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Activity Areas, Form, and Social Inequality in Residences at Late Postclassic Zacpetén, Petén, Guatemala

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Zacpetén, Petén, Guatemala was densely settled from the Late Postclassic to Contact periods. During initial contact with the Spaniards and after the conquest of Petén in A.D. 1697, a group called the Kowoj occupied the area where the site is located. Excavations in domestic contexts at Zacpetén revealed that occupants of larger residences had greater access to resources. Many common trade artifacts such as greenstone, serpentine, and obsidian strongly correlate with residence size, indicating that inequality in spatial resources was associated with access to trade. The scarcest non-local items, including copper alloy artifacts, were limited to public ceremonial areas and the residences of the highest Kowoj elite. Instead of corresponding with access to trade, the possession of these items was related to high-level participation in the religious hierarchy. There are a variety of activity areas that were structured by a dualistic division in domestic space that was not overtly related to gender.

Introduction

During its 1996–1997 field seasons, the Proyecto Maya Colonial excavated 26 buildings and nearby plaza areas at Zacpetén, Petén, Guatemala. The residential excavations investigated the architecture and activity areas of five Late Postclassic (A.D. 1200–1525) to Contact period (A.D. 1525–1697) domestic groups. The research revealed evidence of social differentiation in the form of structure size, composition, and artifact content. Social differentiation at the site has a linear relationship with access to trade items. Certain non-essential exotic items did not follow a linear relationship with social status, but were instead restricted to the highest level of the social hierarchy.

The Proyecto Maya Colonial is reconstructing the dynamic political geography of Postclassic to Contact period Petén (FIG. 1). Two social groups, the Itza and the Kowoj, dominated politics in the Petén Lakes region during this period (Jones 1998: 3–28). The central city of the Itza group, Nojpeten, stood on an island in Lake Petén Itzá, occupied today by Flores, Guatemala. The conquest of Nojpeten by the Spaniards in A.D. 1697 ended independent rule in the region. The Itza controlled areas to the west, south, and east of Late Petén Itzá. The Kowoj lived in fortified settlements in the NE part of the Petén Lakes (Jones 1998: map 3).

The Itza and Kowoj had complex social hierarchies with nobility (Jones 1998: 60–107). Noble status depended upon the lineage quality of one’s father and mother (Restall 1997: 88; Jones 1998: 75–82). Slaves occupied the lower end of the social spectrum (Roys 1943: 34–35) and between these individuals and the elites were commoners and “middle” classes (Chase 1992: 121). Evidence of a continuum, as opposed to an elite/commoner dichotomy has been documented at Late Postclassic Maya sites (Chase 1992: 127–128). Social status is difficult to reconstruct, as other factors impinge upon this variable (Chase and Chase 1992: 11–14).

The peninsular site, Zacpetén, lies in the NE corner of Lake Salpetén in the NE part of the Petén Lakes region. The site (FIG. 2) was first investigated between 1979 and 1981 by Don and Prudence Rice, who recorded two Late Postclassic ceremonial groups, Group A and Group C (D. Rice 1986: 323–324, 1988: 227–244; P. Rice 1986: 264–266; Rice, Rice, and Pugh 1998: 207–246). Densely clustered on high terraces below the ceremonial groups and two elite household groups, Group D and Group E, are 137 visible
domestic patio groups and 23 unidentified structures. Group B, which is a Terminal Classic Twin-Pyramid Group, rests on the northern part of the peninsula. Late Postclassic censer sherds found on the surface of this group indicate that its use continued beyond the Terminal Classic period.

In 1979, Don and Prudence Rice initiated Proyecto Lacustre which involved three transects, each two km by 500 m, randomly placed around Lake Salpetén as well as survey and testing on the peninsula. The surveys revealed 152 structures or 50.7 buildings per sq km. Of the 42 test units excavated, Middle to Late Preclassic (1000 B.C.–A.D. 300) deposits were encountered in seven, Early Classic (A.D. 300–600) in three, Late Classic (A.D. 600–830) in 38, Terminal Classic (A.D. 830–930) in one, and Postclassic (A.D. 930–1525) in three. Results differed on the Zacpetén peninsula, where 190 buildings were encountered, averaging 819 per sq km. Of the 17 test units excavated at Zacpetén, little occupation existed before the Late Classic period and only one unit had an Early Classic component. Four of the 17 units had Late Classic materials; five had Terminal Classic occupations; and all 17 had Postclassic materials.

Following Proyecto Lacustre, research at Zacpetén ceased for 14 years until resumed by Proyecto Maya Colonial in 1994. This work revised an earlier site map, placed additional test units, and investigated a defensive system in the northernmost portion of the peninsula. Two test units excavated in the plaza of Group A revealed the most complete occupational history. The earliest settlement was a substantial Middle Preclassic occupation followed by a hiatus until the Late to Terminal Classic period, at which time the group experienced a major reconstruction. The group continued to be used in the Early Postclassic period and experienced a dramatic reconstruction during the Late Postclassic period (Rice, Rice, and Pugh 1998: 224). Except where noted, the Late Postclassic masonry at Zacpetén is composed of hard limestone rubble. All late constructions at the site had thatched roofs.

A large defensive system stands on the northern end of the peninsula where it meets the mainland (FIG. 2). A canal, two parapets lining a ditch, a high stone wall, and numerous low walls at the peninsular neck controlled access to the settlement. Numerous small side-notched projectile points and large bifaces at the base of the high wall affirm that its defensive capabilities were tested at least once. The system was constructed in the Terminal Classic period, but Early and Late Postclassic renovations are evident (Rice, Rice, and Pugh 1998: 225–227).

