Journal of Pacific Archaeology – Vol. 5 · No. 2 · 2014

– ARTICLE –

Household Archaeology and 'House Societies' in the Hawaiian Archipelago

Jennifer G. Kahn[1]

ABSTRACT

The house society model can serve as an important tool for testing models of increasing social complexity at the micro-scale in Polynesia. In this paper, I discuss the house society model in relation to household archaeology studies carried out in the Hawaiian archipelago. Hawaiian household archaeology studies commonly follow materialist approaches, which while touching upon ideational themes such as site proxemics, gender, or the *kapu* system (social proscriptions), typically privilege material data for establishing household wealth as a proxy for household rank and status. Given that the micro-scale level of the household allows for archaeologists to access traces of people's everyday lives, including features of social life such as domestic ritual, links to the ancestors, and cosmogony, more humanistic interpretations are possible. It is here that the strength of the house society model comes into play, as a heuristic device for modeling the social lives of houses and the people who lived, worked, slept, ate, and worshipped within and around them. I explore these themes through an analysis of household archaeology case studies in Hawai'i, including those from Kawela (Moloka'i), Kohala (Hawai'i), and Miloli'i (Kaua'i).

Keywords: household archaeology, house societies, Hawai'i, social status, micro-scale

INTRODUCTION: PATRICK KIRCH AND THE STUDY OF HOUSE SOCIETIES IN POLYNESIA

In their book entitled *Hawaiki*, Patrick Kirch and Roger Green (2001) set out to understand the congruence of history, phylogeny, and evolution. By doing so they developed a renewed appreciation for an historical anthropology, one that used controlled comparison of linguistic, ethnographic, and archaeological data to reconstruct the lifeways of and connections between prehistoric Polynesian cultures. Kirch and Green developed a triangulation method, whereby data from archaeology, ethnology, historical linguistics, and biological anthropology were assessed to develop historical reconstructions of the relationships among Polynesian societies. Their technique privileged the use of multiple lines of evidence for developing robust interpretations about variability in prehistoric Polynesia.

In reconstructing emic or cultural categories in Polynesia, Kirch and Green turned to the 'house society' model. This model, initially developed by Claude Lévi-Strauss (1979), focuses on the house as a social structure or corporate body. The house, as a primary social structure, holds a landed estate made up of material and immaterial wealth perpetuated through the transmission of names, goods, and privileges. The house society model encourages a focus on the architectonic manifestations of social organization. This includes the physical structures occupied by a social group, along with their estate (surrounding buildings and spaces), with special attention paid to their placement on the landscape. Lévi-Strauss included Indonesia, Melanesia, and Polynesia as among the areas where cultures were organized as *sociétés à maison* (Lévi-Strauss 1979: 45, 51). Numerous ethnographic case studies of Austronesian societies in Oceania illustrate the shared antiquity of house societies (Carsten and Hugh-Jones 1995; Fox 1993; Macdonald 1987; McKinnon 1991, 1995; Reuter 2002; Waterson 1990). This highlights the utility of the house society perspective for understanding variation in prehistoric residential sites in Polynesia, including those in Hawai'i, as they form the northeastern most limit of the Austronesian expansion.

The idea of the house as a type of social structure, or corporate body, holding an estate made up of material and immaterial wealth, and perpetuated through the transmissions of rights, names, goods, or privileges has many advantages for household archaeology. The conceptual framework closely links social organization to architectonic space (physical structures occupied by a social group, their estate, and the immediate landscape) and, as such, offers a critical tool for understanding how social relations shape archaeological patterning in and around prehistoric dwellings. Because the house estate is founded on mate-

1 College of William and Mary, Williamsburg, Virginia, VA 23185 USA

Corresponding author: jgkahn01@wm.edu

Submitted 13.12.2013, accepted 20.4.14

rial and immaterial wealth, the model grounds domestic relationships by emphasizing common investments in the house estate (Gillespie 2000). This allows for materiality in daily activities, agency, and social reproduction, rather than kinship, to be moved to the forefront when interpreting household remains. Because the theoretical framework relates social organization to architectonic space, it also offers much potential for archaeological interpretations of social differentiation, particularly its role in creating inter- and intra-household variation within the local community.

In their reconstruction of Ancestral Polynesian societies, Kirch and Green (2001: 203–205) discuss some critical features of sociétés à maison. They note that the concept of the house as both a social group and a physical structure or dwelling is found throughout Polynesia as a lexically marked, emic category. Second, both the physical house (dwelling structure) and the social unit occupying it have endurance and persistence over time. Specific social mechanisms for recruitment of members to the house ensure its continuity. Third, the house, as a social grouping, is a fixed-property holding unit and the house contains rights over its residential architecture and significant movable property (such as canoes, or fishing nets). Various rights, privileges, and titles pertain to the house, including ownership of specific ancestral genealogies, heirlooms, and founding myths.

The house is also a vehicle for the transmission of proper names, in association with the social group, the physical dwelling, and the estate. Finally, houses are often ranked relative to each other, in part due to an historical process of fission. In some Oceanic societies, differential ranking among houses is weakly developed and can be termed heterarchical, but in other cultures, such as that of the Society Islands and the Hawaiian Islands, it is quite pronounced and hierarchical. Thus, the house society model can serve as an important tool for testing models of increasing social complexity at the micro-scale in Polynesia.

Household Archaeology in Hawai'i: Investigating the Micro-Scale

That the house society perspective brought Patrick Kirch to focus once again on the micro-scale of households was no surprise. Indeed, in earlier works during the 1980s, such as *Feathered Gods and Fishhooks* (Kirch 1985), and his Kawela, Moloka'i study with Marshall Weisler (Weisler and Kirch 1985), Kirch turned to an analysis of Hawaiian household clusters or *kauhale*. In the 1960s and 1970s, regional scale settlement pattern studies in Hawai'i and Polynesia were often ill suited to the methodology required for an in-depth analysis of households (Van Gilder and Kirch 1997: 46, 49). During this period, research on households as 'building blocks' in regional settlement pattern studies applying large-scale archaeological survey to broad regions (e.g. Bellwood 1972; Clark and Herdrich 1993; Green *et al.* 1967; Green and Davidson 1969, 1974; Jennings and Holmer 1980; McCoy 1976) took a functional approach, attempting to identify the form and use of particular structures in residential groups (e.g. Cordy 1981; Jennings and Holmer 1980). These studies typically involved surface mapping or limited excavations of residential sites, a data collection strategy that that was not conducive to investigating inter- or intra-household variation. However, these pioneering studies were instrumental in outlining the material correlates of primary residences and their auxiliary structures through partial excavation of limited numbers of house structures. Such work laid the important groundwork for later micro-scale studies of household variability. For example, in Hawai'i, excavations completed as part of regional settlement survey research designs successfully identified the use of field shelters, rockshelters, and various alignments (C-shapes, L-shapes, box-shapes) as temporary field shelters and extended-use domestic sites (see discussion in Kirch 1985: 248–251).

Weisler and Kirch's (1985) study of the 'structure of settlement space' within households and communities at Kawela, Moloka'i, was a revolutionary departure from the strict functional approaches taken by earlier settlement pattern studies in Hawai'i. Their work was instrumental in advocating for the use of four complementary paradigms for analyzing Polynesian settlement patterns: environmental; social; economic and political; and semiotic. Weisler and Kirch's goal was to document the archaeological correlates of a range of ethnohistorically documented features such as primary residences, temporary habitation shelters, and cooking sheds and to test the ethnographic model of the idealized Hawaiian household (e.g., Handy and Pukui 1972). Excavations at a range of structure types were carried out to enable functional interpretations of specific features, but more importantly, their work critically identified diverse aspects of material variation in prehistoric Hawaiian house clusters. For example, the primary residence was often the largest structure in the residential cluster and often included stone uprights, cupboards, and slab-lined hearths (Weisler and Kirch 1985: 142–147). The surrounding ancillary structures exhibited a range of forms, including low short walls or informal C, J, and L shaped shelters, some associated with lithic reduction activities. Thus, Weisler and Kirch investigated material variation in household clusters not only as a means to answer functional questions such as the specific use of particular structures in *kauhale* complexes, but to address socio-economic questions, such as the spatial patterning in activity areas, secular versus sacred spaces, and access to raw materials and resources.

