

What does their Storage say about Them?
An interpretation of domestic storage practices at the
Classic Period Maya village of Cerén

by

Alexandria Marie Halmbacher

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written by Alexandria Marie Halmbacher

has been approved by the Department of Anthropology

Payson Sheets

Arthur Joyce

Gerardo Gutierrez

Date_____

*The final copy of this thesis has been examined by the signatories, and we
Find that both the content and the form meet acceptable presentation standards
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Abstract

Halmbacher, Alexandria Marie (M.A., Anthropology; Department of Anthropology)

What does their Storage say about Them? An interpretation of domestic storage practices at the Classic Period Maya village of Cerén

Thesis directed by Professor Payson Sheets

Around A.D. 650 the Loma Caldera eruption entombed the Classic Period Maya village of Cerén in 4-6 meters of volcanic ash. This resulted in the exceptional preservation of structures, artifacts and botanical remains, providing archaeologists with a unique opportunity to study the household complexes and their related activities. However, much of the previous research concerning the households at Cerén has primarily focused on its economic activities. As a result, archaeologists have yet to address the socio-cultural aspects such as status, wealth, authority and moral order of the household and its members. Part of the reason for this emphasis on the economic is a narrow conceptualization of the domestic space and materiality. Therefore, this study proposes the use of domestic storage practices to better understand the socio-cultural aspects such as status, wealth, authority and moral order of household complexes at Cerén. Storage provides an ideal medium to evaluate these dimensions because it represents a confluence of the spatial, symbolic, social and material worlds. Interpretations of the domestic storage practices of households at Cerén suggest its inhabitants lived within a complex and dynamic social heterarchy.

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Chapter 1 : Introduction

Around A.D. 650 the Classic Period Maya village of Cerén, located in the Zapotitán Valley of El Salvador, was entombed by the Loma Caldera volcanic eruption (Sheets and McKee 2003:66). This explosive event buried the village in 4-6 meters of volcanic ash, which resulted in the exceptional preservation of architecture, artifacts, and plant remains (Brown and Sheets 2001:114). Additionally, because the inhabitants were forced to abruptly abandon their village, they were unable to take many possessions. As a result, artifact inventories within structures at Cerén are virtually complete, with many of the archaeological remains found in storage or activity contexts (Sheets 2002).

Since its discovery in 1976, archaeologists have conducted several excavations (1978, 1980, 1983, 1990, 1991, 1993, 1996, 2007, 2011, and 2013), at the archaeological site of Cerén. They have completely or partially excavated 12 structures and their surrounding areas. Additionally, several other structures have been detected as geophysical anomalies but have yet to be confirmed by excavations. Based on the architecture and artifact inventories of excavated structures, archaeologists have identified four household complexes at Cerén (Sheets and McKee 1989; 1990). It appears each household complex probably had a structure for sleeping (domicile), a kitchen, and a storehouse (*bodega*) (Sheets and McKee 1989; 1990). Household 1 is the most completely excavated of the four households. It consists of a domicile, a *bodega*, a kitchen and a workshop. Household 2 is known by a domicile and *bodega*, while Household 3 is only known by a partially-excavated kitchen and Household 4; by a *bodega*. The remaining excavated structures at Cerén have been identified as having served special purposes within the community. Their functions include a sweatbath, a ceremonial/storage structure, a place for divination and a civic building (Sheets 2002).

Furthermore, as a result of the exceptional preservation encountered at Cerén, archaeologists have been able to reconstruct the activities of the households and special purpose structures (Sheets 2000; 2002). Based on the artifacts and botanic remains found within the domestic structures it appears that the households were participating in part-time craft specialization and varying degrees of agrarian production (Sheets 2000). Additionally, it is suggested that two of the households were providing service in the form of grinding, processing, transportation and storage of foodstuffs, as well as maintenance of architecture, to three of the specialized structures within the community (Sheets 2000; 2002).

While we have certainly learned a great deal about household complexes at Cerén from previous research, most interpretations have primarily been concerned with reconstructing the economic activities of the domestic unit (Sheets 2002; 2000). As a result, they have yet to address the socio-cultural dimensions such as wealth, status, authority and moral order of the households and their inhabitants. This emphasis on the economic can be attributed to a narrow conceptualization of the domestic space and materiality. Current interpretations of the household complexes at Cerén do not account for the relationship between the human subjects and the material things (Beaudry-Corbett 2002; Sheets 2002). Thus, in order to better understand the socio-cultural aspects of the Cerén households and their inhabitants, this project proposes an analysis of domestic storage practices. Storage provides an ideal medium to evaluate the socio-cultural dimensions of the household because it represents a confluence of the spatial, symbolic, social and material worlds.

Specifically, this project utilizes Julia Hendon's (2000) extended definition of storage. By understanding storage as a situated practice, Hendon (2000) proposes moving beyond traditional conceptualizations to include ideas of memory and knowledge. As a result, storage practices

become a means of interpreting the socio-cultural dimensions such as wealth, status, authority and moral order of the households at the Classic Period Maya village of Cerén.

Interpretations of the domestic storage practices of the households at Cerén suggest its inhabitants lived within a complex and dynamic social heterarchy. It appears household members were utilizing storage practices to convey ideas about their own status, wealth, authority and moral position within the community. Additionally, it appears these ideas were further emphasized through the orientation, layout, embellishment and construction of household structures.

Organization of the Thesis

Chapter 2 situates the site of Cerén within the broader context of the Zapotitán Valley in order to demonstrate its connection to the larger social, political, economic and ideological institutions within the region. Thus, it provides a discussion of the cultural and physical environment of the region with specific emphasis on the 1978 Protoclassic Survey of the Zapotitán Valley and the resulting archaeological site data (Sheets 1983). Additionally, it addresses the political and economic relation between the Classic period Maya village of Cerén and the primary regional center of San Andrés and surrounding secondary regional centers. It also provides a brief introduction of the Cerén site including its burial by the Loma Caldera eruption, discovery and subsequent excavations.

Chapter 3 provides the theoretical context necessary to understand how Cerenians were able to communicate ideas about their wealth, status, authority and moral order through domestic storage practices. This chapter specifically discusses Julia Hendon's (2000) concept of storage as a situated practice through which groups are able to construct ideas about their socio-cultural identities. Additionally, it addresses the materiality of storage practices.

Chapter 4 provides the necessary information to evaluate domestic storage practices as indications of the socio-cultural dimensions such as status, wealth, authority and moral order of the Cerén households. This chapter discusses the households and their related structures, artifacts, artifact locations and activity areas. Additionally, it addresses household member's participation in part-time craft specialization and agrarian production.

Chapter 5 provides a discussion of the specialized structures including their architecture, artifacts, artifact locations and relationships with the Cerén households and their inhabitants. The types of service activities performed by the members of each household required the use and storage of particular material items. Thus, the information provided in this chapter will be used to better understand how the relationships between the specialized structures and the households were impacting domestic storage practices. Additionally, the specialized structures' storage practices will provide a comparative model to access additional information about the storage practices at household complexes at Cerén.

Chapter 6 discusses the analyses and interpretations of the domestic storage practices taking place within the household complexes at Cerén. Specifically, this chapter examines the relation between the items being stored and the human subjects engaging in the act of storing. Additionally, it discusses how the construction, placement, layout and embellishment of household structures, as well as the placement of material items within the domestic space communicate household member's ideas about their status, wealth, authority and moral position within the community.

Chapter 7 discusses storage practices as a successful means to evaluate the socio-cultural dimensions of households. Additionally, this chapter provides future research directions to improve upon our understanding of the diverse and dynamic lifeways of the inhabitants of the

Classic Period site of Cerén. Specifically it explores the use of organic residue and starch grain analysis of ceramic vessels from both the domestic and special purpose structures to determine what types of food were being stored and traded by its inhabitants.

Chapter 2 : The Background Context

Introduction

The households at Cerén should not be conceived of as passive, static containers housing people and their actions. Nor should they be seen as socially or spatially segregated units (Robin 2002). The households and their related activities created a dynamic space that was intrinsically linked to the larger political, social, economic and ideological institutions both within the community and the region. Thus, if we are to understand the socio-cultural dimensions of the Cerén households and the people who inhabited them, it is necessary to situate the site within the region. Therefore, the following text provides an introduction to the Zapotitán Valley, including the types of interactions and relations that were taking place between the elite within the region and the inhabitants of Cerén.

The Zapotitán Valley

The Zapotitán Valley, (Figure 2.1) located at 14° north latitude (McKee 2007:23), is a tectonic depression situated within the western portion of El Salvador that formed during the late Pliocene and Early Pleistocene (Carr and Stoiber 1977). The Valley encompasses a 550km² area (Sheets 1983:2) that is part of the Central American convergent plate margin, a region frequently affected by earthquakes and volcanic eruptions (Hart and Steen-McIntyre 1983:14).

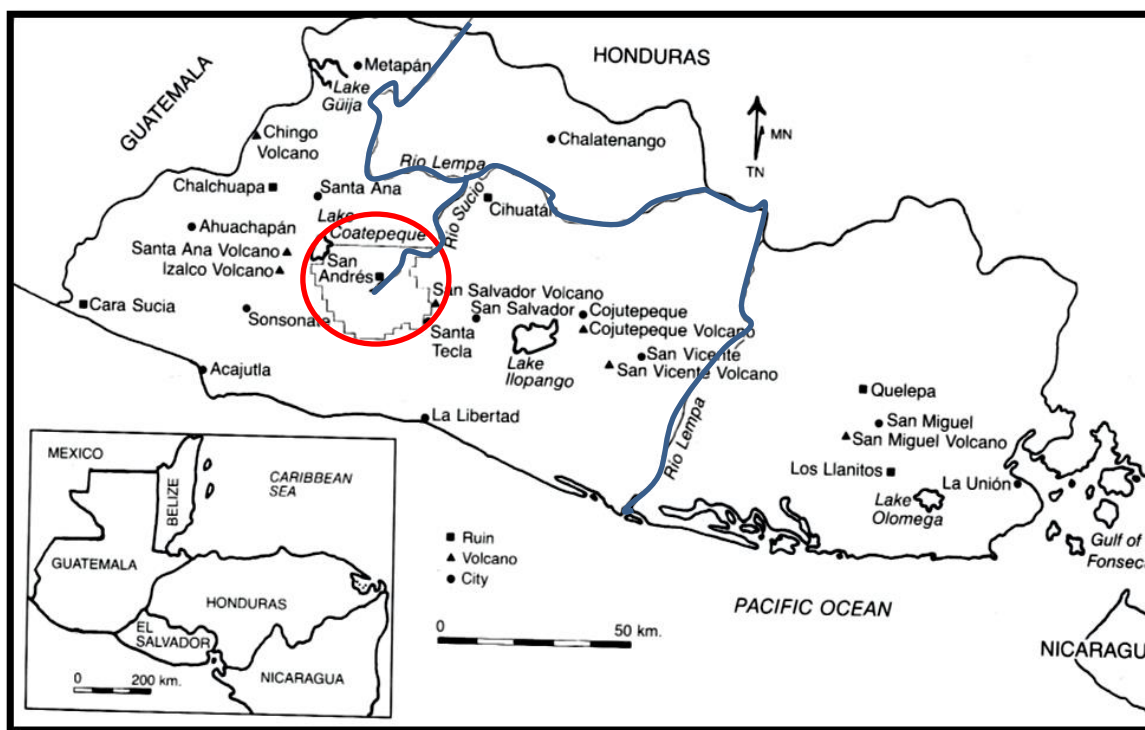


Figure 2.1: Map of El Salvador, Central America depicting the Prehistoric and Contemporary features with Zapotitán Valley. The Zapotitán Valley, Río Lempa and Río Sucío are emphasized (taken from Sheets 1983:2, used with permission of Payson Sheets).

It is a topographically diverse region populated with a number of volcanic cones and mountains, low rolling hills, deep gullies known as *barrancas*, and flat valley plains (Figure 2.1) (Sheets 1983; McKee 2007). The western boundary of the Zapotitán Valley is formed by the Santa Ana volcanic complex, the highest point in El Salvador at an elevation of 2,400 meters (Sheets 1983:3). The southern boundary consists of the Balsam Range Mountains and block-faulted Pliocene volcanics (Sheets 1983). The eastern boundary is made up of the San Salvador volcanic complex (Black 1983:63) which forms a natural barrier between the Zapotitán Valley and the Ilopango volcanic depression to the east (Sheets 1983:3). The Central portion of the Valley is a wide, flat alluvial lake bottom that once contained Lake Zapotitán (Black 1983:62). This lake would have provided the ancient inhabitants of the Zapotitán Valley with edible

wetland flora, fish, shellfish and waterfowl (Daugherty 1969:38). Today, the Valley is drained by the Río Sucío, which empties into the Río Lempa (Figure 2.1) (Sheets 1983:8).

The Zapotitán Valley floor sits at an elevation of 450 meters (Sheets 2006:3). It has an average temperature of 24°C (75°C) (Sheets 1983:6) and can be characterized as having a tropical monsoonal climate (Sheets 1992; Sheets 2002). The Valley receives around 1,700 +/- 300 mm of precipitation per year, with 96% of rain falling during the wet season which typically lasts from May through October (Sheets 2006:3). Although there is little undisturbed vegetation in the Valley today, a reconstruction of the ancient natural environment by Daugherty (1969: 41-47) depicts the region as once being covered by a dense deciduous forest, with evergreen woodland in well-watered areas, pine-oak trees on high slopes, and patches of cloud forest on the northern tops of the highest volcanos.

Cultural Environment

El Salvador is an area that lies on the border of two culturally defined geographic regions; Mesoamerica and the Intermediate region. As a result of its position, El Salvador has been a point of contention amongst scholars. Some have argued for its affiliation with Mesoamerica (Sheets 2009), while others have argued for its association with the Intermediate region (Baudez 1970; Kirchhoff 1943).

For most scholars Mesoamerica typically encompasses the present day countries of Mexico, Belize, Guatemala, and parts of western El Salvador and western Honduras (R. Joyce 2010). It is characterized as having state-level complex societies, intensified agriculture, deity worship and highly organized craft specialization (R. Joyce 2010; Lange and Stone 1984; Sheets 1992). The Intermediate area generally refers to the countries of Nicaragua, Costa Rica, Panama and into northern South America and is characterized as having simple ranked societies with

non-intensified agricultural systems and an emphasis on ancestor worship (Sheets 1992; Quilter and Hoopes 2003; Sheets and McKee 1994).

Within El Salvador, the traditional boundary used to mark these cultural regions is the Río Lempa, which runs through the center of El Salvador (Figure 2.1) (Longyear 1966; Lothrop 1939; Willey 1969). Areas to the north and west of the river are considered to be Mesoamerican, while the southern and eastern regions are typically affiliated with the Intermediate area (Longyear 1966; Willey 1969). Although, this should not be thought of as a static boundary, cultures from both Mesoamerica and the Intermediate region traded and moved back and forth across this boundary (Sheets 1983). Material culture, ceramics and architecture suggest that throughout prehistory much of western and central El Salvador had more in common with Mesoamerica; however at times the influence from the Intermediate region was greater (McKee 2007; Sharer 1974; Sheets 2009).

The Late Preclassic and Early Classic Periods (500 B.C. - A.D. 600)

The Late Preclassic and Early Classic periods within El Salvador were marked by a time of cultural florescence (Dull, Southon and Sheets 2001). The area extending from highland Guatemala into El Salvador was inhabited by the Miraflores culture (Sheets 2009). They were characterized by monumental construction, hieroglyphics, and calendrics including the long count, as well as a dynamic expansionistic economy (Sheets 2009) and high population densities (McKee 2007). Throughout the majority of sites in El Salvador there was considerable homogeneity in lithic technology, ceramics, and architecture (McKee and Sheets 2003; Sharer 1974). During this time, "dense populations across this entire region formed a ceramically, culturally, ethnically, and perhaps linguistically unified southeast highland culture area," (Demarest 1988:340). However, this cultural florescence was abruptly terminated by the eruption

of the Ilopango volcano sometime between AD 410 and 534 (two sigma calibrated date) (Dull, Southon and Sheets 2001:27).

The Ilopango eruption was a global event that covered a 10,000 km² area with *Tierra Blanca Joven* (TBJ) tephra (Dull, Southon and Sheets 2001:25). Its impact stretched all the way from the Valley of San Salvador west to the international border of Guatemala (Dull, Southon and Sheets 2001). The Ilopango vent is outside of the Zapotitán Valley, slightly southeast of the present day city of San Salvador (McKee and Sheets 2003). As a result of its close proximity, the Zapotitán Valley was covered by 2 to 6 meters of ash which resulted in a complete depopulation of the region as agriculture was rendered impossible (Sheets 2009:64). Dull, Southon and Sheets (2001), determined that *zea mays* and weedy plant pollen largely disappeared from the area after the volcanic eruption. Inhabitants within 100km of Ilopango would have been forced to abandon their homes following the eruption, most likely moving into the Copán Valley or the south eastern portion of Mesoamerica (Sheets 2009:64).

The Classic Period (A.D. 600-1000)

Full recovery of the Zapotitán Valley following the Ilopango eruption did not occur until at least the 7th century as not a single site has been found that was occupied during the later part of the Early Classic Period (A.D. 300-600) (Black 1983). Based on analyses of the ceramic assemblages, chipped stone tools, architecture, religious practices and other material culture found at sites throughout the region following the Ilopango eruption, it appears the area was repopulated by the Ch'orti Maya who migrated from the Copán region in a 'bottom up' fashion where commoners in need of arable land moved into the region prior to elite occupation (Sheets 2009). This migration later prompted the local development of long-distance trade and occupational specialization (Sheets 2009).

Within the Zapotitán Valley the commoner village of Cerén and the mid-Classic period occupation of the primary regional center of San Andrés were some of the earliest occupations following the eruption (Sheets 2009:66). The 1978 Protoclassic Project Survey conducted by the University of Colorado investigated the circumstances of their reoccupation within the Zapotitán Valley (Black 1983).

The 1978 Protoclassic Project

Prior to the 1978 Protoclassic project, few large-scale published excavations had occurred within El Salvador (Sheets 1983); the exception being Robert J. Sharer's work at Chalchuapa from 1967-1970 (Black 1983; Sharer 1978) and Andrews work at Quelepa from 1968- 1969 (McKee 2007). The Protoclassic Project was a University of Colorado sanctioned survey that lasted from 1978-1979 (Black 1983) and was the first probability-based archaeological survey ever conducted in El Salvador. The primary goal of the project was to identify any differences in material culture, site organization and complexity and settlement location between pre and post Ilopango eruption settlements within the Zapotitán Valley (Black 1983).

The Protoclassic Project documented changes in settlement patterns from the Late Preclassic through the Postclassic Periods (Black 1983), and found evidence of several volcanic eruptions (Sheets 1983). It also established a regional ceramic sequence (Beaudry 1983) and excavated two archaeological sites, including the discovery and excavation of the Classic Period village of Cerén (Zier 1983)

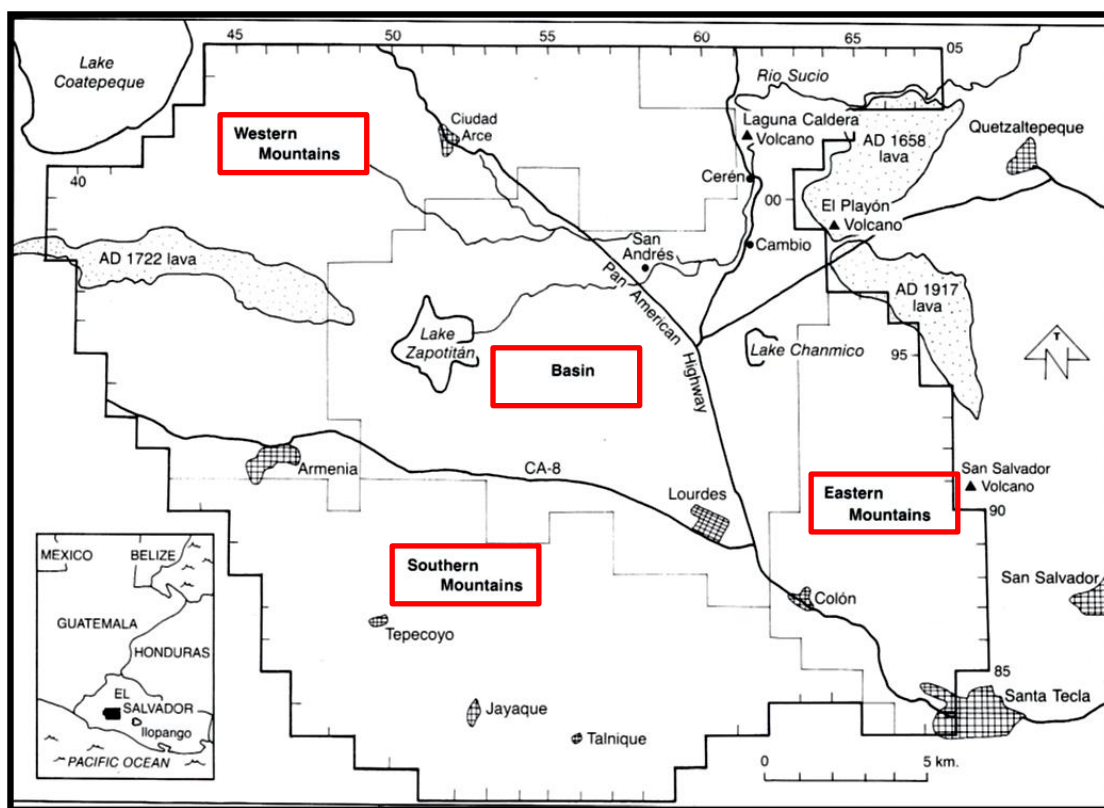


Figure 2.2: Map of the Zapotitán Valley survey areas (taken from Sheets 1983:4, used with permission of Payson Sheets).

The Zapotitán Valley was chosen as the study area because it had been significantly affected by the Ilopango eruption but it was not buried to a point where sites were no longer identifiable (Sheets 1977). Because only a representative sample of the entire region was needed, only 15% of the land area in the Zapotitán Valley was actually surveyed for a total area of 82.31 km² (Black 1983:68). This area was divided into four regions based on topography and drainage patterns (Black 1983:68). These regions (Figure 2.2) were identified as the Eastern Mountains, the Western Mountains, the Southern Mountains and the Basin (Black 1983:67).

The northern limit of the survey included most of the land drained by the southward-running tributaries of the Río Sucío (Black 1983:67). The eastern boundary reached the western

rim of the Boqueron volcanic crater and therefore included large parts of the San Salvador volcanic slopes which drained into the Valley (Black 1983:67). The southern boundary followed the crest of the Balsam range while the western boundary included most of the piedmont zone of the Santa Ana Volcanic Complex that drained eastward into the Valley (Black 1983:67). The central portion of the survey was composed of the Basin, which was a 182km² area located in the center of the Valley (Black 1983:67).

The Protoclassic Project survey developed a hierarchy of site types that could be distinguished based on surface evidence alone (Black 1983). The primary purpose of this typology was to understand the range of sites present in the Zapotitán Valley and to construct a framework within which to more easily analyze site data. The site types chosen were derived from the work done in the Valley of Mexico by Parsons (1971) and Blanton (1972) (Black 1983). The eight site types included; isolated residence, hamlet, small village, large village, large village with ritual construction, isolated ritual precinct, secondary regional center, and primary regional center (Black 1983:72). Two criteria were used to categorize sites; site size and architectural complexity; however sites lacking architecture were categorized solely on site size (Black 1983:72). Site size index (SSI), $SSI = \text{length} \times \text{width} / 10,000$, was used to formulate the site types into meaningful groups which were then used to make inferences about settlement patterns and hierarchies within the Zapotitán Valley (Black 1983:71).

The Protoclassic Project survey identified a total of 54 archaeological sites with 36 isolated finds (Black 1983:72). The sites ranged from middle Preclassic to late Postclassic in age and were found almost exclusively in the basin and western mountain regions (Black 1983). Included in these 90 sites were two secondary regional centers, four isolated ritual precincts and

one primary regional center (Black 1983:72). Campana-San Andrés was identified as the primary regional center (Black 1983:80).

Black's (1983) analysis showed repopulation of the Zapotitán Valley by the Ch'orti Maya was underway at 42 sites during the late Classic Period following the Ilopango eruption (A.D. 420-536). It also showed that population was expanding during the late Classic to the west and north, and was particularly dense around the sociopolitical center of Campana-San Andrés and along major water sources within the Valley (Black 1983:95). It was during this Late Classic period that the Zapotitán Valley reached its apex (Black 1983; Sheets 1983). Black (1983:82) estimates the population of the Zapotitán Valley during the Late Classic was somewhere between 40,000-100,000 occupants with an average population density of 70-180 people per km².

San Andrés and other Elite Centers

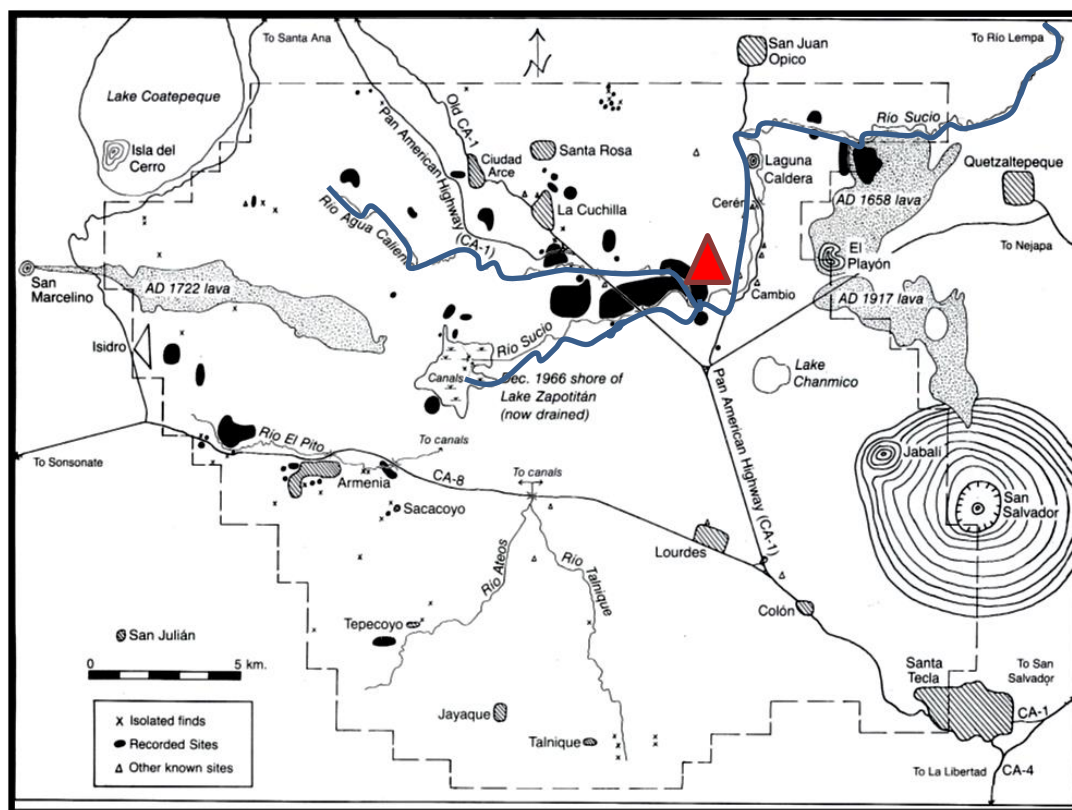


Figure 2.3: Map of the Zapotitán valley archaeological sites with San Andrés Highlighted (taken from Sheets 1983:72, used with permission of Payson Sheets).

