

# **Fleeting Identities**

## **Perishable Material Culture in Archaeological Research**

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## 8. The Material Correlates of Village Ceremony: Two Ritual Structures at the Cerén Site, El Salvador

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*Abstract:* Around A.D. 600, an ancient Mesoamerican agricultural village, known today as Cerén, was suddenly buried in ash from a nearby volcanic vent. The ash precipitated the rapid abandonment of the site and created superb preservation, thereby providing archaeologists with an unusual opportunity to compare virtually total, in-context artifact recovery with what might be preserved under more usual site-formation processes. Archaeological evidence from two atypical structures at Cerén suggests that residents engaged in village ceremonialism, including the production of community festivals and divination. Using this site as a case study, we engage in a heuristic exercise and systematically remove artifacts and features from these two ceremonial buildings to simulate a gradual-abandonment assemblage. This hypothetical assemblage is examined for any patterning that would suggest that these buildings functioned in village ceremonialism. Our model predicts that distinct features and architecture would remain in the archaeological record that could aid in the recognition of village ritual activity areas in sites preserved under more usual conditions.

On an August evening around A.D. 600, a thriving Mesoamerican agricultural community, today known as the Joya de Cerén site, was suddenly buried under 4 to 6 m of ash by a nearby volcano (Figure 8-1). The beginning of the eruption precipitated the catastrophic abandonment of the community and facilitated the preservation of fragile perishable remains not usually recovered from archaeological sites in tropical environments.

The eruption occurred with little warning and did not come from a volcanic edifice, such as a cone, 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

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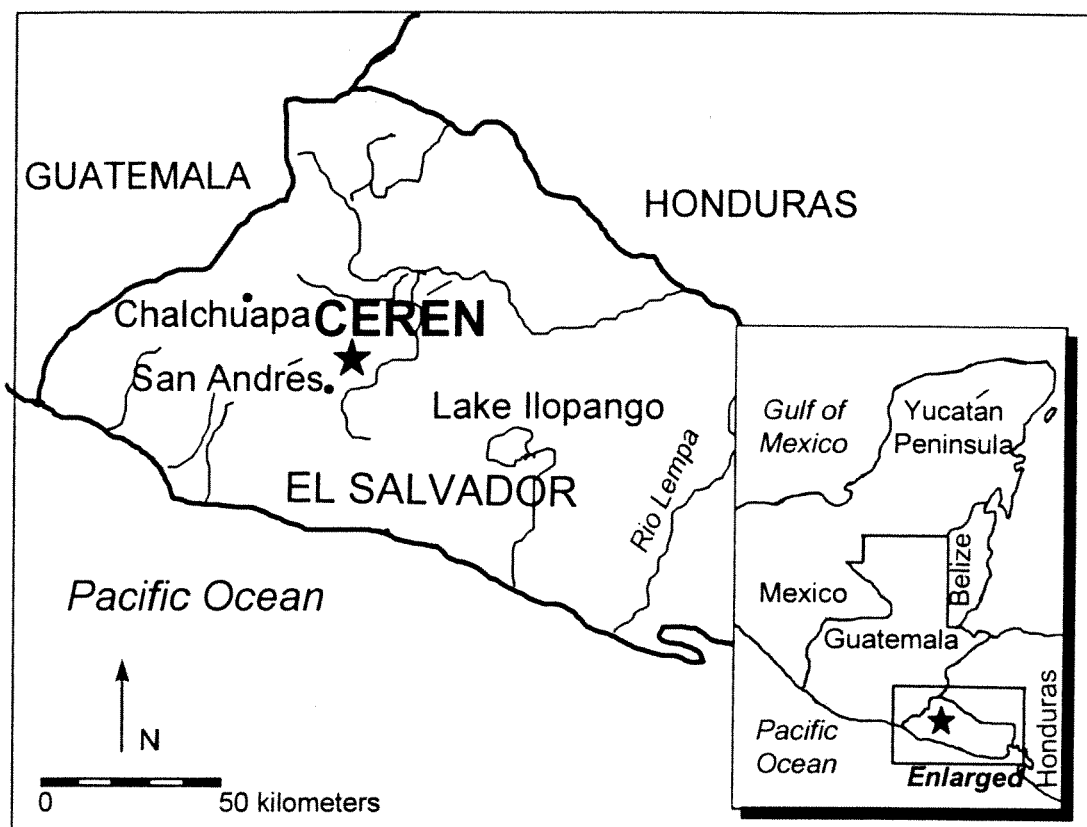


Figure 8-1. Western El Salvador.

with water in the river. Cracks in the original ground surface suggest that a mild earthquake struck the village, quickly followed by an initial and probably very noisy steam emission from the opening vent located only 700 m north of the site. The steam emissions would have given directionality to the danger and must have indicated that Cerénians should “head south.” Thus, the residents abandoned virtually complete household and community artifact assemblages, giving us an unprecedented view of village life in the late sixth century on the Southeast Maya Periphery.

