

Inside Ancient Kitchens

NEW DIRECTIONS IN THE STUDY OF DAILY MEALS AND FEASTS

edited by

ELIZABETH A. KLARICH

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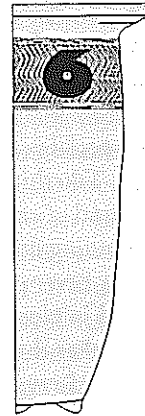
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To my family,
for teaching me the importance of a good meal

MAYA PALACE KITCHENS



Suprahousehold Food Preparation at the Late and Terminal Classic Site of Xunantunich, Belize

Lisa J. LeCount

Before the development of haute cuisine in eighteenth-century Italy, courtly food in the noble houses of Europe conformed more to a tradition of extravagant displays than to innovative preparations associated with later cookery (Mennell 1996: 68). Early banquets featured copious amounts of roasted meat and wheat bread, the raw ingredients of which came from local estates. First and foremost, the scale of noble banquets exemplified the power of the king and the splendor of courtly life. Although not trendsetters, cooks prepared both public and private feasts and catered to their patrons' private whims.

Much the same can be said of Classic period feasting among the Maya. Although the ancient Maya elites may have consumed greater amounts of meat, maize, and *ka'kaw* (cacao) (Chase and Chase 2001: 129; Gerry 1993; Pohl 1990: 167), there is little evidence that what they ate and how they prepared their food differed qualitatively from those of commoners (LeCount 2001). What differentiated Maya elites from commoners revolved more around their ability to sponsor large feasts, their roles in civic feasting events, and the manner in which they consumed their feasts (LeCount 2001).

The focus of this discussion therefore revolves not around feasts per se but around what happened behind the scenes leading up to

Classic period Maya palace feasts. How did Maya royal and noble houses organize food preparation? Where were the kitchens, and how were they staffed? At Xunantunich, I suggest that a set of low ancillary structures adjacent to the ruler's compound was a palace kitchen and the people who worked there were attached food specialists who prepared and served food for the ruling family and special events. The ancillary structures are physically connected to the southeast corner of the ruler's compound, and stairs led directly into it. Given the close proximity of the service area to the ruler's compound, I entertain the possibility that kitchen help was closely related to the ruling family. If so, not only was their work area physically attached to the ruler's compound, but they were socially attached to the ruling house as well.

There is some precedent for viewing palace kitchens as specialized work areas and cooks as attached specialists in the Maya Lowlands. Takeshi Inomata's (2001) research on elite specialization illustrates how some kind of crafting was a common activity among Classic period Maya nobles, including courtiers, at the site of Aguateca, Guatemala. Although their output was never great, elite artists produced high-value items in noble residences located in close proximity to the Palace Group (Inomata 2001: figure 2). He also makes the case that crafting was a spiritual endeavor in which artisans transformed raw resources into animated objects—ritual paraphernalia and costume elements—through their connections with supernatural powers and knowledge. Special skills, knowledge, and supernatural connections helped legitimize noble status in Maya society.

Like crafting, cooking is a transformational process that involves acquired skills, special tools, and in certain cases, supernatural intervention. For this reason, I address the organization of elite food preparation in the same way archaeologists examine other forms of specialization. Utilizing concepts developed for the study of craft specialization (Costin 1991), I employ the parameters of context, concentration, scale, and intensity to understand how food preparation and serving for Maya rulers differed from practices in noble and commoner households. Although heuristic, Cathy Costin's model under-theorizes the social relations of production, especially those associated with corporate or ritual production. Like other forms of crafting, elite food preparation may not fit comfortably within current evolutionary models of specialization. Nonetheless, by applying this model I systematically examine how food preparation is similar to craft production and the ways in which cooking as a quintessential domestic activity differ from other forms of specialization. In this way, we can begin to address some of the assumptions behind models of specialization.

Classic Maya Palaces, Kitchens, and Specialists

The Classic period Maya royal court was a group of people who lived and worked in a large palace, a palatial set of buildings organized as an enclosed compound, or, more expansively, an agglutinated acropolis (Inomata and Houston 2001).¹ Maya courts not only functioned as houses of royal lineages but performed essential administrative, judiciary, ceremonial, and diplomatic functions as well (Inomata and Houston 2001: 12). Many lines of evidence support this interpretation, but none so visually striking as the images painted on Classic period polychrome pottery and described in hieroglyphs found inscribed on these vessels.

Epigraphic and art-historical analyses of images painted and inscribed on pottery vessels indicate that at least four kinds of public events took place at palaces: presentations, performances, religious rites, and feasts (Reents-Buder 2000, 2001). Food commanded a central position in many palace activities. Tamales, meats, ka'kaw drinks, and other foods can be seen heaped on plates, presented in vases, and frothing in jars (Houston, Stuart, and Taube 2006; Taube 1989). The *k'uhul ajaw*, or divine lord, was always located at the center of the scene (Reents-Buder 2001: 217). Some images illustrate him, or possibly her, sitting on a bench inside a palace with a small group of people; other scenes depict larger delegations standing outside on palace steps. Food was served to guests as gestures of hospitality, received as tribute from subordinate lords, and offered to the gods as part of the ritual commensality at ceremonies.

Some courtiers who surrounded the *k'uhul ajaw* might have been involved in food service and preparation (Reents-Buder 2001: 215). A crucial member of the sixteenth-century K'iche court was the *nim chokoj*—"giver of banquets" or "master of ceremonies"—whose responsibilities included arranging food and drink for wedding banquets (Tedlock 1996: 322, 347). A high-ranking lord in each of the three ruling K'iche lineages held the title. Michael Coe and Justin Kerr (1998: 91, 94) suggest that an individual filling the position of *ah ku hun*, a pre-Hispanic title referring to "he of the holy house" or possibly "he of the holy book," also may have been a master of ceremonies, similar to a *nim chokoj*, during the Late and Terminal Classic periods. This courtier may have been the same individual who is depicted in scenes rendered on some Classic Maya drinking vases, standing behind the throne of the *k'uhul ajaw* and watching palace proceedings (Reents-Buder 2001: 215).

