# Distinguishing Domestic from Ceremonial Structures in Southern Mesoamerica: Suggestions from Cerén, El Salvador

#### LINDA BROWN

University of Colorado-Boulder

## **PAYSON SHEETS**

University of Colorado-Boulder

#### **ABSTRACT**

About 1400 years ago, a southern Mesoamerican agricultural village that we call Cerén was suddenly buried in ash from a nearby volcanic vent. The eruption precipitated the rapid abandonment of the village and created unusually good preservation of architecture and artifacts. The four structures of Household 1 are compared to two nearby structures that were used for divination and to produce community festivals. In this study we heuristically remove artifacts and features from these household and ceremonial buildings to simulate gradual abandonment and subsequent cultural and natural processes. If those processes preserved floors and wall bases in the usually preserved site, then archaeologists have a good chance of correctly identifying building function.

**Key words**: Household archaeology, volcanism, divination, preservation.

#### **RESUMEN**

Hace 1400 años, una aldea agrícola del sur de Mesoamérica que hemos llamado Cerén fue súbitamente enterrada en ceniza a causa de una erupción volcánica. La erupción precipitó el rápido abandono de la aldea y permitió una buena e inusual preservación de arquitectura y utensilios. Las cuatro estructuras del Conjunto Habitacional 1 son comparadas con dos estructuras cercanas que fueron utilizadas para adivinación y para realizar festejos comunales. En este estudio quitamos heurísticamente utensilios y rasgos de los edificios habitacionales y ceremoniales para simular el abandono gradual y el posterior proceso cultural y natural. Si esos procesos conservaron pisos y cimientos de las paredes en el sitio preservado normalmente, entonces los arqueólogos tienen una excelente oportunidad de identificar correctamente la función de la edificación.

Palabras clave: Arqueología de conjuntos habitacionales, vulcanismo, adivinación, preservación.

### INTRODUCTION

On an August evening in the A.D. 600's, a thriving southern Mesoamerican agricultural village, now known as the Cerén site (Inomata and Sheets in this issue, Figure 1), was suddenly buried under some five meters of ash by a nearby volcanic vent (Sheets 1992, 1994). The precursors of the eruption precipitated the emergency abandonment of the community and facilitated the preservation of fragile perishable remains not usually recovered from open sites, especially in the tropics.

The eruption occurred with little warning. It did not come from a volcanic edifice, such as a cone or crater, but from a fissure in the earth under the Rio Sucio. The hot basaltic magma slowly worked its way upward until it came in contact with water in the river. Cracks and slight slumpage of the original ground surface near Str. 12 are evidence of a mild earthquake, but not so strong as to knock hemispherical pots off of walltops, about a Richter 4 intensity. That was quickly followed by initial and probably very noisy steam emissions from the opening vent located only 700 meters north of the village. The steam emissions would have given directionality to the danger, and must have indicated that Cerenians should literally «head south.» Thus, the residents abandoned virtually complete household and community artifact assemblages, providing us an unprecedented view of village life on the Southeast Maya Periphery some 1400 years ago. Even individual maize plants were preserved in the milpas, with their ears matured at the time of the first maize harvest probably in August.

To date, 17 structures have been found and at least partially excavated at Cerén (Figure 1). Many others probably have been detected as geophysical anomalies (Conyers 1995), and await testing and confirma-

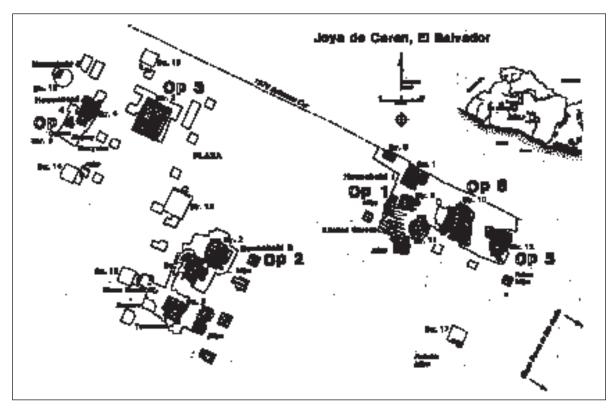


Figure 1. Map of the Cerén site, with Household 1 and the religious complex on the east side.

tion. Of these, one complete and three partial household clusters have been excavated (Figure 1). Household clusters consist of at least three functionally separate buildings: a kitchen, a storeroom, and a domicile, as well as associated exterior household activity areas and agricultural zones. In addition to domestic buildings, special use structures have been excavated including: a civic building (Structure 3), a communal sweatbath (Structure 9), and the two ceremonial buildings (Structures 10 and 12) that were associated with Household 1 which are the focus of this paper.

