

# *Spatial Similarities and Change in Hawaiian Architecture: The Expression of Ritual Offering and Kapu in Luakini Heiau, Residential Complexes, and Houses*



THEGN N. LADEFOGED

ARCHAEOLOGISTS HAVE LONG RECOGNIZED that architecture reflects cultural beliefs and practices. Pearson and Richards (1994*a*, 1994*b*) review a number of classic anthropological and archaeological case studies (e.g., Lévi-Strauss 1973; Douglas 1966; Cunningham 1973; Bourdieu 1973; Glassie 1975, 1987; and see Carsten and Hugh-Jones 1995 for additional anthropological examples) and note that a range of beliefs can be reflected in architecture, including notions of “gender and sex pollution, kinship and moiety patterning, linking of the cosmos and the earth, and segregation of individuals by age and rank and status” (Pearson and Richards 1994*a*:28). Cultural beliefs are often reflected in diverse spatial contexts, and it is not uncommon for the layout of houses to mirror the organization of settlements or burials (Hodder 1994:75; Kus and Raharijaona 1990; Pearson and Richards 1994*b*:41–54). Architecture, however, goes beyond merely reflecting cultural beliefs and provides physical settings for social interaction (Hiller and Hanson 1984; Samson 1990). As such, architecture is instrumental in processes of socialization where behavior is directed in particular ways and cultural beliefs are reinforced. Because of the recursive relationship between architectural forms and beliefs, architecture is an ideal means for propagating and sustaining ideological beliefs (Miller and Tilly 1984; Spriggs 1984). The use of optical illusions in gardens (Leone 1988:252) and house design (Marcus et al. 1987) has been identified as a way in which specific architectural forms reaffirm ideological systems.

Some of the most compelling studies of architecture have focused on Austronesian houses (for some recent examples, see the papers in Fox 1993, and Waterson 1990, 1995). In an early analysis of a Fijian house, Sahlins (1976:32–47) suggested that cultural categories are reflected in architectural forms. He notes that the house is a “model of” and a “model for” society insofar as “the house functions as the medium by which a system of culture is realized as an order of action”

Thegn N. Ladefoged is a lecturer in the Department of Anthropology of the University of Auckland, Auckland, New Zealand.

*Asian Perspectives*, Vol. 37, No. 1, © 1998 by University of Hawai'i Press.

(Sahlins 1976:36). Similarly, Sutton (1990:201–202) interprets the spatial organization of pre-contact Maori residential complexes in terms of sacred and profane. Kirch's (1996) recent analysis of Tikopian spatial organization observes similar reflections of fundamental structuring principles such as the binary oppositions of seaward:landward :: male:female :: senior:junior, which are displayed in a range of architectural phenomena from houses to residential spaces to religious features. The reiteration of the structuring principles at different scales in these three spatial phenomena is evidence of their fundamental nature.

In Hawai'i, the adherence to cultural organizational principles based on ritual offering and *kapu* produced spatial similarities in several different types of architecture. In the following analysis, archaeological data, ethnohistorical accounts, and historical literature are used to document similarities in the use of space and the morphology of *luakini heiau*, household clusters, and residential houses. The Hawaiian belief system that structured these organizational practices metamorphosed following European contact. These ideological changes can be identified in how various segments of Hawaiian society selectively incorporated European notions of domestic space into their residential architecture. This transition exemplifies the important role that particular beliefs had on the organizing principles of space.

#### SIMILARITIES IN THE SPATIAL ORGANIZATION OF PRE-CONTACT HAWAIIAN ARCHITECTURAL FEATURES

*Luakini heiau* were temples used by Hawaiian kings and their delegates for royal rituals (Valeri 1985:179; Kolb 1991). Depending upon the context, rituals associated with *luakini heiau* were performed to promote either war or peace (Kolb 1991; Valeri 1985:180). The morphology of *luakini heiau* was undoubtedly diverse (Cachola-Abad 1996), but Valeri's (1985:239) review of the ethnohistorical literature suggests a generalized model (Fig. 1). The inner court or *kahua* of the *luakini heiau* was often surrounded by a rectangular stone enclosure (*pā*). Malo (1951:162), writing around 1840, states that there was a small house just inside the entrance of the enclosure. Opposite this entrance house was the *hale mana*, where priests and chiefs resided during rituals and where small images and cult objects were kept. In the middle of the court was the *hale pahu*, or drum house. In the 1860s Kamakau (1976:138) wrote that "The *hale pahu*, drum house, was the house where the *kahuna* did their work." There was a *hale umu*, or oven house, which according to Kamakau (1976:138) was "where the consecrated work was performed for the offerings." In addition, there was a *hale wai ea*, where, according to Valeri (1985:240), "holy water" was kept "in a bowl made from a human skull." The *lananu'u mamao*, or oracle tower, was at the far end of the *heiau* with the *lele*, or altar, in front of it. Valeri (1985:240–243) suggests that the *lele* was either "an elevated wooden structure" such as a scaffolding, or alternatively "a simple pole on which offerings (were) hung."

Hawaiian household clusters generally "consisted of a group of thatched structures and associated activity areas" (Kirch 1985:251) (Figs. 2 and 3). These residential clusters have been identified from both archaeological and documentary data. Ideally, the household cluster or *kauhale* of a chief contained several distinct houses. These might include a sleeping house (*hale moa*); a men's house