Palace scenes occasionally depict food service or preparation. Women are often shown offering food and drink (Kerr 1990: 297 [K2914], 1994: 640 [K4996], 1997: 807 [K5456]), grinding ka'kaw (Kerr 2008 [K631]), preparing or serving beverages (Kerr 2008 [K3027]), and pouring liquid (Coe 1972: 91 [K511]). Although the women in these images might represent servants, it is interesting to note that the woman depicted pouring liquid on the Princeton

vase (Kerr 2008 [K511]) displays the high forehead associated with noble status. Although in this scene she represents one of the characters from the *Popul Vuh* legend of the Hero Twins in the Court of Xibalba (Justin Kerr, personal communication, 2004), the image also demonstrates how collateral elites might have performed important roles for courtly banquets. Certain noblewomen may have been responsible for the final preparations of sacred ka'kaw drinks; or like some European nobles (Mennell 1996: 116), Maya noblewomen may have supervised servants working in palace kitchens. It is conceivable that Maya courtiers took some part in the preparation of feasts, but it is difficult to envision them cooking on a daily basis, especially given the evidence for separate living and working conditions across social classes (Hendon 1996, 1997; Joyce 1993, 2000; Robin 2004). It is more probable that servants or lower-ranked members of noble households cooked daily for the king and court.

Kitchens are commonly inferred architectural features at Classic period Maya sites (Folan et al. 2001; Haviland 1981; Haviland and Moholy-Nagy 1994; Sanders 1989: 96). Usually identified as low platforms behind or beside domestic structures, kitchens were dedicated activity areas where food preparation took place and trash was deposited. Sanders (1989: 92–95) identified palace kitchens in noble compound groups at Las Sepulturas, Copan, by the presence of dense, sherd-laden middens, features such as hearths and workbenches, and a lack of burials.

At Altun Ha, Structure A-8 was likely the location of a palace kitchen that prepared food and drink for royalty (Reents-Budet 2000). This ancillary platform is situated behind Structure A-2, a palace that contains an elaborately decorated bench similar to those depicted in Maya art in which rulers sat feasting and exchanging gifts. Behind Structure A-2 is an extensive midden containing the pottery remains of large and sumptuous banquets (Reents-Budet 2000: 1029). The palace kitchen was located on a low platform that supported a central vaulted building encircled by perishable structures. In general, vaulted buildings are indicative of privileged status; however, the presence of modest burials in the low platform indicates that most of the people who worked there were not elite. Burned floor features and a garbage dump indicate that this low platform was a service area for feasts that took place atop Structure A-2 (Reents-Budet 2000: 1030).

Kitchens were not restricted to royal and noble palaces in Maya capitals. At the Chan site, a minor center in the rural hinterlands of the Xunantunich polity, an ancillary platform identified as a kitchen was appended to the largest house (Structure 2) on the public plaza (Latsch 2004; Robin 1999). The northern position of Structure 2 on the plaza would have placed its elite occupants in a privileged position near founding ancestors (Ashmore 1989, 1991, 1992). The ancillary building was a low platform that lacked any evidence of a masonry

superstructure but displayed enigmatic features, including low walls that might have formed storage bins and possibly a workbench or raised surface. Similar small, ancillary structures attached to commoner residences have been found at Ceren, Honduras (Sheets 1992), and at sites in the Copan hinterlands (Gonlin 1993). Again, archaeologists identified these structures as kitchens based on the nearby presence of dense middens or other types of trash deposits.

The organization of food preparation in non-royal kitchens cannot be extrapolated from artwork, since the Maya illustrated mainly royal people and events directly related to their lives. However, archaeological data lend evidence to suggest that domestic and economic activities were less differentiated and segregated among non-royal groups (Robin 2004); therefore, the kitchens of less privileged groups may have been the domain of extended family or corporate group members. Although commoner women may have worked much of their day in kitchens cooking, few would call them attached specialists.

The fact that common women who work in kitchens full-time are not considered specialists raises an interesting point: What is the difference between craft specialists who work in the home and homemakers? Are nobles who work in lineage compounds occupational specialists whereas common women are homemakers? Similar questions are asked today in our own society, and the answers hinge on our definition of specialization. According to Barbara Stark (1995: 233), specialization is defined as "production for distribution to other households on more than a sporadic basis." It is the nature of exchange that makes an item a commodity and producers occupational specialists (Clark and Parry 1990; Inomata 2001). In this way, definitions of specialization hark back to the ideas of Karl Marx, who made the distinction between use value and exchange value (Roseberry 1997: 33). Not all useful products are commodities because they never change hands through gifting, tribute, or markets but instead are exchanged through other social mechanisms. In addition to their use value, commodities gain added worth through their exchange value (Roseberry 1997: 34).

Kitchen workers, who labor daily at a domestic task, therefore, do not fit into our current definition of specialization unless, of course, food is produced regularly for people outside the household. This may indeed be the case for feudal European and Classic period Maya palace kitchen help, who cooked and served at public banquets and private affairs for visiting royalty and other non-kin groups on a regular basis. It may also have been true for other non-royal Maya groups who regularly prepared food for suprahousehold feasts.

But viewing food solely as a commodity may limit our interpretation of people who labor every day to prepare items that fulfill many social, political, economic, and ritual obligations. For precapitalist societies we should go beyond our current ideas of labor and exchange as the only bases of value to

examine artisans who reside outside the confines of commodity specialization. Qualitatively different relations of production and exchange, such as ritual and kin obligations, may have been important in determining value and occupational status in ancient societies.