Campana-San Andrés (Figure 2.3) was identified during the Protoclassic Project survey as the primary regional center of the Zapotitán Valley (Black 1983:80). Although archaeological research at this site has spanned six decades, unfortunately little has been published, leaving many gaps in the archaeological record. The exact size of the site is unknown, however two architectural complexes that are composed of a north and south plaza have been identified (McKee 2007). San Andrés was occupied from the middle Preclassic to late Preclassic (Black 1983:95) and lies in the center of the Zapotitán Valley near the confluence of the two largest rivers; the Ríos Sucío and Agua Caliente (Figure 2.3) (McKee 2007:204). The Late Classic population at San Andrés following the Ilopango eruption numbered in the thousands (Black 1983).



Figure 2.4: Picture of the main pyramid mound at the primary region center of San Andrés (Photo by author).

Although San Andrés is smaller, it architecturally resembles the Classic period Maya site of Copán, as they both emphasize pyramids and temples and define sacred spaces around elevated plazas (Sheets 2009:66-67). The ritual complex at San Andrés features a large elevated plaza surrounded on three sides by pyramidal mounds and platforms (Black 1983:80). The largest structure is a 15m high bell-shaped mound (Figure 2.4) resting on a wide platform (McKee 2007:207). Specialized activities such as major religious events and principal ceremonies involving the society as a whole probably took place at San Andrés (Sheets 2006).

During the late Classic period San Andrés was the main political and economic hub of the Zapotitán Valley (Black 1983; Sheets 2000; Sheets 2006). The elites at San Andrés and other secondary regional centers had control over the trade, production, distribution and consumption of outside material goods such as, polychrome ceramics, obsidian, jade, presumably salt, hematite cylinders, cinnabar and marine shell (Sheets 2000). These outside material goods were exchanged at marketplaces throughout the Zapotitán Valley for locally produced items such as firewood, crafts, food and other material goods (Sheets 2000).

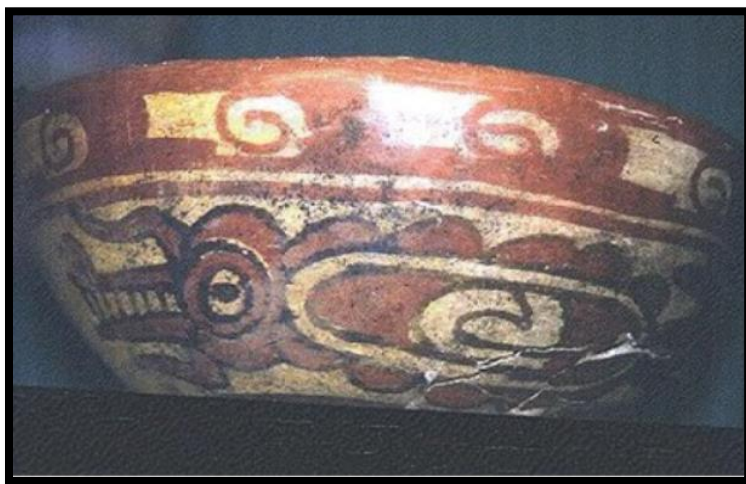


Figure 2.5: A polychrome ceramic from the Copán valley (Photo by author).

The Polychrome ceramics (Figure 2.5) were imported from the Copán Valley about 100km to the North (Beaudry-Corbett 2002:120). Based on chemical and stylistic analysis most of the imported ceramics were identified as Copador, Gualpopa and Chilanga polychrome (Sheets 2000:223). Jade appears to have been brought into the Valley from Sierra de las Minas in the Motagua River Valley of Copán Valley, which is approximately 130km to the north (Sheets 2000:221). Both the jade and polychrome ceramics were brought into the Zapotitán Valley in ready-made form (Sheets 2000).



Figure 2.6: examples of some of the obsidian implements brought into the Zapotitán Valley from the Ixtepeque source (Photo by Payson Sheets, used with permission of Payson Sheets).

Obsidian (Figure 2.6) was another material acquired by the elite and distributed through marketplace exchange (Sheets 2000:222). Sourcing indicates that the obsidian was imported into the Zapotitán Valley from the Ixtepeque source in Guatemala about 80km to the northwest (Sheets 2000:219). It was brought into the Valley in macrocore form and manufactured at the primary and secondary regional centers and sometimes the large villages (Sheets 1983:140).

Thus, it appears primary and secondary regional centers had more direct access to obsidian than did smaller settlements within the Valley (Sheets 1983).

Due to the high skill needed in creating core-blade technology it seems likely that San Andrés provided occupational specialists to shape the cores as well as make sharp knives (prismatic blades), scrapers and utility cutting tools through percussion and pressure techniques (Sheets 2000:220). Based on large amounts of manufacturing debris found at San Andrés, Sheets (personal communication with Linda Brown (1999) 2000: 223) believes an obsidian core blade workshop may have existed underneath the Colonial Hilasal factory a few hundred meters southeast of the site center. Even though the natural source of jade is farther into Guatemala than obsidian, it is possible the two resources were brought into the Valley along the same route by the same trader (Sheets 2000:221-222).

Despite San Andrés's role in the Zapotitán Valley as a major political and economic center it did not maintain a monopoly over all aspects of the economy (Sheets 2000). The inhabitants of the Zapotitán Valley maintained a considerable degree of control as they were able to choose where to acquire material goods (Sheets 2006; 2000). Secondary regional centers and large villages were scattered throughout the Zapotitán Valley and provided alternative locations for marketplace exchange (Sheets 2000).

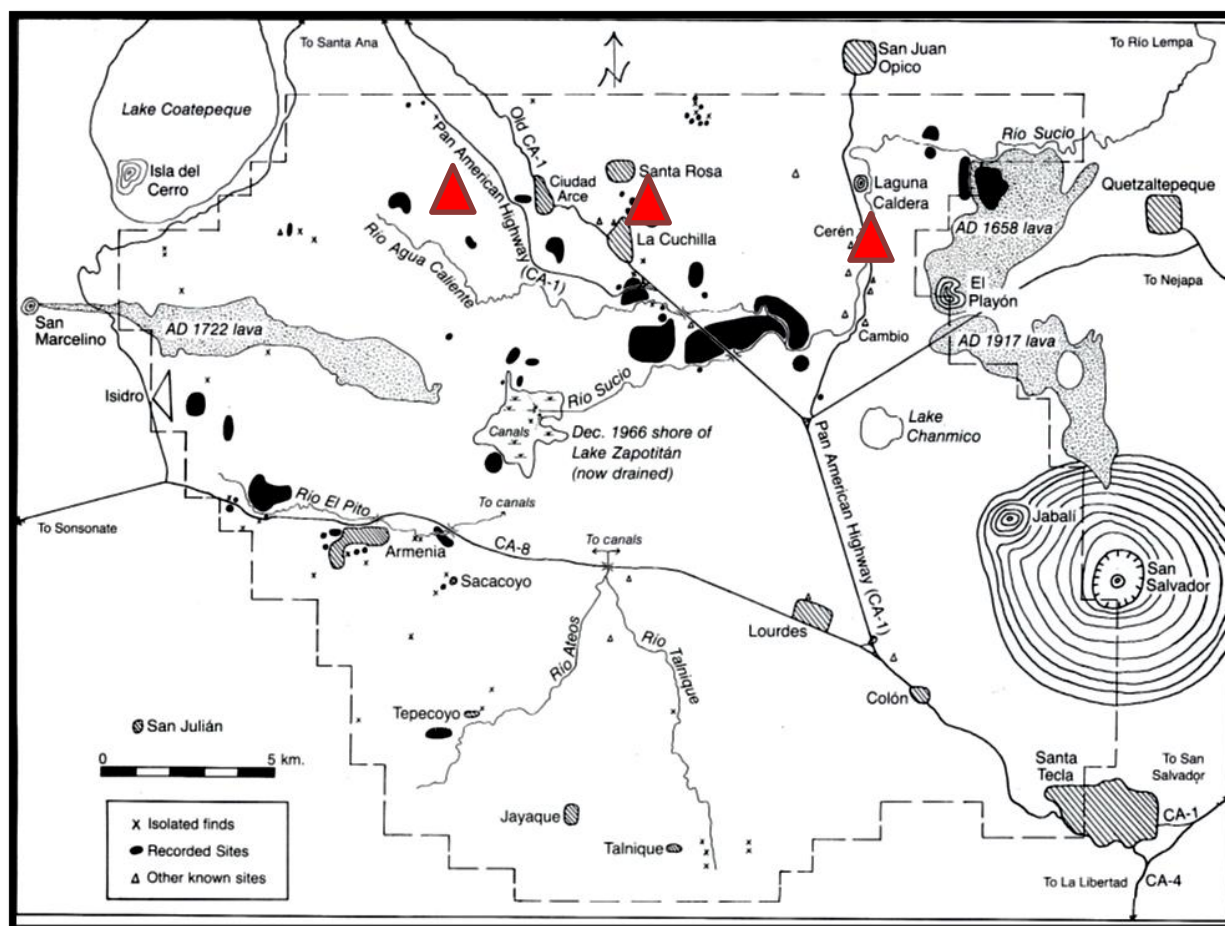


Figure 2.7: Map of the Archaeological sites in the Zapotitán Valley highlighting the sites of Cerén, La Cuchilla and La Virgen are highlighted (Taken from Sheets 1983:72, used with permission of Payson Sheets).

The 1979 Protoclassic Project identified two secondary regional centers (Figure 2.7) within the Zapotitán Valley; La Cuchilla and La Virgen (Black 1983). La Cuchilla is located on the northern edge of the basin with the greater part of that occupation clustered along the Río Agua Caliente. La Virgen is located in the western mountains and is 8km west of La Cuchilla (Black 1983:79). The site is spread out across the high piedmont overlooking the valley floor with a massive mound standing at over 10m high dominating the site (Black 1983:79). Each of these sites would have served as manufacturing and redistributive centers for items coming into the Zapotitán Valley, and provided alternative trade locations (Sheets 2000).

The Classic Period Site of Cerén

The archaeological site of Cerén is located adjacent to the Río Sucío in the Zapotitán Valley, at 13°49' north latitude and 89°21' west longitude (Figure 2.7) (Sheets 2002:1). It is situated on a terrace above the river floodplain at 450m (Sheets 2006:3) about 6km downstream from the Late Classic primary regional center of San Andrés (McKee and Sheets 2003) and 2.5km from the secondary regional center of Cambio (Chandler 1983). It was classified during the Protoclassic Project as a small village based on its size and architectural complexity (Black 1983). While the exact size of the site is unknown, evidence indicates that it probably extended 2 - 5 ha, and supported a population of 50 to 200 people (Sheets 2000:217).

The Discovery of the Site



Figure 2.8: Picture of the bulldozer cut exposing the northern end of structure 1 at Cerén (Taken from Sheets1983:25, used with permission of Payson Sheets)

The archaeological site of Cerén was accidentally discovered in 1976 when a bulldozer operator who was leveling a low hill to build grain storage silos noticed that his blade had cut through the corner of a building buried by 5m of volcanic ash (Figure 2.8) (Sheets 2006). Two years later while participating in the Protoclassic Project in the Zapotitán Valley, Payson Sheets asked the local community if he could see this building. Upon inspection of the structure he found pieces of polychrome ceramics that were later dated to A.D. 500-900 or the Middle to Late Classic Period (Beaudry 1983; Sheets 2006). Shortly after its discovery, excavations began in 1978 at two structures at Cerén, which are now identified as Structures 1 and 5 (Sheets 2006; Zier 1983). Subsequent research was completed in 1978, 1980, 1983, 1990, 1991, 1992, 1993, 1996, 2007, 2009, 2011 and 2013. To date archaeologists have completely or partially excavated a total of 11 structures including their surrounding areas. Additionally, they have identified the location of at least seven others as geophysical anomalies.

The Loma Calera Eruption and Preservation

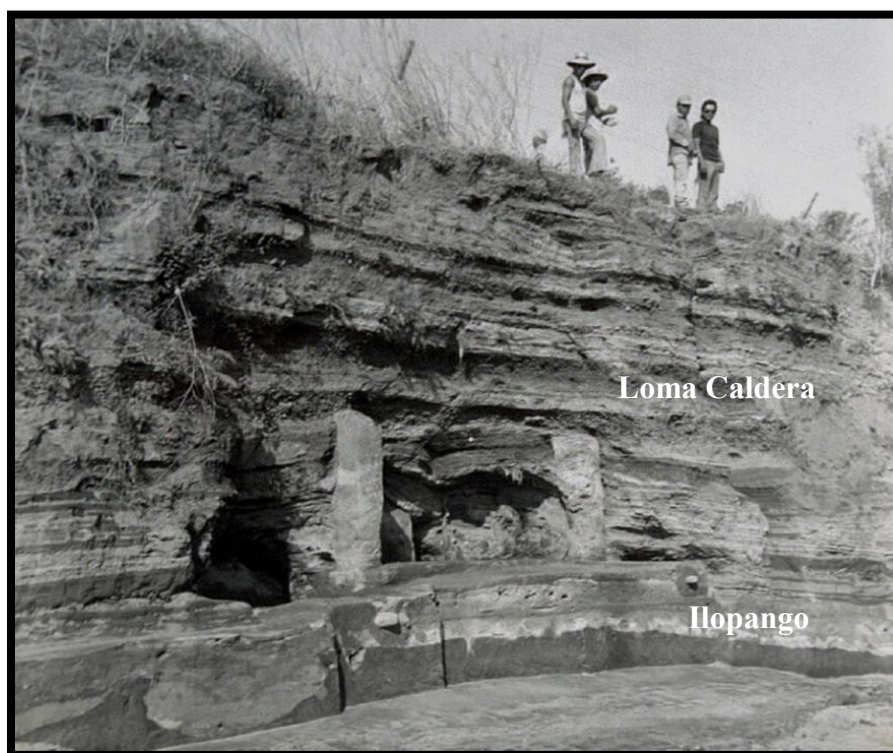


Figure 2.9: Stratigraphic profile of the Ilopango and Loma Caldera eruptions (Photo by Payson Sheets, used with permission of Payson Sheets).

The Cerén site was one of the earliest known settlements established in the Zapotitán Valley following the Ilopango volcanic eruption (Figure 2.9) (Sheets 2006). However, this occupation was short lived, as the community was impacted by an eruption from the Loma Caldera volcano in A.D. 610-671 (Figure 2.9) (McKee 2002). The Loma Caldera volcano is located 600m north of Cerén (Miller 2002:12). While the eruption was devastating to local populations, it was far smaller than the earlier Ilopango eruption. It covered Cerén in roughly 4 to 6 meters of ash, forcing inhabitants within a 10-20km² area to permanently abandon their homes (McKee and Sheets 2003:66).

The Loma Caldera eruption occurred in a number of phases over a few days to weeks (Miller 2002). Prior to the catastrophic eruption there were a number of warnings that would have possibly alerted the Cerenians to the impending disaster, allowing them time to escape. To date no bodies dating to the time of the eruption have ever been recovered (McKee and Sheets 2003). The possible warning signs would have included earthquakes and a steam emission (Sheets 2006:34). Archaeologically we know that the Loma Caldera eruption was preceded by a magnitude 4 earthquake, as Miller (2002:20) identified small fissures and normal faults on Structure 12. Additionally, the fragments of the decorative wall cornice of Structure 3 fell off as a result of ground shaking (Miller 2002:20). It is possible that some inhabitants of Cerén remained behind following the earthquakes. They probably would have been able to survive the initial phases of the eruption and escape when pauses occurred (Sheets 2002).

The Loma Caldera eruption began when water from the Río Sucío was instantly vaporized as a result of contact with magma from the volcanic vent which caused a massive steam explosion (Sheets 2006). Following this event, there was a lateral blast called a pyroclastic surge that consisted of hot gasses, water vapor, steam and fine-to-course fragments of magma which were blasted through the air as tephra (Miller 2002:20). This pyroclastic surge known as Unit 1 covered Cerén in fine-grain sediments (20-30cm) which were instrumental in preserving the structures and organic material throughout the site. During this first phase, river water would have been blasted away from the volcanic vent creating a temporary tephra dam (Sheets 2006).

As a result of this tephra dam, the second eruptive phase known as Unit 2 would have been dry (Miller 2002:20). Unit 2 and all other dry phases were composed of tephra particles ranging from very small to larger than a basketball (Sheets 2006:35). Each dry phase ended when the river eroded through the dam and a stream explosion occurred (Sheets 2006:35). The

various units expelled by the Loma Caldera volcanic eruption, which number 14 in total, alternate between airfall and pyroclastic surges, each of which lasted anywhere from minutes to hours (Sheets 2006; Miller 1992; 1993). Contained within Unit 2 were lava bombs that reached temperatures exceeding 575 degrees Celsius (Hoblitt 1983:146). These lava bombs were extremely destructive to the site as they punched through the roofs and caught them on fire (Miller 2002:19). The following Units, 3-14, further buried Cerén and weighed everything down (Sheets 2006).

As a result of the Loma Caldera eruption, the Classic Period site of Cerén was very well preserved. This has provided archaeologists with the opportunity to study aspects of Classic Period Maya life that otherwise would have been destroyed. McKee and Sheets (2003) have identified four ways in which artifacts, architecture, organics, etc. have preserved at the site of Cerén; direct preservation, carbonization, mineral replacement and as molds. Molds are impressions of organic material that have survived in the form of voids. Additionally, the preservation at Cerén has also provided archaeologists with the day and month of the eruption.

Archaeologists know that the Loma Caldera eruption occurred at night after a meal but before everyone went to sleep. Most of the artifacts found had been stored rather than left in their use locations (McKee and Sheets 2003). Dinner had been served but not all of the vessels had been washed. Evidence of vessels that had been used during a meal was found in Structures 2 and 4 (Sheets 2006). Also, a cooking pot had been removed from the hearth and the fire had died down (Gerstle and Sheets 2002:78). Additionally, the sleeping mats were still stored in the rafters, therefore we can assume that the eruption occurred early enough no one had gone to sleep yet (Sheets 2006).

We also know that the eruption occurred at the end of the first planting of maize and that the inhabitants of Cerén were attending a festival at Structure 10 which coincided with the first maize harvest and likely the manioc harvest and likely the manioc harvest (Sheets 2006; 2009). The ritual underway at Structure 10 resembled the Maya “kuch” ceremony which focuses on deer as symbolic of fertility, the earth and on giving thanks for the maize harvest (Brown and Sheets 2001). Most of the maize plants that have been excavated at Cerén are found doubled over with ears of corn still attached to the stock (Sheets 2006). One area excavated contained juvenile maize only 1 to 2 feet tall which is indicative of a second planting during the middle of the rainy season (Sheets 2002). From this we can infer that the eruption occurred sometime in August in the middle of the growing season (Sheets 2006).

Construction of Structures



Figure 2.10: Digital Reconstruction of the Household structures at Cerén (Used with permission of Payson Sheets).

The inhabitants of Cerén constructed their households and other special purpose buildings using earthen architecture (Figure 2.10). Typically, the domestic structures (Structures 1, 2, 4, 6 and 7) were built of bajareque (wattle and daub), although one (Structure 11) was constructed of poles and thatch (Sheets 2006). This form of construction is extremely earthquake resistant which would have been important given this region is frequented by earthquakes (Sheets 2002). Structures 3 and 9 which have been identified as the civic structure and the sauna were constructed of solid clay, while the religious complex, which consisted of Structures 10 and 12 was of bajareque construction (Sheets 2002). All structures had thatch roofing (Figure 2.10).

Most households probably built and maintained their own architecture through the use of local materials. Smoothing tools for finishing earthen architectural surfaces were found in each household (Sheets 2000). Clay deposits for both construction of architecture and ceramics could have been found along the banks of the river and its tributaries (Sheets 2000), while the Grass (*Trachypogon plumosus*) used for thatching would have probably been grown locally (Lentz et al. 1996). Household 4 at Cerén grew bajareque reinforcing poles, which is important since wattle and daub or bajareque architecture requires pole reinforcements to be replaced every decade or two before they rot (Sheets 2006; 2000).

The Household Complexes

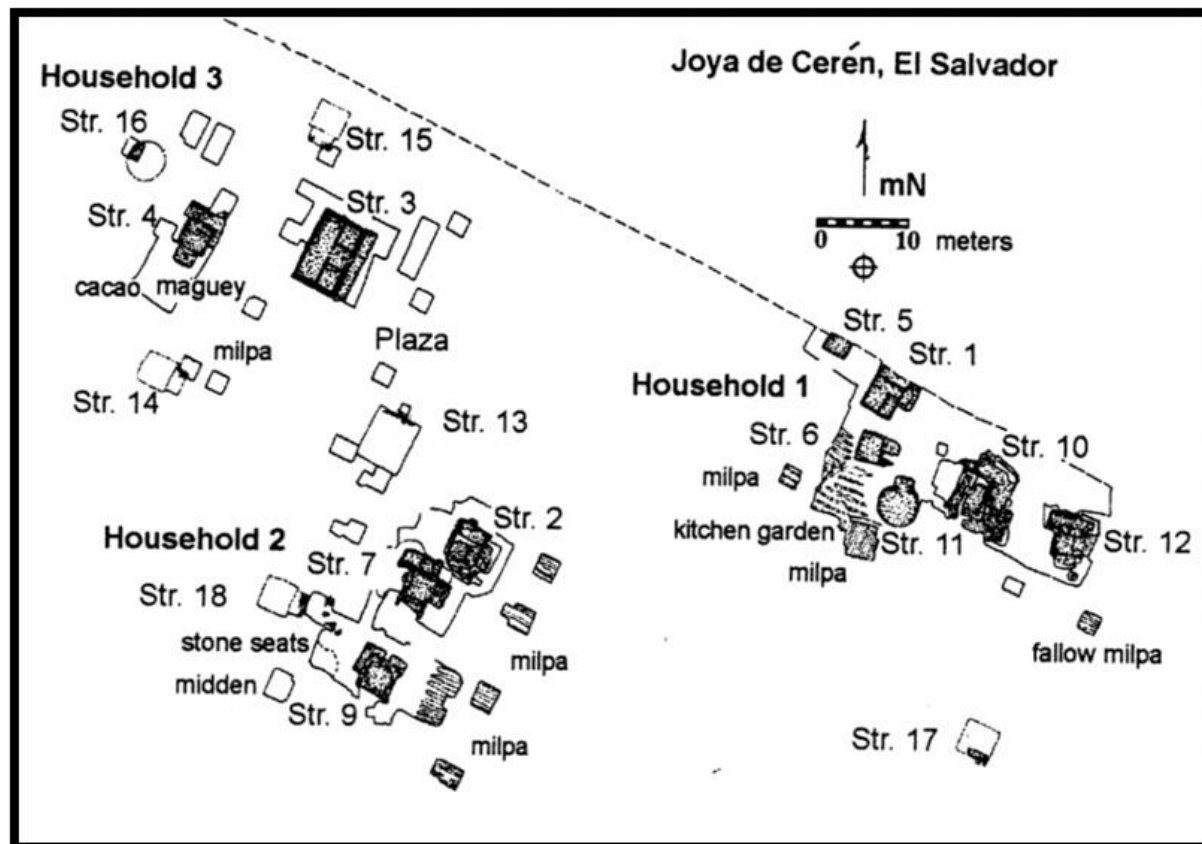


Figure 2.11 Map of the Classic Period site of Cerén (taken from Sheets 2000:218, used with permission of Payson Sheets).

To date four households have been identified at Cerén (Figure 2.11). Household 1 is the most complete and includes four structures; a kitchen, a domicile or sleeping area, a *bodega* or storehouse, and a possible workshop (McKee and Sheets 2003; Sheets 2002). Household 2 is largely complete with a domicile and a *bodega*. Households 3 and 4 are far less complete. Household 3 is only known by a small portion of the kitchen and Household 4 is represented by a *bodega* (Sheets 2002; 2006). Spatial placement of these structures demonstrates an arrangement favoring a north south placement of domicile to *bodega*, the off-line placement of the kitchen and the placement of a clay-surfaced patio between the buildings (Sheets 2009). The dominant

architectural orientation of these structures is 30° east of north which is set by the nearby Río Sucío which flows 30° east of north (Sheets 2002:198). Additionally, all plants with the exception of the agave garden in Household 4 were also oriented to 30° east of north (Sheets 2006:58). Sheets (2002:198) suggest this architectural orientation is rooted in the Maya reverence of and need for water.

Every household and household structure contained an incense burner for copal which was most likely used to convey messages to the supernatural (Sheets 2000:224). Each of the incensarios varied in form and decoration, displaying a different animal head effigy which may indicate the association of animal spirit companions with the heads of the households (Brown et al. 2002:84). Most households also owned roughly 12 gourd vessels and over 70 ceramic vessels, 3/4 of which were local, the rest most likely came from the Copán Valley (Beaudry-Corbett 2002:120). Also found in each household was a jade axe, hematite cylinders, and at least six obsidian blades, all of which were obtained at regional centers within the Zapotitán Valley (Sheets 2000).

Each household was sufficiently able to meet their subsistence needs through the cultivation of milpas and kitchen gardens which would have provided most if not all of the food needed for the year (Lentz and Ramírez-Sosa 2002). Household gardens were located either adjoining the buildings or separated by a narrow walkway (Lentz et al. 1996; Sheets 2002).

The most common plant cultivated at Cerén was maize (*Nal-Tel/Chapalote*) which can be found in milpa both surrounding the households and in more distant locations (Lentz et al. 1996). Maize is planted at the beginning of the rainy season in mid-May and is ready for harvest in mid-August (Sheets and Woodward 2002:186). The first harvest would have produced almost half of what was needed for the year's consumption while the second harvest would have provided

another third on average (Sheets and Woodward 2002:186). Beans and squash were typically planted around mid-August among the corn, as beans fixed the nitrogen in the soil for the next planting (Lentz and Ramírez-Sosa 2002:35).

Other crops cultivated at Cerén in both household gardens and milpa include: lima beans (*P. lunatus*), chile peppers, manioc (*Manihot esculenta*), cotton (*Gossypium hirsutum*), malanga (*Xanthosoma violacium*), maguey (*Agave spp.*), cacao (*Theobroma cacao*), achiote (*Bixa orellana*) and gourds (Lentz et al. 1996; Lentz and Ramírez-Sosa 2002). The inhabitants of Cerén also relied on orchard farming of broadleaf trees including; avocado, guava, nance, cacao, calabash, capulín and others, some of which functioned to provide household compounds with shade (Lentz et al. 1996:259). Other domesticates and species discovered within Cerén include; dog, domestic duck, deer, freshwater snail ‘jute’, olive shells, spondylus shells and cowry shells (Brown 2002:151-152).

