inroads into the population.

The first official census, taken in 1832, showed a total population of the islands as 130,313, of which 124,049 were Hawaiians. In barely 50 years, the Hawaiians had been reduced to one-third their pre-contact numbers. From 1866 to 1950, Hawaiians and part-Hawaiians were counted separately on the census, with the part-Hawaiians showing a steady increase. By 1930 they outnumbered the full-blooded, and the gap is steadily growing wider.
ECONOMIC STRUCTURE

The ancient economy was based on agriculture and fishing. The producers in this economy, the farmers and fishermen, were the great mass of commoners who lived as tenants-at-will upon lands under the jurisdiction of feudal chiefs. In addition to vegetable food and fish, pigs, dogs, feathers, barkcloth, tools, and implements were products of the economy.

Distribution was on a gift-barter basis between the basic producers, and on a gift-tax basis to the chief upon whose lands they lived. He kept a part, and passed the rest on to the chief to whom he owed allegiance. At the top of the structure was the ruling chief, who distributed the goods and products received to support himself and the members of his large household.

Taxes and services were required of all dwellers on the lands of the chiefs, commoners and lesser chiefs alike. They were contributed

*(The State of Hawaii Dept. of Health has given the above figures unofficially. Since Hawaii became a state, Hawaiians and part-Hawaiians were lumped together in the official 1960 census along with "Others"; The Dept. made the separation.)*
by family units, rather than by individuals. Land distribution was geared to this system of taxation. Family lands comprised areas suitable for varied food crops and cultivated plants, as well as fishing grounds.

All lands were the sole property of the ruling chief to give, transfer, or reclaim, as he saw fit. Upon his death, the lands reverted to his heir, to be redistributed according to his own wishes. Theoretically this should have caused constant upheaval, but, in practice, only the few dispossessed chiefs were the losers. The basic producers remained on the lands, as long as they continued to contribute acceptable quantities of goods and produce in taxes.

With the use of the land came water rights assuring equitable distribution of free flowing waters for irrigation. Also, inshore fishing grounds were restricted to the use of those who had received the lands adjacent to them. These rights were retained long after the change in the land tenure system occasioned by the Great Mahele of 1848. Today, a few old land deeds still show these provisions, which are legally recognized.

Land Divisions:

Geographic: Terms for geographic divisions were descriptive.

Pae-moku or pae-'aina: archipelago
Makapu'u: (often shortened to moku): a single island
Mau-oloko; or moku-'aina: (often shortened to moku):
a district of an island
'Okana (syn. Palana): a portion of a district
Poko: a subdivision of an 'okana

Landholding: Within each district or portion thereof were feudal
land holdings called ahupua'a. These were subdivided into smaller units which furnished the goods and produce as taxes for the ahupua'a.

**Ahupua'a**: varied in size; theoretically ran from sea to mountain top.

**'Ili**: portions of an ahupua'a; located in various and sometimes separated areas of the ahupua'a.

**Mo'o-'aina**: arable lands within the 'Ili.

**Pauku**: sections of arable lands smaller than the mo'o-'aina.

**Kihapai, ko'ele, hakuone**: small food patches, descriptively named.

The term *kuleana* for a land unit came into use after 1850, when fee simple title to lands was given to those whose "right" (*kuleana*) to them had been established by use.¹

**SOCIAL ORGANIZATION**

**Status System**: All classes of society functioned on the principle of genealogical seniority. Every member of society was born to a fixed position, with sharply defined obligations and privileges according to his status in the immediate family and in the whole family.

In Hawaii, the immediate family was the descent group from a common ancestor within three to five generations back, both on the male and female lines. The whole family included all descent groups from any common ancestor whose descent lineages could be traced. Since multiple

¹Reference: Chinen, 1958; Malo, 1951, Chapter 7, p. 16.
matings were common in Hawaii, immediate and whole families were very large. Relationship was also recognized between members of the extended family, i.e., the descent groups known to have been connected by blood in some remote generation.

Because status governed the role of an individual in all social and economic functions, determined his eligibility to hold lands, and to serve and to receive support from senior relatives, genealogical records were of utmost importance. Every branch of a family kept its own genealogy in full, and knew the connections to collateral branches, a facet of the ancient culture that exists in modern times. The higher the status of an immediate family within the whole family, the more lines of pedigree were kept.

Hawaiian kinship terminology reflects the recognition of blood kinship within the whole family as being equal to that within the immediate family. It was based upon generation, genealogical seniority, and sex. Briefly, ego's direct and collateral ancestral relatives were all kupuna (ancestors); his parents and their lateral relatives were all makua (parents). If a male, ego's sisters through either parent, and his lateral female relatives through the common ancestor, were all kaikuahine (sisters); if a female, all brothers and lateral male relatives through were the common ancestor/kaikunane (brothers). Ego's own children and those of his lateral relatives were his keiki (children), and his grandchildren and those of his lateral relatives were his mo'opuna (grandchildren). On the lateral stratum, ego's relatives of the same sex were always recognized, and addressed, as kaikua'ana (senior) or kaikaina (junior). Amongst siblings, seniority of birth was the criterion; in the immediate and whole family, seniority of birth of the founder of the branch family from the common ancestor was the criterion.
Classes of Society:

Ali'i, or chiefs, of various ranks; the superior ranks were called ni'aupi'o chiefs, offspring of chiefs who themselves had one or both parents or grandparents in common; the ruling class. In the literature, when "the chiefs" are mentioned, it is this class that is being referred to.

The chiefs of purest blood rank and indisputable family seniority, as evidenced by their genealogies, were considered closest in descent from the creator gods. As such, these chiefs inherited the mana of the gods themselves, and their power and prestige stemmed from this descent.

Papa ali'i; kaukauali'i; kulu: descriptive terms for lesser chiefs; offspring of (male or female) chief and mate of lesser, little, or no rank. Status of a lesser chief depended upon his acceptance or rejection by the parent of the higher rank.

Kanaka: (This classification is based on a corrected translation of Malo, pp. 191-192, Sections 34-44, and clarifies the status of the kanaka as a class). The "men," i.e., distant relatives, of the chiefs; the middle class. The relationship of the kanaka to his immediate chiefly relative was known to both; his relationship to the ruling chief was determined by a recitation of genealogies in the Hale I'au-a. This recitation listed ten generations, on both the paternal and maternal lines.

Maka'ainana: the mass of commoners (sometimes called hu), without claim to relationship to the chiefs; the laboring class.

Kauwa: a small class of untouchables. They were not slaves, to be bartered or given away, but were permanently attached to, and served,
only the chief whose land they lived on.¹

Units of Society:

Households: A nuclear family of parents and children, augmented by husbands and children of married daughters, occupied a household of one to several buildings. These were situated on plots of land (kihapai, etc.) on the family's land holdings, and were self-supporting insofar as the environment allowed, some being in cultivable areas, and some at the seashore.

Dispersed communities: Small clusters of households of related family groups formed what Handy terms dispersed communities within the boundaries of the larger units of the family's lands (pauku, mo'o-'aina, 'ili). These family groups shared and exchanged food, goods, and services through voluntary, though obligatory, giving. The elder male of the senior branch of the family theoretically directed all activities which concerned the family as a whole, and was answerable to the konohiki (land manager) of the chief of the ahupua'a for the family's share of taxes and services.

Court: The ruling chief and his personal kindred formed the court. The closest approach to a village occurred in the vicinity of the households of the members of the court. Lesser chiefs, warriors, priests, fishermen, etc., all attendant upon the ruler, lived in proximity in more or less unrelated family groups. There

¹References: Handy and Fukui, 1958, Chap. 4; Malo, 1951: Chapters 18, 20, 38.
was no barter or trade in this "village." The chiefs comprising the court received food and goods from the tenants of their ahupua'a, and supplied all the necessities of their own households and attendants.¹

POLITICAL ORGANIZATION

Kingdom

There was only one real political unit, the kingdom. The Hawaiian term is aupuni, meaning both "kingdom" and "government." At various times in Hawaiian history, kingdoms comprised island districts, groups of districts, whole islands, and combinations of islands. At the time of discovery by Captain Cook in 1778, there were four Hawaiian kingdoms: Kauai, with Niihau; Oahu, with Molokai; Maui, with Lanai and Kahoolawe; and Hawaii.

Ruler: Each kingdom was headed by a ruling chief, the e-li'i nui. Theoretically, the ruling chief was the supreme chief, that is, was the senior member branch of the hereditary ruling family. In practice, the ruling chief was often, genealogically speaking, a younger member of the family.

The ruling chief had absolute control of the life, lands, and property of all his subjects. He maintained the soldiery, imposed taxes, and presided over religious rites affecting the kingdom. There were no laws of justice, no redress for wrongs other than at the pleasure of the chief. The only escape from death at the hands of the chief's agents or from private vengeance lay in flight to places of asylum, called pu'uhonua.

¹References: Handy and Pukui, 1958; Chapter 1; Ii, 1959, pp.55-69; 89-95; Malo, Chapter 19, Sec. 11-17;32.
Councilors: The ali'i nui was advised and guided by two councilors, a high priest, kahuna nui, and a chief administrator, kalaimoku.

The kahuna nui guided the chief in all religious rituals and observances necessary to maintain the favor of the gods. Through the hierarchy of ritual priests, of which he was the head, infractions of religious taboos were brought to his attention, and he in turn counseled the chief as to punishment or atonement.

The kalaimoku advised the ruler on secular affairs, and the distribution of lands and positions. He guided the conduct of the ruler to maintain popular relationship with the people, and, as chief strategist, directed the ruler's battles.

Council of the Chiefs: Its only function was to discuss and advise on the affairs of government. It had no governing powers, and its advice was ignored should it be contrary to that of the kalaimoku.

Executors: All executors were in some degree related to the ruling chief. His closest relatives were delegated positions of greatest authority, such as the kuhina nui (an innovation of Kamehameha I), very nearly a co-ruler; generals and captains of the chief's army; and the ilamuku nui, the chief executive officer, responsible for the carrying out of the chief's decrees. The ruler directly appointed, from among eligible relatives, not only his personal attendants, but managers of his "treasury," his fishing fleets, private lands, etc. Relatives of lesser chiefly rank, and kanaka, were placed in positions of diminishing authority as agents of those in higher authority.
Priests' Houses in Napoopoo, South Kona, Island of Hawaii.

By Surgeon Wm. Ellis, 1779, Courtesy Bishop Museum.
District chiefs were given whole districts, or large tracts of land (moku, 'okana), over which they had nearly autonomous control, being answerable only to the ruling chief of the kingdom. The district chiefs were always from collateral branches of the ruling chief's family, and the ruler had to depend upon their allegiance to maintain his kingdom.

In the early years of Kamāhameha's reign as supreme ruler of the united kingdom of Hawaii, Maui, and Oahu, he modified the position of the district chiefs by placing over each island a governor answerable directly to himself. The chiefs to whom he had given lands on these islands received produce from them, but did not have the authority of district chiefs to govern them.

The konohiki, who were kanaka relatives of the landed chiefs, imposed and collected the chiefs' taxes from his ahupua'a land sections. They were the agents of authority in charge of all land and sea usage, and were also responsible for the recruitment of soldiers and labor parties.¹

RELIGION AND RELIGIOUS ORGANIZATION

The Hawaiians were an extremely religious people. Their religion was based upon a belief in an inherent mana in persons or objects and in a belief in spirits. It expressed itself in ceremonial prayers and rites designed to maintain, and sometimes to increase, the mana of their inherited or created spirit gods. All phases of human activity were carried out under ritual of some sort, directed to any one or several of the innumerable gods upon whose favor depended the lives and fortunes of humans.

¹Reference: Malo, 1951, Chapters 18 and 38.
Gods and Spirits

**Major Gods:** For the males, Kane, Ku, Lono, and Kanaloa, the major gods of East Polynesia, were the all-powerful gods in the Hawaiian pantheon. All other gods were limited in their powers to specific areas or functions. Singly and collectively, the four possessed the ultimate in mana, and were appealed to for "long life, blessings, and prosperity." The ruling chiefs especially worshiped these gods, to protect the kingdom and the land against famine, pestilence, war, or rebellion. The corresponding major gods of the women were the mo'o, or lizard, goddesses, such as Kalamainu'u (Kihawahine) and Walinu'u.

**Functional gods:** Various attributes of the major gods came to be worshiped under god names specifying their specific functions, usually with the god-name prefixed. As examples, Ku-ka'ili-moku, the war god of the ruling chiefs of Hawaii island, was the attribute of Ku which brought prosperity to the kingdom by "snatching" (ka'ili) land; Kane-wai-ola was the attribute of Kane which blessed the land with fresh water (wai ola). Many manifestations of nature were personified, and bore such prefixed god-names, while others, notably volcanic phenomena, bore single names. These functional gods were worshiped in their own right as gods, and not as intermediaries to the major gods.

**Craft Gods:** Certain spirits and deities had jurisdiction over the materials used, and others over the skills needed, in each craft or profession. Some were ancestral gods in that they were once humans who had been deified because of exhibiting extreme mana in performance of a particular craft; others were certain attributes of other gods.
Family gods ('aumakua): Family gods were ancestors, by one definition or another. Some were the gods, or at least the supernatural beings, whose matings with humans had produced offspring from whom had descended the family; some were deified ancestors of the remote or recent past. To some families, especially on Hawaii island, personifications of volcanic forces and associated natural phenomena, e.g. the Pele family of gods, were 'aumakua.

'Aumakua were in a real sense guardians of the family. They were constantly consulted for protection and guidance, and then responded by visitations or omens. They also punished those of their living family who transgressed their laws, or kapus. The 'aumakua continued to be venerated long after the disintegration of the ancient culture. The edicts and restrictions imposed by these gods on their ancestors are still observed by some Hawaiians today.

'Unihipili: These were familiar spirits, created by a process of deification to be a means of communication with the spirit world. In simplest form, a relic of a deceased relative, such as bones or hair, was cherished, and its associated spirit remained close to its keeper. Sometimes the bodies of the family's deceased were offered to certain family gods to become additional guardians of the family. The localized guardian shark gods were such 'unihipili. Other 'unihipili were created by sorcerers as a means of manipulating spirit forces.1

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1References: Handy and Puki, 1958, ch. 3,6; Malo, 1951, Ch. 23.
Times of Worship

Daily individual and family homage was paid to the 'aumakua. In petition or supplication, the appropriate gods were approached only when the occasion warranted. Milestones in the life cycle called for special rites directed to the 'aumakua, and projects of fishing, cultivating, manufacturing, healing, and the like, called for rites to the craft gods.

The ruling chief had the obligation to maintain the favor of the major gods towards his kingdom. To this end, four worship periods a month were observed in the chief's "state" heiau, a luakini. Three of these worship periods (Hua, Kaloa, Kane) comprised two nights and a day, and the fourth (Ku), three nights and two days. These periods were separated by seven to nine days, and severe restrictions were imposed on activity in the area of the heiau during the ritual periods. These worship periods were appropriate times for all to bring their special petitions before the great gods.

Places of Worship

Family worship was conducted in the men's eating house (mua), or in a family heiau, a house specially dedicated to the gods. Worship consisted of prayers and offerings, and was restricted to the men. Rituals marking life cycle events and special family projects were performed at improvised altars, under the direction of a family kahuna, or priest. Dependent upon the specific ceremony, men or women, or both, participated.

Formal services of chiefs, and of organized occupation groups such as fishermen or doctors, were held in heiaus. Some heiaus were single houses surrounded by fences; others were stonewall enclosures with one or more heiau houses within, the most elaborate having terraced pavements.
Hale O Lono (or Hikiau) Heiau at Napoopoo, South Kona, Island of Hawaii.

By Surgeon Wm. Ellis, 1779, Courtesy Bishop Museum.
Heiaus were built for specific purposes, the most numerous being for success in agriculture (heiau ho'ouluulu 'ai), and in fishing (heiau ho'ouluulu i'a). Chiefs of all ranks, and kanaka, could build such heiaus, but only the ruling chief of a kingdom could build and use the "state" heiau called luakini, wherein were conducted rituals pertaining to the welfare of the entire kingdom.

**Heiau Ceremonies**

Rituals were presided over by one or more kahunas before images, and comprised prayers and offerings appropriate to the particular gods being petitioned, and appropriate for the particular petition being presented. Appropriate offerings were the kinoleu, animal or plant "bodies" of the gods being petitioned, and those whose names, because of their associated meanings, showed the purpose of the petition.

Elaborate ceremonies, taking ten days, were conducted for the building and consecration of the luakini heiau. Opening ceremonies featured the construction of walled enclosures and pavements, putting up of heiau houses, and preparing images. The main ceremony of consecration featured offerings of hogs, coconuts, bananas, and human sacrifices to the major gods. The final ceremony was held in the women's heiau, Hale o Papa, adjacent to the luakini proper, and featured rites performed by the women of the ruler's family.

The entire proceedings themselves constituted the worship ritual of the ruling chief for success in war, or for alleviation of a
pestilence, or of a famine, upon his lands. Having served such a specific purpose, a luakini was often abandoned, although its site would be used again and again for generations. However, the ruler maintained at least one luakini in functioning order near his place of residence for the continuing welfare of this kingdom. During Kamehameha's last years on Hawaii island (1812-1819), six luakini, one in each district, are noted as having been ceremoniously visited each year. These were: Hikiau in Kona, Punaluu in Kau, Wahaula in Puna, Kanoa in Hilo, Honuaula of Waipio in Hamakua, and Mookini in Kohala. These ritual visits were for the express purpose of maintaining the mana of the major gods, to whom the heiaus were thus reconsecrated annually. The monthly worship periods observed by the ruler were held in such luakini.