Structures 10 and 12 are described in detail below so only a brief mention is provided here. Structure 10 apparently was used to produce community festivals. The building stored ceremonial paraphernalia in the two upper rooms, and was used for storage, preparation, and dispensing of festival food and drink. Structure 12 was the locus of ritual activity, apparently divination. That two permanent special use ceremonial

buildings were functioning in a rural village community, lends credence to previous interpretations that access to the supernatural realms was not exclusively restricted to the elite on the Southeast Maya Periphery during the Classic Period (Benyo 1986; Gonlin 1993).

In order to make this paper maximally useful to archaeologists, we simulate what might have remained of these two religious buildings and their contents, compared to the household architecture and artifacts, if they all had been subjected to more usual preservation conditions, mode of abandonment, and site formation processes common in Southeastern Mesoamerica. We heuristically impoverish the Cerén archaeological record, replicating as accurately as possible the more usual site formation processes, thereby systematically reducing the amount of information available for interpretation. Our hypothetical remains are compared to the formal attributes used to identify ritual buildings in the Maya Lowlands and the

Southeast Maya Periphery (Becker 1971; Marcus 1978). Specifically, we are interested in whether any material patterning would have suggested the original function of the Cerén buildings in community ceremonialism versus habitation, had they undergone more usual site formation processes.

# DESCRIPTION OF ARCHITECTURE, ARTIFACTS, AND FEATURES

### Household 1

Household 1 is located immediately west of the two ceremonial buildings, Structures 10 and 12. The household's patio extends eastward almost to Structure 10. The household had four buildings, each built upon a raised earthen platform. All buildings of all households are oriented 30° east of north. The clay floor of each of the three rectangular buildings (Strs. 1, 5, and 6) rests on a substantial earthen platform, and each was fired after it dried. Then, vertical poles spaced some 20 cm apart were placed in the platform to reinforce the walls, except for Str. 5 which had no walls. Horizontal reinforcements were added in the form of vines or branches. Structures 1 and 6, the domicile and storehouse, had mud added to both sides of the organic reinforcements to make solid walls. These wattle-and-daub walls, locally called bajareque, were very earthquake-resistant. The vertical poles continued upward to connect with the roof beams, and a grass thatch formed the roof of all four buildings. Solid earthen columns were added to the four corners of the domicile.

The kitchen (Str. 11) was circular in plan with a tabular porch, and only the rim of the groundplan and the porch were fired. After firing, a floor of llopango volcanic ash from an earlier eruption was placed inside the rim, easily replaceable when too many spills had accumulated. The walls were of pole and thatch, and the roof was relatively thin thatch. Kitchens at Cerén were detached, and built of adequate but not substantial materials. The reason, presumably, is that the hearth would be burning in the daytime and smoldering at night, presenting a fire risk. The central prominent three-stone hearth in the kitchen of Household 1 contrasts strikingly and significantly with the two hearths in Structure 10 that probably were used only while a ceremony was taking place.

Household 1 contained over 70 complete ceramic vessels (see Webb and Hirth article for a similar figure for Xochicalco), 22% of which were polychrome food

or drink serving vessels. The preservation is sufficiently thorough for us to realize that only about a third of their artifacts at the site were in floor contact, and almost two-thirds of their artifacts were in elevated contexts of use or storage (Sheets 1998). Virtually all obsidian implements were stored in the thatch of the roofs, at accessible locations in corners or above doorways, as were bone needles. The household had four functioning *metates*, one on the floor of the kitchen with considerable use-wear that was the everyday metate (adjacent to the household hearth). The other three metates, with very slight use wear, were mounted on forked poles for someone to stand and grind at mid-thigh level. The latter probably used for surplus masa production when ceremonies were being conducted at Str. 10. The household manufactured groundstone tools, including donut stones as well as manos and metates, and apparently a lot of cotton thread, judging from the high frequency of small spindle whorls found in the complex. Corn huskers (tapiscadores) are conspicuous by their absence in Household 1, but the two found in Structure 10 may well have been borrowed from that household. We believe the material record is sufficiently strong to posit a service relationship between Household 1 and Structure 10. That may have included Structure 12, but the evidence is not as strong.

#### Structure 10

Structure 10, located only 5 meters east of Structure 12, is a thatch roofed bajareque building constructed on a square platform and oriented approximately 23 degrees east of magnetic north. The building has two rooms anchored in the corners by four large adobe columns: an east (front) room and a west (back) room. Curiously, the earthen columns in this building expand toward the top, even though that would make them topheavy. As one enters the building and progresses inward, each floor is higher than the previous floor, a characteristic shared with Str. 12, and no other known building at the site. The superstructure is enclosed along the south, east, and north sides by walls that form a narrow corridor. The sole entrance into the structure is past a pole door at the west end of the north corridor. Architectural components and the artifact assemblage suggest that Structure 10 was a special-use building that served a non-residential function (Gerstle 1992, 1993). We believe that Structure 10 was utilized for production of community festivals and

the storage of festival paraphernalia. Festivals at Cerén included the use, and presumably display, of white tailed deer ritual paraphernalia along with community feasting, likely connected with the fertility of nature and agricultural productivity.