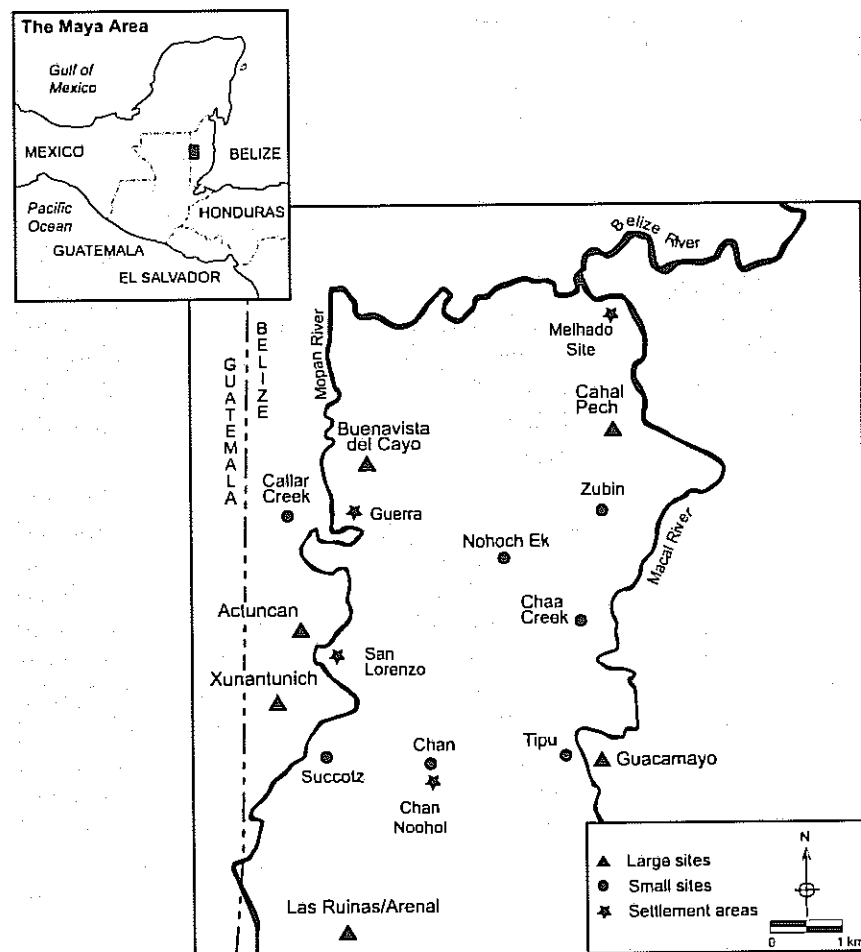
Many Classic period Maya artisans were members of elite corporate groups who produced their wares in royal or noble palaces (Ball 1993; Foias 2002; Inomata 2001; McAnany 1993; Reents-Budet 1994). As attached specialists, these elite craftspeople made prestige goods, including shell ornaments, textiles, and pyrite mosaic mirrors, for higher-ranked members of their own group. Therefore, at least part of the value of these inalienable wealth goods was conferred through social relations and work that occurred *within* the house. Inalienable objects gain value precisely because they never leave the hands of the group that makes them, similar to the way we think about some kinds of family heirlooms today. Foods and other ephemeral objects made by close family members also gain value because of their personal connections to people and houses.

Viewing goods as commodities also limits our understanding of how certain items are imbued with supernatural properties. As discussed above, Maya crafting was also an ideologically laden activity in which artistic pursuits confirmed a connection between the artisan and the supernatural (Inomata 2001: 331). Through the production process, some objects were animated with supernatural forces. The same may have been true for elite Maya cooks and the feasts they created, since foods—especially maize and ka'kaw—were sacred substances and, in the appropriate contexts, manifestations of deities (Freidel, Schele, and Parker 1993; Taube 1985). Special skills and esoteric knowledge associated with elite cooking may have transformed foods into sacred meals, ritual offerings, and other special fare. In addition, only special cooks may have been allowed to prepare meals for a Maya lord because of moral and social codes about the kinds of foods that could be consumed by a royal body. It is possible, therefore, that some Classic Maya cooks might have been recognized as specialists.

In the following sections, I turn to Xunantunich's palace kitchen and compare it with other elite and commoner domestic assemblages to determine the organization of food preparation at this Maya site. Before doing so, I present a brief sketch of the Xunantunich polity during the Late and Terminal Classic periods to set the table for a more detailed examination of its royal kitchen.

Xunantunich: A Late and Terminal Classic Maya Center

The Classic period Maya site of Xunantunich was a provincial center in the upper Belize River valley located three kilometers east of the modern-



6.1. Classic period sites in the upper Belize River valley.

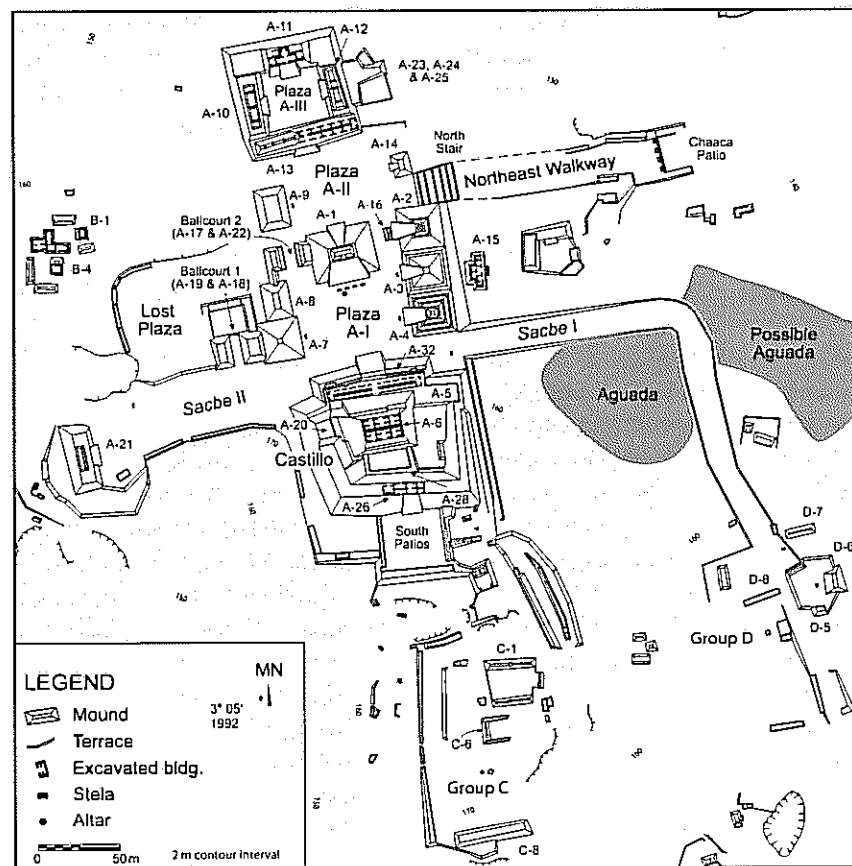
day Guatemala-Belize border (Figure 6.1). From its ridgetop vantage point, Xunantunich overlooks the nexus of political and geographical boundaries. Less than a day's walk to the west was Naranjo, the capital of one of the largest and most bellicose Classic Maya states situated in the eastern Petén (Martin and Grube 2000). To the east of Xunantunich lay a set of regional centers—Actuncan, Buenavista del Cayo, Cahal Pech, Baking Pot, and Blackman Eddy—whose leaders claimed control over fertile alluvial terraces and uplands near the Mopán and Macal rivers, which form the upper Belize River valley (Garber 2004). Classic period centers ranged in regional scale and political centralization from large, territorially expansive states, such as those centered

at Tikal and Calakmul, to comparatively small and, at times, subjugated kingdoms, such as Xunantunich.