The various test units indicate a moderate Middle to
Figure 2. Plan of Zacpetén, Petén, Guatemala with excavated Domestic Groups.
Late Preclassic occupation of Lake Salpetén followed by near abandonment in the Early Classic period. The area was heavily reoccupied during the Late Classic period. In the Postclassic period, most areas around the lake were largely abandoned, but population increased dramatically on the peninsula (Rice, Rice, and Pugh 1998: 222). The choice of the peninsula for settlement was likely the result of the natural protection afforded by the peninsular neck, augmented by the defensive system.

Just east of Zacpetén rests Muralla de Leon, which was also fortified. Topoxté, far to the east of Zacpetén stands upon three naturally defendable islands. These sites also have ceremonial architecture nearly identical to that of Mayapán, a Late Postclassic capital in Yucatan, Mexico (Johnson 1985: 163; Rice 1988: 241; Pugh 2001: 567–581). These three sites appear to be the central settlements of the Kowoj region.

**Domestic Excavations at Zacpetén**

In 1996–1997 horizontal excavations were conducted in civic-ceremonial and residential contexts at Zacpetén, the latter of which are considered here (FIG. 2). The sampling of residences was judgmental with buildings chosen by size, group content, and location. Size and group content were key factors because excavations at Mayapán indicated that elite domestic groups were more imposing and grouped with additional houses, religious structures, and service buildings (Smith 1962: 218). We selected the largest, smallest, and three intermediate-sized residences at Zacpetén and groups with and without associated structures, thereby sampling a broad range of social statuses. Zacpetén may have been divided into several social districts (Pugh 2001: 601), and residences to be excavated were selected, therefore, from a variety of locations. Residences at Zacpetén are “tandem,” meaning that they have open front rooms parallel to closed back rooms.

The excavations at Zacpetén were designed to discern activity areas through the use of a 1 x 1 m grid. In total, 4685 1 x 1 m units were excavated and 1466 of these units investigated residential areas. Deposits usually lay under approximately 20 cm of soil unless near walls, where overburden could be 50 cm deep. Artifacts were removed from the units according to cultural and natural strata. All soil was screened through 1/8” hardware cloth, as previous research revealed that larger screen sizes would lose tiny artifacts such as divination crystals, mosaic mirror pieces, and small projectile points.

**Domestic Group 758**

Domestic Group 758 is the smallest and most poorly constructed of the excavated residential groups. It is located on the side of a hill 40 m south of the ceremonial core of Group C (FIG. 2). The group includes a residence, Str. 758, with a patio to its east, which provides a level surface in sloping terrain. A 71 m sq excavation block exposed 95% of Str. 758. A disturbed rectangular masonry feature lay at the northern end of the eastern edge of Str. 758 (FIG. 3). The foundation stones of the west wall of the superstructure are all that remain of the exterior walls of Str. 758, indicating that they were constructed of perishable materials. The most salient masonry feature within Str. 758 is its straight bench. Relative to the other benches excavated at Zacpetén it is small and poorly constructed and an earlier test pit clipped its northern end. The orientation of the bench indicates that Str. 758 faced toward the patio. In the front room, on the eastern side of the bench, lies a large patch of a preserved plaster surface. Six units excavated into the platform of Str. 758 and patio to the east revealed no earlier constructions. Early Postclassic fill underlay the Late Postclassic period construction, but may have been brought in from nearby abandoned buildings or refuse areas.

No substantial deposits were found within Str. 758, but traces of activities were revealed. Ceramic sherds, net weights, and chert debitage were encountered in the back room. Chert debitage and a chert core lay south of the rectangular masonry feature. Composite censer sherds were weakly concentrated between the bench and rectangular masonry feature. Such censers are decorated with simple appliqués such as spikes and “buttons” and do not depict deities. One quartz crystal rested on the rectangular feature. A complete ceramic mold used to create faces of small deity effigy censers was discovered in the back room of the structure. The reverse side of the mold was decorated with the incised depiction of a human skull. The lack of substantial and complete domestic artifacts suggests that Str. 758 was not rapidly abandoned. But if it was, the occupants may have been able to carry most of their possessions with them.

**Domestic Group 664**

Domestic Group 664 is slightly larger and much better constructed than Group 758. It lies east of Group B approximately 35 m west of the Lake Salpetén shoreline. The 180 sq m patio group held a residence, Str. 664, and a small rectangular building, Str. 709. A 224 sq m excavation block exposed the entire patio (FIG. 4). An inset stairway along the eastern edge of the patio leads east toward the lake’s edge and nearby buildings. The floor and bench of Str. 664 have no traces of a plaster surface. The building had no masonry partitions, but perishable walls likely enclosed it. A row of limestone slabs defines the northern
edge of the superstructure. The front side of the superstructure was open and faces due south with an inset stairway leading to the patio. The most prominent feature within Str. 664 is the bench, which is straight rather than the typical L-shape. No masonry wall lines the back of the bench, but a perishable wall likely divided the back room from the front room. In line with and east of the bench is an irregular low platform. Str. 799, a platform of limestone slabs, lies on the southern edge of the patio in line with the stairway of Str. 664. At Mayapán (Smith 1962: figs. 3–7) and Cozumel (Freidel and Sabloff 1984: figs. 29–30, table 8), similar small rectangular buildings centered upon residences and other structures in domestic groups were found to be household altars or shrines.

Four test units excavated into Domestic Group 664 revealed no earlier constructions, but a stratum beneath the Late Postclassic fill layer had Terminal Classic diagnostic sherds. A test unit located 10 cm west of the bench encountered a human burial (Burial 664-1) partially inserted under a higher platform to the west of the Str. 664. The 1.65 m long (N–S) and 65 cm wide feature contained a partially flexed adult on its right side with its hands near the mid-section. The skull was to the north and faced west. A fragmented unidentified ceramic vessel lay to the west of the individual. Numerous chert flakes found among the metacarpals and phalanges had been placed in the individual's hands at the time of interment.