Little is known of the rites conducted in heiaus, other than those for the building and consecration of the luakini. That heiaus were very numerous, however, is evidenced by the many ruins of stone enclosures known to be sites of ancient heiaus, and these ruins stand as memorials to the all-pervading spiritual environment in which the Hawaiians lived.¹

**SOCIO-RELIGIOUS FEATURES**

To the early Hawaiians there was no separation between religious and secular affairs. All human activities were regulated by the need to establish and maintain proper relations with the innumerable spirits who

¹References: Fornander, 1919, Vol. 6, Pt. 1; Handy and Pukui, 1958, Ch. 5; Ii, 1959, Ch. 3; Malo, 1951, Ch. 37; 40 (Sec. 1-15).
Ruins of Puukohola heiau, South Kohala, Island of Hawaii.

Taken about 1890, Courtesy Bishop Museum.
surrounded them. The 'aumakua, whose presence was constantly felt, the craft gods, who assured or denied success, the nature gods, upon whom physical safety depended, and the great gods, whose displeasure would devastate the land, were ever-present powers with whom rapport had to continually be maintained. To ensure the cooperation of these spirit forces, and to escape destruction by them, guideposts of behavior and ritual were evolved over the years, culminating in an elaborate set of regulations called kapus. The observance of these kapus was the way of life for all.

The Kapu System

The kapu system is the term used for the entire set of regulations and prohibitions governing human behavior in relation to the gods and to the god-like chiefs of great rank. Kapus accumulated over the course of the years as kahunas interpreted each revealed "will of the gods," and as the enhanced mana of the chiefs required more and more protection from contamination. Infractions of the kapus, even unwitting ones, would bring dire calamity to the individual and to the land if not atoned for, therefore swift and sure punishment was meted out to infractors by priests and chiefs, in the name of the gods.

The most ancient, and fundamental, kapu was the required separation of sexes for eating. All rites of worship, including daily family worship, included an offering or partaking of foods dedicated to the gods under petition, and women, being periodically "unclean", were not permitted to participate. As a corollary, certain foods were denied to women. Thus pork, the favorite food of the major gods, could never be eaten by women, although the men could eat dog, the favorite of the women's mo'o goddess.
Eventually, by the "will of the gods," as expounded by one kahuna or another, the list of foods denied to women grew.

Each god imposed his own kapus on his worshipers, as revealed through kahunas. These included prescribed offerings of certain varieties of pig or dog, chicken, fish, and vegetable food. Many of these were "forms" of the god himself, and therefore most suitable offerings. If the article of food was a form of an 'aumakua god, that article was strictly forbidden to the family as a food item. In some instances, the prohibition of the god extended even to the color of apparel.

The kapus of prerogative associated with the high chiefs were in effect safeguards to their mana. They took several forms, but all were designed to prevent loss of a chief's mana through contact with "common" things, on the one hand, and to protect ordinary mortals from the dire consequences of exposure to his god-like radiations of mana, on the other. The kapus of prerogative were inherited, and were observed in recognition of the degree of mana inherent in the chiefs who held them. The kapu moe, the kapu wahi, and the kapu noho were the three highest "royal" kapus. The kapu moe required the prostration of all persons upon the announcement of the approach of a chief holding this kapu, himself the eldest-born of a kapu moe chief. Several chiefs, younger siblings of the kapu moe chief, might hold the kapu wahi, exempting them from the prostration requirement. The kapu noho required persons to squat as the personal articles of the high chiefs were carried by, and was a secondary kapu of those holding either the kapu moe or kapu wahi.

There were certain kapus imposed by the chiefs which had the same force as those imposed by the gods, and were invoked in their names. These
were designed to protect the land and conserve its resources. Regulations pertaining to farming and fishing, water usage, and disposal of wastes, came into this category.  

The Kahunas

Every project and every activity affecting a segment of society was presided over by a kahuna, or priest. He interpreted the will of the god concerned, imposed his kapu, and performed his prescribed rites. Only by proper offering and ritual could any work succeed, and success depended upon the rapport between the kahuna and the god.

Kahunas were not a class of society. Every family had at least one member trained to handle the family's spiritual affairs, and their specialist kahunas directed the activities connected with the family's various occupations. Outstanding proficiency was rewarded by appointment to serve a higher ranking chief in the family. Thus all classes of society had kahunas drawn from family ranks.

Kahuna pule were officiating priests of prescribed rituals. Their functions were to maintain continual rapport with the gods, and to intercede with them for a particular purpose. The kahuna pule attached to the service of the ruling chief constituted a hierarchy of priests, headed by the kahuna nui, a chief councilor to the ruler.

Some kahunas were specialists, or experts, in professional fields. Their proficiency was not only of temporal knowledge but equally of divine inspiration and correct ritual. Such were the kahuna kalai wa'a, canoe-making experts, and the kahuna lapa'au, the doctors. The kahuna kalai wa'a presided over the making of a canoe, directing the entire operation from the

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References: Handy and Pukui, 1958, pp. 122-126; Ii, 1959, pp. 51-52; 58-59; Malo, 1951, Ch. 11; Ch. 18, Sec. 27-35.
felling of the tree to the launching of the canoe, with every operation under ritual. The kahuna lapa'au, the doctor, depended not only on his pharmacopeia, but upon the divinations and instructions of his god or gods of medicine as to ritual treatment.

Besides the kahunas who were effective because of their spiritual rapport with the gods, there were many whose effectiveness stemmed from their ability to manipulate spiritual forces, in other words, to practice magic. Kahunas who practiced magic of various sorts were called after the name of their particular art. For instance, the kahuna hana'loha could control love; the kahuna ho'opi'opi'o could send his familiar spirits (unihipili) on errands, usually of evil; the kahuna 'ana'ana could cause death, while the kahuna kuni (a branch of 'ana'ana magic) could cause the death of the kahuna 'ana'ana himself. The kahuna nui of the ruling chief had to be well versed in all branches of the art of magic to counteract evil forces directed against his chief.¹

The Makahiki

The Makahiki season was a four-month period of the year when the usual worship periods were suspended, taxes were gathered, and the people were freed from their labors to enjoy themselves in a festival of games and sports. War was forbidden during these months. The Makahiki was a form of the "first fruits" festival common to many cultures. Something similar was observed throughout Polynesia, and in Hawaii the festival reached its greatest elaboration.

The season opened at the beginning of October with the announcement of the coming of the Makahiki season. In November, taxes in the form

¹Reference: Malo, 1951, Ch. 28, 30, 34.
of goods and produce were gathered for the ruler, who distributed them amongst his retinue. Then three Makahiki images were made, and rites performed for the main Makahiki god, Lonomakua. His image, called the akua loa, was a 16-foot pole with a carved human head at the top, and cross piece hung with sheets of tapa and feather streamers. It was borne around the island, stopping at each land section, ahupua'a, to receive the people's tributes. If the tributes were deemed sufficient by the officiating kahunas, the akua loa moved on, and his place was taken by the god of play. This image, similar to the akua loa and called the akua pa'ani, was set up to preside over the sports and games participated in by the people of the land and by those who followed the procession of the god. The third god, the akua poko, collected taxes from the lands set aside by the ruler for his direct support.

The circuit of the island of Hawaii took over twenty days, extending into December. Upon the return of the Makahiki gods to the ruler's heiau, the ku'akini, rites were again performed for the main Makahiki god, and then the images were dismantled.

Various rites of ceremony and purification in December and January closed the observance of the Makahiki season. One ceremony was for the lifting of the kapu on the catching of the aku fish, and imposing it on the 'opelu fish. These fishes were under prohibition alternately for six months of the year. In the first worship period of February, the chiefs and people resumed their religious observances during the prescribed worship periods.¹

References: Ii, 1959, pp. 70-76; Malo, 1951, Ch. 36; 40; Sec. 7-15.
MILITARY ORGANIZATION

In the Hawaiian society, where the power of the ruling chief was so absolute, struggles for this power were inevitable. Once established, a ruling chief often attempted wars of conquest on other kingdoms, and had to be on guard against invaders and against ambitious relatives in his own kingdom. However, because of the primary tenet of the superiority of seniority, a relative's attempts to wrest his power had to be justified on this basis, else there would be no support from the chiefs who provided the manpower needed for warring. In the ancient island kingdoms of Maui, Oahu, and Kauai, where the successive ruling chiefs were unmistakably seniors of a pure hereditary line, there was seldom dispute upon the accession of heirs to the ruling power. On the island of Hawaii, with six large districts controlled by descendants of its first supreme ruler, many inter-family matings obscured the purity of the senior line. Thus it happened again and again in the course of its history that Hawaii island chiefs, each claiming justification by heritage, warred upon their "brothers" to wrest the supreme power. Kamehameha I, acting upon such justification, finally became the undisputed ruler of the island, and then carried on wars of aggrandizement with the other island kingdoms until all were under control.

Training and Recruitment

At the court of a ruler, trained groups of men were kept in readiness for battle. Sham battles were staged often, and constant training was provided in the use of weapons, especially in the throwing and dodging of spears, and in hand-to-hand fighting (lua). District chiefs held frequent athletic games, both with a view to keeping their men fit,
and to pick out for warrior training those who showed special prowess. In the event of war, all landed chiefs were called upon to provide men for the ruler's army. These common soldiers were drawn from all occupations, and were self-trained and self-equipped. They carried their own food and weapons into battle, and were frequently accompanied by their womenfolk, who prepared the food, and acted as nurses.

**Weapons and Combat**

Weapons made of wood consisted of long and short one-piece spears, daggers, and clubs. Stones lashed to wooden handles were also used as clubs, and shark teeth mounted on wood handles became daggers. Tripping weapons consisting of wooden or stone weights attached to long cords were used to bring an opponent down, as did sling-stones. In hand to hand fighting between champions or trained warriors, *lua* fighting was the usual method of combat. This was a particularly murderous way of fighting that included bone-breaking, eye gouging, noosing, spearing and clubbing, and was practiced only by those skilled in the art.

**Conduct of War**

A chief who contemplated war had first to find out, through his kahunas, if the gods would favor his action. If the auguries were auspicious, active preparations began. Fighting men and their leaders assembled, councils were held, and the time and place of commencement were settled. Under the direction of the *kalaimoku*, the fighting units were assigned their roles in accordance with his planned strategy. Few naval battles are recorded in Hawaiian warfare, the preferred fields of battle being on open ground. Another consultation of the gods preceded actual hostilities, with both sides beseeching their own gods for success.
The men then advanced and battle was joined, first with the hurling of the long pike spears and sling-stones, then closing in with the shorter javelin spears, daggers and clubs, and finally, in hand to hand combat. Occasionally truce was declared without either side having won a decisive victory, but usually battle was to the finish, and the fleeing vanquished pursued and slain.

Before battle, old men and women and children in the area were sent to places of safety in the mountains, or to caves, or to pū'uhonua. The surest place of safety was in a pū'uhonua, for it was an asylum under the protection of guardian deities, and under their taboo, which decreed that no blood could be shed within its limits.

The record of the many pū'uhonua in Hawaii indicates that there was one functioning in each district at all times. To flee to a pū'uhonua was the only escape from death for guilty or innocent violators of taboos, and in war provided an inviolable sanctuary not only for the people of the area, but for the warriors of either side who were being bested in combat.

The largest walled pū'uhonua in Hawaii, and perhaps the most continuously used, was at Hōnaunau, Kona, Hawaii. This pū'uhonua, later named the City of Refuge, was established in ancient times by the Kona ruling chiefs, and functioned as a place of refuge into historic times. It is now a National Historical Park, and is the subject of a detailed study and report made by the Bishop Museum in 1957 for the National Park Service.¹

¹References: Buck, 1957, pp. 417-464; Emory, Bryan, and others, 1957, vol. 2; Ellis, 1917, pp. 93-94; 109-121; 126-129; Maio, 1951, Ch. 38, Sec. 79-9;
TECHNOLOGY

Stone, bone, wood, and other plant materials were the main raw materials from which the Hawaiians fashioned their tools and equipment. Shells and corals were also used, but to a lesser degree. No metal work or pottery was known; indeed, the basic materials for their manufacture were generally lacking in the islands. The wheel was unknown.

The adze was the principal stone tool. Adzes were made of fine-grained dike basalt, and ranged in size from large tree-felling adzes over a foot long and 12 to 14 pounds in weight, to inch-long ones used for delicate carving. The principal use for bone was in the manufacture of fishhooks, awls, and food picks; for shells, as scrapers. Various woods were used for canoe hulls and parts, houses, weapons, and household utensils. Fibrous plant materials were used to manufacture barkcloth and cordage, and gourds were extensively used for all kinds of containers. Complete descriptions of tools and equipment, and details of their manufacture, are given in Buck's Arts and Crafts of Hawaii.

Agriculture

Extensive agriculture was carried on in the old culture. Besides food crops, plants yielding materials for housing, clothing, utensils, and medicines were cultivated, or tended and conserved in their wild growth. The main implement, and almost the only one, used in cultivation was the diggin stick ('o'o), a piece of hard wood of variable length, with either a flat point or a flat blade.

Principal Food Crops

Taro (Kalo): The most widely cultivated food plant was the taro. A staple food, poi, was made from the baked tubers of taro, pounded and
mixed with water. Over a hundred varieties of taro were recognized, according to characteristics of size, color, or quality, but all varieties were divided into two broad classifications, "wet" and "dry" taro. Wet taro, requiring abundant fresh water, was planted along streams, springs, fresh water marshes, and in well-irrigated terraced or level patches. Dry taro, requiring slightly less water, was cultivated in rain-soaked forest, and under mulch.

Sweet potato ('uala): On dry lands where water was insufficient for taro growing, sweet potato was the main crop. The tubers were baked, like the taro, in underground ovens, and the tender tips of the vines were used for greens. A hard poi was sometimes made from the tubers.

Breadfruit ('ulu): Breadfruit trees were planted in groves in sheltered areas where there was fertile soil and little wind. The fruit, which matured from May to September, was broiled or baked or made into poi.

Banana (Mai'a): Fifty or so varieties of bananas were raised in clumps around taro patches and in gulches. Some varieties were eaten raw when ripe, but the preference was for cooking varieties.

Yam (Uhi): The forest-grown yam was not as extensively cultivated as the taro or the sweet potato in ancient times, probably because it was too mealy to mash into poi. Of better keeping quality than taro or sweet potato, yam was a preferred item to sea captains during the early trading days, and its cultivation then increased to supply their demand. One or more of the above crops provided the staple food in every household. The vegetable diet also included coconuts, sugar cane, arrowroot, and seaweeds. In times of famine, ti, turmeric, and wild yams were utilized as food

References: Buck, 1957, pp. 1-73; Handy, 1940; Malo, 1951, Ch. 14.
Animal Husbandry

Pigs, dogs, and fowls were raised by country dwellers, mainly to supply the chiefs. Pig was a necessary offering for the chiefs' frequent ceremonial feasts, and dog appears to have been their favorite meat dish. Certain of the chiefs' tenants were appointed to supply these items, and the suppliers rarely had enough of a surplus to keep for their own use. The animals were fed on vegetable foods, mainly scrapings of taro, and were usually kept penned for fattening.¹

Hunting

Birds were the only animals hunted. Two of them, the 'o'o and the mamo, were caught by professional bird catchers using bird lime, and were liberated after plucking their prized yellow feathers. Some 32 birds are mentioned by Malo as being hunted for food, and the feathers of some of them were also used for ornamentation. Many were killed by pelting with stones, and others by means of snares and nets.²

Fishing

Fish, as a food classification, included all aquatic plants and animals. Sea urchins, certain shellfish, crabs, and seaweeds formed a good part of the fish diet, and these items were gathered by hand along rocky coasts and on reefs. They were usually eaten raw.

Both fresh and saltwater fishponds were constructed for the raising and storing of fishes, principally the mullet and the milkfish, awa. A few of these once numerous ponds remain, and some are in use commercially.

The habits and localities of true fishes were well studied by the ancient Hawaiians, and fishing techniques were adapted to suit their

¹References: Buck, 1957, pp. 2-3.
²References: Buck, 1957, pp. 3-4; Malo, 1951, Ch. 13.
characteristics. Netting, trapping, and hook and line fishing were the principal methods used. Much fishing was done by professionals, using canoes to reach the deep sea fishing grounds. Most of the fishes caught by these methods were eaten cooked, and together with the "fish" mentioned above, formed the main protein-giving elements of the average Hawaiian diet.¹

### Food Preparation

The "fish" of the reef and shore, sugar cane, and some varieties of banana were about the only foods generally eaten raw. Most fishes, plant foods, and all flesh foods, were cooked, either by broiling, boiling, or a combination of steaming and roasting in a ground oven (kalua). All foods were eaten cold, with salt, a kukui nut relish, or seaweed as condiments. Fires were started with two fire sticks, the upper one being a pointed piece of wood, and the lower, a soft dry wood, such as hau.

Large quantities of food were cooked in a ground oven called an imu. This was a shallow hole in which food placed on heated stones was first covered with leaves, then with old mats or tapa, and left to steam-roast. A combination of foods could be cooked in an imu by placing the longer cooking items, such as taro, directly on the hot stones, and placing other foods, some of them wrapped in ti leaves, on top. Imu cooking is still widely used today, especially in the preparation of whole hogs for commercial "native" feasts.