The Specialized Structures

To date four special purpose structures (Figure 2.11) have been identified at Cerén; three of which are affiliated with household complexes based on proximity and access (Sheets 2006). Structures 10 and 12 compose the village ritual complex. Structure 10 has been identified as a community feasting and ritual center (Brown and Gerstle 2002). It was used to store festival paraphernalia including; food, ceramic vessels, tools for the preparation of feasts and a white-tailed deer skull headdress that was painted and probably worn in ceremonial performances (Brown et al. 2002; Brown and Sheets 2001). The second structure of the ritual complex, Structure 12 was built on the highest topographic elevation within Cerén and was used by a ritual practitioner to engage in divination (Sheets 2009). Within this structure archaeologists found a

collection of minerals and beans on the floor of the largest room which were most likely used for diving information for clients (Brown and Sheets 2001).

Another specialized structure found at Cerén was Structure 9. Based on the presence of a river cobble firebox located in the center of the structure and other features, it has been identified as a sweatbath (Sheets 2009; Sheets and McKee 1990). No artifacts were recovered from within Structure 9, however based on the unusual amount of firewood and the large amount of ollas found in the *bodega* of Household 2, it is suggested that the maintenance of Structure 9 was carried out by this household (McKee 2002:70).

The final specialized structure excavated at Cerén is Structure 3. Structure 3 is the largest structure found at the site (Sheets and McKee 1989). It has been identified as a communal structure for multifamily use based on its large doorway, the presence of two very large benches in the east room and its monumentality which set it apart as a locus of power within the community (Gerstle 2002:88). Additionally, the large pot located on the southern bench in the east room of the structure was probably used to dispense a liquid to village elders and guests (Gerstle 2002:88). The presence of Structure 3 provides strong indication of a political authority (Gerstle 2002:88). This authority was probably village elders or respected members of the community who convened in Structure 3 to discuss community affairs (Sheets 2006:96). This suggests that the village had a degree of political separation from the primary regional center of San Andrés (Sheets 2000).

The Household Activities

As a result of the exceptional preservation encountered at Cerén, archaeologists have been able to identify various types of activities occurring both within the households and the

special purpose structures. Based on the types and location of artifacts found within household buildings it appears their inhabitants were participating in part-time craft specialization and varying degrees of agrarian production (Sheets 2000). The high concentration of groundstone and spindle whorls recovered from Household 1 suggests its inhabitants were manufacturing groundstone implements, particularly metates, manos and donut stones as well as producing and manufacturing cotton thread (Sheets 2000). The abundance of hematite pigment and the use-wear of obsidian blades and painted gourds encountered in Household 2, suggests its members specialized in decorated gourds (Sheets 2000). Furthermore, the large amount of agrarian products found in storage, as well as those growing in the areas surrounding Household 4; suggest its inhabitants produced bajareque reinforcing poles, cotton seed oil, agave and cacao (Sheets 2000). The goods produced by the members of each household were most likely traded within the community and at regional marketplaces for items such as obsidian, polychrome ceramics, hematite cylinders, jade and presumably salt (Sheets 2000).

In addition to part-time craft specialization and agrarian production, it appears that two of the Cerén households were maintaining relationships with three of the special purpose structures (Sheets 2002). Household members were providing services in the form of maize grinding, the transportation and processing of water and food, architectural maintenance, storage of material and food related items, as well as assisting in the preparation for ceremonial events (Sheets 2002).

Based on several lines of evidence, archaeologists have identified a relationship between the members of Household 1 and Structures 12 and 10 (Brown et al. 2002; Brown and Sheets 2001; McKee and Sheets 2003). Household 1 possessed a high concentration of manos and metates, which suggests the household sponsored community rituals by grinding food for the

public feasts (Brown et al. 2002:91). Furthermore, Structure 10 and 12 were only 5m apart and the low serving wall along the east corridor of Structure 10 opened toward Structure 12 (Brown et al. 2002:91). Additionally, Beaudry-Corbett (2002:122) found that Household 1 had more utilitarian bowls with handles and jars without handles than any other household, which she suggests was a result of a greater need to transport and store goods. Also, each household contained a tapiscador except for Household 1. However, because Structure 10 contained two, it has been suggested that Household 1 may have loaned theirs for festival preparations (Beaudry-Corbett 2002).

Chapter 3 : The Theoretical Framework

Introduction

Previous archaeological studies of the household complexes at the Classic Period Maya village of Cerén have primarily been concerned with the economic aspects of the domestic unit (Beaudry-Corbett 2002; McKee 2002; Sheets 2002). As a result, they have yet to address the socio-cultural dimensions such as wealth, authority, status and moral order. Part of the reason for this emphasis on the economic, is a narrow conceptualization of the domestic space and materiality. Physical spaces become meaningful by the connections people make between the space itself and practices occurring within these spaces (A. Joyce and Goman 2012). Practices are concerned with how human subjects and the broader social, cultural and material settings interact and how they mutually constitute one another (A. Joyce 2010). People are considered to be embedded in a material world, they are immersed within it and it is this world of material things that has an effect on the way people and things interact (Hodder 2012). Things are dependent on people just as people are dependent on things. They act as social agents and therefore should not be considered as static, bounded entities. Instead they should be understood as having life histories of their own (Hodder 2012). They are connected to memories and experiences. They incorporate knowledge and possess a spatial and temporal dimension (Olsen 2010).

Thus, in order to interpret the socio-cultural dimensions of households at Cerén it is necessary to consider the relationship between the social actor and the material thing itself. Therefore, this study proposes the use of storage practices as means to better understand the socio-cultural dimensions of the households such as status, wealth, authority and moral position within the community at Cerén households. Storage practices provide an ideal medium because

they represent a confluence of the spatial, social, symbolic and material worlds (Hendon 2000; 2010).

Storage as a Situated Practice

Traditionally, storage has been defined as an activity which involves the setting aside of material things (e.g. water, food, tools, seeds for plants) for some future use whether short-term or long-term (Halperin 1994; Smyth 1989). It is a topic within archaeology that has been taken for granted, especially in the development of models of social complexity (Childe 1950; Firth 1964; Sanders and Price 1968). Many archaeologists assume that surplus food creates the foundation for material wealth and thus views storage solely as a material indicator of that wealth (Childe 1950; Halperin 1994; Sanders and Price 1968; Smyth 1989; 1991; Testart 1982). This assumption coupled with the poor preservation of stored goods, has led archaeologists to infer the existence of storage from evidence of farming, settled life, population growth, craft specialization, social hierarchies, monumental architecture and other signs of developing complexity (Hendon 2000:42). This characterization of storage as a static, bounded activity is limiting in that it constricts archaeologists' ability to recognize its potential to inform on other aspects of society. Storage is about more than just material goods, it has social significance.

Drawing on the works of Rappaport (1990), Giddens (1993), and Bourdieu (1972; 1977), Hendon (2000:42); argues for storage as a *situated practice* and as such suggests extending its definition to include memory and knowledge. As a component of mutual and situated knowledge storage becomes part of the daily and periodic practices occurring within the household. As a result, it becomes part of the processes of memory making and knowledge which are drawn upon to create socio-cultural identities. Thus, the act of storing becomes a means through which individuals are able to express these identities. Hendon (2000) utilizes this expanded definition

of storage to explore the social and symbolic meanings of alternative kinds of storage such as burials and votive offerings, or caches. However, due to the excavation restrictions placed on the archaeological site of Cerén, archaeologists have not been able to excavate the burials and caches discovered beneath the structures. Therefore, this chapter will focus on storage in the more traditional sense. Specifically, it discusses storage as a situated practice and the materiality of storage.

Knowledge and Identity

In order to understand how storage becomes a situated practice, it is necessary to discuss the production of knowledge and its role in the creation, contestation and negotiation of socio-cultural identities. Knowledge is produced through the interactions, actions, relations and practices that occur within a particular physical space. It can either be mutual or situational.

Mutual knowledge is a body of information that people as members of a group assume they share. It is created through the mutual participation of actors in a shared space that involves a series of interactions, relations and actions where acts of memory making and learning take place (Yeager and Canuto 2000; Hendon 2010). It functions as an intermediary between knowledge and action. As a result it becomes an essential part of social interaction (Hendon 2000). Thus, mutual knowledge is what makes communication and social interaction possible, and as a result defines social competency (Hendon 2000:42). However, mutual knowledge is not a static entity; it is constantly being modified and reconstructed based on new experiences and understandings of the inhabited world.

Mutual knowledge can be mobilized to create common community identities. The community is “an ever-emergent social institution that generates and is generated by interactions that are structured and synchronized by a sense of place within a particular span of time (Yaeger

and Canuto 2000:3). It is representative of the relationship between the interactions that occur within a particular space and the sense of shared identity that both fosters and is fostered by these interactions (Yaeger and Canuto 2000:3).

However knowledge is not always shared equally, it can be differential and partial. Often access to knowledge is a product of the particular social position and experiences of a human subject (A. Joyce 2010). Additionally, it can be constrained and restricted through symbolic and social barriers. Thus, the ways in which people learn and remember can be understood as situated within social, spatial, temporal and physical contexts (Isbell 2000: 244). Therefore, because access to knowledge is contingent on an individual's social position, experiences and physical access, it can be understood as situational. Thus, *situated knowledge* provides opportunities for the contestation, negotiation and creation of alternative identities. As a result, social identity can be understood as a flexible conception of self, in which individuals' shift or change identities situationally (Cohen 1994). Thus, social identity represents the coalescence of mutually agreed upon and self-ascribed cultural categories (Yaeger and Canuto 2000:2-3). One way mutual and situated knowledge can be embodied is through the daily and periodic practices occurring within physical spaces.

Practice and Space

Physical spaces become meaningful by the connections people make between the space itself and the actions, interactions and practices occurring within these spaces (A. Joyce and Goman 2012). Practices refer to what people do within a space or landscape, such as cooking, weaving, storing, religious performances, etc. They are concerned with how human subjects and the broader social, cultural and material settings interact and how they mutually constitute one another (A. Joyce 2010). During the practices occurring within the domestic space acts of

memory making and learning are taking place. Because knowledge and memory are mobilized for identity formation, practices can be understood as embodying varying identities, emotions, knowledge, relations of power and social rules. Thus, practices such as storytelling, conversation, participation in activities of daily life or ceremonies can be understood as embedded with socio-cultural identities (Hendon 2010:9). As such, practices become entangled within the living and being of a group.

However, because knowledge is situational, it should not be assumed that members of the same community are engaging in similar practices in the same manner. Individuals are able to combine or segregate knowledge of daily and periodic practices through differential spatial settings (R. Joyce and Hendon 2000). For instance, practices occurring in more open spaces such as plazas allow for greater access and visibility. As a result, knowledge is more equally shared between community members and thus can be called upon for the creation of common community identity (R. Joyce and Hendon 2000). Alternatively, more intimate settings such as domestic spaces restrict visibility and access. Thus, knowledge about what is occurring within the space is not equally shared or known by all members of the community. It is differential and partial, known only to those who are intimately familiar with the space (Hendon 2000). As a result, knowledge becomes a spatially and temporally contextualized source of social differentiation.

Thus, if privacy is thought of in terms of restricted access, then spatial secrecy and containment become physical manipulations of power, status and control (Hendon 2010). For example, at the Classic Period Maya polity of Copán, politically powerful elite make certain kinds of places or actions less visible by controlling movement and observation by creating physical and symbolic barriers (Love 1999). Lower status members at Copán tend to put their

material resources on display by making their location known (Rathje and Murphy 1992). As a result, lower ranking members of society are providing the higher status members at Copán with knowledge that is not reciprocated unless they are allowed to become familiar with the interior of elite residences or restricted public settings (Hendon 2000:45).

Thus, as embodied forms of socio-cultural identity, practices provide opportunities for the creation, contestation and negotiation of social identity (Hendon 2000; 2010). Therefore, differences in similar practices within the same community can be understood as a reflection of a subject's ideas about their socio-cultural standing within the community relative to others. As a result, the daily practices occurring within the domestic space become a means to better understand the socio-cultural dimensions of the household and its inhabitants.

The Household and Domestic Storage Practices

Archaeologists tend to characterize space based on its function, typically identifying the buildings that provide some type of community service as 'public' and those associated with domestic functions as 'private' (Hendon 2010). While we may be tempted to characterize the household as only concerned with economic tasks such as cooking, weaving and food preparation, this would be misleading. The domestic unit is not socially or spatially segregated. It is intrinsically linked to the larger social, economic, ideological and political institutions of the community and region. As a result, it represents not only a fundamental economic unit but a site of group identity construction (R. Joyce and Hendon 2000; Hendon 2010; Yaeger and Canuto 2000).

Within the domestic space, during practices such as ceramic production and groundstone manufacture, acts of remembering, learning, making, and knowledge are occurring (Bourdieu 1977; Moore 1996; Giddens 1993). It is this knowledge and memory that are drawn upon to

create identities. Thus, the household as a site of identity formation becomes a dynamic spatial and material domain of life lived at home, symbolic of the identities that are defined and inscribed through routinized daily and periodic practices (Hendon 2010:99). As a result, households represent the confluence of the material, social and spatial domains.

Through the visibility and access of the practices occurring within the domestic space, individuals are able to create circumstances which necessitate differential knowledge. As a result, they are able to express ideas about their status, wealth, authority and moral position relative to others within the community. Therefore, households are able to create common and alternative identities based on mutual and situated knowledge (Hendon 2010).

Thus, by considering storage as a component of mutual and situated knowledge, it becomes part of the acts of learning, memory making and knowledge that occur during the interactions, actions, relations and practices taking place within the domestic unit (Hendon 2000). As a result, storage becomes about more than food or useful items. It concerns the ideas of memory and knowledge and becomes part of the lived lives of individuals and groups. It becomes part of the mutual and situated knowledge mobilized in identity formation. Therefore, storage practices become a means through which individuals and groups are able to communicate their ideas about status, wealth, authority and moral order (Hendon 2000). Storage, “acquires a moral dimension because it is part of the processes connecting resources with people’s needs and desires, and because the social evaluation of people or groups may take into account their connection to the practices of storage,” (Hendon 2000:45). Therefore, formal storage features, facilities specifically used for storage (Kent 1999:80) become material representations of moral order. As a result, formal storage features and their related storage practices becomes representative of how society is ordered.

Additionally, storage practices can be used to express ideas about status and authority through the access and visibility of these practices occurring within the domestic space. Through physical and symbolic barriers individuals are able to restrict or provide other community members with knowledge about the types of items being stored and their locations within the household (Hendon 2000). As a result, knowledge about the contents and locations of stored items becomes a source of social differentiation. Therefore, storage as a *situated practice* can be understood as an expression of an individual's ideas about their socio-cultural identity within the community. As a result, differences in storage practices between households within the same community can be understood as an individual's desire to express perceived differences in socio-cultural identity (Hendon 2000). Materiality is a means through which social actors transform socio-cultural identities into historical facts (R. Joyce and Hendon 2000).

Materiality

Materiality is concerned with the interaction between humans and things. People are considered to be embedded in a material world, they are immersed within it and it is this world of material things that has effects on the way people and things interact. Things and society co-produce each other (Hodder 2012). Things are dependent on people just as people are dependent on things. These dependencies are not inherent in the things themselves but in the interactions between humans and things. Things depend on people when they are procured, manufactured, exchanged, used and discarded but in particular they depend on people to maintain them if they are to remain as people want them. It is these dependencies that trap humans into various forms of care (Hodder 2012). Earthen architecture is a good example of the entanglement between humans and things. Both are reliant on one another. The human depends on the construction to

provide shelter, an area for subsistence activities and sleeping and the thing depends on the human for maintenance and care. In this way things act as social agents.

Things possess their own nonverbal qualities and are involved in their own historical processes. When one individual discards a thing it does not mean that its life ends there, it continues on and interacts with both humans and other things. A thing can be recycled, reused; it can take on new meanings, memories and uses (Hodder 2012:43). They persist, in some cases well beyond the lifespan of a human and therefore have a social biography, a life history of their own. The past is not left behind but continues into the present.

They have differential meanings based on when and how they are experienced within the landscape. Therefore, they belong with such processes as learning, knowledge, and making sense of things. Thus, they cannot be perceived as isolated and static. They incorporate knowledge and memory and possess spatial and temporal dimensions (Hodder 2012; Olsen 2010). As a result, objects are viewed as materializations of the social relationships between people and things. Because things are representative of social relations, their meanings are subject to changes and modifications (Hodder 2012). They can be selected for based on preference of material properties or associations. Distant material sources are often chosen over more local sources because of certain properties or characteristics that are emphasized by particular culture groups (Hodder 2012). This concept is best exhibited in exchanges between cultural groups.

Exchanges are as much about holding onto as they are about giving away. As a material object is traded away as part of an exchange, the one trading the object may gain or modify a sense of self as well as gain social esteem as a result of the trade (Hendon 2000:45). The person receiving the traded object may gain prestige also, both from the thing itself and from the alliances or friendships or animosities that the exchange establishes. But at another level it turns

out often to be difficult to separate oneself from a thing traded away. When a thing one has become associated with is traded away, part of oneself may travel with it (Hodder 2012; Olsen 2010). Thus, while the trading of an object physically separates one from it, the thing retains an association with the individual trading the object away. Therefore, “possession of the object rebounds back on the predecessor, who acquires prestige through ownerships of not just the object itself but of the history and memory the object incarnates,” (Hendon 2000:46). We see this occurring at Classic Period Maya sites like Copán, where we find Teotihuacan style ceramic vessels in the homes and burials of the Maya elite (McKillop 2004:131). Despite access to local ceramics, the Maya of Copán chose to acquire ceramics from a more distant source. This is indicative of their desire to affiliate themselves with the Teotihuacáños.

Thus, materiality, as a concept concerned with the relation between the human subject and thing itself, becomes representative of individuals’ and groups desires, needs, dependencies and ideas about socio- cultural identities.

Materiality and Domestic Storage Practices

The materiality of domestic storage can be understood in terms of the relation between the individuals participating in the act of storing and the items being stored. They co-produce each other and as a result create dependencies. The stored item can affect the human, just as the human can act back on the stored thing. Thus, the location of a stored object may be the result of the thing itself and not just the human actor. Additionally, a thing can be selected for based on its material properties and socio-cultural associations. An individual may acquire an object because it is affiliated with a high status, wealthy elite group, or because its material properties make it better suited for cooking. Therefore, the location and possession of a stored item can be

understood as a reflection of not only an individual's desires, needs, wants, and perception of their socio-cultural identities within the community, but the dependencies of the object itself.

Summary

People are embedded within a material world and it is this world of material things that affects the way people and things interact. Things and society mutually constitute on another. Thus, as a representation of the confluence of the social, spatial, material and symbolic worlds, storage should be concerned with understanding the relationship between the individual performing the act of storing and the thing that is being stored.

Storage, as a component of mutual and *situated knowledge* becomes part of the acts of memory making and learning that occur during the interactions, actions and *practices* taking place within the domestic space (Hendon 2010). As a result, ideas about storage can be extended to include memory and knowledge (Hendon 2000). Thus, because memory and knowledge can be mobilized by groups or individuals for the creation of common and alternative identities, storage becomes part of the processes of identity formation. Therefore, storage practices occurring within the household can be understood as socially meaningful acts that embody both group and individual ideas about identity. As a result, the participation in daily and periodic practices provides opportunities for the creation, contestation and negotiation of identity (Hendon 2000; 2010). Therefore, as a *situated practice*, storage becomes a means through which individuals are able to express ideas about identity such as status, authority, wealth and moral order.

Moral order or social rules are understood through knowledge which draws on memory, past experiences, expectations, desires and a communicative engagement with other co-inhabitants (A. Joyce 2010). Therefore, storage acquires a moral dimension because it is part of

the processes connecting resources with people's needs, desires, and because the social evaluation of people or groups may take into account their connection to storage practices (Hendon 2000:45). Thus, storage features and practices become a means through which individuals are able to orient themselves in the world. As a result the quality of construction, decoration, placement and layout of formal storage features and location of stored objects provides individuals an opportunity to express ideas about moral order (Hendon 2000; 2010).

Ideas about status, authority and power can be expressed through the visibility and accessibility to storage practices. Differential spatial settings combine or segregate knowledge (R. Joyce and Hendon 2000). Through the construction of physical and symbolic barriers individuals are able to restrict access and visibility to domestic storage practices. As a result, they are creating circumstances which necessitate differential knowledge about the items being stored and the individual's performing the act of storing. Thus, they are using knowledge as a source of social differentiation. Therefore, if privacy is thought of in terms of restricted access, then spatial secrecy and containment become physical manipulations of power, status and control (Hendon 2010).

However, the relation between the human subject performing the act of storing and the item being stored are not static. The thing acts back on the human subject just as the human subject acts back on the thing. Things depend on people when they are procured, manufactured, exchanged, used and discarded but in particular they depend on people to maintain them if they want to remain as people want them (Hodder 2012). In this way things act as social agents. Therefore, storage practices need to take into account the dependencies that exist between the individual performing the act of storing and the item being stored.

Additionally, a thing can be selected for based on preference of material properties or associations. Distant material sources are often chosen over local ones because of certain properties or characteristics that are emphasized by particular cultural groups (Hodder 2012). When a thing one has become associated with is traded away, part of oneself may travel with it (Olsen 2010). Thus, while the trading of an object physically separates one from it, the thing retains an association with the individual trading the object away. Therefore, the owner acquires prestige not only from ownership of the object but through the history and memory the object incarnates (Hendon 2000). Therefore, possession of an object can be indicative of an individual's desire to associate themselves with a particular trait such as status, power, prestige, authority and wealth of a cultural group. Therefore, the location and possession of a stored item becomes reflective of not only an individual's desires, status, authority, wealth, and ideas about moral order, but the dependencies of the object on the human subject. As a result, when we find a storage area we find part of a social landscape that has the potential to hold the entire spectrum of objects that symbolized a household coherence and identity (Hendon 2000:47).

Chapter 4 The Household Complexes at Cerén

Introduction

The exceptional preservation encountered at the Classic Period Maya village of Cerén has provided archaeologists with a unique opportunity to study the household and its dynamic and diverse activities. Based on the types of material and botanical remains and their position within the domestic structures, it appears the inhabitants of each household were engaging in a variety of activities including part-time craft specialization, agrarian production and in some cases providing services to the special purpose structures (Sheets 2002). These activities would have necessitated particular material and agrarian products and therefore influenced the types of items being stored as well as their location within the domestic space. Thus, in order to understand the relation between the individual engaged in the act of the storing and the item being stored, it is necessary to understand what types of activities each household was participating in and how these activities impacted their storage practices. Therefore, the following chapter provides a discussion of each household complex and its related activities. Specifically it focuses on the architecture, artifact inventories, and artifact locations of domestic structures.

The Cerén Households

To date, excavations have been carried out at four household complexes at Cerén (Figure 4.1). Based on architectural data and artifact inventories (Sheets 2002), it appears all households had at least three structures; a structure for sleeping (domicile), a kitchen, and a storehouse (*bodega*). The domicile typically consisted of an inner room with a sleeping bench that was probably used for food sharing and other activities during the day (Sheets 2002:198). The storehouses, while similar in size to domiciles, were not as substantially constructed. The kitchens were circular in plan with very thin thatched roofs and thatched walls and had

replaceable floors. Of the four excavated household complexes, Household 1 is the most complete. It includes a domicile, a *bodega*, a kitchen and a possible workshop. Household 2 is partially complete with a domicile and a *bodega*; while Household 3 is known only by its kitchen and Household 4, by a storehouse.

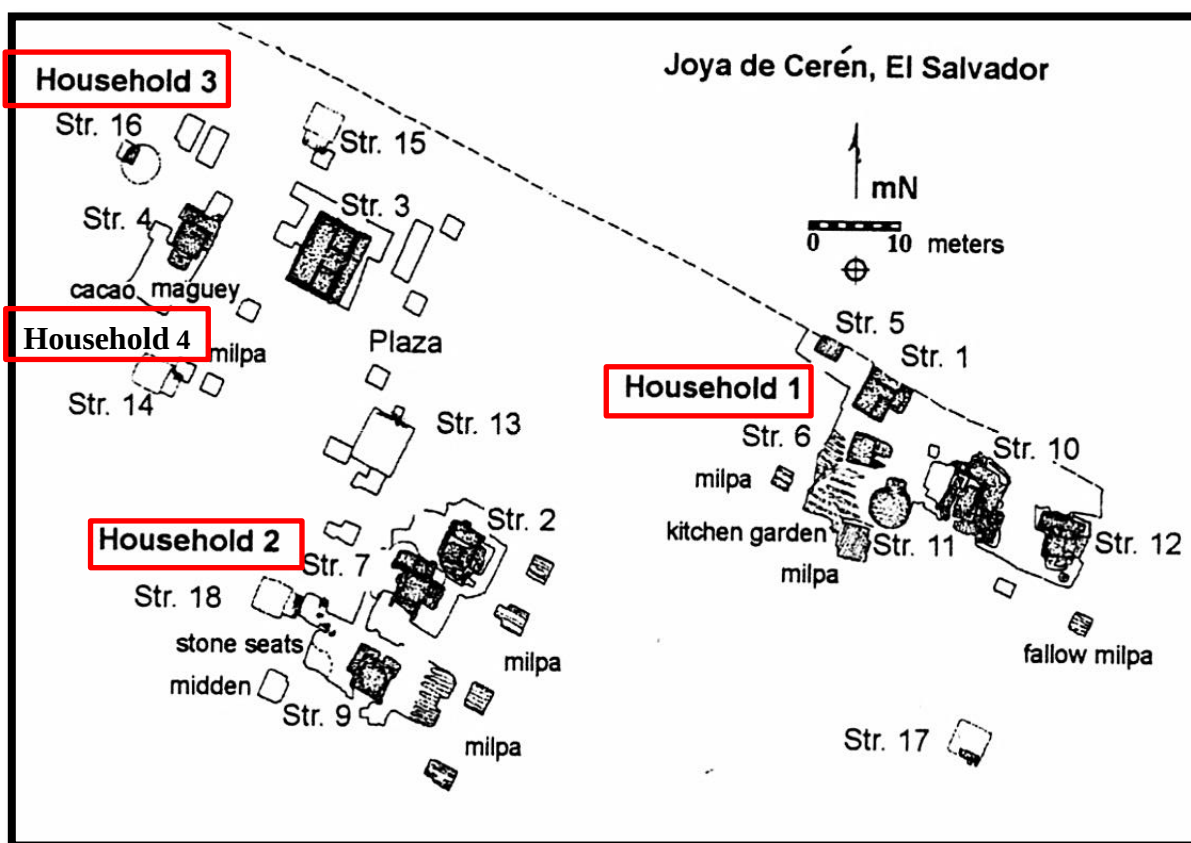


Figure 4.1: map of the Classic Period Maya site of Cerén (taken from Sheets 2000:218, used with permission of Payson Sheets).

Household structures varied considerably in terms of the quality of construction materials, nature of wall details, interior benches, and other architectural aspects. Most domestic buildings showed evidence of having been refurbished, with significant changes such as the relocation of the structure entrance from one side to another or changes in the principal function

of the building (Sheets 2002). Because Household 3 has only been partially excavated, the following descriptions focus on Households 1, 2 and 4.