Artifacts were sparse in the majority of Domestic Group 664. The most exceptional concentration appeared on the group's western edge and was likely secondary refuse dumped from a higher platform to the west. The refuse included ceramic sherds, animal bone, shell, chert debitage, flakes, blades, cores, hammerstones, mano and metate fragments, animal and human teeth, and net weights. A primary deposit of obsidian debris, flakes, and blades lay in the back room of Str. 664. The front room was relatively clean, but several ceramic whistle sherds and chert cores lay near the bench. Forty chert and obsidian corner-notched points were spread across the patio, but only two lay inside the residence. Several figurine sherds, including two female effigies (male figurines are rare), were scattered across the...
Domestic Group 732

Structure 732 was chosen for excavation because it appeared small and it was hoped that the “lower” social tiers were being investigated. It turned out, however, to be larger than expected and well constructed, likely housing a family of medium status. Domestic Group 732 contains a residence (Str. 732) with an open patio to its NE (FIG. 5). Another small platform (Str. 1004) of unknown function also rests on the patio. West of the group is the sharp slope leading up to Group C, while terrain to the east gradually descends to the shore of Lake Salpetén. The patio leveled the naturally sloping surface and has an area of roughly 200 sq m. Along the patio’s SE edge is a small inset stairway. A 169 sq m excavation block uncovered all of Str. 732.

Structure 732 has an L-shaped bench. The plaster on the floor and bench in the front room of the tandem building is roughly 2 cm thick, which is substantial relative to other Late Postclassic buildings at Zacpetén. Lining the back of the bench is an L-shaped wall separating the front and back rooms. In the “elbow” part of the bench surface are several spots of charred plaster. At the SE end of the bench is a crude shrine defined by a row of small chunks of limestone rubble. The plaster within the feature is charred. The back room has an earthen surface and a crude row of foundation slabs defines its back wall. In the SW part of the building, between the front and back rooms, is a low rectangular platform. Several test units indicated that the patio was not built upon earlier structures. A burial encountered on the east edge of the patio contained the tightly flexed skeleton of a child in a seated position who may have been wrapped in a bundle. The head was to the south and the individual faced north. The burial form was similar to that of the Chinamita, an ethnic group located NW of the Petén Lakes region and described by Thompson (1977: 13).

Group 732 appears to have been suddenly abandoned with many objects left in situ. Utilitarian items, such as shell, bone, most chert and obsidian artifacts, manos, metates, net weights, and non-censer ceramics were concentrated in the back room. These artifacts were also found in secondary refuse deposits SW of the patio and adjacent to the NW corner of the structure along with a cache of human and animal teeth. Two in situ Mumul Composite spiked censers were encountered in Str. 732. One stood on the NW corner of the low rectangular platform between the front and back rooms. This censer contained incense resin, which was submitted for AMS dating (AA35236) and determined to have a conventional age of 426 ± 30 b.p., calibrated to A.D. 1423–1509 and A.D. 1601–1613 (2 sigma). The second censer was located in the small shrine on the SE end of the bench. Burnt plaster inside the shrine suggests the burning of offerings without censers. A spindle whorl also rested in the shrine. While used for spinning yarn, such objects collected from archaeological contexts by contemporary Maya are used in divinatory practices (Brown 2000: 330). The low platform in Str. 732 seems to correspond with similar constructions in Str. 758 and Str. 664, which were also the locations of ceremonial activities.

Several sherds of La Justa or Extranjeras Composite censers, a small greenstone or serpentine axe, two chert bifaces, and two quartz crystals lay clustered on the patio edge, just east of the low platform. These items were likely secondary refuse from domestic ritual activities. A few isolated sherds from Classic and Postclassic period deity effigy censers were found in Group 732. Despite the lack of in situ effigy censers, an effigy censer face mold lay just north of an altar in the front room, suggesting the production of such vessels.

Domestic Group 747

Domestic Group 747 is the second largest of the excavated residential groups and rests on the hilltop in the center of Group E. The hilltop was built up to form a flat plaza...
with an area of approximately 390 sq m. Adjacent to the plaza stand Str. 747, a residence, and Str. 748, a low platform (FIG. 6). The edges of the plaza are steep, dropping 4 m to its south and NW where several other Late Postclassic/Contact period residences stand.

A 193 sq m excavation uncovered all of Str. 747. The tandem building rests on a low platform with exterior benches on its north and south sides. A masonry wall divides the interior of the superstructure. The front room of Str. 747 was open to the east and has a well-preserved plaster floor accessed by a small outset stairway. The front room has an L-shaped plastered bench in its northern half. Most of the back room of Str. 747 was not plastered, but a small portion of plaster surface rested in its SE corner. Parts of the plastered area are charred. Two metates standing on end (Fea. 747-1) are embedded into the earthen floor of the back room along the medial axis of the structure. A similar feature stands in the back room of Str. 719 and both may have been domestic altars or table bases. In front of Str. 747 lay two posthole features that were dug into bedrock, as the soil was extremely shallow in this area. The line formed by these two features is perpendicular and 1.2 m east of the eastern edge of Str. 747. No other postholes were discerned because the soil had been disturbed by tree roots. Perishable posts likely supported the thatched roof of Str. 747.

Eighteen units were excavated into the floor of Str. 747 to search for earlier constructions and subsurface features. Str. 747 was built upon an earlier building, which was oriented 100.3° east of north or 6.7° west of the later construction. The back room of Str. 747 was the location of various activities. Miscellaneous ceramic sherds, bone, shell, obsidian blades, corner-notched points, manos, and net weights were primarily located in the back room. A complete utilitarian jar found NW of Fea. 747-1 contained 45 ceramic, butterfly-shaped net weights and wood fragments dated with AMS analysis (Beta-112317) and determined to have a conventional age of 370 ± 30 b.p., calibrated to A.D. 1447–1528 and A.D. 1552–1632 (2 sigma). The wood was identified as *Piscidia erythina*, which is commonly used as a fish poison (Lee Newsome, personal communication 2003).