Xunantunich rose rapidly to power in the Hats' Chaak phase of the Late Classic period (AD 660–780) under the aegis of Naranjo (LeCount and Yaeger, in press; LeCount et al. 2002; Leventhal and Ashmore 2004). At the height of its power, hinterland populations within five kilometers of the site reached 35,000 people (Yaeger 2003). These people were called upon to build the massive monuments that characterize Xunantunich. In exchange for labor and tribute, polity members received protection and civic-ceremonial leadership from rulers who lived in the city (Marcus 1983). Although Xunantunich's leaders claimed political autonomy from Naranjo beginning in AD 820, during the Tsak' phase of the Terminal Classic period, construction ceased within a few generations, and rural populations declined until the site was abandoned in the late ninth or early tenth century.

The core of the site encompasses roughly fourteen hectares of monumental architecture, including palaces, pyramids, and an acropolis called the Castillo (Figure 6.2). The Castillo's terraces supported palaces, *audiencias* (meeting halls with private rooms), courtyards, and a temple, making it a regal-ritual building complex. The ruler's compound—consisting of Structure A-11 (the ruler's residence), Structures A-10 and A-12 (palaces), and Structure A-13 (an *audiencia*)—is located at the northern edge of the site. The people who resided here made up the populace of Group A. Between the ruler's compound and the Castillo is a massive pyramid, Structure A-1, which separated the civic core into two plazas flanked by steep-sided pyramids and ball courts. Public rituals conducted on top of these buildings would have been visible to participants in the plazas below; private meetings were conducted in palaces and *audiencias* located in more inaccessible portions of civic architecture. The grand nature of its public architecture and the size of its civic plazas indicate that one of the major functions of the site was to provide a meaningful venue for ritual activities (Yaeger 2003).

Besides the ruler's compound in Group A, there are two major zones of residential architecture at Xunantunich. To the southeast is Group D, a secondary elite corporate group linked to the civic core by way of Sacbe I (Braswell 1998, in press). Clustered around Group D's central platform are structures representing four households, one of which appears to have held greater rank than the others because members occupied a large masonry building (Structure D-7). A second residential zone, Group B, consists of seven structures organized around two patios. At least some of the structures were masonry buildings, indicating the wealth of its occupants. Another indicator of elite status is Structure B-1, a small ancestor shrine that contained a crypt burial (Thompson 1942). The relative nearness of this residential group to the ruler's compound



6.2. The site core of Xunantunich, Belize (© Angela H. Keller and Jason Yaeger).

lends evidence to suggest that Group B may have been home to families closely associated with the ruling lineage either through work and/or kinship. Given the limited number of house mounds at the site, Jason Yaeger (2003: 130) estimates that no more than 700 people occupied the site at the height of its power, 200 of whom resided in Group A, the civic core.

This said, it is important to note that the city was not a vacant ceremonial center. Xunantunich also served as an important administrative center for the region (Yaeger 2003: 132). Buildings that faced civic plazas and contained high benches served as *audiencias* where Xunantunich's rulers negotiated tribute demands or discussed village disputes with local leaders. One such *audiencia* was Structure A-13, located along the front of the ruler's compound near the northeast entrance of the site. *Audiencias* located in more restricted locations,

like Structure A-32 on the Casrillo, might have served as more intimate meeting rooms where elites negotiated affairs of the state with other privileged individuals or visitors (LeCount 2001). The site was also the loci for limited craft production (Braswell 1998, in press), and there was ample space for markets (Keller 1997, in press).

Two zones of deep trash deposits stand out as locations where food preparation and feasting might have occurred in Group A: the ancillary structures (Structures A-23, A-24, and A-25) immediately east of the ruler's compound, and Structure A-15, a palace located near the northeast entrance of the site. The crux of my argument and analysis centers on quantitative data from the ancillary structures associated with the ruler's compound; however, at this juncture, a discussion of materials associated with Structure A-15 is pertinent for understanding feasting patterns associated with palace activities.

Structure A-15 is a five-room palace located on the east edge of Group A. In its original configuration, three rooms faced east toward the entrance of the site and contained high benches immediately behind the doorway. The central room's bench was more elaborate than those of the flanking rooms, and at some point in the Hats' Chaak phase it was outfitted with a throne (MacKie 1985: 59). It is the only example of a royal throne at Xunantunich (MacKie 1985: 65; Yaeger 1997, in press).

The deepest and densest artifact accumulations found at the site to date are associated with Structure A-15. At the front of the building, Euan MacKie excavated a stratified "rubbish pit" that he interpreted as the remains of domestic activities including stone tools, grinding stones, lithic blades, and "enormous" quantities of common bowls and jar sherds, so many in fact that "much of it had to be left behind" (MacKie 1985: 63, 83). In consolidating Structure A-15 for tourism, Jaime Awe and Carolyn Audet (personal communication, 2000) also excavated an extensive trash deposit piled against the rear wall of the palace.

Since neither of these collections has been analyzed, Structure A-15 does not figure into the detailed discussion below. But I suggest that Structure A-15's unusually deep trash deposits and architectural features call into question MacKie's interpretation of these materials as merely elite domestic trash. It may be more prudent to consider Structure A-15 as a venue for consultations and feasting with the local ruler or possibly visiting *k'uhul ajawob* from nearby states such as Naranjo. The fact that the deposit contained mostly common black and red bowls and jars does not rule out the distinct possibility that feasting occurred in the rooms or along the front terraces of the building. Although polychrome plates and vases were the hallmarks of elite Maya feasting paraphernalia (Houston, Stuart, and Taube 1989: 722; Reents-Budet 1994), festival fare for community-wide feasts held at the entrance to the site may have

been prepared and served in appropriate "Xunantunich style," which would have included common pottery styles.