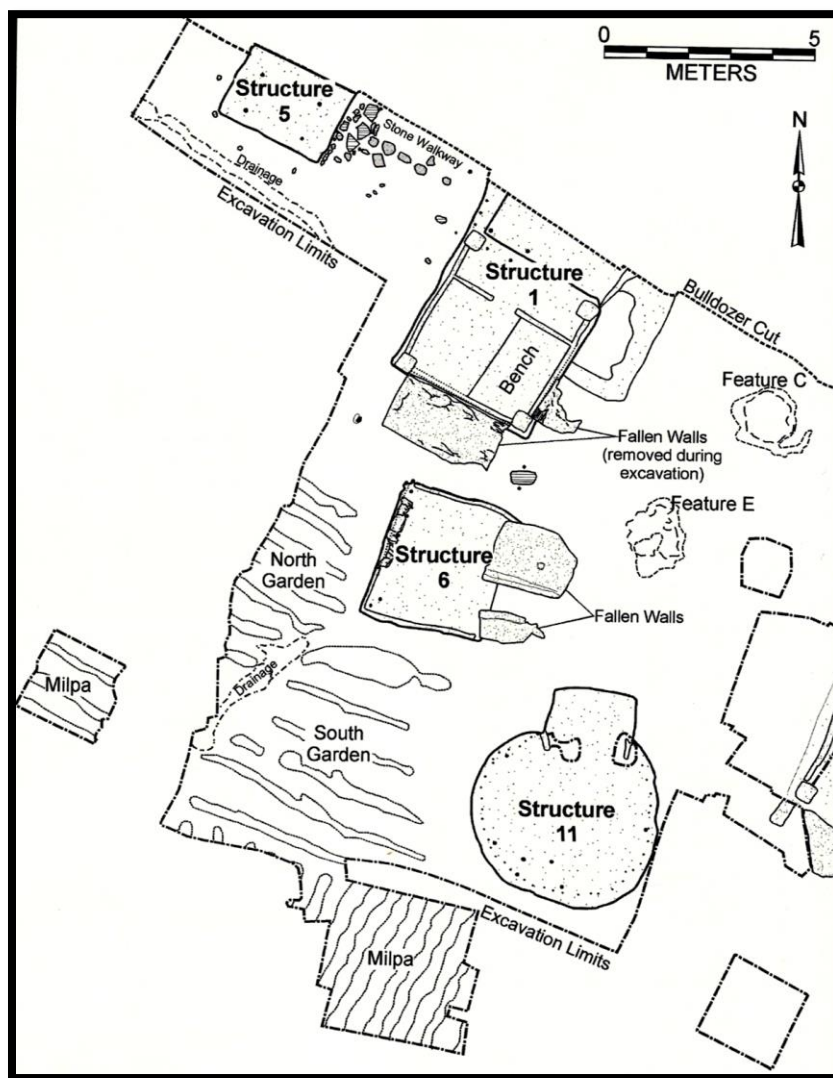


Figure 4.2: Map of Household 1 Complex (taken from Sheets 2002:46, used with permission of Payson Sheets)

Household 1

The Household 1 complex is the most completely excavated at Cerén (Figure 4.2). It is composed of multiple structures including; a domicile (Structure 1), a kitchen (Structure 11), a *bodega* (Structure 6) and a workshop (Structure 5) (Figure 4.2). Based on the material and botanical remains found in the household structures, it appears its inhabitants were engaging in

various activities including the procurement, storage, processing, cooking and consumption of food, as well as the participation in various craft activities including groundstone manufacture and cotton thread production (Sheets 2000: 2002). The following description of Household 1 will focus on the domicile, the kitchen, and the *bodega*.

Structure 1: Domicile



Figure 4.3: Picture of Structure 1, the domicile of Household 1 (Photo by author).

Architecture

Structure 1 (Sheets and McKee 1989; 1990), identified as a domicile or sleeping area, consisted of a single interior room with a raised bench embellished with a cornice decoration (Figure 4.3). The structure had two anterior rooms; one was a roofed, walled room, while the other room was unwalled and roofed (Figure 4.2). Entry to the principal interior room was gained via a doorway positioned in the partition wall which divided the anterior walled room and

the interior principal room. The northernmost end of Structure 1, which includes a portion of the un-walled roofed space, was removed by the bulldozer cut in 1976 (Figure 4.2).

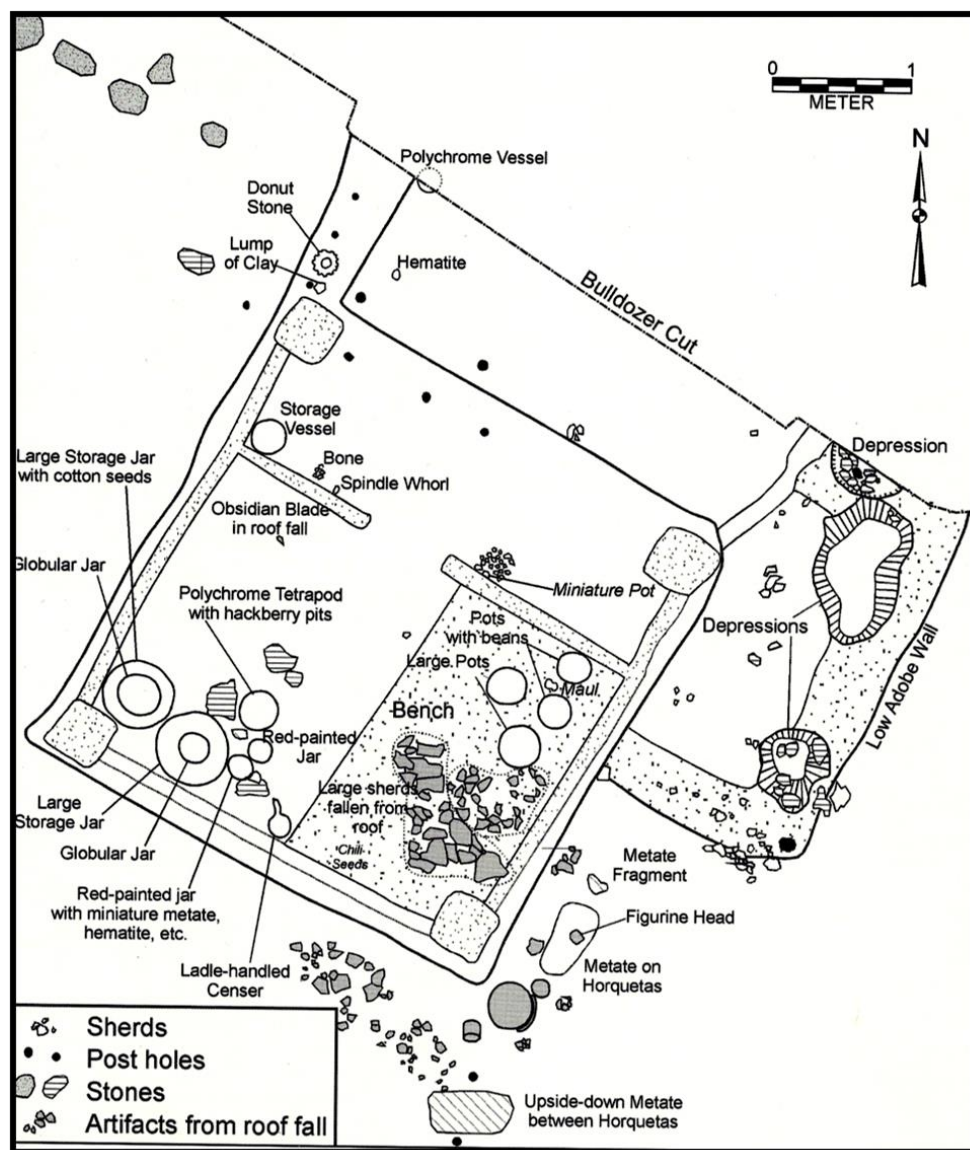


Figure 4.4: Map of artifacts in Structure 1, the domicile of Household 1 (taken from Sheets 2002:47, used with permission of Payson Sheets)

Artifacts

The Interior Room

The interior room consisted of two areas, the western floor and the eastern platform bench. The western floor was largely clear of artifacts except for a cluster of items in the southwest corner (Figure 4.4). Within this cluster were a large storage jar with cotton seeds and fibers inside, a smaller globular jar which sat atop this vessel, and another large storage jar that had a small fragmented globular jar inside of it.

In addition to these storage-related vessels, three other complete pots were found by the rear wall: a polychrome tetrapod serving dish and two small red-painted jars (Figure 4.4) (Beaudry-Corbett, Simmons, and Tucker 2002:48). Inside one of the small jars was a variety of small items including: three shaped cylinders of compressed hematite and quartz (Beaubien 1990:190), a spindle whorl, a miniature metate whose surface showed traces of hematite pigment, and a fragment of mother-of-pearl-like shell (Figure 4.4) (Beaudry-Corbett, Simmons, and Tucker 2002:48). Also in this grouping were two flat laja stones which had been placed close to one of the large storage vessels and had been used as grinding stones. A river cobble hammerstone and an incomplete vessel were found lying partially on top of one of the lajas. An obsidian blade was also found in this area, which had probably been stored in the thatch roofing (Figure 4.4) (Sheets 2002:141). On the floor, along the southern wall, near the platform bench, was a smashed small ladle-handled censer (Figure 4.4) that tested positive for copal (Sheets 2006). Mixed in with censer sherds were carbonized chile pepper seeds.



Figure 4.5: Picture of a Scraped-Slip ceramic vessel found in Structure 1 (Photo by Payson Sheets, used with permission of Payson Sheets).

The platform bench located along the southeastern wall of the interior room had a tight cluster of artifacts in the northwest corner (Figure 4.4) (Zier1983:131). They included four large pots and a grooved maul (Figure 4.4). Two of the pots within this cluster were empty, while the remaining two contained beans.

The remaining area of the interior room contained a widespread scatter of sherds that covered about 1 square meters to the north and west. Reconstruction of the vessels indicates one was a polychrome bowl, while the other was a very large storage vessel (Figure 4.5) (Beaudry-Corbett, Simmons, and Tucker 2002:49). They had probably been stored in the rafters and fell along with the carbonized chile pepper seeds also collected from this area.

The Anterior Walled and Unwalled Rooms

The anterior walled and unwalled rooms of Structure 1 did not contain very many artifacts. Along the rear wall, west of the doorway of the walled anterior room, were a large

storage vessel, some bone fragments, and a spindle whorl (Figure 4.4). Assuming the spindle whorl was used for making cotton thread, it appears this area may have been used as a space for crafts (Sheets 2006:46-47). On the opposite side, east of the doorway was a collection of twenty sherds and a miniature ceramic vessel (Figure 4.4).

The Surrounding Areas

A pottery working area was located on the western side of Structure 1 where a prepared lump of clay which still bore the fingerprints of a mature pottery maker was discovered (Sheets 2006:45). This suggests possible ceramic production related activities. Also found in the western area was a mounted donut stone (Figure 4.4). An active storage area was identified on the east side of Structure 1 where a metate was found in a working position on horquetas, which suggest this area may have been used for maize grinding activities (Figure 4.4) (Beaudry-Corbett, Simmons and Tucker 2002:49). Above this, hanging from the rafters, were two polychrome vessels, a large globular jar nested in a large sherd, and additional large sherds. One of the polychrome vessels contained a mixture of hematite pigment and mica. South of the active metate was another metate upside down on the ground between two postholes that could have held horquetas (Figure 4.4) (Beaudry-Corbett, Simmons and Tucker 2002:48). Since the entire area along the north side of Structure 1 was easily accessible from the entrances of the storage and kitchen structures of Household 1, it was probably used for numerous outdoor activities, including food preparation (Beaudry-Corbett, Simmons and Tucker 2002:56).

Structure 11: Kitchen



Figure 4.6: Image of Structure 11, the kitchen of Household 1(Photo by author).

Architecture

Structure 11 (Sheets and McKee 1990), identified as a kitchen, is unlike other structures at Cerén. It was a circular, single-room building oriented almost directly north (Figure 4.6). The area to the front consisted of a square, unwallled, roofed space with two stubs of bajareque that served as informal columns to the structure entrance which was left open. Pole walls covered in a thin layer of thatch made up the circular portion of the structure. Inside the main room, along the southern wall, was a raised shelf.

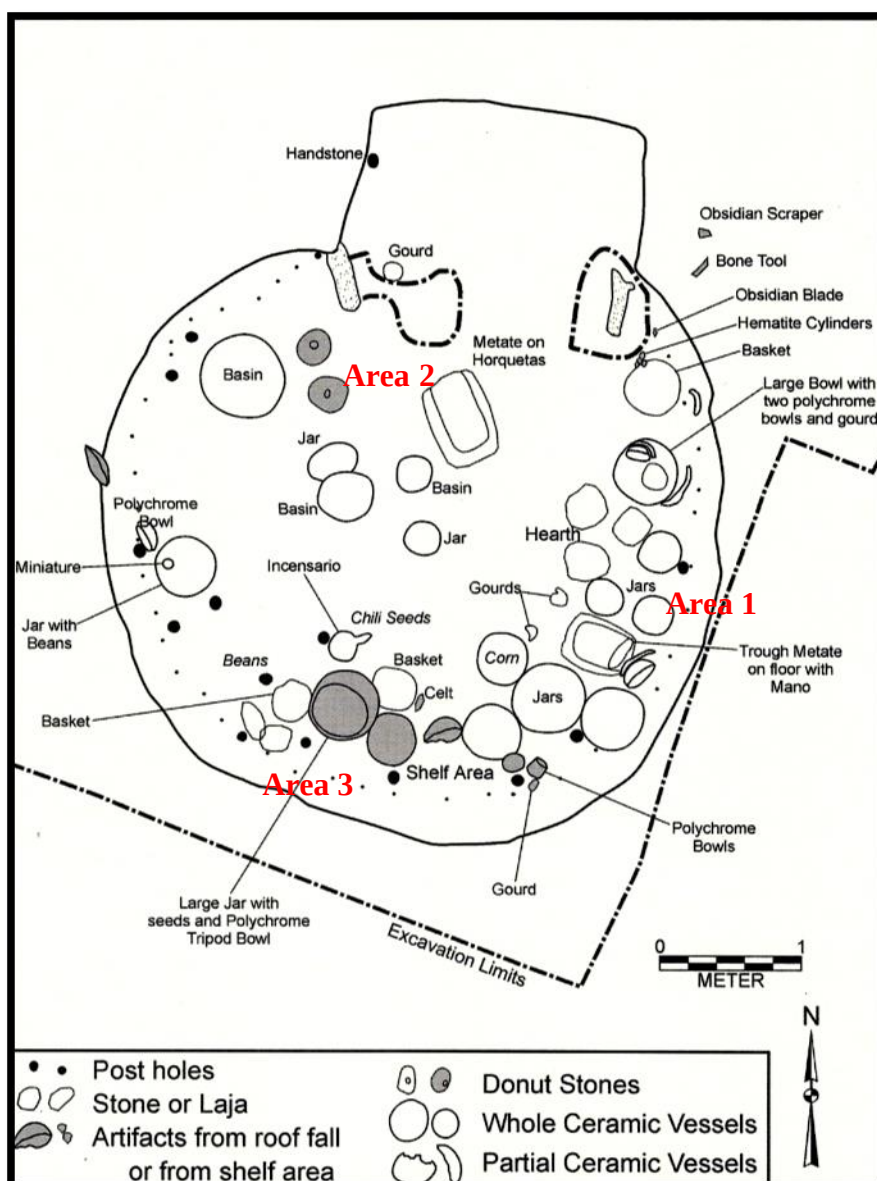


Figure 4.7: Layout of artifact locations within Structure 11, the kitchen of Household 1 (taken from Sheets 2002:52, used with permission of Payson Sheets)

Artifacts

Area 1: The Eastern Part of the Kitchen near the Hearth and the Floor-Level Metate

Based on the artifacts found on the eastern side of the kitchen, it appears this area was used for cooking, processing and preparation of food as well as for food storage (Beaudry-Corbett 2002:51). However, the area surrounding the well-used trough metate did not provide

adequate room for grinding, therefore, this area was probably used less frequently than central western portion of the structure which was more open and accessible and had a metate in an active use position.

Just inside the structure, east of the entrance was a three stone hearth. Additionally, the area contained a high concentration of wood ash and charcoal. To the south of the hearth was a rock embedded in the floor that had a mano and metate resting on it (Figure 4.8). These items were surrounded by a number of ceramic vessels, several painted gourds, and partial vessels possibly being used as informal containers or scoops (Figure 4.7) (Beaudry-Corbett, Simmons, and Tucker 2002:51). Two charcoal-encrusted vessels, one jar and one large cooking basin with handles were located between the mano-metate set and the hearth (Figure 4.7). The location of these items and the presence of charcoal on their exterior suggest they were most likely used for everyday activities such as cooking and food preparation. A basket was placed on the floor in the northeastern part of the structure. Its location suggests it was probably used for short-term storage (Beaudry-Corbett, Simmons, and Tucker 2002:51). An obsidian blade and a shaped cylinder of red pigment fell from the roofing in the same area (Figure 4.7).



Figure 4.8: Mano and metate set found in Structure 11 (Photo by Payson Sheets, used with permission of Payson Sheets).

Also in this area were two polychrome open bowls, a large utilitarian bowl and a painted gourd (Figure 4.7). Another open bowl of the same size as the polychrome ones but made of utilitarian ware had been left near the wall next to the mano-metate set. The utilitarian ware suggests possible food service of a less formal nature as a result of its location in an easily accessible position (Beaudry-Corbett, Simmons, and Tucker 2002:52). Three other vessels were located in this area. They were placed more or less in a line on the floor south of the mano-metate set (Figure 4.7). One was a cooking jar with charcoal on the exterior. As a result of the large capacity of these three vessels, it is possible they would have probably been used for special-occasion meals (Beaudry-Corbett, Simmons and Tucker 2002). Additionally, the kernels recovered from the interior of one of the vessels, suggest it was being used for long-term storage, since maize does not perish as easily as other foodstuffs (Beaudry-Corbett, Simmons and Tucker 2002). The final vessel was probably used for storage since there was no direct evidence of cooking residues (Beaudry-Corbett, Simmons and Tucker 2002:53).

Area 2: The space around the Metate on an Horqueta and the area to the West of It

The central area of the structure surrounding the mounted metate was considerably more open and accessible than the other parts of the structure which suggests it was probably used more frequently for activities such as the processing, cooking and preparation of food (Figure 4.7). Closest to the metate was an open basin with handles (Figure 4.7). Slightly to the west of this was a larger open basin with charcoal on the exterior (Beaudry-Corbett, Simmons, and Tucker 2002:53). Also in this area were two handleless jars, which have been interpreted as having been for liquid, and two donut stones that were probably located in the rafters (Figure 4.7) (Beaudry-Corbett, Simmons, and Tucker 2002:53). Isolated from the other vessels discussed above and closest to the west wall was a large open cooking basin (Figure 4.7). Given its location it was probably not used in everyday activities.

Area 3: The Rear Part of the Structure, Including the Wooden Shelf

The rear part of the structure contained a wooden shelf which appears to have been used for storage of both containers and commodities (Beaudry-Corbett, Simmons, and Tucker 2002:53). Based on the types of items located on the shelf, it appears they were accessed less frequently and thus were related to long-term storage practices. However, it is also possible that some processing was done in the area in front of the shelf (Beaudry-Corbett, Simmons, and Tucker 2002).



Figure 4.9: Picture of a Polychrome bowl found in Structure 11 (Photo by Payson Sheets, used with permission of Payson Sheets).

Towards the eastern end of the shelf were two small polychrome vessels (one cylinder, the other a recurved bowl) (Figure 4.9) and a painted gourd (Figure 4.7). Next to these items were a small utilitarian jar that contained squash seeds and a large utilitarian jar that contained unidentified seeds. Inside the jar with unidentified seeds was a tripod serving dish (Figure 4.7). This dish is a variant of the more standard polychrome types (Beaudry-Corbett 2002:53). The association of the jar and the serving dish suggests this could have been a set of objects available for occasional non-household events related to Structure 10 (Beaudry-Corbett, Simmons and Tucker 2002:53). Also on the shelf were a greenstone celt (Figure 4.7) and a lump of red hematite pigment mixed with crushed sheet silicate that was found immediately on top of a lump of pure red hematite pigment. Suspended above the shelf was a large utilitarian jar. It had likely been hung by a handle with string or netting from the roof beams (Beaudry-Corbett, Simmons and Tucker 2002).

On the floor near the eastern end of the shelf was a large utilitarian jar without handles that contained beans (Figure 4.7). Based on the lack of handles and presence of beans, it appears this jar was probably used for long-term storage of a commodity that could be scooped from the stationary container (Beaudry-Corbett, Simmons and Tucker 2002:53). This idea is further

supported by the two coarse-weave baskets and a mat with a mixture of at least three different kinds of beans piled on top of it located under the shelf.

To the west of the shelf was a cleared area that had a scatter of chili pepper seeds on the floor. The chiles were probably hung from the rafters (Beaudry-Corbett, Simmons and Tucker 2002:53). Also in this area was a ladle incensario which has probably been left on the floor after a recent use (Figure 4.7) (Beaudry-Corbett, Simmons, and Tucker 2003:53). Further to the west of the incensario, were a large jar with beans, a miniature bottle-shaped vessel which was found inside the jar of beans but had most likely been stored in the rafters, a polychrome serving bowl (Figure 4.9) and a partial utilitarian jar with beans and squash seeds (Figure 4.7). The food items being stored in these vessels suggest this area was probably used for long-term storage.

The Surrounding Areas

The square porch area of Structure 11 had very few artifacts and appears to have been kept clear for easy access into the structure. The three small items found in the porch area that had probably been stored in the roof include, an obsidian scraper, a long bone of a large mammal, and a fragment of a bone tool (Figure 4.7) (Beaudry-Corbett, Simmons, and Tucker 2002:51). Located on the floor, west of the entrance, were a slightly worked handstone and the remains of a painted gourd (Figure 4.7).

Structure 6: *Bodega*



Figure 4.10: Picture of Structure 6, the *bodega* of Household 1 (Photo by author).

Architecture

Structure 6, (Sheets and McKee 1989; 1990) identified as the *bodega* of Household 1, consisted of a single room (Figure 4.10). The doorway to the building was located in the east wall, facing a small patio area between this structure and the kitchen (Structure 11). This is different from other *bodegas* at Cerén in that it opened toward the kitchen rather than the domicile (Beaudry-Corbett, Simmons and Tucker 2002:49). The sides of the doorway were embellished with vertical cornice decorations. The east wall of Structure 6 was the only full bajareque wall. The northern end of Structure 6 consisted of a low, poorly made consolidated adobe wall (Beaudry and Tucker 1989); while the west and south walls had adobe mudding that had been built up to an irregular height. These incongruities have led to an interpretation of Structure 6 as having been in the process of renovation (Beaudry-Corbett, Simmons and Tucker 2002:49).

As a result of these structural renovations, members of the community would have been able to see into the structure and in some cases would have been able to reach through the gaps between the poles and take things from inside (Sheets 2006). This could be why many of the small valuable items that usually would have been stored in the *bodega*, such as the greenstone celt, were stored in the domicile and kitchen of Household 1 (Sheets 2006:47). While evidence indicates that the main function of Structure 6 was storage, it is possible that it may have been used as a site for occasional supplemental maize grinding (Beaudry and Tucker 1989).

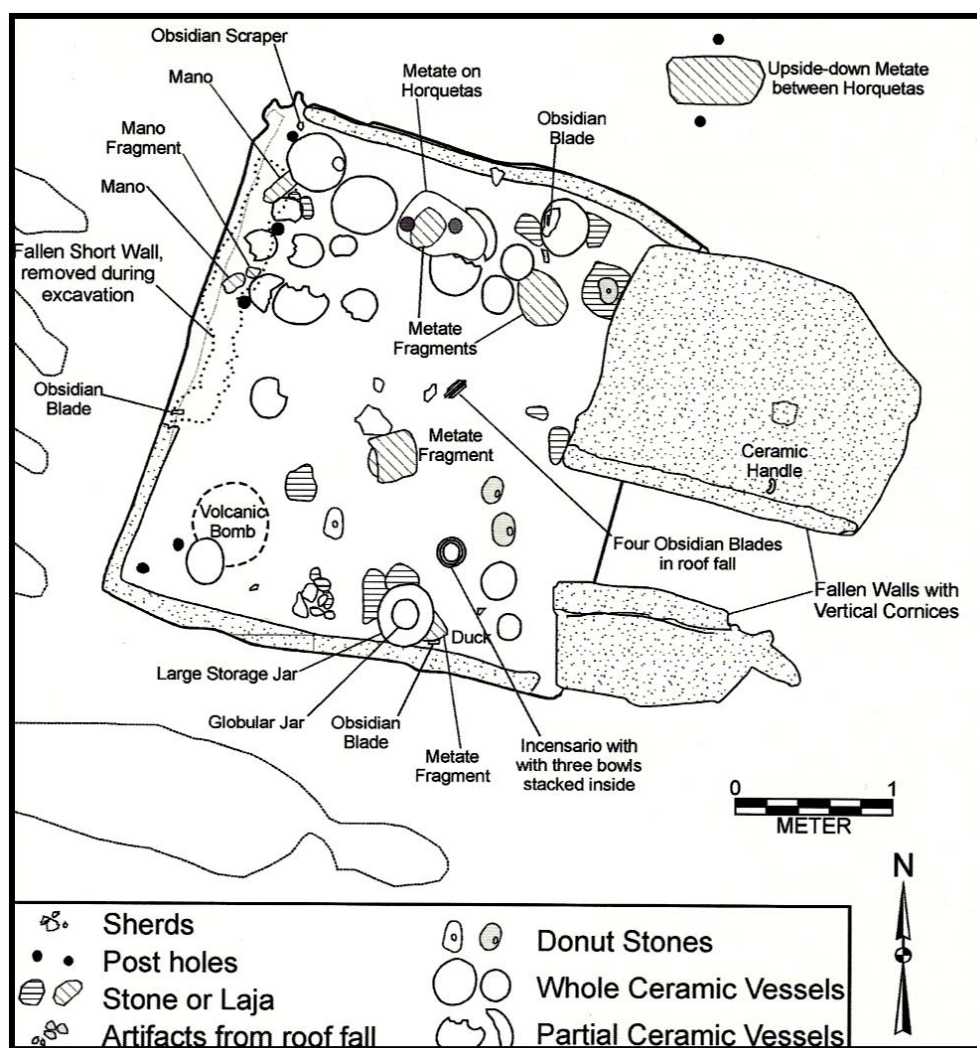


Figure 4.11: Map of Structure 6, the bodega of Household 1 (take from Sheets 2002:50, used with permission of Payson Sheets)

Artifacts

The Interior Room

Immediately upon entering the structure one would have encountered a flat worked stone, a fragmentary trough metate overturned above a stone, and the lower part of a nearby jar (Figure 4.11). To the right, along the north and west walls was a mixture of objects. These items were located in the least accessible area of the structure. They consisted of eighteen ceramic vessels (Figure 4.12), ten of which had been damaged during use but had not been discarded (Figure 4.11).

