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Identifying residences of ritual practitioners in the archaeological record as a proxy for social complexity



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ABSTRACT

Dedicated ritual specialists often had indispensable roles in ancient religions and significant impacts on political histories. Few studies have developed methodologies for recovering direct evidence for ritual practitioners in the archaeological record. I argue that the study of religious practitioners must take a holistic micro-scale approach, documenting not only the places where ritual paraphernalia (sacra) were stored, but places where priests and their assistants lived and practiced intimate and communal rituals. I begin with a discussion of ethnohistoric and ethnographic data to model what priests did in ancient societies, and what the material correlates of their dwellings and activities might look like. I then present archaeological data from two late prehistoric house sites identified as priest dwellings from East Polynesian. Utilizing multiple lines of evidence, including portable artifacts, botanical specimens, site architecture, and site distribution patterns, I argue that there is close complementarity between the eth nohistoric–ethnographic model and the archaeological remains. That priests' houses houses are often situated within corporate ritual centers speaks to the import of such sites and their associated ceremonial activities in the strategic use ideology to institutionalize social hierarchies and political status, a pattern seen in many other ranked societies in Polynesia and other case studies world-wide.

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1. Introduction

Religions worldwide have been used as a source of power for rulers of complex societies and states, oftentimes in conjunction with political and economic institutions (Earle, 1989; Emerson, 1997). Religious change can have broad ramifications, not only in the ideological realm, but in socio-economic and political structures (Shaw, 2013). The development of dedicated religious specialists (i.e., priests) is an important factor leading to increased social complexity in chiefdoms, states, and empires (Steadman, 2009). Indeed, the advent of full-time ritual specialists can be considered as a proxy for social complexity, as more complex ritual ceremonies necessitated more complex ritual specialist hierarchies (Redmond and Spencer, 2008). In a similar manner, the level of social complexity found within religious cults or priesthoods can be associated with the level of complexity of the larger society itself (Blenkinsopp, 1995; Hayden, 2003). Formalization of hierarchies within the ritual specialist class, in turn, enhanced the prestige of the office, making ritual specialists indispensable (Blenkinsopp, 1995), and highlighting the important role that religious practitioners played in the political histories of polities.

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While some studies have modeled ways in which ritual practitioners can be identified in the archaeological record, most notably through contexts where they led rituals and used objects emblematic of their posts (sacra), few studies have developed methodologies for recovering direct evidence for ritual practitioners in the archaeological record, such as the dwellings where they lived, the topic of the present paper. In part, this reflects the relative youth of sustained archaeological interest in studying religion and identifying ritual practices in the material record. Yet, for many, ritual is a topic well suited to archaeology, for if we define ritual as regularized, patterned performance (Bell, 2009: 94) linked to collective beliefs (Insoll, 2004), such activities often leave patterned traces that can preserve in the archaeological record (Fogelin, 2008). Yet, many studies have focused on ritual as the event to be studied (Fogelin, 2007; McCoy, 1999, 2008; see Insoll, 2004 for a critique), rather than investigating the role of the ritual practitioner which, I argue, is another fruitful avenue for archaeological research.

Perhaps the most common material correlates of ancient religion which archaeologists examine include integrated settlement pattern data, construction sequences of religious monuments, and evidence for associated ritual activities at such sites, including animal or human sacrifices, offerings to the gods, or feasting (Demarrais et al., 1996; Flannery and Marcus, 1993; Kolb, 1992,

1994, 2011; Marcus, 1978; McCoy et al., 2011; Rakita, 2009; Redmond and Spencer, 2008). These can be considered top-down approaches, as they derive from political economy models, whereby political elites support or control the construction of large monuments as a means of reinforcing the social order. In contrast, there has been little archaeological discussion of ritual specialists and what particular roles they might have played in religion, despite ethnohistoric accounts suggesting the importance of full-time ritual specialists world-wide. While past studies have focused on the ways in which the material record can inform on past experiences of ritual participants (Fogelin, 2007), be they elite leaders or commoners, many have ignored the primary role that ritual specialists played in leading individualistic and communal rituals (Fogelin, 2003; Kahn, in press; Rakita, 2009) and their linkage to larger socio-economic and political processes.

Full-time priests emerged in many sedentary complex societies and performed standardized ceremonial rites mediating between the supernatural and the sacred. They form one end of the shaman–priest continuum (Fogelin, 2007; Rakita, 2009); however, priests represent more formalized, often ascribed full-time positions, whereas shamans, most commonly found in less-integrated hunter–gatherer societies, were part-time specialists who commonly sought altered states of consciousness in achieved positions. While some complex societies retain elements of shaman–priest rulers (Hayden, 2003), it is often full-time occupational specialists such as priests who emerge as important socio-ritual elites. Examining full-time ritual occupational specialization is then key to understanding socio-political transformations in complex societies

Identifying specialized religious facilities such as priests' houses is one avenue for determining whether a particular society had ritual specialists (Emerson, 1997). I argue that a study of religious practitioners must take a holistic micro-scale approach, documenting not only the places where ritual paraphernalia (sacra) were stored, but places where priests and their assistants lived and practiced intimate and communal rituals. For some time, archaeologists have discussed the material correlates of ritual, including ritual objects used by specific cults or ritual practitioners and ceremonial features, such as altars (Blenkinsopp, 1995; Dozier, 1965; Emerson, 1997; Flannery, 1976; Mills, 2004; VanPool, 2009). While heads of priesthoods or cults often owned masks, paraphernalia, ceremonial costumes, and other specialized objects (Knight, 1986; Mills, 2004), examining the context of where such objects are stored gives us little idea of the role of ritual specialists (Blenkinsopp, 1995).

Some have argued that archaeological materials relating to religion and ritual are fragmentary (Fogelin, 2007); I contend that the houses of ritual practitioners might be less so and should be identifiable in the archaeological record. As both the dwellings of priests and as places where they conducted religious rituals and organized social events such as feasts, ritual specialists' houses inform us of the lives and roles of priests on a daily basis in contrast to archaeological remains found at monumental religious sites. After modeling what priests did in ancient societies, and what the material correlates of their dwellings and activities might look like, I present archaeological data from two late prehistoric house sites identified as priest dwellings from East Polynesian contexts. The first derives from household archaeology excavations in the 'Opunohu Valley, island of Mo'orea, Society Island archipelago. The second derives from household archaeology excavations in the Kahikinui region, island of Maui, Hawaiian archipelago. Drawing from multiple lines of evidence, including portable artifacts, botanical specimens, site architecture, and site distribution patterns, I argue that there is close complementarity between the ethnohisto ric-ethnographic model and the archaeological remains. Finally, I argue that in-depth knowledge of the specific lifestyles of ritual practitioners allows archaeologists to tackle other important questions related to the advent of occupational specialization and political hierarchies. For example, what was the degree of priests' day to day involvement in ritual, economic, and political spheres and to what degree did ritual occupational specialists differ in social status from political rulers? In turn, these data can be used to assess the role that ritual elaboration and the formalization of religious practices had in relation to the elaboration of social complexity.

2. Household archaeology and defining social variability

With the advent of micro-scale household archaeology, greater variability in ancient house sites has been detected than expected from the ethnographic and ethnohistoric record and archaeological models (Allison, 2001; Carballo, 2011; Carpenter et al., 2012; De Lucia and Overholtzer, 2014; Guengerich, 2014; Kahn, 2005; Levine, 2011; Nash, 2009; Pluckhahn, 2010; Robin, 2003). This is, in part, linked to social variability, such as gradations in status and rank, including lesser ranked chiefs or lineages, gender, or occupational specialization, that is not noted in historic accounts and ethnographies. In addition, historic accounts sometimes present "ideals" or normative views of ancient dwellings and social relations that lack subtle distinctions seen in every-day life, where rigid dichotomies of social class and access to resources were negotiated on a daily basis. Current archaeological analyses of status roles have moved away from simple dichotomies (elite versus commoner) that can mask social identities (Casella and Fowler, 2005; Voss, 2005) to highlight variability found both within and among classes and how class is socially negotiated in a dynamic fashion (Dobres and Robb, 2005; Levine, 2011).

Priests' houses serve as one aspect of the architecture of ideology (Emerson, 1997), providing a window into both prehistoric religious systems and variability in social status. Many complex societies, especially those with formalized religious systems which included differentially ranked priests, afforded ritual specialists with some form of high social status, yet this differed by culture and regional context. Given their special social status, and the unique activities that they carried out on a daily and annual basis, residences of full-time priests should be identifiable with the large scale horizontal excavations that characterize household archaeology. In developing a more rigorous methodology for studying ritual, Marcus (2007) argued for a focus on "meaningful contexts" and completion of large scale horizontal exposures to recover caches of ritual objects and activity areas (for a hunter-gatherer perspective see Hrynick and Betts, 2014). Such a bottom-up perspective draws on the strengths of household archaeology while allowing for a contextualized approach to identifying ritual practitioners in the archaeological record.

3. Research goals

My goal is to develop a structured middle-range approach that connects archaeological data with formalized ritual practitioners. The aim is to increase the rigor of studies into ancient religions by clearly defining connections between data and priests' activities. Drawing from ethnohistorical and archaeological data world-wide, I begin by outlining the significant roles that priests played in ancient religion. I develop a cross-cultural model for what priests did and what particular roles they played. I then discuss the activities that priests carried out with sacra and the relationships of these activities and priests' dwellings to formalized religious centers. The model illustrates how, in many ancient societies, priests' houses can be expected to be incorporated into, or nearby, ritual centers. But how can we specifically identify the houses of full time ritual specialists in the archaeological record

Table 1

A cross-cultural comparison of priest's duties in ancient societies, compared with those from the Society Islands and the Hawaiian archipelago. World-wide sources include Baines and Lacovara (2002), Beard (2007), Blenkinsopp (1995), Brisch (2006), Emerson (1997), Insoll (2010), Knight (1986), Knüsel (2002), Landa (1941), Marcus (1978), Mills (2004), Redmond and Spencer (2008); Society Island sources include Babadzan (1993), Henry (1928), Oliver (1974); Hawaiian sources include Barrère (1986), Malo (1951), Kamakau (1961, 1976), Ruggles (2007).

Activity	Archaeological case studies world-wide	Society Islands	Hawaiian Islands
Control specialized knowledge (calendrical, medical, construction of temples, etc.)	Х	X	X
Maintain and store sacra	X	X	X
Writing	X		
Recite genealogies		X	
Divination, prophecy	X	?	
Lead important rituals	X	X	X
Offer sacrifices, offerings to the gods	X	X	X
Protect individuals at places of refuge			X
Warfare rites	X	X	X
Embalming ceremonies, mourning of leaders, mortuary rites, maintain ossuaries	Х	X (embalming, mourning)	X (mourning, maintain ossuarie

in order to enrich our understanding of religion and social complexity in prehistory? Based on ethnohistoric and archaeological models, priests' houses will conform to specialized house sites and will differ, in sometimes dramatic ways, from mundane sleeping houses, both in their spatial context, their orientation, and in their suites of artifacts and sub-surface features (see Huffman and Earley, 2014; Hrynick and Betts, 2014). Finally, I provide two case studies from East Polynesia, the first from the Society Islands, known as a complex chiefdom, the second from the Hawaiian Islands, currently accepted as an archaic state (Hommon, 2013; Kirch, 2010). Both are complex societies where hierarchy was well-defined and included political elites and occupational specialists carrying out annual rites linking economic surplus production to the ritual calendar. I conclude that identifying formalized occupational specialists in the archaeological record adds to our understanding of the integrated nature of ideology and social and economic control as important power bases for socio-ritual elites in complex societies. The identification of ritual specialists in the archaeological record particularly aids our understanding of social complexity in cultures where religious ideology was central to the political rulers' power.

4. What did priests do in prehistoric societies?

Priests and shamans played different roles in ancient religious practice, but they are not necessarily mutually exclusive categories. VanPool (2009) argues that priests are chosen by particular kin groups to mediate for and in behalf of the gods, while shamans enter trances to become the spirits. Priests rarely entered trance-like states (Hayden, 2003: 46-48). Shaman positions were commonly part-time achieved positions, while priest positions were full-time and ascribed. Shaman and priests thus served on different scales within specific communities. Hayden (2003) maintains that shamans typically worked for specific individual clients, while priests were ritual practitioners for the community but were also involved in economic affairs associated with tribute and the ritual calendar (also see Huffman and Earley, 2014; Rakita, 2009). Another generality links formal priesthoods with more formalized religions in complex societies, where communal religious rites are associated with specialized buildings (Steadman, 2009).

Priests can be viewed as a form of full-time occupational specialization focusing on religion and ideology. Priests received specific training, tended to be full-time because they had a range of duties to carry out, and were supported by political leaders and by offerings made from the general public. A cross-cultural comparison of priestly duties derived from archaeological and historic sources is presented in Table 1. In many societies, priests went through elaborate training periods to become occupational

specialists and could be organized into graded hierarchical priesthoods. As ritual specialists, they controlled or had access to varied types of specialized knowledge, including medical knowledge, calendrical knowledge, methods for divination and prophecy, methods for sacrifices and offerings to the gods, knowledge of mortuary practices, and methods for constructing and maintaining religious sites (Baines and Lacovara, 2002; Blenkinsopp, 1995; Brisch, 2006; Knight, 1986; Knüsel, 2002; Landa, 1941; Marcus, 1978). In some societies, knowledge of writing and artistic styles seems to have been restricted to priests and political leaders, and thus formed an aspect of elite "high culture" (Beard, 2007; Landa, 1941; Marcus, 1978; Inomata, 2001; Joyce, 2000a,b), as was the ability to carry out rituals related to warfare and territorial expansion (Redmond and Spencer, 2008).

A large focus of priests' activities was to lead communal rituals, and in particular, to offer sacrifices and other gifts to the gods (Marcus, 1978). Many of these religious ceremonies were carried out in formalized community-level religious structures such as monumental temple sites. Ceremonies included annual renewal rites tied to the ritual calendar, as well as *rites de passage* that were often celebrated with elaborate feasting. As officiants of large communal ritual events, priests were often physically marked in their dress and the use of sacra to stand out from the rest of the population (Knight, 1986; Redmond and Spencer, 2008); indeed, sacra function as a highly portable form of materialized ideology (Demarrais et al., 1996). Maintenance and storage of sacra was a common priestly activity (Table 1), as was conserving and reciting genealogies at large communal events.

Finally, in some complex societies, political leaders actively took on ritual specialist roles as a way of consolidating social power. Joyce and Winter (1996: 36) argue that at Monte Alban, elites appropriated the role of ritual specialists. They controlled aspects of ritual practice such as human sacrifice, and associated their dwellings with sacra and other forms of ritual symbolism. Joyce (2000b: 75) likewise maintains that Monte Alban nobles situated themselves as sacred priests, as intermediaries between the commoners and the sacred, typically through sacrifice. Sacrifices not only allowed for communication with the ancestors and the deities, but promoted fertility in the human and natural worlds. My Polynesian case studies offer contrasting forms of elites as ritual specialists - some Hawaiian chiefs became "Divine Kings" whose roles were supported by formal priesthoods, whereas in the Society Islands there was a stronger demarcation between the political roles held by chiefs and the ritual roles held by priests. This division becomes muddied, however, by the fact that Society Island priests were often closely related kin of the chiefs, suggesting a close association between chiefly political power and ritual power in East Polynesia.

