

CONSIDERATION OF SITE TYPES

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The following overview considers Kaua'i archaeological sites in terms of form and function. Hommon (1970a, 1970b) began a list of morphological site types in Hawai'i, partly with the intention to separate observable form from interpreted function, and a similar approach is advocated here. Some sites are prominent stonework monuments, and others are modest aggregations of discarded tools and food refuse. Some sites were places of important social and political events, and others yield insight into everyday life.

Archaeological sites are an essential unit of analysis for archaeology, yet sites are defined in many different ways that are often incompatible with one another (Dunnell 1992). In the context of resource management, sites need to be defined by their location and boundaries. The term "site" cannot be rejected, but it can be refined.

Bennett (1931:10-55, 90-94) identified several site types in Kaua'i, although his scheme did not always distinguish form and function. Bennett's (1931:10-55) overview identified: 1) house foundations and sites; 2) pens for pigs or perhaps for planting areas; 3) walks and paths; 4) walls; 5) fishing shelters; 6) wells and springs; 7) agricultural terraces; 8) irrigation ditches; 9) fishponds; 10) salt pans; 11) burial places; 12) *heiau* (traditional Hawaiian religious sites); 13) fortifications; 14) *hōlua* (mountainside sledding runs); and 15) petroglyphs.

Site surveys and inventories in Kaua'i and elsewhere in the State are directed by the Hawai'i State Historic Preservation Division (SHPD) to define sites by the location and boundaries of surface architectural remains. Dye (2004:127-129) has exposed the inadequacy of this perspective. Plainly, constraining sites to surface architecture all but ensures documentation of only the most recent archaeological evidence on the landscape. Subsurface deposits remain unknown or misinterpreted. The full sequence of human activity and human-environment relations cannot be addressed simply by identifying surface ruins.

Most liberally, a site is an area that contains evidence of past human activity, but this definition could apply to almost every place on earth. However, some places are clearly denser than others with archaeological evidence (Ebert 1992).

FORM

Traditional Kaua'i archaeological sites include architectural remains, modified natural features, and cultural deposits. Potentially, all of these forms can be in either surface or subsurface settings, although modified natural features are very rarely in subsurface context.

Architectural Remains

Naturally, structural ruins in archaeological sites are but remnants of what once existed. As Bennett (1931:10) noted:

Because the material is perishable the Hawaiian grass house leaves little but stone foundations and collections of stones and shells as evidence of dwelling sites. As not all of the grass houses were paved or marked with stone, many of the sites are lost forever.

Given the ruinous state of abandoned structures, Bennett (1931:10-12) suggested seven forms of abandoned house sites in Kaua'i: 1) cleared, flat spaces; 2) stone-outlined areas; 3) platforms; 4) terraces; 5) walled or enclosed areas; 6) terraces in multiple steps or divisions; and 7) complexes or compounds of the aforementioned forms.

The most common architectural remains include terraces, platforms, mounds, walls, and depressions (Table 1). Each of these structural types can be described in more detail by overall dimensions, building materials, and construction technique.

Table 1. Common morphological types of architectural remains.

Form	Description
Terrace	Level area, raised on downslope side, flush with ground on upslope side
Platform	Level area, raised on all sides
Mound	Pile of material, mounded in section view
Wall	Linear arrangement of material, length exceeds both width and height
Depression	Excavated area, could be circular pit, elongate ditch, or other form

Stonework and earthwork constructions in Kaua'i are primarily of dry-stacked stone masonry, but earthen material is used in some settings and circumstances. Stone construction is typically either core-filled or multi-stacked (Figure 1). In core-filling, the outer edges of the stonework construction consist of well placed stones usually of cobble to boulder size, and the interior fill consists of more loosely organized and usually smaller stones. In multi-stacking, no difference is noted between edges and interior fill of a structure. For earthen building materials, these construction techniques do not apply.

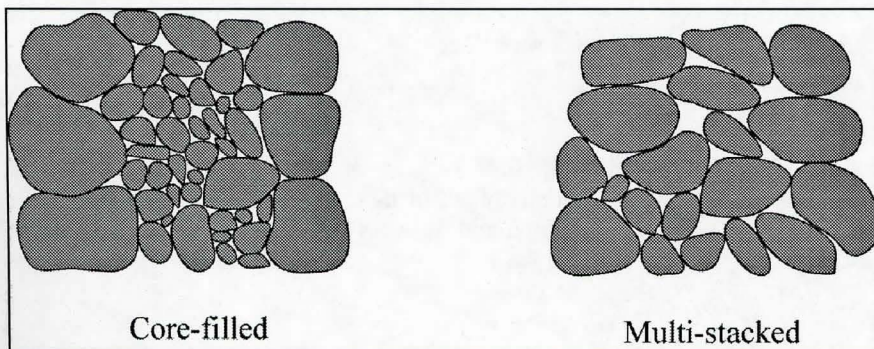


Figure 1. Examples of core-filled and multi-stacked stonework construction.



Figure 2. Section of Kikīaola (the Menehune Ditch).