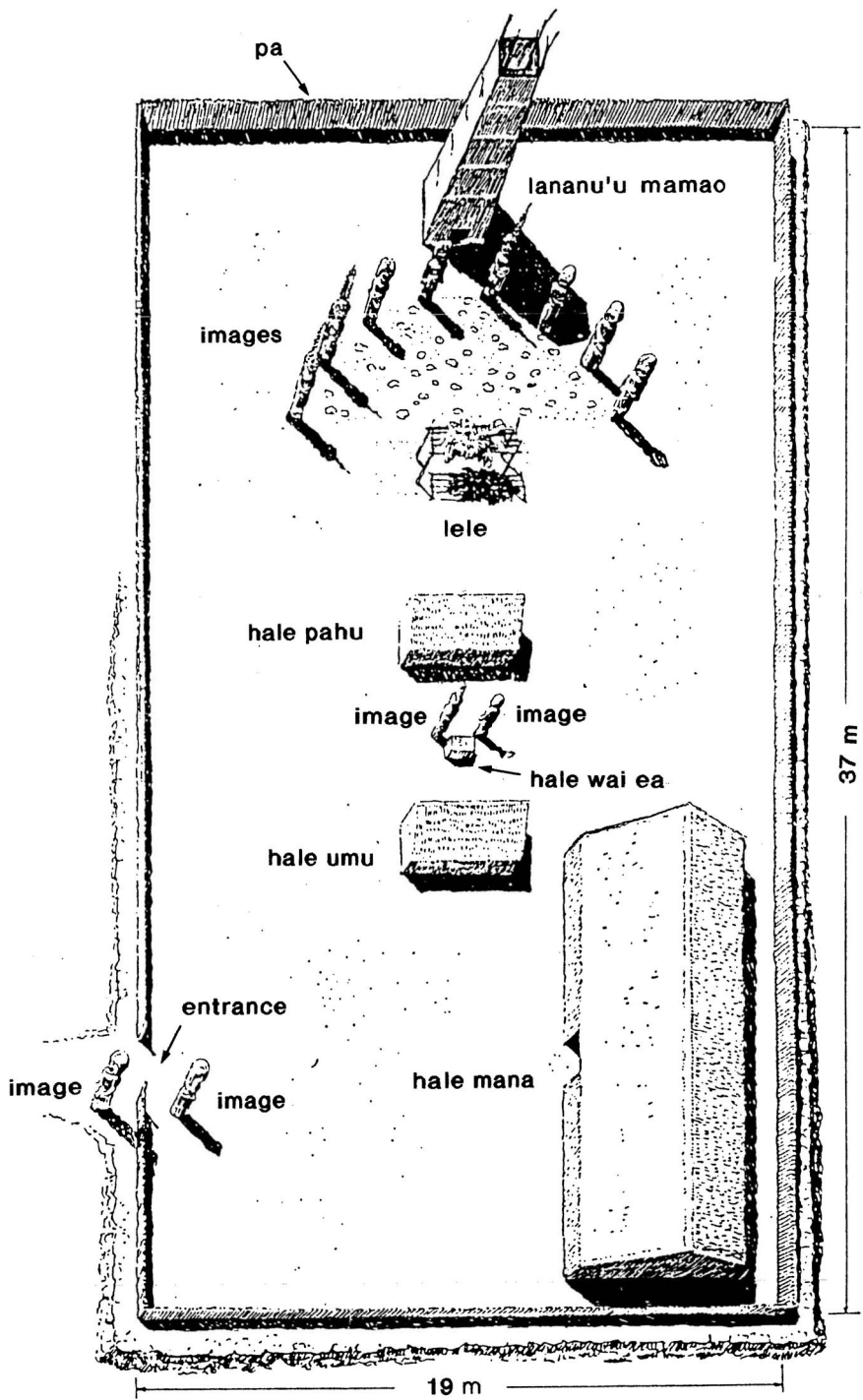


Fig. 1. A generalized model of a *luakini heiau* based on Ii (1959:34) and Valeri (1985:241).

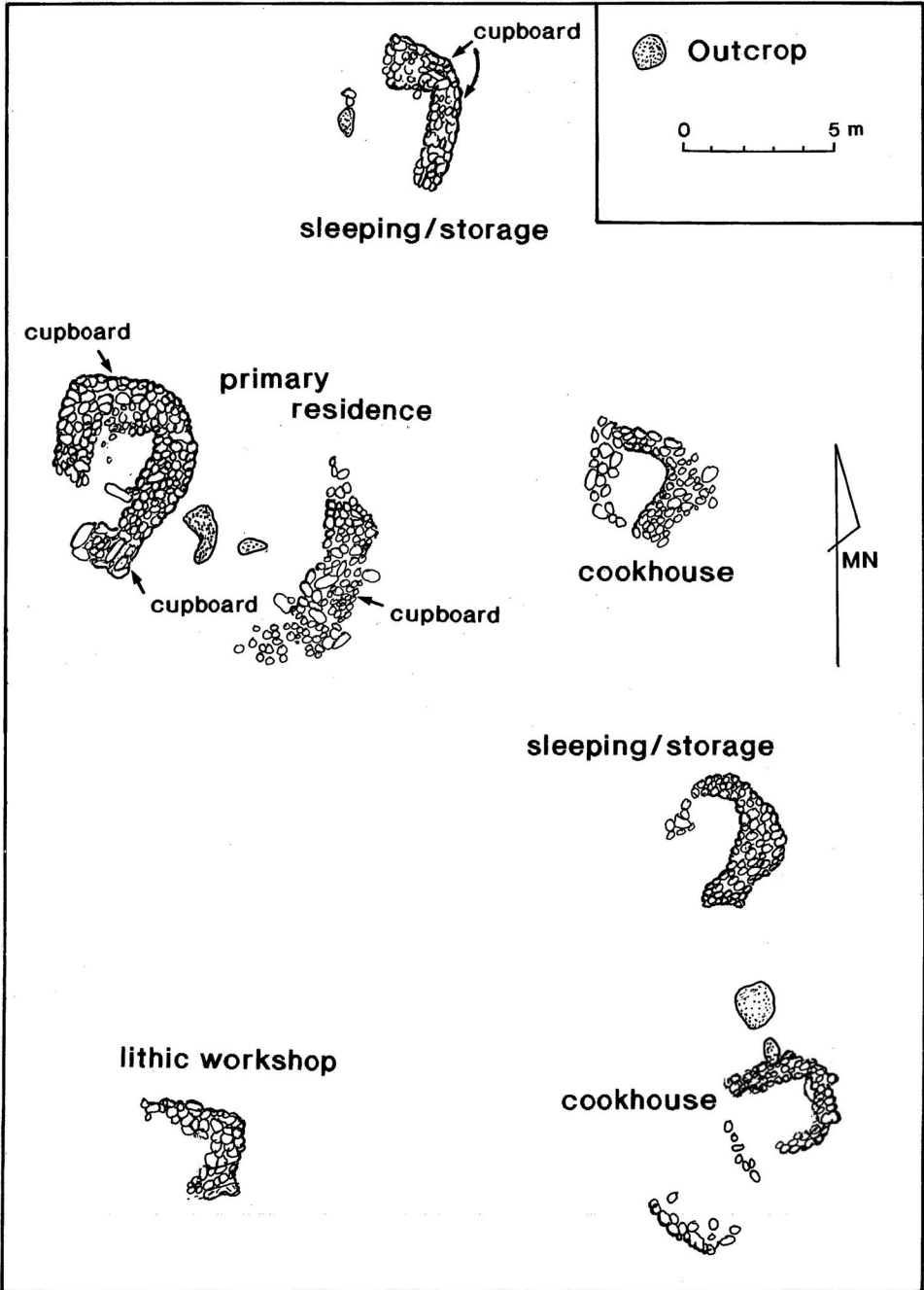


Fig. 2. A Hawaiian residential complex (after Weisler and Kirch 1985: 145).