For small quantities of food, the usual methods of cooking were broiling or boiling. Some foods, such as fish, or whole breadfruit and

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¹References: Buck, 1957, pp. 285-363; Cobb, 1906; Malo, 1951, Ch.15
bananas, were broiled unwrapped; other foods were wrapped in ti leaf packages and laid on hot coals or ashes. For lack of fireproof utensils, boiling was done by adding heated stones to a container of food and water, rather than by placing a container over heat. Greens, fish, and small fowls were cooked in this manner.

Some form of poi was an essential part of the Hawaiian diet. Cooked breadfruit, sweet potatoes, or bananas, were easily mashed with the fingers and mixed with water to make poi, but taro poi required considerably more labor, and was done by men. After cooking in the imu, the taro was peeled or scraped and pounded on a board with a stone pounder while water was gradually added until the mass was of doughlike consistency. For eating, a portion of this mashed taro was kneaded with the hands and mixed with more water into a smooth paste, and was served in bowls of wood or gourd.

The main beverage of the Hawaiians was water, drawn and stored in many varieties of gourds. In addition, 'awa, a refreshing drink made from the roots of the Piper methysticum, was greatly enjoyed. The dried roots were chewed, mixed with water in a wood or gourd vessel, and strained with plant fibers. For serving, highly polished coconut shells cut lengthwise were used as drinking cups.¹

Clothing

The common garments of the Hawaiians were a loincloth (malo) for men, a skirt (pa-'u) for women, and a rectangular piece of cloth (kihei) worn over the shoulders by both sexes as additional covering. All this clothing was made of bark cloth, or tapa, called kapa in Hawaiian. Bark

¹References: Buck, 1957, pp. 17-43; 55-73; Titcomb, 1948.
cloth was made principally from the cultivated wauke, or paper mulberry, and from the wild, indigenous mamaki. The inner bark was stripped for bast, which was soaked, and then beaten into strips. After another soaking, strips were again beaten and felted together to make a piece of cloth of desired size. During the final process, various beaters, stamps, dyes, and frequently, perfumes, were used. Women did all the work of tapa making, from the humblest commoner who clothed her family, to the chieftesses, who thus displayed their artistic and creative accomplishments in craftsmanship and design.

People went barefoot, generally, but in rough lava country, sandals were quickly fashioned of whatever tough fiber was at hand. An occasional garment was the ti-leaf cape for protection from cold and rain.

Garments made of bark cloth were common to all Hawaiians, and differed only in richness of texture or quality of craftsmanship and design. Feather garments, however, were restricted to the male chiefs, and the feathers needed for their making were a large item in the annual gift-tax of the akupua'a.

Feather cloaks and capes were made by men only. Small bunches of feathers were attached by a separate binding of thread to a netting of desired shape and length. The full length cloaks of red and yellow feathers only were restricted to the highest chiefs, while capes made of various feathers were a necessary garment of distinction of other chiefs. All were regalia, rather than wearing apparel, and were worn only on high "state" occasions, and into battle. Complementing the feather cloaks and capes were crested helmets made of woven fibers of the 'ie'ie, usually covered with feathers. Some of the crests were solid, others were supported on
Village at Waimea, Island of Kauai.

By Webber, 1779, Courtesy Bishop Museum.
projections, and others consisted simply of a row of projections resembling toadstools. The red and yellow feather helmets completed the regalia of the highest chiefs, while the others were the headdresses of lesser chiefs.¹

**Housing**

Hawaiian houses were one-room structures, consisting of a wooden framework covered with thatch. They varied in size and finish from the rudely built huts about eight feet long and six feet wide used by commoners to well-finished houses of the chiefs, ranging up to fifty feet in length and thirty feet in width. Commoners did most of their cooking, eating, and even sleeping out-of-doors, and used the house mainly for storage and for shelter in bad weather. In the higher classes, and dependent upon the size of the family and the social status of its head, a household consisted of three or more houses, each used for a specified purpose. A basic household consisted of a men's eating house (mua), a women's eating house (hale 'aina), and a common sleeping house (hale moe). Larger households included a house for the segregation of women during their menstrual periods (hale pe'a), a general workhouse for the women (hale kua), a special workhouse for making tapa (hale kuku), a separate house for worship (heiau), a shed for storing canoes and fishing gear (halau), and perhaps one or more storehouses (hale papa'a).

Construction methods of notching posts, fitting, and lashing the framework were the same for all houses. The most used thatch was pili grass, tied by bunches onto the horizontal rods of the walls and roof. Other grasses and sedges were applied in the same manner, but different techniques were used for thatching with the leaves of pandanus, ti, sugar-

¹References: Buck, 1957, pp. 165-186; 213-252.
cane, or with banana trunk fiber. Usually the only opening was a low doorway, with a detachable or sliding door.

The earth floors of the poorer houses were strewn with dry grass, upon which coarse mats plaited of sedges or of pandanus leaves were spread. The better houses, however, were often built upon stone platforms, and the floors were paved with smooth pebbles before mats were laid down.

Basic household furnishings were, mats and pillows, tapa bed covers, and containers for serving and storing food. Wooden platters, bowls and cups of wood or gourd, stone utensils such as lamps and poi pounders, plaited and twined baskets, carrying poles, large gourds for storing garments, and the various tools used in the family's occupations were stored against the walls or on shelves in the houses appropriate to their use. Food and water were stored in large wooden bowls and gourds, hung in nets, and suspended from rafters or poles.\footnote{References: Buck, 1957, pp. 75-106; Malo, 1951, Ch. 33.}

**Transportation and Roadways**

There were well marked foot trails on each island, the principal one at, or near, the coastline, and others transversing the interiors. Coastline trails were usually marked with coral chunks or lava rocks to contrast with the terrain, and flat water-worn rocks were laid as stepping stones across rough ground such as aa lava flows. Along all trails resting places became established by usage. On the western coast of Hawaii island such resting places are often clearly definable by the presence of large groups of petroglyphs carved into the smooth paho'ehoe beds across which the trails led. Most of the petroglyphs in Hawaii are in the nature of pictorial signatures left by travelers of their passage, and afford a
Petroglyphs at Puuloa, Puna (in Hawaii Volcanoes National Park), Island of Hawaii.
a clue to the ancient roadways of the islands.

There being no wheeled vehicles or large transport animals in Hawaii, all land transport was done by manpower, with the aid of sling nets and carrying poles. Over long distances, or for large amounts of freight, canoes were used.

Canoes: The double and single outrigger canoes made by the Hawaiians were hollowed out of solid tree trunks, with the freeboard increased by the addition of gunwale strakes. The felled tree, usually koa, was trimmed and roughly hollowed with adzes before being hauled down the mountainside to the prospective owner's canoe shed. There the hull was shaped, smoothed, and polished with stone rubbers, and painted black with vegetable dyes. Hull accessories of gunwale strakes, end pieces, thwarts and braces were made and attached, entirely by lashings. For single canoes, two outrigger booms (‘iako) made of hau wood were attached to the canoe itself, and their ends lashed to a float (ama) of wiliwili or hau wood. Double canoes had two parallel hulls of equal or unequal length attached together by several cross booms. Often a narrow platform (pola) over the booms carried passengers and freight. Canoes were outfitted with paddles, gourd bailers, and mat covers for protection of freight and passengers. Many canoes carried a mast and a sail of pandanus leaf, plaited in strips and sewed together horizontally. Some fishing canoes had notched racks attached to the fore booms upon which to rest one end of spears and poles.¹

¹References: Buck, pp. 253-282; Emory, 1956, pp. 9-11.
The featherwork of the Hawaiians was a local invention, and displayed a high degree of technical skill and artistry. The 'i'iwi bird (Vestiaria coccinea) furnished most of the red feathers used, while darker red feathers were obtained from the 'apapane (Himatione sanquinea). The most valuable, because the most rare, were the yellow feathers of the mamo (Dropanis pacifica) and of the 'o'o (Moho nobilis). Black feathers were also obtained from the 'o'o, and green feathers from 'o'u (Psittirostra psittacea) Feathers of various other birds were also used for featherwork of lesser quality or significance.

Capes and cloaks made of netting were covered with small red and yellow feathers arranged in curved motifs and geometric designs, occasionally accented with black or green feathers. A cloak in Bishop Museum which belonged to Kamohameha I is unique in that it is made entirely of mamo feathers, except for a few 'i'iwi feathers on the neck border. The feather helmets worn as complement to the capes and cloaks were made in different styles, usually with some form of crest. The base of a helmet was made of split aerial roots of the 'ie'ie, to which the feathers were attached either by means of a netting or a braid. The most beautiful of the fifty-three helmets known is that which belonged to Kaumualii, last king of Kauai. The cap and sides are of 'i'iwi feathers, with yellow 'o'o feathers on the crest and small spaced patches of black ones along the border of the cap.

A continuation of the helmet technique produced a complete human head with neck base. Such figures, covered with feathers in the
same way as the helmets, became the "feather gods" (akua hulu) of the chiefs. Nineteen of these feather images are known to exist. Kamehameha's war god Kukailimoku was represented by such an image. Its head and face are of red feathers with eyebrows and nose apertures defined with black; the upper surface of the crest and the lower neck and are of yellow feathers. Pearl shell eyes and a mouth lined with dog teeth complete the image.

Feather leis were among the prized ornaments of the chieftesses, and in early times seem to have been worn only on the head. They were rounded in shape, sometimes of a single color, often of two or more colors arranged alternately in bands or in continuous spiral. As with the featherwork of the men, mamo, 'o'o, and 'i'iwi feathers were the most esteemed.

Large feathers, such as from fowls, tropic, and frigate birds, were used in the making of kahilis, feather ornamented staffs of local development. The large kahilis displayed at historic state funerals are thought to have been a late development, but the small hand kahilis, made of finer feathers and used as fly whisks, were associated with the regalia of chiefs in the old culture.¹

Sculpture

Hawaiian sculpture was predominantly for religious purposes, and in the form of wooden images of gods. The eighty known images which survived the general destruction of religious paraphernalia reflect the individualistic gods of the ancient culture in their great variation in form and detail. Free standing naturalistic human figures, ranging from slightly under a foot and a half to three feet in height, sometimes had pegged-in hair and pearl shell eyes. These, and other images with pointed

¹References: Buck, 1957, pp. 223-231; 237-243; 503-512; 538-541; 578-580.

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props for sticking into the ground or wall thatch, are thought to be 'aumakua images. The latter range in height from about three inches to nearly three feet, above their props. Large images, many of them between six and seven feet tall without their supporting props, were temple images. Images of this type were used mainly in the luakini heiaus, some of them as decorative features rather than as gods. The rarely made stone images were generally rough representations of the human figure, and did not compare with the wooden figures as works of art.

Most of the wooden articles in the households of chiefs were beautifully shaped, but usually unornamented. Occasionally human figures were sometimes incorporated as supports on wooden bowls and platters and on hula drum stands. The figures, though grotesque, were more or less naturalistic in form. A few carrying poles exist with human heads carved at the ends to form the end knobs. 1

DECORATIVE ARTS

Personal Adornment

Decoration of the body by tattooing was practiced in Hawaii by both sexes and by all classes of people, usually as a matter of individual choice. The commonest motifs used were geometric patterns, similar to those used in decorating tapas, mats, and gourds. Tattooing was not as frequently employed or as well executed as in other Polynesian island groups, and in many cases was done for a special significance rather than for decoration.

Flowers and leaves, especially those of the sweet-scented maile, were used extensively for head and neck leis, as the Hawaiians took great

References: Buck, 1957, pp. 14-17; 40-55; 401; 467-503.

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delight in personal adornment. Lei Palaoa, necklaces of braided human hair to which were suspended whale tooth ornaments, were worn only by high chiefs of either sex. These, and the feather leis worn by the chieftesses, were the most valued personal adornments. Chieftesses also had bracelets of boar tusks, turtle shell, ivory, bone and sea shells. Necklaces and bracelets made of plaques of ivory and turtle shell, or of sea shells were worn by women. A buskin, worn only by hula dancers, consisted of rows of the canine teeth of dogs attached to a netting, each ornament requiring hundreds of teeth.

**Plaiting and Twining**

Plaited mats, pillows, baskets, and fans made of pandanus leaves, rushes and sedges, relied on fineness of weave for their decorative quality. Exceptions were the chiefs' ornamental fans decorated with hair or contrasting fibres, and certain sedge mats made on the island of Niihau. The Niihau mats made of makaloa sedge (*Cyperus laevigatus*) were often decorated with geometrical motifs formed by the introduction of stained sedges on the upper surfaces.

Twined baskets, usually made of the aerial root of the 'ie'ie, were given decorative effects by changes in twining technique, and by color decoration. By the use of black or brown dyed weft plies, distinctive patterns were worked into the baskets, which Buck pronounces to be the finest twined baskets in Polynesia.

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1References: Buck, 1957, pp. 533-563; Enory, 1946.

2References: Buck, 1957, pp. 133-135; 162.
Printing and Dyeing

Hawaiian tapas display a great variety of texture and of watermark and color design. Beaters with incised patterns were used to produce the varied watermarks, which are a distinctive feature of the local technique. Liners and carved stamps made of wood or bamboo impressed lines and designs upon the finished cloth, using the block printing technique. The chevron was the most common pattern, and was used in many variations of design. Plant dyes in a large number of colors, mixed with charcoal, or ocher, and oils produced the durable dyes used for the older methods of immersion and painting as well as for the locally developed techniques of overlaying, cord snapping, and block printing.

Gourd bowls made on the island of Niihau were often decorated with lines and simple geometric figures. Designs were traced upon the gourds, the outer skin between them scraped off, and the gourds dyed black. The areas protected by the outer skin were not affected by the dye, resulting in the motifs retaining their natural color set against a dark background.¹

PERFORMING ARTS

Music

In ancient Hawaii music and poetry were inseparable, for nearly all music was chanted poetry. The poetry had no meter or word rhyming, but was rich in imagery and in inner meaning, and was expressed either in hula or in oli chant form. The rhythmic hula chant, intended for dancing, had a range of four or five notes, and was always accompanied by some type of percussion or rhythmic instrument. The oli chant, using only two or three

¹References: Buck, 1957, pp. 36-37; 166-208.
notes, was usually an unaccompanied solo performance.

The Hawaiians had one stringed instrument, an archaic musical bow; a few wind instruments of bamboo and of gourd; and a number of percussion instruments. The stringed and wind instruments were limited in range, complementing the voice range used in chanting, and were used as solo instruments in intimate music making. The percussion instruments included wooden drums with shark-skin heads, large gourd drums, and bamboo and gourd rattles. These were thumped or shaken for precise rhythmic effects in accompaniment to the dance, either by the musicians or by the dancers themselves.

Foreign contact introduced melody and harmony to the Hawaiians, and a new type of music embodying these principles slowly evolved through imitation of foreign melodies. Like the chants, the early melodic songs placed greatest emphasis on the meaning of the poetry. The tunes reflected in their plaintiveness of tone their main inspiration in hymns and in old European folk songs.

The ancient stringed and wind instruments were almost entirely discarded, and the ukulele and the steel guitar, local adaptations of foreign instruments, took the place of percussion instruments as accompaniment to the songs. This melodic Hawaiian music reached its peak of development by 1900. Hawaiian music of today has lost much of its individuality with meaningless vapid poetry, and tunes set in too precise tonic gradations. Ancient chants and instruments have been revived for purposes of demonstration or entertainment, but melodic music is now the music of Hawaii.¹

¹References; Buck, 1957, pp. 387-416; Roberts, 1926, pp. 9-10_17-69.
Dance

The dance of Hawaii, the hula, was formally performed only by dancers who had been trained under the religious restrictions imposed by the gods of the hula. This fact later gave rise to the misconception that the hula itself was a sacred dance in ancient Hawaii. Actually, the hula was a form of entertainment subsidized by chiefs, who maintained hula troupes for their own pleasure and enhancement of prestige. Only the specific dances dedicated to certain gods, most often Pele, were sacred, and these were not a part of ritual worship, but were expressions of honoring.

Hulas were stylized visual accompaniments to chants, and the movements and gestures were suggestive of their words and meaning. Those in honor of the chief's 'aumakua gods or ancestors were formal in character, and were performed as an act of homage. Such dances usually preceded others of less prestige value which, while often extolling the chief or his activities, were offered for his and his guests' entertainment. Instruments of percussion or rhythm used were suitable to the type of dance being performed, the wooden drum, pahu, being reserved for the most formal dances in honor of gods and chiefs. The hulas described by Emerson in his account of the training of dancers are representative of the variety in types of dances and styles of performance.

Formal training of dancers and public performances of the hula were severely restricted after the Christianizing of Hawaii, resulting in an almost complete loss of the ancient dances. What few remain are less than a hundred years old, and most of them are re-created dances set to old chants.
Hula dances set to melodic songs place emphasis on gestures depicting specific words. This is understandable, due to the inability of most audiences to understand the words, but the hula now is shifting farther and farther from a dance form meant to enhance the meaning of a song to a form in which virtuosity of movement and gesture becomes the criterion of the art.¹

Oral Literature

Many of the orally transmitted myths, legends, and folk tales of old Hawaii have been preserved, the largest published collections being those of Abraham Fornander, W. D. Westervelt, and Thomas Thrum. (See Bibliography). Some of the poems and narratives are but fragments of once complete traditions, others are different versions of a common theme, a number are localized tales of gods and chiefs known elsewhere in Polynesia. In addition, there are innumerable stories belonging to particular localities, which form a great body of folklore. A few significant representatives of this oral literature are commented on here.