The building itself was divided into several functionally distinct activity areas. The north corridor was used for food preparation, using two hearths and a metate elevated on forked poles. The east corridor or anteroom was used primarily for food and vessel storage. At least 17 vessels were stored there, some nestled three deep. Food and drink probably were dispensed to festival participants over a half-height wall. The eruption apparently caught Structure 10 at the end of a ceremony, or even interrupted the ceremony, based upon finding so much food stored and being processed.

Ritual and unique items were stored in the east front room of the Structure 10 superstructure. Ceremonial items included a deer skull headdress (Odocoileus virginianus), in storage on a high pole shelf at the moment of the eruption, with other components of a possible dance costume including a matched set of bone tube beads, a carved tear drop shaped bone ornament, and a shaped deer scapula. The deer skull headdress had been painted red and was recovered with twine, presumably for securing to a wearer during ritual performances. A large caiman effigy jar full of achiote (Bixa orellana) seeds was nearby, stored on the floor beside a large jar full of squash seeds. Achiote is used by contemporary Maya as a general food colorant (Coe 1994) as well as for making red paint that is applied to bodies and objects during ceremonies to symbolize human blood (McGee 1990; Tozzer 1907). In addition to the storage of unique and ritual items, the east room was the only painted room in the structure. The eastern face of the dividing wall, cornices, and door pilasters were painted red while a thin layer of white paint was applied to the lower pilasters.

In contrast, the west back room was used for the storage of a few utilitarian objects. Food was stored here as indicated by the large jar on the floor that contained beans. Additionally, a deer scapula tool fell from an elevated storage context in this room.

#### Structure 12

Structure 12 faces 15° east of north (Sheets and Sheets 1990). It also shares some other important characteristics with Structure 10. For example, Structure

12 was painted, albeit in reverse color scheme, as the walls covered in white paint with an occasional red detail. Special treatment was given to columns and two columns had vertical niches associated with them. Additionally, the square principal building had a large antechamber with round columns added to it. And, each floor level is an increasingly higher elevation as one progresses further inside the building, as with Str. 10. Additionally, Structure 12 has two *bajareque* latticework windows.

The building was constructed on top of a low earthen platform that forms a ramp to the step at the doorway. The front entrance was securely closed by a double-rowed pole front door that anchored into sockets in both doorjambs. The clearance is only 90 cm between the north room floor and the bottom of the lintel, suggesting restricted access into the building. That contrasts with all other doorways at Cerén with their lintels at approximately 150 cm above the floor level. Artifacts stored on top of the lintel and on the adjoining columns include two spindle whorls, two obsidian blades, a hard greenstone disk, an obsidian macroblade, a cut section of the pink interior border of a spondylus shell (Spondylus sp.), and a painted gourd. A mineral collection was stored on top of a small interior partition wall. While we infer that the area in front of the door was kept clear for use as an entranceway, there is also evidence that suggests that these areas may have been used for communication, through the pole door or more probably through the lattice window, between individuals approaching the building and the persons inside. Simmons and Villalobos (1993) found evidence, in the form of a highly compacted ground surface, suggesting that the majority of the foot traffic came to the north door and around the outside of the building to the two lattice windows.

Immediately south of the north room is a small earthen bench with a niche built into it. Five pots were clustered on top of the bench while smaller objects were stored inside the niche. Items in the niche included half of a broken ceramic double ring, a ceramic animal head figurine that originally had been attached to a vessel, a human female figurine with red painted decoration, three cut pink interior border fragments from spondylus shell, a small pile of beans, and an antler from an adult white-tailed deer. A series of small holes was drilled into the antler along one side, perhaps for decorating the piece with feathers. These carefully stored items may have been the «supernatural tool kit» of the diviner.

The floor level to the east of the bench is higher than the north room and a narrow doorway served as a passageway into the east room. Three vessels were on the floor of the east room, two of which are strikingly similar in form to vessels used in traditional villages of El Salvador today to contain chicha, the fermented maize beer. One of those pots had a human effigy face on its neck and, curiously, it was resting on top of four Oliva (Oliva spicata) shell beads. A pile of beans had been placed directly on the floor near these vessels. To date, no beans recovered in any domestic context were placed, or stored, on earthen floors suggesting that these beans may have been used for divination, as is common in the Maya region today (Tedlock 1982). Beans stored in domestic contexts were generally stored in ceramic vessels, but occasionally on mats in kitchens.

The elevation of the west room floor is higher than the east room. The floor of the west room was kept virtually clear of artifacts with the sole exception of the large open bowl placed in the extreme southwestern corner. If our interpretation of divination is correct, then divinatory activities may have taken place in the inaccessible back two rooms, and the results of those supernatural contacts may have been communicated through the second lattice window located in the west room.