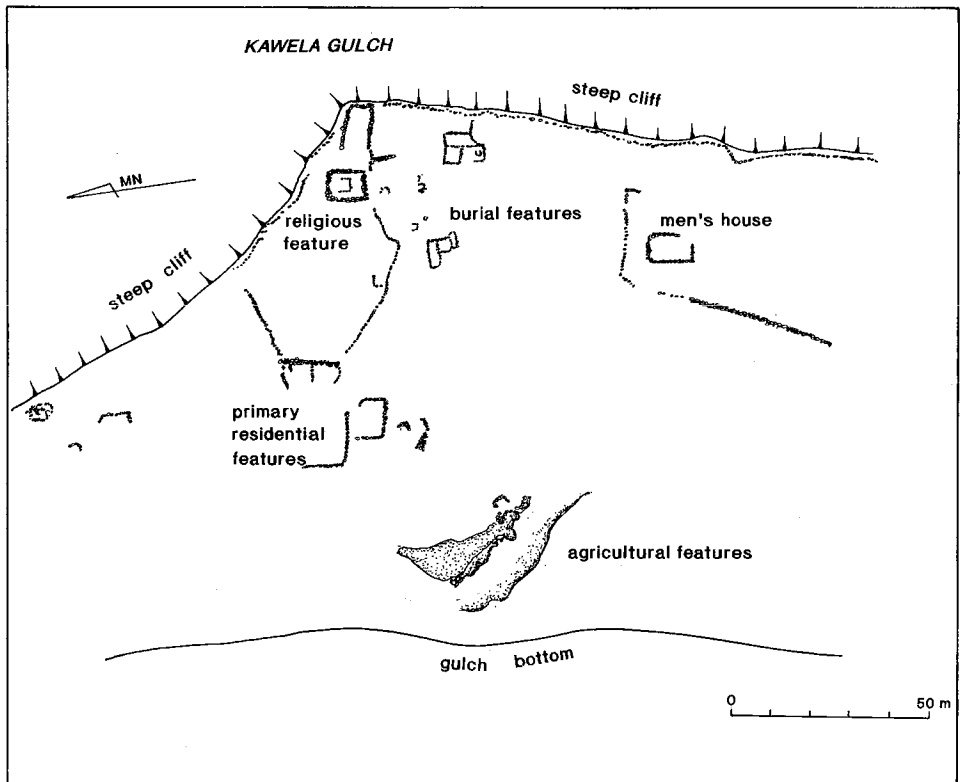


Fig. 3. A high-status Hawaiian residential complex (after Weisler and Kirch 1985 : 146).

(*mua*) used by male family members for eating, praying, and as a place to provide offerings to the gods; an eating house for women and children (*hale 'aina*); cooking houses (*hale kāhumu*) and earth ovens (*imu*); crop storage huts (*hale papa'a*); huts for making mats (*hale ulana*) or tapa (*hale kuku*); a menstrual hut (*hale pe'a*) somewhat removed from the main complex; and if it was a coastal household cluster, perhaps a canoe house (*halau*) (Handy and Puku'i 1972 : 7-17; Kamakau 1976 : 96; Kirch 1992 : 175-176; Malo 1951 : 122, 126; Weisler and Kirch 1985 : 141).

The surgeon on Cook's 1779 expedition, David Samwell (1967 : 1162-1164), describes the "priest" Ka'imiki'i's *kauhale* at Keesi near Kealakekua on the island of Hawai'i. The structure was not a *heiau*, but it was the priest's living area, a distinction made by Samwell in his writings. Samwell (1967 : 1163) notes:

This house of Kaimekee was inclosed in all with a kind of Palisades, and before it was a Court; at one end of this was a curious sort of a building which they told us was dedicated to Orono; it has something the appearance of a triumphal arch, it is about six yards high, two in length and about half a yard broad, being not wide enough to admit a Man in between the front and back of it; it is inclosed in with the bunches of the Cocoa nut tree and shreds of Cloth, and on the top are several pieces fluttering like ragged pendants; before it on a pole stuck in the ground hung a small dead pig, and round the pole a heap of Cocoa nuts and Plantains as an offering to the God Orono.

In 1808, Campbell (1967 : 91) described King Kamehameha's *kauhale* in Honolulu.

The kings [sic.] residence, [was] built close upon the shore, and surrounded by a palisade upon the land side, . . . The palace consisted merely of a range of huts, viz. the kings [sic.] eating house, his sleeping house, the queens [sic.] house, a store, powdermagazine, and guard-house, with a few huts for the attendants, all constructed after the fashion of the country. At a short distance were two extensive store-houses, built of stone, which contained the European articles belonging to the king.

Several archaeological projects have established the existence of household clusters (Clark 1987; Kirch 1992; Ladefoged et al. 1987; Rosendahl 1972; Weisler and Kirch 1985). Weisler and Kirch's (1985) research at Kawela on Moloka'i provides a detailed description of the household cluster. They define:

a late prehistoric residential complex minimally as incorporating: (1) a primary residence, usually the largest structure of the complex, and often including such architectural components as upright stones, a slab-lined hearth, and storage cupboards; (2) several smaller, ancillary shelters or short wall segments, one of which was used for cooking, others for craft activities or storage; and (3) minor horticultural features appearing as stone-faced earthen terraces and stone clearance mounds, or simply as soil areas cleared of stone. (Weisler and Kirch 1985 : 142–147)

They (1985 : 142) also note that "residential complexes often incorporate a sacred or ritual component in the form of a residential shrine." These shrines vary from simple upright stones to formal walled enclosures. Weisler and Kirch's (1985 : 145–148) comparison of commoner households with those of lesser chiefs shows the variation between the two and the similarities that resulted from adherence to underlying organizational principles. The spatial organization of two household clusters shown in Figures 2 and 3 are derived from Weisler and Kirch (1985). The figures depict household clusters comprised of distinct architectural features and activity areas.