Utilizing multiple lines of evidence, the Kawela project study outlined several axes of variability useful for developing holistic analyses of household rank. As Weisler and Kirch argued, status differences in Hawaiian domestic complexes are reflected by sets of attributes such as: (1) the number of structural features in a residential com-

plex; (2) the nature of the ritual feature, whether a formal structure separated from the primary residence, or a simple upright stone within the residence; (3) the presence of burial platforms; (4) high frequencies of pig and dog bone, both status foods according to the ethnohistoric records; (5) high density and range of formal artifacts (e.g., adzes, gaming stones, gourd stoppers, bone picks, tattoo needles); (6) presence of non-local lithic materials; and (7) density of shellfish and other fauna. In Kawela, households identified as elite residences were extensive and incorporated a greater number of structures per household cluster. They were also associated with formal temples (*heiau*) and had prominent topographic settings with commanding views of significant economic resources, such as stone tool quarries or fishing grounds (see also Weisler *et al.* 2006). Increased or preferential access to specialized adze production or other craft activities is suggested as another characteristic differentiating elite from commoner house sites (Weisler and Kirch 1985; see also Field *et al.* 2010). Specialized activity-areas are sometimes situated within elite residential structures, while craft production locales are sometimes adjacent to high status domestic sites (Weisler and Kirch 1985; see also Dixon *et al.* 1994; Weisler *et al.* 2006); this suggests that craft specialization supported royal and elite households (Kirch 2010: 169–173).

Despite the early nature of these studies within the global context of household archaeology, Kirch and others touched upon salient themes which are still in vogue today. These include inter- and intra-household variation and their relationship to social status; evidence for domestic ritual; and differentiating specialized versus domestic structures. Hawaiian household archaeology studies are characterized by an engaging use of varied theoretical perspectives which recognize that diverse processes, including status inequality, rank, gender, wealth, and craft specialization contribute to the variety found in domestic material remains. Diversity can be expressed in subsistence remains (Kirch and O'Day 2003), the use of house space (Kirch 1996; Van Gilder and Kirch 1997), and the presence and intensity of production activities (Kolb 1999).

Hawaiian household archaeology studies commonly follow materialist approaches, which while touching upon ideational themes such as site proxemics, gender, or the *kapu* system (social proscriptions), typically privilege material data for establishing household wealth as a proxy for household rank and status. For example, Kirch and Sahlins's 1992 Anahulu study utilized multiple lines of evidence to interpret household status and rank in domestic sites spanning the prehistoric and historic periods (Kirch 1992; Sahlins 1992). Their study examined the 19th century Anahulu production system and the accompanying changes in residential architecture and settlement patterns following European contact. Excavation strategies incorporated data from ethnohistoric documents to determine the status of the resident households. An important aim was to identify the extent of material differences among and between commoner and headman households. The project documented that the degree to which status is indexed by material culture diversity varies by local context (Kirch 1992: 174). Rockshelters dating to the Conquest Period (*c.* 1795–1802) were rich in gun flints, glass beads, and flakes bottle glass but otherwise retained many traditional Hawaiian artifacts such as adzes, abraders, and poi pounders. Kirch and Sahlins argued that at least some of the occupants of the valley had warrior status. The material culture of these sites supports an interpretation that invading forces of Kamehameha and subchief Keʻeaumoku radically altered the settlement patterns of the upper Anahulu Valley in the 19th century.

In the archaeological portion of the Anahulu study, Kirch also tracked architectonic transformations of domestic complexes and linked these to larger socio-political processes. As he argued, increased construction of stone walls around dwelling sites in the 19th century reflected the reification of property rights. Residential sites dating to the Sandalwood period (*c.* 1820s) had elaborated terraces, stone pavements, and platforms separate from cooking areas. Dwellings dating to the later Whaling Period (*c.* 1829–1830) had compressed households, where the cookhouse was attached to the dwelling platform or just adjacent (Kirch 1992: 74). Kirch linked this to the breakdown of the *kapu* system, where Hawaiians no longer followed traditional rules dictating the spatial segregation of household activities (Kirch 1992: 177). Burial crypts near households also appear during 19th century, an innovation in burial practices that Kirch linked to an increase in local ties to the land.

While architectonic manifestations of rank are commonly analyzed in Hawaiʻi, another form of material culture, notably terrestrial and marine faunal remains, have universally been used as proxy data for identifying household rank and status. Differences in species, density, and quality of marine and terrestrial faunal remains are commonly used to identify household status. Consumption of foodstuffs can differ dramatically between Hawaiian elite and commoner households, with high status 'fleshy foods' and meat more commonly represented in elite contexts (Field *et al.* 2010; Kirch and O'Day 2003; O'Day 2001; Weisler and Kirch 1985). In Kahikinui, Maui, elite house sites had choice cuts of pig and dog and large carnivorous fish, while commoner residences lacked access to dog, had highly fragmented pig assemblages representing less-choice cuts, and small littoral sized fish (Kirch and O'Day 2003: 494). These data suggest not only that Hawaiian elites had greater access to prized foods, but imply increased access to surplus production and specialized labor.

Another avenue of household variability, notably the spatial arrangement of material remains and gender as an important structuring principle, was illustrated in Van Gilder and Kirch's excavation of *kauhale* at Kahikinui, Maui. Within the Kipapa Waena *kauhale* cluster, the authors tentatively identify a linear shelter as a *mua* (men's

house), a modified outcrop with stacked walls as a *hale noa* (sleeping house), and a small C-shaped enclosure as a women's *kahumu* (oven shed). The *mua* was identified by its prominent topographic position within the cluster, the evidence for stone working (presumably a male activity), and the presence of a special niche (Van Gilder and Kirch 1997: 50–52). The *hale noa* was located downslope and had a deeper cultural deposit, with a range of food remains and simple artifacts. Two slab-lined hearths were located next to each other in the eastern area of the terrace. Within the second excavated cluster, another *hale noa* was tentatively identified, again with dual slab lined hearths situated in the eastern area of the house floor. The recovery of recurring identical, side-by-side hearths in individual house structures was interpreted as local adherence to cooking segregation for males and females, as set forth in traditional *kapu* (restrictions) (Van Gilder 2001). Van Gilder and Kirch suggested that regionally specific patterning is evident, notably the presence of dual hearths associated with the *hale noa*, rather than the expected pattern of dual cook sheds. Here we see a movement towards exploring ideational and humanistic patterning in the Hawaiian archaeological record.

Finally, access to high quality resources for producing adzes has been identified as another potential source of variation between elite and commoner residences (Kirch 2010; Weisler and Kirch 1985). As Rieth *et al.* (2013) suggested, tool quality basalt and volcanic glass are 'nonlocal, patchy resources' that had to be traded across island and socio-political district boundaries. However, whether Hawaiian elites controlled access to certain highly desirable stone tool resources is still debated. In a Kahikinui, Maui case study houses of elite community members had higher frequencies of exotic adzes, suggesting that elite control over exchange may have played a part in the wealth economy (Kirch *et al.* 2012). In contrast, a volcanic glass study from Hawai'i Island suggested widespread access to the material was filtered through physical distance and geography rather than social distance (McCoy *et al.* 2011). Another recent Hawai'i Island study by Reith *et al.* (2013) documented significant variation in access to local versus exotic basalt and volcanic glass resources in late pre-contact chiefly occupations. The authors related this variation to the specific activities carried out at the excavated elite contexts, while the creation and maintenance of social networks was identified as another potential factor (Rieth *et al.* 2013: 124–126). Functional variation between domestic sites is an avenue that needs to be further explored in future household archaeology investigations in the archipelago. Humanistic models problematizing the oftentimes strongly economic interpretive perspectives dominating the analysis of domestic architecture and artifact assemblages in Hawai'i and the rest of Polynesia are needed.