Classic Maya Foods and Cooking

Classic Maya festival foods included tamales, roasted meats, chocolate drinks, and *balche*, a fermented beverage. Roasted meat—deer, peccary, turkey, and dog—was a treat not usually consumed at daily meals (Pohl and Feldman 1982). Classic Maya also consumed *jutes* (freshwater snails) in large quantities at public ceremonies (Powis et al. 1999).

Features directly associated with cooking are difficult to recognize and recover in the archaeological record, even in kitchens. In the Maya Lowlands, hearths or large *pibs* (roasting pits) are not common. Therefore, the preparation of Classic Maya festival foods can be identified by discard patterns of functionally specific vessel forms.

Vases have been identified as drinking vessels for ka'kaw-based drinks and plates and dishes as platters to serve tamales and meats. Small bowls likely contained more aqueous foods, such as *atole* (corn gruel); that the Maya wished to keep cool. These interpretations are supported by independent lines of evidence, including chemical studies on vase residues (Powis et al. 2002; Stuart 1988), pictorial scenes on Classic period vessels (Reents-Budet 1994: 71–88), and texts describing Classic Maya foods (Houston, Stuart, and Taube 1989; Reents-Budet 1994; Taube 1989).

The functions of common utilitarian bowls and jars are inferred through ethnographic analogy since they were not described in Maya hieroglyphic texts. Large sturdy bowls are the most common domestic pot in modern and ancient Maya households because of their role in maize processing and general chores such as washing and storing food and non-food items (Reina and Hill 1978: 26; Thompson 1958: 121–123). Jars can be separated into three functional groups based on the ratio of orifice diameter to neck height (LeCount 1996): water-carrying jars, water-storage jars (Reina and Hill 1978: 26; Thompson 1958: 121–123), and cooking ollas. Formal characteristics of modern bowls and jars are very similar to those ancient forms found at Xunantunich, and this pattern allows me to infer function from Classic period pottery forms (LeCount, in press).

Food-Preparation Parameters and Their Archaeological Correlates at Xunantunich

The archaeological correlates for examining the organization of food preparation at Xunantunich derive from established parameters for craft production

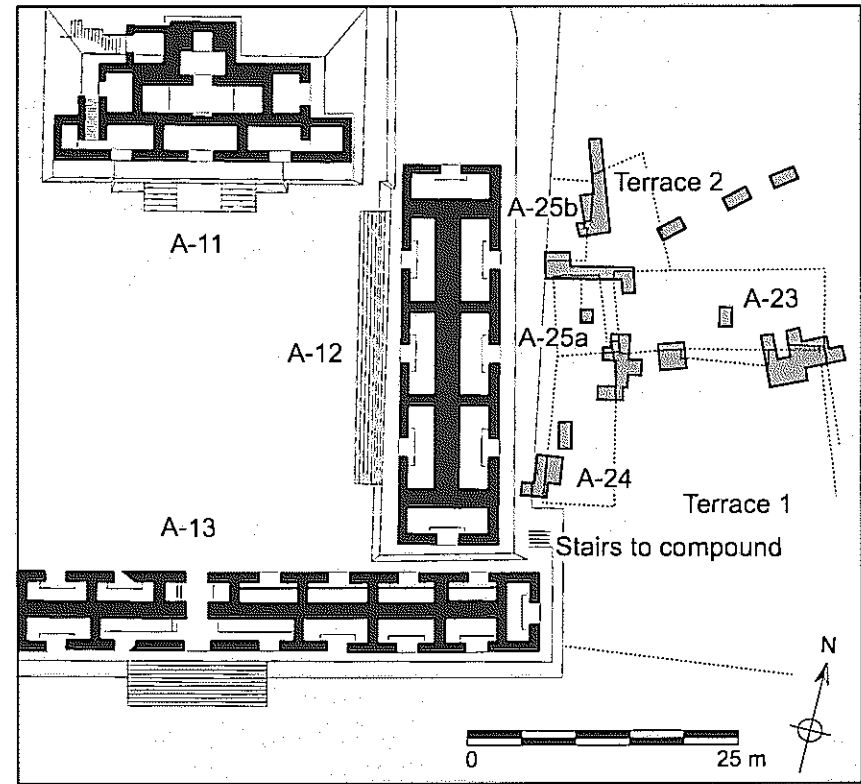
(Costin 1991). I employ these parameters in an attempt to systematically investigate variation in the manner of food preparation and to identify food specialization in the same way they are used to examine craft specialization. I recognize that certain kinds of Classic Maya elite craft production were not highly specialized. Artisans worked at their craft irregularly, might have engaged in a number of artistic endeavors, and required no highly specialized tools or facilities (Inomata 2001). However, utilizing Costin's production parameters provides a systematic way to characterize Maya food preparation and reveals underlying assumptions and variation in these practices.

Context of Production

Costin (1991: 8) describes the context of production as the nature of control over production activities. Attached production is sponsored and managed by elite patrons; independent specialists are unregulated and produce for general consumption (Costin 1991: 11). Here, I make no assumptions about the social relations between producers and consumers and focus solely on the physical location of kitchens. Attached specialists work in areas physically associated with consumers, such as in or near the same corporate group or compound, whereas independent production operated outside immediate oversight in domestic architecture or workshops.

At Xunantunich, ancillary platforms (Structures A-23, A-24, and A-25) adjacent to the ruler's compound likely represent the location of a palace kitchen where attached specialists worked (Figure 6.3). From the easternmost structure of the ruler's compound, Structure A-12, stairs lead down to a set of four low platforms and two terraced areas (Jamison and Wolff 1994). These platforms are unusual in their layout and do not conform to a typical patio-focused domestic group. Because of this arrangement, the excavators proposed that the area functioned as a food-preparation or service area for the ruling family (see Jamison and Wolff 1994: 39–43, for a complete description of the service area).

Structure A-24, the southernmost structure, is the most elaborate of the four platforms, presumably because it is situated nearest Plaza A-II and Structure A-13, an audiencia that forms the front of the ruler's compound. At 1.2 meters tall, it is the highest platform in the service area. Its stone façade is constructed of cut-limestone blocks with elaborate vertical and sloped courses of stone. A south-facing bench sat on the platform, and it may have been covered by a perishable structure. If this is indeed the case, the bench was viewable from Plaza A-II. Inside the bench fill, a stone-lined pit was capped with rough flar stones and during the occupation of the structure may have held a ritual cache.