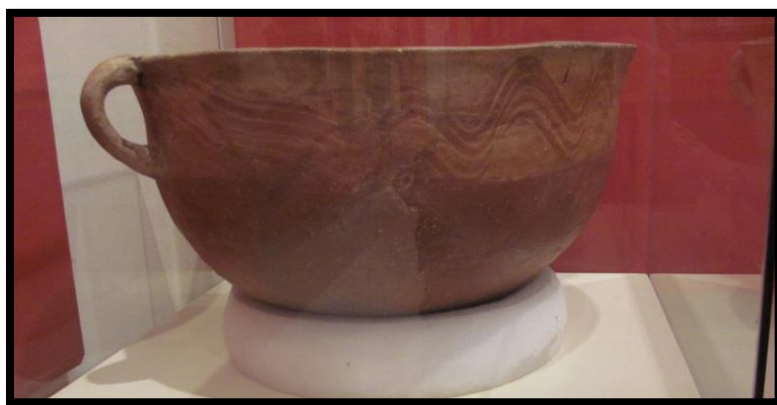


Figure 4.12: Picture of a Scraped-Slip ceramic vessel found in Structure 6 (Photo by Payson Sheets, used with permission of Payson Sheets).

Also within this area were five polychrome vessels, two whole manos, one partial mano, five hammerstones, and a collection of pottery sherds (Figure 4.11). Some of these objects were encountered on the floor, while others had been stacked (Beaudry-Corbett 2002:121). An obsidian scraper was found in the northwest corner (Figure 4.11). It was well hidden, and would have required moving at least two pots to reach (Sheets 2002:141). The high concentration of incomplete vessels, sherds mixed with vessels, sherd disks or blanks, and the presence of a thin walled jar mended with a plug, indicate that the broken pieces of pottery were stored for a variety

of reasons; possibly as digging implements or provisional containers for various commodities or retained to be repaired (Beaudry-Corbett, Simmons, and Tucker 2002:49). Based on the state of the ceramic vessels and their location within the structure, it appears this area was used for long-term storage.

The southwest corner of the building was kept relatively clear of artifacts suggesting it may have been used frequently as an activity area. A large lava bomb had smashed through this portion of the structure, obliterating a large storage vessel (Figure 4.11). Also found in this area was an obsidian scraper that had been stored in the thatch roof (Figure 4.11).

The southeast portion of the structure was loaded with artifacts; some were located in the roof, while others were found on the floor. A spindle whorl which had probably been used to make cotton thread and hematite red pigment mixed with mica inside of an organic container, probably a gourd were found in this area (Figure 4.11). Next to this mixture was a Copador polychrome melon-stripe bowl (Figure 4.11), which was probably used as a food-serving vessel (Beaudry-Corbett, Simmons, and Tucker 2002:50).



Figure 4.13: Picture of an incensario bowl found in the Household complexes at Cerén (Photo by Payson Sheets, used with permission of Payson Sheets).

Past the polychrome serving bowl was a stack of four pots (Figure 4.11). The bottom vessel was an incensario with a pedestal base and a long handle with a face on it for decoration. It tested positive for copal (Sheets 2006). Resting on the incensario bowl (Figure 4.13) were three pots, two Guazapa scraped-slip jars and a Cashal cream-type bowl. All pots were empty. Just beyond these two vessels were a hammerstone, a pumice smoothing stone, and a duck. The duck was tied to the south wall. Also in this area was a Guazapa scraped-slip storage jar that was capped by a smaller hemispherical jar (Figure 4.11). It was probably used to store some type of liquid (Beaudry-Corbett, Simmons, and Tucker 2002:49-50). Wedged up against this jar was a broken metate, a laja, a wedge of clay and a stream rock (Figure 4.11). Three donut stones were also found in this area (Figure 4.11). The types of items and their location within the structure suggest they were accessed infrequently, thus this area was probably used for long-term storage.

A prismatic blade was discovered in the thatch roofing just inside the doorway, about 30 centimeters from the south wall. The blade was in excellent condition and showed almost no use wear (Sheets 2006). Another blade was found tucked into a little crack at the bottom of the west wall of the structure. The blade had relatively extensive use wear on one edge, while the other edge was unused (Sheets 2006). A cluster of four prismatic blades had been placed together, in a bundle up in the roof in the center of the building (Figure 4.11). None of these four blades showed any evidence of use wear (Beaudry-Corbett, Simmons and Tucker 2002). The location and condition of these blades suggest they were used infrequently.

The Surrounding Areas

The surface under the eaves and immediately surrounding Household 1 near Structures 1 and 6 was quite uniform. It had a fairly level, smooth, moderate to densely compacted. The lack of plant growth and the small size of cultural debris, all suggest that the eaves and patio areas

were kept clear and swept regularly by household members and were used frequently for activities such as daily tool preparation, craft production, food drying, socialization, child's play and other domestic activities (Simmons and Villalobos 1993: 38-43).

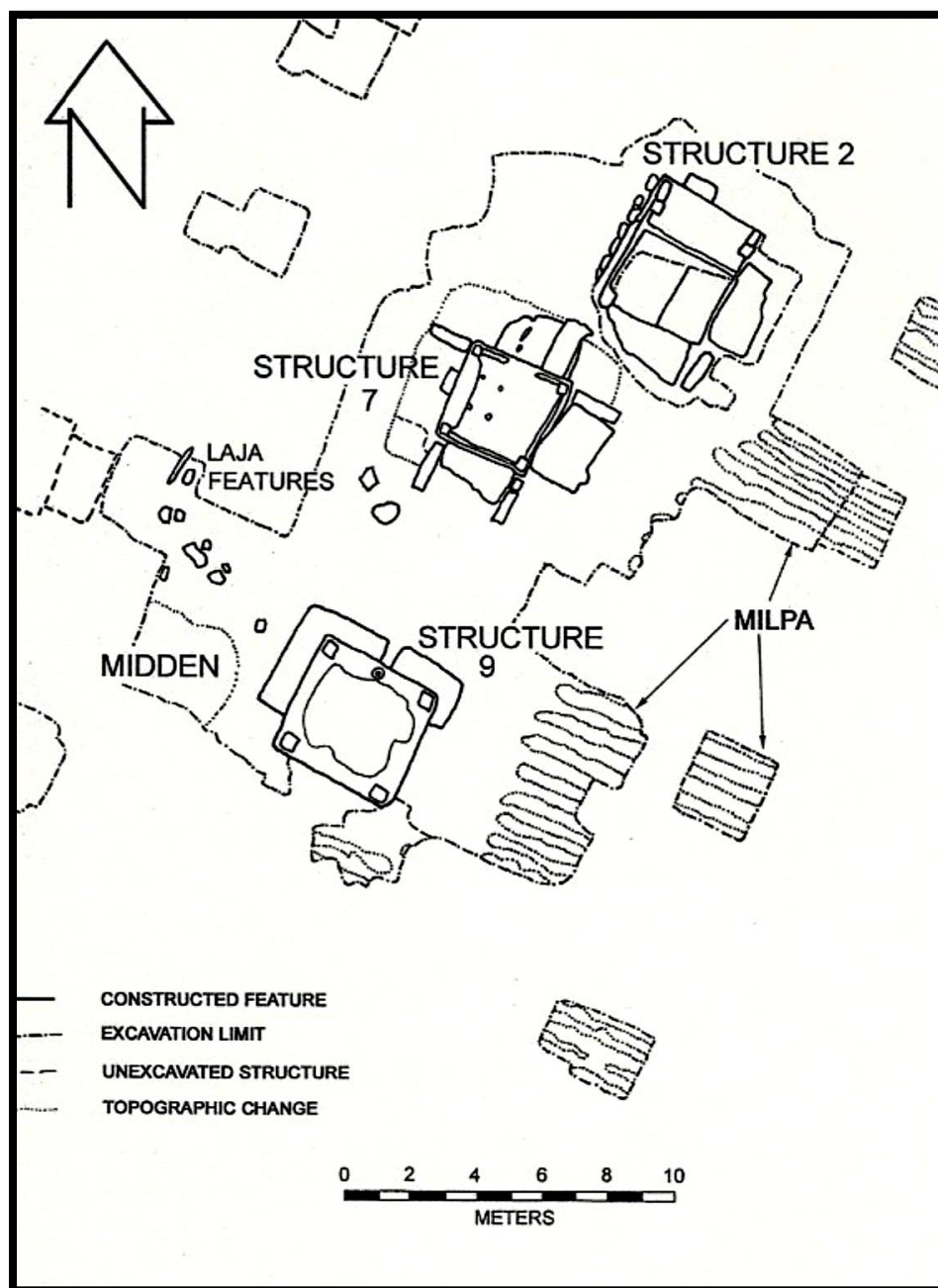


Figure 4.14: Map of Household 2 Complex and the Sweatbath (Structure 9), (taken from Sheets 2002:58, used with permission of Payson Sheets).

Household 2

The Household 2 complex is known by two structures, a domicile, (Structure 2), and a *bodega*, (Structure 7) (Figure 4.14). Based on the material items recovered from the structures, it appears the inhabitants of Household 2 were engaged in agricultural production and various craft activities including the manufacture of painted gourds (McKee 2002).

Structure 2: Domicile



Figure 4.15 Picture of Structure 2, the domicile of Household 2 (Photo by author).

Architecture

Structure 2 (Sheets and McKee 1989; Sheets and Kievit 1992), identified as a domicile, consisted of two rooms, the north room, and the south room (Figure 4.15). The northern most side of the structure was un-walled and served as the entrance into the building (Figure 4.15). It was probably closed by an organic pole wall (McKee 2002:59). The south room was enclosed on all four sides. Entrance to this room was gained via a doorway in the dividing partition wall

between the two rooms. The doorway was built of mudded poles and was framed with pilasters and a cornice (McKee 2002:59). A bench, with a large niche, covered the eastern portion of the south room. Additionally, a raised shelf (*tabanco*) ran the width of the building. It covered much of interior and extended outside under the eaves of Structure 2.

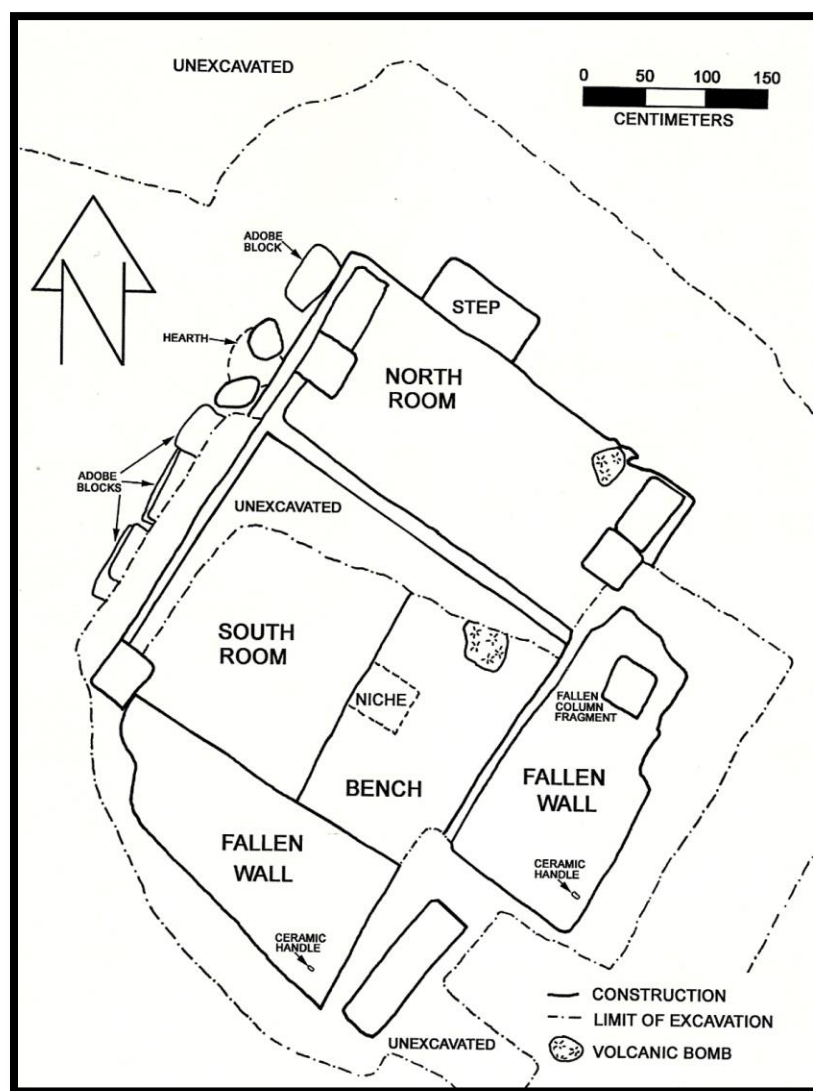


Figure 4.16: Plan of Structure 2, the domicile of Household 2 (taken from Sheets 2002:61, used with permission of Payson Sheets).

Artifacts

The South Room

A large adobe bench with a niche ran along the eastern side of the south room, filling almost half of the room's interior (Figure 4.16) (McKee 2002:59). Within the niche were three complete polychrome vessels, a Gualpopa Polychrome open bowl, a Copador shallow tripod bowl, and a Copador Polychrome bowl with melon stripe decoration. The bowl contained food residue and marks where someone's fingers had passed while removing food which suggests this area was probably used in everyday use to serve and consume food (McKee 2002:62).



Figure 4.17: Photo of the types of marine shell found at Cerén (Photo by author).

In addition to the ceramic vessels, two other artifacts were found in the niche, part of a marine bivalve (Figure 4.17) and a painted object. Resting on the bench were a spatulate bone tool, a small hammerstone and three ceramic vessels. The ceramic vessels have been identified

as; a globular scraped-slip jar, a smaller scraped-slip jar, and a small tripod incensario (McKee 2002:62).

The only artifacts found in contact with the floor in the south room were a series of small poles that had been lashed together with agave fiber string. They were identified as a portable fence (Sheets 2006:69). A similar one was discovered on the floor by the front door of Structure 7, the *bodega* of Household 2. Several artifacts had been stored in the roofing of the south room. These items included two prismatic blades, a Cashal cream storage vessel, two large sherds from storage jars, and a large-stemmed percussion macroblade. One of the prismatic blades was complete and had been barely used, while the other was broken and had moderate use wear along with some organic residues (Sheets 2002:141). Additionally, a small, roughly made side scraper was found resting on top of the northwest column within this room.

The North Room

The north room had no artifacts. However, it did contain an enigmatic feature consisting of a mixture of TBJ tephra, grass, and water. A similar deposit was found in Structures 3 and 4, suspended from the ceiling (McKee 2002:6). The lack of artifacts encountered in this room suggests it may have been used as a space for activities such as socialization, child's play, etc.

The Surrounding Areas

Outside the west wall of Structure 2 under the eaves, were nine large adobe bricks and a hearth. Two 30-35 centimeter (diameter) stones were placed 15 centimeters apart and about 10 centimeters from the wall. A fire had been built between the stones, and pots evidently rested on the stones and leaned against the wall, based on diffuse charcoal staining around the rocks

(McKee 2002:64). The presence of the hearth and charcoal around the rocks, it appears this area was used in everyday activities such as cooking and food processing.



Figure 4.18: Biconically perforated donut stones found at Cerén (Photo by Payson Sheets, used with permission by Payson Sheets).

In the western area outside of Structure 2 was a high concentration of groundstone. Most of these items would have probably been resting on the shelf that ran the length of the building (McKee 2002:63-64). The groundstone implements recovered in this area include three biconically perforated donut stones (Figure 4.18), one of which was a perforated mortar with a wooden pestle, a whetstone, a possible hammerstone, a carnivore tooth, two large mammal bone fragments and a minimally worked bone splinter. Of the three biconically perforated donut stones, one was small with little use-wear while another had been broken during the eruption (Sheets and McKee 1989:54). The only item recovered outside Structure 2 in direct contact with the floor was a ceramic jar with modeled and appliqued human features.

Other artifacts discovered in the areas outside of Structure 2 were discarded prior to the eruption and include; ceramic sherds, an edible jute (snail) shell (*Pachychilus* sp.) (Figure 4.17),

several seeds, one identified as avocado (*Persea americana*), a ground sherd spindle whorl and an obsidian macroblade fragment (McKee 2002:63).

Structure 7: *Bodega*



Figure 4.19: Picture of Structure 7, the bodega of Household 2 (Photo by author).

Architecture

Structure 7, (Sheets and McKee 1990; Sheets and Kievit 1992) identified as the *bodega* of Household 2, was a one-room, thatched-roof, bajareque structure located 1.2 meters southeast of Structure 2 (domicile) (Figure 4.19). In front of the room was a porch. The northern wall of Structure 7 contained a doorway that served as the only entrance into the building. A raised wooden shelf was located in the west-central portion of the room (Figure 4.20). Several lines of evidence indicate that Structure 7 evolved and expanded over time. An adobe step was found on the west side of Structure 7 but the west wall was closed at the time of the eruption (Figure 4.20). This suggests the building may have originally opened to the west, but was remodeled to open to the north (Sheets 2002:72).

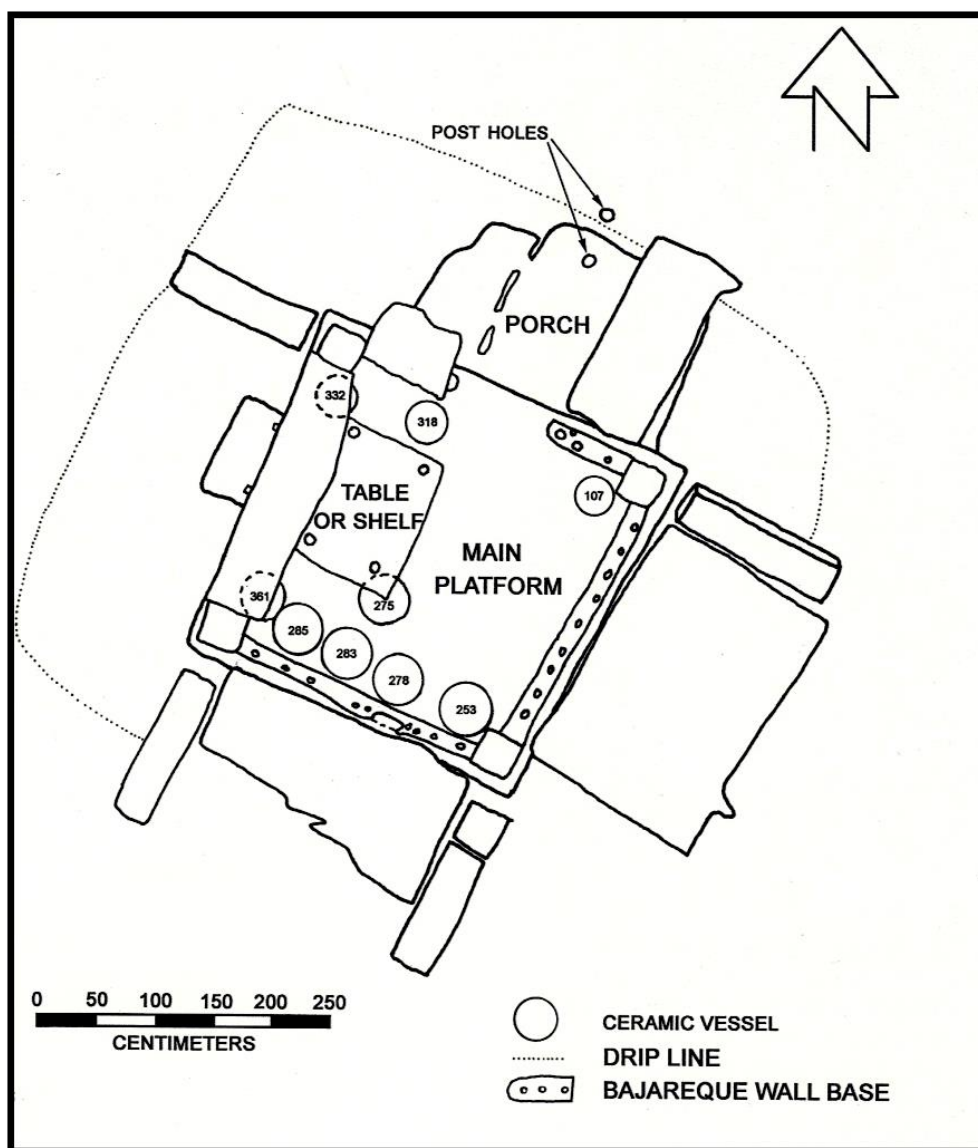


Figure 4.20: Plan of Structure 7, the bodega (taken from Sheets 2002:66, used with permission of Payson Sheets).

Artifacts

The Interior Room

The interior of Structure 7 was kept relatively clear of artifacts. Most of the recovered items were stored above the floor in elevated positions. Artifacts in direct contact with the floor were kept on the edges. This artifact patterning suggests this structure was used frequently for various activities such as painting. Along the southern wall on the floor of Structure 7 were five

large Guazapa scraped-slip storage jars (Figure 4.20). Sheets (2006:73) suggest they may have been used to transport water for the sauna which is located to the south of Structure 7 (Sheets 2006:73). Also found on the floor of this room were one medium-sized and two large pots. They appeared to have been used as storage for various kinds of seeds, although one did contain a lump of specular hematite wrapped in organic material and an unidentified cylindrical fibrous object (McKee 2002:67). In the west-central portion of the room was a raised wooden shelf (Figure 4.20). The northern portion of the shelf was covered by a woven mat that may have originally covered the entire the feature (McKee 2002:65). A small jar with a ground sherd lid and another small polychrome dish had been stored on the shelf (McKee 2002:65). On the floor beneath the shelf was a large storage jar.



Figure 4.21: Miniature decorated vessels containing cinnabar and jade beads (Photo by Payson Sheets, with permission of Payson Sheets).

A large number of artifacts were found in elevated contexts within the *bodega*. Suspended from the southwest corner was a cache of items that were stored in an organic

container and included five cinnabar-filled miniature decorated ceramic vessels (Figure 4.21) (Beaubien 1990). One of the miniature vessels had a face on one side and a coiled tail on the other. Also recovered from within this deposit were seven jadeite beads (Figure 4.21), another bead made from dark gray stone, a disk-shaped shell bead with an incised five-pointed star, two incised shell pendant fragments, a small mammal bone, a cowrie shell, and three shell fragments. The final items in the deposit were fragments of iron oxide minerals, including limonite and hematite, and some prepared hematite pigment (McKee 2002:67).

Other artifacts stored in elevated contexts include a large polychrome dish, a medium-sized scraped-slip jar, and a Copador bowl with a monkey decoration, a Campana Fine-Line tripod plate, six obsidian prismatic blades, all of which were tucked in the thatch roofing, and several large sherds used for storage or in provisional discard (McKee 2002:67). Additional items stored in elevated contexts include: an unhafted green stone celt, an anthropomorphic figurine carved from a large mammal longbone depicting an older man with a tall, broad-brimmed hat and some specular hematite, a fine spindle whorl, with a carved coyol palm endocarp with a wooden shaft, and a wood ash hemisphere (Beaudry-Corbett and McCafferty 1998). The spindle whorl was apparently used to make fine thread (Sheets 2000).

The Surrounding Areas

The majority of artifacts recovered from the porch and areas surrounding Structure 7 were stored in the thatch roofing. These items include a recurved bowl, a macroblade fragment, three bowls and two prismatic blades. None of the prismatic blades showed any use wear. Also in elevated contexts were two manos that were resting on the wall top. They were the only grinding instruments found in Structure 7. A small hematite cylinder and several deposits of

wood ash were also recovered from elevated contexts. The wood ash was most likely stored in organic containers, probably gourds that had decomposed (McKee 2002:68).

The north side of Structure 7 appears to have been utilized as a household activity area. Based on the recently nibbled corncobs left on and beside the porch, it appears it was used for eating corn on the cob (Sheets 2006:72). The northwest area of Structure 7 was most likely utilized for trash disposal as the area contained several large sherds and a bowl (McKee 1990).

Household 4

Household 4 is only known by a single structure, a *bodega*, (Structure 4) (Sheets and McKee 1990). Based on the material and organic remains recovered from Household 4, it appears its inhabitants were participating in a variety of activities including the storage of maize and other unique food items such as cacao (Gerstle and Sheets 2002:77). They were also processing agave and cotton seeds, as well as consuming and preparing food.

Structure 4: *Bodega*



Figure 4.22: Picture of Structure 4, the bodega of Household 4 (Photo by author).

Structure 4, identified as a *bodega*, consisted of two rooms, the north room and the south room (Figure 4.22) (Sheets and McKee 1990). Only three of the four principal walls of Structure 4 were of bajareque construction, while the fourth was constructed of poles. The beams connecting the corner columns which ran along the wall tops formed rounded cornices. Additionally, the north side of the partition wall facing into the north room was embellished with enlarged door jams (Gerstle and Sheets 2002). Entrance into the north room was gained through a swinging pole door located in the northernmost wall of the structure which was also constructed of poles. The south room could only be entered through a second doorway constructed in the partition wall of the two rooms. Above the doorway, on the north side of the partition wall, was a high shelf (*tabanco*). The shelf ran from the western to the eastern

horizontal roof beam; one would have had to duck under it and the wooden lintel of the doorway to enter the south room (Sheets 2006:82).

In comparison to other *bodegas* at Cerén, the size, height and number of rooms of Structure 4 indicate it was initially built to be a domicile but was later converted to a *bodega* (Gerstle and Sheets 2002). It appears that the earthen bench in the south room had been entirely removed (McKee and Sheets 2003). Based on the artifacts and botanical remains found within and around structure 4, it appears its inhabitants specialized in agrarian production (Sheets 2002).

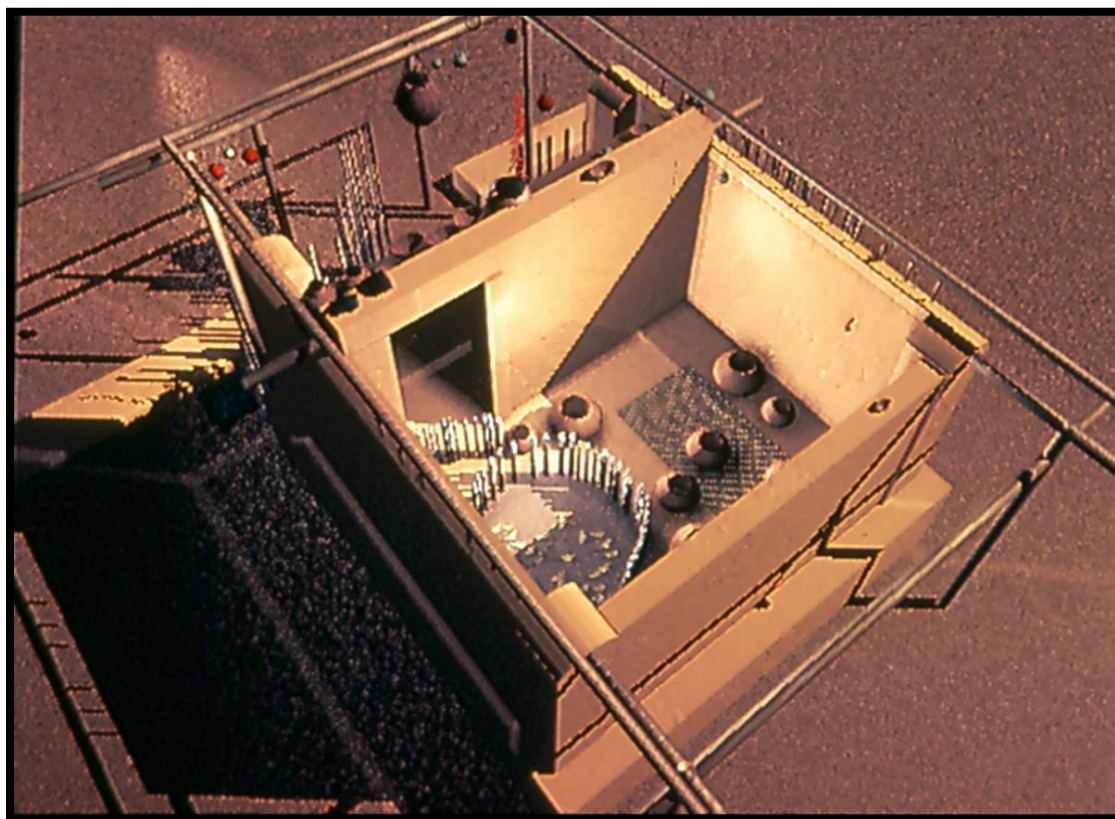


Figure 4.23: Computer Model of Structure 4 with artifacts (taken from Sheets 2002:77, used with permission from Payson Sheets).