The front room of Str. 747 was relatively clean of artifacts. A light concentration of sherds was located in the front room just south of the bench and north of the door to the back room. Correlated with the sherd scatter was a higher frequency of obsidian debitage, bone, shell, an obsidian core, two chert cores, and two chert corner-notched points. A second concentration found near the building’s stairway included chert debris, flakes, blades, cores, a lance or knife head, a corner-notched point, and an obsidian corner-notched point. The two small scatters deviate from the typically “clean” front room and appear to have resulted from lithic production. The front room of Str. 747 did not contain concentrations of censer sherds. Two small miscellaneous sherd concentrations lay outside and in front of Str. 747: one in the NE corner and the other in the SE cor-
Domestic Group 719

Domestic Group 719 was the largest excavated residential group and among the three largest at Zacpetén. It rests on the saddle between Group A and Group C (FIG. 2). An aguada (water hole, pond) lies to its east, and to the west is another aguada linked to Lake Salpetén. The group includes Str. 719, a residence; Str. 721, a domestic temple; and Str. 720, a shrine (FIG. 7). The buildings stand on a platform with an area of 1200 sq m. Excavations focused upon the three visible buildings and did not investigate substantial parts of the plaza.

A 532 sq m excavation uncovered all of Str. 719 and tested adjacent areas (FIG. 8). The front room of the tandem structure has a plaster floor, an L-shaped bench, an interior shrine, an altar, and a small square masonry feature. Hundreds of plaster fragments painted with red curvilinear designs had collapsed from the bench face. The unfaded designs and red stains on the adjacent floor suggest that the bench had been painted just before the building's abandonment. Ten slabs cut from soft limestone, all taken from Classic period constructions, are embedded into the northern bench dividing it into eleven sections. Since the front rooms of tandem residences were social areas (Landa 1941: 85–87), these stones may have been seats.

The interior shrine of the front room was enclosed by three walls. The top and sides of the shrine were capped by a plaster surface, apparently unpainted. West of the shrine lies an altar, partially composed of soft, cut, limestone from Classic period constructions. A large piece of stucco, painted with red and black dots and lines on white, rested upon the altar. The preserved stucco fragment had been whitewashed and repainted several times. In front of the altar is a small masonry rectangle. This rectangle could have been the foundation for a post or another altar. Given its similarity to a feature along the medial axis of Str. 721, I assume the latter. A cache vessel encountered inside the altar included a lidded restricted orifice Chilo paste bowl with two loop handles on the vessel and one on the lid. It contained a greenstone bead, two red stone beads, and a flat greenstone mosaic tessera. This cache likely activated or renewed the residential structure and helped protect the domestic space from evil winds (Stuart 1998: 395, Redfield and Villa Rojas 1934: 146). Just east of the medial altar is the entrance into the back room, which has an earthen floor. The only masonry feature in this room is composed of two large metates embedded into the floor. A similar feature was found in the back room of Str. 747.

Fourteen test units excavated into Str. 719 and adjacent areas revealed that Str. 719 had been built on top of an earlier Late Postclassic structure which had in turn been constructed upon a building with Early Classic diagnostic sherds in its fill (Prudence Rice, personal communication 2001). South of Str. 719 excavations revealed a trash pit with large amounts of freshwater shell, animal bone, and early Late Postclassic polychrome ceramic sherds (Leslie Cecil, personal communication 2001). The vessels seem to have been ceremonial and the entire deposit likely included refuse from a ritual event. Burial 719-1, the only one found in Str. 719, lay adjacent to the west side of the building just below the ground surface. The upper half of the in-
The quantity of primary refuse inside Str. 719 suggests a rapid abandonment. Heavy concentrations of utilitarian items including sherds, bone, shell, obsidian and chert debris, blades, cores, corner-notched points, chert bifaces, manos, net weights, gizzard stones, and hammerstones lay in the back room and behind the structure (FIG. 8). Ceramic sherds in the back room were concentrated against the interior wall and included at least four complete vessels, though the 36,589 non-censer sherds of the building undoubtedly comprised additional complete vessels. Two utilitarian jars embedded into the floor just north of the shrine held carbonized remains, including maize kernels. An AMS analysis (Beta–107791) had a conventional age of 200 ± 40 b.p., calibrated to A.D. 1639–1701, A.D. 1721–1818, A.D. 1831–1881, and A.D. 1915–1944 (2 sigma). The dates between A.D. 1831 and 1944 have low probabilities and no historical artifacts lay in the building. In addition to the jars, Ixpop Polychrome and Macanché Red on Paste plates lay adjacent to the wall.

An important activity occurring in the back room at the time of its abandonment was the production of red paint. In the western part of the room lay two small limestone mortars (FIG. 8) with four smooth river cobble pestles nearby, two with red pigment staining their fracture lines. Adjacent to one of the pestles were two fragments of gypsum, which occurs in abundance in the Salpetén basin, and a couple of meters south of these was a piece of fired gypsum. Fired gypsum produces plaster of Paris which may have been used as an undercoat or ground in the painting of Str. 719. Near the fired gypsum were two red stones, one of which was more than 30 cm in diameter. Field tests revealed that these stones could be ground into water-soluble pigment (Leslie Cecil, personal communication 1998). A third pigment stone was located nearby. The paint production in the back room supports the idea that the bench and altar of the front room were freshly painted. This behavior suggests ritual activity because cleaning and renovation purified houses during certain rites (Landa 1941: 151).