Malo (1951 : 29) described the *hale moa* as the "common dwelling house," the place for "a man to sleep in with his wife and children" (Malo 1951 : 122). Captain Cook (1967 : 283) noted that the exterior was "not unlike oblong corn stacks." According to Samwell (1967 : 1176), the houses were generally "small, being not above 6 or 7 yards long, 4 wide, some few are 12 to 15 long and 7–8 wide, they may be about as high as they are long; the entrance into them is just like the mouth of an oven and very little bigger so that everyone is obliged to creep into them." Based on Webber's drawings and Ledyard's (1963 : 128) description, the door was located along one of the sides of the house and not at either end. Writing in 1779, Corporal Ledyard (1963 : 128) noted that "the inside of the house is without partition." The *hale moa* was a single room, with no internal walls. Despite the lack of physical partitions, the space within the house was subdivided according to a culturally defined set of rules. Samwell notes that (1967 : 1176) the "floors were covered with mats," and there was "little furniture of any kind." In 1818, Corney (1896 : 91) wrote "At one end was built a large bed-place, stuffed with dry grass, and covered neatly with mats." Campbell (1967 : 130–131) wrote in 1808 that the sleeping platform was "raised about three feet from the ground, which extends the whole breadth of the apartment." In contrast, Kamakau (1976 : 104), who wrote approximately fifty years later, noted that "their sleeping places were at the center of the house." He goes on to say that "back of the sleeping place a shelf, *haka*, was built from the back row or posts to the front row; on it were laid tapa and bundles. It was called *olo'ewa*, *olowalu*,

*holopapa, olohaka, or ho'oleinamoe.*" In 1779, Samwell (1967:1176) had also noted a shelf and wrote "In one corner of the house are two long pieces of wood stuck in the ground with a board between them forming a shelf; on this they put their bowls and other household furniture." He also noted a pole with hanging calabashes on it. Reverend Ellis (1979:228) referred to it as a "*haka*," and said it was "often made with care, and carved," and was "used to hang their calabashes, and other vessels containing food." The final component mentioned as part of the interior of houses is a hearth or fire pit. According to Samwell (1967:1163) the fire was "in the middle of the floor in a square place inclosed with thick pieces of wood."

The ethnohistorical accounts suggest that there was variation in morphology of *hale moa*, but in general it was a rectangular, single-roomed building (Fig. 4). The door was a low entrance through one side of the structure. The area just inside the door was for sitting and working. In some houses there was a hearth near the entrance. Some accounts note the presence of a raised sleeping platform, with a shelf possibly behind or to the side. Near the shelf there may have been a pole on which to hang objects.

#### DISCUSSION

A comparison of the spatial organization of *luakini heiau*, household clusters, and houses reveals that they were constructed according to a common set of structuring principles (Table 1). The door of the house can be considered analogous to the enclosure entrance of the household cluster, and the further elaborated entrance house of the *luakini heiau*. The sleeping area of the *hale moa* is analogous to the *hale moa* of the household cluster, and the *hale mana* of the *heiau*. In all three spaces, private and personal activities took place. The shelf of the house corresponds to the store house of the household cluster, and to a portion of the *hale mana* of the *heiau*. Material items were kept in all three areas. The sitting and work area of the house corresponds to the open court of the household cluster, and the *hale pahu* of the *heiau*. Production activities took place in each of these areas. The hearth of the house might correspond to the cook house of the household cluster, and the *hale umu* of the *heiau*. In each of these materials are transformed. The oracle tower described by Samwell (1967:1163) in Ka'imiki'i's household cluster and those in the *heiau* do not have a correspondent in the house reconstructed by the ethnohistorical literature. Some archaeological houses do, however, have an upright stone in a corner (Weisler and Kirch 1985:148). As both the uprights and the oracle towers were used to communicate with the gods, either personal *'aumakua* or higher deities, it is possible that these structures correspond. Finally, the *haka* pole in the house possibly functioned in a similar manner to some areas of the *mua* in the household cluster, and the *lele* altar of the *luakini heiau*, that is, as a place to provide offerings.

Corresponding areas within *luakini heiau*, household clusters, and houses can be identified. To a certain extent, there are similarities in the relative spatial positions of the elements found in each of the three architectural phenomena. For example, entrances to houses and *luakini heiau* are often found on the long side of the enclosure instead of the short end, and there is correspondence between Malo's (1951:162) somewhat ambiguous statement that the focal point of *heiau* is in the east and Weisler and Kirch's (1985:154) comment that religious features within