5. How to identify ritual specialists in the archaeological record

A number of researchers have advocated utilizing data from ethnohistoric and historic sources to model what ritual specialists did in the past and where they carried out their activities. In this manner, models can be developed by upstreaming from known historical ritual activities to unknown prehistoric activities and then can be tested with archaeological data from the same culture (Blenkinsopp, 1995; Huffman and Earley, 2014; Knight, 1986) or from another culture of similar socio-political organization (Redmond and Spencer, 2008).

From a spatial perspective, priests' houses form part of the architecture of ideology. In complex societies where rulers depended on ideology as a substantial component of their powerbase, large political centers typically included monumental religious structures, specialized mortuary facilities, and priests' houses (Emerson, 1997). Ritual structures such as priests' houses are likely to be placed in unique contexts on the landscape, often removed from residential clusters. Houses situated in ceremonial contexts are therefor likely candidates for archaeological investigations of ritual specialists. However, ritual centers sometimes were comprised of numerous ritual structures, and the identification of ritual specialists' houses can be confounded when their surface architecture varies little from that found at domestic house sites. Identifying houses of ritual specialists thus requires multiple lines of data that integrate analysis of spatial context with a study of artifacts and sub-surface features. Because activities carried out in ritual structures, including priests' houses, differed from those in residential contexts (Hrynick and Betts, 2014), such structures will have artifact and sub-surface features that differ from residential settlements.

From an architectural perspective, priests often resided in or near temples or in houses that exhibited elements of high status residences (Miles, 1957; Steadman, 2009). This can be materialized with elaborated architecture. Because priests took charge of making offerings to the gods, their residences and burials are expected to be associated with their specialized clothing, ritual offerings, and religious paraphernalia (Marcus, 1978; Mills, 2004), however the degree to which such elements preserve in the archaeological record is highly variable. Perhaps more importantly, one can expect that priests' houses will have an element of exclusion, privacy, or limited access (Marcus, 1978), given the sanctity of the role and the activities that they carried out. For example, Marcus (1978) describes a Zapotec priests' house as windowless and attached to a temple. Material remains of offerings for private ceremonies were located in the abode. Because many ceremonies directed by priests were likewise marked by elaborate feasting, we can expect to find traces of large food preparation facilities that are beyond what is needed for an individual, or family, in or around priests' houses (Redmond and Spencer, 2008).

6. Investigating religion, ritual, and ritual specialists in East Polynesia

In East Polynesia, a region encompassing archipelagoes within the Hawai'i-New Zealand-Easter Island triangle (Fig. 1), religion and ritual are commonly studied with top-down approaches emphasizing temples as proxies of elite power. Researchers have

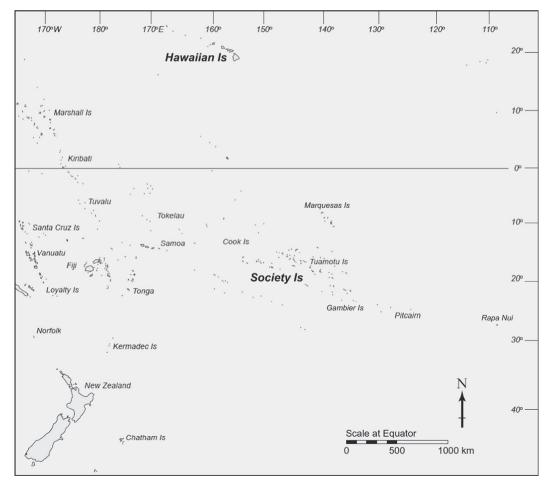


Fig. 1. Map of East Polynesia showing the location of the Society Island and Hawaiian Island archipelagoes.

demonstrated how monumental religious structures are embedded within settlement landscapes, and have outlined the pace and timing of temple construction sequences and labor requirements (Graves and Cachola-Abad, 1996; Kolb, 1991, 1994, 2006; Kirch et al., 2015; Mulrooney and Ladefoged, 2005; Sharp et al., 2010; Weisler et al., 2006). Others have focused on cosmological layouts in temple orientation (Kirch, 2004; McCoy, 2008) and their associations with particular deities or astronomical events or how their architectural elements speak to religious beliefs. While the aforementioned case studies have relied on ethnohistoric data, many have utilized archaeological data sets to test ethnohistoric models, similar to world-wide patterns in the study of ancient ritual and religion.

Few East Polynesian studies have highlighted the advent of ritual specialists and their association with increasing social complexity, Suggs (1961: 183) argued that the growing size and complexity of Marguesan tohua (communal ceremonial sites associated with feasting, ritual, and dancing) and me'ae (isolated sites associated with ritual, divination, mortuary practices, and less frequently serving as the residences of priests, see Rolett, 2010) in late prehistory signaled the increasing power of the priestly class. In a Cook Island study, Endicott (2000) argued that religious specialization was one pathway to political power, particularly in Open chiefdoms (Goldman, 1970) of East Polynesia. Her argument was tentative and mainly referenced the fact that in such societies, ritual structures such as priests' dwellings and temples are often hard to distinguish from one another, as are differences between priests' dwellings and chiefly dwellings. A recent Hawai'i Island paper by McCoy et al. (2011) focused on stylistic changes in temple design and site proxemics to infer the presence of a particular sect of priests. As this brief review suggests, East Polynesia archaeological research typically makes use of proxy data to suggest the presence of priests or other ritual specialists on the archaeological landscape.

But how are we to more directly identify ritual specialists in the East Polynesian archaeological record? Are there alternatives to utilizing a top-down approach and proxy data? East Polynesia represents a tropical environment where ritual paraphernalia and human remains preserve poorly, if at all, and in many locales, human skeletal remains cannot be studied out of respect for descendant communities. East Polynesian societies lacked writing, but had rich oral traditions, including genealogies, myths, and chants, which can be used to model what priests did, where they lived, and how they might have differed from the rest of the population. Material studies of ritual and religion in East Polynesia have to rely on the best preserved material evidence in the archaeological record, notably site proxemics, the layout and elaboration of temples and specialized structures, and sub-surface features and artifacts associated with specialized house sites that may be of a ritual nature. In addition, micro-traces for ritual activity, such as evidence for ritual woods, ritual deposition, or micro-fossils of ritual offerings, may offer important data. The following sections utilize ethnohistoric records to model the nature of ritual specialists in the Society Islands and Hawai'i, including what sorts of activities they led and participated in.

6.1. Society Islands

Archaeologists and ethnographers classify the Society Islands as one of the most complex and highly stratified of Polynesian chiefdoms (Cordy, 1981, 1985; Goldman, 1970; Kirch, 1984, 1990; Peebles and Kus, 1977; Sahlins, 1958). The ancient Ma'ohi, as ancient residents of the Society Islands are called, are noted for occupational specialization, with numerous ranks of chiefs and sub-chiefs, land managers, and craft and ritual specialists (Oliver, 1974). Like other complex societies, there was a hierarchy of

priests in the Society Islands, with each group having different functions and wearing different styles of clothes to mark their offices. At the upper echelon, the priesthood was hereditary. Officiants were trained in schools by older priests in special houses (fare aira'a upu) constructed on sacred temple grounds (Oliver, 1974: 870–871). Young men in training for the priesthood learned to recite chants used at ceremonies on the temples, in addition to prayers, religious and political speeches, genealogies, songs and enchantments, war and peace songs, and invocations to inspire the god images or the deities. Priests in training also studied how to tie prisoners and sacrifices up in sennit cords for their use as offerings at temples. Priest teachers were paid with an assortment of staple and wealth finance items, including food, bird feathers, images, tapa (barkcloth), fine mats, ornaments, and clothing (Henry, 1928: 1245).

The range of activities that Ma'ohi priests, particularly high priests, were involved in (Table 2), their lexical marking in the Tahitian language, and the fact that they were paid for their prayers and for imparting their knowledge (Oliver, 1974), suggest that many priests were full-time occupational specialists, particularly those in the highest orders. In contrast, *tāura* or *tahu'a atua* served as oracles, shamans, or prophets. Rather than being ascribed positions, Ma'ohi shamans could come from all social classes and were an achieved position. Shamans served as mediums through which the spirit world addressed humans. They tended to work for individuals in the general populace rather than serving in specific ritual positions for the chiefly class.

Ma'ohi priests, particularly high priests, formally engaged in worship and were considered *ra'a*, or sacred, a state of belief associated with persons of high status (Kahn, 2005; Shore, 1989). The strong connection between high status, priests, and ritual and political power is reflected in the fact that high priests were, at times, kin of the ruling chief. High priests could be attached to specific elite temple sites, where participation in ritual was restricted to high status persons (Babadzan, 1993; Henry, 1928: 144); women and commoners were excluded from direct participation in such events. In this way, the development of formalized ritual occupation specialists went hand in hand with ideologies of status and hierarchy in the Society Island chiefdoms.

High priests mediated between the chiefs and the deities at community-based ceremonial events carried out at high status temple sites (Table 1). Many of these rituals were multi-day affairs, such as the annual *pai'atua* ceremonies, where god images were renewed and unveiled, often in association with other rituals and tribute offerings, sacrifices, and feasting (Babadzan, 1993; Oliver, 1974). Equally important were ceremonies conducted at royal *marae* (temples) to ensure success in warfare, such as the *matea* rite, involved in "[a]waken[ing] the tutelar god for war and to secure his favor for their sides" (Henry, 1928: 301). This three-day long ritual concluded with the offering of a human sacrifice. A portion of these rites involved the presentation of gifts to priests, who were then to convince the gods to support the elites in battle (Ellis, 1829[I]: 280), suggesting political and ritual roles for high priests.

The activities of Ma'ohi high priests differed from that of other priests and the rest of the population. At large communal rituals, hierarchy in the priesthood was visually expressed to lay participants, as only high chiefs lined up in the court of the *marae*, while lesser chiefs congregated other along the temple walls and exterior areas (Oliver, 1974: 913). High priests and other specialists were also involved in death rituals, including embalming of the body, elaborate mourning rituals, and final deposition of the dead in caves or other isolated areas. At these mourning rituals high priests donned elaborate mourning costumes with shiny breastplates fabricated from cut pearl shell (Henry, 1928: 293–294; Oliver, 1974: 503–504). These mourning costumes were of high value and

Table 2Hierarchy of Society Islands and Hawaiian Islands religious authorities.

Tahitian name (English gloss)	Function	Clothing	Type/status	Comments
Tahuʻa rahi, Tahuʻa a nui (High priests)	Conducts all religious ceremonies at high ranked temples; decides when offerings and sacrifices are to be made to the gods, mediates between high chiefs and deities; conducts chiefly investitures	Fine white <i>maro</i> (loin cloth); large cape with special fringe	Full-time, high status, drawn from families of the chiefs	Only at higher ranking temples; attached to higher ranking chiefs; considered "religious royalty", had role in secular affairs
Tahu'a pure (Officials in praying, Ordinary priest)	Serves under a high priest or at lesser ranked temples; conducts less important rituals; prepares victims of battle for sacrifice; solicit supernatural assistance in battles	Smaller, less elaborate capes	Full-time, medium status	
Opu nui (Big bellies)	Lay merchants; aid priests with menial tasks – feed animals, keep <i>marae</i> clean, stock altar with offerings, clear altar and temples of old offerings/structures, manufacture fine white bark cloth	Less fine brown maro	Part-time, commoner status	Drawn from overall population; not hereditary; eat of the offerings and feasts levied to the priests
Tahuʻa tiri (Bearers of the god images)	Hold the god images during processual events in major ceremonies	-	Part-time	Usually commoners (de Bovis, 1909: 51); only during this duty were they considered highly sacred
Haere po, Oripo (Night walkers)	Young men in training for the priesthood; serve in subordinate roles in temple ceremonies; roam at night as spies, especially during times of war; prepare victims of battle for sacrifice	-	Medium to low status?	
'Orero (Orators)	Takes part in first fruits ceremonies, participate in war councils (see Henry, 1928: 297), take part in peace talks to end wars	Fine caps/hats (Oliver, 1974: 365)	Full-time, high status (sometimes go on to become chiefs)	Precepts of ideal chieftainship dictate that chiefs be attentive to their orators whose bellies are full of wisdom, experience, sophistication (Handy, 1930: 39)
Tahu'a tutera Tahu'a para tumu fenua	Diagnosis of illnesses Reciters of heraldry, genealogy – serve as teachers in schools for elite children	-	Full-time, high	Paid with high status goods and wealth items (best foods, bird feathers, clothing and ornaments) (Henry, 1928: 154)
Feiā tahutahu, Tahuʻa atua, Taura ʻatua, tahutahu, orou, nanati aha, natinatiʻaha, taʻata opu tara (Shamans, Prophesiers, Oracles, Sorcerers)	Became possessed with the spirits; protect temples and chiefs from hostile spirits; divine or predict historical events through conversing with the spirits' avenge and annihilate opposing sorcerers; aid warriors by leading rites on slain or captured chiefs in time of war; interpret signs when deciding when to go to war or to break treaties	Bizarre dress, headdresses of red and black feathers with <i>ava</i> leaves	A very few seem to be of high status and in formalized offices, the rest are medium to low status. Range from full- to part-time	Drawn from all classes and both genders (Oliver, 1974: 79); receive food offerings and objects as payment (Henry, 1928: 206; Oliver, 1974: 103, 875)
Hawaiian name	Function	Clothing	Type of specialist; status	Other
Kahu akua Kahuna nui (High priest, Royal chaplain)	Keeper of the god image; feeds the god by making daily sacrifices; takes care of the god's temple and images; carries god figure in processions; serves as living image of the god Responsible for Paramount Chief's religious duties, maintains	White loin cloth	High High, chiefs of lower rank	
	his temples and his gods, controls luakini and agricultural ceremonies, controls large number of priests, manages <i>tapu</i> , plays an important role in all legitimation ceremonies for the Paramount Chief	(malo)		
Kahuna pule; (Prayer specialist, Priest); Kahuna pule heiau (Temple priest)	Officiate in temples controlled by chiefs, carry out rituals to Ku and Lono, inaugurate houses and carry out house opening rituals; carry out purification rituals at heiau as well as mortuary ceremonies		High, chiefs of lower rank, drawn from high-ranking elite families	
Kahuna wāwae (Principal priests) Kahuna lapa'au (Medical priests, Curing experts)	Eight types, induce pregnancy and deliver babies, diagnose childhood ailments, use magic in treatment, counteract sorcery, etc.			

	temples, houses, fish ponds, ritual architects, develop plans for		
	new temples		
Papa kilokilo lani	Study and read omens in the sky		
Kilo hōkū	Study and read omens in the clouds		
Kilo honua	Study and read omens in the earth		
Kahuna 'anā 'anā, kahuna kuni, kahuna	"Impure", anti-establishment; perform sorcery to figure out	Low status?	Greatly feared; outside the hierarchical class
ho'opi'opi'o (Sorcerers)	who caused the death of a fallen chief; cannot perform		and in opposition to the state cult system
	purification ceremonies because impure		but could be paid high sums for their
			services
Kāula (Prophets, Oracles)	Becomes possessed by the gods, trance states, foretell	Low, did not participate in state	Live apart, isolated
	overthrow of governments, deaths of chiefs, etc.	cults but king's did seek their advice	
Kahuna kuhi 'alaea (Priest who marks with	Belongs to the order of Lono	Low	Live apart, isolated
ocher)			
Kahuna hui	Prepares elite corpses in mortuary ceremonies		

A class of priests who advise the building and location of

Papa kuhikuhipu'uone

prestige, and were heirloomed, suggesting that they would be stored in the priests' residence or a nearby specialized storage house for sacra. Fare ia manaha or "treasure houses," are described in the ethnohistoric record as specialized houses used for storing images, drums, or priests' vestments (Oliver, 1974: 101). Given the sacred nature of high priests, and their involved in specialized ritual tasks at sacred temples throughout the day, they were typically brought offerings and provisions from elsewhere (Oliver, 1974: 1336), as cooking was considered a defiling act that should not be associated with temples.