To date, 17 structures have been identified at Cerén. Of these, one complete and three partial household clusters have been excavated (Figure 8-2). Household clusters consist of 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 sweat bath (Structure 9), and the two ceremonial buildings (Structures 10 and 12) that are the focus of this chapter. (Structures 10 and 12 are described in detail below; only a brief mention is provided here.)

Structure 10 has been interpreted as functioning in community festivals. Specifically, this building was used for the storage of ceremonial paraphernalia and the storage, preparation, and dispensing of festival food. Structure

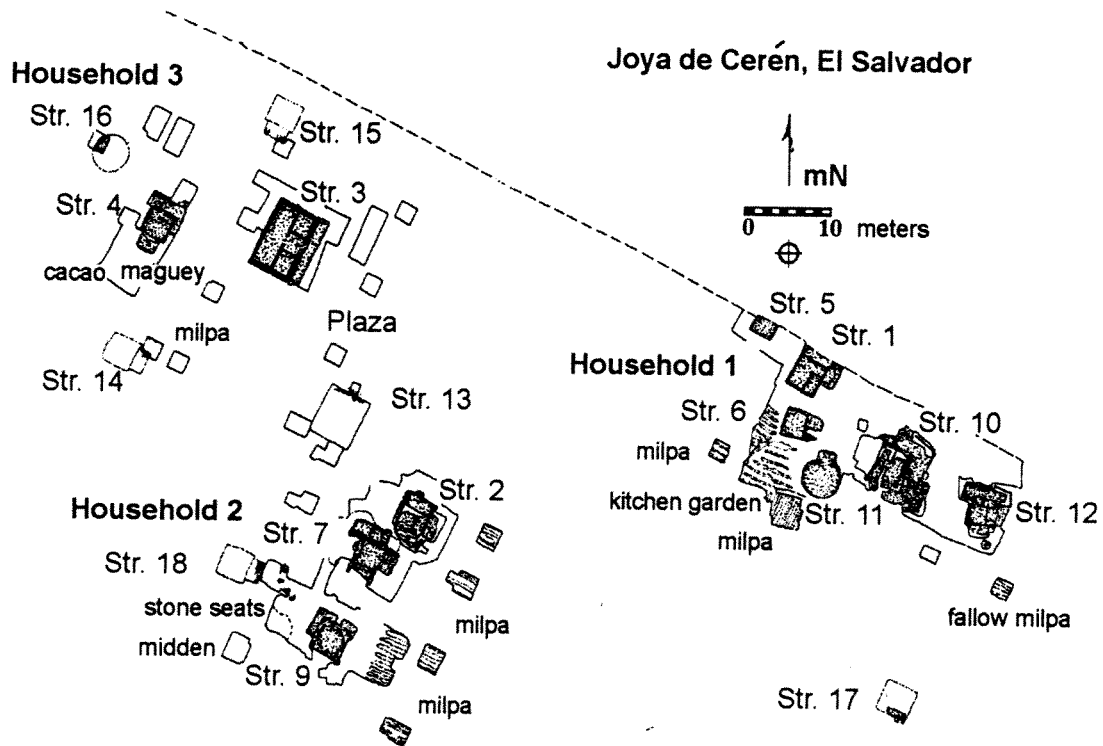


Figure 8-2. The Joya de Cerén site, El Salvador.

12, while seemingly related to Structure 10, served a different function. It was the locus of ritual activity, probably divination, and may have been a specialized “divination house.” The presence of two permanent special-use ceremonial buildings in a rural village community further supports previous interpretations that access to the supernatural realms was not exclusively restricted to the elite on the Southeast Maya Periphery during the Classic period (e.g., Benyo 1986; Gonlin 1993).

To make this chapter maximally useful to archaeologists, we simulate what might have remained of these two buildings and their contents if they had been subjected to more usual preservation conditions, mode of abandonment, and site-formation processes common to southeastern Mesoamerica. We heuristically remove artifacts from 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 with the formal attributes used to identify ritual buildings in the Maya Lowlands and the Southeast Maya Periphery (e.g., 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 had they undergone typical site-formation processes.

## Description of Artifacts and Features

### *Structure 10*

Structure 10, located only 5 m east of Structure 12, is a thatch-roofed wattle-and-daub (*bajareque*) building constructed on a square platform and oriented approximately 23° east of magnetic north. The building has two rooms supported by four large adobe columns: an east (or front) room and a west (or back) room (Figure 8-3). 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 at the west end of the north corridor. Structure 10 was excavated during 1992 and 1993 under the supervision of Andrea Gerstle (1992, 1993).

Architectural components and the artifact assemblage suggest that Structure 10 was a special-use building, which served a nonresidential function (Table 8-1; see 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.

The building was divided into several functionally distinct activity areas. A person entered the building through a west-facing pole door leading into the north corridor. The north corridor was used for food preparation, which took place in a very small circumscribed area (Gerstle 1993). Food-preparation activities included cooking on the two hearths located nearby; shelling corn, as indicated by the three corn huskers and discarded corncobs on the ground just outside the entranceway; and grinding food on the metate mounted on forked poles. A large open bowl, placed on the floor just under the lower end of the metate, presumably was used to catch food pushed off the metate during the grinding process. A high clay-covered pole shelf, jutting out over this corridor, was used for the storage of items related to food preparation and serving, such as open bowls, jars, corn huskers, and a polychrome tripod plate.