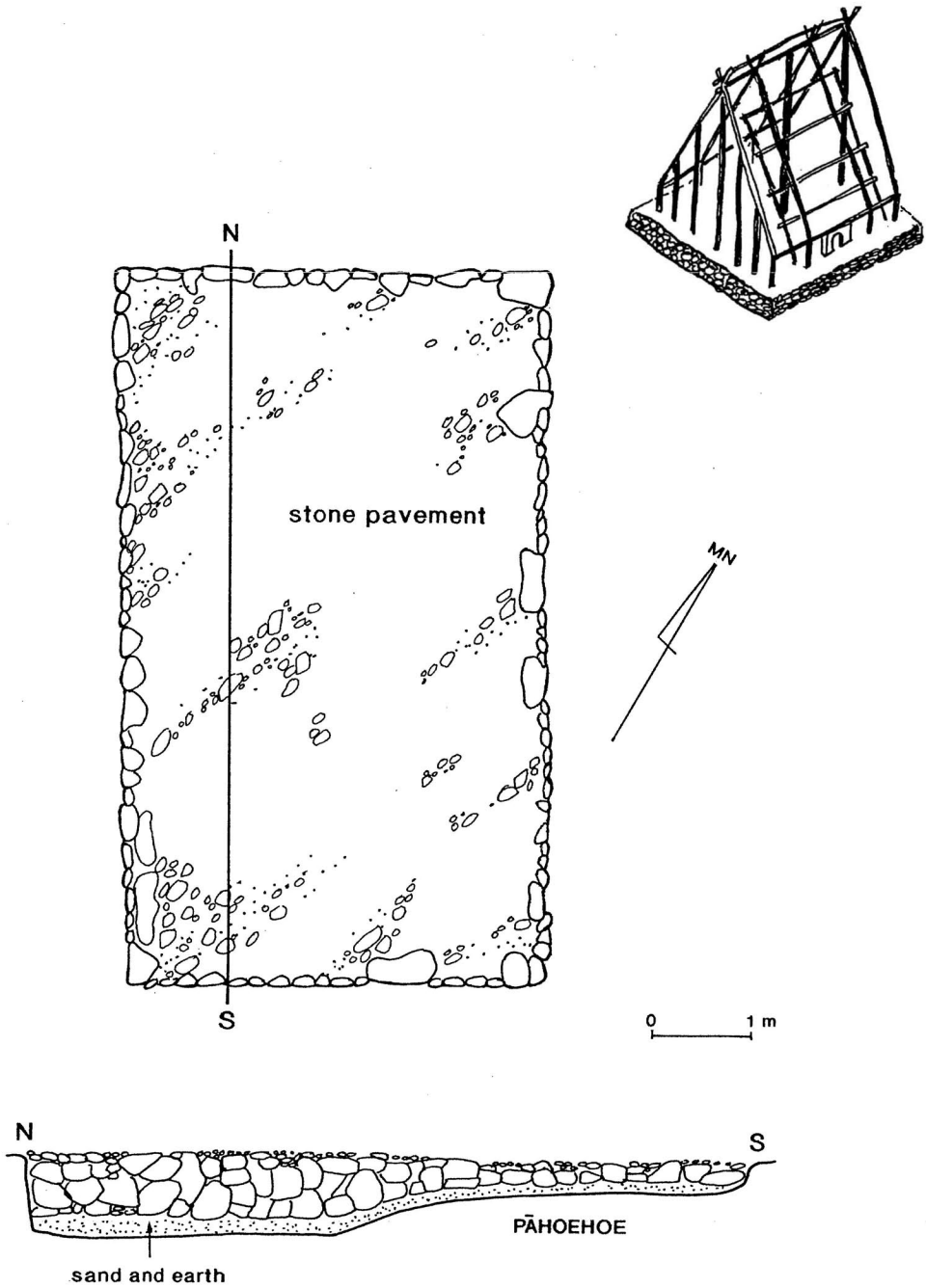


Fig. 4. An archaeological example of a *hale moa* (after Tuohy 1987 : 106) and a generalized model of *hale moa* (after Apple 1971 : frontispiece).



TABLE I. SIMILARITIES BETWEEN *Hale Moa*, RESIDENTIAL COMPLEXES, AND *Luakini Heiau*

FUNCTION	<i>Hale moa</i>	RESIDENTIAL COMPLEX	<i>Luakini heiau</i>
Passage	Door	Enclosure entrance	Entrance house
Private and personal activities	Sleeping area	<i>Hale moa</i>	<i>Hale mana</i>
Storage	Shelf	Storehouse	Portion of <i>hale mana</i>
Production activities	Sitting area	Open court	<i>Hale pahu</i>
Transformation	Hearth	Cook house	<i>Hale umu</i>
Deity communication	Upright	Oracle tower	Oracle tower
Ritual offerings	<i>Haka</i>	<i>Mua</i>	<i>Lele</i>

household complexes were found on the east side. While provocative, the current evidence for consistent relative spatial positions of comparable areas within these architectural units is not conclusive. What is apparent, however, is that there were comparable activity areas within *luakini heiau*, household clusters, and houses. Furthermore, within each of the architectural phenomena these activities were spatially discrete. This pattern was produced by at least two aspects of the pre-Contact belief system. The first is the practice of ritual sacrifice, and the second is adherence to the *kapu* system.

Valeri (1985 : 38) proposed that a sacrifice was a "ritual action, during which an offering made up of animal, vegetable, or artificial components having symbolic values is consecrated to one or several deities, on certain occasions with certain ends in view." Hawaiian sacrificial rituals were thus symbolic actions which affected the relationship between a person or group and a deity (Valeri 1985 : 70-71). This ritual interaction could take place at many different levels, from individual to societal. The components of houses, household clusters, and *luakini heiau* reflect three of the many possible levels of this ritual interaction.

On the individual or family level the *hale moa* was probably not the primary location of ritual interaction. The ethnohistorical literature indicates that the primary religious feature in a residential complex was the *hale mua*, or men's house, or in exceptional circumstances such as a priest's residential complex possibly some sort of oracle tower. The lack of detailed ethnohistorical accounts makes examination of the spatial organization of *hale mua* extremely difficult. Despite the fact that the *hale noa* was not the primary ritual setting on the individual or family level, it does exhibit characteristics of ritual offering.

Kamakau (1976 : 104) notes that people slept with "the protection of Kukeoloewa along the back wall. A reference to Kukeoloewa, the land holding god of the Maui chiefs, having first been a house rack, *olo'eva*." The calabashes and food hanging from the *haka* described in the ethnohistorical accounts might have been offerings. In addition, Brigham (1908 : 92) noted that "under these [ridge poles] was buried the victim anciently offered to the gods, although some authorities claim one of the corner posts for this honor." An archaeological manifestation of this practice may have been documented during the excavation of a residential feature on the island of Lāna'i (Ladefoged and Graves 1988 : 7). In the corner of a house was a dark stain with an *uhu* (*Scaridae*) fish mouth plate and a pig (*Sus scrofa*) mandible, possibly remains of a ritual offering. The accounts indicate that sacrifices and ritual offerings took place in the *hale moa*. The rituals associated with the

individual homes might be viewed as a means for the social reproduction of individuals and their immediate families.

The rituals and beliefs surrounding the household cluster of a chief could be viewed as socially reproducing his lineage and those under his influence (Valeri 1985:303). Malo (1951:191) states that "... the king was to be compared to a house. A house indeed stands of itself, but its *pā*, or stockade (which surrounds the household cluster), is its defense. So it was with the king; the chiefs below him and the common people throughout the whole country were his defense." When a household cluster was constructed for a chief's European visitor in 1818 it was "built by four different villages, each taking a house to build and furnish" (Corney 1896:90). These rituals and beliefs were conducted by kings and chiefs in association with household clusters. The actions might have been intended to strengthen the chief's control over his subjects and land holdings.