Chert hammerstones and obsidian cores were also concentrated in the back room (FIG. 8). Str. 719 had more obsidian cores (TABLE I) than any other excavated structure at Zacpetén and it held more manos and metates than all other excavated residences combined. Most of these objects...
Table 1. Frequency of lithic artifacts by residence at Zacpetén.

<table>
<thead>
<tr>
<th>Residence</th>
<th>Building area (sq m)</th>
<th>Excavated area (sq m)</th>
<th>Obsidian cores</th>
<th>Obsidian blades</th>
<th>Obsidian debitage/flakes</th>
<th>Obsidian points</th>
<th>Chert cores</th>
<th>Chert blades</th>
<th>Chert debitage/flakes</th>
<th>Chert points</th>
<th>Greenstone/serpentine</th>
</tr>
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<tr>
<td>Str. 719</td>
<td>225.60</td>
<td>532</td>
<td>8</td>
<td>263</td>
<td>134</td>
<td>32</td>
<td>13</td>
<td>49</td>
<td>1891</td>
<td>41</td>
<td>4</td>
</tr>
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<td>Str. 747</td>
<td>95.20</td>
<td>193</td>
<td>5</td>
<td>32</td>
<td>42</td>
<td>16</td>
<td>11</td>
<td>10</td>
<td>673</td>
<td>33</td>
<td>2</td>
</tr>
<tr>
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<td>1</td>
<td>68</td>
<td>49</td>
<td>23</td>
<td>1</td>
<td>9</td>
<td>722</td>
<td>17</td>
<td>2</td>
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<tr>
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<td>0</td>
<td>91</td>
<td>59</td>
<td>16</td>
<td>21</td>
<td>58</td>
<td>952</td>
<td>24</td>
<td>1</td>
</tr>
<tr>
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<td>33.73</td>
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<td>11</td>
<td>6</td>
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<td>2</td>
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</table>

Figure 9. Copper-alloy bells from Str. 719 at Zacpetén.

were in the back room, though some appear to have been construction stones while several tiny pieces of worn gravel near the interior wall appear to be gizzard stones. A clustering of ceramic figurines of animals in the western part of the room could have been toys. Two copper bells (FIG. 9) and three shell beads were found near the metates embedded in the floor of the back room.

Compared to the back room, the front room was free of everyday refuse, although it held censers and other ceremonial artifacts. Thirteen complete composite censers were found on both sides of the interior wall in the eastern part of the structure in a mirror-like fashion. Shards from several censers were encountered on both sides of the wall; hence, the vessels likely rested on top of the interior wall when the ceiling collapsed. Forty percent of a Saca Polychrome collared jar, a quartz crystal, and a copper axe-head were found with the censers.

The interior shrine contained several ceremonial items including an in situ Kulut Modeled effigy censer (FIG. 10). Within the bowl of the censer was a small cup, probably used to offer ceremonial drink to the deity depicted on the front of the vessel. Similar cups often rested near larger deity censers in temples at Zacpetén. Lying adjacent to the effigy censer was half of a lower mandible from a tapir or pecary. The bases of two Extranjeras Composite censers rested upon the altar.

Str. 720 and Str. 721, completely uncovered by a 168 sq m excavation, lie on the eastern edge of Domestic Group 719 (FIG. 7). Str. 721 is a domestic temple and faces west (269° east of north). Str. 720, west of and centered upon Str. 721, is a masonry rectangle standing 20 cm high and was likely a shrine or altar. Some of the stones of Str. 720 were dressed soft limestone blocks. Two smaller masonry rectangles lay adjacent to the larger rectangle. A low apron wrapped around the western (front) side of the structure. The superstructure of Str. 721 included a C-shaped wall, medial altar, and interior altar. A small masonry rectangle similar to those adjacent to Str. 720, was found west of the interior altar. The facade and medial features of Str. 721 were partially composed of dressed soft limestone. The entire plaster floor had been exposed to high temperatures and was charred in some places. Areas of red wash were preserved in some parts of the floor.

The artifacts of Str. 720 and Str. 721 will be discussed together. A lithic production area, or secondary refuse from such activities, yielding two chert cores and 30 chert flakes lay behind Str. 721. Several animal teeth and a human tooth were encountered outside the building against the
north side of the platform. Inside the building, several turtle carapaces occurred in the SE corner. The carapaces were likely offering vessels as they were found with two other offering dishes, one manufactured and the other a large worked jar sherd. The remains of various animals composed an offering placed near the small masonry square on the west side of Str. 721. Sherds of a lid and rim of a Chipotle Red cache vessel adjacent to the interior altar may have resulted from the termination of the building’s cache, corresponding with its burning. Sacred objects in Mesoamerica were periodically terminated or ritually “killed” and replaced with new objects (Mock 1998: 4–6).

The use of effigy and composite censers represents the primary activity of Strs. 720 and 721, producing 822 censer sherds, mostly burnt. Composite censers comprised 25% of the sherds whereas the other 75% were deity effigy censers. Two pairs of composite censers were arranged along the medial axis of the building while a fifth was broken over the eastern half of Str. 721. The deity effigy censer sherds (Kulut Modeled and Patojo Modeled) were clustered to the west of the medial altar. This distribution overlaps with that of the composite censers, but these effigy censers were smashed and scattered.

The distribution and orientation of the Patojo Modeled effigy censers in Str. 721 matches that of those found in the two temples at Zacpetén (Pugh 2002: table 16-1). The burned interior and intentionally smashed cache of the building likely corresponds with the rapid abandonment of Str. 719.