The east corridor was used primarily for vessel storage. At least 17 ceramic vessels, some nested three deep, were located here (Beaudry-Corbett 1993). The southern walls, which collapsed inward and have not been excavated, likely cover more vessels. A half-height wall was built into one section of the exterior corridor, and it may have been used as a pass-through for food distribution during feasts (Gerstle 1993). This low wall would have allowed festival participants to approach, but not enter, the building and receive food or drink or both during ceremonies. This interpretation is further supported by excavations of the original ground surface at this location: the ground was highly compacted, flattened, and smoothed, suggesting an area of heavy foot traffic (Simmons and Villalobos 1993). This area was presumably where ceremonies and food consumption occurred. Only five serving vessels were recovered from Structure 10, suggesting that either food serving occurred at a different location or ritual participants brought their own serving vessels with them to the ceremonies.

Ritual and unique items were stored in the east (front) room of the Structure

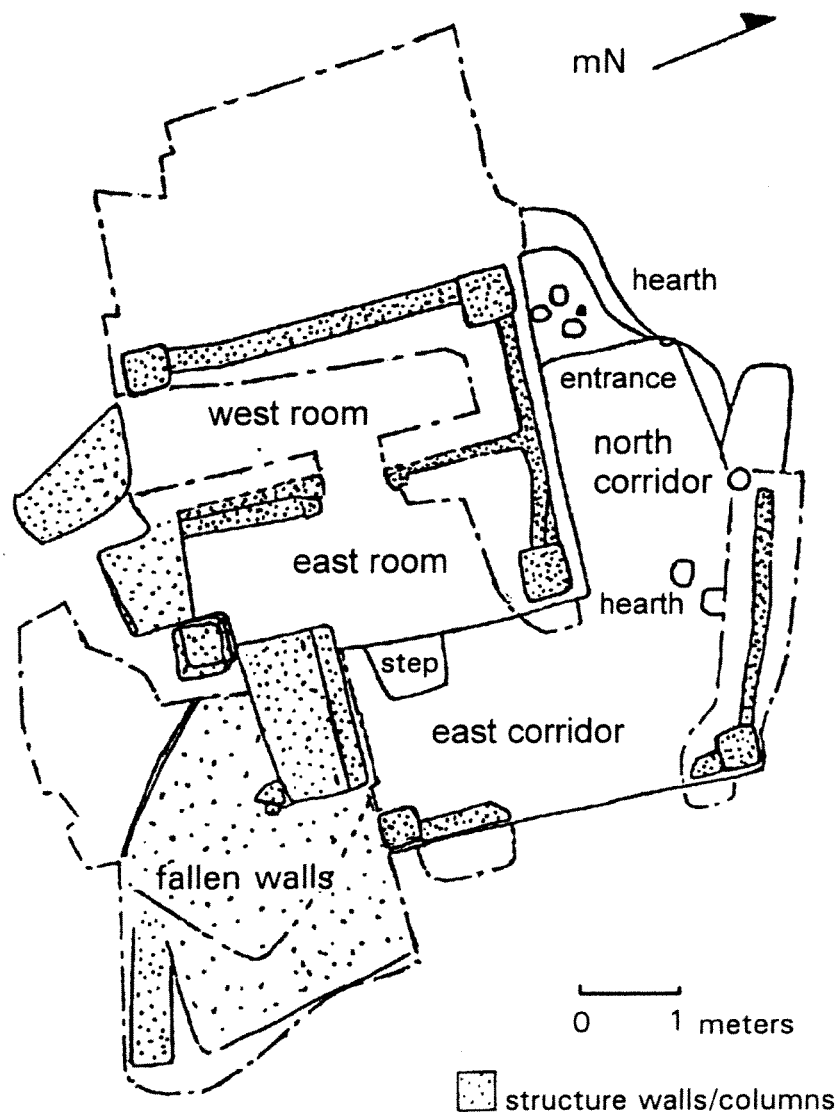


Figure 8-3. Structure 10, Joya de Cerén, El Salvador.