While substantial strides have been made in the identification of elite versus commoner house sites in the archipelago, the above summary illustrates a notably materialist and functionalist bent in current Hawaiian household archaeology. Given that the micro-scale level of the household allows for archaeologists to access traces of people's everyday lives, including aspects of social life such as domestic ritual, links to the ancestors, and cosmogony, more humanistic interpretations are possible. It is here that the strength of the house society model comes into play, as a heuristic device for modeling the social lives of houses and the people who lived, worked, slept, ate, and worshipped within and around them.

THE HOUSE SOCIETY PERSPECTIVE AND INTER- AND INTRA-HOUSEHOLD VARIATION IN HAWAI'I

I argue that three aspects of the house society perspective can be useful for interpreting social variation within and between Hawaiian residential sites. These include: 1) How the house provides rights to intangible and tangible property, thereby allowing for its continuity and reproduction through time; 2) An architectonic focus on house structures as living entities with symbolic associations and ritual attractors rather than just functional attributes, and finally, 3) How social differentiation in the landed estate can be used to understand the evolution of social ranking and other social transformations in precontact Hawai'i.

The house as a corporate body provides rights to intangible and tangible property, thereby allowing for its continuity and reproduction through time. Material wealth includes access to goods such as elaborate house architecture and heirlooms, access to specialist craft production, and access to the physical resources of the estate, including labor and land. Immaterial wealth is expressed as access to social resources, including titles, rank, and the ability to claim closeness to the ancestors. Equally important is access to specialty knowledge, such as ritual practitioners, genealogical specialists, and craft producers (Chiu 2005; Gillespie 2000; Joyce 2000: 21, 49, 57; McKinnon 2000: 126). Members of the house can also have important social roles, in maintaining, perpetuating, and widening social networks and alliances (Joyce 2000: 21–22).

Site Proxemics: House Placement on the Landscape

In many Austronesian societies, house placement serves as a reminder of the ritual importance of the physical house structure and the social group. Situating a dwelling in a ritually symbolic context is one avenue for legitimating social status. In today's parlance, this can be expressed as how the ideology of space leads to place making. Thus, the spatial location of residences on the landscape imbues particular locales with socially embedded, personal, and collective significance.

In their 1985 Kawela study, Weisler and Kirch were perhaps the first archaeologists in Polynesia to place

an importance on site proxemics. The Kawela research documented how high status residences were located on prominent topographic highpoints. While the elevated nature of the residence in itself is considered sacred in Hawaiian cosmology, the placement of these houses also commanded prominent views of the landed estate, such as fishponds, agricultural lands, and stone adze quarries (Weisler *et al.* 2006). A similar pattern is found in a recent Kohala case study from Hawai'i. There, two of the higher status residences were situated in prominent locales. MKI-56, a residential site complex, commands an excellent view of the fishing grounds found at Kamilo Bay and is situated near KAL-1, a large *heiau* or temple site (Figure 1). Indeed, the relationship is not just a spatial one, as the excavated assemblages from MKI-56 had among the highest density of bone, including large pelagic fish, pig, and dog. Lithic materials, including non-local volcanic glass, and fishing gear were also abundant, illustrating how certain houses had increased access to rights and resources. These spatial, proxemic, and artifactual patterns are mirrored at another elite dwelling KAL-46, where the residence is found in a prominent position surrounded by a *holua* slide for elite sport, canoe sheds, and a rich bay (Figure 2). This residence had the highest density of bone among all of the excavated residences, in addition to high frequencies of specialized tools, indicating increased access to specialist labor and marine resources. These economic processes translated into social capital for the house, in bolstering both the wealth of the house as well as its social ties within the neighborhood and community.

Houses as Living Entities

In turning to the theme of houses as living entities, we again are encouraged to focus on the architectonic manifestations of the dwelling. Yet in this case, we are looking for material traces of symbolic or ritual aspects of dwellings. A common characteristic of Austronesian house societies is that features of dwellings serve symbolic rather than purely functional purposes. The material construction and layout of the physical house articulate the dwelling with symbolism and ritual.

Ethnographic and ethnohistoric data highlight that the construction of Hawaiian houses followed proscribed rules. During ritualized 'house opening' ceremonies, participants cut a small doorway into the dwelling, symbol-

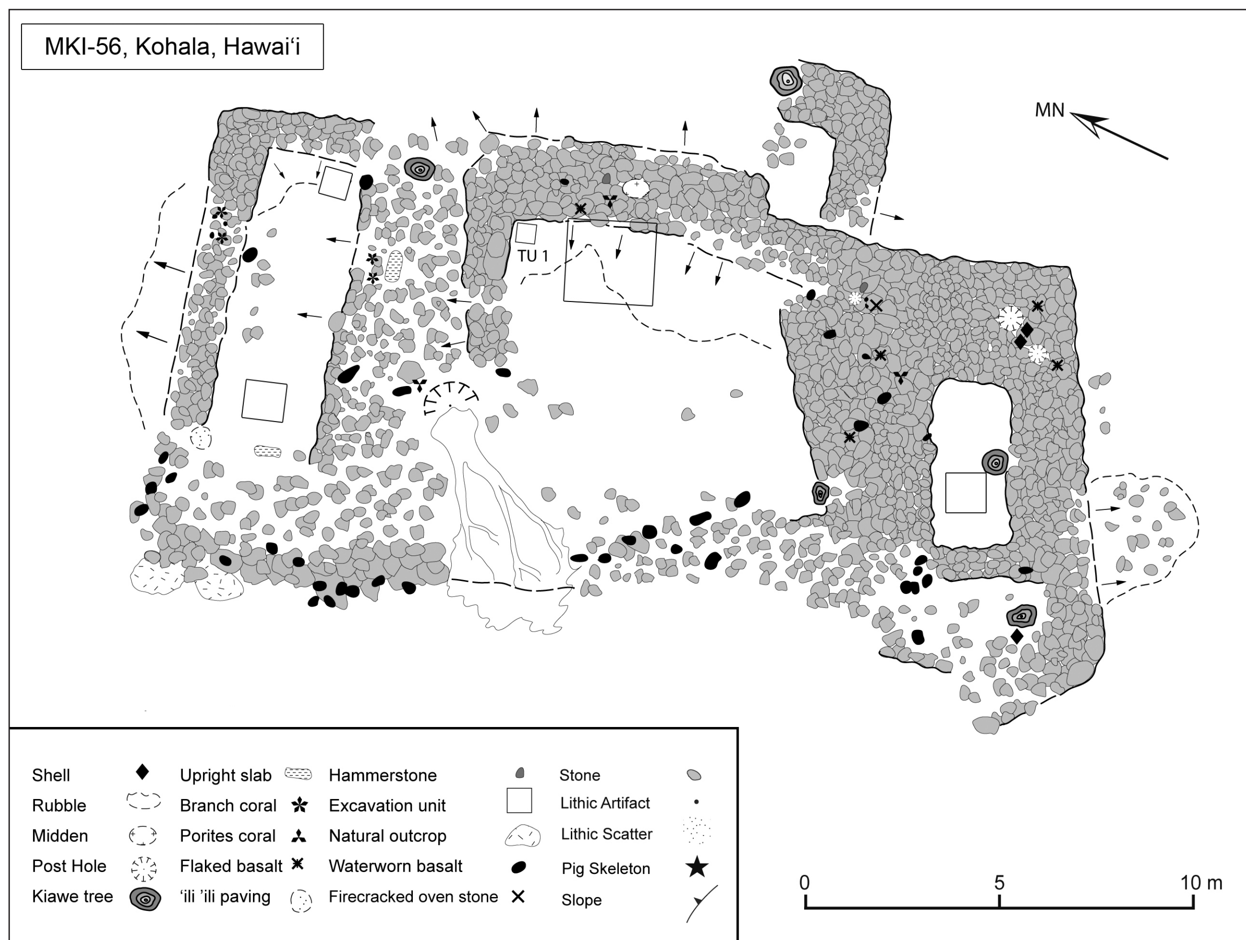

Figure 1. Plan view of the MKI-56 complex with areas excavated.