6.3. The ruler's compound and ancillary platforms (map redrawn from Jason Yaeger, *in press*).

Structure A-23, the central platform, is a one-meter-high platform with a central stairway on its south face. The platform was faced with cut-limestone blocks, and its rather formal façade may reflect the fact that it was open to Plaza A-II and public view. The platform is fronted by a low terrace where excavators found large quantities of broken ceramics, and other artifacts were scattered across the plaster surface. Trash piles were found off the eastern end of the platform and heaped in the corner formed by its south-facing staircase.

Smaller, less elaborate platforms are found toward the back of the service area. Structure A-25a was a low platform that may have supported a perishable structure with a rear room and possibly a low bench (Jamison, personal communication, 2008). Another small, low platform, Structure A-25b, contained a niche feature and a patch of burned plaster.

Structures A-24, A-25a, and A-25b parallel Structure A-12, and this arrangement formed an alleyway between the ruler's compound and the service

Table 6.1. Frequency of primary forms across contexts

	Group A ^a		Group D		Group B		San Lorenzo ^b	
	n	%	n	%	n	%	n	%
Open forms	303	51.4	219	60.0	64	46.3	270	57.6
Jar forms	255	43.2	116	31.8	56	40.6	176	37.5
Vase forms	27	4.6	7	1.9	15	10.9	16	3.4
Ritual forms ^c	5	0.8	23	6.3	3	2.2	7	1.5
Total forms	590		365		138		469	

Notes:^a Materials from Structures A-23, A-24, and A-25 only.^b Includes single-mound and multiple-mound architectural groups.^c Includes incense burners, figurines, and miniatures.

area. Stairs led from the alley between Structures A-24 and A-12 to the top of the A-13 platform (Yaeger 1997: 40). A stratified trash deposit located in the alleyway between Structure A-24 and Structure A-12 yielded extensive ceramic materials (Jamison and Wolff 1994: 39).

Concentration of Production

The second parameter, concentration, characterizes the spatial organization of production. The key to identifying concentration is the differential distribution of production debris across contexts (Costin 1991: 13). Equitable distribution of production debris across sites indicates dispersed production, whereas uneven distribution indicates nucleated production.

In this study, the concentration of food preparation is investigated by comparing formal pottery assemblages from a variety of domestic contexts at Xunantunich and San Lorenzo. Pottery for this analysis derives from three elite groups at Xunantunich: Group A's service area, Group B, and Group D. To broaden the sample of households across sociopolitical status, I also utilize pottery materials from San Lorenzo, a hinterland community located about two kilometers from the site center (Yaeger 2000). San Lorenzo contains patio-focused households and single mounds, where suprahousehold feasting is documented from a wide range of archaeological materials including faunal remains (Stein and Yaeger 2004).

There is substantial variation in the frequency of primary pottery forms across these assemblages (Table 6.1), but I call attention to the relatively even patterning found in the frequencies of jars and open vessels that make up the basic kitchen tool kit. Elite Group D residents and common San Lorenzo households have approximately the same frequencies of open vessels (approximately 60 percent) that could have been used for domestic serving and

food preparation, whereas the ruler's compound (Group A) and Group B have slightly lower proportions of open form (approximately 50 percent). The reverse is true for jars. These patterns suggest that there is a strong relationship between the two pottery forms and that most of the variation in these assemblages is the result of differences in the frequency of ritual and special serving vessels. Importantly, these differences are not related to status, since greater differences in the frequencies of forms exist within elite assemblages than between elite and commoner assemblages.

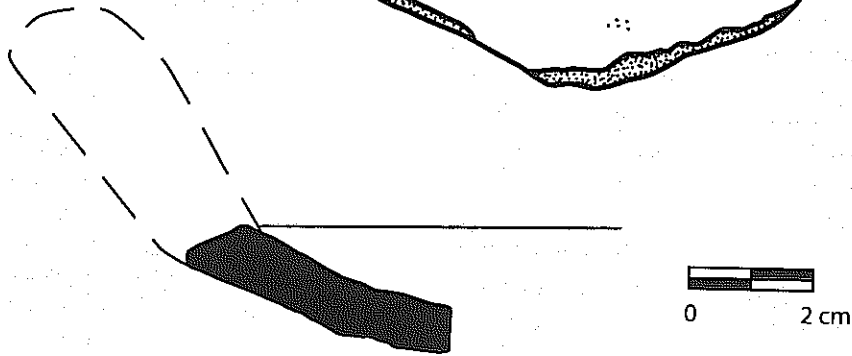
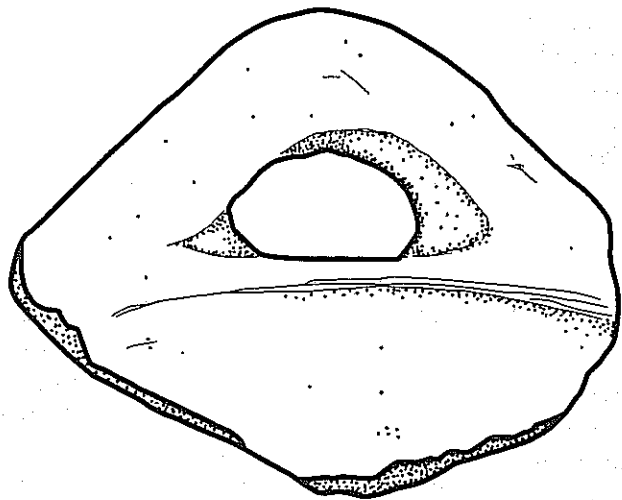
Interestingly, the formal pottery assemblage from the service area did not exhibit the highest frequency of special serving forms, including vases, as would be expected from a specialized kitchen that catered to elite feasting. Since vases were also cached in ritual contexts and burials, part of this patterning is likely due to the nature of the sample. The kitchen assemblage did display more jars than other households; however, the differences were minor.

It is evident that although activities at the ancillary platforms represent the remains of a kitchen and probably the activities of attached food specialists, the cooks used the same assemblage of pots as their "less specialized" counterparts. In addition, the palace kitchen did not specialize in the preparation of a single kind of food, such as balche or ka'kaw, but rather produced a full range of meals and ritual foods similar to those made in other households.