Genealogical Chants

Traditions of chiefly families were preserved in genealogical chants which, besides enumerating the ancestors, contained passages telling of the family's origin, and the deeds of illustrious ancestors. All of them once led back to remote cosmic origins through Wakea and Papa, the personifications of Sky and Earth, who were the immediate progenitors of mankind. A few of these genealogical chants exist today in fragmentary form, but one, the Kumulipo, is preserved in its entirety. This chant was composed about A.D. 1700 for a chief of Hawaii island, and traces his

¹References: Barrère, 1958; Emerson, 1909.
genealogy back to the creation of the world from chaos. The composers of the Kumulipo brought together the traditions of the various families who were united by the birth of this chief, and have left us what are unquestionably some of the oldest of Hawaiian traditional origins.

Myths

During the nineteenth century, when the oral literature of Hawaii was first being set down in writing, attempts to identify mythological characters with those of the Bible led to inventions that distorted many of the ancient traditions. Modern scholars are careful to separate the inventions from the authentic versions. They give no credence to any myth of creation of man except that through the union of Wakea and Papa, the starting point of all "human" genealogies of the chiefs. Versions of the creation of the islands by emergence from the sea, or being born, or being fished up from the depths, or evolving out of chaos, are all acceptable as ancient traditions, but not a version of creation by biblicized gods. The myth of Hawaii Loa and his discovery of the islands, and of the Menehune as progenitors of the Hawaiian race are also discounted as inventions of the 19th century.

Legends

Representative of the legends common to all Polynesia are the stories of Maui, the half-man, half-god, Polynesian culture hero. In Hawaii, he appears as an ancestor in the Ulu genealogy of chiefs, and his exploits are listed in the Kumulipo chant. Most of the Maui stories were recorded by W. D. Westervelt from translations of newspaper stories in Hawaiian, or gleaned from informants of his day, and are localized geographically.
The many legends and folk tales surrounding Pele, the volcano
goddess, and the members of her family are distinctly Hawaiian. Of them
all, the most significant are those connected with the travels of Pele's
youngest sister, Hiiaka, from Hawaii to Kauai to fetch her sister's lover.
This Pele and Hiiaka cycle has for hundreds of years inspired the composers,
chanters, and dancers who have depicted the story of her journey. Several
versions exist, one in published form by N. B. Emerson. In the words of
Luomala (1955, p. 35), "Hiiaka, because of what countless poets have given
to her in her name, is the greatest of all artists known in Polynesian
oral literature."

Folklore

Menehune, the "little people" of Hawaii, are a popular theme
in Hawaiian folklore. Both they and Pele are still the occasional subjects
of modern day tales given in all seriousness by those who have seen them,
or know someone who has seen them. A complete listing of the older
Menehune tales is given by Luomala (1951, pp. 6-7). In the traditional
stories, Menehune always appear as a small-sized supernatural people who
lived in the mountains, and who appeared at night to perform wondrous
feats of construction on heiaus, fishponds, and roads.

Innumerable localized folk tales were, and are, told by Hawaiians.
Usually they concern gods and supernatural beings whose exploits are
commemorated in the names of the wahi pana, "famous places," of their home
lands.¹

¹References: Barrère, 1961; Beckwith, 1951; Luomala, 1949;
1951; 1955.
SPORTS, GAMES, AND AMUSEMENTS

The ancient Hawaiians were very fond of all types of amusements, especially the water sports of surfing and diving. Hula dancing, chanting, and story telling were among the informal pastimes of all classes, as well as such games as konane, a kind of checkers, finger wrestling, dart throwing, kite flying, and the making of string figures in accompaniment to chants. European games and pastimes, especially card playing, replaced most of these amusements.

During the Makahiki season, sports and games were organized for the enjoyment of chiefs and people. Boxing and wrestling matches, exhibitions of lua fighting and spear throwing, foot racing, and bowling game, called maika, drew crowds of spectators. When conditions were favorable, impromptu canoe and board surfing contests were held. Betting was associated with all spectator sports, and was so intense that even lives were bet on the outcome of a contest. Later, under missionary influence, many sports were prohibited in order to stamp out this evil. Surfing contests came under the ban, and the sport itself declined. It was revived in the 1920s, and is again widely popular in Hawaii. From here, the sport has spread to many parts of the world, especially California, Australia, and Peru.

Special areas, called loku, were established near the chiefs' residences, where games and amusements were held at night. Here the chiefs played kilu, a game with love forfeits. Corresponding in purpose, the people gathered here for condoned pastime of love making called 'ume. Also in the loku were played games of puhene, no'a, or puhenehene, consisting of guessing the hiding place of a hidden object, with forfeits paid in chant or dance.
Papamu at Kaunolu, Island of Lanai. Hawaiian-style checkerboard for game of Konane.

Courtesy Bishop Museum.
Certain pastimes were restricted to the chiefs, the most spectacular being holua sledding. A track of rock, layered with earth and slippery with grass, was made for tobaganning on a narrow sled. This sport was extremely dangerous and only experts participated. A few holua slide foundations remain, four of them in Kona, Hawaii, in or near the Honaunau City of Refuge National Historical Park. Cock fighting and rat shooting were also confined to the chiefs, the latter sport being the only use for the Hawaiian bow and arrow.\(^1\)

**THE LIFE CYCLE**

All classes of Hawaiian society were bound together by the observance of similar practices during the span of the life cycle. There were differing degrees of elaboration in the observances of the chiefs and of the commoners, but the differences were in prestige values, not in purpose.

**Birth and Infancy:**

The arrival of the first-born child, makahiapo, or hiapo, was an eagerly anticipated event. As nearest to the gods, this child received, and would transmit, the largest portion of their mana, and would become, by right of seniority, the leader of the next generation.

To ensure that the seniority would go to the child of highest and purest blood rank, the ni'auapi'o chiefs conducted a ceremonious mating, called ho'omeau keiki, in which a pair of highborn chiefs united, in the seclusion of a tapa tent, while kahunas uttered prayers for the fruitfulness of the union. While awaiting the birth of a child so conceived, poets and

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\(^1\)References: Dickey, 1928; Ii, 1959, pp. 63-68; 131-137; Malo, 1951, 214-234.
dancers heralded the coming of the new chief with chants and dances composed especially for him.

Amongst lesser people, care was exercised so that the first-born of a son or daughter in the family would be of best possible rank. The birth of this hiapo was marked by a feast dedicating him the 'aumakua, and commending him to their care and protection.

Children were sometimes accepted by two fathers, po'olua, as the result of polyandrous mating. Amongst the chiefs, having two distinguished paternal genealogies gave a po'olua added prestige, besides enlarging the group of relatives to whom he might look for support.

Many children, especially those in the higher classes, were given away at birth, or soon after, to other members of the family. This in no way indicated a lack of love for children, as the givers usually were receivers from another relative. The practice cemented the bonds between two family branches, and enlarged the group of supporting relatives. The child raised by the sociological parents inherited from them, a matter clearly understood by the old Hawaiians, but one which later caused much contention in legal circles.

The name given a new-born infant always had some significance. Most children bore the name of some forebear, inoa kupuna, the girls from the maternal, and the boys from the paternal, line. Sometimes the name had been given by a god in a dream, and such an inoa po, name-from-the-night, bore the promise of that god's protection. Occasionally an inoa kuamua, a reviling or insulting name, was given as a reminder of some insult or slur, or as a name offensive to evil spirits, who would therefore leave the child alone.
Childhood and Youth

At the age of four or five, a boy came under the eating taboo. In a ceremony in the men's house, prayers and offerings were made to the god Lono, to signify that he would no longer be allowed to eat with women, and henceforth he joined the men for meals. Some three years later, the boy underwent the operation of subincision. No ritual marked the adolescence of either boys or girls.

Chiefly children had several attendants, kahu, to tend to their needs and wants, and to train them in the various accomplishments associated with their rank. Favorite children, punahele, of all classes were treated with special consideration. It was the practice to carry chiefly children on the shoulders, with legs draped about the neck, until adolescence. Such a carrying was to give prestige to the child, and punahele children of all classes were also carried in this manner.

Children of lesser chiefs and commoners learned by doing, and youngsters accompanied their elders on their various tasks, taking on more of the work at hand as they grew in knowledge and experience. The elder relatives, makua, all had a hand in the training of a child, admonishing and encouraging, teaching the observances of kapus, explaining family relationships, and in general molding the youth to the pattern of life applicable to his status. A child showing special aptitude, especially in any branch of the kahuna or composing arts, was given special training, and to the hiapo of any family was taught the family genealogies and lore.

No special sex training was given. Sex was a casual thing among adolescents in most strata of society, though promiscuousness was frowned upon. Among the high chiefs, however, mature sons were trained in sexual
practices by an older female relative. Many girls of the higher classes, and, of course, all first-born chieftesses, were guarded to preserve their virginity until of marriageable age.

Adulthood

Marriage: The marriage customs of the Hawaiians bore out their concern for the strengthening of blood ties, and for establishing seniority based upon blood rank. Both polygamy and polyandry were practiced in all classes. Formal marriages, called ho'ao, established the precedence of wives or husbands with respect to the genealogical status of their children. Therefore first marriages were usually planned to ensure highest possible blood rank ties.

The first marriage of a chief of highest rank was usually to his full or half sister, or to his niece, in order to perpetuate the purity of the family blood. After the hiapo was born from such a union, the chief was free to take other mates, and so could his chieftess. Subsequent marriages were usually made with the purpose of establishing blood ties to other high ranking families.

Only the higher chiefs were permitted to intermarry closely. Among the people in general, cousin marriages were approved, but not uncle-niece, or aunt-nephew marriages, and brother-sister marriages were never permitted. Parent-child matings were considered incestuous by all classes.

The relationship of the two or more mates of a man, or of a woman, to each other was termed punalua. According to the old code, jealousy between punalua mates was disgraceful. They had joint responsibility for the children resulting from their marriages to the same mate. Because this
term was also applied by courtesy to the husbands of sisters or cousins, and to the wives of brothers or cousins, an erroneous impression arose of the *punalua* system in Hawaii, as indicating group marriages. This impression Handy seeks to correct (1958, pp. 60-65).

The in-laws might, or might not, approve of a marriage, but once a child was born, the two families were joined by a blood tie which had to be recognized. If, or when, this connecting link, the *puka a maka*, died, the relationship could then be dispelled. It was the prerogative of the paternal line to name the male children, and of the maternal line to name the females. The *hiapo* of each mate was usually given to its grandparents for rearing.

**Sickness:** The Hawaiians differentiated between a "natural" sickness, and one caused by the working of spirit forces. For a "natural" sickness, one of short duration, or with clearly discernible symptoms, the *kahuna lapa'au*, the medical expert, resorted to his intensive pharmacopeia of mineral, vegetable, and animal elements. Chronic illness, or a severe sickness, indicated to him that an offended 'aumakua had sent the affliction, or that evil forces had been activated to bring disease or death. The kahuna then resorted to magical and mental therapy to effect a cure. His therapy included prayers and incantations to his gods of medicine to discover the cause, to learn from them the medicines to use, and to give ritual treatment to his patient. When the illness was caused by an 'aumakua, not only the patient, but his family, were involved in the therapy to appease its wrath.
Death

If death was thought to be the result of black magic, 'ana'ana, the kuni ceremony was performed over the corpse. This branch of 'ana'ana magic turned the same destructive forces upon the kahuna 'ana'ana who had caused the death, and who now died in retaliation.

Bodies were sometimes disposed of by burial, often in sand dunes. The corpse was drawn up in flexed position, the knees bound to the chest, and the body wrapped in tapa. More usually, bodies were allowed to decompose in a secluded hut or cave, and the bones carefully cleaned and tied in a bundle. The bundle was then taken by a kahu to either a secret hiding place, or more usually, to the family burial cave. Articles which were sometimes interred with the bones or corpse were those which had been favorite possessions of the deceased, or which had been rendered so kapu by his use that they could not be used by anyone else. This placing of articles with the dead did not signify an expected use for them in the spirit world. Food placed with a fresh corpse was meant for the spirit's refreshment, however.

Death was a defilement, and simple purification rites were performed for all who had come in contact with a corpse. Even today, such a ceremonial sprinkling with salt water, pikai, may greet one who returns home after attending a funeral.

Deification after Death

Deification took several forms, but the purpose of each was to provide additional spirit guardians for the family. One method, followed by families who felt especially close to the 'aumakua of their land, was to present, with prayers and offerings, the body of a deceased relative for
interment in the realm of the 'aumakua, that is, in the volcano, for Pele's people; into fresh water pools for mo'o (lizard) descendants; or into the sea, for those who had ocean dwelling 'aumakua.

The deification of a dead ruling chief was conducted in a heiau, under the rites of the god Lolupe. The bones of the dead ruler were encased in a woven casket shaped like a head and torso, and placed in a special heiau, called a hale poki, there to worship as an 'aumakua god. ¹

**ANCIENT HAWAIIAN HISTORY**

Fragments of ancient Hawaiian history have been preserved in the genealogies, chants, and stories that made up the oral literature of Hawaii. These fragments deal with "ancestors," who were nature personifications, demi-gods, and culture heroes, as well as mortal chiefs, and would be meaningless were it not for a common genealogical background into which the traditions could be placed in time sequence.

This background may be divided into four eras: the cosmogonic era, into which fall the myths of the creation of the islands and of mankind; the heroic era, in which appear names of some Polynesian culture heroes whose legends are localized in Hawaiian traditions; the settlement era, when the traditions began to reflect true history; and the dynastic era, when hereditary ruling lines became established, and the features that characterized Hawaiian culture evolved.

Within the framework of the chiefly genealogies, a history of ancient Hawaii may be followed. It is impossible to date, except through the dubious means of generation count, but is correct in sequence. This history has been recorded in the traditions published as the Memoirs of Abraham Fornander, in his remarkable reconstruction of ancient history.

¹References: Handy and Fukui, 1958, Ch. 4, 5, 6; Ii, 1959, Ch. 2, 3; Malo, 1951, Ch. 24, 25, 27, 29, 35.
in the second volume of his *Polynesian Race*, and in the published writings of S. M. Kamakau on the chiefs of the dynastic era. (See Bibliography.)

**TRADITIONAL HISTORY**

Hawaiian traditional history of the settlement era speaks of the chiefs who brought certain items of culture to Hawaii, or who were the founders of dynastic lines. Among them was the priest Paaeo, who came from Tahiti about A.D. 1275, according to genealogical count, and who introduced the form of temple and the ritual worship of the major gods that characterized Hawaiian ceremonial worship. He was the builder of Mookini and Wahaula heiaus on Hawaii island, both of which were re-used for generations, and whose ruins remain today. Paaeo brought Pili-kaaiea from Tahiti to rule Hawaii island and Pili's line, through inter-marriage with the older line, established that island's dynasty.

Traditions of the next five hundred years or so dwell upon the struggles for power within each island kingdom, especially on Hawaii island, and wars of conquest on neighboring kingdoms. It was during these years that the Hawaiian culture described in preceding pages took shape, and became set, in patterns of behavior, religious observances, and in technology.

The documented history of Hawaii begins with the discovery of the Hawaiian Islands by Captain James Cook of the British Royal Navy, in January of 1778.
GENEALOGICAL FRAMEWORK OF HAWAIIAN CHIEFS

Kumulipo
- Papa, o. = Wakea
  - Haloa
    - Kii
      - Ulu
        - Maui
      - Nanalulu
        - Hema
          - Kahai
          - Wahieloa
          - Lake
    - Puna
      - Newalani
        - Hanalaanui
          - Hanalaiki
            - Mawekane
              - Moikeha
              - Sethlement
                - Era
      - Ahukai
        - Hanalanui
          - Laamaikahiki
            - Ahukini
              - Lauoli
                - Liloe
                  - Pilani
                    - Umi
                      - Kihaapiilani
                      - Keawe
                        - Keaulike
                        - Kahekili
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- Oahu
- Hawaii
- Maui
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General Discussion

Viewed as a whole, the Hawaiian Islands present an encouraging picture of archeological and ethnological site preservation. For many years, under the Territorial Government, Hawaii has been aware of the values, both educational and economic, of archeological and historic sites and has endeavored to preserve and call attention to them by protective legislation, by a program of identifying and marking sites, and by actual public ownership and restoration. These measures are being continued and implemented under the State Government. Through the combined efforts of the Federal Government, the State, the counties, and private organizations and individuals, a substantial number of archeological sites in the islands are being preserved and are accessible to the public, although it must also be recognized that there have been significant losses.

As far as archeological sites legislation is concerned, Hawaii is as advanced as most other states of the Union. An "Antiquities Act" protects prehistoric and historic remains, objects, and monuments on State-owned lands, and there is provision for limiting excavations and archeological investigations upon such lands to qualified institutions. The Governor is authorized, with the approval of the Senate, to establish historical landmarks and historic sites upon State-owned lands, and he may accept gifts of land for such purposes. The authority to locate, identify, preserve, and administer State-owned historic sites is vested in the State Department of
Land and Natural Resources. No public construction -- whether by State, county, city, or any government agency -- which would damage recognized historic or prehistoric sites can be commenced without the approval of the State Department of Land and Natural Resources or of the Governor.

In a report issued in January, 1962, an Advisory Committee on Marking Historical Sites, established to assist the State Department of Economic Development to prepare for a State-wide system of marking prehistoric and historic sites, recommended that such a program be established under the Division of State Parks. This program is now in the process of establishment, and in operating it the Director of Land and Natural Resources will be assisted by a permanent Advisory Committee on Marking Historical Sites.