Discussion

The five excavated domestic groups at Zacpetén sampled a variety of residential locations, sizes, and group types. The residences shared many aspects of form and artifact distribution, but variations in the frequency of exotic artifacts and the presence of certain masonry features distinguished the buildings and suggest social differentiation. All five excavated residences were tandem structures on low building platforms with benches in their front rooms. The three structures with L-shaped benches had an interior masonry wall lining the rear of the bench dividing the building into a front room and a back room. It is assumed
that the two other buildings had perishable interior walls. The front rooms in all residences with L-shaped benches and one of the structures with a straight bench were covered with plaster while the back rooms had earthen floors. The other structure with a straight bench did not have a plastered front room. In three of the residences a small masonry rectangle stood opposite the bench with the door leading from the front to the back rooms between the two features. In the two cases where the masonry rectangle was not present, the interior wall continued dividing the side of the residence without a bench. Two structures had a feature constructed of metates embedded into the floor in the center of the back room.

When the architectural features of each house are tabulated and arranged according to the structures' internal areas, a clear pattern is evident. The largest two residences, Strs. 719 and 747, have all of the features listed above, except the masonry rectangle. Str. 732 has the architectural rectangle, but lacks the metate feature and the continued interior wall. The remaining two structures, Strs. 664 and 758 (which were the smallest residences) have the rectangular feature, but lack masonry walls and have simpler straight benches. Str. 664 also has no plastered surfaces. While the area of residential space might not always be a good indicator of social status, it certainly correlates with the presence of specific features at Zacpetén. The size and form of Str. 719 corresponds with descriptions of colonial elite houses in Yucatan, which were built by communal labor (Landa 1941: 85–87). An interior wall divided such houses “lengthwise” producing a front room and back room. The front room was covered with plaster and used as a social area and sleeping place for guests and the occupants slept in the back room. The plastered front rooms of elite houses were elaborately painted (Landa 1941: 86). The Spaniards similarly described elite houses in Contact period Petén (Jones 1998: 71).

Str. 719 is partially constructed of soft limestone pieces from Classic period constructions and has associated elaborate ceremonial buildings. People of higher status seem to have been able to fulfill the majority of their residential construction goals and thus higher status residences are the most complete representations of the archetypical residence. This does not, however, explain the presence of the low rectangular platform in the smaller and less well constructed dwellings, which might have been shrines similar to Str. 720.

Burials were commonly found in Mayapán domestic groups (Smith 1962: 232–255), but were rare in those of Zacpetén, and cist burials were completely absent. It is possible that the “rarity” of burials resulted from patterning that was inadequately sampled. While numerous test units were placed into the residences, only three burials were encountered, all found to the “right” (to the west if it faced south and to the east if it faced north) of the residence. The two groups that did not follow the patterning were not excavated in the area to the “right” of the residence. While a sample of three is certainly insufficient to define burial patterns clearly, it suggests the possibility of such patterning.

Residences at Zacpetén follow the same basic front room-back room pattern as Mayapán (Smith 1962: 230–231). However, while C-shaped benches are common at the latter site (Smith 1962: figs. 2–10), none were found at Zacpetén. Residences at Mayapán sometimes have more than one chamber in the back “room,” but no such internal divisions were found at Zacpetén. What is more, many residences had “shrine rooms” as one of the divisions in the back “room” (Smith 1962: 191–202). Shrines at Zacpetén, however, are located in the front room. The residential oratorios at Mayapán tend to have benches (Smith 1962: fig. 11), but Str. 721 does not. Domestic groups at the Yucatecan site often have more than one domestic structure, perhaps indicating extended families (Smith 1962: 206). In contrast, all of the excavated groups at Zacpetén had a single residence. Domestic groups at Mayapán are defined by boundary walls (Bullard 1952, 1954), but those at Zacpetén are defined by patio borders.

Residential Activity Areas

Activities ranging from everyday tasks to ritual performances occurred in the residences of Zacpetén. While the occupants belonged to a range of social classes, repeated patterns of artifacts were discerned in the excavations of the domestic groups. Occasional variance from patterned assemblages was found, and one should not expect artifact distributions to automatically reflect status. The presence of variability suggests innovation, resistance, or forgotten knowledge, all parts of the process through which habitual behaviors change through time. The present section, however, focuses on repeated patterns of artifact distributions to illuminate structured domestic practices at Zacpetén.

All household groups contained numerous small chert and obsidian corner-notched projectile points (Table 1). While residential excavations were only 25% of the excavated units, they produced 51%, or 202, of the total number of points. In Strs. 719, 732, and possibly 747, most points were found in the back room, but in Group 664, almost all were located on the patio. These small artifacts are probably arrowheads. Such points could have been used in warfare, but it seems likely that most points found in domestic contexts were used in hunting.
The front rooms of all excavated residences were relatively free of artifacts used in subsistence and production. The fact that these areas were generally covered by stucco indicates that the spaces were made to be more visually appealing. Moreover, refuse on the plastered surface must have been easier to clean away. The presence of cut soft limestone taken from Classic period constructions in the front room, but not in the back room of Str. 719, attests to the visual importance of this area.

In Strs. 719, 732, and 758, ritual activities in the form of censer use occurred in the front room close to the door leading to the back room. Interior shrines lay in the front rooms of Strs. 732 and 719 and low masonry rectangles rested near the door opposite the bench in Strs. 664, 732, and 758, the latter two with associated composite censer sherds. While Str. 719 did not have a low masonry feature, numerous censers and other artifacts rested upon the interior wall in the parallel location. Since the front room was open, the ritual activities that occurred in this area were visible to the outside, while activities in the back room were hidden. The benches in all the front rooms imply sitting, and their sizes suggest the presence of more than one individual. Historical documents also describe the use of the front room of the house as a social area. The majority of the ritual and social activities within the residence occurred in the front room public space near the entrance into the back room.