Not only did the activities that high priests carry out on a daily basis differ from the rest of the population, but so did their dress. As Oliver (1974: 448) notes "priests wore clothing specific to their office." The cape of the high priest was large and had a special fringe, while capes of lesser priests varied in size according to their social class. While performing ceremonial duties at the temple, high priests wore white loincloths fashioned from barkcloth of the breadfruit tree called *maro uo* (Babadzan, 1993), while lesser priests wore loin cloths fashioned from lower quality forms of barkcloth produced from other cultigens.

Ordinary priests, or tahu'a pure (one skilled in praying) served under Ma'ohi high priests. They officiated at lesser temples or were attached to chiefly households. Such positions were less important in scale than that of the high priest, and tahu'a pure officiated at less important rituals. Other categories of priests specialized in medical diagnoses, carrying the god images, and reciting genealogies. Those in training for the priesthood assisted at ritual ceremonies, conducted less important rituals, and prepared offerings to be sacrificed to the gods. There was also a lay category of temple functionaries, the 'ōpū nui (big bellies). The 'ōpū nui carried out many of the daily tasks of marae upkeep, cleaning, and maintenance, activities suggestive of occupational specialists. Oliver (1974: 874) infers that 'ōpū nui served temporary shifts and, while on duty, slept in the marae precincts. Interestingly, part-time lay attendants such as the 'ōpū nui (big bellies), were drawn from all classes of the populace suggesting some fluidity to social status. Lay attendants helped with the more menial day to day tasks, such as feeding the animals to be used in sacrifices, cleaning the temples, and producing bark cloth to be used as coverings for ritual structures. 'ōpū nui wore brown loin cloths during their labor at the temples, and were rewarded with a share in the food offerings given to the priests, hence the origins of their Tahitian

As this review suggests, the Ma'ohi had a range of ritual specialists, some formalized and full-time, others part-time and holding ascribed positions. Those in the upper priestly classes spent the majority of their time preparing for, aiding in, and carrying out rituals at temple sites where they mediated between high status elites and the gods. Ethnohistoric references suggest that at least high priests had vested interests in controlling their specialized knowledge (Morrison, 1935: 180-181). This likely included specialized oratories as well as information about ritual paraphernalia (Henry, 1928: 154-155; Beaglehole, 1962 (1): footnote p. 379). Only certain ranks of high priests could take part in the pai'atua ceremonies, where the god images were assembled and uncovered (Babadzan, 1993: 17). High priests had both ritual and political (secular) importance and had considerable ability to affect the political power of chiefs (Oliver, 1974; 870). Such political power is illuminated in their roles in chiefly investiture ceremonies or when they directed war ceremonies, soliciting supernatural assistance in battle or trying to weaken the enemy in times of war (Henry, 1928: 301-304, 389). Finally, ethnohistoric records indicate that high priests often were kin of the high ranking chiefs (de Bovis, 1909: 49-50), suggesting that Ma'ohi political leaders actively established close relations with ritual specialists as a form of consolidating their socio-economic power.

6.2. Hawaiian Islands

For some time the Hawaiian Islands were considered the most complex Polynesian chiefdom (Cordy, 1981; Earle, 1997: 34; Johnson and Earle, 2000; Kirch, 1984). Current analyses focus on Hawai'i as an endogenous archaic state (Kirch, 2010; Hommon, 2013). A comparison of the Society and Hawaiian priesthoods is then instructive, as formalization of the socio-political roles of ritual specialists is expected in more highly elaborate complex societies and may lead to increased elaboration of their material trappings and domestic spaces.

Similar to the Society Islands, there were several orders of priests or *kahuna pule* (prayer specialists) in the Hawaiian Islands. Kirch (2010: 57–58) argues that the Hawaiian priesthood was the most elaborated of any found in the Polynesian chiefdoms. Membership in the high priest class was aristocratic, stressing lineage, particularly of high-ranked families, and hierarchy within the priestly class. State priesthoods served to legitimate the divine kinship of ruling chiefs (Kirch, 2010: 5, 60) and supported the economic and political desires of the elite ruling class, particularly by funneling tribute to the political rulers. However, the fact that some Hawaiian paramount chiefs ruled as divine kings afforded them greater control over the natural and supernatural world than the rest of the populace, including the high priests.

Ethnohistoric records suggest that Hawaiian priests were full-time specialists of high status, some with hereditary positions. The highest ranked priests (*kahuna nui*) presided over worship of major gods at principal temple (*heiau*) sites (Hommon, 2013: 17). At European contact, some important high priests were members of high chiefs' families (Barrère, 1986: 132–133; Kamakau, 1964: 7). High priests performed a range of duties, the most important of which were directing prayer and offerings at major *heiau*, carrying out important roles in the *makahiki* ceremonies (harvest festival, New Year's festival), and leading chiefly investiture ceremonies. During the *makahiki* festival, high priests and principal chiefs had clear managerial roles in all stages of the festival, reciting prayers during ceremonies at temples, lining up the feather gods, and performing sacrifices to the feathered gods (Valeri, 1985).

Ethnohistoric records suggest that Hawaiian pre-contact priesthoods were more highly formalized than their Tahitian counterparts. In Hawai'i, separate orders or sects of priests worked in temples and on rites dedicated to different state gods. A specific subset of high priests (kahuna kuhi-kuhi pu'u one) constructed and aligned luakini temples (war temples) and only high priests directed the war ceremonies within them (Malo, 1951). Historic records indicate that the Ku (war god) order of priests working in luakini temples outranked all the others; Kahuna nui or high priests officiated at war temples of the king (Kirch, 2012: 26). Lono priests, dedicated to the god of agriculture and fertility, also played important ritual-political roles in determining when the makahiki festivals would start. At these significant ceremonies, high priests, in conjunction with the king or principal chiefs, would perform a ten day ceremony where they offered prayers and sacrifices to the gods (Malo, 1951: 141-147; Sahlins, 1995: 52-58). During elaborate ceremonies, high priests were assisted by subordinate priests (Hommon, 2013: 96). There were also several subsets of medicinal priests, each with specialized medical knowledge (Malo, 1951). Thus, while Society Island priests exhibited a high level of hierarchy and functionality, these patterns were more formalized in the Hawaiian Islands.

In Hawai'i, priests functioned beyond the ritual realm and participated in political roles, such as directing warfare rites at *Ku* temples and leading chiefly investiture ceremonies, where the legitimacy of the high chief was established or reestablished (Sahlins, 1995; Valeri, 1985). Yet, in contrast to the Society

Islands, the political role of Hawaiian priests was subsumed in part by the king and principal chiefs (see Hommon, 2013: 132). Hawaiian priests certainly controlled aspects of specialized ritual knowledge and put this toward political use. A case in point would include their role in temple design and alignment, and in maintaining the ritual calendar via astronomical observations (Kirch, 2004; Ruggles, 2007: 293). However, there seems to have been a sort of tension between sacred and secular power in the Hawaiian state administration. Kirch (2010) and others (Malo, 1951: 187-188; Sahlins, 1958) have argued for a dynastic or dualistic structure to the central Hawaiian administration centered on the strong religious forces of the kahuna nui and the strong secular forces of the ka laimoku or chief councilor. Yet Hawaiian high chiefs retained some priestly functions (Sahlins, 1958). In contrast to the Society Islands, historic documents from Hawai'i suggest that high priests, kings, and principal chiefs played important roles in sacred and secular ceremonies at heiau. As such, priests' political and ritual roles in Hawaiian society seem to be somewhat circumscribed and less independent than that found in Ma'ohi society.

6.3. Discussion

As the review above suggests, ethnohistoric documents in East Polynesia most commonly discuss priesthoods in relationship to the roles that priests had in communal based ritual. While the remains of ritual activities such as cleansing rites, mortuary ceremonies, and sacrifices at temple sites certainly serve as proxies for high priests, they do so only in an indirect manner and from a top down perspective. Other micro-scale lines of evidence are required to investigate the daily lives of priests in and around their residences or specialized sites where sacra were made, used, and stored.

7. Archaeological correlates of high priests in East Polynesia

Given the highly specialized nature of Ma'ohi and Hawaiian ritual practitioner activities and the important roles that high priests played in multi-day ceremonies, we can expect that such persons would have been highly associated with elaborate temple sites and the specialized structures surrounding them. Certainly, ethnohistoric and ethnographic documents from other East Polynesian cultures illustrate that priests or new initiates into the priesthood lived in special isolated houses near temple sites, at a minimum during particularly intensive parts of the ritual calendar (Endicott, 2000: 76; Hiroa, 1938: 428-432; Rolett, 2010: 96). High status priests were tapu to the rest of the population, as such their sacred activities had to spatially isolated from the normal contexts of daily life. The next section explores the ethnohistoric records to pinpoint archaeological correlates Ma'ohi and Hawaiian priesthoods and in particular, where high priests lived during intensive periods of ritual carried out during the annual calendar and where they stored the sacra used in religious ceremonies

7.1. Ritual practitioners' and attendants' houses

At least three Tahitian terms recorded by Davies (1851) refer to houses for ritual practitioners (see Table 3). Ma'ohi ethnohistoric accounts describe how priests' houses or those for temple attendants were sometimes situated adjacent to *marae*, at the end of the court furthest away from the altar (Morrison, 1935: 179). These houses were for the "reception of the Priests, when they come to offer sacrifice and Feast on the *marae* [temple]" (Morrison, 1935: 179; see also Henry, 1928: 125). Traditional chants (Henry, 1928: 162) mention that priests, as well as idols,

Table 3References to houses of ritual practitioners in the Tahitian lexicon; *marae* is the Tahitian term for temple.

Tahitian term	Gloss	Source
tapuata	The name of a sacred house for the use of priests, also a prayer	Davies (1851: 253)
ahitu	A company of idolatrous priests, a sort of Nazarites, residing in a sacred house in a marae, and observing peculiar customs, such as not shaving, not cutting the hair	Davies (1851: 11)
fare tinati	Inaccessible house, such as those where wizards are said to be	Davies (1851: 82)

had a house, confirming the presence of priests' houses and those for storing sacra. Orliac (2000: 108) refers to a *fare tahutahu* as a house at each national (or community) temple for a sorcerer or conjurer.

There are no detailed descriptions of Ma'ohi high priest houses in the ethnohistoric record. It is unclear whether they would be of round-ended or rectangular form, but they would have been made from pole and thatch and associated with stone elements such as curbstone outlines and pavements. High priests typically were brought offerings and provisions from elsewhere, suggesting that priests did not cook within the *marae* precincts (Oliver, 1974: 1336), at least during the most intensive periods of the ritual calendar.

Ma'ohi ethnohistoric records suggest that temple attendants (${}^t\bar{o}p\bar{u}$ nui) also took up residence at marae while on temporary duty. Levies of food were left for marae attendants. Descriptions or depictions of possible fare ' $\bar{o}p\bar{u}$ nui are limited. In Wilson's engraving of a temple complex (see Orliac, 1982: 164), a large round-ended house, likely a fare ia manaha, is situated adjacent to a marae and two rectangular houses are found nearby. Orliac suggests that these rectangular houses may have served as habitations for priests or marae attendants. If these rectangular houses did function as ritual practitioners' houses, they would conform to the vague descriptions of fare ' $\bar{o}p\bar{u}$ nui in the ethnohistoric record (see Eddowes, 1991: 67–68).

Hommon's (2014) ethnohistoric survey of Hawai'i Island indicates that *luakini* complexes served as political and ritual centers for the surrounding socio-political district. Such temple complexes included houses to store sacra, specialized houses for priestly prayer and chanting, and others for ritual food preparation. High priests of luakini *heiau* lived nearby the structures order to perform

the daily rituals necessitated by their office (Cordy, 2000; Hommon, 2014). When visiting the chiefly center at Kealakekua Bay, Cook and King (1878) describe a "habitation of a society of priests", where priests' residences were constructed around a sacred pond and isolated from elite chiefly residences. Elsewhere, the Cook and King document (1878: 36, 42) and illustrations from that voyage (Fig. 2; Ellis, 1782, "A view of Owhyee with one of the priest's houses, cited in Stokes, 1991: 100, Fig. 45) refer to specific residences for specific high priests, confirming the presence of priests' houses on the Hawaiian landscape.

7.2. Discussion

In Hawai'i and the Societies, houses for ritual attendants are expected to be situated in association with temples or other ritual structures. For example, Malo (1951) describes that during the makahiki festival, high priests slept at the temple, but that afterward they returned to their own houses. Given the high status of many ritual specialists certain aspects of their house sites, whether their spatial proximity to other structures, or their architecture, artifact assemblages, or sub-surface features, may have similarities to elite residences. However, in contrast to everyday sleeping houses, priest houses are expected to appear "specialized" and may have a more formalized use of interior and exterior house space than that found at domestic house sites. Because priests may have been provisioned from the rest of the population during the most sacred rituals, priest residences may lack clear evidence for daily cooking activities exterior to the house, but may exhibit a limited variety of cooking features used for cooking ritual foodstuffs or preparing feast foods.

While everyday cooking was never associated with temple enclosures, fire played an important sacred role in ceremonies carried out at ritual complexes (Oliver, 1974: 110–111; Wattez, 1992), including fires for singeing offerings or coloring ritual objects and others to ritually burn sacra (Kolb and Murakami, 1994). In the Society Islands, small hearth features and ritual fires lacking an associated pit are described near *marae* and adjacent house structures (Orliac, 1982). These were used in a ritual manner, for cooking animal entrails and singeing the skins of animals to be used as offerings (Morrison, 1935; Parkinson, 1773), burning the remains of materials collected during ritual cleaning, and ritual burning of other offerings.