Based upon ethnographic analogy, we assume that most of the Cerén artifacts probably were used by both genders. However, some artifacts use may have been more gender specific. It probably is significant that all the gender specific artifacts at Structure 12 are female-associated. They include spindle whorls, manos, the *metate*, and perhaps the human female figurine, suggesting that the ritual practitioner may have been a woman (Sweely 1999).

### PROCESSES OF SITE FORMATION

Previous research has shown that much material patterning in the archaeological record results from discard behavior, mode of site abandonment, and post-abandonment processes (Cameron 1991; Deal 1985; Hayden and Cannon 1983; Lange and Rydberg 1972; Savelle 1984; Schiffer 1976, 1985). Archaeologists have identified different behaviors related to refuse disposal including primary, secondary, abandonment, and de facto refuse. Primary refuse includes items disposed at or near the object's location of use, whereas secondary refuse involves intentional dispo-

sal of items in locations not related to the object's area of use (Schiffer 1972, 1976, 1987).

The nature of site abandonment strongly affects the material patterning occurring in the archaeological record (Schiffer 1972, 1976). Rapidly abandoned sites have *de facto* refuse, referring to items of value that are left behind due to constraints placed on individual's ability to transport them (Schiffer 1987), thus more closely approximating the full systemic assemblage (Stevenson 1982).

After the site has been abandoned, a number of factors continue to shape the material patterning thereby affecting the archaeological record. Commonly cited factors include scavenging (Schiffer 1987) and various post-depositional processes (Gifford 1978). In El Salvador, agricultural practices of the last two centuries have differentially affected archaeological sites in the Zapotitán Valley. The most destructive of these is the repeated deep plowings of sugar cane fields of the flat valley bottom.

In addition to human impacts on the archaeological record, differential preservation of artifacts and the burial context itself removes materials from the archaeological record. The majority of organic artifacts rapidly decompose in moist tropical environments, with a few exceptions such as carbonized organics, pollen, phytoliths, or organic items in contact with heavy metal compounds such as cinnabar. Other organic artifacts with high mineral contents, such as shell, antler, and bone, might survive, yet would be vulnerable to rodents and moist acidic soils. In contrast, the inorganic artifacts, such as chipped stone, groundstone, ceramics, mineral pigments and paints generally survive well in the archaeological record.

Earthen architecture in a tropical moist climate can only survive in good condition under a well-maintained roof with adequate drainage away from the building. Thatched roofs in El Salvador must be replaced every few years, so an earthen thatched roofed building would begin to «melt down» into a housemound in less than a decade after abandonment. It is probable the useful architectural elements, such as roof beams, would have been removed and used elsewhere, thus accelerating architectural deterioration. An erosional (degradational) environment is inimical to preservation of earthen architectural details that are important here, such as floors and wall bases, but an aggradational environment would assist their preservation. Our model is neutral with regard to those n-transforms.

#### **CREATING THE HEURISTIC MODEL**

In this section, we engage in a heuristic exercise and hypothetically remove artifacts from the actual Cerén artifact assemblage, and degrade the architecture, to simulate what might remain under the usual modes of abandonment and n-transforms. Our hypothetical model is based on a number of assumptions. First, we assume that site abandonment was gradual and permanent. For our central model we have assumed an average environment, not strongly aggradational or degradational, with all cultural material, remaining exposed to the elements and to human, animal, and insect scavengers for at least a few centuries.

We also have assumed that land use at Cerén, from the Colonial Period forward, would have followed the same trajectory seen throughout the lower elevations of the Zapotitán Valley of El Salvador. Two types of agriculture have been used in the valley since the Colonial Period: large-scale agribusinesses, such as sugar cane, and milpa agriculture without plowing. The evidence to distinguish domestic from ritual structures could have survived only in milpa areas, but would have been destroyed by the 0.5 meter deep plowing of cane farming.

# **Removal of Artifacts**

Based on findings in nearby gradually abandoned sites (Black 1983; Fowler and Earnest 1985; Sharer 1978; Sheets 1983), we assume that during site abandonment all whole portable artifacts in good condition would have been removed from Cerén. Portable items assumed to have been left during abandonment include modified and unmodified river cobbles, carbonized wood in hearths, stone slab fragments, small groundstone fragments, broken ceramics recycled into secondary uses, and all artifacts in caches and burials. Architecture and associated features, such as adobe steps, wattle-and-daub walls, wooden shelves, hearths, and thatched roofs with supporting beams, would have been left largely intact. If later scavengers removed roof beams they would have accelerated the «melting» of earthen architecture. Finally, all items in primary and secondary discard contexts at the time of abandonment would have been left undisturbed.