10 superstructure. Ceremonial items included a deer-skull headdress (*Odocoileus virginianus*), in storage on a high pole shelf at the moment of the eruption; other components of a possible dance costume included a matched set of bone-tube beads, a carved teardrop-shaped bone ornament, and a shaped deer scapula. The deer-skull headdress had been painted red and was recovered with bits of twine, presumably for securing it to the wearer's head during ritual performances, still wrapped around the antlers. 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 the red paint, symbolic of human blood, that is applied to bodies and objects during ceremonies (e.g., McGee 1990; Tozzer 1907). The east room, in addition to storing

**Table 8-1. Artifacts and Features Recovered in Structure 10**

<i>Item</i>	<i>Count</i>	<i>Item</i>	<i>Count</i>
<i>Ceramic Vessels</i>		<i>Agricultural Implements</i>	
Bowls	5	Donut stones	4
Jars	20	Wooden digging stick	1
Painted serving vessels	5	<i>Furniture</i>	
Sherds embedded in floor	20+	Exposed pole shelf	1
Recycled ceramics	3	Clay-covered pole shelf	1
Partial vessels	3	Adobe bench	1
<i>Organic Serving Vessels</i>		<i>Food and Food Refuse</i>	
Painted gourds	2	Shucked cobs of corn	20
<i>Ritual Items</i>		<i>Beans</i>	
Deer-skull headdress	1	Achiote	
Deer scapula	1	Squash seeds	
Bone beads	2	Coyol nut	1
Bone ornament	1	Discarded corncobs	1+
		Unworked mammal long bone	1
<i>Lithic Tools and Debris</i>		<i>Architectural Elements</i>	
Obsidian macroblade	1	Wood roofing beams	3
Obsidian prismatic blades	10	Wooden posts	2
Greenstone celt	1	Roofing thatch	
Jasper core/hammerstone	1	Walls	8
Blades embedded in floor	1	High clay floor	
Macroblade embedded in floor	1	Adobe columns	7
Hammerstone	1	Adobe step	1
<i>Weaving/Spinning</i>		<i>Other</i>	
Fired-clay spindle whorl	1	Flat stone fragments	2
<i>Food Preparation</i>		White stone ball	1
Metate	1	Roof weights?	3
Antler corn husker	1	Worked cobbles (roof weights?)	3
Bone corn huskers	2	River cobbles in clay step	10+
Mano fragment	1	Painted cylindrical object	1
River cobbles from hearths	8	Deer scapula (tool?)	1
Carbonized wood in hearths		Woven jar supports	2
Ash lenses	2		

unique and ritual items, was the only painted room in the structure: the eastern face of the dividing wall, the cornices, and the door pilasters were painted red, and 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 utilitar-

ian 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

Like Structure 10, Structure 12 is not oriented along the dominant 30° east of north axis. The building opens to 15° east of north (Sheets and Sheets 1990; Sheets and Simmons 1993). It also shares some other important characteristics with Structure 10. For example, Structure 12 was painted, albeit the reverse color scheme: the walls were covered in white paint with an occasional red detail. Special treatment was given to columns, and two columns had vertical niches associated with them. And the square principal building had a large enclosure or corridor added to it. But in addition to these shared characteristics, Structure 12 has features not seen in other structures at the site. For example, each floor level is an increasingly higher elevation as one progresses further inside the building. Additionally, Structure 12 has two *bajareque* latticework windows with the lattice forming a crosshatched pattern.

The building was constructed on top of a low earthen platform, which forms a ramp to the step at the doorway (Figure 8-4). The front entrance was securely closed by a pole front door that anchored into sockets in both doorjamb. Interestingly, there is a clearance of only 90 cm between the north room floor and the bottom of the lintel, suggesting restricted access into the building. This clearance is notable, because in all other doorways at Cerén, lintels are approximately 150 cm above the floor level. A cluster of artifacts stored on top of the lintel and on the adjoining columns included two ceramic spindle whorls, two of the three 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 (Table 8-2). A collection of minerals, ranging in size from tiny to moderate, fell from storage on top of a small interior partition wall. The larger minerals might have been used in divination as is common among contemporary Maya diviners (e.g., Tedlock 1982). Apparently, the partition wall separated the north room into two functionally distinct areas. The area behind the wall (to the east) was used for the storage of large artifacts, including a metate and at least five large vessels, one of which contained maize kernels. One of the vessels had an organic woven-mat strip wrapped around its neck, a design reminiscent of the repeated cross-hatch pattern of the lattice windows. Meanwhile, the area to the west of the dividing wall was kept clear of floor artifacts. This cleared area is associated with the front door and one of the windows. While we infer that the area in front of the door was kept clear for use as an entranceway, there is also evidence suggesting that these areas may have been used for communication, through the pole door or more probably through the lattice window, between persons 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 either of the two lattice windows.