Other specialized types of sub-surface features that might be associated with ritual practitioner's houses include basin shaped

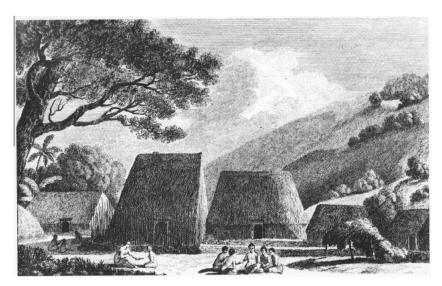


Fig. 2. Illustration from Cook and King Hawai'i voyage, "A view of Owhyee with one of the priest's houses".

pits lined with leaves, adjacent to houses situated near *marae* Henry (1928: 206). These pits were used by ritual practitioners as reflective pools for divining.

7.3. Places for storing sacra

Ma'ohi ethnohistoric accounts refer to *fare ia manaha* or sacred houses used for the storage of ritual paraphernalia such as drums, god-idols, tapa (barkcloth), and costumes utilized in rituals (Henry, 1928: 135, 175–176; Parkinson, 1773: 70). These houses are found in close association to (on, near, or in front of) temple sites (Henry, 1928: 135). While ethnohistoric accounts typically mention or depict *fare ia manaha* only adjacent to the most elaborate "national and international" temple complexes (Orliac, 1982: 161–164, Figs. 101–103), junior chiefly lines would have had related structures on their less elaborate temples (Eddowes, 1991: 67; Kahn, 2005). Wilson's 1799 depiction of a *fare ia manaha* in relation to a temple in Punaauia, Tahiti provides a visual of this practice from the early contact period (Fig. 3; Emory, 1933, Plate 10b).

Archaeologically, fare ia manaha are expected to be manifested as moderately sized round-ended houses situated in front of temples. Orliac's ethnohistoric review (1982: 165) argues that fare ia manaha are typically 15-20 m in length. The interior of the house is described as having a storage area and sleeping area (Henry, 1928: 151-153), which should be manifested as relatively "clean" cultural deposits. As sacred and specialized houses, fare ia manaha are expected to lack general daily activities that are associated with areas exterior to the fare ta'oto (sleeping house), such as frequent evidence for cooking or food storage (Kahn, 2005; Orliac, 1982: 236). There is some indication that the manufacture of ritual objects, such as sacred tapa cloth (apa'a) or braided mats for the gods, was carried out within or around the fare ia manaha (Henry, 1928: 135). Material remains of these textile production activities are likely to preserve as micro-fossils (see Kahn et al., 2014; Prebble and Anderson, 2012).

In a similar manner, Hawaiian ethnohistoric documents discuss specialized house sites found in temple enclosures that were used for storing sacra. The same structures functioned as loci for priest's chants and prayers (Valeri, 1985), and thus served as storage areas for ritual knowledge, a form of immaterial sacra.

7.4. Types of sacra

A select number of objects and actions were used in East Polynesian Island rituals. These constitute a "distinct language"

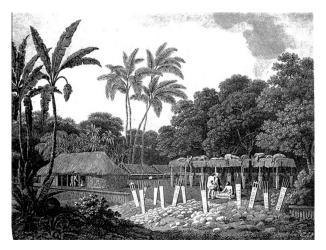


Fig. 3. Wilson's 1799 depiction of a *fare ia manaha* (round-ended house, seen on left) in relation to a temple (seen on right) in Punaauia, island of Tahiti, Society Island archipelago.

with specific ritual meanings that were put together in various ways for differing objectives (Oliver, 1974: 107). Ma'ohi sacra include two forms of god images - ti'i and to'o (Table 3). Ti'i, or sculpted anthropomorphic images of wood or stone, are found in association with shrines, marae, and archery platforms (Kahn and Kirch, 2014). These images were used by ritual practitioners as "fetchers," or mediators between the world of the gods and the world of the living (Campbell, 1991). To'o, wooden, stone, or wickerwork objects that housed the major gods, were themselves housed in small god houses (fare atua) in the fare ia manaha (house for the sacred treasures), along with other important ritual items such as drums and conch shells. These sacra were used on and stored in temple sites; they were also refashioned during annual renewal ceremonies where old images, prestige items, and offering platforms were ritually burnt on areas adjacent to the temple (Kahn, 2005).

To'o and other ritually important costume elements, including girdles used as insignia of the high chiefs (maro), warrior breast-plates (tāumi) and headdresses (hau) of senior warriors and chiefs, were adorned with red and sometimes yellow feathers (Cauchois, 2013: 82–84; Kaeppler, 2007: 105; Stevenson and Hooper, 2007: 183). Red bird feathers, in particular, signaled high status and association with the 'Oro ritual cult, allowing their wearers to personate and enact divinity in public occasions. High priests and the highest levels of shamans were sometimes paid in bundles of red feathers, presumably for their later use in fashioning ritual objects.

Other material objects having important roles in Ma'ohi ritual include human blood, young shoots of the plantain, wood and branches with leaves of the rosewood tree (*miro*, *Thespesia populnea*), glossy leaves and stems of the *ti* plant (*Cordyline terminalis*), turmeric, seawater, and sacred cords (*aha*, *aha mo'a*, *viriviri*) (Cauchois, 2013: 86; Oliver, 1974: 107–109). Large sacra include conch trumpet shells, drums fashioned from tree trunks and sharkskin, human skulls, sennit ropes, bark cloth, woven mats, and spears. Such items would have been used by priests during varied rituals at religious sites.

Hawaiian sacra share many similarities with those from the Society Islands. *Ki'i*, wooden sculpted images or those formed from wickerwork with attached feathers, served as storage receptacles for the gods. Hawaiian *ki'i* were typically larger in size than those found in the Society Islands and were placed on the court of the *Lono* and *Luakini* temples. God images representing *Ku*, the war god, were constructed from wickerwork adorned with red and yellow feathers, inlaid eyes of pearl shell, and mouths lined with dog teeth. Kaeppler (2007: 85) has suggested that male priests manufactured the elaborate feather cloaks worn by Hawaiian high chiefs. Feathered war gods were likewise stored by the priests in the precincts of the *heiau*.

Large woven mats covered stone pavings on at temple sites while rituals were enacted by Hawaiian priests and chiefs (Hommon, 2013: 91). Drums and other items used in religious ceremonies were housed either in a drum house (hale pahu) or the hale mana, a large sacred house where priests resided during certain ceremonies and where feather god-images and other sacra were stored (Malo, 1951: 162; Stokes, 1991: 27; Valeri, 1985: 239). Sacred water was stored in the hale wai ea structure (Hommon, 2013: 94), a small house used for incantation (Stokes, 1991: 27). Barkcloth was used to decorate many ritual items found on the heiau in addition to ritual structures found within the stone enclosure. Bananas were often left as offerings to the gods or were cooked in ritual ovens. Personal sacra of the priests may have included "wands" or staffs tipped with white dog hair (Cook and King, 1878: 5, 10, 36) and distinctive types of cups for use in kava rituals (Buck, 1957: 70).

7.5. Discussion

Modeling Ma'ohi and Hawaiian priestly activities is instructive for generating the material correlates of such activities in the archaeological record (Table 3). Unfortunately, virtually all of the clothing and sacra are organic items that do not preserve in the tropical contexts of East Polynesia. However, traces of some objects may be retrievable using paleoethnobotanical analyses. For example, ritual singeing of offerings on temples involved burning of sacred woods that would differ from those found in cooking features in domestic contexts (Kolb and Murakami, 1994). Wooden god idols, offering platforms, and other sacra were likewise burnt during annual renewal ceremonies; the particular types of ritual woods used to fashion such items can be identified with wood charcoal analyses and should differ from charcoal assemblages found in domestic house sites (see Kahn, 2005; Kahn and Coil, 2006; Kolb and Murakami, 1994; Orliac, 1990).

In a similar fashion, microfossil analyses of starches, phytoliths, and pollen should pinpoint the use of sacred plants and woods at ritual sites. While priestly dress was for the most part non-durable, microfossils of tapa loincloths and capes may preserve and would differ from the common, everyday types of barkcloth found in generalized domestic contexts that were fashioned from other cultigens. Pieces of mourning costumes, including cut pearl shell, are moderately durable and preserve in some Society Island contexts (Kahn, in press), similar to pieces of Hawaiian god figures fashioned from pearl shell or dog teeth. Because such raw materials were also used to fashion other types of personal adornment and tools, most notably fishhooks, material remains of these kinds would not be restricted to ritual sites. However, petroglyphs of Ma'ohi priests depicted in mourning costumes (Garanger, 1980; Kahn, in press) and perhaps the remains of embalming oil should be recovered in areas formerly used for embalming or mourning rituals.

As with studies world-wide, identifying ritual specialists in East Polynesian chiefdoms requires diverse lines of evidence. Fortunately, the spatial relationships among stone remains of temples, shrines, god figures, and the surface and sub-surface remains of house sites surrounding them, can be used in conjunction with

specialized artifact types and sub-surface features to identify where priests may have stored sacra and where priests may have lived. As Table 4 illustrates, remains of houses where ritual practitioners lived and stored sacra are among the most durable archaeological remains for directly studying religious practitioners. The following case studies from the Society Islands and Hawai'i demonstrate this pattern (see Table 5).

8. Archaeological evidence for priest houses in the Society Islands

My Society Islands case study focuses on the 'Opunohu Island, Mo'orea, where long-term survey, settlement pattern analyses, and excavation data permit detailed analysis of ritual structures and the houses surrounding them. The 'Opunohu Valley is found in an inland zone with high rainfall and acidic soils, thus, archaeological sites have poor preservation; typically only highly durable remains (stone tools) preserve, whereas bone and shell are rarely recovered. As part of an analysis of inter- and intra-household variability in the valley, I carried out large scale horizontal excavations at five house complexes in the upper Tupauruuru socio-political district of the 'Opunohu Valley (Kahn, 2005), one of which (ScMo-123A) was interpreted as a priest's house. This was followed by a detailed analysis of a major ritual complex (ScMo-124/125) where a second priest's house was identified (ScMo-124Y-M) (Kahn and Kirch, 2011, 2014).

8.1. ScMo-123

This site complex is situated in the upper slopes of the valley, in an isolated zone dominated by temple sites rather than agricultural or domestic features. The ScMo-123 complex consists of five distinct stone structures, including a rectangular house site (123A) with an adjacent paved area to the west, two large upslope temples (123B and 123C), and a substantial earthen terrace separating the house site from the two temples (see Fig. 4). A small temple/shrine complex (ScMo-151) is found downslope to the west. The most extensive temple complex in the valley, ScMo-124/125, is situated on the next steep ridge crest found upslope and to the southeast.

Table 4Sacra and ritual house sites and their potential for preservation in typical East Polynesian contexts.

	Society Islands	Hawaiian Islands		
Small sacra	Red or yellow feathers (N) Plant remains (ti, turmeric, plantain) (Y, B) Sacred cords, sennit ropes (Y, B) Seawater (N)	Red or yellow feathers (N) Wands tipped with dog's hair (N) Sacred water (N) Bananas (Y, B)		
Large sacra	Barkcloth (Y, B) Drums (Y, B) Human skulls (N) Shell trumpet (N) Spears (N) Ti'i (Y-stone) To'o god images (Y-stone) Woven mats (Y, B)	Barkcloth (Y, B) Drums (Y, B) Ki'i (N) God images (Y – pearl shell eyes, dog teeth mouth) Woven mats (Y, B)		
Priest houses	Postholes (Y) Curbstone outline (Y) Stone pavement (Y) Thatched walls/roof (N) Divining pools (Y)	Postholes (Y) Stone walls or platform (Y) Stone pavement (Y) Thatched walls/roof (N)		
Specialized houses for storing sacra	Postholes (Y) Thatched walls/roof (N) Ritual burns (Y, B)	Postholes (Y) Thatched walls/roof (N) Ritual burns (Y, B)		

First item in parentheses: (N) = will not preserve in typical archaeological contexts; (Y) = will preserve in typical archaeological contexts; (Y-stone) = item will preserve if made out of stone.

Second item in parentheses: (B) = botanical remains, either macro- or micro-may preserve.

Typical-open air sites with or without stone architecture, sub-surface sites, as opposed to uncommon sites with excellent preservation such as sink holes, rockshelters; matrix at typical sites is considered to be loam or clay rather than sandy matrix.

Table 5Characteristics of priests' houses, as determined from the archaeological record.

Site #	Isolated, associated with temples	Elaborate architecture	Unique artifacts	Unique sub- surface features	Comments
123A 124Y, M	X X	T, P, R, U P	X	X	Ochre, divining pools (?) Adjacent to communal feasting zone and assembly areas
KIP-117	Х	T, TC	Х		Divining stones (?) or gaming stones, lava stalactite, choice cuts of sub-adult pig and dog, preferred shellfish/fish, adjacent to assembly areas

T = terrace of substantial height; P = well-constructed pavement; R = ramp/entry way; U = stone upright; TC = architectural traits typically associated with temple sites.



Fig. 4. Plan view of ScMo-123 after excavation with sub-surface features.

When considering site proxemics, ScMo-123A conforms to other houses in the valley of varying size, found in isolated locations near *marae*, or on terraces near *marae*, that are likely to have had specialized functions (Kahn, 2005).

From an architectural point of view, the ScMo-123 complex shares many characteristics with elite or high ranking structures. The 123A rectangular house is situated on a faced and upraised house terrace that is well-constructed from 3 to 4 courses of stacked basalt cobbles and boulders, with height of 0.8 m. The NE corner of the terrace facing is notched, after which a stone ramp/entry-way is found. The earthen terrace behind the house and fronting temple ScMo-123B is substantial, measuring 8.5 m long by 8 m wide. This terrace is well-paved for an extent of 5 m. Two fallen stone uprights (prismatic basalt slabs), are found along the northern limit of this paved area, adjacent to a ramp feature that may have served as an entryway to the site. A portion of the easternmost extent of the habitation terrace is also paved.

Detailed excavation of 'Opunohu Valley house sites has established that the presence of stone uprights, well-constructed paved areas adjacent to the house structure, and placement of the house on an elevated and raised terrace signaled elite status and/or were markers for specialized houses (Kahn, 2005, 2007). Basalt uprights signaled close association with the gods and the ancestors and are restricted to elite residences or temple sites. Ramp features are rarely associated with 'Opunohu Valley house sites, but are typically associated with ritual complexes whose function was in part associated with public procession and performance (Kahn and Kirch, 2014).

Temples ScMo-123B and ScMo-123C, found upslope and to the south and east, also have elaborate architectural features. Both contain altars faced with fan coral and coral slabs respectively. Each has enclosures with rows of stone uprights. ScMo-123C has a stone lined cyst on the interior court (Green and Descantes, 1989: 92; Kahn, 2005), likely used for discarding sacra and prestige

items after their use in ceremonies, which were then regarded as "superlatively sacred" (Henry, 1928: 142–143).

The ScMo-123A rectangular house is delineated by curbstones. It is of moderate size, with interior dimensions of 4.5 m by 3 m. The full extent of the house interior was excavated, excluding the southwestern portion of the site that was disturbed by a large tree. Portions of the exterior house terrace between ScMo-123A and the ScMo-123B *marae* were excavated as a series of 1 m \times 0.5 m units in an attempt to locate sub-surface features. Overall, 44.5 m² were opened, 13.50 m² within the *house* and 31 m² on exterior portions of the house terrace.