The actual preservation and administration of archeological sites on State-owned lands is in the hands of several agencies of the State Government. The responsibility for the administration of formal State Historic Sites (a term used to include both archeological and historical sites) is given to the State Division of Parks, a unit of the Department of Land and Natural Resources. Until very recently the Division of Parks administered only one State Historic Site as such -- the Ulu Po Heiau near Kailua, Island of Oahu. But by a series of executive orders the Governor has recently set aside a number of other State-owned archeological and historical sites to be added to the State Park System.

These new areas include the important complex of heiaus, birthstones, and other prehistoric features along the lower Wailua River on the island of Kauai. These remains are now included in Lydgate and Poliahu State Parks.
and in associated appendages. Another one of the new parks is the Puu o Mahuka Heiau, the large and important temple near Waimea, on the north end of Oahu. The Halekii and Pihana Heiaus at Wailuku, Maui, have also now been transferred to the State Park System. One of these large stone platforms was restored by the Territory in 1958 under the supervision of trained archeologists. It is understood that the State Division of Parks is presently working on a land exchange to permit the incorporation of the impressive Hokukano Heiaus, on Molokai, into the park system.

A number of other prehistoric sites and structures are within existing State parks which are not officially designated and operated as State Historic Sites. An example of this type of preservation is the Keaiwa Heiau in Keaiwa Park, in Aiea Heights, Honolulu. Several highly important sites are located on what are termed "unappropriated State lands," tracts owned by the State but not specifically set aside for park, forest reserve, or other specific uses. Such sites are administered by the Division of Land Management, another agency of the Department of Land and Natural Resources. The significant Hikiau Heiau at Napoopoo and a part of the Kamakahonu site at Kaulua, both on the Island of Hawaii, are located on such unappropriated lands. The State has recently restored the Hikiau Heiau.

Another group of heiaus and related features is being preserved in city and county parks. A number of the most significant sites on the islands are on privately owned lands and are being preserved by their owners. One example of a prehistoric site which is being well preserved by a private owner is Kaneaki Heiau, on the Island of Oahu.
Another is the large Loaloa Heiau on Maui. Other sites on private lands, such as the Kaunolu Village on Lanai, while not being actively protected by their owners, are still well preserved because of their isolation.

Two prehistoric sites of prime importance are being preserved by the Federal Government. These are the City of Refuge National Historical Park and the complex of remains in the Kalapana Extension of Hawaii Volcanoes National Park. Together they present a broad and well-rounded picture illustrating the Hawaiian culture of the pre-European contact period.

In summary, the State of Hawaii and associated agencies are making excellent progress in the preservation of archeological sites. There are several types of sites, however, such as village complexes and the large fishponds, which are not yet well represented in the State-preserved areas.

The Bernice P. Bishop Museum in Honolulu is the chief source of information and the chief repository of records and artifacts relating to Hawaiian culture. Its collections are unrivalled for completeness and breadth. Certain outstanding specimens of Hawaiian artifacts, however, are scattered in museums throughout the United States and Europe. Under the direction of Dr. Kenneth P. Emory, the Bishop Museum conducts a continuing program of archeological exploration in the islands. Ethnological studies are also conducted constantly, and the museum has published a large series of works on the culture of Hawaii and of Polynesia as a whole.
SITES OF EXCEPTIONAL VALUE

1. WAILUA COMPLEX OF HEIAUS - KAUAI

Location: At the mouth of the Wailua River, Lihue District, on the eastern coast of the Island of Kauai.

Ownership: About 109 acres owned by State of Hawaii, located in Lydgate State Park, Poliahu State Park, and a county park (see below).

Significance.

Located at and near the mouth of the Wailua River are a city of refuge (Puuhonua Hikinaakala), four important heiaus (Hikinaakala, Malae, Holo-koloku, and Poliahu), royal birthstones (Pohaku Hookanau), and a sacrificial rock (Pohaku Pilo). This series of heiaus and sacred sites form one of the most important complexes of archeological sites in the Hawaiian Islands; they cover a long period in Hawaiian prehistory and many aspects of Hawaiian aboriginal culture.

The complex is composed of the following individual sites:

1. Puuhonua Hikinaakala and Heiau (HASS-50-KA-A1-1). Located in Lydgate State Park (39.2 acres) on Wailua Bay. Included in this park are the remains of Hauola, a city of refuge also known as Puuhonau Hikinaakala, which served as a shelter for anyone escaping from battle or crime. Part of this walled city also contains the Hikinaakala Heiau. Thomas G. Thrum described this latter structure in 1907 as follows:

"The ruins of this heiau stand along the shore near the south side of the stream. It shows three distinct divisions, paved; the inner section still in fair condition 120 feet in depth. End and southeast corner walls
Puuhonua (City of Refuge) Kikinaakala and Heiau, Lydgate State Park, Wailua, Island of Kauai.

N.P.S. Photo, 1962
are six feet high and 11 feet thick, of heavy stones. Two large "boulders stand near the middle near the division wall of this section. The outer or front section of 80 feet includes a width that runs back beyond the the division wall... A number of graves mark the middle and outer sections, said to be the remains of an entire family in consequence of their desecrating the temple by living and cultivating within its walls." Today much of the stone has been removed, reducing the walls to bare outlines, and obliterating the paving entirely. The outer section has also been destroyed. The stones remaining show the construction of the walls to have been that of placing large stone slabs on edge in a double row; eight feet wide, and filling in between with smaller stones. The division between the front and middle sections is now marked by a rough row of stone that extends 50 feet or more west of the line of the old wall. This is probably later work, an assumption substantiated by the finding of a stone, the surface of which was used for adz grinding, as part of this wall though in a position impossible for use. The Kauai Historical Society has called this a place of refuge "Hauola" as well as a heiau.

Adjacent to these structures are to be seen at low tide an interesting series of old petroglyphs (HASS-50-KA-Al-6). The remains of the heiau and city of refuge are in excellent condition and are well maintained. The park is located in a beautiful setting and is shaded by a fine coconut grove.

2. Malae Heiau (HASS-50-KA-Al-4). Located in a cane field across State Highway 56 from Lydgate Park. The site is situated on a 2.75 acre reserve owned by the State of Hawaii, but not included in the State Park system.
Malae Heiau. Wailua, Island of Kauai.
The heiau stands on a raised area on the left (south) bank of the Wailua River and affords a good view of the surrounding country. Thomas G. Thrum described this heiau in 1907 as follows: "A walled and paved heiau 273 by 324 feet in size of traditional Menehune construction. The place of its altar is pointed out near the center toward the west wall and around on all sides ran a ledge about six feet wide whereon the people is said to have sat during its ceremonies. The outer walls are yet [1907] standing in good order. The corners buttressed with 13-foot walls. [a unique feature] Kapule (Queen Deborah) changed this heiau about 1830, and erected division walls for cattle and calf pens with its inner structures and stone pavements... A ledge is said to have extended all around its four walls (similar to the feature noted in Oahu's largest temple)... The companion heiau of Malae was Poliahu situated some little distance from it, further inland, but the two were in plain sight of each other."

Today only the great stone walls, eight feet wide and from 6 to 8 feet in height, remain of this huge platform heiau. The ruins are in excellent condition although heavily overgrown with weeds, morning glory and lantana; they are also completely surrounded by sugar cane fields.

3. Holoholoku Heiau (HASS-50-KA-AL-2). Located on the north side of the Wailua River and just beyond the Coco Palms Hotel, on the south side of State Highway 56. Thirteen acres; a part of lower Poliahu State Park. Holoholoku, reported to be Kauai's oldest heiau - is a low-walled court type of heiau, measuring 57 by 96 feet in size. The heiau has been thoroughly restored in 1933 by the Kauai Historical Society and the Bishop
Holoholoku Heiau, Poliahu State Park, Wailua, Island of Kauai.
Museum, and contains three reproductions of Polynesian idols and a restored priest’s grass house; the whole making a very picturesque exhibit.

On the north side of State Highway 58, adjacent to the hotel, is a sacred coconut grove and birthplace of kings. The grove was the residence of early Hawaiian royalty for many years.

Located about 100 feet further inland and on the south side of State Highway 58, are the royal birthstones (Pohaku Hoohanau) and a sacrificial rock (Pohaku Pilo). These are a part of Poliahu State Park.


This heiau is situated on a high precipice overlooking the river and commands a splendid view of all the other heiaus described above, including the Malae heiau with which Poliahu was associated.

The Poliahu heiau is a paved and walled enclosure roughly rectangular in shape, with a 30 by 70-foot notch taken out of the southeast corner. The heiau is roughly 242 feet in length by 165 feet in width. The walls, though tumbled in many places, still show an original height of from five to six feet and a width of five feet. Across the west end is a terrace delineated by a row of stones placed on edge. At the south end of this terrace platform is an indefinitely marked square that was possibly the site of the oracle tower. This site is marked by a row of stones. Along the south side, another terrace, and similarly marked by a row of flat...
Pohaku Hoohanau and Pohaku Pilo - Royal Birthstones, Poliahu State Park, Wailua, Island of Kauai.
Polihau Heiau, County Park at Wailua, Island of Kauai.
lava stone on edge, runs from the west terrace to within 13 feet of the east wall. At the back of this terrace, is an upright stone, firmly set in the ground and leaning against the wall, though not a part of it. Near the center of the heiau two rows of stones running parallel to the long axis of the structure appear to be the markings of a house site. In the northeast corner there are two house divisions separated by division wall of double construction and that might once have been much higher than its present one foot. At the east end, outside the wall, there is a platform adjoining the heiau, and just south of it a slightly depressed area. Near the center of the north wall, on the outside, is a large division with a one-foot terrace one foot higher on the outer edge and walls three feet wide and one-foot high at each end. There is some indication that these two walls continued out farther at one time. Where the west wall of this division joins the main wall, the stones of the main wall seem to be finished off to an end as though for an entry way. The rocks are tumbled so that the other side of such an entrance can not be determined. The paving is well done with large flat lava stones with small pebbles over most of it, except on the west terrace. The other side walls are constructed with large stones and small stones intermixed.

The Poliahu heiau is kept in excellent condition and is cleared of all vegetation.

References: Thomas G. Thrum, "Tales from the Temples," Hawaiian Annual for 1907, 49-69; Wendell Clark Bennett, Archaeology of Kauai (Bernice P. Bishop Museum Bulletin 80, Honolulu, 1931), 124-127, with plans of heiaus; Sunset Discovery Book, Hawaii - A Guide to All the Islands (Menlo Park, California, 1961), 72; Dorothy B. Barrère "Hawaiian Aboriginal Culture" (Bishop Museum, 1961 NPS typescript)
2. *PUU O MAKUKA HEIAU - OAHU*

**Location:** Near Waimea, Koolauloa District, north side of Island of Oahu; off State Highway 83, on Pupukea Homestead Road (835).

**Ownership:** Hawaii State Park System, maintained by the City-County of Honolulu. Eight acres.

**Significance.**

Puu o Mahuka Heiau (HASS-50-QA-F1-1) is situated on a high bluff, approximately 300 feet above the sea, overlooking Waimea B.y. About 170 feet by 570 feet in size, this is the largest heiau on Oahu and is of the low-walled court platform type temple. Three adjoining inclosures form what was probably the heiau proper with two smaller inclosures on the sea side and on the edge of the pali (cliff), one directly in front of the other. They average about 25 by 35 feet in size with low surrounding stone walls. The lower inclosure of the heiau proper is small and is said by Thrum to be of more modern construction "to commemorate a kahuna's successful wager with an ali'i, but it is no part of it the heiau". Together the two larger inclosures are 520 feet in length. The lower contains a maze of small, low stone walls; the upper inclosure contains smaller terraces and platforms. It is thought probable that the bodies of Captain George Vancouver's men were sacrificed at this heiau. They were killed by the natives in May, 1792 when attempting to procure water for the *Dedalus* at the mouth of the Waimea River.

According to Stokes the upper terrace was once paved with large stone slabs which have since been torn up and piled along the edge. Puu o Mahuka
Puu o Makuka Heiau near Waimea, Koolauoa District, Island of Oahu.

N.P.S. Photo, 1962
heiau is probably the most important single heiau on the Hawaiian Islands and Oahu's greatest priests came from this district.

**Condition of the Site**

The heiau has not been restored and is intact in its ruined condition. A beginning has been made in clearing away the brush, and minor repairs were made in 1960. There are trees and brush growing inside the walls, but not in such profusion that one cannot see the features. A paved road leads into the park and there is a paved parking area adjacent to the heiau. The park is surrounded by privately owned ranch land and cattle graze around the site. On the sea side of the heiau, along the top of the ridge and located on the privately owned land, are additional small structures that were once a part of the heiau complex.

3. **HUILUA FISHPOND - OAHU**

**Location:** Kahana Bay, Koolauloa District, east coast of Island of Oahu.

**Ownership:** The ownership is unknown. Located adjacent to Kahana Bay State Park.

**Significance.**

This picturesque fishpond (HASS-50-OA-F8-1) is one of the last surviving ponds on the island of Oahu. According to tradition, Huilua Fishpond was built by the Nenehunes for the raising and storing of fish. The pond (about 200 acres in size) is fed by a number of fresh-water springs and is affected by the tides. On the land side of the outlet (makaha) was a fishing shrine (ko'a) formed of large 3-foot stones, roughly rectangular in shape and measuring 24 by 14 feet in size. Most of this shrine has been moved, but a line of the large stones still remains. A low stone wall separates the pond from the sea.

Huilua Fishpond, Kahana Bay, Kookau'loa District, Island of Oahu.

N.P.S. Photo, 1962
4. KAULEONANHOA (NANHOA STONE) (PHALLIC ROCK) - MOLOKAI

Location: Near junction of Nihoa, Naiwa (Apana 3), and Palaau (Apana 3) land divisions, on the north shore of the Island of Molokai, adjacent to Palaau State Park.

Ownership: Molokai Ranch Ltd.

Significance

According to ancient Hawaiian legend, a woman who was unable to conceive would be cured of her affliction if she made an offering on this rock. So far as is known, this is the only phallic stone worshiped in the islands by the ancient Hawaiians and the stone is still employed for its original purpose. The stone is believed to be a natural formation. (HASS-50-MO-B8-1).

Condition of Site

This unusual stone has been badly carved on by visitors but is otherwise intact. Petroglyphs also exist along the trail that leads to the rock from the Kalaupapa Overlook in Palaau State Park.

References: George Paul Cooke, Moolelo o Molokai (Honolulu, 1949), 102, 103, 150; Dorothy B. Barrère, "Hawaiian Aboriginal Culture," (Bishop Museum, 1961, a NFS typescript).
Kauleonanahoa (Nanahoa Stone) (Phallic Rock), near Palaau State Park, Island of Molokai.

N.P.S. Photo, 1962
5. HOKUKANO-UALAPUE COMPLEX - MOLOKAI

Location: South coast of Island of Molokai, along State Highway 45 in Kahananui, Manawai, and Mapulehu Land Divisions, (see below).

Ownership: Varied (see below).

Significance:

The Hokukano-Ualapue Complex includes the six heiaus, known as Pakui, Kahokukano, Kaluakapiioho, Kalauonakukui, Kukui, and Iliiliopae (or Mapulehu) and the two fishponds called Keawanui and Ualapue. Taken together, they form one of the most important and impressive archeological exhibits in the Hawaiian Island.

The individual sites of this complex are as follows:

1. The Five Heiaus of Hokukano. These occupy about 50 acres of land owned by the State of Hawaii, and Mrs. S.C. Friel and Mr. Johnny K. Cockett of Pukoo, Island of Molokai. They are located on the line between the Kahananui and Manawai Land Divisions and stretch inland (north) from State Highway 45 at Ualapue up the side of a hill for about .8 mile to the top of the ridge.

At the top of this ridge, which is about 500 feet in elevation, is located Pakui Heiau (HASS-50-MO-A12-2), the highest and largest of these five stone platform heiaus. A superb view is to be had from this ruin and some sources indicate that this heiau may also have been a place of refuge. Below this is located Kahokukano (HASS-50-MO-A12-1), a three terraced heiau, with the upper terrace containing a court. At a lower level is Kaluakapiioho (HASS-50-MO-A12-3), a terrace heiau with a six-foot high wall on the west side. Beneath this is Kalauonakukui, a small stone platform heiau, and,
Kahokukano Heiau, with Pakui Heiau in distance. Ualapue, Island of Molokai.

N.P.S. Photo, 1962
finally, just off Highway 45, is the Kukui heiau. This last heiau is in very poor condition and is located in the backyard of a native farmer; it is now used as a pumpkin patch. The other heiaus are intact and none has been restored.

2. Ualapue Fishpond. (HASS-50-MO-A12-12). This fishpond is located in the town of Ualapue, on the south side of State Highway 45. The site is owned by the State of Hawaii (leased land). The pond is 1,575 feet long, has two outlets, and encloses 15.46 acres. Mullet and clams are still being raised in it today. The five heiaus of Hokukano are located above this fishpond, on the north side of State Highway 45.

3. Keawanui Fishpond. (HASS-50-MO-A13-1). This site occupies about 73 acres of privately owned land and is located one mile east of Ualapue, Kalaeloa Harbor, on the south side of State Highway 45. The pond is one of the finest and largest of the series of more than 58 ponds that were once situated along the southern coast of Molokai. The pond is still used for its original purpose.

4. Iliiliopae (or Mapulehu) Heiau. (HASS-50-A10-1). This heiau is located at a point .8 miles west of Pukoo and .35 mile north of State Highway 45, at 100 feet elevation at the base of the center ridge dividing Mapulehu Stream from Punaula Gulch. The site occupies about eight acres and is owned by Mrs. S. C. Friel of Pukoo. A good trail leads up to the heiau.