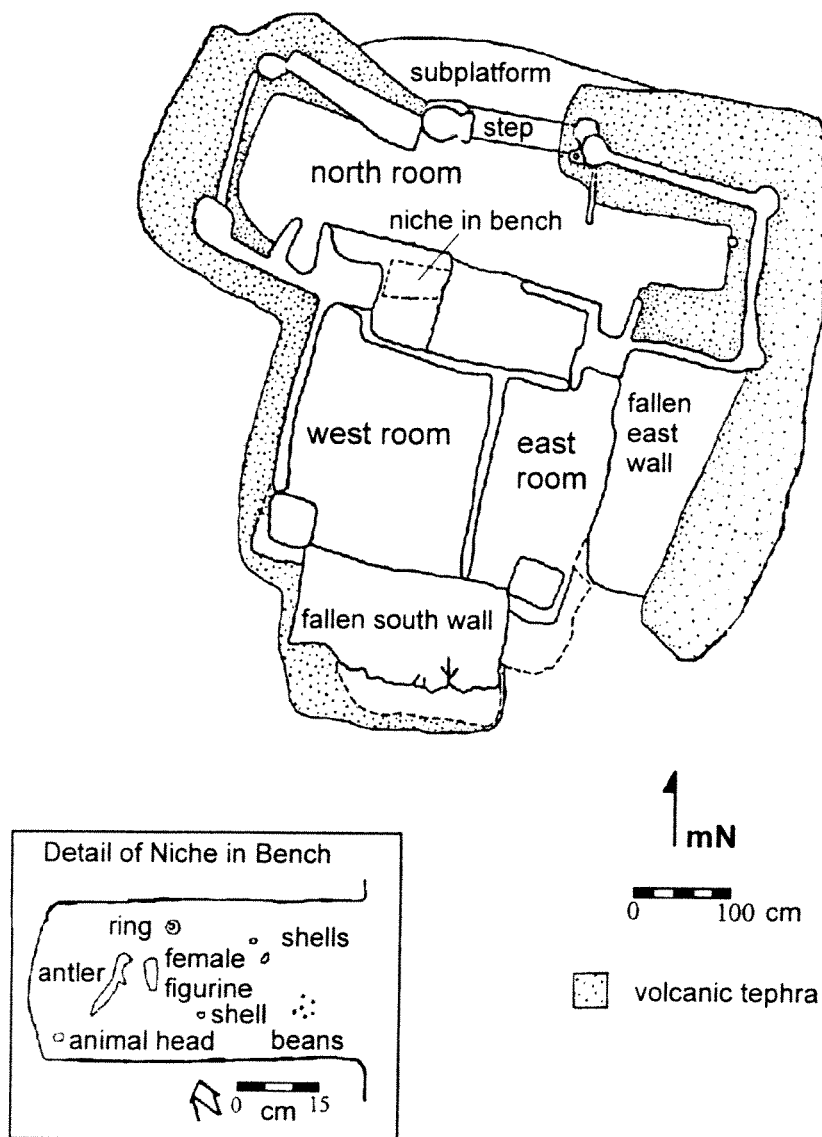


Figure 8-4. Structure 12, Joya de Cerén, El Salvador.

Two superstructure columns are associated with vertical niches: two face the north room, while the other two open to the east and west room, respectively. Based upon the amount of organic materials and the smoothing noted on their surfaces, these niches were used frequently. One niche contained a painted gourd, while another niche was covered by wood ash with a small mano placed on top of the ash layer.

Immediately south of the north room, at the extreme northern end of the main part of the building, is a small earthen bench with a niche built into it. Five pots were clustered on top of the bench, and smaller objects were stored inside the niche. Items in the niche included a left antler from an adult white-tailed deer, half of a broken ceramic double ring, a ceramic animal-head figurine that originally had been attached to a vessel, a female figurine decorated

Table 8-2. Artifacts and Features Recovered in Structure 12

Item	Count	Item	Count
<i>Ceramic Vessels</i>		<i>Marine Shell</i>	
Bowls	3	Spondylus shell fragments	5
Jars	8	Oliva shell beads	4
Miniature paint pot	1		
Ceramic sherds in floor		<i>Drilled Antler</i>	
Partial vessels	4	Left antler	1
		<i>Food and Food Refuse</i>	
<i>Fired Clay</i>		Corn	
Ceramic female figurine	1		
Ceramic animal figurine	1	<i>Architectural Components</i>	
Ceramic ring	1	Wood roofing beams	3
		Roofing thatch	
<i>Organic Serving Vessels</i>		Bajareque walls	12
Painted gourd vessels	2	High clay floor	
		Adobe columns	10
<i>Lithic Tools and Debris</i>		Adobe bench	1
Obsidian macroblade	1	Adobe covered stone slab step	1
Obsidian prismatic blades	3	Pole door	1
Greenstone disk	1	Latticework windows	2
		<i>Other</i>	
<i>Weaving/Spinning</i>		Woven mat around jar	1
Ceramic spindle whorls	2	Minerals	20+
		Ash lens in niche	1
<i>Food Preparation</i>		Beans on floor and in niche	50+
Metate	1		
Manos	3		

with red paint, a small pile of beans, and three cut, pink, interior-border fragments from spondylus shell. The antler was not naturally shed (skull bone was attached to the base). 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 tool kit of the ritual practitioner.

The floor level to the east of the bench is higher than the floor level of 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*, a fermented maize beer. One of the pots had a human effigy face on its neck; 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 other 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 (e.g., Tedlock 1982).

The elevation of the west room's floor is higher than the east room's. The floor of the west room was kept 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 infer that most of the artifacts recovered at Cerén were probably used by both men and women. However, some artifacts may have been more gender specific in their usage, and all the gender-specific artifacts at Structure 12 are female associated. These artifacts include spindle whorls, manos, the metate, and perhaps the human female figurine, suggesting that the ritual practitioner may have been a woman (Sweely 1999).