Artifacts

The North Room

The majority of artifacts found within the north room were located in elevated contexts on a high shelf that ran along the north side of the partition wall. Based on the types of items located on the shelf and the agrarian products stored in some of the vessels, it appears these items were used less frequently by inhabitants of Household 4. The items located on the shelf included ten ceramic vessels, including a ladle incensario with an animal head decoration that probably was used in Household 4 lineage or animal spirit companion rituals, two polychrome vessels which were most likely used to serve corn gruel, two polychrome tripod plates used to serve tamales, two woven textiles, one of which was probably cotton, a ball of bee's wax, a few lajas which may have served as vessel lids, and a piece of a finely woven cotton cloth (Figure 4.23) (Gerstle and Sheets 2002:78). Also located on the shelf were four scraped slip utility jars. Two were empty while another stored cacao and the other chile seeds. Near the jars was a large open-mouthed bowl that also contained chile seeds. A bone needle, an awl or corn husker, and more red pigment were stored on the shelf or possibly the thatched roofing above it (Gerstle and Sheets 2002:78).

A few items fell just north of the north room but were probably inside it before the eruption (Gerstle and Sheets 2002:78). These items were located in an elevated position either resting on the shelf or above the shelf. These items included a scraped-slip jar and two obsidian prismatic blades. Both of the obsidian blades were unused suggesting they were not used in everyday activities (Sheets 2006). A total of fourteen hemispheres of wood ash were found along the northern pole wall in the north room; they were probably gourds that had been half full of wood ash from hearth cleaning that were hung in bags along the north side of the structure.

The ash was most likely stored for use in soaking maize overnight before grinding it into masa (Gerstle and Sheets 2002:78).

The artifacts recovered from floor contexts were largely concentrated in the western part of the north room, near the doorway leading into the south room. These items included three large utilitarian storage jars and a lump of red pigment with mica, which may have been used to paint people or organic artifacts (Gerstle and Sheets 2002: 78). A splotch of hematite paint was found on the floor on the eastern side of the room which suggests this area may have been used for painting (Sheets and Gerstle 2002:78). Near the pigment lump was a pair of sticks that were most likely used for depulping agave leaves (Gerstle and Sheets 2002:78-79).

The South Room

The south room was twice the size of the north room. The majority of artifacts were in the east half of the room and in the northwest portion near the doorway. Most of the floor of the south room was covered by a woven mat that had five jars placed around its margins (Figure 4.23). It probably served as a daytime work or craft area and a place for eating meals (Gerstle and Sheets 2002:78). Evidence indicates that after the meal, the serving vessels were placed on the floor to the southeast of the mat, and the area was then converted to an overnight storage location (Gerstle and Sheets 2002:78). A wattle and daub maize crib was built onto the floor of the south room (Figure 4.23). The structure was 90 centimeters in diameter with an unknown height (Gerstle and Sheets 2002:78). Within the crib, layers of leaves were laid perpendicular to each other separating the food from the floor. The crib contained husked corn on the cob and probably held at least 0.5 cubic meters of maize (Gerstle and Sheets 2002:78).

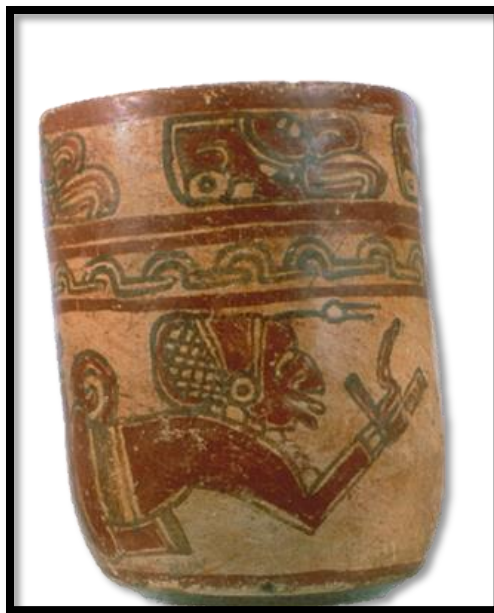


Figure 4.24: A Polychrome cylinder Vase found in Structure 4 (Photo by Payson Sheets, used with permission of Payson Sheets).

Twelve pots (including the five mentioned above) were located on the floor of the south room. Of these twelve, nine were Guazapa Scraped Slip storage vessels. Three of these nine contained food remains including cacao, squash and cacao seeds covered by cotton gauze cloth with chiles on top. The pot with squash also contained an antler maize husker that probably fell into it during the eruption. It was probably used to remove the husks from the maize stored in the large maize crib built on the floor in the same room (Gerstle and Sheets 2002:78). Three of these twelve vessels were found in the southeast corner of the room. They consisted of a stack of two upside-down hemispherical polychrome bowls on top of a polychrome cylinder vessel (Figure 4.24). The latter held a yellow liquid that probably was a mixture of finely ground maize and water (Gerstle and Sheets 2002:79). One of the bowls within this stack had finger marks on the inside and had yet to be washed (Sheets 2006). It was probably used for serving gruel (Gerstle and Sheets 2002:78).

Several items were stored in elevated contexts in the south room, but they were far fewer than the north room. Some of these items included a bone needle, red pigment lumps, some lajas, chiles, a large jade axe, a painted gourd, and an unpainted gourd that contained beans. Most of these items were probably on top of the dividing wall or in the thatch roofing (Gerstle 1990:128). Additionally, a polychrome hemispherical bowl was found on the top of the partition wall. It had sustained a direct hit by a lava bomb which smashed and dispersed it over the south room.



Figure 4.25: the remains of a basket found at Cerén (Photo by Payson Sheets, used with permission of Payson Sheets).

The Surrounding Areas

The area to the east of Structure 4, under the eaves, consisted of a prepared floor and appears to have been used for temporary storage (Gerstle and Sheets 2002:79). Items recovered from this area include a polychrome cylinder vase found at the northern end and a basket (Figure 4.25). The basket was resting on two laja stones, likely to retard capillary groundwater from affecting seed storage (Sheets 2006:86). The basket was coiled on the bottom and supported by

small vertical poles around the periphery. Carbonized beans were found inside of the basket and some string was found below the beans, which may have been part of a net bag that suspended the basket of beans below the thatch roof (Gerstle and Sheets 2002:78). Two portable fences were also stored in this area. One was tightly coiled and bundled in leaves that were tied with a two-ply agave fiber twine. The other was extended and was leaning against the eastern wall. It was over 2 meters in length. Along with the portable fences were three pairs of sticks that had probably been used for depulping maguey leaves (Simmons 1996).

In the northwest corner of Structure 4 was a metate mounted on horquetas. The west end was higher, indicating that the user faced east toward the building entrance (Gerstle and Sheets 2002:79). Its last use was to grind cotton seeds, probably to obtain oil for cooking (Gerstle and Sheets 2002:79). It appears the area to the north of the building was kept clean and may have been used for multi-purpose activities (Sheets 2006).

About 2.5 meters to the south of Structure 4 was an agave garden that consisted of about 70 mature plants. They continued into the unexcavated area to the west and east. Based on the three pairs of sticks found at the northeast corner of Structure 4, this area was probably used for depulping agave leaves (Sheets 2000). This is further supported by the cracking and organic staining and darkening of the clay floor around the northeast pole of Structure 4 (Sheets 2000:226).

Summary

Based on the types of artifacts, botanical remains, and architecture of the domestic structures, it appears the inhabitants of Cerén were participating in a variety of activities some of which include part-time craft specialization, agrarian production, food transportation and processing, cooking, weaving, etc. (Sheets 2000; 2002). For instance, the high concentration of

both finished and unfished metates, manos, donut stones and hammerstones stored in Structure 6, the *bodega* of Household 1, suggests its inhabitants were manufacturing groundstone implements (Sheets 2000:226). Additionally, judging from the amount of spindle whorls in and around the household, it appears they were also producing a lot of fine fiber, presumably cotton (Sheets 2002:203). Furthermore, an unfired lump of clay that was located in the unwallled roofed room of Structure 1, the domicile of household, suggests household members were engaging in ceramic production (Beaudry-Corbett, Simmons, and Tucker 2002:56). Further evidence supporting ceramic production within Household 1 can be found within Structure 6, where high concentrations of ceramics were found in various states of repair.

Based on the five miniature ceramic vessels, each containing a slightly varying hue of cinnabar pigment found in Structure 7, the *bodega* of Household 2, as well as the use-wear of the obsidian blades (Simmons 1996) it appears the inhabitants of Household 2 were making decorated gourds (Sheets 2000). Furthermore, the large bag of wet Ilopango volcanic ash stored in Structure 2, the domicile of Household 2, could have served as an efficient abrasive in cleaning the inner surfaces of the gourds (Simmons 1996).

As a result of the large amount of botanical remains found within Structure 4, it appears the inhabitants of Household 4 specialized in agrarian products as well as the production of special foods or sauces (Sheets 2000:226). They grew chilies, cacao, agave and cotton in abundance, more than what was needed for their own consumption (Sheets and Gerstle 2000:79). Within Structure 4, the *bodega* of Household 4, there was a large number of dried chiles hanging in several bunches inside of the building. To the south of Structure 4 was a young cacao tree and cacao seeds were being stored inside of the structure. Additionally, the metate elevated on horquetas under the roof just outside the northwest corner of the building had evidence of ground

cotton seed fragments which was probably ground to obtain oil for cooking and a large number of cotton seeds were being stored in Structure 4 (Lentz 1996). The area to the east of the structure had over 70 agave plants, as well as staining from the drying of agave leaves. Furthermore, two kinds of plants to the northwest of the building were growing vertical poles that were used in wall reinforcement and roof support (Sheets and Simmons 2002:180).

The goods produced by each household through part-time craft specialization were traded within the community and at regional marketplaces throughout the Zapotitán Valley (Sheets 2000). They were most likely used to acquire imported items such as: polychrome ceramics, obsidian, jade, hematite cylinders, and presumably salt (Sheets 2002).

In addition to the part-time craft specialization and agrarian production, it also appears that two of the household complexes at Cerén were maintaining relationships with the special purpose structures within the community (Sheets 2000). These relationships will be elaborated on in the following chapter (Chapter 5).

Chapter 5 : The Specialized Structures at Cerén

Introduction

The households at Cerén were not independent of the larger economic, political and social institutions of the community. Architectural data, as well as artifact and botanical remains suggest that two of the household complexes at Cerén were providing services in the form of food processing, transportation, cooking and preparation, architectural maintenance as well as preparation for community festivals, to three of the special purpose structures within the community (Sheets 2002). The services provided by household members would have necessitated the use of specific material and agrarian products and as a result would have influenced the types of items each household possessed as well as their location within the domestic space. Therefore, in order to better understand the relationship being the individual participating in the act of storing and the item being stored, it is necessary to discuss the special purpose structures and their relation with the household members at Cerén. Furthermore, because the specialized structures were not engaging in domestic functions they provide a comparative framework for better understanding how domestic storage practices are communicative of ideas about wealth, status, authority and moral order.

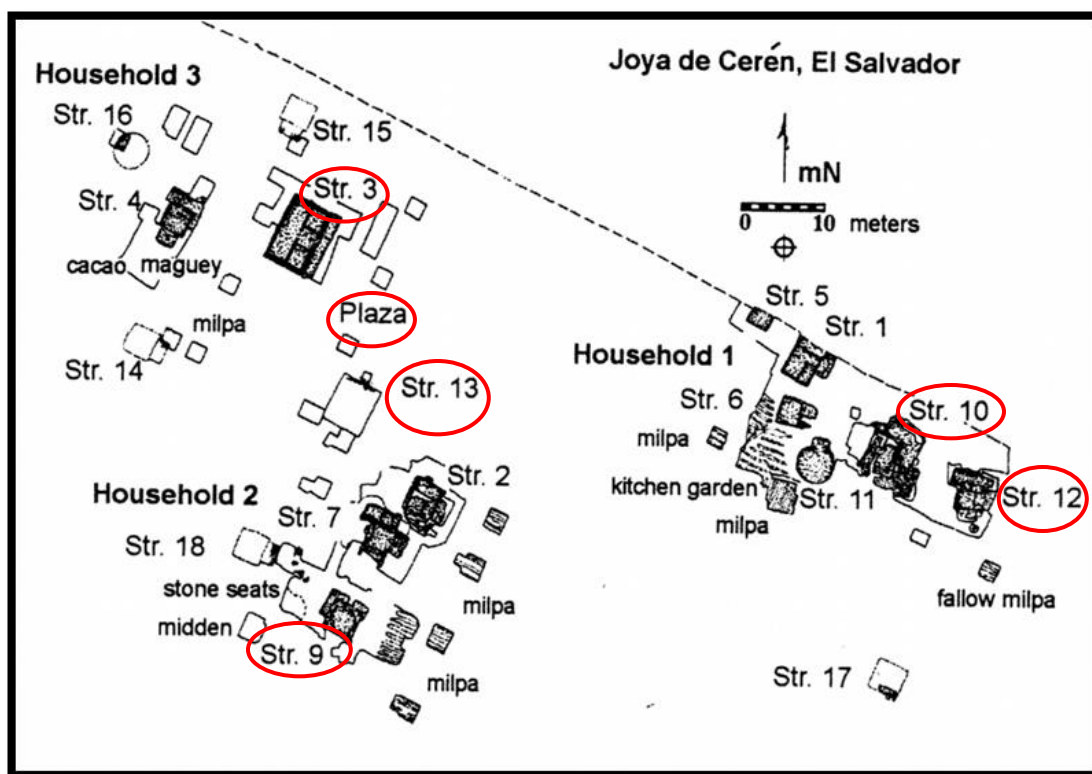


Figure 5.1: Map of Cerén site Center with special purpose structures and the plaza circled (taken from Sheets 2002:2, used with permission of Payson Sheets).

The Special Purpose Structures

To date, archaeologists have completely or partially excavated five special purpose buildings at the Cerén site. Evidence indicates that the overt religious activity of the village centered around two structures designated as 10 and 12 (Figure 5.1) (Sheets and Kievit 1992; Sheets and Simmons 1993), while the civic and political functions were carried out in at least one structure, known as 3 (Figure 5.1) (Sheets and McKee 1989). Additional evidence indicates a second structure designated as 13 may have also have provided civic functions to the community, however this structure is only partially excavated and interpretations are preliminary (Gerstle 2002). Finally, an earthen domed structure with a large firebox, designated as Structure 9, was identified as a sauna (Figure 5.1) (Sheets and McKee 1990; Sheets and Kievit 1992).

The Civic Complex

The civic complex at Cerén is composed of a large plaza area and two buildings identified as Structures 3 and 13 (Figure 5.1). These structures are located on the western and southern sides of the plaza respectively. Because only a small portion of Structure 13 and the plaza have been excavated, this section will focus on Structure 3.



Figure 5.2 Picture of Structure 3, the civic building (Photo taken by author).

Structure 3

Structure 3 was the largest building at Cerén (Figure 5.2). It measured 8 meters long, 5 meters wide and was more than 3.5 meters tall (Gerstle 2002:83). It was made of massive solid adobe walls and similar to most architecture at Cerén, was oriented 30 degrees east of magnetic north (Gerstle 2002:83).

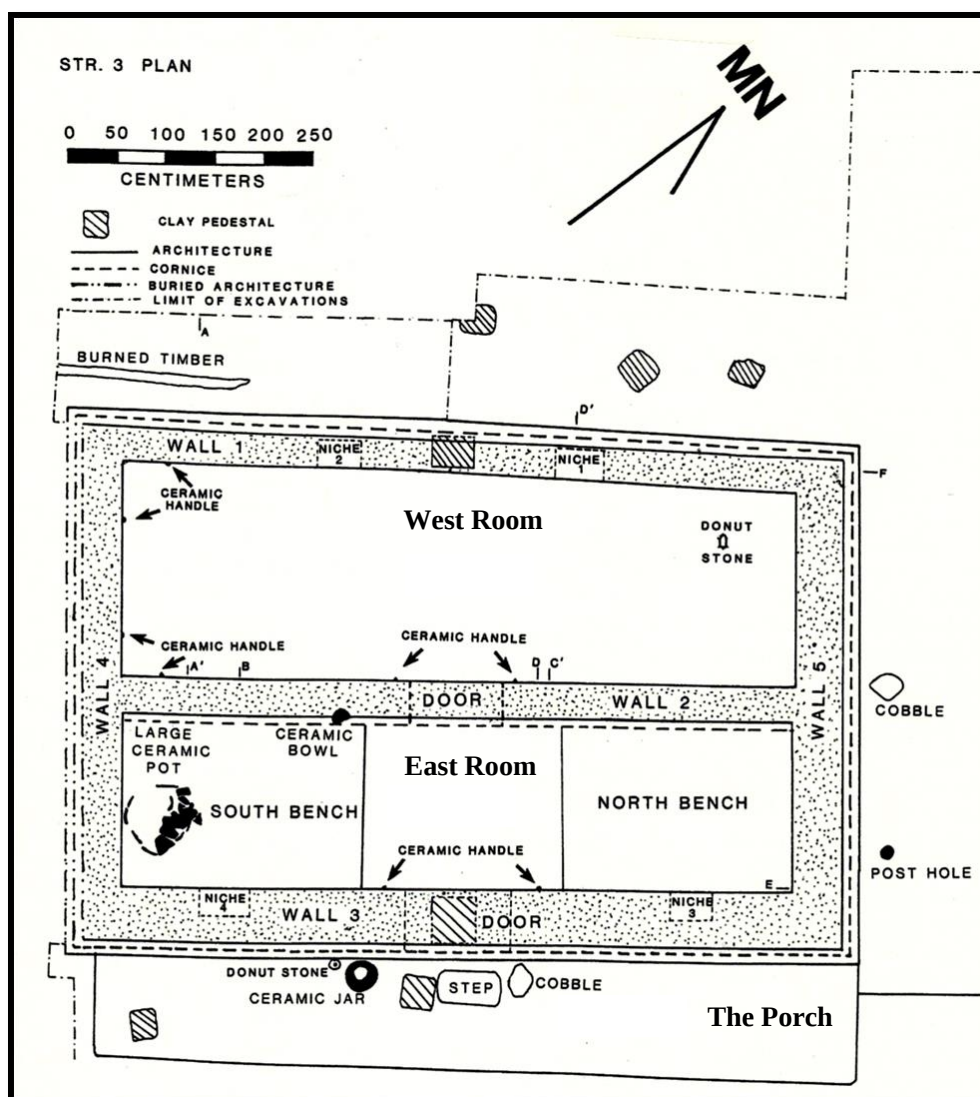


Figure 5.3: Plan of structure 3, the civic building at Cerén (Taken from Sheets 2002:84, used with permission of Payson Sheets).

Architecture

Structure 3 consisted of two rooms, the east room and the west room, and a porch area (Figure 5.3). Access into the east room was gained through a wide doorway on the east side of the building (Figure 5.3). While the height of the doorway was similar to most at Cerén, it was the widest encountered at any structure within the site (Gerstle 2002:84). The west room was

only accessible through the east room via a doorway centered in the dividing wall (Figure 5.3). The east room was slightly smaller than the west room, and contained two large solid adobe benches which covered about 70% of the east room's area (Gerstle 2002:84). The benches were larger than those found in the domiciles, measuring 4.2 meters squared and 62 centimeters high (Gerstle 2002:84). They were also found in the front room, which is unlike the domicile benches that were located in the back innermost room of the household. The remaining space in the east room functioned as a corridor that connected the east door with the internal doorway.

In total, four niches were constructed in the walls of Structure 3. Two were located in the front walls of the east room and two were in the back walls of the west room. Along the western side of the building was a long porch which appeared to be heavily worn from foot traffic (Sheets 2006:93). Encircling the entire structure was a cornice which adorned the top of all four external walls facing the outside. The interior dividing wall also displayed a tall cornice along the eastern side, facing into the east room. Despite its large size, very few artifacts were found inside Structure 3.

Artifacts

The East Room

The East room consisted of two large adobe benches, the south bench and the north bench (Figure 5.3). Only two ceramic vessels and a bone tapiscador were found in the east room. One of the ceramic vessels, a Guazapa Miltitlan jar was found sitting on the south bench (Figure 5.3). It is the largest vessel found to date at Cerén, measuring more than 60 centimeters high and 65 centimeters in diameter (Gerstle 2002). Sheets (2006:94) suggest that it was probably used to keep and dispense a liquid.



Figure 5.4: Picture of a Polychrome bowl (Photo by Payson Sheets, used with permission of Payson Sheets).

The other ceramic vessel found in the east room was a large Copador melon stripe polychrome bowl (Figure 5.4). It was resting on top of the inner partition wall above the south bench. This vessel was probably used to scoop liquid out of the larger vessel (Sheets 2006:94). The tapiscador bone tool was found in the north eastern niche of the east room. According to Gerstle (1989:76), the tool was made from a mammal longbone probably a deer which had been split lengthwise (Gerstle 1989:76). The cut edges and the ends of the tool were shaped and polished.

The West Room

Two artifacts were found in the west room of Structure 3. In the northwest corner was a donut stone (Figure 5.3). Although no evidence of a stick was found, Gerstle (2002:86) suggests it probably had a stick through the hole to hold its position. The donut stone was not decorated and based on use wear analysis it appears to have been used extensively (Sheets 2006:95). Additionally, the black organic residue found on the artifact at the time of its discovery, suggests its use as a perforated mortar (Sheets 2006:95). The second artifact found in the west room was a

large stone that had its corners smoothed by a hammerstone. It appeared to have been stored up high on either a wall top or rafter within the room (Sheets 2006:95). Additionally, similar to other household structures at Cerén, Structure 3 had an organic container suspended in the middle of the west room with the Ilopango ash-water mixture.

The Porch and Surrounding Areas

The porch contained only a few artifacts. Resting against the edge of the platform, to the south of the front door was a Guazapa: Miltitlan scraped-slip storage jar (Figure 5.3). No macrobotanical remains were found in the vessel. Near the storage jar was a donut stone (Figure 5.3). Based on its position, it doesn't appear to have had a stick through it (Sheets 2006:95). Although the significant use wear and small amount of organic residue in the hole suggest it was likely used as a portable perforated mortar for grinding hard organic materials (Sheets 2006:95). On the southeast corner of the porch was a rare broken Obraje Red-painted Guazapa scraped-slip jar. The state of the jar suggests it was hung near the outer edge of the porch and at some point had fallen and shattered (Sheets 2006:95; Gerstle 2002:86). Also found on the porch was a large sherd that had fallen, possibly from above the lintel (Gerstle 2002:86). Aside from the few artifacts recovered on the porch, the area in front of Structure 3 appeared to have been kept relatively clean.



Figure 5.5: Structure 9, the Sweatbath (Photo taken by author).

The Sweatbath

The unique architectural features of Structure 9 have led to its identification as a sweatbath (Figure 5.5) (Sheets and McKee 1990; Sheets and Simmons 1993). The roof of Structure 9 was a bajareque dome covered by grass thatch. The walls were made of solid clay, and encircling the entire outside of the structure was a tall cornice. Additionally, a bench encircled the structure's north end, and wrapped around to continue along both the eastern and western walls. The entrance was only navigable on hands and knees (McKee 2002:90). The interior of Structure 9 contained a firebox that occupied almost 1/3 of the interior floor area (Sheets 2006:98). There were no artifacts found in or around Structure 9, however a midden was discovered west of Structure 9 that may be related to structure use, particularly for the disposal of the wood ash deposits which would have come from cleaning the firebox (McKee 2002:93).

Service Relationship of Structure 9 with Household 2

Based on the proximity and types of artifacts found within Structure 7, the *bodega* of Household 2, it appears that its inhabitants were providing service to Structure 9, the sweatbath (Sheets 2002). Structure 7, was located only seven meters to the northeast of Structure 9 and the TBJ (*Tierra Blanca Joven*) surface between the two structures was kept clear of artifacts and was extremely compacted, indicating a high degree of foot traffic (McKee 2002:68). Additionally, the high concentration of ollas and firewood found in Structure 7 suggests that the members of Household 2 were providing water, for purposes of steam, and firewood to Structure 9 (Sheets 2002). Furthermore, the smoothing stone in Structure 7 could be indicative of architectural maintenance of the sweatbath (Sheets 2006:77).

The Religious Complex

The religious complex at Cerén is composed of two buildings, Structures 10 and 12 (Figure 5.1). Structure 10 has been identified as a production area for community festivals and as a storage location of festival paraphernalia (Sheets 2006). Structure 12 has been identified as the place where a diviner (shaman) practiced (Sheets 2006). Both structures contained architectural features that deviated from the community construction and household architecture found at Cerén. They were built on the highest elevation, on the east side, closest to the Río Sucío and were the only two special purpose buildings not oriented 30 degrees east of magnetic north (Simmons and Sheets 2002:104). Additionally, both were painted white with red decoration and had progressively higher floors as one moved from the outer to inner most room (Brown et al. 2002:104). Each had a sizable enclosure consisting of a room or corridor added to the front of the two-room main building (Sheets 2006). They also had an unusual number of earthen columns (Sheets and Kievit 1992).

Structure 10

Structure 10 (Figure 5.6) was located only 5 meters west of Household 1 and 5 meters east of Structure 12 (Brown and Sheets 2001:116). It was oriented 23 degrees east of magnetic north (Brown and Gerstle 2002:96). Based on the architecture and artifacts found within Structure 10, it appears to have served as a storage location for food, ceramic vessels, tools, ceremonial items, and as a space for preparation of village ceremonies, which included feasting performances (Sheets 2006:107).