Perhaps the most famous stonework construction in Kaua'i is Kikīaola (more commonly known as the Menehune Ditch), one of the very few examples of cut-stone masonry in pre-Contact Hawaiian sites (Figure 2). It is a wall of cut stone blocks, positioned at the base of a steep cliff and parallel with the Waimea River. Between the line of stones and the cliff, a ditch acts as a channel to bring fresh water farther downslope. The ends of the stones were cut, presumably by stone implements, so that they could be fitted very tightly. Although natural (uncut) stones can be fitted quite closely, stone-cutting can achieve better results. Nonetheless, stone-cutting was evidently an extreme rarity.

Modified Natural Features

Modified natural features include both physically altered features and those modified conceptually. Petroglyphs are the most clearly altered natural features, involving artificial working of a natural rock exposure (Figure 3). Also, caves and rockshelters were often occupied as temporary shelters and sometimes used for other special activities. Naturally occurring springs and other resources are sometimes modified with stone enclosures or other constructions, although the natural features themselves are not affected.

Many sites were important for their environmental setting, whether or not physical modifications may be present. At the juncture of the rocky cliffs of Nā Pali and the vast sandy beach of Mānā, Polihale is regarded as a place where souls would depart from the world of the living (Figure 4). This context greatly enriches understanding of the very large Polihale Heiau in this setting.

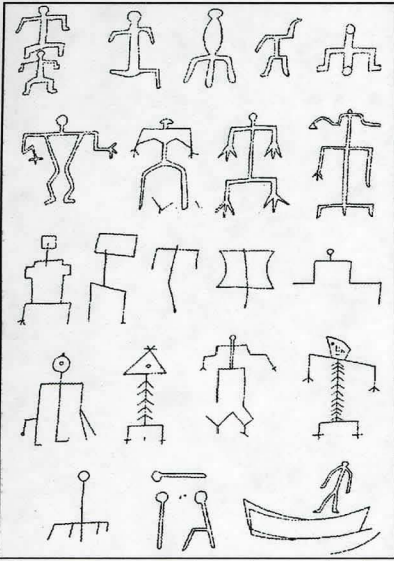


Figure 3. Examples of petroglyphs from various Kaua'i sites (from Bennett 1931:91).



Figure 4. Setting of Polihale Heiau as the juncture of Nā Pali and Kona Districts.



Figure 5. Puhi (Spouting Horn) on the Lāwa'i coast.

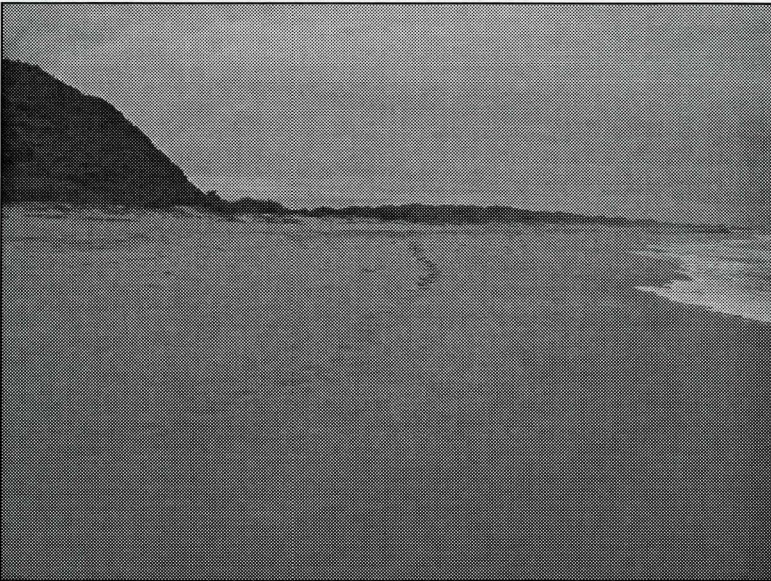


Figure 6. Keonekani o Nohili (Barking Sands) on the Mānā coast.

Also of concern are the many natural features that are given culturally important names and associated with special events and traditions. Knowledge of these traditions is essential when interpreting archaeological sites in the vicinity of these *wahi pana* ("storied places"). On a strip of rocky coast in Lāwa'i, a blowhole known as Puhī (but more commonly known as Spouting Horn) produces an eerie sound, said to be the roaring of an angry water-dragon (*mo'ō*) or perhaps the moaning of a brother grieving for his two lost sisters (Figure 5). On the north end of the Mānā Plain and just south of Polihale, the famous Keonekani o Nohīli ("barking sands of Nohīli") of this beach emit a bark-like sound when compressed beneath footsteps, said to be the barking of dogs that were buried alive beneath the sand (Figure 6).

Cultural Deposits

Cultural deposits are sometimes called "middens," although this term could imply food refuse and not necessarily artifacts. Abandoned occupation areas typically include at least one layer associated with a past living surface. Cultural deposits or middens may be scattered on the surface seen today, but more frequently they are buried under more recent deposits. They may or may not be associated with architectural remains or other features.