Finally, some rites and offerings associated with the *luakini heiau* can be viewed as the ritual reproduction of society as a whole (Valeri 1985:348). Valeri (1985:303) proposes that "it is inside the *mana* house (of the *luakini heiau*) that the highest levels of social relations are reproduced." For example, during the "great sacrifice" of a *luakini heiau* ritual there is a "hierarchical communion" which "makes it possible to reproduce society as a hierarchy of approximations to what the gods stand for" (Valeri 1985:318). By providing offerings during the rituals of *luakini heiau* the social structure is replicated and reproduced.

The adherence to the *kapu* system is the second aspect of pre-Contact Hawaiian culture expressed in the morphology of *luakini heiau*, household clusters, and houses. The *kapu* system specified what was considered sacred as opposed to what was common or profane (Levin 1968:412; Shore 1989). According to Davenport (1969:9) "the *kapu* embraced the prescriptive rules of avoidance and etiquette relating to sacred objects and structure, to members of the inferior class, and between men and women." The performative aspect of maintaining *mana* necessitated the adherence to the *kapu* system by avoiding pollution from profane objects and contexts (Shore 1989).

Pre-Contact *luakini heiau* contained several spatially distinct houses or structures within the *heiau* enclosure. Similarly, the pre-Contact Hawaiian household cluster or *kauhale* was composed of houses that were physically separate. Adherence to the *kapu* system prescribed that different activities take place in spatially distinct areas. Ideally, separate houses were built for specific uses. Internally, individual houses did not have physical partitions because only a limited range of sanctioned activities would have been conducted there.

Hawaiian culture was constantly being reinterpreted and transformed through time. Before European contact the replication of culture was based on antecedent Hawaiian forms and structures. During the initial stages of regular European contact the Hawaiians radically reinterpreted and transformed their culture. Part of this transformation was the abandonment of the *kapu* system in 1819. A material correlate of this religious transformation can be seen in architectural features. *Luakini heiau* were no longer used for religious ceremonies. Many temples were dismantled or destroyed, leaving only the foundation stones. Houses and household clusters continued to exist, but their morphology changed. Ladefoged (Ladefoged 1987, 1991; Ladefoged et al. 1987) outlines the changes in residential structures in Hawai'i Volcanoes National Park, Sweeney (1992) considers architectural change at Lapakahi, Hawai'i, and Kirch (1992:174-177) provides a detailed description

of the changes in the Anahulu Valley on O‘ahu. All of these studies document the change from discrete activity areas within pre-Contact residential complexes to contiguous activity areas within historic houses.

The ethnohistorical literature sheds further light on the process of architectural change. Campbell’s (1967 : 91) description in 1808 of King Kamehameha’s Honolulu residence, which was quoted earlier, illustrates how Hawaiians were selectively integrating different aspects of European material culture. Kamehameha collected portable European artifacts and kept them in a European style store house. He also incorporated the symbolism of European weapons. However, Kamehameha continued to use a Hawaiian-style household cluster with a Hawaiian-style house. He could use the European artifacts, the weapons, and the store house without dramatically reinterpreting his own cosmology. To incorporate European notions of housing would have required a modification of the Hawaiian cosmology with respect to the *kapu* system and notions of purity and pollution, a step Kamehameha was apparently not willing to take.

Campbell also described the house of Kamehameha’s European advisor, Mr. Davies. Campbell (1967 : 98) wrote:

(Mr. Davies’) house was distinguished from those of the natives only by the addition of a shed in front to keep off the sun; His wealth consisting of mats, feathers, and cloth, the produce of the island, and a large assortment of European articles, which . . . were contained in a large storehouse, built of stone, adjoining his dwelling.

The interior of the house was similar to the Hawaiian style, but the exterior had begun to change. The significant difference between Davies’ house and the indigenous Hawaiian house of Kamehameha was the addition of a lanai off the front.

The first ethnohistorical reference of an alternative interior house style is again of a European house. Corney (1896 : 91) described his house built in Honolulu in 1818:

Along each side were built sofas, stuffed and covered the same as the bed, to keep which out of sight there was a light partition. In front of the house was built a raini (lanai), or shed, covered with the branches of coconut trees and here also a sofa was built.

The description suggests that the main house was used for a wider range of activities, and the interior of the house was beginning to be physically subdivided to accommodate these different activities. Europeans, too, felt the need to spatially segregate their activities within the house, thus the partitions, but not according to the same cultural values as Hawaiians or in the same way. The house also contained a spatially contiguous lanai that might have been used for activities that Hawaiians would have thought profane, such as eating.

The first ethnohistorical account of a Hawaiian chief partitioning the interior of his house is found in Ellis’ book under the heading of “Improvements in dwellings.” Ellis (1979 : 227), who was in Hawai‘i during the early 1820s, wrote “within the last few years great improvements have been made in their houses. Karaimoku has erected in the island of Oahu, a stone house, sixty feet by thirty, three stories high, with a spacious cellar underneath. The inside of the house he has formed into apartments.”

In a footnote, Valeri (1985 : 364) points out that “in 1812 in Honolulu, there were 740 houses for 2,025 inhabitants, that is 2.7 inhabitants per house. . . . In Honolulu in 1822 only 550 houses were found for a population that was twice as

large as that of 1812 (4000 inhabitants).” This change probably reflects a decrease in the number of distinct houses used by any individual person, and therefore a corresponding demise of the household cluster. Handy and Pukui (1972 : 7) note a linguistic change that reflects this shift. They state “This word, *kauhale*, was used for a dwelling place until recent times when it changed to *ka hale*, the house, to fit modern residence.”

During the early stages of European contact people modified the morphology of their houses and household clusters. It is probable that after the *kapu* abolition the chiefs were quicker to incorporate western notions of domestic space than the commoners in more rural areas. The chiefs added windows and increased the size of doors, which opened the house for more public display of status-enhancing European goods. The lack of the necessity for maintaining spatial purity, and the desire to symbolically replicate European domestic space, led the chiefs to use their houses for multiple purposes and to partition the interior.