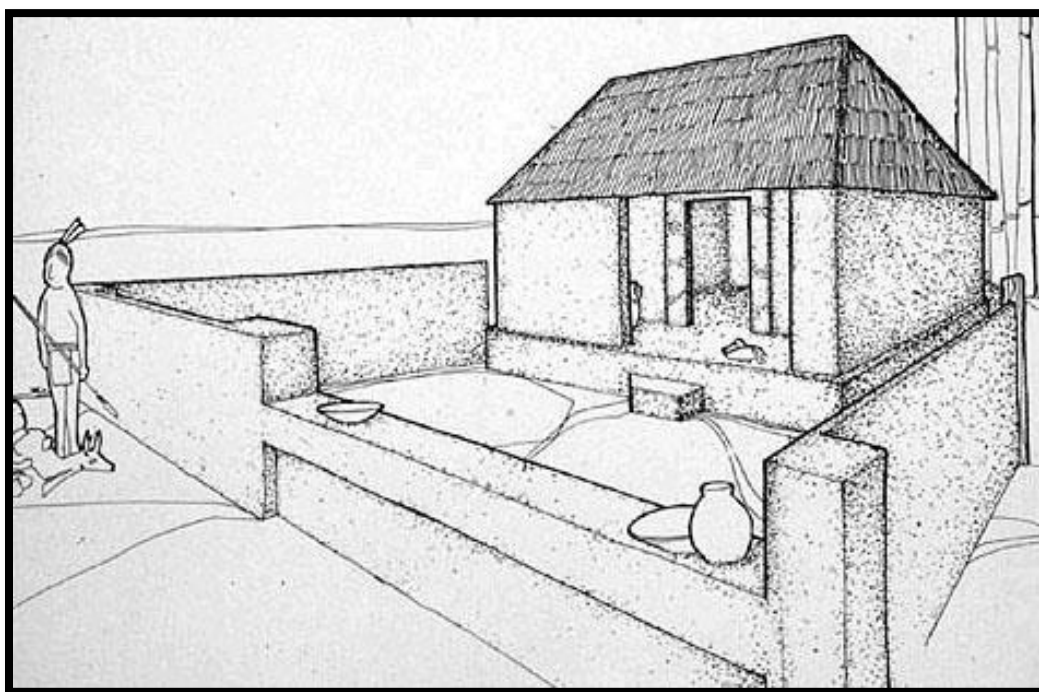


Figure 5.6: An Artistic reconstruction of Structure 10 looking southwest. Illustrated by Karen Kievet (taken from Sheets 2002:98, used with permission of Payson Sheets).

Architecture

The main area of Structure 10 consisted of two principal rooms, the east room and the west room (Figure 5.7). A wall constructed outside of the principal structure enclosed the east and north sides of the building, forming two exterior corridors, the north corridor and the east

corridor (Figure 5.7). Along the east corridor a half-height wall was constructed, probably to serve food and drink to participants in community festivals (Brown and Gerstle 2002:97). All full-height sections of the exterior sides of the corridor walls were left exposed, while the interior wall surfaces were finished with clay (Brown and Gerstle 2002:97). A wooden shelf extended over the east room and north corridor.

The physical space of Structure 10 was very restricted. The only access into the structure was through a pole door located at the western end of the north corridor (Figure 5.7). Once inside the building, to reach the west room, one had to take a circuitous route winding through the narrow north and east corridors, and pass through the east room to reach a doorway in the internal dividing wall (Figure 5.7) (Brown and Gerstle 2002: 97).

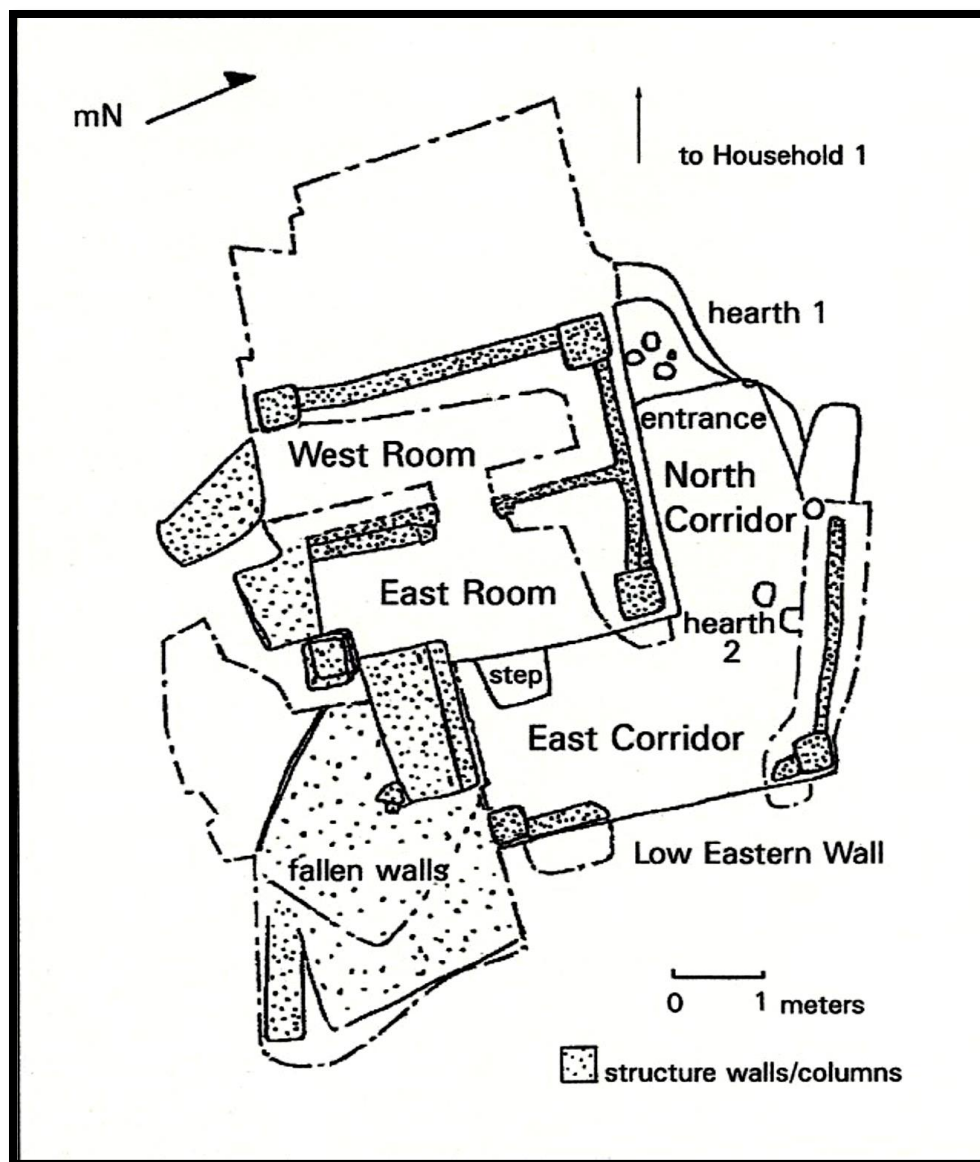


Figure 5.7: Plan of structure 10 (taken from Sheets 2002:98, used with permission of Payson Sheets).

Artifacts

The North Corridor

The north corridor was a long, narrow space that consisted of a variety of artifacts and two stone hearths (Figure 5.7). The first stone hearth was located immediately outside the doorway of the main structure on the lower paved area (Figure 5.7). The second stone hearth was

found inside the corridor (Figure 5.7). Both hearths were constructed from four large, unmodified river cobbles. A large jar was found in situ on top of the first hearth with several shelled corncobs that had been discarded nearby (Brown and Gerstle 2002:98). Near the second hearth, along the north wall, was a mounted metate on forked wooden supports. A large open bowl was placed on the floor under the lower end of the metate, which may have been used to catch food while grinding (Brown and Gerstle 2002:98). Two other large open bowls were resting on the floor between the second hearth and the metate.



Figure 5.8: A ceramic vessel recovered from Structure 10 (Photo by Payson Sheets, used with permission of Payson Sheets).

Several artifacts were found on the raised wooden shelf in the north corridor. Some of these items included an antler and a long bone tool, both presumably used to husk corn, an obsidian blade and six ceramic vessels. The vessels have been identified as a Cashal Cream jar, a shoe-shaped jar, a Copador tripod plate, a recurved bowl, a Guazapa open basin and an open

basin (Figure 5.8) (Brown and Gerstle 2002:98). Based on the presence of the two hearths and associated artifacts in the north corridor, it appears this space was used for food preparation (Brown and Gerstle 2002:98).

The East Corridor

The southern half of the east corridor remains buried under three fallen walls and has yet to be excavated (Figure 5.7). However, evidence indicates that the northern portion of the east corridor was primarily used for ceramic vessel storage (Brown and Gerstle 2002:98). Also based on the flat and hard-packed surface outside of the half height wall, it is possible this area was dedicated to serving food and drink to ceremonial participants and observers (Sheets 2006:107).

Stored against the easternmost wall of the east corridor were eleven medium to large-sized ceramic vessels, three of which were stacked on top of one another. Immediately to the west of these vessels were three additional vessels and a gourd. Most of these vessels were common utilitarian wares (Brown and Gerstle 2002:98). Also found leaning against the eastern wall was a digging stick with of a perforated donut stone.

Artifacts that were in elevated contexts, but had fallen as a result of the volcanic eruption, were found in two distinct clusters within the east corridor. The first cluster, located just outside of the northeast corner of the structure, consisted of carbonized ears of corn, a painted organic cylindrical object, two obsidian blades, a greenstone celt, four donut stones, two worked and three unworked cobbles, five bone artifacts, a spindle whorl, and three ceramic sherds (Brown and Gerstle 2002:98). It is possible that the lighter artifacts in this cluster may have fallen from the high shelf in the east room (Brown and Gerstle 2002:98). The second cluster of fallen artifacts was located at the northern end of the corridor along the eastern exterior wall. Within

this cluster were two obsidian blade fragments, two ceramic sherds and a number of cobbles that were probably dislodged from the nearby column (Brown and Gerstle 2002:99).

The East Room

East is the most sacred direction of the Maya and is emphasized in this building by two things, the east room stored the most sacred artifacts and it is the only room with red paint on the walls in the building (Sheets 2006:109; Brown and Gerstle 2002:99). The eastern face of the dividing wall was painted red, along with the pilasters that emphasized the door jam, and the horizontal cornices that ran around the room at the top of the walls (Brown, Simmons and Sheets 2002:86).



Figure 5.9: Picture of the painted deer-skull headdress found in the east room of Structure 10 (Photo by Payson Sheets, used with permission of Payson Sheets).

Along the top of the dividing wall in the east room ran an elevated shelf made of poles. This is the same shelf that extended past the wall and provided elevated storage in the north corridor. On the shelf was probably the most sacred artifact in the entire building and possibly the village, a painted deer skull headdress (Brown and Gerstle 2002:99). The headdress consisted of the complete cranium and antlers of an adult white-tailed deer (Figure 5.9). The skull had been painted red and a small amount of blue pigment or paint on the right antler (Brown, Simmons and Sheets 2002:86-87). The deer skull was found with several segments of a single-ply twine tied around the base of the two antlers, the twine was probably used to tie the headdress to a wearer during ceremonial activities (Brown, et al. 2002:87). Next to the skull was an unusual wide-mouthed jar with a basket-style handle decorated with two human faces and an obsidian blade that fell from an elevated context in the east room, probably from a shelf that tested positive for human hemoglobin (Brown and Gerstle 2002:99).

On the floor below the shelf in the east room were four pottery objects (three large jars and a recycled ceramic ring base) and a painted gourd. One of the vessels, a caiman effigy jar was found resting on top of a fiber ring support, and was full of achiote seeds (Brown and Gerstle 2002:99). Another of the vessels, a Guazapa jar, contained hundreds of squash seeds. Clustered in the east room were other small artifacts that included components of a possible ritual costume that had probably been stored on the high shelf (Brown and Gerstle 2002:99). These artifacts consisted of two large tubular bone beads, a tear-drop-shaped flat bone ornament, a notched scapula from a juvenile white-tailed deer, an unidentified painted organic object with a flared rim, a long bone tool, two prismatic blades, and a greenstone celt (Brown and Gerstle 2002:99). Also scattered in the east room were ears of shucked corn which were probably dislodged from the shelf (Brown and Gerstle 2002:99).

The West Room

The west room was primarily used for storage of utilitarian items (Brown and Gerstle 2002:100). Two large utilitarian jars, one of which contained impressions of seeds similar to the appearance of beans, were stored on the floor (Brown, et al. 2002:87). A bone tool fashioned from a white-tailed deer scapula and a complete Sacazil Bichrome two-handled recurved bowl were stored in elevated contexts within the west room.

The Surrounding Areas

The areas to the north and southeast of Structure 10 were highly compacted and relatively free of artifacts and vegetation, suggesting the areas were well-swept and maintained (Simmons and Villalobos 1993). Presumably, it was where participants gathered for ceremonial celebrations, performances, dances and other community activities (Brown and Gerstle 2002:101). In contrast, the southeast area of Structure 10 was littered with artifacts, had an undulating ground surface with loose soil and had weeds and bushes growing in this area (Brown and Gerstle 2002:101).



Figure.5.10 Picture of Structure 12, the divination structure at Cerén (Photo by author).

Structure 12

Structure 12 was a four room bajareque structure (Figure 5.10). It was the only structure with no artifacts stored in the thatch roofing. It was also the only structure to have windows and it had two. It was also the only building to have vertical niches. Vertical niches are spaces that are enclosed on three sides; and are primarily associated with columns (Sheets 2006). Two of the vertical niches were being used to store items at the time of the eruption (Simmons and Sheets 2002:107).

Structure 12 was the only building where access to the inner room was made very complex by changes of direction, barrier walls, a low beam, a double pole door with an entry so small one needed to crawl through and five changes in floor level from the outside to the north room (Sheets 2006: 102). It was the only building with an orientation of 15 degrees east of north (Brown, Simmons and Sheets 2002). Finally, Structure 12 was the only building with round

cornices on the platform and with Ilopango tephra in the core of a wall (Simmons and Sheets 2002:106). Based on the architectural differences and the recovered artifact assemblage, it appears Structure 12 was where a ritual practitioner engaged in divination (Brown, et al. 2002:104).

Architecture

Structure 12 had four main internal walls and six small wing walls (Figure 5.11). The largest of the internal walls separated the east and west rooms of the building. The main doorway was located on the north side of the structure. It was closed by a pole front door that anchored into sockets in both doorjambs. Just west of this main entrance was a lattice window of crossed poles coated with clay that was similar to the one found in the back west wall of the structure (Brown, et al. 2002). A second doorway provided access between the north and east rooms (Figure 5.11). Portions of the walls in the north room were decorated with hematite red paint, some of which may have been linear or floral in design (Brown, Simmons and Sheets 2002:89). The north room was divided by a small interior wall into two activity areas (Figure 5.7). To the south of the north room was a bench with a niche (Figure 5.11).

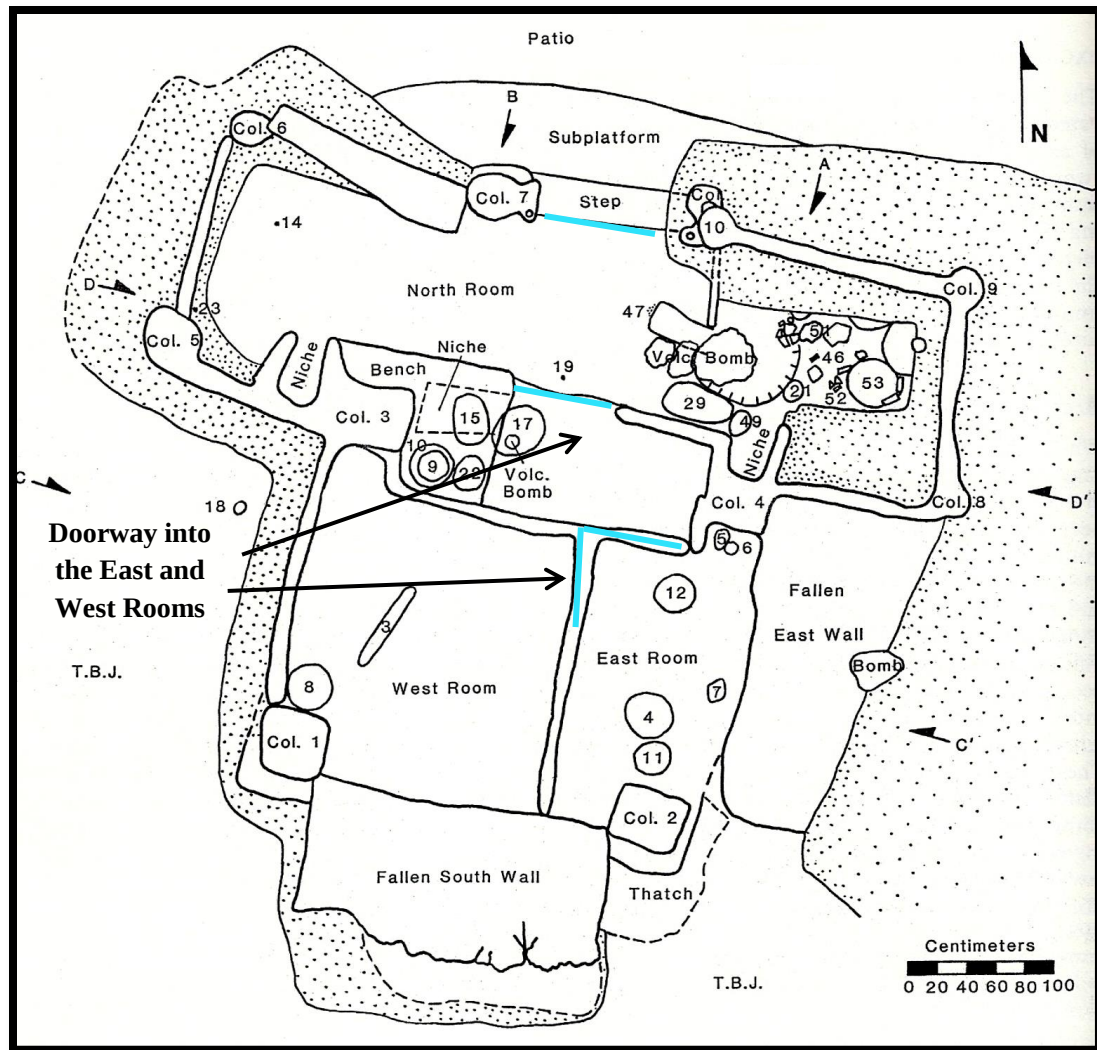


Figure 5.11: Map of Structure 12 (taken from Sheets 2002:106, used with permission of Payson Sheets).

Artifacts

The North Room

A cluster of artifacts was stored on top of the lintel and on the adjoining columns just inside the main doorway of the north room (Figure 5.11). These artifacts included two ceramic 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 (Brown and Sheets 2001:120). In addition, it appears a collection of minerals fell from a storage

location on top of the small interior partition wall that divided the north room into two activity areas (Figure 5.11) (Brown and Sheets 2001). To the east of the dividing wall were a metate and five large vessels (Figure 5.11). One of the vessels contained maize kernels, while another had an organic woven-mat strip wrapped around its neck, similar to the design utilized on the lattice windows (Brown and Sheets 2001:120). The area to the west of the dividing wall did not contain any artifacts (Figure 5.11).

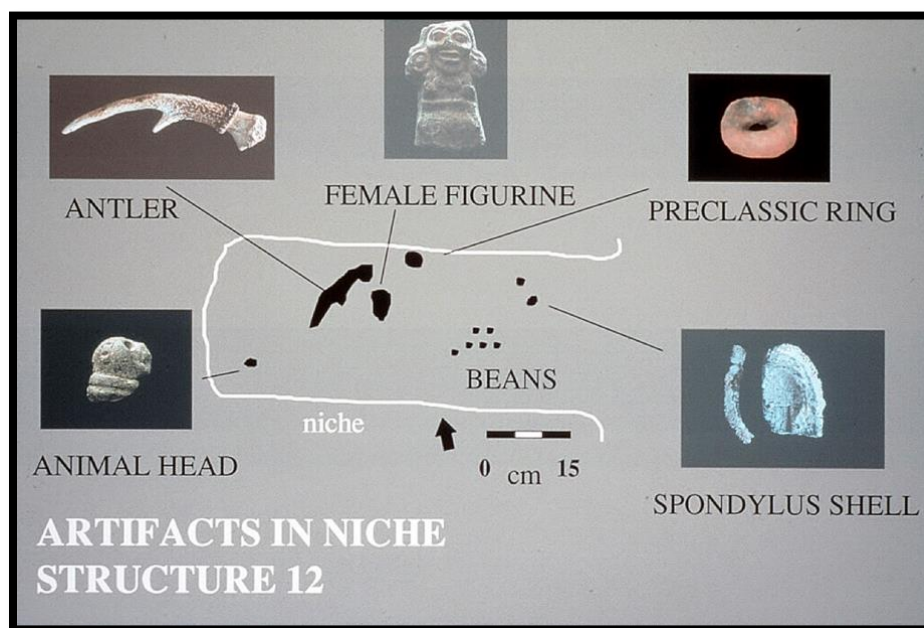


Figure 5.12: Artifacts found in the earthen bench niche south of the north room of Structure 12 (Photo by Payson Sheets, used with permission of Payson Sheets).

Immediately south of the north room was a small earthen bench with a niche built into it (Figure 5.11). Five pots were clustered on top of the bench, while a ‘supernatural toolkit’ consisting of a deer antler drilled with numerous tiny holes, a female human figurine, an animal head figurine, half of a ceramic double ring, shell fragments, and a small pile of beans were found inside the niche (Figure 5.12) (Brown and Sheets 2001:121-122).

The East and West Rooms

Three ceramic vessels were found in the east room (Figure 5.11). Two of these vessels were constricted neck jars, similar in style and form to chicha jars that are made in traditional Salvadoran communities today (Simmons and Sheets 2002:110). One had on its neck an anthropomorphic face molded from a fillet of clay (Sheets 2006) and had been placed atop four perforated olivella shells, which may have been used as jewelry, perhaps as a necklace (Simmons and Sheets 2002:110). These two jars were too large to have served as drinking vessels (Sheets 2006). However, they could have been used either as small storage vessels or for transferring liquids to smaller drinking jars or mugs (Simmons and Sheets 2001:110). The west room only contained one artifact, a large open bowl in the southwest corner of the room (Figure 5.11).

Service Relationship of Structure 10 and 12 with Household 1

Several lines of reasoning seem to support a relationship between Household 1 and Structures 10 and 12 (Sheets 2000). Architecturally, it appears renovations were made to Structure 10, which consisted of changing the location of the only entryway into the building. At some point a north facing entranceway was closed off and a new doorway on the west, facing toward Household 1 was constructed. Also, the doorway of Structure 6, the *bodega* of Household 1 faced east, toward Structure 10, whereas all other household *bodegas* at Cerén had entrances that faced north, opening toward the household domicile (Sheets 2000). This modification would have facilitated the movement of people and goods between Household 1 and Structure 10 (Beaudry-Corbett, Simmons, and Tucker 2002:57).

Additionally, the inhabitants of Household 1 appear to have been providing service in the form of food transport, preparation, serving, processing and storage to Structure 10. Household 1 contained five metates, whereas most households possessed only one or two. This has been

interpreted as a gearing up for a large amount of maize grinding, most likely in preparation for a ceremony, particularly the first maize harvest and deer fertility rituals at Structure 10 (Sheets 2006:111). Also, Household 1 did not have any corn huskers, while Structure 10 had two, which suggests Household 1 had loaned its huskers for temporary ceremonial use for the processing and preparing of food (Sheets 2006:111). Furthermore, the chemical composition of the one local and two nonlocal red wares had a restricted distribution within the community and occurred exclusively in Household 1, and Structures 10 and 12 (Beaudry-Corbett, Simmons, and Tucker 2002:57). Also, Structure 6, the *bodega* of Household 1 had more jars without handles and utilitarian bowls with handles than other household *bodegas*. This suggests that members of this household had a greater need for storing and transferring commodities.

Summary

The specialized structures discovered at Cerén served a variety of functions within the community including divination, storage of festival paraphernalia, food processing and preparation, as well as serving at community festivals (Sheets 2002). Artifact inventories and architectural data indicate that Structure 3 served a civic function within the community. The large pot located on the southern bench was probably used to dispense a liquid to village elders and guests (Gerstle 2002:88). Additionally, Structure 3 had one of the widest doorways encountered at Cerén and two very large benches in the east room which would have provided sufficient area for individuals to sit and discuss community business (Gerstle 2002). Also, the large size of Structure 3 would have lent it a degree of monumentality that set it apart from the household structures, further solidifying it as a seat of power within the community (Gerstle 2002:82).

Structure 10 was a permanent village ceremonial facility utilized for the production of community festivals and storage of festival paraphernalia (Brown, Simmons and Sheets 2002:87). The north corridor appears to have been used for food preparation, including grinding and cooking, as indicated by the presence of a metate and two hearths (Sheets 2006). There were also quite a few empty shelled corn husks discarded within this area. Additionally, the three corn huskers that fell from an elevated context indicate that corn was husked and shelved in this area (Brown and Gerstle 2002). The east corridor was primarily used for storage, as almost half of all ceramic vessels in Structure 10 were stored here (Beaudry-Corbett 2002). In addition to storage, the east corridor probably was utilized for food dispensing (Brown, Simmons and Sheets 2002:98). Special architectural elements such as the low exterior corridor wall may have functioned as a pass-through for dispensing food to ceremonial participants on the exterior of the structure during festivals (Brown and Gerstle 2002:100).

Structure 12 was most likely a place for divination or other ritual activities (Brown, Simmons and Sheets 2002). The objects left at the building's entrance may have been placed there as offerings or payment for services a ritual practitioner could have rendered, including curing, divination, prediction, and intervention between the residents of the village and deities, spirits or ancestors (Simmons and Sheets 2002:110).

Chapter 6 : Analysis and Interpretations

Through its inclusion in mutual and situated knowledge, storage becomes engaged in the processes of memory making and learning that take place during the actions, interactions, and practices occurring within the household. As a result of its involvement in these processes, ideas of storage can be expanded to include memory and knowledge (Hendon 2000). Memory and knowledge are what individuals and groups mobilize for the creation of socio-cultural identities, thus storage becomes part of the processes of identity formation. Therefore, storage practices occurring within the household can be understood as socially meaningful acts that embody group and individual ideas about identity. However knowledge is not always shared equally, it can be differential and partial. The ways in which people learn, remember, develop a sense of self and understand are situated in social, spatial, temporal and physical contexts (Isbell 2000:244). As a result, the participation in daily and periodic practices provides individuals with opportunities for the creation, contestation, and negotiation of socio-cultural identities (Hendon 2000). Therefore, storage as a *situated practice*, becomes a means through which individuals are able to communicate ideas about identity such as status, wealth, authority and moral order.

Moral order or social rules are understood through knowledge which draws on memory, past experiences, expectations, desires and a communicative engagement with other co-inhabitants (A. Joyce 2010). Therefore, storage acquires a moral dimension because it is part of the processes connecting resources with people's needs, desires, and because the social evaluation of people or groups may take into account their connection to storage practices (Hendon 2000: 45). Thus, the decoration, quality of construction, and permanence of formal storage features can be understood as material representations of individual's perception of community *moral order*.