### The Preservation of Perishable Materials at Cerén

At Cerén, perishable materials underwent direct and indirect preservation. Directly preserved items included those things that were preserved in relatively untransformed condition, as well as those items that underwent carbonization. For example, organic items stored in ceramic vessels and other containers were relatively unmarred by the fires ignited by the eruption. However, less-protected materials, such as large wood roofing beams, branches from trees in household gardens, and roofing thatch, burned and were carbonized when lava bombs, hotter than 575°C, ignited fires in thatch roofs and in trees.

In addition to facilitating the direct preservation of perishable material, the moist 100°C ash that fell during the initial stages of the eruption indirectly preserved many cultigens. As the fine ash fell, it packed tightly around plants in fields. Subsequently, the plants deteriorated with time leaving cavities in the ash where the plants once stood. During excavations, when we encounter hollows, we first examine them with a fiberoptic proctoscope to determine the best method of preservation; and, if appropriate, we fill the cavity with dental plaster, thus preserving the perished material as a cast. Additionally, some perishable materials were indirectly preserved as partial impressions in materials that we have been unable to cast. For example, painted gourds were first identified at Cerén as fugitive impressions of fibrous ribbed material, formed from the missing original organic substrate, pressed into fragile paint layers (Beaubien 1993).

The excellent preservation of organic remains at Cerén has enabled us to identify numerous species exploited by the ancient villagers. Species identified thus far include maize, beans, squash, guayaba, nance, manioc, cacao, chili, cotton, gourds, avocado, achiote, guava, maguey, coyol nut, as well as a number of medicinal and/or ceremonial plants (Lentz et al. 1996). Of these, corn, beans, squash seeds, achiote seeds, and a coyol nut were recovered from Structures 10 and 12.

## Site-Formation Processes

Previous research has shown that most material patterning in the archaeological record results from refuse behavior, mode of site abandonment, and postabandonment processes (e.g., 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 disposal of items in locations not related to the object's area of use (e.g., Schiffer 1972, 1976, 1987).

In addition, the nature of site abandonment greatly affects the material patterning visible in the archaeological record (Schiffer 1972, 1976). De facto refuse refers to those items of value left behind because of constraints placed on the occupant's ability to transport them (Schiffer 1987). Research has shown that assemblages from rapidly abandoned sites more closely reflect original activity areas than do gradually abandoned sites as the de facto refuse closely approximates the complete system's assemblage (Stevenson 1982). Interpretations are trickier when sites are gradually abandoned because individuals may engage in refuse behaviors directly related to the impending abandonment (Schiffer 1985; Stevenson 1982). For example, items might be discarded in otherwise atypical areas, such as inside enclosed living spaces and within domestic structures, as the usual refuse-disposal pattern is modified in anticipation of imminent abandonment.

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) by both animals and humans and various postdepositional 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 practices is the repeated deep plowings of sugarcane fields of the flat valley bottom.

In addition to the effects of human agency on the archaeological record, differential preservation of artifacts and the burial context itself remove materials from the archaeological record. The majority of organic artifacts rapidly decompose in moist tropical environments, with a few exceptions (including carbonized organic items, siliceous plant parts, and organic items in contact with heavy-metal compounds, such as cinnabar pigment). Other organic artifacts with high mineral content, such as shell, antler, and bone, might survive yet would be vulnerable to rodents and moist acidic soils. This contrasts with the inorganic artifacts, such as chipped stone, groundstone, ceramics, mineral pigments, and paints, that do survive well in the archaeological record.

Earthen architecture in a moist tropical 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 abandoned thatch-roofed building would begin to "melt" down into a housemound as quickly as a decade after abandonment. It is probable that the

useful architectural elements, such as roof beams, would have been removed and used elsewhere, thus accelerating architectural deterioration.

### Creating a Heuristic Model

In this section, we engage in a heuristic exercise and remove artifacts from the actual Cerén artifact assemblage. The hypothetically denuded ceremonial buildings can inform us of the types of artifacts, features, and architecture that archaeologists might encounter in other ritual contexts that have undergone more usual site-formation processes.

#### *Assumptions*

Our hypothetical model is based on a number of assumptions. To begin, we assume that site abandonment was gradual and permanent. We have not attempted to introduce refuse patterning specific to abandonment behavior because of the unpredictability of such activity. We have assumed the usual scenario for sites in nonaggradational environments; that is, all cultural materials, including perishable remains, left behind would have remained on the ground surface exposed to the elements and to human and animal scavengers for at least a few centuries. Bioturbation, soil chemistry of the burial environment, length of time an artifact is exposed on the surface, and other natural factors would remove certain artifacts initially left behind, and human scavengers would remove usable materials.

We also have assumed that land use at Cerén, from the Colonial period forward, would have followed the same trajectory seen throughout 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 sugarcane plantations, which engage in deep plowing of the land, and milpa agriculture done without plowing. Sugarcane production results in a plow zone 50 cm deep with little aggradation or degradation except in special cases. In our case scenario, we have assumed that the flat valley floor where the Cerén site is located would have been intensively plowed, thereby disturbing a zone at least 50 cm deep.