These architectural transformations reflected a shift in Hawaiian cosmology toward European cultural beliefs. However, the changes in architecture were more than symbolic. Hawaiians adopting European design may also have benefited economically. Individuals willing to modify their residences may also have been more amenable to European notions of commerce and production. The use of European architectural conventions would have distinguished those Hawaiians who were willing to substantially alter their lifestyles and engage in material commerce. These changes in architecture and economic opportunities would have occurred rapidly once the Hawaiian political economy was situated within a world system economy (Kirch 1992 : 174–175; Ladefoged 1993 : 122–127) largely controlled by Europeans and Americans. Kirch (1992 : 175) notes architectural changes and the proliferation of property or *kuleana* walls demarcating property boundaries after 1840.

#### CONCLUSION

Documentary and archaeological data indicate that there were similarities in the spatial organization of pre-Contact Hawaiian *luakini heiau*, household clusters, and houses. These similarities reflected a common set of organizational principles predicated upon notions of ritual offerings and the observance of the *kapu* system. After European contact and the dissolution of the *kapu* system, Hawaiian belief systems changed. These changes are evident in the destruction of *luakini heiau* and household clusters, and the transformation of domestic architecture. The spatially discrete activity areas of residential complexes that once reflected the adherence to the *kapu* system collapsed into contiguous living areas.

#### ACKNOWLEDGMENTS

I thank Sarina Pearson and Michael Graves for their comments, suggestions, and support. Roger Green, Douglas Sutton, Geoff Irwin, Melinda Allen, Kēhaunani Cachola-Abad, Blaze O’Connor, Alan Howard, and Terry Hunt also provided comments and suggestions, and engaged in discussions. I would like to thank Marshall Weisler and Patrick Kirch for their contributions to the subject and the inspiration for this paper. Joan Lawrence kindly drew the figures. The research was partially funded by a University of Auckland Research Committee grant.

## REFERENCES

- APPLE, R. A.  
1971 *The Hawaiian Thatched House*. San Francisco: United States Department of the Interior, National Park Service, Office of History and Historic Architecture Western Service Center.
- BOURDIEU, P.  
1973 The Berber house, in *Rules and Meanings*: 98–110, ed. M. Douglas. Harmondsworth: Penguin.
- BRIGHAM, W.  
1908 *The Ancient Hawaiian House*. Memoirs of the Bernice Pauahi Bishop Museum 2(3): 185–378. Honolulu: Bishop Museum.
- CACHOLA-ABAD, C. K.  
1996 The significance of heiau diversity in site evaluations. *Cultural Resource Management* 8: 11–16.
- CAMPBELL, A.  
1967 *A Voyage Round the World, from 1806 to 1812*. . . . Facsimile reproduction of the third American edition, 1822. Honolulu: University of Hawai'i Press.
- CARSTEN, J., AND S. HUGH-JONES  
1995 *About the House: Lévi-Strauss and Beyond*. Cambridge: Cambridge University Press.
- CLARK, J. T.  
1987 Waimea-Kawaihae, A Leeward Hawaii Settlement System. Ph.D. diss. Department of Anthropology, University of Illinois at Urbana-Champaign.
- CLERKE, J.  
1967 Journal, in *The Journals of Captain James Cook on His Voyages of Discovery, Vol. 3: The Voyage of the Resolution and Discovery, 1776–1780*, Parts 1 and 2, ed. John C. Beaglehole. Cambridge: Cambridge University Press.
- COOK, J.  
1967 Journal, in *The Journals of Captain James Cook on His Voyages of Discovery, Vol. 3: The Voyage of the Resolution and Discovery, 1776–1780*, Parts 1 and 2, ed. John C. Beaglehole. Cambridge: Cambridge University Press.
- CORNEY, P.  
1986 *Early Voyages in the Northern Pacific, 1813–1818*. Fairfield, Washington: Galleon Press.
- CUNNINGHAM, C. E.  
1973 Order in the Atoni house, in *Right and Left: Essays on Dual Symbolic Classification*: x, ed. R. Needham. Chicago: University of Chicago Press.
- DAVENPORT, W.  
1969 The Hawaiian cultural revolution: Some political and economic considerations, *American Anthropologist* 71: 1–20.
- DOUGLAS, M.  
1966 *Purity and Danger: An Analysis of the Concepts of Pollution and Taboo*. London: Routledge and Kegan Paul.
- ELLIS, W.  
1979 *Journal of William Ellis: Narrative of a Tour of Hawaii*. . . . Tokyo: Charles E. Tuttle Company.
- GLASSIE, H.  
1975 *Folk Housing in Middle Virginia*. Knoxville: University of Tennessee Press.  
1987 Vernacular architecture and society, in *Mirror and Metaphor: Material and Social Constructions of Reality*: 229–245, ed. D. W. Ingersoll and G. Bronitsky. Lanham, Maryland: University Press of America.
- HANDY, E.S.C., AND M. K. PUKUI  
1972 *The Polynesian Family System in Ka-'u, Hawaii*. Tokyo: Charles E. Tuttle.
- HILLIER, B., AND J. HANSON  
1984 *The Social Logic of Space*. Cambridge: Cambridge University Press.
- HODDER, IAN  
1994 Architecture and meaning: The example of Neolithic houses and tombs, in *Architecture and Order: Approaches to Social Space*: 73–86, ed. M. P. Pearson and C. Richards. New York: Routledge.