Excavations revealed that a single cultural occupation layer was associated with the house and the exterior terrace. A series of postholes were recovered in the interior house excavations, many with support stones; they are arranged in two lateral rows and one mid-line row (Fig. 4). Some postholes had evidence for at least three replacement episodes, illustrating that this rectangular house was cared for and refurbished for perhaps as long as sixty years.

Sub-surface cooking features were not located in the house interior or areas exterior to the house. Inside the house moderate amounts of charcoal and a piece of red pigment were recovered. This pigment may have been used in bark cloth decoration or in preparation of corpses prior to burial (Kirch and Green, 2001: 185–186). Debitage, polished adze flakes, and tool fragments were recovered with moderate frequency from the house interior (17.8 density/m²). Several adze flakes and much of the debitage were recovered from the western edge of the house, near the pavement, suggesting that this was a locale for stone tool production, use, and reworking.

Outside the house, cultural deposits were shallow. An isolated posthole, Feature 19, was identified exterior to the house along the northeastern terrace. Feature 19 may represent an exterior *fata*, *a* storage post for hanging baskets of food, household utensils, and other items out of the reach of rats (Davies, 1851: 82; Morrison, 1935: 197; Orliac, 2000: 62; Wilson, 1799). Two postholes (Features 4, 21) were recovered between the house and a single course alignment. The arrangement of these features suggests that either informal structures or storage poles were adjacent to the house.

Diverse types of sub-surface features were located on the exterior terrace between the 123A house and the 123E temple, yet formal or informal cooking features were not encountered. Probable in situ burn features and ash dumps (Features 15, 23) suggest the use of fire along the terrace. These small in situ burnt sediment lenses with dense charcoal deposits tentatively suggest that small informal structures or posts between the house and temple may have been burnt, conforming to expected evidence for ritual burns. Several postholes (Features 9, 16, 18) and pits of varying size and morphology were recovered along the terrace between the rectangular house and the temple. The postholes' arrangement does not suggest they formed part of larger super-structures; they may have served as posts supporting small offering platforms.

Numerous pits (Features 6, 7, 8, 13, 14, 17, 22) of varying forms and indeterminate function were recovered. The pits lack strong evidence that they were related to in situ fire combustion or cooking activities, as would be found in domestic contexts. At least two pits (Features 8 and 17) are deep and basin shaped, similar to the enigmatic descriptions of "reflecting pools" used in ritual contexts, but they also conform to pits used for breadfruit fermentation. Further analysis of the pit fill sediments may allow for clarification of pit function.

Several lines of evidence suggest that the 123A structure and adjacent exterior terrace had a specialized function. The lack of well-defined earth ovens or informal cooking features in areas exterior to the house suggest that this structure was not used as an everyday sleeping house, nor as a structure for everyday

domestic activities. The type and variety of sub-surface features found along the exterior terrace vary from those recovered at the other excavated house sites, including pole or platform structures used for offerings to the gods in front of marae. Third, while tentative, there is some suggestion from the amorphous burn deposits found on the terrace that ritual burning activities may have been carried out here. Unique artifacts, such as red ochre, could be associated with corpse embalming activities, a highly specialized ritual activity, or decoration of fine bark cloth. A variety of pit features of indeterminate type which did not neatly fit into functional categories for pits typically associated with food storage were recovered. Finally, the geographical isolation of this rectangular house and the complex as a whole, in a sector of the valley dominated by large elaborate temple complexes, suggests that this rectangular house had a ritual function, as does the presence of certain elaborate architectural features, including the entry ramp and the basalt uprights. These data illustrate that the ScMo-123A house had a specialized function, likely serving as a temporary residence for 'ōpū nui or priests during their residence on the temple during ritual renewal ceremonies and other community-wide rituals. Radiocarbon age determinations place the construction of the house and elevated terrace within the mid-15th-mid 17th centuries (Kahn, 2006: 415). A U-Th date on Porites coral associated with the ScMo-123A temple dates to the final phase of construction to AD 1617 ± 9.4 (Sharp et al., 2010: 13236, Table 1). Given the close architectural association between the two sites and the fact that they are both situated on the same elevated terrace, it seems likely that ScMo-123A most likely dates to the first half of the 17th century.

8.2. ScMo-124

This is the most extensive aggregate temple complex in the 'Opunohu Valley. It is situated on a ridge just above ScMo-123 and commands sweeping views of Mt. Rotui, where spirits go to rest. The complex includes sixteen temples, many of elaborate form, in addition to fifteen shrines composed of stone pavements, uprights, and god figures (sculpted stone *ti'i*) (Fig. 5). These structures are tightly clustered between two massive boulder ridges. Human skeletal remains are cached under the large boulders and crevices, indicating use of the ridges as burial grounds. Two massive Banyan tree (*Ficus prolixa*) are found in the complex. Banyan trees were sacred to the Ma'ohi and ancestral skulls were also sometimes cached in their aerial roots. Each structure in the complex was mapped and described. Overall, 22 structures were excavated and a total 233 m² were opened at the complex (Kahn and Kirch, 2011, 2014).

Based on surface remains, only two structures within the ScMo-124 complex were identified as probable habitation sites. These include ScMo-124Y, a rectangular house fronted by a stone pavement, and ScMo-124M a well-paved rectangular area associated with a habitation flat, found adjacent to ScMo-124Y. ScMo-124Y and -M are found in the middle sector of this aggregate temple complex, below two paired sets of elaborate temples, each of which are fronted by elaborate terraces (Fig. 5). Both ScMo-124Y and M were subjected to broad horizontal excavations.

The ScMo-124Y terrace, measuring 5.5 m \times 10 m, has a rectangular curbstone outline measuring 4.75 m long \times 5.0 m wide (Fig. 6). A well-constructed pavement forms a paved zone between the curbstone alignment and the terrace retaining wall. The house sits on a faced terrace that is 0.6 m in height. A block excavation totaling 24.9 m² was completed in the interior of the rectangular house.

A single cultural occupation with infrequent charcoal inclusions and a moderately low frequency (15.0 per m²) of lithic artifacts was uncovered in the 124Y excavations. Within the rectangular

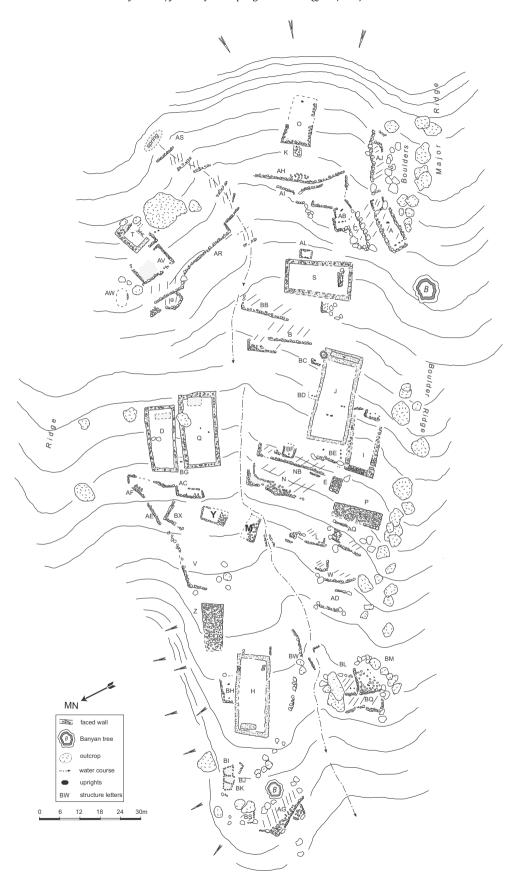


Fig. 5. Plan view of the ScMo-124 complex.

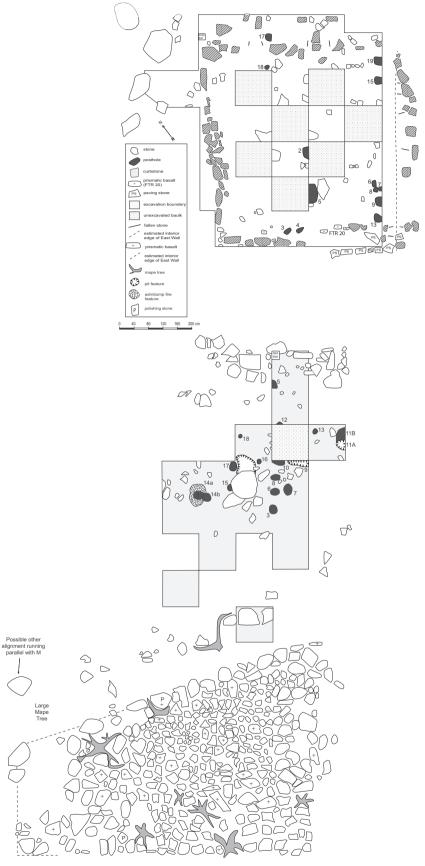


Fig. 6. Plan view of ScMo-124Y House #2 and ScMo-124M after excavation with sub-surface features.

house interior, eighteen postholes were identified. Their configuration indicates two different phases of occupation, each associated with a pole-and-thatch superstructure. The first (earliest) house was square, 4 m on each side, while the second house was enlarged, at 5.5 m by 5 m in width. Several of the curbstones from House #1's western wall were robbed to construct the western wall of House #2 (Fig. 6). Prismatic basalt slabs placed on end along the western edge of House #2, may have functioned as a "runner" for a moveable sliding door or screen that could open along this section of the house to overlook the exterior pavement, as well as the adjacent 124M terrace. Posthole Feature 17 is outside the limit of either house, and may have served as a *fata* (storage post). Stone tools and debitage were recovered with moderate frequency (15.0 per m²).

Radiocarbon dates illustrate that the ScMo-124Y house and terrace were most likely constructed in the 16th century. Given the evidence for rebuilding of the house (the later house being undated but later than House #1), it is entirely possible that this site was occupied continuously until the late 17th century. House renovations are rarely evidenced in the archaeological record of the 'Opunohu Valley. In addition to the house enlargement episode at ScMo-124Y, the posthole sequence along the southern wall of the house suggests several replacement episodes (more than necessary for the two houses already discussed). As with ScMo-123A, these post replacement episodes speak to the long duration of the house occupation.

ScMo-124M, the habitation flat and well-constructed pavement adjacent to ScMo-124Y, was thought to have a residential function given its close spatial proximity. The ScMo-124M structure includes a large terrace and a paved area rising just above the surface. The paved area is rectangular, and measures 9 m long \times 4 m wide. Nineteen m^2 were excavated along the terrace flat between 124Y and the 124M pavement, while a 36 m^2 décapage exposed the 124M pavement.

Stone tools and debitage were recovered with low frequency (1.8 per m²), while numerous postholes, ash dumps, and pit features were identified in the ScMo-124M excavations. Posthole Feature 5 is in close association with the 124Y terrace and may have functioned as a *fata*. Aligned postholes indicate the presence of at least two small pole and thatch rectangular structures. The form of pit Feature 9 suggested it served as a food storage or fermentation pit. Banana leaf phytoliths and bottle gourd pollen were recovered in this pit's interior, indicating that it was lined with banana leaves and used for short term food storage or for fermenting breadfruit paste (Kahn et al., 2014). Two double, cross-cutting postholes (Feature 1 and 14b) were associated with one of the pole-and thatch structures. Earth oven rake out consisting of charcoal, ash, and fire-cracked rock, was repeatedly dumped against post Feature 14b leaving a large heap of debris. In the southwestern sector of the site, on the southern side of the pavement, another cluster of features are found. These include pit Feature 20, a substantial basin-shaped pit feature that is lined with basalt cobbles. This conforms well to descriptions of pits used in the initial stage of breadfruit fermentation. Bottle gourd pollen was identified in a sediment sample from the cultural deposit at ScMo-124M, indicating cultivation or processing of this Polynesian introduced crop and its use as a foodstuff or as a storage

Thus, while no clear cooking features were identified at 124M, sub-surface features suggest it served in part as a cooking area. The zone is replete with posthole features with at least two clustered alignments of postholes suggesting the presence of pole-and-thatch structures. Certain sectors had moderately high levels of ash and charcoal. This, in addition to the recovery of an ash dump/earth oven rake out (Feature 14b), is indicative of pole-and-thatch structures serving as cooksheds. The presence of

at least three food storage pits and/or breadfruit fermentation pits strengthens this functional assessment of the site. It is likely that the 124M terrace served as a cooking area for the resident(s) of the 124Y rectangular house, while the formal pavement likely served as an outdoor area for greeting visitors. Radiocarbon determinations indicate that ScMo-124M was most likely used and constructed during the 16th century and perhaps used until the 18th century.

Overall, the 124Y and M remains are indicative of a permanent residence, likely for the priest responsible for the ritual complex as a whole or his retainers. Varied lines of evidence support this interpretation. The two structures, situated within an isolated ritual complex, are spatially isolated from the normal contexts of everyday life, fitting for the *tapu* status of a high ranking priest. While in close proximity to temple sites, the structure are somewhat isolated from the temples in being constructed on their own terraces. This would have served to isolate the somewhat polluting nature of food preparation activities, even those associated with a high-status priest, from the formally demarcated ritual zones in the complex. While the two structures do not have highly elaboarchitecture. ScMo-124M is associated well-constructed pavement, a characteristic of high-status dwellings. The structures are unique in having evidence for cooking, food storage, and somewhat "dirty" culture deposits, in clear contrast to the remarkably "clean" deposits located at the temple sites, the latter are likely a result of intentional maintenance activities for highly ritualized areas (Kahn and Kirch, 2014). Lastly, ScMo-124Y and M are located adjacent to a large communal feasting area (ScMo-124BX) fronting elaborate temples, where large earth ovens were recovered in the excavations (Kahn and Kirch, 2014). As priests were involved in oratory and offerings at major communal ceremonies, events where feasting would also have been a common occurrence, this spatial association is likely intentional. It is also likely that residents of this house tended the burial remains of chiefly leaders associated with the ScMo-124/125 complex, those found interred along the boulder ridges.

8.3. Comparison with elite and commoner sleeping houses

How do ScMo-123A and -124Y-M differ from other houses excavated in the 'Opunohu Valley that have been indentified as commoner and elite sleeping houses? While both commoner and elite sleeping houses can be associated with small to medium exterior pavements (Green et al., 1967; Kahn, 2005, 2007; Kahn and Kirch, 2013), our current sample lacks evidence for exceptionally large, well constructed pavements such as that found at 124M. The entry ramp at 123A can also be seen as a unique feature, as such architectural forms are typically associated with elaborate temple sites rather than house sites.