#### *Removal of Artifacts*

Based on findings in nearby gradually abandoned sites (e.g., Black 1983; Fowler and Earnest 1985; Sharer 1978; Sheets 1983), we assume that during site abandonment all inorganic, whole, portable artifacts, including ceramic vessels, fired-clay artifacts, groundstone, polished stone, and obsidian tools in good condition, would have been removed from Cerén. All whole, portable, organic artifacts, including modified bone, antler, marine shell, and painted gourds, also would have been removed. Furthermore, food stored in Structure 10 and Structure 12 would have been transported from the site.

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 for secondary uses, and all artifacts in caches and burials. Architecture and associated features, such as adobe steps, wattle-and-daub walls, wooden shelves, and thatched roofs with supporting beams, are assumed to have been left intact (not burned in a termination ritual) at time of abandonment. Finally, all items in primary- and secondary-discard contexts at the time of abandonment are presumed to have been left undisturbed.

### *What Would Archaeologists Find?*

The majority of artifacts would have been removed from Structures 10 and 12 had they undergone gradual abandonment and typical site-formation processes (Table 8-3). According to our model, the most numerous artifact type that would remain in the archaeological record would be ceramic sherds. In addition to sherds, our hypothetical artifact assemblage would have included numerous stones and cobbles, an exhausted jasper core, as well as an obsidian macroblade, carbonized wood in hearths, red and white paint flecks, and numerous obsidian blade fragments and sherds embedded in the clay floor.

The most obvious physical remains would have been the structures themselves: the two building platforms, superstructures, and associated items, such as roofing thatch, wooden roof-support beams and posts, several pole shelves, adobe benches, niches, steps, and stone hearths. Scavengers visiting the site shortly after abandonment could have found usable building materials, such as wooden beams and posts, that ethnoarchaeological research suggests would be hauled away when no longer needed as support for occupied structures.

While our model suggests that most of the artifacts and usable building parts would have been removed from Structures 10 and 12, certain features and architectural elements might remain in the archaeological record that could shed light on what took place in and around these buildings. If enough aggradation occurred reasonably soon after abandonment (perhaps within a few decades) to bury intact floors, wall bases and column bases, then the overall building plans, with associated floor features from Structures 10 and 12, would remain in the archaeological record. Because structure remains frequently are used to infer building function, below we examine the criteria used to identify ritual buildings, and we compare them to our hypothetical Cerén remains.

### **Standard Recognition Criteria Versus the Hypothetical Assemblage**

In the Maya region, archaeologists have developed models, based on the formal attributes of temples, to help recognize the material signature of ritual buildings in the archaeological record. These attributes include building location, building plan, subplatform height, increasing floor elevation,

**Table 8-3.** *Hypothetical Assemblage of Artifacts and Features in Structures 10 and 12*

<i>Structure 10</i>		<i>Structure 12</i>	
<i>Item</i>	<i>Count</i>	<i>Item</i>	<i>Count</i>
<i>Ceramic Vessels</i>		<i>Ceramic Vessels</i>	
Sherds	28+	Sherds embedded in floor	
<i>Lithic Tools and Debris</i>		<i>Architectural Components</i>	
Obsidian macroblade	1	Stone slab from step	1
Obsidian prismatic blade	1	Column bases	10
Jasper core	1	Superstructure wall bases	
Miscellaneous stone cobbles	±17	Superstructure clay floor	
<i>Food Preparation</i>		<i>Other</i>	
River-cobble hearthstones	8	Wood ash	
Ash lenses in hearths		Red and white paint flecks	
Carbonized wood in hearths			
<i>Architectural Elements</i>			
Column bases	8		
Superstructure wall bases			
Superstructure clay floor			
Corridor wall base			
Corridor clay floor			
Postholes	2		
<i>Other</i>			
Red paint flecks			

construction technique, altars, and the presence of subfloor caches and burials (e.g., Becker 1971; Marcus 1978). We compare the features and architectural elements that our model predicts would remain in the archaeological record at Structures 10 and 12 at Cerén to the standard criteria used by archaeologists to identify ritual structures in the Maya Lowlands and the Southeast Maya Periphery. Where appropriate, we offer recommendations when the Cerén assemblage suggests that other correlates might be useful in the interpretation of village ceremonial buildings. Because the conservation ethic at Cerén does not allow us to dig into structure floors, we do not have data from subfloor caches and burials, but all other formal attributes of ritual buildings are compared to the Cerén assemblage.

#### *Location*

Directionality was an important factor in influencing decisions concerning the placement of prehistoric ceremonial buildings. For example,

Becker (1971) argued that 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 (e.g., Gerstle 1988; Gonlin 1993; Hendon 1991; Joyce 1991). The evidence from Cerén also supports this criterion. Both Structures 10 and 12 are located immediately east of the closest household compound, Household 1. In fact, these structures are not only east of Household 1 but are located on the easternmost part of the site.