- II, J. P.  
1959 *Fragments of Hawaiian history*. B. P. Bishop Museum Special Publication 70. Honolulu: Bishop Museum.
- KAMAKAU, S. M.  
1976 *The Works of the People of Old: Na Hana a Ka Po'e Kahiko*, trans. Mary Kawena Pukui, ed. Dorothy B. Barrere. B. P. Bishop Museum Special Publication 61. Honolulu: Bishop Museum.
- KIRCH, P. V.  
1985 *Feathered Gods and Fishhooks: An Introduction to Hawaiian Archaeology and Prehistory*. Honolulu: University of Hawai'i Press.  
1992 *Anahulu: The Anthropology of History in the Kingdom of Hawaii, Volume Two: The Archaeology of History*. Chicago: The University of Chicago Press.  
1996 Tikopia social space revisited. In *Oceanic Culture History: Essays in Honour of Roger Green: 257–274*, ed. J. Davidson, G. Irwin, F. Leach, A. Pawley, and D. Brown. Dunedin: New Zealand Journal of Archaeology.
- KOLB, M. J.  
1991 Social Power, Chiefly Authority, and Ceremonial Architecture in an Island Polity, Maui, Hawaii. Ph.D. diss. Department of Anthropology, University of California at Los Angeles. Ann Arbor: University Microfilms.
- KUS, S., AND V. RAHARIJAONA  
1990 Domestic space and the tenacity of tradition among some Bestileo of Madagascar, in *Domestic Architecture and the Use of Space: An Interdisciplinary Cross-Cultural Study*: x, ed. S. Kent. Cambridge: Cambridge University Press.
- LADEFOGED, T. N.  
1987 Settlement Pattern Analysis and Relational Data Bases: An Archaeological Study in Hawai'i Volcanoes National Park. M. A. thesis. Department of Anthropology, University of Hawai'i, Honolulu.  
1991 Hawaiian architectural transformations during the early historic era. *Asian Perspectives* 30(1): 57–69.  
1993 Hawaiian Dryland Agricultural Intensification and the Pacific Economy. *Pacific Studies* 16(2): 119–131.
- LADEFOGED, T. N., AND M. W. GRAVES  
1988 Report of the 1987 University of Hawai'i Archaeological Field School on the Island of Lana'i. Unpublished reported. Submitted to Castle & Cooke Incorporated, Honolulu, Hawaii.
- LADEFOGED, T. N., G. F. SOMERS, AND M. M. LANE-HAMASAKI  
1987 *A Settlement Pattern Analysis of a Portion of Hawaii Volcanoes National Park: Archaeology at Hawaii Volcanoes National Park*. Western Archaeological and Conservation Center Publications in Anthropology No. 44. Tucson: National Park Service, U.S. Department of the Interior.
- LEDYARD, J.  
1963 *A Journal of Captain Cook's Last Voyage to the Pacific Ocean . . . Performed in the Years 1776, 1777, 1778, and 1779*. Reprint. Ed. J. K. Munford. Corvallis: Oregon State University Press.
- LEONE, M. P.  
1988 The georgian order as the order of merchant capitalism in Annapolis, Maryland, in *The Recovery of Meaning: 235–261*, ed. M. P. Leone and P. B. Potter. Blue Ridge Summit: Smithsonian Institution Press.
- LEVIN, S. S.  
1968 The overthrow of the kapu system in Hawaii. *Journal of the Polynesian Society* 77: 402–430.
- LÉVI-STRAUSS, C.  
1973 *Tristes tropiques*. London: Cape.
- MALO, D.  
1951 *Hawaiian Antiquities*, second edition, trans. N. B. Emerson. B. P. Bishop Museum Special Publication 2. Honolulu: Bishop Museum.
- MARCUS, C. C., C. FRANCIS, AND C. MEUNIER  
1987 Mixed messages in suburbia: Reading the suburban model home. *Places* 4(1): 24–37.

- MILLER, D., AND C. TILLEY  
1984 *Ideology, Power and Prehistory*. Cambridge University Press.
- PEARSON, M. P., AND C. RICHARDS  
1994a Ordering the world: Perceptions of architecture, space and time, in *Architecture and Order: Approaches to Social Space*: 1–37, ed. M. P. Pearson and C. Richards. New York: Routledge.  
1994b Architecture and order: Spatial representation and archaeology. In *Architecture and Order: Approaches to Social Space*: 38–72, ed. M. P. Pearson and C. Richards. New York: Routledge.
- ROSENDAHL, P. H.  
1972 Aboriginal Agriculture and Residence Patterns in Upland Lapakahi, Island of Hawaii. Ph.D. diss. Department of Anthropology, University of Hawai'i at Mānoa, Honolulu.
- SAHLINS, M.  
1976 *Culture and Practical Reason*. Chicago: University of Chicago Press.
- SAMSON, R.  
1990 Introduction, in *The Social Archaeology of Houses*, ed. R. Samson. Edinburgh: Edinburgh University Press.
- SAMWELL, D.  
1967 Journal, in *The Journals of Captain James Cook on His Voyages of Discovery, Vol. 3: The Voyage of the Resolution and Discovery, 1776–1780*, Parts 1 and 2, ed. John C. Beaglehole. Cambridge: Cambridge University Press.
- SPRIGGS, M., ED.  
1984 *Marxist Perspectives in Archaeology*. Cambridge: Cambridge University Press.
- SUTTON, D. G.  
1990 Conclusion: Interpretation and implications, in *The Archaeology of the Kainga: A Study of Precontact Maori Undefended Settlement at Pouerua, Northland, New Zealand*: 183–208, ed. D. G. Sutton. Auckland: Auckland University Press.
- SWEENEY, M.  
1992 Settlement pattern change in Hawai'i: Testing a model for the cultural response to population collapse. *Asian Perspectives* 31(1): 39–56.
- TUOHY, D. R.  
1987 Salvage Excavations at City of Refuge National Historical Park, Honaunau, Kona, Hawai'i. In *Archaeological Excavations at Pu'uhoonua o Honaunau National Historical Park, Honaunau, Kona, Hawai'i*, by L. J. Soehren and D. P. Tuohy, pp. 65–221. Department of Anthropology Report Series 87-2. Honolulu: Bishop Museum.
- VALERI, V.  
1985 *Kingship and Sacrifice: Ritual and Society in Ancient Hawaii*, trans. Paula Wissing. Chicago: University of Chicago Press.
- WEISLER, M., AND P. V. KIRCH  
1985 The structure of settlement space in a Polynesian chiefdom: Kawela, Molokai, Hawaiian Islands. *New Zealand Journal of Archaeology* 7: 129–158.

## ABSTRACT

Pre-Contact Hawaiian architecture reflected the cultural beliefs associated with ritual offering and adherence to the *kapu* system. Similarities in morphology and the use of space were evident in a range of architectural phenomena, from *luakini heiau*, to residential complexes, to houses. Interaction between Hawaiian and European cultures in the early nineteenth century began to de-emphasize the importance of spatial segregation associated with *kapu*. Architectural structures and the activities that took place in them began to undergo a fundamental change. These changes destroyed the structural parallels that had once occurred between religious and residential architecture. KEYWORDS: Hawaiian archaeology and ethnohistory, architecture, structural anthropology.