In terms of the frequency and types of sub-surface features and artifacts recovered, houses identified as elite and commoner sleeping houses typically exhibit a similar range of domestic cooking and storage features, although their size and frequency may vary (Green et al., 1967; Kahn, 2005, 2007; Kahn and Kirch, 2013). Commonly, at least one small scoop hearth is found within the house interior, to provide light or warmth. Exterior to the house, cooking and storage features include hearths with numbers ranging from 1 to 5 per house, earth ovens, with numbers ranging from 1 to 3 per house, and pits, with numbers ranging from 1 to 4 per house. These cooking features are often associated with "dirty" deposits replete with charcoal, ash, oven rake out, and fire cracked rock. Associated artifacts include low to moderate amount of lithic debitage and stone tools. In contrast to the specialized houses, unique sub-surface features and unique artifacts finds are not associated with elite and commoner sleeping houses. Rather, the latter

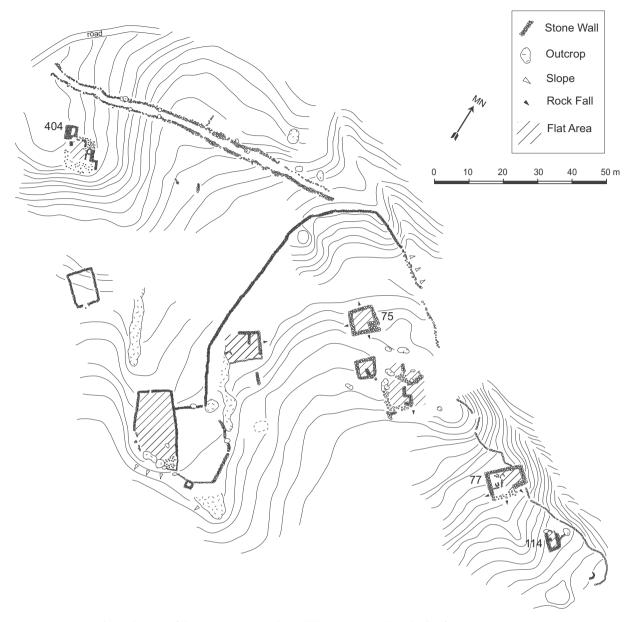


Fig. 7. Plan view of the KIP aggregate complex, Kahikinui, Maui, Hawaiian Islands (after Kirch et al., 2010).

are dominated by what archaeologists in the region refer to as typical domestic sub-surface and artifact assemblages.

9. Archaeological evidence for priest houses in the Hawaiian Islands

The Hawaiian case study focuses on the Kahikinui District of Maui, in the Hawaiian archipelago, where Patrick Kirch and students have carried out micro-scale analyses of households for several decades (Kirch, 1997, 2014). Kahikinui is found in an inland dryland zone where bone, shell, and other organic materials have a high likelihood of preserving.

The KIP-117 site is situated within a larger aggregate complex (Fig. 7) where four temples, an enclosure of uncertain function, and another enclosure identified by excavation as a cookhouse for sacrificial offerings, are found. Kirch describes the aggregate complex as "a sort of 'acropolis', with temples dedicated to a number of different gods and cults" (Kirch et al., 2010: 146). KIP-117 is found to the southeast of temple KIP-75 and in association with

two large spaces outlined by low walls that are interpreted as assembly areas, perhaps for commoners.

The KIP-117 site has an open architectural form and lies on a massive upraised and faced terrace, 0.8–1.2 m in height. As Kirch notes, the terrace is large, at 20×16 m, within the range for elite residences, although some aspects of site construction echo those normally found in temple sites. The partially enclosed site has several space cells (A–F) defined by stone walls or pavements (Fig. 8). Ten $\rm m^2$ were excavated by Kirch and his students. The discussion of the results (below) follows their published analyses.

Excavations in space cell F revealed traces of an earth oven, suggesting this area served as a cookhouse. Excavations in space cell A, considered the main dwelling area, revealed a small hearth to light the house interior. In addition, a cache of 67 white coral pebbles and black stones was recovered against the NE wall of space cell A. Kirch argues that these unique finds were either gaming stones or divining stones used in the diagnosis of sick people, an activity associated with priests in the ethnohistoric record. Stone tools, coral abraders, worked bone, and lithics were recovered, the latter

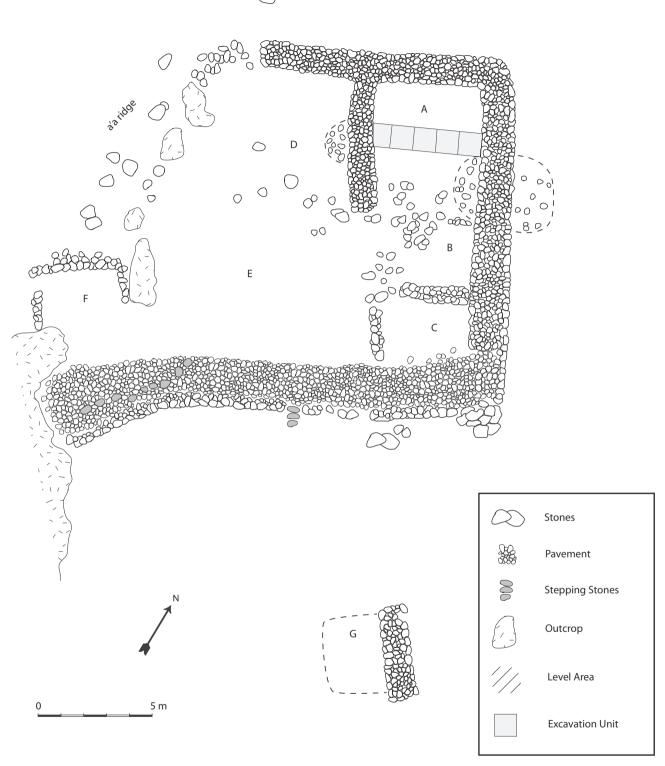


Fig. 8. Plan view of KIP-117 with space cells identified (after Kirch et al., 2010).

in high quantities (62.4 density per m²), in addition to a unique find of a lava stalactite, which the authors suggest may have had ritual significance.

Faunal remains recovered in the space cell A excavations likewise were unique when compared to other domestic spaces and differed in many ways from non-elite domestic assemblages in the region. The shellfish species were highly restricted with large

numbers of prized species. Similarly, fish catches targeted large fish and there is some suggestion species were chosen for cultural preferences (fatty fish of sacred colors). Both the marine and terrestrial faunal assemblages at KIP-117 indicate preferential access to resources, as would be expected of a high-status residence. Finally, the bird remains hint at potential religious significance, as do the preponderance of sub-adult pig and dog bones and the

specific cuts represented. These remains were likely the result of sacrifices made at temple sites, with parts being distributed to the chiefs and the priests prior to the ceremonies (Kirch et al., 2010).

Based on multiple lines of evidence, Kirch maintains that KIP-117 served as the residence of a member of the priestly class. The site is an isolated dwelling found among a cluster of elaborate temple sites, in line with expectations for a ritual practitioner's dwelling. The large-scale, elaborate architecture is consistent with high status, as would be expected for an individual from the priestly class. The recovery of unique artifacts with likely ritual significance, and recovery of a wide range of high-status foods and meat cuts known to have been offered to priests, are particularly strong lines of evidence. Radiocarbon dates place the construction and use of the site between AD 1650–1820 (Kirch et al., 2010: 151).

9.1. Comparison with elite and commoner sleeping houses

As with the Ma'ohi examples, some architectural features at KIP-117 share similarities to ceremonial temple sites rather than residential sites. But the most obvious material differences can be found in comparing sub-surface features and portable artifacts at KIP-117 to the over twenty excavated house sites interpreted as elite and commoner dwellings in Kahikinui (Kirch et al., 2010: 151). The latter typically lack high numbers of, or diversity in, formal tools, yet can be rich in informal lithic assemblages (i.e. flakes and debitage). Of note, the unique artifact types found at KIP-117, including the lava stalactite and cache of black and white pebbles, have not been found at domestic house sites in the region (Kirch et al., 2010). In addition, the relatively low proportion of invertebrate fauna at KIP-117 and the limited species diversity is unusual. Up to 19 additional species of marine invertebrates have been recovered in Kahikinui commoner house sites, which typically exhibit more diversity and broad-based exploitations of these foodstuff than elite residential assemblages (Jones and Kirch, 2007; Kirch and O'Day, 2003; O'Day, 2001). The high amounts of juvenile pig and dog found at KIP-117, and the specific cuts (heads, forquarter, feet) differ from domestic assemblages which typically have smaller cuts of meat. Finally, the presence of certain marine and terrestrial species at KIP-117 that may have been exploited due to their ritual connotations, either due to their sacred color (red or black), or their use as offerings at ceremonies, differs from marine and terrestrial species found at elite and commoner sleeping houses in their region.

10. Convergence and divergence between the ethnohistoricethnographic model and the archaeological data

In many ways there is strong convergence between the proposed archaeological correlates for Society Island and Hawaiian priestly dwellings based on the ethnohistoric record, and data derived from the archaeological record. Each of the excavated houses identified as priests' residences had a clear spatial association with temple complexes; each was a unique house structure found integrated into clusters of temple structures. Each of the three houses was in some ways architecturally elaborate and similar in style to elite residences, while one (KIP-117) had architectural similarities to adjacent temples. Only one of the three (ScMo-123A) conformed to expectations for specialized houses rather than domestic structures, particularly in the lack of cooking structures. ScMo-124Y and M had sub-surface artifacts and features similar to those commonly recovered at everyday domestic house sites (Kahn, 2005, 2007; Kahn and Kirch, 2011), yet were unique in their association with a large communal feasting area. In a similar manner, KIP-117 had sub-surface features comparable to everyday dwelling structures, but had a unique spatial association near public assembly enclosures. These data highlight the importance of site proxemics for identifying priests' houses in the archaeological record.

Unique sub-surface features and artifacts were also correlated with priests' residences. Only one of the priests' houses, ScMo-123A, had evidence for unique sub-surface features, including ritual burns, possible divining pools, and other pit features that do not fit into expected models for ordinary dwellings. Two of the three houses (ScMo-123A, KIP-117) had unique artifact finds that could be correlated with ritual activities commonly associated with priests in the ethnohistoric record. Yet, ethnohistorically documented sacra, both large and small, were not recovered at any of the houses. In the two Society Island case studies this may relate to preservation issues, but several other factors may have played a role. Perhaps sacra were commonly placed in safekeeping in specialized houses for storing sacred objects, of which we have clear evidence in the ethnohistoric record. Alternatively, some sacra may have been ritually burnt and renewed during annual rituals, reducing the numbers of such objects in the archaeological record. Finally, sacra may have been buried with their ritual practitioners, effectively removing such items from their daily use contexts.

In other ways the archaeological examples of priest houses diverged from ethnohistoric expectations. For the Society Island examples, cultural deposits within temple enclosures were remarkably "clean", lacking high frequencies of charcoal or other debris, while the interiors and exteriors of priest houses typically had moderate to high charcoal frequencies, either from small hearths used to warm or light the house interior or cooking and ritually burning activities in the house exterior. This divergence is likely due to a common failing of ethnohistoric and historic accounts world-wide, notably a lack of detail concerning what happened in and around ancient house sites and a lack of attention to daily life or variation in social status, gender, or occupational specialization at the local level (Allison, 2001, 2006; Carballo, 2011; Kirch and Kahn, 2007; Nash, 2009; Taomia, 2000; among others). In East Polynesia, European explorers most often recorded aspects of priests' activities and use of material culture at large communal ceremonies. In contrast, priests' houses are briefly mentioned or labeled on sketches of sacred sites, however, the evidence for activities carried out at such houses on a daily basis are not discussed and have to be cobbled together from different data sources. The recovery of moderate to high amounts of stone tools and debitage in each excavated house speaks to daily activities of the sort that are not recorded in the historic records, as does architectural evidence for open house sides or sliding doors at two of the three houses.

Along these lines, the fact that priest houses, at least in the Society Islands examples, were well tended and refurbished, in one case enlarged, in the other cases having several post-replacement episodes, was not adduced from the ethnohistoric record. In hindsight, this comes as no surprise, given that mundane aspects of daily life such as house maintenance are not discussed in the historic records. Yet, given that at least in the Society Island context, fixity and continuity of place are associated with high rank (Kahn, 2007), and the fact that temple complexes served to legitimize rank in expressing one's access to labor, land, and other resources (Kahn and Kirch, 2014), that priest houses have strong evidence for continuity has a certain logic. There are hints that there may be some variation in the permanence of priest house occupation. While ScMo-124Y and M and KIP-117 correspond to expectations for permanently occupied house sites, ScMo-123A seems somewhat more specialized in its lack of cooking features. Whether ScMo-123A was a house that saw impermanent use, perhaps only occupied during specific times during the ritual calendar, is a question requiring further analyses.

11. The advent of ritual specialists and ideological and socioeconomic control

Finally. I want to turn to a short discussion of how a study of priests' houses in the archaeological record can speak to the integrated nature of ideology and socio-economic transformations in ranked societies. From a chronological standpoint, priests' houses, and their association with aggregate temple complexes in the Society Islands, develop during the late Expansion to Classic periods (AD 1500 and onwards) (Kahn, 2014). This period is characterized by dense populations and formalized status hierarchies that have evolved over a c. 500 year time period (Lepofsky and Kahn, 2011). A major shift in the role Ma'ohi chiefly elites and occupational specialists such as priests is signaled by the development of aggregate temple sites with specialized ritual structures and the formalized association of ritual practitioners with such massive, and isolated, ceremonial complexes (Kahn and Kirch, 2014). These zones, which can be viewed as ceremonial elite centers, were unique and of a highly ritualized nature. They represent a shift from earlier egalitarian forms of individual and communal ritual to more formalized corporate ritual mediated by high status priests who belonged to a clergy (Kahn, in press, sensu Fogelin, 2003). Archaeological and ethnohistoric data illustrate that temples situated in these elite centers, and the large terraces fronting them. served as presentation areas for tribute offerings that were used in ritual (Kahn and Kirch, 2011, 2014). Foodstuffs were laid out in heaps and divided into shares, while a large part was appropriated for the gods and the highest ranking elites (Henry, 1928: 177). This tribute-the direct result of commoner labor-was funneled up through the social hierarchy at certain times during the ritual calendar, confirming the integrated nature of Ma'ohi social hierarchy and ideology. The presentation of ritualized tribute literally at or in front of community-level marae underscores the integrated role of ritual, hierarchy, and economic control in the late precontact Society Islands chiefdoms, as does the evidence for feasting. These activities were organized by political elites and priests, representing a distinctive power strategy that led to increasing sociopolitical power of Ma'ohi elites through time.

The Hawaiian case study places the advent of ritual occupational specialists and elite ritual centers somewhat later than the Society Island examples. However, the sample size is small, and the Hawaiian case derives from a more marginal dryland environment, while the Society Island examples derive from a well-populated and agriculturally productive inland valley. In both contexts elaborate temples, communal gathering areas for tribute and feasting, and houses for ritual practitioners become isolated zones on the landscape, where socio-ritual elites directed "state" rituals in front of commoner populations who participated indirectly through tribute offerings. Isolated and formalized concentrations of aggregate corporate ritual centers increasing excluded commoners and women, members of society who lacked mana, from the "state religion". Corporate ritual sites thus served as one avenue for elites and high-status priests in formal clergies to strategically use ideology to institutionalize social hierarchies and political status, a pattern seen in many other ranked societies in Polynesia (Clark et al., 2008; Clark and Martinsson-Wallin, 2007; Kirch, 1984, 2010; Hommon, 2013) and elsewhere (Demarrais et al., 1996; Emerson, 1997; Fleisher and Wynne-Jones, 2010; Rakita, 2009; Pauketat and Emerson, 1997; Stein, 1998; Swenson, 2007; Van Buren and Richards, 2000).