This platform heiau, located in a dense grove of trees, is very impressive and is the largest heiau site on Molokai. It consists of a huge
Ualapue Fishpond, Ualapue, Island of Molokai.

N.P.S. Photo, 1962
Keawanui Fishpond, Kalaeloa Harbor, Island of Molokai.
Iliiliopae (or Mapulehu) Heiau near Pukoo, Island of Molokai.
platform, about 320 by 120 feet, built up of piled rocks. It was used for
human sacrifice and the altar was located on the eastern portion of the
main platform. The upper side of the platform is only a few feet above
ground level, but the lower (seaward) side is about 18 feet high in places
and is terraced. The surface is composed of rough, loose, stones, but it
shows several burial pits. This temple was in use until the early 1800's.

Although nothing definite seems to be known concerning its origin and
use, legend says that the Menehunes (or, in some versions, the Hawaiians)
stood in a long line from the Wailau Valley, across the mountains to the
north, to Mapulehu and passed the stones for this structure from hand to
hand.

This ancient temple is in superb condition and has an imposing site.

References: George Paul Cooke, Moolelo o Molokai (Honolulu, 1949),
104, 109, 152; Marion A. Kelly, "Annotated List of Puuhonau in the
Hawaiian Islands," in "The Natural and Cultural History of Honaunau, Kona,
Hawaii," (typewritten, 2 vols., Bernice P. Bishop Museum, Honolulu, 1957),
II, 127; Dorothy B. Barrere, "Hawaiian Aboriginal Culture" (Bishop Museum,
1961, a NFS typescript).
6. **KAUNOLU VILLAGE SITE - LANAI**

**Location:** Kaunolu Bay, on the southwest cape of the Island of Lanai.

**Ownership:** About 640 acres, owned by (Dole) Hawaiian Pineapple Company, Ltd., of Honolulu.

**Significance**

Kaunolu (HASS-50-LA-A6-50) was once a typical "vigorous" Hawaiian fishing community. It has been deserted for more than 80 years, but owing to its extremely isolated location and to the dry, almost desert-like climate of the area in which it is located, its ruins are extremely well preserved and make a most impressive and dramatic exhibit, with remains representing nearly all phases of Hawaiian culture. It is said that Kamehameha I frequently visited this town and that it was one of his favorite recreation spots.

The principal ruins and surviving cultural features are as follows:

a. Eighty-six house platforms, 35 stone shelters, and more than 30 detached pens and garden patches. These remains are scattered over a wide area, but are largely in the lower half mile along the top of the east bank of Kaunolu Gulch.

b. **Halulu Heiau**, a temple and place of refuge described by Dr. Emory as "the most imposing ruin on Lanai," is located on the west bank of Kaunolu Gulch, about 200 feet from the sea. Its situation is dramatic, being surrounded on three sides by cliffs and beyond it on the north rises the magnificent cliff of Palikaholo, terminating in Kahilikalani craig, a thousand feet above the sea. The heiau, which dominates the village,
Halulu Heiau, at Kaunolu Village Site, Island of Lanai.

N.P.S. Photo, 1962
consists of a rock platform with three main terraces, each a foot above the other. The upland side is protected by a perpendicular stone wall eight feet high and 15 feet thick. The great stone pavement on the valley floor below the temple may have been connected with the heiau. The temple was used as late as 1776-1810, when Kamehameha I visited the town.

c. A stone altar to the fish god, Kunihi, is located in Kaunolu Gulch directly below the heiau. Kamehameha V, in 1868, instructed one of his overseers to hide the stone fish god, and it is said to be still hidden in the vicinity.

d. A canoe shed called Hilinae.

e. Kahekili’s Jump, a 15 foot gap in the natural stone wall which borders the cliff top to the east of the heiau. Legend says that Kamehameha I forced disobedient warriors to leap to the sea 62 feet below, their survival being dependent upon their ability to clear a 15-foot rock ledge protruding into the sea.

f. A house site said to have been the fortified residence of Kamehameha I.

g. A number of petroglyphs. (See photo following page 55).

h. Several graves and tombs.

These remains are in excellent condition and are undisturbed. The area is unused and can be reached by a jeep road.

7. **LOALOA HEIAU - MAUI**

**Location:** Southeast coast of Island of Maui, in the Hana District; situated on a hill overlooking Mana Wainui Stream and State Highway 31, about one-quarter of a mile north of the village of Kaupo.

**Ownership:** About 5 acres, owned by Mr. Dwight H. Baldwin, Kaupo Ranch, Island of Maui.

**Significance**

This large platform heiau (HASS-50-MA-A28-1) occupies a most impressive site overlooking the highway and ocean and is in an excellent state of preservation. The temple believed to have been built by King Piilani, was the center and prime site of a culture complex around Kaupo, which includes Hawaiian village sites and other heiaus. One of these, the Popoiwi or Mokulau heiau, is located immediately above State Highway 31 as it passes Hui Aloha Church.

Loaloa Heiau is intact, unrestored, and unmarked; the site is now somewhat difficult to reach because of the heavy growth of vegetation.

**References:** Dorothy B. Barrere, "Hawaiian Aboriginal Culture" (Bishop Museum, 1951 - a NFS typescript); W. K. Walker, "Archaeology of Maui" (Ms. in Bishop Museum, Honolulu, 1931).
Loaloa Heiau, near Kaupo, Island of Maui.

1955 Photo, Courtesy Bishop Museum.
Mokulau (or Popoiwi) Heiau, near Kaupo, Island of Maui.
8. MOCKINI HEIAU - HAWAII

Location: Northern tip of Island of Hawaii, in North Kohala District. The site is situated in a sugar cane field about 1000 feet south of the shoreline cliffs, one mile west of the Upolu Point Airport.

Ownership: The site occupies about 12 acres of land and is owned by the Kohala Sugar Company, Hawi, Hawaii, and by the Bishop Estate, leased to the Kohala Sugar Company.

Significance

Mockini Heiau (HASS-50-HA-F15-1) is a luakini (sacrificial) heiau with a open stone paved court. This huge temple measures about 250 by 130 feet and has a great open stone paved court that is enclosed on all sides by 20 foot-high stone walls. The sacrificial stone now lays in the field just outside of the walls.

Traditional history states that this heiau was constructed in the 11th Century by Paao, a famous priest who came from Tahiti. The stones are said to have come from Pololu Valley, 10 miles distant. The heiau was rededicated by Kamehameha I as the main temple for North Kohala and was used as a war temple. The impressive ruin is in good condition, and is one of the largest and best-known physical evidences of the ancient Hawaiian religion.

Kamehameha I's birthstone at Kokoiki is located within one-half mile of this heiau and should be considered a part of this site.

Reference: Dorothy B. Barrere, "Hawaiian Aboriginal Culture" (Bishop Museum, 1961, a NPS typescript), 31; Sunset Discovery Book, Hawaii - A Guide to all the Islands (Menlo Park, Calif., 1961), 51; Thomas C. Thrum, "Tales from the Temples, Part II," in Hawaiian Almanac and Annual for 1906 (Honolulu, 1909), 58-61; Mary Charlotte Alexander, Dr. Baldwin of Labaina (Berkeley, Calif., 1953), 50-51.
Mookini Heiau, North Kohala District, Island of Hawaii.

N.P.S. Photo, 1962
9. **PUAKO PETROGLYPHS - HAWAII**

**Location:** On the west coast of the Island of Hawaii, in the South Kohala District, at Puako, near Kawaihae.

**Ownership:** About 120 acres owned by the State of Hawaii and Parker Ranch (lessee - Richard Smart).

**Significance**

The **Puako Petroglyphs** (HASS-50-HA-E3-1), together with the **Anaehoomalu Petroglyphs** - which are located about five miles to the south, are two of the three prime petroglyph sites in the Hawaiian Islands.

The **Puako Petroglyphs** are located just a short distance inland from the village of Puako; a good and well-marked trail, about one-quarter of a mile long, leads from the village to the site.

The **Puako petroglyphs** are in three sections along the old native Hawaiian Kaeo foot trail, and are carved into fairly flat pahoehoe lava flow. The pictures are most varied in subject matter and include representations of long lines of human figures and long elongated human figures representing gods, as well as owls and Polynesian canoe sails.

These drawings form a most spectacular exhibit and have been cleared and cleaned by the Bishop Museum and the State of Hawaii. These petroglyphs are in excellent condition.

**References:** Dorothy B. Barrère, "Hawaiian Aboriginal Culture," (Bishop Museum, 1961, a NFS typescript), 50; Kenneth P. Emory, "Kilalow was Here," *Paradise of the Pacific*, Vol. 68, No. 3 (Honolulu, 1956), 9-11.
Puako Petroglyphs, South Kohala District, Island of Hawaii.
10. **ANAEHOOMALU PETROGLYPHS - HAWAII**

**Location:** On the west coast of the Island of Hawaii, in the South Kohala District, five miles south of Puako, at Anaehoomalu.

**Ownership:** About 115 acres owned by State of Hawaii and leased to Mr. Roleent Hind as ranch land.

**Significance**

The Anaehoomalu Petroglyphs (HASS-50-HA-El-1), together with the Puako Petroglyphs which are located five miles to the north, are two of the three prime petroglyph sites in the Hawaiian Islands. The Anaehoomalu site is the most extensive, varied, and finest example of petroglyph art in the entire Hawaiian Archipelago. (See photograph following page 43).

They are carved into flat pahoehoe lava along the old native Hawaiian Kaeo foot-trail that ran along the coast. The drawings are in excellent condition, but can presently only be reached by a rough foot trail.

**References:** Dorothy B. Barrère, "Hawaiian Aboriginal Culture" (Bishop Museum, 1961), 50; Kenneth P. Emory, "Kilalowe was Here," Paradise of the Pacific, Vol. 68 No. 3, (Honolulu, 1956), 9-11.
Anaehoomalu Petroglyphs, South Kohala District, Island of Hawaii.

1955 Photo, Courtesy Bishop Museum.
Anaehoomalu Petroglyph Area, South Kohala District, Island of Hawaii.

1955 Photo, Courtesy Bishop Museum.
11. MAUNA KEEA ADZ QUARRY - HAWAII

Location: On the very top of Mauna Kea, in the Hamakua District of the Island of Hawaii.

Ownership: About two acres owned by the State of Hawaii.

Significance

The Mauna Kea Adz Quarry (Hawaii Archeological Site Survey-50-HA-G20-1) is the largest such primitive quarry in the world. Here the ancient Hawaiians came to obtain their basalt for adzes and other stone implements. Evidences of their use of this quarry are to be found in the great heaps of chips, some of which measure 30 feet in width and 10 feet in height. The quarry is now unused, and the remains are intact.

This site is accessible only by a rough mountain foot trail (see guide book, listed below).

References: Sunset Discovery Book, Hawaii - A guide to all the Islands (Menlo Park, Calif., 1961), 52; Peter H. Buck, Arts and Crafts of Hawaii (B. P. Bishop Museum, Special Publication 45, Honolulu, 1957); Dorothy B. Barrère, "Hawaiian Aboriginal Culture" (Bishop Museum, 1961 - a NFS typescript).
Mauna Kea Adz Quarry, Hamakua District, Island of Hawaii.

1957 Photo, Courtesy Bishop Museum.
12. **HONOKOHAU SETTLEMENT - HAWAII**

**Location:** On the west coast of the Island of Hawaii, in the North Kona District, at Honokohau Bay, just north of Kailua.

**Ownership:** About 250 acres owned by the State of Hawaii, Frank B. Greenwell, and the Thelma K. Springer, Nance E. Oliver and Mary S. Holt Trust.

**Significance**

The Honokohau coastal area, because of its ideal landing places for canoes and its fishponds, was important not only to the ancient Hawaiians, but to the Hawaiians of historical times. In the Great Mahele of 1848, King Kamehameha V and other Hawaiian Chiefs reserved property and fishponds for themselves at Honokohau. This Hawaiian town continued to be used until about 1920, when its isolation, due to the inaccessibility by sea except for small boats and by land except by foot or horseback, resulted in its desertion by the Hawaiians. Today the settlement is occupied by a few Filipino fishermen living in shacks. Jeep roads to the settlement have recently been constructed.

The Honokohau Settlement thus preserves virtually intact sites dating from prehistoric times to historic times. Included are 50 ancient house sites, four heiaus, three fishponds, a holua (toboggan) slide constructed for the use of chiefs, and many tombs.

The three fishponds, Aiopio, Aimakapa, and Kaloko, are largely intact. The large heiau of Puuoina (HASS-50-HA-D12-1) is situated just inland from Malu’i Point, on the boundary between Kealakehe and Honokohau, and at the south side of the Aiopio Pond. This is a platform temple, about 50 feet...
by 145 feet, and varies from three feet to eight feet in height. The heiau is in an excellent state of preservation.

Around the point to the west of the Puucina heiau, at Alaula Cove, is a fisherman's heiau, Makaopio, (HASS-50-HA-D11-7) remarkable for two great upright stone slabs which rise above the height of the pavement in its seaward retaining wall. These slabs served as fishermen's gods.

To northeast of the Puucina heiau, is Honokohau Nui, (HASS-50-HA-D12-25) a broad holua (toboggan) slide that extends down the seaward slope of the aa lava flow at the head of Aimakapa Pond. Honokohau Nui is one of the five holua slides that have survived in Kona (others are located as follows: one at Keauhou; two at Honaunau in the City of Refuge National Historical Park; and one at Okoe in South Kona). The Honokohau Nui slide (like the one at Keauhou) is wide enough to allow two contestants to compete at the same time. The take-off and the run-way as far as the brow of the flow are perfectly preserved, but the lower part of the slide at Honokohau has been demolished to provide stones for two corrals on the plains below.

There are also scattered petroglyphs in the area and what appear to be ancient bathing pools.


N.P.S. Photo, 1962
13. **KEAOUH HOLUA SLIDE - HAWAII**

**Location:** On west coast of the Island of Hawaii, in North District, at Keauhou, to east of the coast Highway (State 18).

**Ownership:** About 10 acres, probably owned by the Bishop Estate.

**Significance**

The Keauhou Holua (Toboggan) Slide (HASS-50-HA-D3-2) is the largest and best preserved slide in the State of Hawaii. This slide, extremely long (1290 feet), steep, and wide, served as the "Olympic Games" holua of the Hawaiian people.

Certain pastimes were restricted to the chiefs, the most spectacular being holua sledding. A track of rock, layered with earth and made slippery with grass, was made for tobogganing on a narrow sled. The sled or *papa* consisted of two narrow and highly polished runners, from seven to 10 feet in length, and from two to three inches deep. The two runners were fastened together by a number of short pieces of woods varying in length from two to five inches, laid horizontally across the runners. The contestants grasped the sled, ran a few yards to the brow of the hill or starting place, and throwing themselves forward, fell flat on the sled, and slid rapidly down the hill. Those who rode the farthest were considered the victors. This sport was extremely dangerous and only experts participated.

14. SOUTH POINT COMPLEX - HAWAII

Location: South Cape, the extreme southern point of the Island of Hawaii, in the Kau District.

Ownership: About 710 acres owned by the United States Government (U.S. Coast Guard) and the State of Hawaii.

Significance

This area contains a group of sites that document the longest and most complete record of human occupation in the Hawaiian Islands. Included in this complex are the following sites:

1. Puu Alii Sand Dune Site (HASS-50-HA-B20-1). From this site the earliest recorded date of 124 A.D. for the State of Hawaii has been obtained through the carbon 14 method of dating. The house site with a fire hearth was excavated in the 1950's by the Bishop Museum. The site is located in a sand dune a few hundred feet east of the Coast Guard lighthouse. This area was once a large fishermen's habitation and workshop that was later covered by a sand dune and subsequently used as a burial ground. The site is located on the coast approximately a quarter of a mile east of the lighthouse at South Point.

2. Makalai Cave Shelter (HASS-50-HA-B20-2). This site, located about three-quarters of a mile inland from the Puu Alii Sand Dune site, is a great depression in the ground with two large lava tubes extending from it at either end. The tube on the north, which was used as a habitation site, has stone terracing at both sides of the entrance and on the main floor. This large rock shelter was also excavated by the Bishop Museum and contained material dating back to 1750 A.D. The site is surrounded by a former military base.
Fire Hearth inside dwelling at Puu Alii Sand Dune Site, South Cape, Island of Hawaii.

N.P.S. Photo, 1962
Makalai Cave Shelter, South Cape, Island of Hawaii.

N.P.S. Photo, 1962
3. **Kalalea Heiau**, adjacent to the lighthouse, is a fishermen's heiau of the small court-type which has been venerated for years and is still used by fishermen today. A stone resembling a humanoid face, that served as the fish god, is situated just outside of the heiau.

4. **Mooring Holes.** Attesting to the fact that the area has been used for hundreds of years by fishermen are the many mooring holes that have been pierced in the lava ledge overlooking the sea. These holes belonged to individual families and were used to attach their canoes while fishing in the powerful cross currents. The sea currents meet at South Cape and the turbulence brings schools of fishes, making an excellent but dangerous fishing ground.

5. **Salt Pans.** Numerous carved and natural salt pans indicate the extensive scale of salt manufacturing that occurred at South Point in times past.

6. **The Pohakuokeau Stone** ("stone of the times" or "stone of the region") is also situated in this area. Legend states that this huge natural boulder turns over each time a reign changes in Hawaii.

Kalalea (Fishermen's) Heiau, South Cape, Island of Hawaii.