The back room was hidden from outside view and was the place of domestic production and the family living space. In all five residences, non-censer ceramics were concentrated within the back room near the interior wall. The contents of the vessels in Str. 719 indicate that they were utilized to store food. The occupants embedded two vessels in the floor and their purpose was storage rather than transportation. In Mesoamerica, the storage of surplus goods appears to have been organized at the household level (Brumfiel and Earle 1987: 6; Hirth 1992: 20). The presence of large vessels in the back rooms of residential structures at Zacpetén fits this trend. It is very likely that the local elite stored more surplus than they produced. They certainly had more space and ceramic containers. In densely settled Zacpetén, the large spaces of elite compounds were a luxury and are evidence of inequality in the distribution of resources. Most lithic artifacts, manos and metates, miscellaneous bone and shell, and net weights were also found in the back room.

If one assumes that females conducted most maize grinding and males contributed the majority of lithic production, then the back room was both a female and male space. Among the modern Maya of Oxlutzcab, the kitchen, which is usually in a separate structure, is primarily female space and the field is male space (Hanks 1990: 329–364). Neither of these gender-specific spaces was identified in the residential excavations at Zacpetén.

The modern Northern Lacandon ritualize social interactions in the domestic structure with visitors remaining near the entrance (Boremanse 1998: 18). In tandem residences at Zacpetén, a similar behavior is evident, but in this case an intermediate social area, the front room, is placed between the outside world and domestic space. The doorway as a passage from public space to domestic space is clearly the focus of ritual activity. The front room was not simply public space, as it is likely that one must have first gained permission before passing into the household patio or plaza. If the pattern at Zacpetén resembled that of the Lacandon, it is doubtful that anyone other than family members entered the back room of the residence.

**Trade Goods**

The frequencies of several artifact types appear to correlate with social status (Tables 1, 2). Structure 719 had more obsidian cores than any other excavated building at Zacpetén. The eight cores in the building compose one-third of all the obsidian cores encountered in Late Postclassic contexts at the site. The area of each residence appears to be related to the presence or absence of certain architectural features suggesting that larger residential space corresponds to greater access to resources and, therefore, higher social status. Residential area at Zacpetén is also correlated with the frequency of obsidian cores (r = 0.918, p = 0.028). Obsidian was obtained through trade with the highlands and higher social status is thought to correlate with access to such trade.

The frequency of obsidian cores was not a function of the excavation size, as the two variables are only moderately correlated (Table 2). On the other hand, the frequencies of obsidian blades (r = 0.979, p = 0.004), obsidian debitage (r = 0.989, p = 0.001), and chert debitage (r = 0.981, p = 0.003) are highly correlated with excavation size. It is difficult to excavate anywhere at Zacpetén without recovering a few obsidian blades and chert and obsidian debitage; therefore, they tend to be well and evenly dispersed. Obsidian cores are an entirely different matter. The fact that no obsidian cores were recovered in the smallest structures, even the Domestic Group 664 patio which was completely excavated, indicates that obsidian cores were not equally dispersed. Additionally, most obsidian cores in Str. 719 were concentrated in the eastern third of the back room, while those of Str. 747 were focused around the back room, and the single obsidian core of Str. 732 was in the back room. These objects were not only limited to specific residences, but were clustered in specific areas inside.
them. Chert cores and blades were not significantly associated with residence area or excavation size indicating that the correlation between obsidian objects and these spaces was related to access to the specific raw material. Greenstone and serpentine were also imported from the highlands. These materials composed beads, pendants, small “hatchet” heads, and miscellaneous objects. Most residential groups included at least one such artifact (Table 1). Greenstone and serpentine artifacts and residence size (Table 2) were highly correlated \( r = 0.964, p = 0.008 \). The frequency of greenstone and serpentine correlated less well \( r = 0.906, p = 0.034 \) with total excavated area.

The items from Zacpetén that were found in only a few locations were European artifacts and long distance trade exotics such as gold and copper artifacts. Scarce European artifacts, including a white clay pipe stem, a lead ball, and pieces of miscellaneous iron were recorded only in the civic-ceremonial groups, as was gold foil. The sources of copper found at Zacpetén have not been identified, but Late Postclassic copper alloy artifacts at Lamanai, Belize originated from West Mexico (Hosler 1994: 211). Copper artifacts were primarily limited to ceremonial groups at Zacpetén, but two of the three bells and the only copper axe head found at the site rested in Str. 719. Copper artifacts were not encountered in the other residential groups.

Variables other than access to trade could have influenced the distribution of obsidian, greenstone, serpentine, and copper in the residential groups. Perhaps the most likely factor is the abandonment process. Similar to other archaeological examples (Schiffer 1985: 20–38; 1987: 89–98; Cameron 1993: 5–6), the residential groups at Zacpetén were differentially abandoned. Domestic Group 719 was deserted rapidly during a ritual event and Domestic Group 732 was also vacated suddenly. The three other excavated groups experienced staggered abandonment as they lack ample quantity and variation in their artifact assemblages (Schiffer 1985: 26–38). Nevertheless, strong correlations exist between trade goods and residence size. If one rules out access to trade as an explanation for variations in the number of trade goods, one might suggest that smaller residences were abandoned more gradually or their occupants moved a shorter distance to their new communities. Even so, I argue that the strong correlations resulted from a relationship between social status and access to trade goods, as the second largest residence, Str. 747, had various trade goods but did not contain abundant abandoned artifacts. Furthermore, the third largest residence, Str. 732, which had substantial numbers of in situ artifacts, contained few trade items.