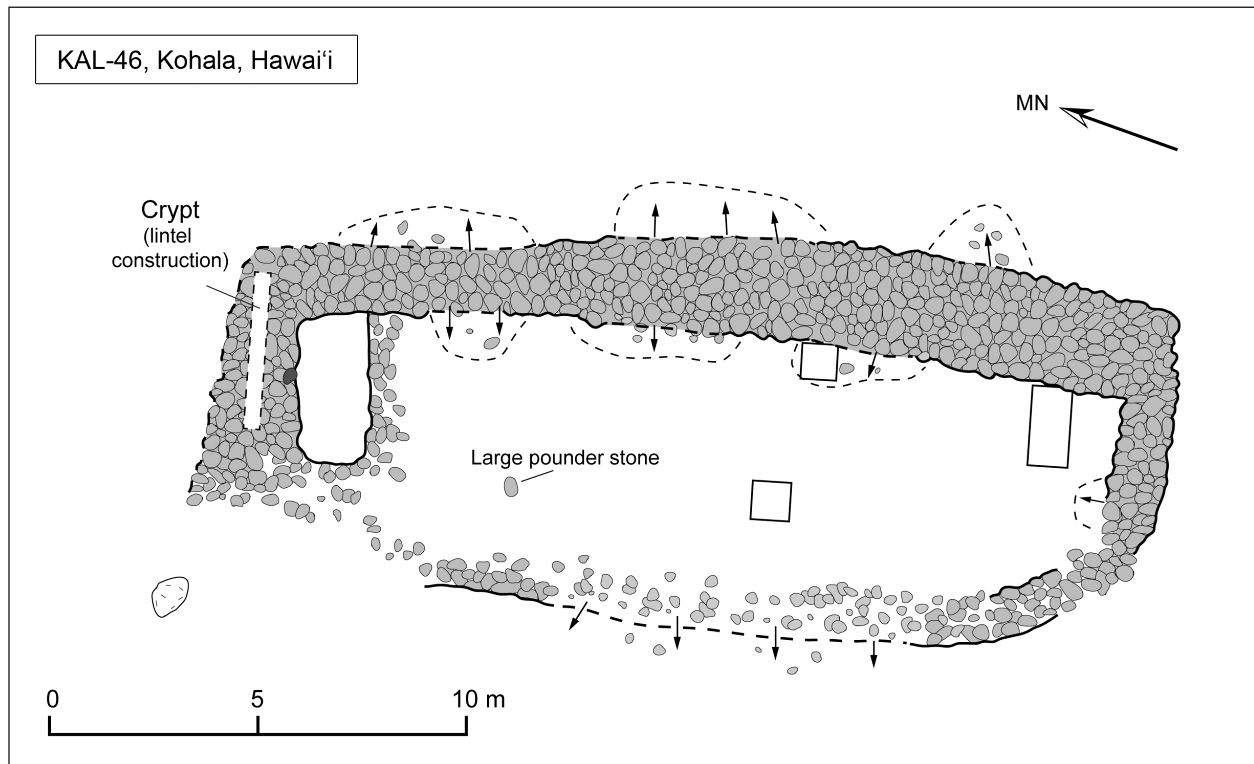

Figure 2. Plan view of KAL-46 with areas excavated.

izing the cutting of the umbilical cord, a highly ritualized act (Malo 1951: 121–125). Areas for domestic rituals were materially marked by shrines with upright stones that represented the household gods or ʻ*aumakua* deities. Such features have been found near men's houses where offerings such as coral heads were presented. In Kawela, residential shrines in the form of uprights or enclosures most often were located to the east of the primary dwelling (Figure 3a; Weisler and Kirch 1985). In the Kahikinui study, Van Gilder and Kirch (1997) presented evidence for the role of ritual in specialized men's houses, including a stone slab niche and waterworn stones found in the northeast corner of a structure. A Molokaʻi example presented by Weisler and colleagues (2006) documented a sleeping structure with a detached shrine. Again, the ritual feature was found in the northeastern corner and is associated with branch coral offerings (Figure 3b). Thus, archaeological data from a range of pre-contact Hawaiian domestic contexts suggest a marked preference for ritual spaces and a north, northeastern, or eastern orientation. These data link patterning in the Hawaiian archaeological record not just to economic and functional practicalities, but to social processes, including how worldviews and cosmology structured daily lives. In the Hawaiian worldview, east was associated with the gods, sacredness, and *kapu* (see Valeri 1985), lending support to these social, humanistic interpretations.

The extent to which prehistoric ritual practices associated with Hawaiian dwellings were perpetuated in the post-contact period when European concepts of dwellings were adopted remains unclear. This is particularly true for the period after 1821 when New England style architecture was introduced by missionaries (Bayman 2009). The Bishop Museum's *hale pili*, taken from Miloliʻi Valley (Site 201H, State Site # 50–30–01–7206) and housed in the Museum, represents a hybrid house, with elements of traditional Hawaiian folk housing (pole and thatch structure with *pili* grass roof, stone platform) and European ideas (larger entryway, fronted by a *lanai*) (Apple 1971; Kahn *et al.* in prep; Summers 1998). Excavations at the 201H site demonstrate that deliberate offerings were emplaced in the house architecture, either during its construction or during an 'opening ceremony.' Specifically, the remains of a small unburnt pig skeleton were placed in a pit under the northeast corner of the house terrace, underneath the large foundational facing stones (Figure 4). The internment of this juvenile pig under the front facing of this residence suggests another form of domestic ritual that has not before been documented. It is interesting to note that the spatial context of ritual in the northeastern portion of house sites is retained in both the pre-contact and contact periods.

But what role did household ritual play in the larger social context of households competing with one another for rank and status at the local level? In Austronesian house societies, domestic rituals serve to link the house with the ancestors. Such practices solidify genealogical