Cultural deposits are potentially the most informative site form or part of a site, in terms of providing evidence of site function and chronology. These deposits potentially reveal information about the manufacture and use of tools and ornaments, food procurement and consumption, and other topics. Also, cultural deposits typically contain datable materials, such as carbonized wood suitable for radiocarbon dating.

A subsurface cultural deposit site at the beach of Wainiha, on the north shore of Kaua'i, yielded evidence of several centuries of occupation in multiple subsurface layers (Figure 7). Detailed excavations (Carson 2004; see also Carson 2003) revealed a change in site function, from early residential function to later recurrent short-term access. Also, radiocarbon dating of multiple samples from different layers allowed constraint of the otherwise long-tailed radiocarbon date ranges.

FUNCTION

Although sites undoubtedly served multiple purposes simultaneously, material-based archaeological studies emphasize technological and economic functions. These most basic functions are often surmised from the form of sites and artifacts. However, social, political, ideological, aesthetic, and other functions may be recognized.

All societies need spaces for residence, crop cultivation, cooking, and essential labor. Most also include spaces for communal events, religious practices, and other activities. In an island setting such as Kaua'i, fishing shelters and fishing shrines may be expected, and artificial fishponds are also known. Other expected sites are for repeated short-term access in variable resource zones apart from long-term residences. Still other considerations are trails, recreational areas, and raw material quarries.

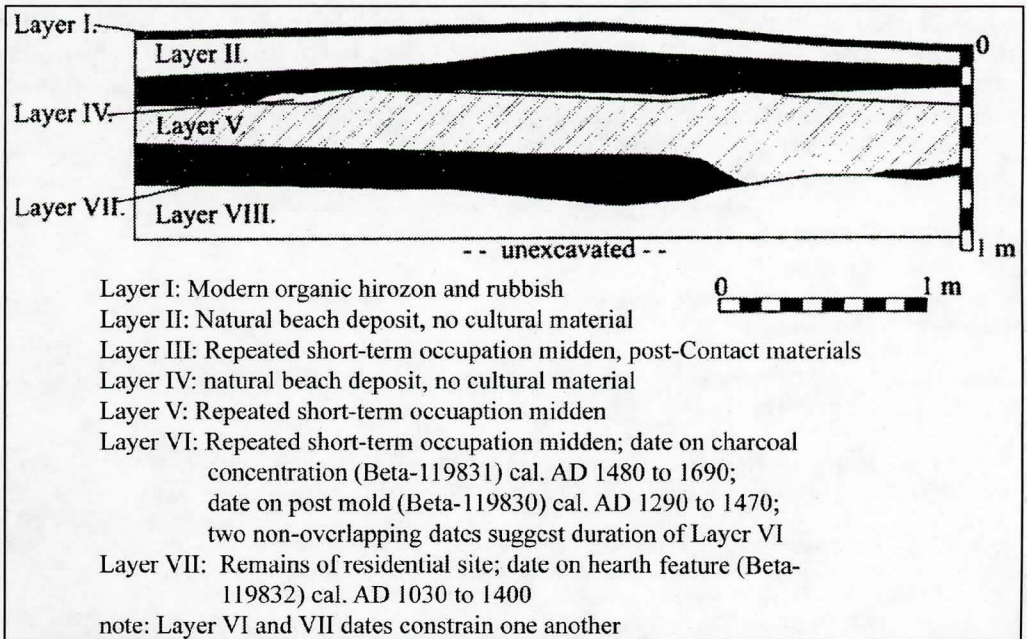


Figure 7. Stratigraphy and dating of cultural midden deposits at the beach of Wainiha (data from Carson 2004; see also Carson 2003).

Green (1967, 1970, 1986, 1993) proposed a core group of domestic and community features, shared by all Polynesian societies. The domestic features refer to the elements of a single household, such as a dwelling house, cooking area, and possibly a canoe shed. The community features are those used by groups beyond the scope of a single household, such as religious shrines, community guest houses, and public meeting places.

In addition to the basic distinction between domestic and community scales, more precise functional site types have been proposed, including men's houses, women's houses, temporary shelters, pathways, burial monuments, refuge caves, basalt tool quarries, workshops, agricultural fields, and other site types (for overviews, see Clark 1987:193-244; Cordy 1981; Green 1980:50-70; Soehren 1980).

No list of site functional types can be adequate for all eventualities and for all research questions, but a potentially useful approach considers that every site serves at least seven functions: 1) technology; 2) economics; 3) social organization; 4) politics; 5) ideology; 6) aesthetics; and 7) communication (Carson 2005). Sites of course vary in the ways they fulfill these functions, and some variation or evolution may be noted over time. Researchers may investigate the variable ways to fulfill these functions, in relation to changing demands for these functions.

Whatever function is proposed for a site, an appropriate theory and an adequate testing procedure must be devised and implemented. Although ethnographic and historical

sources suggest a number of site functional types, uncritical acceptance of these essentially ethnographic types is rarely justifiable (Graves and Erkelens 1991). In the case of purported *tī* ovens (*imu kī*), analysis of technological and cultural performance characteristics proved helpful to diagnose which archaeological oven features may or may not belong to this ethnographically defined functional category (Carson 2002). Similar approaches are encouraged for other proposed functional categories.

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