### What Would Archaeologists Find?

The most numerous artifact type that would remain in the archaeological record would be sherds, followed

by obsidian prismatic blade fragments. Our hypothetical artifact assemblage also would have included numerous stones and cobbles, an exhausted jasper core, fragmentary obsidian macroblades and scrapers, carbonized wood in hearths, and some red and white paint flecks. Certain features and architectural remains might remain in the archaeological record that could shed light on what took place in and around these buildings. If enough aggradation from «melting» upper earthen architecture occurred to bury intact floors, wall bases, and column bases, and that deep plowing for sugar cane cultivation had not occurred, then the overall building plans, with associated floor features would remain in the archaeological record to distinguish religious from domestic buildings.

# STANDARD FORMAL CRITERIA FOR THE RECOGNITION OF RITUAL BUILDINGS COMPARED TO THE CERÉN HYPOTHETICAL ASSEMBLAGE

Mesoamerican archaeologists have developed criteria to help recognize the material signature of ritual buildings in the archaeological record. These attributes include building location, building plan, sub-platform height, increasing floor elevation, construction technique, altars, and the presence of subfloor caches and burials (Becker 1971, Marcus 1978). Here we compare the features and architectural elements that our model predicts would remain in the archaeological record at Cerén to these criteria.

# **Location (Directionality and Orientation)**

Directionality was an important factor in influencing decisions concerning the placement of prehistoric ceremonial buildings. For example, Becker (1971) argued that the religious structures in Tikal Patio A groups were always positioned on the east side of the household plaza, and he suggested that this might be the case throughout the Maya Lowlands. Similarly, along the Southeast Maya Periphery, numerous scholars have identified «residential group temples,» interpreted as serving smaller corporate groups, located on the east side of household patios (Gerstle 1988; Gonlin 1993; Hendon 1991; Joyce 1991). The evidence from Cerén also supports this criterion. Both Structures 10 and 12 are located immediately to the east of Household 1. Interestingly, not only are these structures east of Household 1 but they are located on the easternmost part of the site. And they are located at the topographically highest point within the entire settlement.

Closely associated with the physical placement of a ritual building in relation to the household compound is the axis of the building itself. At Cerén, neither Structure 10 nor 12 follow the 30 degrees east of north orientation of all domestic and civic buildings as well as plant rows in milpas and gardens. Such an obvious departure in the dominant architectural and agronomic axis could be a rather strong indicator of a special use building, perhaps ceremonial.

## **Building Plan**

Marcus (1978) argued that in the Maya and Oaxaca areas, temple building plans were patterned and consisted of an open antechamber with restricted access into the innermost rooms. Marcus's temple building plan has been used to infer ritual buildings along the Southeast Maya Periphery as well. For example, Joyce (1991) identified a ritual structure at the Late Classic site of Cerro Palenque, in the Ulua Valley of Honduras, that had an antechamber with restricted access to an interior room. Additionally, this building was located on the east side of a plaza and had the highest subplatform (see below) of all structures excavated. A midden associated with this building contained many decorated serving vessels and finely crafted stone, bone, and shell ornaments, suggesting that this area was used for «specialized feasting and ritual associated with elaborately costumed participants» (Joyce 1991: 123).

Cerén domestic and civic buildings do not have antechambers. The civic buildings (Strs. 3 and 13) facing on the town plaza do not have antechambers, and neither does the sweatbath (Str. 9). Structure 12 does follow the basic religious architectural pattern identified by Marcus (1978). The north corridor forms an antechamber to the main square adobe platform and access into the Structure 12 antechamber, as well as the innermost two rooms, is restricted. However, Structure 10 does not fit this building plan as closely. While Structure 10 has an enclosed corridor along the north and east sides, the presence of two hearths is atypical of temple antechambers. Furthermore, while the pole door into the north corridor suggests that there was restricted access into the building, the entrance into the main interior east room was unusually wide, rather than narrow and restricted.

# **Subplatform Height**

Another architectural trait used to identify ritual buildings is the height of the subplatform. Becker (1971)

proposed that residential group temples in the Maya Lowlands had taller subplatforms, with the smallest usable surface area, when compared to domestic structures. A similar pattern has been noted along the Southern Maya Periphery in ritual buildings at both elite (Gerstle 1988; Hendon 1991; Joyce 1991) and nonelite sites (Benyo 1986; Gonlin 1993). At Cerén, neither ceremonial building fits this criterion very strongly. A small portion of the Structure 12 subplatform under the west room is 40 cm higher than residential platforms. However, the total usable surface space in both Structures 12 and 10 is greater than any residential or domestic ancillary building at the site to date. And we do think it important that the internal heights do increase as one progresses to the innermost room in both structures.