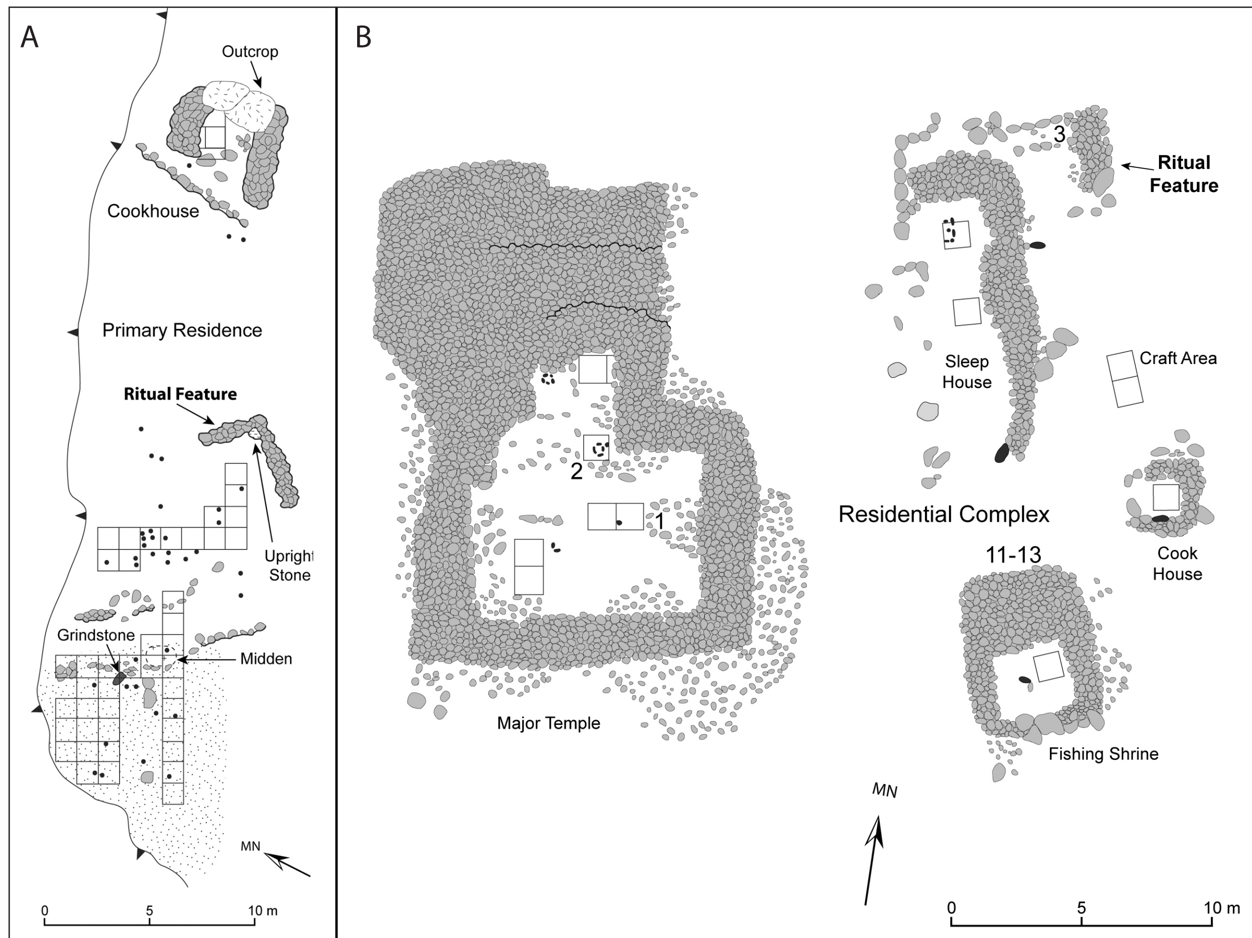

Figure 3. A: A (Left): Plan of Residential Complex F, Kawela, Moloka'i (after Weisler and Kirch 1985); B (Right): Plan of Residential Complex 16 A-B, northern leeward coastline of Moloka'i (after Weisler *et al*. 2006).

claims to rank and status, as ritualized houses and parts thereof become symbolic vessels for residential gods and ancestors. Taken as a whole, the archaeological data presented above support Valeri's analysis that contact period dwelling structures in Hawai'i signified animate and sacred social beings. Ethnographic evidence for house rituals and 'house opening' ceremonies in the archipelago confirm this. Handy (Handy 1972:116; Handy and Pukui 1972:177) notes that organic offerings, such as fish or red taro, were placed under the main posts of a new sleeping house during consecration ceremonies. Ethnohistoric documents likewise illustrate that Hawaiian houses symbolized the human form and social relations. In particular, the ridge pole represented the crest, hair, or helmet of high ranking males, the head of the family, the *ali'i*, or the priests (Valeri 1985:302–303).

I have argued that Hawaiian house posts served as ritual attractors, significant features around which key activities, including domestic ritual, were organized (Kahn 2008). Hawaiian ethnographies describe how particular care was taken in fashioning the main and supporting house posts. Afterwards, strips of barkcloth were tied around the posts. During house construction, the corner posts were symbolically aligned. The ridge post, termed *pou hana*, is also a figure of speech used to denote persons of importance. This post was kept somewhat isolated from the other house posts. In excavations of postholes in Hawaiian house sites, support stones have been located that served to provide stability for the post. However, water worn stones or *'ili 'ili* have also been recovered in post features. Such stones were commonly used as offerings at Hawaiian ritual sites and can be seen as such in posthole contexts. As material embodiments of ritual strength, we can view house posts as more than functional objects – they also serve as ritual objects and status symbols. They form parts of ritual landscapes, embodying kin labor and identity, and symbolize the human form and elements of the social hierarchy.

Cross-culturally, domestic ceremonies associated with ritual attractors enhance their role as repositories for maintaining, augmenting, or holding the tangible and intangible property of the house (Bloch 1995:81–82; Carsten 1995:111; Gillespie 2007; Helms 2007; Kahn 2007; Waterson 1990:124–125). In Polynesia, the use of ritual attractors

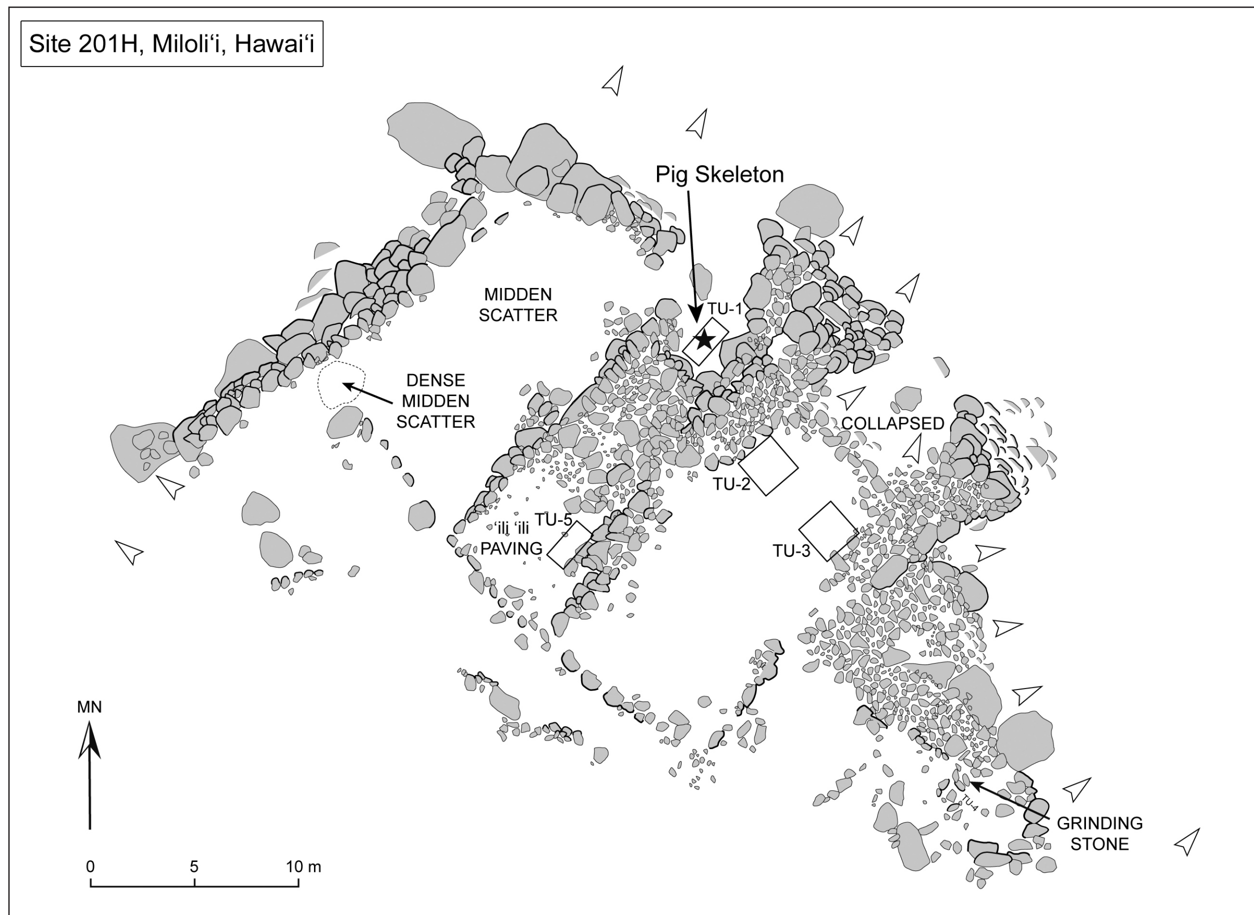

Figure 4. Plan View of Site 201H in Miloliʻi Valley. Note the recovery of the pig skeleton under the front northeastern corner of the house platform.

such as uprights or posts also provides social continuity in residential architecture. They link the dwelling structure and the social group of the house with the ancestors. In sum, multiple lines of data indicate the animate qualities of Hawaiian house structures and their architectural features, as well as the ritual and symbolic importance accorded to them. Hawaiian domestic dwellings represent much more than functional structures transmitting a domestic group's rank and status, they also encode important information about social identity and links to the ancestors.