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

### *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 Ulúa Valley of Honduras, that had an antechamber with restricted access to an interior room. In addition this building was located on the east side of a plaza and had the highest subplatform (another formal criterion of ritual buildings, discussed 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).

At Cerén, Structure 12 also follows the same basic 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. 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 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 the temples of residential groups 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 (e.g., Gerstle 1988; Hendon 1991; Joyce 1991) and nonelite sites (e.g., Benyo 1986; Gonlin 1993).

At Cerén, neither ceremonial building fits this criterion. 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 excavated at the site to date.

#### *Increasing Floor Elevation*

Marcus (1978) argued that Maya and Oaxaca temples frequently had increasing floor elevations as one proceeded from the antechamber deeper inside the structure. At Cerén, Structure 12 does have this characteristic: the innermost western room is 1.1 m 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, whether a 30 cm variation in floor height would be evident to archaeologists if Structure 10 had undergone typical abandonment and preservation conditions is questionable. Meanwhile, the overall platform height is unremarkable: it is the same as height platforms in domestic domiciles.

#### *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 Uaxactún in Guatemala, 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. While we note that many architectural details, such as the latticework windows in Structure 12 or the low "serving" wall in Structure 10, would not be preserved under 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 have other structures. 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. Taken together, these features might have suggested a greater labor investment than in domestic structures and thus special use.

#### *Altars*

Finally, the presence of altars has been used for inferences con-

cerning ritual buildings (e.g., Becker 1971; Marcus 1978). To date, no altars have been excavated at Cerén.

### *Summary of the Material Signature of Ceremonialism at Cerén*

In our exercise, we applied six formal attributes used by archaeologists (e.g., Becker 1971; Marcus 1978) to recognize ritual structures in the Maya Lowlands and the Southeast Maya Periphery to our gradually abandoned model of Structures 10 and 12. Four of the six criteria (building location, building plan, increasing floor elevation, and construction technique) were evident at Structure 12, and our hypothetical model suggests that these elements would have remained in the archaeological record under favorable preservation and gradual abandonment conditions. Therefore, we feel that Structure 12 would have been interpreted as a ritual structure, probably labeled a temple, although the specific function of the building likely would not have been evident.

The correct interpretation of Structure 10 might be more problematic; only two of the six formal attributes of ritual buildings (building location and construction technique) firmly fit this structure. While Structure 10 has an enclosed corridor along the east and north sides, it does not closely match antechambers typical of temples (e.g., Marcus 1978). In addition, the slight increase in the west floor level might not be noticeable under usual preservation conditions. The observation that fewer criteria fit Structure 10 than 12 suggests that ritual buildings associated with village festivals might be difficult to identify in the archaeological record, if one is relying solely on these commonly accepted criteria.

However, there are some features at Structure 10 that could help with the interpretation of similar ritual buildings elsewhere. For example, while the enclosed corridor does not resemble a temple antechamber, it is unusual and, when compared to other "domestic" buildings at the site, might have suggested a special-use building. Although lateral building growth generally is attributed to an increase in family size (e.g., Leventhal 1983), the presence of two hearths in a narrow, adjoined, enclosed "kitchen" is noteworthy because domestic kitchens found at Cerén thus far are round, freestanding pole structures with a single hearth. 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 without sleeping benches; (3) controlled access into the building corridor; (4) special, 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 or feasting structures with associated storage space.

## **Conclusions**

What would be the consequences of misidentifying these two re-

religious buildings as domestic structures? One consequence would be an erroneous inflation of the population estimate of the village. A second and more significant consequence would be 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, as well as and ceremonial activities at Structure 12, were institutionalized. If this interpretation is correct, it raises interesting questions in light of Robert Redfield's notion of the "Little Tradition" (Redfield 1960; local interpretations of state ideology and the "folk" religious practices by agriculturalists living in areas more peripheral to centralized urban settlements) and how the tenets of official state religion 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 (e.g., Benyo 1986; Gonlin 1993; Hirth 1988) suggests that Cerén may be part of a trend noted in central Honduras (A.D. 500–900) where an increasing number 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. Interestingly, the evidence that Structure 12 is a permanent building suggests that during the Middle Classic period divination was firmly integrated into rural-community ritual activities and was more public than it often is today. Perhaps the competition and pressure from contemporary Judeo-Christian religious sects, as well as various other historical forces, has 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 may have been 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 (e.g., Joyce 1993; Pohl and Feldman 1982). Analogy with contemporary Maya would suggest that women had central roles in the creation and replication of the village Little Tradition, as well as in the active contestation of state ideologies (e.g., Gossen and Leventhal 1993). If the interpretation of a female diviner practicing in Structure 12 is correct, then women's ritual roles in the ancient village extended beyond the domestic realm.

These kinds of questions, of course, can be addressed only with a larger data base. In this chapter we have engaged in a heuristic exercise with the goal of using the Cerén data to augment commonly used formal attributes of ritual buildings to aid in the interpretation of other nonelite ceremonial structures in the Maya Lowlands and along the Southeast Maya Periphery at sites that have undergone the abandonment and preservation conditions more typical of archaeological sites.

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