### **Increasing Floor Elevation**

Marcus (1978) argued that Maya and Oaxaca temples frequently had increasing floor elevations as one proceeded from the antechamber deeper inside of the structure. At Cerén, Structure 12 does show this characteristic, with the innermost western room 1.1 meters higher than the elevation of the patio and about 60 cm higher than the floor in the north corridor. The floor elevation in the Structure 10 superstructure also increases, although slightly, with the innermost west floor level 30 cm higher than the eastern room floor level. However, it is questionable whether a 30 cm variation in floor height would be evident to archaeologists if Structure 10 had undergone more-usual abandonment and preservation conditions. The platform heights of Structures 10 and 12 are higher than platform heights of each of the Household 1 group, but not higher than the domicile of Household 2.

# **Elaborate Construction Technique**

Leventhal (1983) argued that at some sites elaborate construction technique, rather than subplatform height, was more useful for inferring a ritual function. For example, ritual buildings at the site of Uaxactun were not the tallest but, instead, the most elaborately constructed with vaulted roofs, small roof combs, and plastered and painted walls and floors (Wauchope 1934).

At Cerén, both Structures 10 and 12 fit this criterion when compared to domestic architecture. While we note that many architectural details, such as the lattice work windows in Structure 12 or the low «serving»

wall in Structure 10, would not be preserved under more usual site formation conditions, both structures do have elaborate features that our model predicts would remain in the archaeological record. For example, both structures have more massive columns than other structures. The columns on the east side of Str. 10 actually taper upward, and Str. 12 has round columns in its northern enclosure «antechamber.» Additionally, both buildings have walled enclosures that represent notable deviations from domestic structures excavated to date. Moreover, both structures received special wall surface treatment as they are the only structures that were painted. Evidence of the white and red paint could be preserved on lower portions of walls or as paint flecks in decayed wall in-fill. Any of these features suggest a greater labor investment and thus special use.

# Summary of the Material Signature of Ceremonialism at Cerén

In the above exercise, we applied six formal attributes (Becker 1971, Marcus 1978) used by archaeologists to distinguish ritual from habitational structures in the Maya Lowlands and the Southeast Maya Periphery to our gradually abandoned model of Structures 10 and 12 along with Household 1. Four of the six criteria (building location, building plan, increasing floor elevation, construction technique) were evident at Structure 12, and our hypothetical model suggests that these would have remained in the archaeological record unless deep plowed. Based on this, we feel that Structure 12 could have been interpreted as a ritual structure, perhaps identified as a small «temple,» although the specific function of the building would not have been evident.

The correct interpretation of Structure 10 might be more problematic as only two of the six (building location, construction technique) formal attributes of ritual buildings firmly fit this structure, and two others more weakly pertaining (building plan, increasing floor elevations). Additionally, the slight increase in the west floor level might not be noticeable. Because fewer criteria fit Structure 10, we fear ritual buildings associated with village festivals might be more difficult to identify in the archaeological record. However, there are some features at Structure 10 that could help identify them. The enclosed corridor might suggest a special use building. Although lateral building growth generally is attributed to an increase in family size (Leventhal 1983), the presence of two evanescent he-

arths in a narrow adjoined enclosed cooking area is striking, because domestic hearths are intensively used in kitchens only. When the unusual formal attributes of Structure 10 are considered together: (1) a multiple function building including an area with several hearths, (2) adjoined rooms lacking sleeping benches, (3) controlled access into the building corridor, (4) special more elaborate construction techniques and wall treatment, and (5) the proximity of this building to a household cluster containing its own kitchen with a hearth, then these attributes might be indicative of specialized community festival/feasting structures with associated storage space.

#### **CONCLUSIONS**

What would have been the consequences of misidentifying these two religious buildings as domestic structures?. One consequence would be an erroneous inflation of the village population estimate. A more significant consequence would be completely missing the richness of ritual life in the village. Inferences based on the permanence of architecture, evidence of past building modification, and spatial relationships suggest that ritual responsibilities for hosting festivals at Structure 10, and ceremonial activities at Structure 12, were institutionalized. If they were, then it raises interesting questions in light of Redfield's (1960) notion of the «Little Tradition» and how these may have been negotiated and manipulated by members of rural communities in the Zapotitán Valley. Evidence of active ceremonialism at other small rural sites along the Southeast Maya Periphery (Benyo 1991; Gonlin 1993, Hirth 1988) suggests that Cerén may be part of a trend noted in the Classic period in Central Honduras (A.D. 500-900) when increasing numbers of small and medium sized communities had distinct ceremonial precincts (Hirth 1988:311).

Our model predicted that Structure 12 would be identified as a ritual building, although the function of this building as a divination house would have been difficult to ascertain. Because Structure 12 was such a prominent permanent building, we argue that divination was firmly integrated into rural community ritual activities during the Classic Period and more boldly public than it generally is today. Perhaps the competition and pressure from historic and contemporary Christians have driven divination into more hidden contexts than it was in the past.