X. P. S. Photo, 1962.
Canoe mooring holes, South Cape, Island of Hawaii.

N. P. S. Photo, 1962.
Salt pans at South Cape, Island of Hawaii.

N. F. S. Photo, 1962.
AREAS IN THE NATIONAL PARK SYSTEM
RELATED TO THE THEME

1. City of Refuge National Historical Park. Located at Honaunau, on the coast of South Kona, about 20 miles south of Kailua, on the Island of Hawaii, this park of 160 acres preserves a complex of ruins representing almost all phases of ancient Hawaiian culture. The most important and impressive feature is the vast Pu'uhonua, or place of refuge, enclosed on two sides by a massive stone wall, in places 17 feet wide and 12 feet high. It probably was established in the 1400's by the kings and chiefs who lived at Honaunau Bay as a sanctuary for non-combatants and defeated soldiers in time of war, criminals, and for taboo-breakers. While there were at least five other refuges on the Island of Hawaii, and one in every other major district of the other inhabited islands of the Hawaiian chain, the City of Refuge at Honaunau is the only one to have survived almost intact.

Associated with the Pu'uhonua at Honaunau are the stone remains of several heiaus or temples, including the platform of the Hale-o-Keawe, a highly sacred house built in the middle 1600's, which contained the deified bones of at least 24 Hawaiian kings and chiefs. Near this heiau are remains of royal house platforms, and throughout the park are to be found the ruins of some 147 Hawaiian houses, several temple-shrine platforms, walls, ancient and recent trails and roads, and canoe landings.

Two holua (toboggan) slides are also located in the park. One is in an excellent state of preservation and the other is in fair condition. The latter slide appears never to have been completed by the Hawaiians. The park also contains a number of important burial caves, located in the
spectacular Alahaka Cliffs, that have been used for burials from early times to the present. Archeologists have recently found skeletal remains of at least 12 individuals in one cave and those of five children in another. Many of these caves have previously been ransacked by looters.

2. **Hawaii Volcanoes National Park.** Covering an area of about 344 square miles on the Island of Hawaii, this park includes the craters of the only two Hawaiian volcanoes still considered to be active - Kilauea and Mauna Loa. It also encompasses a long stretch of the island's southeastern coast, and its lands rise from sea level to an elevation of 13,660 at the summit of Mauna Loa.

The values of this park are chiefly geologic, scientific, and scenic in nature, but it has several sites with important archeological associations. Included in this classification are the Puuoca Petroglyphs, the Apua and Heiau Petroglyph Caves, and the Wahaula Heiau, all located in the Puna District.

The **Puuloa Petroglyph** area is situated in the Pu'uloca Section, Kalapana Extension of the park. This concentration of petroglyphs is second only in extent and quality to the famous field at Anaehoomalu in South Kohala on the Island of Hawaii. The **Puuloa Petroglyphs** extend along the park trail approximately 1000 feet on the east side of the hill to about 500 on the west and include a large variety of figures, patterns, dots, and pictorial elements. (See photo following page 43). The most significant area is to be found at the top of the hill where there are thousands of dots and rings, ranging in size from one to six inches in diameter,
pecked in the surface of the pahcehoe lava. Many of these drawings are very old and have been almost obliterated by successive overlays of dots and marks and also by natural erosion of the rock. This field covers about half an acre.

_Apua and Heiau Petroglyph Caves_ are located three miles inland from Apua Point in the Kalapana Extension of the Park. _Apua Cave_ is situated about 600 yards east of the bluff on the west side of Keauhau Bay, and to the seaward side of the trail. The cave is a lava tube and was used as a shelter by the Hawaiians. At the entrance to the cave, on the east wall, are to be found a number of linear figures of human form, and several other similar figures are carved on the west wall inside the shelter. The back of the tube has a loose stone wall across it which served as a wind break. Nearby is the _Heiau Cave_, which also contains a few petroglyphs.

_Wahaula Heiau_ is located close to the ocean shore in the Kalapana extension section of Hawaii Volcanoes National Park. This ancient court-type temple has close association with Hawaiian tradition and history. Thought to have been built in or before the 13th Century, it was reconstructed about 1500 and again in the time of King Kalaiopuu (shortly before 1762). It was known as a temple of "severe" services, where many human sacrifices were required. It continued to operate for a time after the official abolition of the ancient religion in 1819 and has been termed "perhaps the last heiau in which worship was publicly offered to the Hawaiian Gods." The remains are in good condition and make an impressive appearance.
3. **Haleakala National Park.** Located on the summit and slopes of Haleakala Volcano on the Island of Maui, this park's nearly 27 square miles are largely occupied by the huge and magnificent Haleakala Crater. Remains of rock shelter walls, trails, and a temple platform, as well as a number of legends and traditional stories, attest to the use of the park area by the ancient Hawaiians; but apparently the crater and its surrounding slopes are not the scene of any archeological sites of major importance.
OTHER SITES CONSIDERED

A. Island of Hawaii

   a. North Kona District

      1. Ahuena Heiau (recommended as possessing exceptional value in "Hawaii History" study, pp. 128-131). Located on the northwestern edge of Kailua Bay, west of Kailua wharf, in Kailua, and on the west coast of the Island of Hawaii. This temple is attributed to the period of King Liloa, about the beginning of the 16th Century. About 1812 King Kamehameha I restored the Ahuena Heiau as his personal temple. After reconstruction it measured 150 by 120 feet. The ruins of the temple have been badly damaged. (See 1816 print on cover).

      2. Kealakowaa Heiau (HASS-50-HA-D7-2). Located 2½ miles south of Kailua, on the west side of State Highway 11, and on the west coast of the Island of Hawaii. This is a small platform heiau situated on private property and in good condition.

      3. Kauakaiakaola Heiau (HASS-50-HA-D7-1). Located 1½ miles south of Kailua on State Highway 11, and on the west coast of the Island of Hawaii. This court-type heiau was reconstructed by the private owner in 1947 and now contains a wooden oracle tower, Polynesian idols, and a reconstructed grass house. These are in excellent condition and are open to the public.

      (4-9). The Six Kahaluu Bay Heiaus. Located along the coastal highway adjacent to Kahaluu Bay County Park and north of the village of Kahaluu, on the west coast of the Island of Hawaii. This complex of six heiaus is situated on privately owned land and includes the following temples:
4. Haleaama Heiau (HASS-50-HA-D6-3).

5. Hikapaia Heiau (HASS-50-HA-D6-2), located north of the first mentioned temple.

6. Kuemano Heiau (HASS-50-HA-D6-1), located just north of St. Peters' Catholic Church. This small platform temple is the best preserved of this complex and contains excellent paving. It was a surfing heiau and has a royal bathing pool adjoining it.

7. Hapaialii Heiau (HASS-50-HA-D4-2).

8. Keeku Heiau (HASS-50-HA-D4-3).

9. Keolonahihi Heiau (HASS-50-HA-D6-1). The state of preservation of the ruins of these six temples ranges from fair to excellent.


11. Holualoa Petroglyph Cave (HASS-50-HA-D6-7). Located 2-1/4 miles south of Kailua, on the east side of the coastal highway, and on west coast of the Island of Hawaii.

b. South Kona District

12. Puhina-o-Lono Heiau (HASS-50-HA-C25-2). Located on Kealakekua Point, just back of the monument to Captain James Cook, on the west coast of the Island of Hawaii. This is a small court-type temple and can be reached by jeep trail or boat. The ruins are in poor condition. (See 1779 prints following pages 21 and 25).

13. Hikiau Heiau. Located on the eastern shore of Kealakekua Bay, in Napoopoo, and on the west coast of the Island of Hawaii. This piled
rock temple platform is a "truncated pyramid" which in 1908 measured 190 by 105 feet, with a seaward face 15 feet high. At that time it was reported to be well paved with two divisions. This was a heiau of the highest class, a place of human sacrifice. The temple has since been twice "restored", but not under the supervision of archeologists. The site makes an excellent and impressive appearance and is owned by the State of Hawaii.


15. Kealakekua Bay Burial Caves (HASS-50-HA-C25-3). Located in the sheer cliffs overlooking Kealakekua Bay, near Napoopoo, and on the west coast of the Island of Hawaii. Most archeological materials have been removed from these caves. The caves can be easily seen by visitors taking the boat cruise in Kealakekua Bay.

16. Hookena Burial Caves (HASS-50-HA-C20-1). Located at Hookena, on the west coast of the Island of Hawaii. These caves are situated in the cliffs above the bay. Archeological materials have mostly been removed from this site.

c. Kau District

17. Wai (o) Alukini Cave Shelter and Settlement Site (HASS-50-HA-B21-1 and 2). Located 2 1/2 miles northwest of South Point at the southern end of the Island of Hawaii. This site has been excavated by the Bishop Museum and a carbon 14 date of A.D. 950 was obtained from the cave shelter.
18. **Kailikii Settlement Site** (HASS-50-HA-B22-1). Located at Pakini-nui, five miles northwest of South Point, at the southern end of the Island of Hawaii.

19. **Keeku Heiau and Kawaa Settlement Site** (HASS-50-HA-B-1 to 85-settlement; HASS-50-HA-B10-1-heiau). Located between Honuapo and Punaluu, on the coast, approachable by a jeep road leading from State Highway 11, and on the southeast coast of the Island of Hawaii. A large (100 acres) and probably important cultural complex that has not yet been fully investigated.

20. **Punaluu Heiau** (HASS-50-HA-B8-1). Located at Punaluu village, on State Highway 11, on the southeastern coast of the Island of Hawaii. This was a luakini (sacrificial) heiau of King Hamehameha I and is a court-type temple, that is situated on a lava flow on a promontory. The temple has been seriously damaged by the removal of stone for use in the construction of a nearby sugar cane wharf.

21. **Kimole Fishpond** (HASS-50-HA-B9-2). Located near Punaluu, off State Highway 11, and on the southeastern coast of Island of Hawaii. This is a small fishpond in good condition.

d. **Puna District**

22. **Mahinaakaka Heiau** (HASS-50-HA-All-1). Located about 1/2 mile south of Pohoiki, on State Highway 137, and on the southeastern coast of the Island of Hawaii.

23. **Makauku Settlement and Canoe Landing** (HASS-50-HA-A6-1). Located east of State Highway 137, at Kahuwai, near Cape Kumukahi, and on
the eastern tip of the Island of Hawaii. This site of some 220 acres is heavily overgrown with vegetation.

24. **Punaluu Heiau** (HASS-50-HA-A24-1). Located at Kahaualea, near Kupaahu village and at the end of State Highway 13 on the southeastern coast of the Island of Hawaii. A well-preserved heiau, exhibiting unusual skill in stone-slab construction. The Punaluu spring was the legendary home of the shark god. This heiau and the adjacent "Queen's Bath" are located on privately owned land situated just outside of the Kalapana Extension of Hawaii Volcanoes National Park.

25. **Kikoa Heiau** (HASS-50-HA-A19). Located at the town of Kaimau, on State Highway 13, and on the southeastern coast of the Island of Hawaii. This is a small platform temple that has been restored. Adjacent is an open paved area with "whipping stones" and a small fishpond. Ancient burials are also located nearby. The temple is in excellent condition and is well maintained by the county as a park.

e. **South Kohala District.**

26. **Puukohola Heiau** (recommended as possessing exceptional value in the "Hawaiian History" Study, see pages 125-127). Located on the top of a prominent hill, 0.9 mile southeast of Kawaihae, on the northwest coast of the Island of Hawaii. This ancient stone temple is perhaps the most famous heiau in all the islands. (See 1890 photo following page 27). The earliest temple known on this site was in existence as early as the time of Lonoikanakahiki (about 1550) and was even then a place of human sacrifice. It was rebuilt by Kamehameha the Great in 1790-91 and was closely associated with one of the key incidents in his rise to power as supreme ruler of all
the Hawaiian group. This event, the sacrifice of the rival King Keoua in the summer of 1791, gave Kamehameha control over the entire Island of Hawaii. This temple is an impressive structure. Built of piled stones and measuring about 224 by 100 feet, it is walled on the ends and on the landward side, the seaward side being open and terraced. It commands a superb view and overlooks Mailekini Heiau, another large temple situated down the slope a short distance to the northeast.

Puukohola Heiau has been restored and is in excellent condition. The site is opened to the public.

27. Hailekini Heiau (HASS-50-HA-E5-2). Located adjacent to the Puukohola Heiau, along State Highway 26, near Kawaihae, and on the north-west coast of the Island of Hawaii. This is a high-walled, court-type heiau. The temple is in good condition and is open to the public.

B. Island of Kauai


This heiau is of the open platform type and consists of three platforms, 112 by 138 feet, 50 feet by 93 feet, and 57 by 70 feet, respectively. The platforms stand four to eight feet high, depending on the slope of the land. The outer walls are well built of selected pieces of local stone, carefully piled. Two of the platforms are excellently paved. On the river-side of the highest platform is a walled pit, 63 feet long, 8 feet wide, and 6 feet deep.

The site is difficult to reach. One must drive to the Kehaha Sugar Company's spray mixing plant and then walk about half a mile through dense
lantana and keawe. Although covered with vegetation, the ruin is extremely impressive in size and is in good condition. (HASS-50-KA-C3-1).

29. Kauluapaoa Heiau and Lohiau's Dancing Shrine. Located at Kee, near Haena, in the Hamalei District, at end of State Highway 56 on the north coast of the Island of Kauai the Kauluapaoa Heiau (HASS-50-KA-D5-1) is a unenclosed stone platform temple measuring approximately 100 by 60 feet. Above it is located Lohiau's Dancing Shrine (HASS-50-KA-D-5-2) a hulea heiau, sacred to Laka; the latter temple is a stone dancing platform. Both sites are now heavily overgrown with vines and plants and are in a fair state of preservation.

30. Mualolo-Kai Beach area. Located at the mouth of the Mualolo Valley, on the Na Pali coast, at the northwest side of the Island of Kauai. This bluff shelter was excavated by the Bernice P. Bishop Museum and from here was obtained a carbon date of 1389 A.D. The only access to the site is by boat. (HASS-50-KA-D1-1).

31. Haeleele Bluff Shelter and Polihale Heiau. Located near Polihale, about one-quarter of a mile north of the mouth of Haaleele Valley, in the Waimea District, on the northwest coast of the Island of Kauai. The Polihale heiau is a four-terraced, stone-platform type temple situated on the seashore at the base of the Polihale cliff. The two lower terraces have been badly damaged by the 1960 tidal wave. The two upper terraces, built up the side of a steep talus slope, measure 13 by 89 feet and 21 by 89 feet, and are still in fairly good shape, although covered with dirt washed down from the cliff above.
The Haeleele Bluff Shelter (HASS-50-KA-C5-1) is located on the south side of the mouth of Haeleele Valley. Here the Bishop Museum obtained a carbon date of 1239 A.D.

32. Menehune Irrigation Ditch. (HASS-50-KA-C3-2). Located on the west bank of the Waimea River, up stream from the village of Waimea, on the southwest side of the Island of Kauai. (See 1779 print following page 41). Of all the prehistoric native Hawaiian irrigation systems, only the Menehune Ditch "has any record preserved of its construction and that is a myth". According to the well-known legend, the ancient king, Ola, wishing to bring water to the taro patches of his people at Waimea, consulted his Kahuna (priest, magician), Pi, who went to the mountains and summoned the Menehune. After cutting the stones at Mokihana, the Menehune built the entire water system, including dam, ditch, and a stone and clay causeway about 24 feet high around the face of a cliff, in one night.

Today all that can be seen of this ancient great water-course is a wall of carefully cut stone blocks about two feet high and extending along the edge of the modern highway for about 200 feet. The site is marked by a bronze tablet erected by the Territorial Superintendent of Public Works in 1925. Although doubts have been expressed as to the antiquity of this unique work, the evidence seems overwhelming that it was constructed before Cook's visit; and thus it is the best and most unusual example of native dressed stonework in the islands.

33. Niu Malu (Alekoko or Apakofo) Fishpond (HASS-50-KA-A4-1). Located two miles south of Lihue, in the Lihue District, on the southeast coast of the Island of Kauai. The fishpond, situated near the mouth of the Huleia
River, consists principally of a stone-faced, dirt wall that runs for over 900 yards and cuts off a large bend in the river for use as a fishpond. Cement walls and iron gates have been introduced, but it is still used for fish and ducks today. The pond is in excellent condition.

34. Puu o Hewo Holua (Toboggan) Slide. (HASS-50-KA-B4-1). Located one mile north of the town of Koloa, in a sugar cane field on Puu o Hewo hill, in the Koloa District, and the south side of the Island of Kauai. Two lines crossing just below the middle of Puu o Hewo hill, on the Koloa side, extend to the top of the high knoll. These depressions in the earth are about five-feet across and at the most eight inches deep. There are no traces of stone paving. It is believed that this is an old Houla side, that, in the absence of rough rocks, the ancient Hawaiian used Ti leaves moistened from the sea, to slide downhill on. The slide is still used in this manner today. If correct, this is the only holua slide of this type remaining in the Hawaiian Islands today.

C. Island of Lanai

35. Kaena-iki Heiau. Located at the extreme northwest end of the Island of Lanai, on severely eroded gulches. Access is only by boat or by combination of a long and difficult jeep ride and a long hike on foot. This is a stone platform heiau, measuring 55 by 152 feet and is one of the two largest heiau foundations in Lanai. The heiau lies parallel and close to the edge of a bluff at the head of the bay, and on the north bank of the stream (HASS-50-LA-A9-1).
36. **Lopa Heiaus.** Located at the eastern side of the Island of Lanai, on the north bank of Lopa Valley, at Kikoa Point. This site is accessible only by means of boat or a long and difficult jeep ride. The site contains two heiaus, situated one hundred yards apart, with a stone platform half way between them. The larger platform of the two heiaus, is known as Kahaleaka and is 55 by 150 feet in size (HASS-50-LA-A1-2).