12. Conclusions

Through constructing an ethnohistorically based model, I have argued that dwellings of ritual practitioners, and the activities

carried out in and around them, are among the most durable material remains of sacred practice that can be used to study the advent of occupational specialization and elaboration of religion in ancient societies. Archaeological case studies from the Society Island chiefdoms and the Hawaiian archaic state support the efficacy of such models for identifying priestly dwellings within or adjacent to aggregate temple complexes. My ethnographic-ethnohistoric model linking archaeological data with the activities of formalized ritual practitioners should have broad applicability for complex societies, particularly those where political power was underwritten by ideology. Given the close association of priests with religious centers, targeting elite-style house sites found in isolated contexts in religious complexes should aid in the study of ritual practitioners world-wide. As more archaeologists move away from temple-centric modes of studying ancient religion, to those that encompass a wider variety of ritual structures, it is certain that a larger corpus of priests' houses will be discovered, both in East Polynesia and in other contexts.

From a methodological standpoint, the model illustrates the need to use multiple lines of evidence, including site proxemics, degree of architectural elaboration, and analysis of artifact and sub-surface features to identify priests' houses in the archaeological record and to examine how such houses differ from ordinary dwellings, elite residences, and other specialized use structures. Large horizontal exposures of house sites, with close attention to unique artifacts or sacra, ritual features, and evidence for feasting, aides in the identification of priests' dwellings. There is close complementarity between my ethnohistoric-ethnographic model and the archaeological remains of East Polynesian priests' dwellings, while the few exceptions are illuminating as to world views, artifact life histories, and the vagaries of the ethnohistoric accounts. In this way, identifying ritual practitioners' residences in the archaeological record contributes to larger debates concerning status differences in ranked societies, but also to the complex and often nuanced nature of status difference within hierarchical classes and their relationship to occupational specialization.

But what are the benefits to identifying ritual practitioners' dwellings in ranked societies of the past? Such analyses facilitate spatio-temporal approaches for understanding the intertwined nature of ideology and socio-political complexity. As the role of ideology and high status priests became more formalized, their activities and dwelling areas became more restricted on the landscape. The similarities between elite residences and specialized use house sites of ritual function (whether for storing sacra or for housing priests) are the result of intentional actions, due to the needs for materializing sacred places. Such actions were required to protect the mana (supernatural and political power) of a diverse group of high status individuals. The ethnohistoric texts briefly refer to these practices when describing elite residences, but rarely describe how the same principles governed the layout and use of houses with specialized ritual functions, including those of high status priests. Here we can see how ideological principles are intertwined with the elaboration of status and hierarchy in ranked societies. Through time, such aggregate ritual centers and the priests' houses within them become elaborate restricted nodes on the landscape serving multiple functions - first and foremost as centers for sacred rites for communicating with the gods, but also as economic centers for funneling tribute up to the elites, and as highly visible contexts for political performance supporting and normalizing ritualized and political hierarchies.

Finally, the analysis of ritual practitioners' houses reported here demonstrates the benefits of 'bottom up' analyses of social change. Identifying variation in the archaeological record, on the ground, at the local level of daily activities, provides a more peopled view of the past in addition to an active, agent based view of the past. Rather than "faceless blobs" (Tringham, 1991) of theorized ritual

practitioners conducting communal ceremonies at the largest of temple sites, direct studies of priests' houses permit access into other sorts of actions, including daily and perhaps individualized ritual events and contexts for social interaction such as feasting and entertaining visitors. It is as much through these daily individualized actions, isolated and kept apart from the commoner public, as well as those performed in front of large audiences, that the roles of ritual occupational specialists were solidified in ranked societies.

Acknowledgments

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References

- Allison, P.M., 2001. Using the material and written sources: turn of the millennium approaches to Roman domestic space. Am. J. Archaeol. 105 (2), 181–208.
- Allison, P.M., 2006. Mapping for gender. Interpreting artefact distribution inside 1st-and 2nd-century AD forts in Roman Germany. Archaeol. Dialog. 13 (1), 1–20
- Babadzan, A., 1993. Les dépouilles des dieux: essai sur la religion tahitienne à l'époque de la découverte. Paris, Editions de la maison des sciences de l'homme, Paris.
- Baines, J., Lacovara, P., 2002. Burial and the dead in ancient Egyptian society: respect, formalism, neglect. J. Soc. Archaeol. 2 (1), 5–36.
- Barrère, D., 1986. A reconstruction of the history and function of the Pu'uhonua and the Hale O Keawe at Honaunau. In: Bryan, E.H., Emory, K.P. (Eds.), The Natural and Cultural History of Honaunau, Kona, Hawai'i, Departmental Report 86-2. Bishop Museum, Honolulu, pp. 117-136.
- Bishop Museum, Honolulu, pp. 117–136. Beaglehole, J.C. (Ed.), 1962. The Endeavour Journal of Joseph Banks 1768–1771. 2 vols. Angus and Robertson, Sydney.
- Beard, Mary., 2007. Writing and religion. In: Johnston, S.J. (Ed.), Ancient Religion. Harvard College, Harvard, pp. 127–138.
- Bell, C., 2009. Ritual: Perspectives and Dimensions. Oxford University Press, Oxford. Blenkinsopp, J., 1995. Sage, Priest, Prophet: Religious and Intellectual Leadership in Ancient Israel. John Knox Press, Westminster.
- Brisch, N., 2006. The priestess and the king: the divine kingship of Su-Sîn of Ur. J. Am. Orient. Soc. 126 (2), 161–176.
- Buck, P.H., 1957. Arts and Crafts of Hawaii. Bernice P. Bishop Museum Special Publication 45. Bishop Museum, Honolulu.
- Campbell, B., 1991. Stone *Ti'* i of the Society Islands. Unpublished M.A. Thesis, Department of Anthropology, University of Auckland.
- Carballo, D.M., 2011. Advances in the household archaeology of highland Mesoamerica. J. Archaeol. Res. 19 (2), 133–189.
- Carpenter, L., Feinman, G., Nicholas, L., 2012. Spindle whorls from El Palmillo: economic implications. Latin Am. Antiq. 23 (4), 381–400.
- Casella, E.C., Fowler, C., 2005. Beyond identification: an introduction. In: Casella, E.C., Fowler, C. (Eds.), The Archaeology of Plural and Changing Identities: An Introduction. Plenum Press, New York, pp. 1–8.
- Cauchois, H., 2013. Tressage. Au Vent des Iles, Papeete.
- Clark, G., Martinsson-Wallin, H., 2007. Monumental architecture in West Polynesia: origins, chiefs and archaeological approaches. Archaeol. Ocean. 42, 1–30.
- Clark, G., Burley, D., Murray, T., 2008. Monumentality and the development of the Tongan maritime chiefdom. Antiquity 82, 994–1008.
- Cook, J., King, J., 1784. A Voyage to the Pacific Performed under the Direction of Captains Cook, Clerke, and Gore, in His Majesty's Ships the Resolution and Discovery, in the Years 1776, 1777, 1779, and 1780, vol. III. G. Nichol, London.
- Cordy, R.H., 1981. A Study in Prehistoric Social Change: The Development of Complex Societies in the Hawaiian Islands. Academic Press, New York.
- Cordy, R., 1985. Settlement patterns of complex societies in the Pacific. N. Z. J. Archaeol. 7, 159–182.
- Cordy, R., 2000. Exalted Sits the Chief. Mutual Publishing, Honolulu.
- Davies, J., 1851. A Tahitian and English Dictionary with Introductory Remarks on the Polynesian Language and a Short Grammar of the Tahitian Dialect with an Appendix, reprint of second ed. Haere Po No Tahiti, Pape'ete, Tahiti.
- de Bovis, E., 1909. Etat de la sociéte tahitienne á l'ariveé des européans. Gouvernement française, Pape'ete.
- De Lucia, K., Overholtzer, L., 2014. Everyday action and the rise and decline of ancient polities: household strategy and political change in postclassical Xaltocan, Mexico. Ancient Mesoam. 25 (2), 441–458.

- DeMarrais, E., Castillo, L.J., Earle, T., 1996. Ideology, materialization, and power strategies. Curr. Anthropol. 37 (1), 15–31.
- Dobres, M.A., Robb, J.E., 2005. "Doing" agency: introductory remarks on methodology. J. Archaeol. Method Theory 12 (3), 159–166.
- Dozier, E.P., 1965. Southwestern social units and archaeology. Am. Antiq. 31 (1), 38–
- Earle, T.K., 1989. The evolution of chiefdoms. Curr. Anthropol. 30 (1), 84-88.
- Earle, T.K., 1997. How Chiefs Come to Power: The Political Economy in Prehistory. Stanford University Press, Stanford.
- Eddowes, M., 1991. Ethnohistorical Perspectives on the Marae of the Society Islands: The Sociology of Use. Unpublished M.A. Thesis, University of Auckland, New Zealand.
- Ellis, W., 1782. An Authentic Narrative of a Voyage Performed by Captain Cook and Captain Clerke in His Majesty's Ships in Resolution and Discovery, vols. 2. Robinson et al., London.
- Ellis, W., 1829. Polynesian Researches, vols. 2. Fischer, Son and Jackson, London.
- Emerson, T.E., 1997. Cahokia and the Archaeology of Power. University of Alabama Press, Tuscaloosa.
- Emory, K.P., 1933. Stone Remains in the Society Islands. Bernice P. Bishop Museum Bulletin 119. Bishop Museum Press, Honolulu.
- Endicott, J.M.E., 2000. Archaeological and Ethnohistoric Evidence for Protohistoric Social Relations on Mangaia Island, Cook Islands. Ph.D. Dissertation, Department of Anthropology, University of California, Berkeley.
- Flannery, K.V., 1976. Contextual analysis of ritual paraphernalia from Formative Oaxaca. In: Flannery, K.V. (Ed.), The Early Mesoamerican Village. Academic Press, New York, pp. 333–342.
- Flannery, K.V., Marcus, J., 1993. Cognitive archaeology. Cambridge Archaeol. J. 3 (2),
- Fleisher, J., Wynne-Jones, S., 2010. Authorisation and the process of power: the view from African archaeology. J. World Prehist. 23 (4), 177–193.
- Fogelin, L., 2003. Ritual and presentation in early Buddhist religious architecture. Asian Perspect. 42 (1), 129–154.
- Fogelin, L., 2007. The archaeology of religious ritual. Annu. Rev. Anthropol. 36, 55–
- Fogelin, Lars (Ed.), 2008. Introduction: methods for the archaeology of religion. In: Religion, Archaeology, and the Material World. Center for Archaeological Investigations, Southern Illinois University Carbondale, pp. 1–14.
- Garanger, J., 1980. Prospections archéologiques de l'îlot Fenuaino et des vallées Airurua et Vaiote à Tahiti. J. Soc. Océan. 66–67, 77–104.
- Goldman, I., 1970. Ancient Polynesian Society. University of Chicago Press, Chicago. Graves, M.W., Cachola-Abad, C.K., 1996. Seriation as a method of chronologically ordering architectural design traits: an example from Hawai'i. Archaeol. Ocean. 31 (1), 19–32.
- Green, R.C., Descantes, C., 1989. Site Records of the 'Opunohu Valley, Mo'orea. Green Foundation for Polynesian Research, Auckland.
- Green, Roger C., Green, K., Rappaport, Roy A., Rappaport, A., Davidson, J., 1967.
 Archeology on the island of Mo'orea, French Polynesia. Anthropol. Pap. Am.
 Mus. Nat. Hist. 51 (2), 111–230.
- Guengerich, A., 2014. The architect's signature: the social production of a residential landscape at Monte Viudo, Chachapoyas, Peru. J. Anthropol. Archaeol. 34, 1–16.
- Handy, E.S.C., 1930. History and Culture in the Society Islands. Bernice P. Bishop Museum Occasional Papers 79, Honolulu.
- Hayden, B., 2003. Shamans, Sorcerers and Saints: A Prehistory of Religion. Smithsonian Books, Washington, DC.
- Henry, T., 1928. Ancient Tahiti. Bernice P. Bishop Museum Bulletin 48. Bernice P. Bishop Museum. Honolulu.
- Hiroa, T.R., 1938. Ethnology of Mangareva. Bernice P. Bishop Museum Bulletin 157. Bernice P. Bishop Museum. Honolulu.
- Hommon, R.J., 2013. The Ancient Hawaiian State. Oxford University Press, Oxford. Hommon, R.J., 2014. The Kealakekua Region: salubrious core, political centre. J. Pacif. Archaeol. 5 (2), 40–50.
- Hrynick, M.G., Betts, M.W., 2014. Identifying ritual structures in the archaeological record: a Maritime Woodland period sweathouse from Nova Scotia, Canada. J. Anthropol. Archaeol. 35, 92–105.
- Huffman, T.N., Earley, F.L., 2014. Caddoan archaeology on the high plains: a conceptual nexus of bison, lodges, maize, and rock art. Am. Antiq. 79 (4), 655–678
- Inomata, T., 2001. The power and ideology of artistic creation: elite craft specialists in classic maya society. Curr. Anthropol. 42 (3), 321–349.
- Insoll, T., 2004. Archaeology, Ritual, and Religion. Routledge, London.
- Insoll, T., 2010. Talensi animal sacrifice and its archaeological implications. World Archaeol. 42 (2), 231–244.
- Johnson, A.W., Earle, T., 2000. The Evolution of Human Societies. Stanford University Press, Stanford.
- Jones, S., Kirch, P.V., 2007. Indigenous Hawaiian fishing practices in Kahinkui: Maui: a zooarchaeological approach. Hawaiian Archaeol. 11, 39–53.
- Joyce, A.A., 2000a. The founding of Monte Albán: sacred propositions and social practices. In: Dobres, M.A., Robb, J.E. (Eds.), Agency in Archaeology. Routledge, London, pp. 71–91.
- Joyce, R.A., 2000b. High culture, Mesoamerican civilization, and the Classic Maya tradition. In: Richards, J., Van Buren, M. (Eds.), Order, Legitimacy, and Wealth in Ancient States. Cambridge University Press, Cambridge, pp. 64–76
- Joyce, A.A., Winter, M., 1996. Ideology, power, and urban society in pre-Hispanic Oaxaca. Curr. Anthropol. 37 (1), 33–47.
- Kaeppler, A.L., 2007. Containers of divinity. J. Polynes. Soc. 116 (2), 97-130.