Another area that would have been missed is the

gender of the diviner, who probably was a woman (Sweely 1999). Scholars have argued that Mesoamerican women played important roles in ceremonialism and that the production of ceremonies was marked by gender complementarity, with ritual roles for both men and women (Joyce 1993; Pohl and Feldman 1982). Analogy with the contemporary Maya suggests that women had central roles in the creation and replication of the village Little Tradition, as well as the active contestation of state ideologies (Gossen and Leventhal 1993). If the interpretation of a female diviner practicing in Structure 12 is correct, then women's

ritual roles in ancient village life extended well beyond the domestic realm.

#### **Acknowledgements**

Takeshi Inomata gave a draft of this article a close reading, and his suggestions have improved it considerably. The remaining shortcomings are the responsibility of the authors. This article is dedicated to the life, accomplishments, and humanity of our close friend and colleague Victor Manuel Murcia of Chalchuapa.

#### REFERENCES

- BECKER, Marshall. 1971. The Identification of a Second Plaza Plan at Tikal, Guatemala and its Implications for Maya Social Complexity. Ph.D. dissertation, University of Pennsylvania. UMI Dissertation Services. Ann Arbor.
- BENYO, Julie C. 1986. An Archaeological Investigation of Intra-Community Social Organization at La Ceiba, Comayagua, Honduras. Ph.D. dissertation, State University of New York, Albany. UMI Dissertation Services. Ann Arbor.
- BLACK, Kevin D. 1983. «The Zapotitán Valley Archaeological Survey». In *Archaeology and Volcanism in Central America: The Zapotitán Valley of El Salvador*, Ed. P. Sheets, pp. 62-97. University of Texas Press. Austin.
- CAMERON, Catherine M. 1991. «Structure Abandonment in Villages». In *Archaeological Method and Theory*, Vol. 3, Ed. M. B. Schiffer, pp. 155-194. University of Arizona Press. Tucson.
- CONYERS, Lawrence. 1995. «The use of ground-penetrating radar to map the buried structures and landscape of the Cerén site, El Salvador». *Geoarchaeology* 10: 275-299.
- COE, Sophie. 1994. America's First Cuisines. University of Texas Press. Austin.
- DEAL, Michael. 1985. «Household Pottery Disposal in the Maya Highlands: An Ethnoarchaeological Interpretation». *Journal of Anthropological Archaeology* 4: 243-291.
- FOWLER, William R. and Howard EARNEST. 1985. «Settlement Patterns and Prehistory of the Paraiso Basin of El Salvador». Journal of Field Archaeology 12 (1): 19-32.
- GERSTLE, Andrea I. 1988. Maya-Lenca Ethnic Relations in the Late Classic Period Copán, Honduras. Ph.D. dissertation, University of California, Santa Barbara. UMI Dissertation Services. Ann Arbor.
- —. 1992. «Excavations at Structure 10, Joya de Cerén». In 1992 Investigations at the Cerén Site, El Salvador: A Preliminary Report, Eds. P. D. Sheets and K. Kievit, pp. 30-54. University of Colorado. Boulder.
- —.1993. «Excavations at Structure 10, Joya de Cerén». In *Cerén Project 1993 Preliminary Report*, Eds. P. D. Sheets and S. Simmons, pp. 46-90. University of Colorado. Boulder.
- GIFFORD, Diane P. 1978. «Ethnoarchaeological Observations of Natural Processes Affecting Cultural Materials». In *Explorations in Ethnoarchaeology*, Ed. R. A. Gould, pp. 77-101. University of New Mexico. Albuquerque.
- GONLIN, Nancy. 1993. Rural Household Archaeology at Copán. Ph.D. dissertation, Pennsylvania State University. UMI Dissertation Services. Ann Arbor.
- GOSSEN, Gary H. and Richard M. LEVENTHAL. 1993. «The Topography of Ancient Maya Religious Pluralism: A Dialogue with the Present». In *Lowland Maya Civilization in the Eighth Century A.D.* Eds. J. A. Sabloff and J. S. Henderson, pp. 185-217. Dumbarton Oaks Research Library and Collection. Washington, DC.
- HAYDEN, Brian and Aubrey CANNON. 1983. «Where the Garbage Goes: Refuse Disposal in the Maya Highlands». *Journal of Anthropological Archaeology* 2: 117-163.