Social Differentiation and the House

How can we use the house society approach to understand the evolution of social ranking in precontact Hawaiʻi? In many ethnographic studies of Austronesian house societies, social differentiation among households is expressed materially in the landed estate. Intra-site comparisons of household activities, site proxemics, and the elaboration of house architecture can be used as proxies for household rank and status. These processes serve as markers of social change and are not limited to economic transformations. For example, competing houses could actively manipulate social relations in order to acquire access to resources, wealth, and power, and to promulgate social difference. In the Society Islands of Eastern Polynesia, 'origin houses' (after McKinnon 1991, 2000) were constructed in inland valleys after AD 1350 (Kahn 2005, 2007; Kahn and Kirch 2013). These residential sites served as high-ranking dwellings of the headman of the extended residential group. These dwellings are the most elaborate within household clusters and are situated in ritually elevated locales. They tend to be the first dwellings built within residential groups, typically constructed at the same time as large temple sites. These dwellings also have the richest material assemblages, particularly when compared with less elaborate commoner residences. In particular, evidence for craft specialization and access to non-local goods are found at much higher rates at origin houses than the lower status junior houses which are typically found downslope (Figure 5). I have argued that these origin houses serve as physical markers of the houses' access to the corporate estate, land, and resources (Kahn 2007). In the Society Islands example, these origin dwellings were constructed early on during

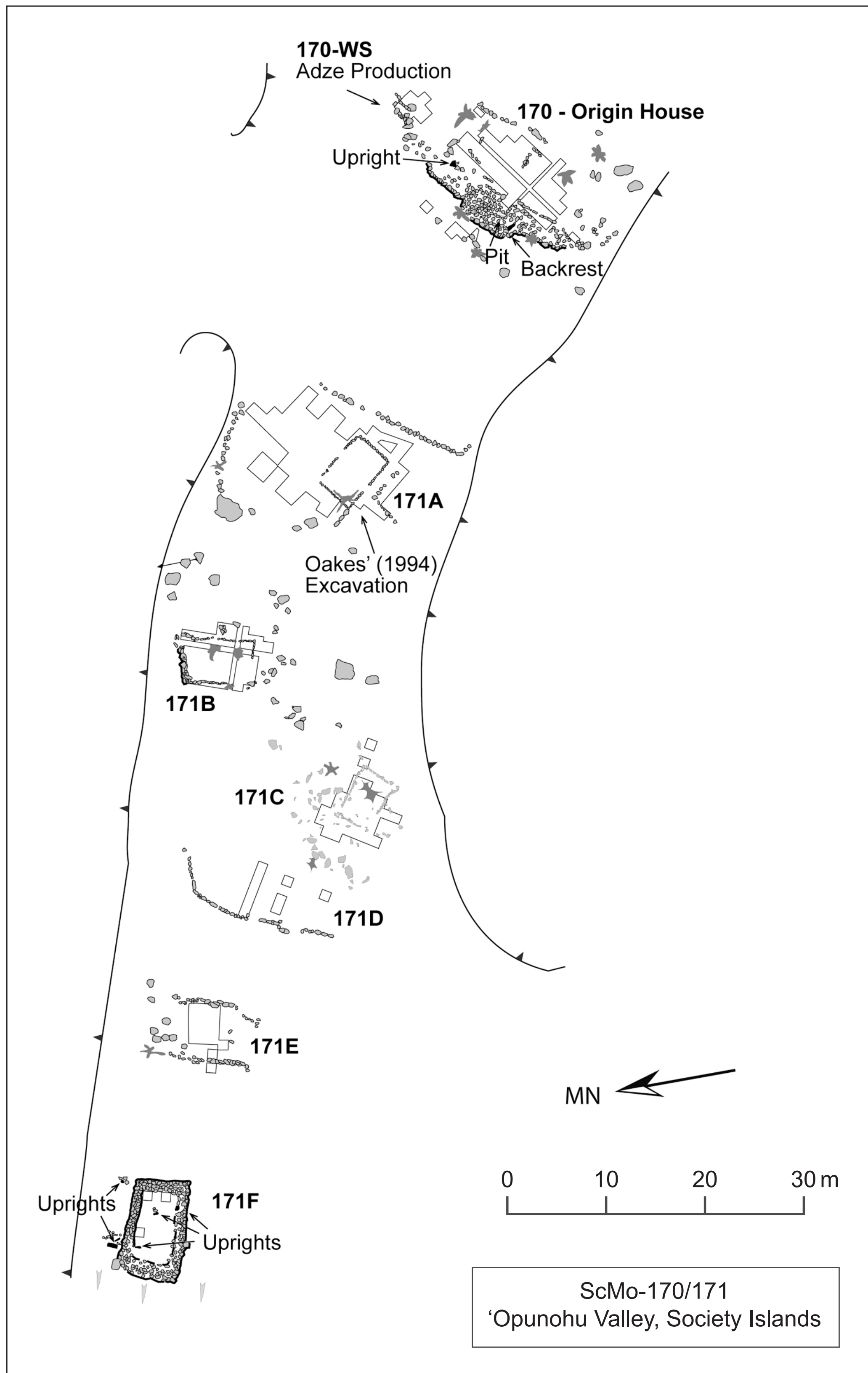

Figure 5. Plan view of ScMo-170/171, a residential complex in the 'Opunohu Valley, Society Islands. ScMo-170 is an origin house, with the most elaborate architecture and situated at the most upslope sacred promontory. An adze workshop is found in close proximity on the house platform. Downslope, more junior ranking households are found (ScMo-171B, C), while ScMo-171a served as an indoor craft activity area.

the interior expansion, *c.* AD 1350. They were built at the same time as ancestral temple sites which also served to symbolize formal claims to land and resources (Kahn and Kirch 2013).

Turning back to Hawai'i, in the Kohala example (Figures 1, 2), I would be tempted to define the two elaborate dwellings excavated in Makiloa (MKI-56) and Kālala (KAL-46) (discussed above) as origin structures. These residences stand apart from the surrounding residential landscape in terms of their architectural elaboration, access to goods and labor, and spatial location on the landscape. However, these two dwellings were built late in the Hawaiian sequence, after AD 1650. This is up to 100 years after the nearby *heiau* or temple site was constructed and as much as 250 years after the first use of the coastal region. Clearly there are different social processes at work here. The construction of such dwellings in marginal Leeward coastal Kohala was not an autochonous development linked to the first expansion into the area, but a much later development.

Kirch (2012) and Field (2011) have argued that the elite influence in coastal Kohala only developed after significant population growth was stimulated by inland agricultural expansion post-AD 1650. In this way, the Hawaiian study is similar to the Society Islands case, in that status differentiation in residential groups is expressed most forcefully after significant shifts in the subsistence base. Yet, it is clear in the Hawaiian study that elites, at least at the local scale, did not have to stress their long term connections to the landed estate and the ancestors in the same way that they had to in the Society Islands. This likely is because in Hawai'i we are dealing with a society that had moved to an archaic state-based organization led by what Kirch (2010) calls divine kings, while in the Societies, social relations at the local scale were still kin-oriented, even though significant inequalities existed (Lepofsky and Kahn 2011). In Kohala, I believe what we are likely seeing is the imposition of an elite presence, perhaps that of lesser chiefs or *konohiki*, on the local landscape. These individuals' claims to power rested in their political relationships to the high chiefs or divine kings, rather than in organic social relations. In this way, we see how a focus on households and houses gives us insight not just into economic relations, but also into shifts in socio-political organization.