37. **Puu Makani Heiau.** Located on the top of Puu Makani Hill, overlooking the Palawai Basin, near the southern end of the Island of Lanai. This is a court-type heiau, situated on the summit of a 1500 foot hill; it differs from the coastal heiaus in its location far from a village, in the absence of any walls on the platform, and in the attachment of very small platforms to the large one. The site and the hill have been badly damaged by quarrying for boulders. The ruins are in poor condition. (HASS-50-LA-A2-1).

38. **Palawai Basin or Luahiwa Petroglyphs.** This site is located to the east of State Highway 441, in the Palawai Basin, along the boundary line between the Kealiaupuni and Kealiakapu Land Divisions. These petroglyphs, while not forming the largest group on Lanai, exhibit nearly every form found on the island. They are inscribed on 20 boulders scattered over an area of three acres and are in fairly good condition. (HASS-50-LA-A4-1).

D. **Island of Maui**

39.-40. **Pihana and Halekii Heiaus.** (HASS-50-MA-C9-1 and 2). Located on the northeastern outskirts of Wailuku, on the north side of the central "neck" portion of the Island of Maui. Halekii, or House of Images, was an ancient temple of worship, believed to have been in use during the reign of
Kahekili, 1765-1794. The heiau, once adorned by rows of images, measures 300 by 150 feet. It was a terraced court-type platform temple and contained an oracle tower and houses for the priest and king. Its terraces rose to a height of from 12 to 30 feet, and were constructed of water-worn boulders and paved with beach pebbles. Halekii Heiau was partially reconstructed in 1958, under the supervision of Dr. Kenneth P. Emory and Dr. Charles W. Rowe.

**Pihana Heiau** is located about 300 feet southwest of the Halekii temple. Pihana, constructed by Kahekili about 1779, measures 300 by 120 feet and was a stone terraced heiau, similar in construction to Halekii. Pihana was a sacrificial temple. Both ruins are in excellent condition and have been marked with a state historical plaque.

41. **Kaiwaloa Heiau** (HASS-50-MA-D2-1). Located .6 miles inland from State Highway 30 at Olowalu, in the Lahaina District, on the southwest side of the Island of Maui. This site is a well-preserved massive court-type heiau, constructed of large rounded boulders. This was a war temple in which human sacrifices were offered.

42. **Olowalu Petroglyphs**. (HASS-50-MA-D2-2). Located on a cliff, one-half mile north of Olowalu Village, along State Highway 30, in the Lahaina District, on the Island of Maui. These figures, interesting but not extensive, are carved on dense slabs of basalt lava and are believed to be between two and three hundred years old. They have been badly vandalized.

43. **Kahikinui Settlement Site** (HASS-50-MA-A33 thru A38). About six square miles extending from Makee to Kamoamoa, in the Hana District, on the southeastern coast of the Island of Maui. This site, accessible only by
jeep, consists of one vast archeological area of village sites of ancient Hawaiians. The remains are in good condition.

44. La Perouse Bay Settlement Area (HASS-50-MA-B3-1). Located at the southern tip of the Island of Maui; the site is accessible by means of a gravel county road leading southeast from Makena. This ancient Hawaiian village settlement contains house platforms, walks, and pens, which are in good condition.

45. Hale o Lono Heiau (HASS-50-MA-A15). Located near Hamoa Beach, Hana District, on the island of Maui. This is a platform-type temple set on a low hill overlooking Hamoa Beach. A smaller heiau is also located immediately in front of the hill heiau.

E. Island of Molokai

46. Naimukaluaua (Rain Oven) Heiau (HASS-50-MO-B3-10). Located about 1.2 miles northeast of town of Kualapuu, on State Highway 48, in the Naiwa Land Division, and on north side of the Island of Molokai. This small heiau is 25 by 18 feet in size. According to tradition, this heiau, "the ovens to bake the rain," was built for a woman who had difficulty in drying her tapa because of the heavy rainfall in the area. In various compartments fires were made, when the raindrops fell on the fire the priest would cover them with flat rocks, baking the water, and thus dispelling the rain. This temple, a ceremonial structure, is the only rain heiau in the Hawaiian Islands and is in an excellent state of preservation.

47.-48. Mana and Papa Heiaus (HASS-50-MO-Al-1 and 2). Located in Halawa Valley, at Halawa, on the northeast tip of the Island of Molokai. This valley was heavily populated during ancient times and contains 11
heiaus. Two of the most prominent of these platform-type temples are Papa heiau, situated at the base of the north valley wall almost immediately on the sea, and Mana heiau, located slightly above the base of the north wall and about .3 miles inland (west) from the shore. The valley floor contains many taro patches, a few of which are still in use, and many house platforms, and stone walls. Most of these ruins are in splendid condition and are located in a lightly populated area that possesses great natural beauty.

49. The Fort or Puu Honua (City of Refuge) at Kawela (HASS-50-MO-A17). Located near the south coast of the Island of Molokai, about five miles east of Kaunakakai, in the Kawela Land Division. This stone enclosure with high stone walls was evidently used as a fort and also possibly as a puuhonua (place of refuge), although there is considerable doubt on this latter use. Due to the steepness of the gulch walls on each side, the only feasible approach is up the "nose" of the ridge. Remains of shelters evidently mark sentinel stations, from which sling stones and rolled boulders could be used to repel enemies.

50. Kalanikaula Kukui Sacred Grove (HASS-50-MO-A2-1). Located on the Keopukaloa Land Division, at elevation 750 feet on a ridge of Puu o Hoku, on the south coast of the Island of Molokai, near its southwest tip. This sacred grove of Kukui trees is said to have been named for, or to have been planted by, a powerful priest named Kalanikaula and is reported to have also been a place of refuge.

51. Hua Maika (Kahua Maika) (Bowling Place)(HASS-50-MO-B2). Located on the Kalamaula Land Division, near Kauluwai, on the Island of Molokai. This hua maika course was employed by the Hawaiians as an alley for a game which resembled bowling.
52.-53. Moomomi Bluff Shelter and Ka-laina-wawae Petroglyphs (HASS-50-MO-B6-3 and 7). Located at Kaiehu Point, in the Kaluakoi District, at Moomomi Beach, on the north side of the Island of Molokai, near the western end. The Moomomi bluff shelter is the site of a native Hawaiian fishing settlement, long since deserted. The remains of several rock enclosures used for ti plant cultivation are found nearby. A carbon date of A.D. 1406 was obtained by the Bishop Museum from the site.

Nearby are found the Ka-laina-wawae footprints, apparently human, carved in the coral on the slopes of a ridge west of Moomomi, and overlooking Manolo Gulch. These are said to be in poor condition; a slab containing several of these footprints is preserved in the Bishop Museum.

54. Velioka Heiau (HASS-50-MO-A6). Located on the southeast coast of the Island of Molokai, near the village of Waialua, and north of State Highway 45. This large court-type temple, constructed in several tiers, is in a very poor state of preservation.

F. Island of Oahu

55. Keaiwa Heiau (HASS-50-OA-B1-1). Located in the Ewa Forest Reserve Park, on Aiea Heights, in the Ewa District of the Island of Oahu. This was a court-type heiau, measuring 100 by 160 feet and consisting of one terrace with low surrounding walls. It was used as an ancient medicinal temple.

56. Ulupo Heiau (HASS-50-OA-G6-1). Located 1½ miles south of Kailua, in the Koolaupoko District, on the west side of State Highway 61, and on the southeastern end of the Island of Oahu. This large terrace heiau, 140 feet wide and 30 feet high, is very well maintained by the State of Hawaii. The ruins are in excellent condition.
57. **Kupupolo Heiau** (HASS-50-0A-D6-1). Located near the town of Waimea in the Waialua District, about 300 feet east of State Highway 83, and on the northeastern coast of the Island of Oahu. This is a large walled platform type temple; constructed in two sections with a heavy low wall between the two platforms; it measures 266 by 110 feet. The ruins are in good condition, but are covered by a fairly heavy growth of vegetation.

58. **Kukaniloko Birthstone** (HASS-50-0A-E2-1). Located near Wahiawa, on a county road one mile west of State Highway 80, in the Wahiawa District, and in the interior of north central portion of Island of Oahu. This site consists of a rock, surrounded by a grove of trees, where Hawaiian queens came to give birth to their royal offspring.

59. **Kuliouou Shelter** (HASS-50-0A-A2-1). Located at Maunalua Bay, in Kuliouou Valley in the Honolulu District, and at the southeast end of the Island of Oahu. This rock shelter, excavated by the Bishop Museum in 1950, produced a carbon date of A.D. 1004, the first carbon date recorded for any Pacific Island. The site is a remnant of a lava tube that forms a spacious natural shelter.

60. **Mekaniolu Shelter** (HASS-50-0A-A2-2). Located on the ridge forming the east boundary of Kuliouou Valley and overlooking Maunalua Bay, in the Honolulu District, on the Island of Oahu. The cave, about 30 by 60 feet in size, was formed when erosion at the end of the ridge opened an old lava tube. Excavated by the Bishop Museum in 1950, the site has not yet been carbon dated, but from it came fine specimens of ancient tattooing needles of a type previously unknown.
61. **Heeia Fishpond** (HASS-50-OA-G4-1). Located at Heeia, in the Koolaupoko District, and on the north coast of the Island of Oahu. This fishpond, about 5000 feet long and enclosing about 88 acres, is now being filled in for real estate development purposes.

62. **Mokapu Fishponds** (HASS-50-OA-G5-1). Located in the Kameohe Marine Corps Air Station, on the Mokapu Peninsula, in the Koolaupoho District, on the north coast of the Island of Oahu. This group of six fishponds enclosing about 350 acres, are the largest and best preserved of all such ponds remaining in Oahu.

63. **Nuuanu Petroglyphs** (HASS-50-OA-A5-1). Located in Nuuanu Valley, in Nuuanu Memorial Park, Honolulu. These petroglyphs are carved on a bluff overlooking the left bank of the Nuuanu Stream and have been badly damaged by vandals, although now protected by iron grills. They are located in five different spots situated in the crevices of the cliff and are fairly difficult to reach and see.

64. **Kokohead Petroglyphs** (HASS-50-OA-Al-46). Located .6 miles north of Palea Point, Kokohead, along side State Highway 72 in the Honolulu District and on the southeastern tip of the Island of Oahu. These petroglyphs are carved along the face of a cliff and are nearly all gone, having been destroyed by vandals. Only one or two petroglyphs remain today.
SITES ALSO NOTED

A. Island of Hawaii

B. Island of Kauai
   3. Menehune Fishpond, Nawiliwili
   4. Kana-Iolouma Heiau, Poipu - believed to be a sports heiau.
   5. Puuka Pele (Pele's Hill) (Canoe Factory) Waimea District (HASS-50-KA-C

C. Island of Maui
   8. Kanakouila Heiau, Kipohulu - a luakini (sacrificial) temple.

D. Island of Molokai
   12. Heiau at Puuhakina (Makai), Kaluakoi, western end of island.

E. Island of Oahu.
   14. Kanea-Ki Heiau, Makaha Valley, western end of island (HASS-50-OA-C4-1)

Two main enclosed platforms with numerous terraces.
15. **Kamaile Heiau**, located on a ridge between Waianae and Makaha, western end of island (HASS-50-OA-C3-1). A single terrace temple, 60 by 13\(\frac{1}{4}\) feet in size.

16. **Ukanipo Heiau**, located on west coast of island near northwest tip, on Kahanahaiki Land Division, Wainae District. A small terrace heiau, about 93 by 40 feet and almost entirely gone (HASS-50-OA-05-1).


18. **Moanalua Petroglyphs Stone**, Kahalelauki, Moanalua Valley, (HASS-50-OA-A7-1), Honolulu District. A stone measuring 11 by 8.7 feet by 3 feet high, with 22 carvings and a **Konane** (checker) board.
APPENDIX I

CRITERIA FOR SELECTION OF SITES

The National Park Service has adopted the following criteria for selection of sites of exceptional value.

1. Structures or sites in which the broad cultural, political, economic, military, or social history of the Nation is best exemplified, and from which the visitor may grasp the larger patterns of our American heritage. Such sites are naturally the points or bases from which the broad aspects of prehistoric and historic American life can best be presented.

2. Structures or sites associated importantly with the lives of outstanding historic personages.

3. Structures or sites associated with important events which are symbolic of some great idea or ideal of the American people.

4. Structures which embody the distinguishing characteristics of an architectural type-specimen, exceptionally valuable for a study of a period style or method of construction; or a notable work of a master builder, designer, or architect whose individual genius reflected his age.

5. Archeological sites which have produced information of major scientific importance by revealing new cultures, or by shedding light upon periods of occupation over large areas of the United States. Such sites are those which have produced, or which may reasonably be expected to produce, data which have affected theories, concepts, and ideas to a major degree.

6. All historical and archeological sites and structures in order to meet the standards of exceptional importance should have integrity; that is, there should not be doubts as to whether it is the original site or building, original material or workmanship, and original location. Intangible elements of feeling and association, although difficult to describe, may also be factors in weighing the integrity of a site or structure.

7. Structures or sites of recent historical importance relating to events or persons within 50 years, will not, as a rule, be eligible for consideration.
ARCHEOLOGICAL SITES OF EXCEPTIONAL VALUE
IN THE HAWAIIAN ISLANDS

KEY
△ - SITES OF EXCEPTIONAL VALUE
Sites Recommended for Classification as Having Exceptional Value:

1. Wailua Complex of Heiaus, at the mouth of the Wailua River, on the eastern coast of the Island of Kauai. Located here are a City of Refuge, four important heiaus, royal birthstones, and a sacrificial rock. This series of heiaus and sacred sites form one of the most important complexes of archeological sites in the Hawaiian Islands; they cover a long period in Hawaiian prehistory and many aspects of Hawaiian aboriginal culture. Criteria 1, 4, 5, 6.

2. Puu o Nakua Heiau, near Wai'ma'i, north side of Island of Oahu. This is the largest heiau on Oahu, and is probably the most important single heiau on the Hawaiian Islands, and Oahu's greatest priests came from this district. Criteria 1, 4, 5, 6.

3. Huilua Fishpond, Kahana Bay, east coast of the Island of Oahu. This picturesque fishpond is one of the last surviving ponds on the island of Oahu. According to tradition, it was built by the menehunes for the raising and storing of fish. Criteria 4 & 6.

4. Kauleonanahoa (Nanahoa Stone) or Phallic Rock, on the north shore of the Island of Molokai. So far as is known, this is the only phallic stone in the islands worshiped by the ancient Hawaiians, and the stone is still employed for its original purpose. Criterion 6.

5. Hokukano - Ualapue Complex, along the south coast of the Island of Molokai, includes six significant heiaus and two fine fishponds. Taken together, they form one of the most important and impressive archeological exhibits in the Hawaiian Islands. Criteria 1, 4, 5, 6.

6. Kaunolu Village Site, southwest cape of the Island of Lanai. This was once a typical "vigorous" Hawaiian fishing community. Its ruins, which represent nearly all phases of Hawaiian culture, are extremely well preserved and make a most impressive and dramatic exhibit. Criteria 1, 2, 4, 5, 6.

7. Loaloa Heiau, southeast coast of Island of Maui, near Kaupo. This temple, believed to have been built by King Piilani, was the center and prime site of a culture complex around Kaupo, which includes Hawaiian village sites and other heiaus. Criteria 1, 4, 5, 6.

8. Mookini Heiau, northern tip of Island of Hawaii, near Upolu Point. This huge temple (one of Hawaii's largest) is a luakini (sacrificial) heiau. Traditional history states that this heiau was constructed in the 11th century by Paa o, a famous priest who came from Tahiti. King Kamehameha I's birthstone is located nearby. Criteria 1, 2, 4, 5, 6.
9. Puako Petroglyphs, on the west coast of the Island of Hawaii, at Puako. One of the prime petroglyph sites in the Islands in extent and interest, these ancient petroglyphs form a spectacular exhibit containing a most varied subject matter. Criteria 4, 5, & 6.

10. Anaehoomalu Petroglyphs, on the west coast of the Island of Hawaii, five miles south of Puako. This site is the most extensive, varied, and finest example of petroglyph art in the entire Hawaiian Archipelago. Criteria 5, & 6.

11. Mauna Kea Adz Quarry, on the top of Mauna Kea, Island of Hawaii, is the largest basalt adze quarry in the world. Here the ancient Hawaiians came to obtain the material needed for their stone age culture. Criteria 5 & 6.

12. Honokohau Settlement, on the west coast of the Island of Hawaii, just north of Kailua. This settlement preserves virtually intact sites dating from prehistoric times to as recent as 1920. Included are 50 ancient house sites, four heiaus, three fishponds, and a holua slide. Criteria 1, 4, 5, 6.

13. Keauhou Holua Slide, Keauhou, west coast of the Island of Hawaii. This site is the best preserved and largest toboggan slide in the State. The slide served as the site of the "Olympic Games" of the Hawaiian people. Criteria 1, 4, 5, 6.

14. South Point Complex, the extreme southern point of the Island of Hawaii. This area contains a group of sites that document the longest and most complete record of human occupation in the Hawaiian Islands. Included is the sand dune site which produced the earliest carbon 14 date of 1244 A.D. for the State. Criteria 1, 4, 5, 6.
This site is "recommended for classification as possessing exceptional value (national significance) in commemorating and illustrating the history of the United States, and for Registered National Historic Landmark status."