Mayab 13 (2000): 11-21

- HENDON, Julia A. 1991. «Status and Power in Classic Maya Society: An Archaeological Study». *American Anthropologist* 93: 894-918.
- HIRTH, Kenneth G. 1988. «The Central Honduran Corridor». In *The Southeast Classic Maya Zone*, Eds. E. H. Boone and G. R. Willey, pp. 297-334. Dumbarton Oaks Research Library and Collection. Washington, D.C.
- JOYCE, Rosemary A. 1991. Cerro Palengue. University of Texas Press. Austin.
- —. 1993. «Women's Work: Images of Production and Reproduction in Pre-Hispanic Southern Central America». Current Anthropology 34 (3): 255-274.
- LANGE, Fred W. and Charles R. RYDBERG. 1972. «Abandonment and Post-abandonment Behavior at a Rural Central American House Site». *American Antiquity* 37: 419-432.
- LEVENTHAL, Richard M. 1983. «Household Groups and Classic Maya Religion». In *Prehistoric Settlement Patterns: Essays in Honor of Gordon Willey*, Eds.E. Z. Vogt and R. M. Leventhal, pp. 55-76. University of New Mexico Press and Peabody Museum of Archaeology and Ethnology. Harvard University. Cambridge, Mass.
- MARCUS, Joyce.1978. «Archaeology and Religion: A Comparison of the Zapotec and Maya». World Archaeology 10 (2): 172-191.
- McGEE, R. Jon. 1990. Life, Ritual, and Religion Among the Lacandon Maya. Wadsworth Publishing Company. Belmont.
- POHL, Mary A. and Lawrence H. FELDMAN. 1982. «The Traditional Role of Women and Animals in Lowland Maya Economy». In *Maya Subsistence: Studies in Memory of Dennis E. Puleston*, Ed. K. V. Flannery, pp. 295-312. Academic Press. New York.
- REDFIELD, Robert. 1960. Peasant Society and Culture. University of Chicago Press. Chicago.
- SAVELLE, James M. 1984. «Cultural and Natural Formation Processes of a Historic Inuit Snow Dwelling Site, Somerset Island, Artic Canada». *American Antiquity* 49 (3): 508-524.
- SCHIFFER, Michael B. 1972. «Archaeological Context and Systematic Context». American Antiquity 37: 156-165.
- —. 1976. Behavioral Archaeology. Academic Press. New York.
- —. 1985. «Is There a «Pompeii Premise» in Archaeology?». Journal of Anthropological Research 41: 18-41.
- —. 1987. Formation Processes of the Archaeological Record. University of New Mexico Press. Albuquerque.
- SHARER, Robert J. (Ed.). 1978. The Prehistory of Chalchuapa, El Salvador. University of Pennsylvania Press. Philadelphia.
- SHEETS, Payson. 1992. The Cerén Site: A Prehistoric Village Buried by Volcanic Ash in Central America. Harcourt Brace College Publishers. Fort Worth.
- —. 1994. «Tropical Time Capsule: An ancient village preserved in volcanic ash yields evidence of Mesoamerican peasant life». *Archaeology* 47 (4): 30-33.
- —. 1998. «Place and Time in activity area analysis: A study of elevated contexts used for artifact curation at the Cerén site, El Salvador». Revista Española de Antropologia Americana 28: 63-98.
- SHEETS, Payson D. (Ed.). 1983. Archaeology and Volcanism in Central America: The Zapotitán Valley of El Salvador. University of Texas Press. Austin.
- SHEETS, Payson D. and Fran Mandel SHEETS. 1990. «Excavations of Structure 12, Cerén». In 1990 Investigations at the Cerén Site, El Salvador: A Preliminary Report, Eds. P. D. Sheets and B. R. McKee, pp. 138-147. University of Colorado. Boulder.
- SHEETS, Payson D. and Scott SIMMONS. 1993. «Excavations at Structure 12, Operation 5». In *Cerén Project 1993 Preliminary Report*, Eds. P. D. Sheets and S. Simmons, pp. 31-45. University of Colorado. Boulder.
- SIMMONS, Scott and Susan VILLALOBOS. 1993. «Landscape Archaeology in Operation 8 Between Household 1 and the Structure 10 Patio». In *Cerén Project 1993 Preliminary Report*, Eds. P. D. Sheets and S. Simmons, pp. 31-45. University of Colorado. Boulder.
- STEVENSON, Marc G. 1982. «Toward an Understanding of Site Abandonment Behavior: Evidence from Historic Mining Camps in the Southwest Yukon». *Journal of Anthropological Archaeology* 1 (3):237-265.

Mayab 13 (2000): 11-21

SWEELY, Tracy L. 1999. «Gender, Space, People, and Power at Cerén, El Salvador». In *Manifesting Power: Gender and the Interpretation of Power in Archaeology*, Ed. T. L. Sweely, pp. 155-171. Routledge. New York.

TEDLOCK, Barbara. 1982. Time and the Highland Maya. University of New Mexico Press. Albuquerque.

TOZZER, Alfred M. 1907. A Comparative Study of the Mayas and the Lacandones. The Macmillan Company. New York.

WAUCHOPE, Robert. 1934. *House Mounds of Uaxactun, Guatemala*. Publication 502, Carnegie Institution of Washington. Washington, DC.