CONCLUSIONS

Household archaeology became firmly entrenched within Americanist archaeology during the heyday of Processualism. It is not surprising then that archaeologists adopted models of the household that prioritized economic processes such as the production, consumption, and distribution of material goods (Wilk and Rathje 1982: 621). Such patterns are clearly represented in the trajectory of household archaeology within Hawai'i, where studies to this day often prioritize functionalist analyses of material remains, similar to other parts of the world (see Ames 2006; Hendon 1996). By the end of the 1980s, critiques of household archaeology argued for the need to address the social nature of the household. Indeed, Weisler and Kirch's (1985) Kawela study is an early Polynesian example, illustrating a broadening in theoretical orientation to include ideational aspects of the household. As household archaeology world-wide began to widen its focus, new topics of research emerged, including how households varied in identity or production, and how this difference related to human action and social relations rather than just economic relations (Beaudry 1989; Marshall 1989). As I have argued, the conceptual framework of the house society model closely links social organization to architectonic space and, as such, offers a critical tool for understanding how social relations shape archaeological patterning in prehistoric dwellings.

Using diverse lines of evidence and data from multiple case studies, I have illustrated how social differentiation at the local scale in pre-contact Hawai'i is clearly expressed in residential architecture, material assemblages, and the use of space. The house society perspective provides a powerful tool for investigating both the architectonic manifestations of social difference at the local scale in the Hawaiian archipelago, as well as emic classifications of the residence and the household. Hawaiian houses had both social, political, ritual, and economic import. This highlights the value of household archaeology studies in Eastern Polynesia for investigating socio-economic and political change and for providing a much needed 'bottom up' perspective that complements 'top-down' approaches. A continued focus on themes such as the variation at the micro-scale, household archaeology, and house societies in Hawai'i also serves to celebrate and substantiate the long term impacts that Pat Kirch's work has had on the field of Hawaiian archaeology.

Acknowledgements

A big mahalo to Dr. Roger Green, Dr. Patrick Kirch, and Dr. Rosemary Joyce for sharing their thoughts on house society applications and for many discussions about the strengths of household archaeology. Archaeological work in Miloli'i Valley was funded by the Elsie Wilcox Foundation, the George Wilcox Foundation, and the Hawai'i Council for the Humanities Preservation and Access Grant. Hawai'i State Parks generously granted permission to work along the Nāpali. Alan Carpenter expertly created the plane table map of site 201H. The Kohala excavations were funded by National Science Foundation Human Social Dynamics program grant BCS-0624238. The State of Hawai'i Department of Land and Natural Resources, Parker Ranch LCC, and the State Historic Preservation Office generously granted for permission to carry out archaeological research on State and private lands. Julie Field broadly organized the Kohala field research and Patrick Kirch funded the research and created the Kohala site

plane table maps found in this article. Cordelia Nickelsen completed the Kohala faunal analyses. Diana Izdebeski is thanked for the final production of the figures.

References

Ames, K.M. 2006. Thinking about Household Archaeology on the Northwest Coast. In: E.A. Sobel, D.A.Trieu Gahr, and K.M. Ames (eds.) *Household Archaeology on the Northwest Coast*, pp.16–36. Michigan: International Monographs in Prehistory, Archaeological Series 16.

Apple, R.A. 1971. *The Hawaiian Thatched House*. Washington: National Park Service, United States Department of the Interior.

Bayman, J. 2009. Technological Change and the Archaeology of Emergent Colonialism in the Kingdom of Hawai'i. *International Journal of Historical Archaeology* 13:127–157.

Dixon, B., Major, M., Price, M., Carpenter, A., Stine, C., & Longton, B. 1994. *Lithic Tool Production and Dryland Planting Adaptations to Regional Agricultural Intensification: Preliminary Evidence from Leeward Moloka'i Hawaii*. Bishop Museum Occasional Papers, 39:1–19. Bishop Museum Press, Honolulu.

Bellwood, P.S.1972. *A Settlement Pattern Survey, Hanatekua Valley, Hiva Oa, Marquesas Islands*. Pacific Anthropological Records 17. Honolulu: Bernice P. Bishop Museum, Honolulu.

Bloch, M. 1995. The Resurrection of the House Amongst the Zafimary of Madagascar. In: J. Carsten and S. Hugh-Jones (eds.) *About the House: Levi-Strauss and Beyond*. Cambridge: Cambridge University Press, pp.69–83.

Carsten. J, 1995. Houses in Langkawi: stable Structures or mobile homes? In: J. Carsten and S. Hugh-Jones (eds.) About the House: Lévi-Strauss and Beyond. Cambridge: Cambridge University Press, pp.105–128.

Carsten, J., & Hugh-Jones, S. (editors). 1995. *About the House: Lévi-Strauss and Beyond*. Cambridge: Cambridge University Press.

Chiu, S. 2005. Meanings of a Lapita face: materialized social memory in ancient house societies. *Taiwan Journal of Anthropology* 3(1):1–47.

Clark, J.T., & Herdrich, D.J. 1993. Prehistoric settlement system in Eastern Tutuila, American Samoa. *Journal of the Polynesian Society* 102(2):147–185.

Cordy, R.H. 1981. *A Study in Prehistoric Social Change: The Development of Complex Societies in the Hawaiian Islands*. New York: Academic Press.

Field, J.S., Kirch, P.V., Kawelu, K. and & Ladefoged, T.N. 2010. Households and Hierarchy: Domestic Modes of Production in Leeeward Kohala, Hawai'i Island. *Journal of Island and Coastal Archaeology* 5(1):52–85.

Field, J.S., T.N. Ladefoged, W.D. Sharp, & Kirch, P.V. 2011. Residential chronology, household subsistence, and the emergence of socioeconomic territories in Leeward Kohala, Hawai'i Island. *Radiocarbon* 53(4):652–657.

Fox, J. J. (editor). 1993. *Inside Austronesian Houses: Perspectives on Domestic Designs for Living*. Canberra: Australian National University.

Gillespie, S. 2000. Beyond kinship: an introduction. In: R.A. Joyce & S.D. Gillespie (eds.) *Beyond Kinship: Social and Material Reproduction in House Societies*. Philadelphia, University of Pennsylvania Press, pp.1–30.

Gillespie, S.D. 2007. When is a House? In: R. Beck, Jr. (ed.) *The Durable House: House Society Models in Archaeology*. Occasional Paper No. 35, Center for Archaeological Investigations. Carbondale: Southern Illinois University, pp.25–50.

Green, R.C., Green, K., Rappaport, R.A., Rappaport, A. & Davidson, J. 1967. *Archeology on the Island of Mo'orea, French Polynesia*. Anthropological Papers of the American Museum of Natural History 51(2):111–230.

Green, R.C., & Davidson, J.M. (editors) 1969. *Archaeology in Western Samoa*, Vol. 1. Auckland: Auckland Institute and Museum Bulletin 7.

Green, R.C & Davidson, J.M. 1974. *Archaeology in Western Samoa*, Vol. 2. Auckland: Auckland Institute and Museum Bulletin 7.

Handy, E.S.C. 1972. *Native Planters in Old Hawaii: Their life, lore, and environment*. Honolulu: Bishop Museum Press.

Handy, E.S.C., & Pukui, M.K. 1972. *The Polynesian Family System in Ka-'u, Hawai'i*. Charles E. Tuttle Company, Rutland.