- Kahn, J.G., 2005. Household and Community Organization in the Late Prehistoric Society Islands (French Polynesia). Unpublished Ph.D. Dissertation, Department of Anthropology, University of California, Berkeley.
- Kahn, J.G., 2006. Society Islands (Central Eastern Polynesia) chronology: 11 radiocarbon dates for the late prehistoric expansion and proto-historic periods in the 'Opunohu Valley, Mo'orea. Radiocarbon 48, 409–419.
- Kahn, J.G., 2007. Power and precedence in ancient house societies: a case study from the society island chiefdoms (French Polynesia). In: Beck, R. (Ed.), The Durable House: House Society Models in Archaeology. Center for Archaeological Investigations Occasional Paper No. 35. Southern Illinois University, Carbondale, pp. 198–223.
- Kahn, J.G., 2014. Household archaeology and "house societies" in the Hawaiian archipelago. J. Pacif. Archaeol. 5 (2), 18–29.
- Kahn, J.C., in press. Public versus Corporate Ritual in the Prehistoric Society Islands (French Polynesia): A Multi-Scalar Analysis of Religious Practices. Séances de la Société Préhistorique française. In: Valentin, F., Molle, G. (Eds.), La pratique de l'espace en Océanie: Découverte, appropriation et émergence des sociétés traditionnelles. Actes de la séance de la Société Préhistorique Française, Paris, 30 janvier-1er février 2014.
- Kahn, J., Coil, J., 2006. What house posts tell us about status difference in prehistoric Tahitian society: an interpretation of charcoal analysis, sacred woods and intersite variability. J. Polynes. Soc. 115 (4), 319–352.
- Kahn, J.G., Kirch, P.V., 2011. Monumentality and the materialization of ideology in Central Eastern Polynesia. Archaeol. Ocean. 46, 93–104.
- Kahn, J.G., Kirch, P.V., 2013. Residential landscapes and house societies of the late prehistoric Society Islands (French Polynesia). J. Pacif. Archaeol. 4 (1), 50–72.
- Kahn, J.G., Kirch, P.V., 2014. Monumentality and Ritual Materialization in the Society Islands. Bishop Museum Bulletin in Anthropology 13. Bishop Museum Press, Honolulu.
- Kahn, J.G., Horrocks, M., Nieuwoudt, M., 2014. Agriculture, domestic production, and site function: micro-fossil analyses and late prehistoric landscapes of the Society Islands. Econ. Bot. 68 (3), 246–263.
- Kamakau, S.M., 1961. Ruling Chiefs of Hawaii. Kamehameha Schools Press,
- Kamakau, S.M., 1964. Po'e Kahiko: The People of Old. Bishop Museum Special Publication 51. Bishop Museum Press, Honolulu.
- Kamakau, S.M., 1976. The Works of the People of Old: Na Hana a ka Po'e Kahiko. Bishop Museum Press, Honolulu.
- Kirch, P.V., 1984. The Evolution of the Polynesian Chiefdoms. Cambridge University
- Press, Cambridge.
 Kirch, P.V., 1990. The evolution of socio-political complexity in prehistoric Hawaii:
- an assessment of the archaeological evidence. J. World Prehist. 4, 311–345. Kirch, P.V., 2004. Temple sites in Kahikinui, Maui: their orientations decoded.
- Antiquity 78, 102–114. Kirch, P.V., 2010. How Chiefs became Kings: Divine Kingship and the Rise of Archaic
- States in Ancient Hawai'i. University of California Press, Berkeley.

 Kirch, P.V., 2012. A Shark Going Inland is My Chief: The Island Civilization of Ancient
- Hawai'i. University of California Press, Berkeley. Kirch, P.V., Green, R.C., 2001. Hawaiki, Ancestral Polynesia: Essays in Historical
- Anthropology. Cambridge University Press, Cambridge.

 Kirch, P.V., Kahn, J.G., 2007. Advances in Polynesian prehistory: a review and assessment of the past decade (1993–2004). J. Archaeol. Res. 15, 191–238.
- assessment of the past decade (1993–2004). J. Afchaeol. Res. 15, 191–238. Kirch, P.V., O'Day, S.J., 2003. New archaeological insights into food and status: a case
- study from pre-contact Hawaii. World Archaeol. 34, 484–497. Kirch, P.V., Millerstrom, S., Jones, S., McCoy, M.D., 2010. Dwelling among the gods: a late pre-contact priest's house in Kahikinui, Maui, Hawaiian Islands. J. Pacif.
- Archaeol. 1 (2), 145–160.

 Kirch, P.V., Mertz-Kraus, R., Sharp, W.D., 2015. Precise chronology of Polynesian
- temple construction and use for southeastern Maui, Hawaiian Islands determined by 230 Th dating of corals. J. Archaeol. Sci. 53, 166–177.
- Knight, V., 1986. The institutional organization of Mississippian religion. Am. Antiq. 51 (4), 675–687.
- Knüsel, C.J., 2002. More Circe than Cassandra: the princess of Vix in ritualized social context. Eur. J. Archaeol. 5 (3), 275–308.
- Kolb, M., 1991. Social Power, Chiefly Authority, and Ceremonial Architecture in an Island Polity, Maui, Hawaii. Unpublished Ph.D. Dissertation, Department of Anthropology, University of California, Los Angeles.
- Kolb, Michael J., 1992. Diachronic design changes in heiau temple architecture on the island of Maui, Hawai'i. Asian Perspect., 9–37.
- Kolb, M.J., 1994. Ritual activity and chiefly economy at an upland religious site on Maui, Hawai'i. J. Field Archaeol. 21 (4), 417–436.
- Kolb, Michael J., 2006. The origins of monumental architecture in ancient Hawai'i. Curr. Anthropol. 47 (4), 657–665.
- Kolb, Michael J., 2011. The genesis of monuments in complex societies. In: Smith, Michael E. (Ed.), The Comparative Archaeology of Complex Societies. Cambridge University Press, pp. 138–164.
- Kolb, M.J., Murakami, G.M., 1994. Cultural dynamics and the ritual role of woods in pre-contact Hawai'i. Asian Perspect. 33 (1), 57–78.
- Landa, D. de, 1941. Landa's Relaciones de las cosas de Yucatan (ed. with notes by Tozzer, A.M.). Papers of the Peabody Museum of American Archaeology and Ethnology, vol. XVIII. Cambridge.
- Lepofsky, D., Kahn, J.G., 2011. Cultivating an ecological and social balance: elite demands and commoner knowledge in ancient Ma'ohi agriculture, Society Islands. Am. Anthropol. 113 (2), 319–335.
- Levine, M.N., 2011. Negotiating political economy at late Postclassic Tututepec (Yucu Dzaa), Oaxaca, Mexico. Am. Anthropol. 113 (1), 22–39.

- Malo, D.D., 1951. Hawaiian Antiquities. Bernice P. Bishop Museum Special Publication 2. Bishop Museum Press, Honolulu.
- Marcus, J., 1978. Archaeology and religion: a comparison of the Zapotec and Maya. World Archaeol. 10 (2), 172–191.
- Marcus, J., 2007. Rethinking ritual. In: Kyriakidis, Evangelos (Ed.), The Archaeology of Ritual. Cotsen Institute of Archaeology, UCLA, Los Angeles, pp. 43–76.
- McCoy, P.C., 1999. Neither here nor there: a rites of passage site on the eastern fringes of the Mauna Kea Adze Quarry, Hawai'i. Hawaiian Archaeol. 7, 11–34.
- McCoy, M.D., 2008. Life outside the temple: reconstructing traditional Hawaiian ritual and religion through new studies of ritualized practices. In: Fogelin, L. (Ed.), Religion, Archaeology, and the Material World. Carbondale, Illinois: Southern Illinois University's Center for Archaeological Investigations, Occasional Paper No. 36, pp. 261–278.
- McCoy, M.D., Ladefoged, Thegn N., Graves, Michael W., Stephen, Jesse W., 2011. Research strategies for constructing religious authority in ancient Hawai'i. Antiquity 85 (2011), 927–941.
- Miles, S.W., 1957. Maya settlement patterns: a problem for ethnology and archaeology. Southwest. J. Anthropol. 13 (3), 239–248.
- Mills, B.J., 2004. The establishment and defeat of hierarchy: inalienable possessions and the history of collective prestige structures in the Puebloan Southwest. Am. Anthropol. 106 (2), 238–251.
- Morrison, J., 1935. In: Rutter, Owen (Ed.), The Journal of James Morrison, Boatswain's Mate of the Bounty, Describing the Mutiny and Subsequent Misfortunes of the Mutineers, Together with an Account of the Island of Tahiti. Golden Cockerel Press, London.
- Mulrooney, M., Ladefoged, T.N., 2005. Hawaiian Heiau and agricultural production in the Kohala dryland field system. J. Polynes. Soc. 114 (1), 45–67.
- Nash, D.J., 2009. Household archaeology in the Andes. J. Archaeol. Res. 17 (3), 205–261.
- O'Day, S.J., 2001. Excavations at the Kipapa Rockshelter, Kahikinui, Maui, Hawai'i. Asian Perspect. 40 (2), 279–304.
- Oliver, D.L., 1974. Ancient Tahitian Society, 3 vols. University of Hawai'i Press, Honolulu.
- Orliac, C., 1982. Materiaux pour l'étude des habitations protohistoriques à Tahiti (Polynésie Française). Unpublished Ph.D. Dissertation, Université de Paris I, Sorbonne.
- Orliac, C., 1990. Des arbres et des dieux: Choix des matériax de sculpture en Polynésie. J. Soc. Océan. 90 (1), 35–42.
- Orliac, C., 2000. Fare et Habitat à Tahiti. Editions Parenthèses, Paris.
- Parkinson, S., 1773. A Journal of a Voyage to the South Seas in his Majesty's Ship The Endeavor, Faithfully Transcribed from the Papers of the Late Sydney Parkinson, Draughtsman to Sir Joseph Banks, Esq. on this Late Expedition with Dr. Solander, Round the World. Stanfield Parkinson, London.
- Pauketat, T.R., Emerson, T.E. (Eds.), 1997. Cahokia: Domination and Ideology in the Mississippian World. University of Nebraska Press, Lincoln.
- Peebles, C.S., Kus, S., 1977. Some archaeological correlates of ranked societies. Am. Antiq. 42, 421–448.
- Pluckhahn, T.J., 2010. Household archaeology in the southeastern United States: history, trends, and challenges. J. Archaeol. Res. 18, 331–385.
- Prebble, M., Anderson, A., 2012. The archaeobotany of Rapan rockshelter deposits. In: Prebble, M., Anderson, A. (Eds.), Taking the High Ground. Terra Australis 37. ANU Press. Canberra. pp. 77–95.
- Rakita, G.F.M., 2009. Ancestors and Elites: Emergent Complexity and Ritual Practices in the Casas Grandes Polity. Alta Mira Press, New York.
- Redmond, E.M., Spencer, C.S., 2008. Rituals of sanctification and the development of standardized temples in Oaxaca, Mexico. Cambridge Archaeol. J. 18 (2), 239–266.
- Robin, C., 2003. New directions in Classic Maya household archaeology. J. Archaeol. Res. 11 (4), 307–356.
- Rolett, B.V., 2010. Marquesan monumental architecture: blurred boundaries in the distinction between religious and residential sites. Archaeol. Ocean. 45 (2), 94–102
- Ruggles, C., 2007. Cosmology, calendar, and temple orientations in ancient Hawai'i. In: Ruggles, C., Urton, G. (Eds.), Skywatching in the Ancient World: New Perspectives in Cultural Astronomy. University Press of Colorado, Boulder, pp. 287–329.
- Sahlins, M., 1958. Social Stratification in Polynesia. American Ethnological Society, Seattle.
- Sahlins, M., 1995. "How Natives" Think: About Captain Cook, for Example. University of Chicago Press, Chicago.
- Sharp, W.D., Kahn, J.G., Polito, C.M., Kirch, P.V., 2010. Rapid evolution of ritual architectural in Central Polynesia indicated by precise ²³⁰Th/U coral dating. Proc. Natl. Acad. Sci. 107, 13234–13239.
- Shaw, J., 2013. Archaeology of religious change? Introduction. World Archaeol. 45 (1), 1–11.
- Shore, B., 1989. Mana and Tapu. In: Howard, A., Borofsky, R. (Eds.), Developments in Polynesian Ethnology. University of Hawaii Press, Honolulu, pp. 137–173.
- Steadman, S.R., 2009. The Archaeology of Religion: Cultures and Their Beliefs in Worldwide Context. Left Coast Press, Walnut Creek.
- Stein, G.J., 1998. Heterogeneity, power, and political economy: some current research issues in the archaeology of Old World complex societies. J. Archaeol. Res. 6 (1), 1–44.
- Stevenson, K., Hooper, S., 2007. Tahitian Fau- Unveiling an Enigma. J. Polynes. Soc. 116 (2), 181–211.

- Stokes, J.F.G., 1991. Heiau of the island of Hawai'i: a historic survey of native Hawaiian temple sites. In: Dye, T. (Ed.), Bishop Museum Bulletin in Anthropology 2. Bishop Museum Press, Honolulu.
- Suggs, R., 1961. The archeology of Nuku Hiva, Marquesas Islands, French Polynesia, vol. 49. American Museum of Natural History.
- Swenson, E., 2007. Adaptive strategies or ideological innovations? Interpreting sociopolitical developments in the Jequetepeque Valley of Peru during the Late Moche Period. J. Anthropol. Archaeol. 26 (2), 253–282.
- Taomia, J.M.E., 2000. Household units in the analysis of prehistoric social complexity, Cook Islands. Asian Perspect. 39 (1), 139–164.
- Tringham, R., 1991. Households with faces: the challenge of gender in prehistoric architectural remains. In: Gero, J.M., Conkey, M.W. (Eds.), Engendering Archaeology: Women in Prehistory. Basil Blackwell, Cambridge, pp. 93–131.
- Valeri, Valerio, 1985. Kingship and Sacrifice: Ritual and Society in Ancient Hawaii. University of Chicago Press, Chicago.
- Van Buren, M., Richards, J., 2000. Ideology, wealth, and the comparative study of "civilizations". In: Richards, J., Van Buren, M. (Eds.), Order, Legitimacy, and Wealth in Ancient States. Cambridge University Press, Cambridge, pp. 3–12.

- VanPool, C.S., 2009. The signs of the sacred: identifying shamans using archaeological evidence. J. Anthropol. Archaeol. 28 (2), 177–190.
- Voss, B.L., 2005. From Casta to Californio: social identity and the archaeology of culture contact. Am. Anthropol. 107 (3), 461–474.
- Wattez, J., 1992. Dynamique de Formation des Structures de Combustion de la Fin du Paléolithique au Néolithique Moyen: Approche Méthodologique et Implications Culturelle. Thèse de Nouveau Doctorat, Université de Paris I.
- 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. J. Archaeol. Sci. 33 (2), 257–273.
- Wilson, A., 1799. Missionary Voyage to the Southern Pacific Ocean, Performed in the Years 1796, 1797, 1798, in the Ship Duff, Commanded by Captain James Wilson, Compiled from Journals of the Officers and the Missionaries, and Illustrated with Maps and Charts and Views... S. Gosnell, for T. Chapman, London.