But here I must admit I have not told the whole story. What is unusual about the service area's pottery assemblage is the presence of a very special kind of open form, a *comal* or *cajete* (Figure 6.4). This form first appears in the archaeological record at large Lowland Maya sites during the Late and Terminal Classic periods (Ashmore 1981; Brainerd 1958; Harrison 1970; Hendon 1987; Pendergast 1979; Smith 1971). Because they are large flat griddles, it is commonly assumed that comals were used to toast tortillas or seeds, including ka'kaw beans (Hendon 1987: 350). Ka'kaw drinks have a very long history in the Maya Lowlands, dating back to the Early Formative (Powis et al. 2008), but tortillas were not commonly eaten in the Central Lowlands until the Postclassic period (Taube 1989). Regardless of whether comals were adopted by local people as a new way to toast seeds and beans or introduced along with tortillas, comals may be the single most specialized tool and the best marker of a royal kitchen in the Late and Terminal Classic periods. This new kitchen aid might have reduced preparation time for parching seeds and beans, or it might have been readily adopted because of its elite connections with foreign cooking techniques or styles.

Scale of Production

Scale describes the composition of the production unit and encompasses two variables: size of labor force and principles of labor recruitment (Costin



6.4. *Cayo Ceramic Group comal (117L/2.12978).*

1991: 15). Families who produce items in the home generally recruit a small number of kin or affines to help them. In more specialized modes of production, such as workshops, unrelated individuals who are bound together through more contractual agreements staff larger production units.

One way to understand the scale of production is by investigating the structure or layout of the workspace (Costin 1991: 30). The more highly structured the organization of production (e.g., workshops), the more highly organized the space in which those activities took place should be. Workshops are locations where activities are routinized and differentiated by task, the results of which allow laborers to work more effectively and efficiently (Costin 1991). Small, kin-based production units perform tasks in domestic contexts or other kinds of nonspecialized activity areas, where tasks are performed simultaneously and overlap in space with other unrelated activities.

At Xunantunich's service area, the size of the activities can be gleaned from the concentration of trash deposits in the alleyway between the ruler's com-

Table 6.2. Frequency of primary forms across ancillary platforms^a

	Front ^b		Center ^c		Back ^d	
	n	%	n	%	n	%
Open forms	116	54.7	114	52.3	69	45.1
Jar forms	89	42.0	94	43.1	69	45.1
Vase forms	5	2.4	9	4.1	13	8.5
Ritual forms ^e	2	0.9	1	0.5	2	1.3
Total forms	212		218		153	

Notes:

^a Omits material from Terrace 2 included in Table 6.1.

^b Structure A-24.

^c Structure A-23.

^d Structure A-25.

^e Includes incense burners, figurines, and miniatures.

pound and the ancillary platforms, which yielded one of the largest concentrations of pottery recovered from the site. Even more telling is the arrangement of activity areas, which can be viewed by examining the spatial distribution of pottery forms across the ancillary building (Table 6.2). If the ancillary platforms represented a dedicated kitchen area, I would expect that tasks were spatially segregated. Serving might have been organized at the front of the service area, cooking and preparation near the center, and storage toward the back.

Some of these expectations were realized. Open forms that could have been used for either serving or cooking are more often found toward the front of the service area near Plaza A-II. Jars were found evenly spread across all platforms, a pattern that is not entirely unexpected since jars, in general, serve varied functions. Unexpectedly, vases are found more often toward the rear of the service area. The high frequency of vases associated with the back platform may indicate that the preparation of ka'kaw drinks often took place secretly. Could it be that cooks were instructed to make chocolate drinks for private banquets in the ruler's compound beyond the preying eyes of the public? This might have been the case if chocolate drinks were considered by the public to be reserved for ritual events or sacred offerings, not more secular affairs. Or were recipes for sacred drinks secret?

A more detailed look at the kinds of open forms found at the ancillary building also confirms the spatial segregation of activities (Table 6.3). The central platform's assemblage contains the highest frequency of plates (11.4 percent) found across the service area, and the adjacent front platform contains the highest frequency of dishes (8.7 percent). Bowls that were likely used to prepare *nixtamal* (maize dough) for corn gruels and tamales were ubiquitous across all platforms (see LeCount 1996: 238; in press).

Table 6.3. Frequency of open forms across ancillary platforms^a

	<i>Front</i> ^b		<i>Center</i> ^c		<i>Back</i> ^d	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Plates	8	7.0	13	11.4	3	4.4
Dishes	10	8.7	8	7.0	4	5.9
Bowls	82	71.3	70	61.4	47	69.1
Unspecified	15	13.0	23	20.2	14	20.6
Total	115		114		68	

Notes:^a Omits material from Terrace 2 included in Table 6.1.^b Structure A-24.^c Structure A-23.^d Structure A-25.Table 6.4. Frequency of jar forms across the service area^a

	<i>Front</i> ^b		<i>Center</i> ^c		<i>Back</i> ^d	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Open-mouthed	32	36.0	17	18.1	22	31.9
Restricted-mouthed	23	25.8	32	34.0	8	11.6
Ollas	3	3.4	3	3.2	2	2.9
Unspecified	31	34.8	42	44.7	37	53.6
Total	89		94		69	

Notes:^a Omits material from Terrace 2 included in Table 6.1.^b Structure A-24.^c Structure A-23.^d Structure A-25.

These distributions suggest that most serving occurred near the front of the service center on Structures A-24 and A-23. These platforms, as well as the bench on Structure A-24, are oriented toward Plaza A-II or Terrace 1. The high proportion of plates on the central platform indicates that festival foods may have been served banquet style or handed from the *k'uhul ajaw* seated on the bench to gathered participants below him.

Similar patterns arise when the distribution of specific jar types is investigated across the three platforms (Table 6.4). Constricted-necked jars used for serving or transporting liquids are concentrated along the front platforms. The back platform has predominately open storage jars used to brew alcoholic beverages, such as *balche*, or to store items (LeCount, in press).

Clear-cut patterns such as these were not identified at other households. It could be that sample sizes in other households were too small to find such

fine-grain patterning or because pottery from household activities was dumped together in undifferentiated trash piles. But it is just as likely that these segregated activity areas are the result of task differentiation.