Helms, M.W. 2007. House Life. In: R. Beck (ed.) *The Durable House: House Society Models in Archaeology*, Occasional Paper No. 35, Center for Archaeological Investigations. Carbondale: Southern Illinois University, pp.487–504.

Hendon, J.A. 1996. Archaeological approaches to the organization of domestic labor: household practices and domestic relations. *Annual Reviews in Anthropology* 25:45–61.

Jennings, J.D., & Holmer, R.N. 1980. *Archaeological Excavations at Western Samoa*. Pacific. Anthropological Records 32. Honolulu: Bernice P. Bishop Museum.

Joyce, R.A. 2000. *Gender and Power in Prehispanic Mesoamerica*. Austin: University of Texas Press.

Kahn, J.G. 2005. Household and Community Organization in the Late Prehistoric Society Islands (French Polynesia). Ph.D. dissertation, Department of Anthropology, University of California, Berkeley.

Kahn, J.G. 2007. Power and precedence in ancient house societies: a case study from the Society Island chiefdoms (French Polynesia). In: R. Beck (ed.) *The Durable House: House Society Models in Archaeology*. Center for Archaeological Investigations Occasional Paper No. 35. Carbondale: Southern Illinois University. pp.198–223.

Kahn, J.G. 2008. Ritual house posts and 'house societies' in Polynesia: modeling inter- and intra-household variability. *Rapa Nui Journal* 22(1):14–29.

Kahn, J.G., Kawelu, K., Wichman, V., Carpenter, A.C, Moore, S. & Hunt, T. in prep. Settlement and Subsistence in Miloli'i, Kaua'i, Hawaiian Islands from the Early Expansion to Historic Period. To be submitted to Archaeology in Oceania.

Kahn, J.G. & Kirch, P.V. 2013. Residential Landscapes and House Societies of the Late Prehistoric Society Islands (French Polynesia). *Journal of Pacific Archaeology* 4(1):50–72.

Kirch, P.V. 1985. *Feathered Gods and Fishhooks: An Introduction to Hawaiian Archaeology and Prehistory*. Honolulu: University of Hawaii Press.

Kirch, P. V. 1992. *Anahulu: The Anthropology of History in the Kingdom of Hawai'i. Vol. 2, The Archaeology of History*, University of Chicago Press, Chicago.

Kirch, P.V. 1996. Tikopia social space revisited. In: J. Davidson, G. Irwin, F. Leach, A. Pawley, & D. Brown (eds.), *Oceanic Culture History: Essays in Honour of Roger Green*. Dunedin: New Zealand Journal of Archaeology Special Publication, pp. 257–274.

Kirch, P.V., Asner, G., Chadwick, O.A., Field, J., Ladefoged, T., Lee, C., Puleston, C., Tulajapurkar, S. & Vitousek, P.M. 2012. Building and testing models of long-term agricultural intensification and population dynamics: a case study from the Leeward Kohala Field System, Hawai'i. *Ecological Modeling* 227: 18–28.

Kirch, P.V. & Green, R.C. 2001. *Hawaiki, Ancestral Polynesia: Essays in Historical Anthropology*. Cambridge: Cambridge University Press.

Kirch, P.V., & O'Day, S.J. 2003. New archaeological insights into food and status: a case study from pre-contact Hawaii. *World Archaeology* 34(3): 484–497.

Kolb, M.J. 1999. Staple finance, ritual pig sacrifice, and ideological power in ancient Hawai'i. In: A. Bacus and L.J. Lucero (eds.) *Complex Polities in the Ancient Tropical New World*, Archaeological Papers of the American Anthropological Association, Number 9, pp. 89–107.

Lepofsky, D. & Kahn, J.G. 2011.Cultivating an ecological and social balance: elite demands and commoner knowledge in ancient Ma'ohi agriculture, Society Islands. *American Anthropologist* 113(2): 319–335.

Lévi-Strauss, C. 1979. *Nobles sauvages. Culture, Science et Développement : Contribution à une Histoire de l'Homme*. Toulouse: Edouard Privat, pp. 41–55.

Macdonald, C. (editor). 1987. *De la Hutte au Palais: Sociétés 'à Maison' en Asie du Sud-Est Insulaire*. Paris: CNRS.

Malo, D. 1951. *Hawaiian Antiquities*. Honolulu: Bernice P. Bishop Special Publication 2.

McCoy, M.D., Mills, P.R. Lundblad, S., Rieth, T., Kahn, J.G., & Gard, R. 2011. A cost surface model of volcanic glass quarrying and exchange in Hawai'i. *Journal of Archaeological Science* 38: 2141–2154.

McCoy, P.C. 1976. Easter Island Settlement Patterns in the Late Prehistoric and Protohistoric Periods. Easter Island Committee. Bulletin Five. International Fund For Monuments, Inc.

McKinnon, S. 1991. *From a Shattered Sun: Hierarchy, Gender, and Alliance in the Tanimbar Islands*. Madison: University of Wisconsin Press.

McKinnon, S. 1995. Houses and hierarchy: the view from a South Moluccan society. In: J. Carsten & Hugh-Jones, S. (eds.) *About the House: Lévi-Strauss and Beyond*. Cambridge: Cambridge University Press, pp. 170–88.

McKinnon, S. 2000. The Tanimbarese Tavu: the ideology of growth and the material configurations of houses and hierarchy in an Indonesian society. In: R.A. Joyce and S.D. Gillespie (eds.) *Beyond Kinship: Social and Material Reproduction in House Societies*. Philadelphia: University of Pennsylvania Press, pp. 161–176.

O'Day, S.J. 2001. Excavations at the Kipapa Rockshelter, Kahikinui, Maui, Hawai'i. *Asian Perspectives* 40(2): 279–304.

Reuter, T.A. 2002. *The House of Our Ancestors: Precedence and Dualism in Highland Balinese Society*. KITLV Press, Leiden.

Rieth, T.M., Mills, P.R., Lundblad, S.P., Morrison, A.E. & Johnson, A. 2013. Variation in lithic sources utilized by late precontact elites in Kona, Hawai'i Island. *Hawaiian Archaeology* 13: 103–130.

Sahlins, M. 1992. *Anahulu: The Anthropology of History in the Kingdom of Hawai'i.* Volume 1: Historical Ethnography. Chicago: University of Chicago Press.

Summers, C.C. 1988. *The Hawaiian Grass House in the Bishop Museum*. Bishop Museum Special Publications 80. Honolulu: Bishop Museum.

Van Gilder, C.L. 2001. Gender and Household Archaeology in Kahikinui, Maui. In: C.M. Stevenson, G. Lee, & F.J. Morin (eds.) *Pacific 2000: Proceedings of the Fifth International Conference on Easter Island and the Pacific*. Easter Island Foundation, Los Osos, pp. 135–140.

Van Gilder, C., Kirch, P.V. 1997. Household Archaeology in Kipapa and Nakaohu, Kahikinui. In: P. V. Kirch (eds.) *Na Mea Kahiko Kahikinui, Studies in the Archaeology of Kahikinui, Maui*. Special Publication No.1. Archaeological Research Facility, University of California, Berkeley, pp. 45–60.

Valeri, V. 1985. *Kingship and Sacrifice: Ritual and Society in Ancient Hawaii*. Chicago: University of Chicago Press.

Waterson, R. 1990. *The Living House: An Anthropology of Architecture in South East Asia*. New York: Watson Gutpill Publications.

Weisler, M.I., & Kirch, P.V. 1985. The structure of settlement space at Kawela, Molokai, Hawaiian Islands. *New Zealand Journal of Archaeology* 7: 129–158.

Weisler, M.I., Collerson, K.D., Feng, Y.-X, Zhao J.-X., & Yu, K.-F. 2006. Thorium-230 coral chronology of a late prehistoric Hawaiian chiefdom. *Journal of Archaeological Science* 33: 273–282.