Ideas about *status* and *authority* can be expressed through the visibility and accessibility to storage practices. Individuals or groups are able to combine or segregate knowledge through differential spatial settings (R. Joyce and Hendon 2000). Practices occurring in more open spaces allow for greater visibility and access. As a result, knowledge is more equally shared between community members and be utilized for the creation of common community identities (Joyce and Hendon 2000). Alternatively, more intimate spatial settings restrict access and visibility to the practices occurring within. As a result, knowledge is not equally shared or known by all members of the community. Thus, knowledge can be a source of social differentiation. Thus, if privacy is thought in terms of restricted access, then spatial secrecy and containment become physical manipulations of power, status and control (Hendon 2010). Thus, access and visibility about the practices occurring within the household becomes a source of social differentiation in which individuals are able to communicate ideas about their authority and status within the community.

However the relationship between the social actor performing the act of storing and the item being stored are not static. Things are dependent on humans just as humans are dependent on things. Things depend on people when they are procured, manufacture, exchanged, used and discarded, but in particular they depend on people to maintain them if they want to remain as people want them (Hodder 2012). They co-produce each other and in this way act as social agents. Thus, storage practices need to take into account the dependencies that exist between the individual performing the act of storing and the item being stored.

Furthermore, things are not static and bounded, but possess life histories of their own. They incorporate knowledge and memory and possess spatial and temporal dimensions (Hodder 2012). They have differential meanings based on when and how they are experienced within the

landscape. They can be selected for based on preference of material properties or associations.

Storage Practices at the Cerén Households

In order to explore the socio-cultural dimensions such as wealth, status, authority and moral order of the inhabitants at the Classic period Maya village of Cerén, it is necessary to discuss the relationship between the items being stored and the human subject performing the act of storing within the household. Distant material sources are often chosen over more local sources because of certain properties or characteristics that are emphasized by a particular cultural group (Hodder 2012). They are materializations of the social relationships between people and things and as a result are subject to changes and modifications.

As a result, domestic storage practices can be understood in terms of the relation between the individuals participating in the act of storing and the items being stored. Thus, the possession and placement of a stored item within the domestic space is reflective of not only an individual's desires, status, authority, wealth and ideas about moral order, but the dependencies of the thing on the human subject. Therefore, in order to explore the socio-cultural dimensions such as wealth, status, authority and moral order of the inhabitants at the Classic period Maya village of Cerén, it is necessary to discuss the relationship between the human subject performing the act of storing and the items being stored.

Storage Practices at the Cerén Households

Through the acquisition, possession, location, visibility and accessibility of storage practices and their related stored goods, those inhabiting the Cerén households would have been able to express ideas about their status, authority, wealth and moral order relative to other community members.

Material Items

When assessing the ownership and location of a stored item within the domestic space, it is necessary to account for the dependencies between the human actor and the thing, as well as the items desirability as a result of its material properties or socio-cultural affiliations. One item that may have been chosen by the Cerenians as a result of its socio-cultural affiliations is polychrome ceramics.

The Polychrome ceramics were imported from the Copán Valley about 100 km to the North and traded at elite marketplaces throughout the Zapotitán Valley (Beaudry-Corbett 2002:120). Despite access to local ceramics, over $\frac{1}{4}$ of the ceramic vessels found within each household were from the Copán Valley (Beaudry-Corbett 2002:122). When material objects are traded away, they retain an association with the one who traded it away. Thus, through ownership of the object, the individual would have acquired prestige from not just the object itself but the history and memory the object incarnated (Hendon 2000). In this instance these associations would have been linked to the Maya elite of Copán and the Zapotitán Valley. Thus, because Cerenians chose to obtain ceramics from Copán over more local sources, we can infer that they were desired for their social connotations. During the Classic Period, Copán was a revered political and economic Maya elite center. Thus, ownership of these items would have provided its possessor ties to the status, wealth and authority of the Maya elite.

Obsidian was another item that was acquired through exchanges with the Maya elite. It was brought into the Zapotitán Valley from the Ixtepeque source in Guatemala about 80 km to the northwest (Sheets 2002:219). Obsidian, once in blade form, is an extremely sharp tool and thus would have required storage in an area not frequently trafficked by members of the household. Thus, the material properties of the object would have acted back on the human

subject. The sharpness of the blade would have necessitated its storage within a particular location. For the household members at Cerén this would have meant storage in an elevated position. Within each household there were at least 4-6 obsidian blades stored in the thatch roofing (Sheets 2000). Additionally, as a result of the marketplace exchanges, the obsidian blades would have retained an association with the elite of Copán. Thus, ownership of the obsidian could have been used to link oneself with the status, authority and wealth of the Maya elite.

Jade was brought into the Zapotitán Valley from the Sierra de las Minas source about 130 km to the north. Jade axes and other trinkets were manufactured at the source in the Montagua River Valley and acquired through exchanges at elite centers such as San Andrés (Sheets 2000:221). Therefore, jade may have been desired as a result of its connection to the wealth, power, status and authority of the Maya elite. Each household at Cerén had a jade axe; however the location of the axe varied by household. In Households 2 and 4, the jade axe was stored in elevated contexts in the bodegas. While the jade axe of Household 1 was found in the interior of Structure 11, the kitchen, on an elevated shelf. During the time of the eruption, the bodega of Household 1, Structure 6, was undergoing renovations. As a result, individuals within the community would have been able to see into the structure and in some instances remove small items such as the jade axe. As a result, these items were moved to the kitchen and domicile structures of Household 1. This is another example of how the material properties of the object would have acted back on its possessor. As a result of its small size and high value, it necessitated relocation. Additionally, the relocation of these items by the inhabitants of Household 1 suggests that theft may have been an issue within the community. This suggests that individuals had different ideas about what constituted moral behavior within the community.

The inhabitants of Household 2 and Structure 9 were reliant on one another in a variety of ways. For instance they were responsible for maintaining the architecture of Structure 9. As a result, the earthen architecture relied on the human subject for maintenance and care, and the human subject relied on the construction to serve its purposes as a sweatbath. Additionally, Structure 9 was dependent on the individuals of Household 2 to perform certain acts such as the provisioning of water for purposes of steam and firewood; in return the inhabitants of Household 2 expected the sauna to function appropriately. These services would have necessitated the ownership of particular material goods such as the large ollas and smoothing stone found in Structure 7, the *bodega*. Because these items were required to perform particular functions, they would have been selected for based on their material properties. Maintaining these dependencies would have been important to Household 2 as they received compensation and payment from others who wished to use the sauna (Sheets 2000).

Additionally, the relationship between the inhabitants of Household 1 and Structure 10 created dependencies. For instance, most bodegas at Cerén opened toward the domicile, however the entrance to Structure 6, the bodega of Household 1, opened towards Structure 10 (Beaudry-Corbett, Simmons and Tucker 2002:49). Additionally, Structure 11, the kitchen of Household 1 was oriented directly north instead of the typical 30 degrees east of magnetic north seen at the majority of domestic structures. It opened onto a patio area that was also shared by Structure 6 or the bodega of Household 1 (Beaudry-Corbett, Simmons and Tucker 2002). Furthermore, the entrance to Structure 10 was changed so that it faced toward Structure 6, the bodega of Household 1. Thus, the placement of domestic structures emphasized the relationship between Household 1 and Structures 10.

Additionally, the services being provided to Structure 10 by the members of Household 1 necessitated the storage, possession, use and loaning of specific items. The inhabitants of Household 1 possessed five metates while most households only contained one or two. This is indicative of the large amount of maize grinding Structure 10 was dependent upon for community ceremonies. Additionally, the loaning of their corn huskers to Structure 10, suggests the members of Household 1 were also engaged in the processing and preparing of food for this building. As a result of the large amount of food transportation and storage required as a result of this relationship, the inhabitants of Household 1 had more jars without handles and utilitarian bowls with handles than other household bodegas.

Therefore, it is clear that the relationship between the inhabitants of Household 1 and Structure 10 created dependencies which influenced the types of practices occurring within the household, the items being stored and the orientation of the domestic structures. Access and visibility of storage practices and their related stored items would have created differential knowledge about the types of practices carried out between the members of Household 1 as a result of its relationship with Structure 10. Thus this relationship would have provided the members of Household 1 with the opportunity to situate themselves within a position of authority and power within the community through the restriction of knowledge.

Access and Visibility

Access and visibility to the storage practices occurring within the household can be used by individuals as a means to express ideas about their status and authority within the community. By restricting access and visibility individuals are creating circumstances which necessitate differential knowledge. As a result, knowledge about the items being stored and their locations within the household would not be shared equally and thus, becomes a source of social

differentiation (Hendon 2000). Therefore, in order to understand household perceptions of status and authority, it is necessary to examine to what degree they made their storage practices and related stored items visible and accessible to other members of the community.

Construction

The type of construction material utilized at household structures at Cerén, created circumstances for more or less visibility of storage practices. Several structures utilized bajareque construction; some used pole wall architecture, while others used a mixture of the two techniques. For instance, all four principal walls of Structure 1, the domicile of Household 1, and Structure 7, the *bodega* of Household 2, were made of solid bajareque construction. Arguably, this type of construction would have made stored items less visible. Knowledge about what was being stored and where it was being stored would only be acquired through a familiarity with the interior of the structure. Thus, bajareque architecture offered restricted visibility and therefore was used as a means to control knowledge about the storage practices and locations of items being stored within the structure.

For instance, the bajareque architecture utilized by the members of Household 1 and 2 would have restricted access and visibility to the items relating to their participation in part-time craft specialization. The location and quantity of groundstone implements and spindle whorls stored in Structure 6, the *bodega* of Household 1, as well as the hematite pigment and painted gourds stored in Structure 7, the *bodega* of Household 2 would have only been known to those familiar with the interior the structure. Restricting access and visibility to these activities and their related stored goods would have been in the best interest of each household. These items required a considerable degree of skill and knowledge as well as time investment. Additionally, they acted as a form of currency as they were traded at local and regional marketplaces for

various items such as obsidian, ceramics, jade, hematite cylinders and presumably salt. Thus, restricting knowledge about these activities would have decreased marketplace competition and ensured that the knowledge and skill needed for the production of these crafts would have remained known only to members of that household.

Within Structure 6, the bodega of Household 1, there was a high concentration of polychrome ceramics along the east and west walls which was the least accessible and visible area of the structure. Knowledge about these items would have only been known to those familiar with the interior. Thus, knowledge about these ceramics would provide the inhabitants of the household with a source of power and status. This is also true of Structure 2, the domicile of Household 2, where the majority of polychrome vessels were kept in less visible and accessible locations within the south room of the structure. As a result of their placement within the thatch roofing as well as within the niche in the sleeping bench, knowledge about the polychrome ceramics was restricted to the household members and those familiar with the interior of the structure.

Another type of construction technique utilized at Cerén was a mixture of bajareque and pole walls. At Structure 2, the domicile of Household 2, and Structure 4, the *bodega* of Household 4, only three of the four principal walls were made of solid bajareque construction. The fourth wall, which also served as the entrance to the structure was made of poles. While the proximity of the poles would have partially restricted visibility and accessibility, it still would have allowed individuals to see the types of items being stored as well as their location within the domestic space. In the case of Structures 2, and 4, the pole wall would have given members of the community visibility into the north room. Specifically within Structure 4, it would have allowed individuals to view the items being stored on the shelf on the north side of the partition

wall. As a result, members of Household 4 would have been providing other community members with knowledge that may or may not be reciprocated and thus negating their source of power, control and status. Within Structure 4, the *bodega* of Household 4, an unused obsidian blade was found on the elevated shelf in the north room. While this blade could have been placed here as a safety precaution, the fact that it was visible to other members of the community suggests the household members desire to make its possession known. Thus, communicating ideas about their wealth, status, and authority within the community.

Another structure at Cerén which utilized pole wall construction was Structure 11, the kitchen of Household 1. However, unlike Structures 2 and 4 which only had one pole wall, all of Structure 11 was constructed with poles. Additionally, the walls were covered with thatch which would have restricted access and visibility into the structure. However, because the building did not contain a door, the items that were located on the shelf that ran along the southern portion of the interior of the structure and the activities occurring in front of the shelf would have been visible. The most valuable objects within Structure 11 were placed on the east side of the shelf. These items include, two polychrome vessels (cylinder and recurved bowl), tripod serving dish which is a variant of more standard polychrome, a painted gourd, two utilitarian jars with seeds inside a greenstone celt and hematite pigment (Beaudry-Corbett 2002:53). Due to the relationship Household 1 maintained with Structures 10 and 12, the increased visibility of the tripod serving dish, the polychrome vessels and the greenstone celt has been interpreted as a greater desire of Household 1 to connect with the higher status and politically powerful elite of Copán. Thus, the visibility of these objects would have served to reinforce ideas about their status and authority within the community.

Layout

The layout of structures is another way households at Cerén would have been able to restrict access and visibility to their storage practices and related activities. Physical barriers would have made access and movement within the structure difficult, thus households would have been able to control knowledge about their storage practices, such as the location and types of items being stored. Only those familiar with the interior of the structure would know details about their storage practices. It appears individual's restricted visibility and access to storage practices occurring within the domestic structures through the erection of internal dividing walls. Within Structure 4, the *bodega* of Household 4, and Structure 2, the domicile of Household 2, and Structure 1, the domicile of Household 1, access to the innermost room would have only been gained through a doorway positioned in the within an internal dividing wall.

Structures 10 and 12, which make up the religious complex at Cerén, also used physical barriers as way of restricting access and visibility of stored items and storage practices. In order to reach the west room of Structure 10 one would have had to take a circuitous route, winding through the narrow north and east corridors to reach the east room, where they would then need to pass through a doorway in the internal dividing wall to reach the west room (Brown and Gerstle 2002:97). Access to the inner room of Structure 12 was restricted by changes in direction, barrier walls, a low beam, a double pole door with a very small entry and five changes in floor level from the outside to the north room (Sheets 2006:102). Therefore knowledge and access to the items being stored within these structures would have been very restricted. However, based on the relationship between the members of Household 1 and Structures 10 and 12, it is highly probable this household would have been privy to knowledge about the interiors of the structures. Therefore, it can be inferred that through the possession of this differential

knowledge, Household 1 would have acquired more status and authority within the community. They would have known something other community members would not.

Additionally, as a result of the service relationship, Household 1 would have had continued access to the most sacred artifacts at Cerén. These items were kept within the east room of Structure 10 and included a deer-skull headdress and a possible ritual costume that consisted of two large tubular bone beads, a tear-drop shaped flat bone ornament, a notched scapula from a juvenile white-tailed deer, an unidentified painted organic object with a flared rim, a long bone tool, two prismatic blades and a greenstone celt (Brown and Gerstle 2002:99). As a result of the differential access Household 1 had to these sacred items, they would have probably acquired more status and authority within the community.

Embellishment

It is suggested that household members at Cerén utilized cornice decorations to reinforce ideas about their status, wealth and authority. Cornice decorations were used to denote structures as socially significant within the community. For instance, all four special purpose structures at Cerén contained cornice decorations along the tops of the exterior walls facing towards the outside. Additionally, within Structure 3, the civic building at Cerén, the east side of the internal dividing wall contained a cornice. The decoration would have been visible through the primary entrance of Structure 3, as well as by those occupying the benches in the east room. The east room was where the village elders convened to discuss community business and thus was an important location within the community (Gerstle 20002). Therefore, the decoration would have reinforced the room as a socially significant place within the community.

Another instance where we see a cornice decoration being used to denote social significance is in the east room of Structure 10. As the most sacred direction of the Maya, the

east room contained the most sacred objects at Cerén such as the deer-skull headdress and the ritual costume (Beaudry-Corbett, Simmons and Tucker 2002). To emphasize the importance of the items stored within this room, the top portions of the walls had horizontal cornices. Therefore as a marker of social significance, we can infer that the cornice decorations found within the domestic structures at Cerén are used to denote the inhabitant's ideas about their social position within the community.

The Household 1 complex had two cornice decorations. Structure 1, the domicile of Household 1, had a cornice decoration on the raised bench in the principal interior room (Sheets and McKee 1989). This was the only domicile bench that had a cornice decoration. Although this decoration would not be visible to members of the community unless they were invited into the structure, its presence would still be known. Therefore, we can infer that the members of Household 1 were utilizing this decoration to reinforce their status and authority within the community. The decoration found within Household 1 was along the sides of the main entrance to Structure 6, the *bodega* of Household 1. As a structure formally designated for storage, this structure would have represented the economic capabilities of the household as well as their ability to provide service to Structures 10 and 12. The decoration would have emphasized the importance of this structure and the household member's relation to the religious complex as many of its contents were related to the services being provided by members of Household 1.

Structures 2 and 4 were the only other domestic structures that contained cornice decorations. Structure 2, the domicile of Household 2, had a cornice decoration along the partition wall facing into the north room. Structure 4, the *bodega* of Household 4, had cornice decorations along the east and west walls as well as the north side of the partition wall facing into the north room. The cornice decorations within Structures 2 and 4, while inside the structure

would have been at least partially visible. As discussed above, the north wall of each structure was made of pole wall construction.

The north room of Structure 2 did not contain any artifacts; in fact most of its contents were stored in less visible and accessible locations in the south room. Therefore, it appears the cornice decoration in Structure 2 marked this residence as socially important. The restriction of knowledge regarding this household's storage practices suggests this household maintained a degree of status and authority within the community. The idea of Household 2 as a higher status household is further supported by the large amount of jade, varying styles of bead and decorated jars found within Structure 7, the *bodega* of Household 2. Suspended from the southwest corner of Structure 7, there were five cinnabar-filled miniature decorated ceramic vessels, seven jadeite beads, a dark gray stone, a disk-shaped shell bead with an incised five-pointed star, and two incised shell pendant fragments (McKee 2002:67). These items were stored in a less visible and accessible location, thus knowledge about the stored goods would have only been known by those familiar with the interior. Thus, both the location and possession of these valued items suggests that Household 2 was of higher status and wealth. As discussed previous, this wealth can probably be attributed to the service relationship this structure maintained with Structure 9, the sweatbath.

Unlike Structure 2, the north room of Structure 4, the *bodega* of Household 4, was not devoid of artifacts. In fact the majority of stored items including the most valuable were kept within this room in somewhat visible places. Some of these items which were displayed on the shelf that ran along the dividing wall included, a ladle incensario with an animal head decoration, two polychrome vessels, two polychrome tripod plates, two woven textiles, four scraped utilitarian jars, two of which contained chile and cacao seeds, an open mouth bowl with chile

seeds, a bone needle, an awl or corn husker (Gerstle and Sheets 2002:78). By making these items more visible, Structure 4 was providing members of the community with knowledge about their storage items and practices that may not have been reciprocated. Additionally, given the social connotations associated with the polychrome vessels and other foreign items on display, it appears the members of Household 4 were attempting to connect themselves with the status, power and wealth of the Maya elite in a public way. They desired other members of the community to know they possessed these items. Thus, given the degree of knowledge being communicated to other members of the community, it appears the cornice decoration within Structure 4 was not used to denote the household as socially important, but instead communicated a desire of Household 4 to associate themselves with the wealthier and higher status households within the community.

Discussion of Domestic Storage Practices at Cerén

In comparison to the two other households at Cerén, there are a number of lines of evidence that support Household 1 as having higher status and authority within the village of Cerén. For instance, the material goods stored in Structures 1 and 6 were kept in less visible and accessible locations. Thus, knowledge about these items was restricted and only known to those familiar with the interior of the structure. Additionally, the cornice decorations found on the sleeping bench in Structure 1 and along the exterior doorway of Structure 6 identified this household as socially important within the community. Most likely this social importance resulted from the service relationship of Household 1 with Structures 10 and 12. Household 1 had knowledge and access to the items being stored within the community religious structures that other members of the community did not. Therefore, they would have probably acquired more status and authority as a result of this differential knowledge. Furthermore, the service

relationship and resulting social status is emphasized in the structural placement of Structures 6 and 11, as well as the change of doorway in Structure 10.

The authoritative position of the inhabitants of Household 1 is further demonstrated through the visibility of the items on the shelf in the southern portion of Structure 11. Resting on this shelf were very valuable items such as two polychrome ceramic vessels, a tripod serving dish that was a variant of the more typical variety and greenstone celt (Beaudry-Corbett, Simmons and Tucker 2002:53). The visibility of these items suggests a desire of this household to associate itself with the elite. While the service relationship maintained with Structures 10 and 12 provided Household 1 status and authority, they may not have been the ultimate authority within the community. Therefore they made these items more visible in an attempt to reinforce their social position within the community.

Several lines of evidence suggest that Household 2 was of higher status and wealth than other households within the community. Household 2 was the only residence that possessed jade beads and other valuable trinkets in such large quantities. This wealth was probably acquired through the service relationship Household 2 maintained with Structure 9, the sweatbath. Members of the community would probably pay or somehow compensate Household 2 to use the sauna (Sheets 2006). Furthermore, the items stored within Structure 2, the domicile and Structure 7, the *bodega*, were kept in less accessible and visible locations. Knowledge about what was being stored and where it was being stored would have only been known by those familiar with the interiors of the structures. Additionally, the idea of Household 2 as a higher status, wealthier residence was supported by the cornice decoration found in the north room of Structure 2. This decoration would have identified the residence as socially important within the community.

Evidence suggests that Household 4 was of lower status. The majority of items kept within Structure 4, the *bodega*, were located in very visible and accessible locations. Thus, they were providing knowledge to other members of the community that may not have been reciprocated. Additionally, through the visibility of socially valuable items such as the polychrome ceramics, Household 4 was communicating a desire to be associated with the status, authority and wealth of the Maya elite. This is further emphasized by the cornice decorations found on the north side of the partition wall and the east and west walls. This decoration would have drawn attention to these objects, further conveying Household 4's desire to be associated with the status, power and authority of the Maya elite.

Chapter 7 : Conclusions and Future Research Directions

Storage as Situated Practice

Storage, as a component of mutual and situated knowledge becomes involved in the acts of memory making and learning that occur during the interactions, actions and practices occurring within the domestic space (Hendon 2010). As a result, ideas about storage can be extended to include memory and knowledge (Hendon 2000). Memory and knowledge are what groups and individuals mobilize to create socio-cultural identities. As a result, storage becomes part of the processes of identity formation. There socio-cultural identities are materialized through the daily and periodic practices occurring within the domestic space. Therefore, storage practices can be understood as socially meaningful acts reflective of socio-cultural identities (Hendon 2000).

However, knowledge and memory are not always shared equally. Often access to knowledge is a product of the particular social position and the social experiences of a human subject (A. Joyce 2010). Thus, memory and knowledge can be understood as situated within spatial, social, temporal contexts. Thus, the participation in daily and periodic practices provides opportunities for the creation, contestation and negotiation of socio-cultural identities (Hendon 2000; 2010). Individuals are able to share or restrict knowledge based on the type of spatial settings in which practices such as storage occur (R. Joyce and Hendon 2000). Practices occurring in more open and accessible settings allow knowledge to be shared more equally between members of the community, while practices that are less accessible and visible restrict knowledge. As a result, knowledge becomes a source of social differentiation. Thus, if privacy is through of in terms of restricted access, then spatial secrecy and containment become physical manipulations of power, status and control (Hendon 2010). Therefore, differential knowledge

about storage practices occurring within the domestic space becomes indicative of the household member's ideas about their status, power and authority within the community.

Furthermore, as a component of mutual knowledge, storage becomes part of the moral order around which individuals orient themselves in the world. Storage acquires a moral dimension because it is part of the processes connecting resources with people's needs, desires, and because the social evaluation of people or groups may take into account their connection to storage practices (Hendon 2000:45). Therefore, the placement, permanence, construction and embellishment of formal storage features and their related practices can be understood as embodying a moral dimension.

Objects should not be considered as static, bounded things. Things and society co-produce each other (Hodder 2012). Things are dependent on people just as people are dependent on things and it is in this way that they become social agents. They possess their own nonverbal qualities and are involved in their own historical processes. They can persist, in some cases beyond a life history of their own. They incorporate knowledge and memory and have spatial and temporal dimensions (Olsen 2010). They have differential meanings based on when and how they are experienced within the landscape and can be chosen based on the preference of material properties or associations.

Thus, domestic storage can be understood in terms of the relations between the individuals participating in the act of storing and the items being stored. If the stored object and the individual are co-dependent on one another then the location and possession of a stored item is reflective of not only the individual's desires, needs, wants and perceptions regarding their socio-cultural position within the community, but the dependencies of the object on the human subject. As a result, storage as a situated practice becomes a socially meaningful mechanism that

can be used to interpret household member's ideas about their wealth, status, authority and moral order within the community.

Domestic Storage and Cerén

Due to the exceptional preservation of architecture, artifacts and botanical remains, the archaeological site of Cerén serves as an ideal case for evaluating the socio-cultural dimensions of the domestic unit such as wealth, status, and authority. The near complete artifact inventories and preservation of architecture and botanical remains at Cerén have provided archaeologists with opportunity to reconstruct household activities (Sheets 2000; 2002). Based on the artifact patterning within the domestic structures it appears that the households were participating in part-time craft specialization and varying degrees of agrarian production, (Sheets 2000). Additionally, it is suggested that two of the households were providing service in the form of grinding, processing, transportation and storage of foodstuffs, as well as maintenance of architecture, to three of the specialized structures within the community (Sheets 2000; 2002).

Many of the variations in storage practices, structural features and artifact inventories were connected to the types of services being performed by household inhabitants. The socio-cultural characterizations of the households and their inhabitants including wealth, status, authority and moral order appeared to be linked to the services being provided by individuals to the special purpose structures within the community. Based on the variability of domestic storage practices and structural features at Cerén, it appears that the households and their inhabitants were socially differentiated.

Given the locations, properties, layout, orientation, embellishment and placement of household artifacts and structures, it appears that in comparison to the other two households at Cerén, Household 1 possessed a high degree of status and authority within the community.

Comparatively, Household 2 appeared to have a high degree of wealth and status, while Household 4 appeared to be of lower status. Therefore, based on the interpretations presented in this study and the previous archaeological work conducted at Cerén, we can conclude that the social, ideological, economic and political life of the Cerenians was diverse and complex. They lived within a social heterarchy where some of the households and its members possessed more or less wealth, status and authority than others.

Through the use of storage practices, this study had demonstrated the successful application of an alternative means to interpreting the daily and periodic practices occurring within the domestic unit. Materiality or the interactions between human subjects and things represents a viable direction for better understanding the ideas individuals have about their status, wealth, authority and moral position within the community.

Future Research Directions

While the interpretations presented in this study have improved upon our understanding of the socio-cultural dimensions of the household complexes at Cerén, there is still a great deal we do not know. Such as, what types of food were being stored in the ceramic vessels? Therefore, a potential direction for future research would be the use of organic residue and starch grain analysis of the ceramic vessels from within the households and specialized structures. Through these methodologies we would be able to improve upon our understanding of the service relationships between households and structures, agrarian trade within the community and the greater Zapotitán Valley, as well as the storage, processing and production of agrarian goods within the households and specialized structures at Cerén. Additionally, we can also identify the type of festival occurring at Structure 10 at the time of the eruption based on the type of food being within the stored vessels.

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