Intensity of Production

The final parameter is the intensity of specialization, an aspect of production that "reflects the amount of time producers spend on their craft" (Costin 1991: 16). Intensity may be indirectly examined by identifying the range of economic activities at the production loci, since it is assumed that full-time specialists did not live in the same rooms or spaces where they worked. Although production studies of workshops at Teotihuacan apartment compounds clearly contradict this proposition (Cowgill 1997; Manzanilla 1996; Widmer 1991), it may have some validity at Xunantunich.

Based on the kinds of artifacts and features found across Structures A-23, A-24, and A-25, the Maya who staffed the ruler's kitchen probably lived elsewhere. Group A's service area displayed the lowest proportion (< 1 percent) of ritual items such as incense burners, figurines, and miniature pots found in household assemblages at Xunantunich or San Lorenzo (Table 6.1). In contrast, 6 percent of Group D's assemblage was composed of ritual items, a frequency that reflects the activities focused on this elite group's ancestor shrine. Even San Lorenzo commoner assemblages contained higher frequencies (> 1 percent) of ritual items than the service area.

The unusual open architectural layout described above deviates from the Classic period pattern of an inward-focused habitation area. Nor were any burials found in the service area. These data indicate that typical domestic activities, including household rituals, were performed elsewhere by the people who worked there. In this way, Xunantunich's palace kitchen is more similar to Copan kitchens at Las Sepulturas than that found at Altun Ha's Structure A-2, where a more varied range of domestic activities occurred. At Xunantunich, the palace kitchen was a dedicated work area for the preparation and serving of food.

Discussion and Conclusions

Kitchens are a well-recognized architectural component of large Maya households, although they have not received much attention in the literature. I interpret the ancillary platforms adjacent to the ruler's compound at Xunantunich as a palace kitchen where attached occupational specialists prepared food for private parties and banquets inside the ruler's residence and also staged larger public festivals from the service area's front and central platforms. Four lines

of evidence support this interpretation. First, the service area is physically attached to the ruler's compound; therefore, the context of food preparation was highly controlled or managed by the court. Second, the concentration of food preparation was dispersed, but the palace kitchen assemblage was slightly more specialized. The comparison of formal pottery assemblages across domestic contexts indicates that although all kitchen assemblages are fairly similar, the palace kitchen contained the only example of a specialized cooking tool (a comal). Obviously, the concentration of food preparation was dispersed, but the palace kitchen assemblage was slightly more specialized. Third, the larger scale of food preparation in the palace as compared with other households is indicated by the spatial segregation of tasks in the service area. Finally, the palace kitchen appears to be utilized full-time for serving, cooking, and storage, not for other activities associated with residential groups. Nonetheless, some important questions remain unanswered.

What was the relationship between the kitchen staff and the noble families who lived in the ruler's residence? If the physical location of an activity area and the people who worked there can be linked to the nearest domestic group, Xunantunich's kitchen staff might well have been close kin to the ruling family. Of course, it is equally plausible to argue that the kitchen staff was attached to the ruling family through patron-client relations. Corporate groups, especially noble houses, contained many unrelated individuals who lived and/or worked in close proximity to the dominant lineage.

Do dedicated kitchens always imply full-time specialists? I think it is possible to imagine how specialized food-service areas, like modern church kitchens, might not have supported full-time specialists. For instance, Copan's Structure 78 sits alone at the nexus of Courtyards A and H and "undoubtedly served as a kitchen" (Sanders 1989: 96), presumably because of the rich trash deposits and the layout of the building. Rather than a palace service area, it might have functioned solely as a communal kitchen, where groups staged banquets in potluck fashion. Although the area was maintained as a specialized facility, any combination of local families and leaders might have pooled food, tools, and labor to sponsor a feast in this kitchen.

Although we may be able to identify where food for the court was prepared and served at Xunantunich, we do not yet clearly understand how Maya royal kitchens were stocked. Did Maya courts have kitchens that were stocked with goods demanded through periodic tribute or did they expect food to be provided on a daily basis? If they stored staple tribute for daily meals and future feasts, where and how was it held?

Finally, many of the assumptions behind craft-specialization models are bound to market-based principles, especially supply and demand. Parameters that focus on contractual arrangements to the exclusion of social relations and

reciprocity may be inappropriate for understanding the organization of food preparation, especially when it applies to large feasts. Preparations for regal banquets and ritual feasts may have more to do with establishing prestige, repaying obligations, or following ceremonial precedents than with negotiating the production and distribution of commodities. The preparation of sacred foods or kingly foods may have required special skills and ritual knowledge only occupational specialists possessed.

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Note

1. Here I define "palace" as a large stone-faced platform that, in the Classic period, supported elite residential, ritual, and/or administrative buildings (Christie 2003: 5). Some palaces were the building blocks of larger architectural compounds, such as an acropolis that housed the royal family and the court in the urban core of Maya capitals. Others occurred as individual buildings and fulfilled many roles. Noble palaces are distributed in a variety of locations at Maya sites and are distinguished from royal acropolises by their size, location, and architectural embellishments (Harrison 2003).

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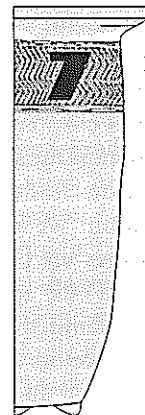
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FEEDING THE FIRE



Food and Craft Production in the Middle Sicán Period (AD 950–1050)

David J. Goldstein and Izumi Shimada

Previous publications synthesize the nature of multi-craft interaction and its implications for the organization and operation of interacting technologies and craftspeople at Huaca Sialupe on the North Coast of Peru during the Middle Sicán period (AD 950–1050; Goldstein 2007; Goldstein, Shimada, and Wagner 2007; Shimada and Wagner 2007; Shimada et al. 2003). Here we address craft production from the perspective of domestic economy and subsistence resources. Often discussions of artifact fabrication ignore the fact that people need to produce food to sustain the workshop whether production is year-round or seasonal. Specifically, we use a paleoethnobotanical approach to interpret the archaeobotanical remains from Middle Sicán metal and ceramic production contexts in relation to identified food-production loci at Huaca Sialupe. We build on our previous work covering Huaca Sialupe (Goldstein 2007; Goldstein, Shimada, and Wagner 2007; Shimada and Wagner 2007; Shimada et al. 2003) to interpret the implications of the variety of subsistence remains and non-ceramic and non-metal production features at Mounds I and II during the Middle Sicán.