**Conclusions**

The larger the residence at Zacpetén, the more elaborate the architecture, and the greater access the occupants of the structure had to trade items. Important trade items such as obsidian cores varied positively with residence size. Numerous explanations for the association between obsidian cores and social status are possible. First, higher status might have allowed greater access to trade networks. The groups may have alternatively been involved in a greater amount of production activity, perhaps exceeding the work force of the household and employing outsiders. Perhaps higher status groups obtained cores in order to redistribute blades to the larger population. Finally, the larger number of cores might be a function of greater waste by higher status individuals. In any case, the higher the status, the more obsidian cores a group possessed.

Greenstone and serpentine objects also had a positive relationship with residence size indicating that these materials were accessible to the larger population. Greenstone served a variety of purposes, including personal decoration

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Table 2. Pearson correlation matrix of residence area and frequency of lithic artifacts.

<table>
<thead>
<tr>
<th></th>
<th>Building area</th>
<th>Excavated area</th>
<th>Obsidian cores</th>
<th>Obsidian blades</th>
<th>Obsidian debitage/flakes</th>
<th>Obsidian points</th>
<th>Chert cores</th>
<th>Chert blades</th>
<th>Chert debitage/flakes</th>
<th>Chert points</th>
<th>Greenstone/serpentine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building area</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Excavated area</td>
<td>0.923*</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obsidian cores</td>
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<td>0.830</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obsidian blades</td>
<td>0.888*</td>
<td>0.979*</td>
<td>0.723</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Obsidian debitage/flakes</td>
<td>0.903*</td>
<td>0.989†</td>
<td>0.775</td>
<td>0.979†</td>
<td>1.000</td>
<td></td>
<td></td>
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<tr>
<td>Obsidian points</td>
<td>0.839</td>
<td>0.843</td>
<td>0.690</td>
<td>0.822</td>
<td>0.900*</td>
<td>1.000</td>
<td></td>
<td></td>
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<tr>
<td>Chert cores</td>
<td>0.120</td>
<td>0.457</td>
<td>0.217</td>
<td>0.394</td>
<td>0.462</td>
<td>0.297</td>
<td>1.000</td>
<td></td>
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<tr>
<td>Chert blades</td>
<td>0.342</td>
<td>0.675</td>
<td>0.246</td>
<td>0.696</td>
<td>0.703</td>
<td>0.514</td>
<td>0.872</td>
<td>1.000</td>
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</tr>
<tr>
<td>Chert debitage/flakes</td>
<td>0.875</td>
<td>0.981†</td>
<td>0.759</td>
<td>0.965†</td>
<td>0.997†</td>
<td>0.905*</td>
<td>0.522</td>
<td>0.740</td>
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<td>Chert points</td>
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<td>0.852</td>
<td>0.720</td>
<td>0.835</td>
<td>0.822</td>
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</tr>
<tr>
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<td>0.906*</td>
<td>0.889*</td>
<td>0.853</td>
<td>0.915*</td>
<td>0.939*</td>
<td>0.215</td>
<td>0.393</td>
<td>0.905*</td>
<td>0.869</td>
<td>1.000</td>
</tr>
</tbody>
</table>

* Correlation significant at the 0.05 level (2-tailed)
† Correlation significant at the 0.01 level (2-tailed)
and ritual offering. Serpentine primarily appears at Zacpetén in the form of miniature celts, which were likely "art tools" (Graham 1992: 170–176) involved in ritual activities. The correlation of greenstone and serpentine with residence size supports the idea of the latter variable as an indicator of social status.

Access to copper at Zacpetén differed from obsidian or greenstone, in that only one of the five residences contained such items. The same pattern is true of soft-cut limestone recycled from Classic period constructions. Since these stones also decorated the facades of public ceremonial structures, they must have been considered more desirable. In addition, stones removed from earlier buildings were likely believed to possess special attributes similar to the stones the modern Lacandon remove from archaeological sites to "ensoul" their god pots (following McGee 1998: 43). In both cases, access was not related to the range of social status, but was either present or absent. Outside of Group 719, soft-cut limestone and copper artifacts were limited to public ceremonial groups.

Not only did the occupants of Group 719 possess copper and soft limestone, but they also constructed their domestic group to mimic a ceremonial group (Pugh 2002: 317–319). In addition, this is the only domestic group that contains effigy censers as primary refuse. Although effigy censers were produced in smaller residential groups they were not used there. The mimicry of civic-ceremonial architecture and the possession of objects generally limited to public rituals suggest that key members among the inhabitants of Group 719 were part of the religious and political elite of the site. Since the soft limestone was prominently displayed in the facades of Group 719, the discrepancy between this group and the others was not a matter of covert borrowing from the coffers, but rather public differentiation.

While I agree with Hirth's (1992: 22–23) suggestion that exotic materials such as metals are not necessarily "badges of authority," I disagree with his suggestion that they were "primitive valuables" involved in interregional exchange. When in situ, metal artifacts generally rest in caches within ceremonial buildings. Such caches are not "primitive" systems of banking the objects for later use in exchange, because the contents of terminated caches are deposited in secondary refuse heaps adjacent to the ceremonial buildings (Pugh 2001: 224). Economic forces do not appear to be the primary explanation of access to metal. Instead, these items were likely restricted to those who knew how to interact with them properly, without being polluted by the sacred items. Copper artifacts were obtained through trade, but the possession of these objects by the social elite likely resulted from their participation in the higher levels of the religious hierarchy. Greenstone and serpentine, on the other hand, might well have been lower-level valuables and the number of obsidian cores certainly reflects access to interregional trade.

The definition of social elites through archaeology cannot be attained simply by quantifying valuables, but must include the analysis of the control of critical activities such as religion, politics, defense, or the economy (Chase and Chase 1992: 3). It is clear that the elite individuals who occupied Str. 719 had more space and exotic trade goods than individuals who occupied other excavated groups. They also possessed and utilized items that were not available to other individuals (e.g., copper artifacts, limestone borrowed from Classic period buildings, deity effigy censers, and cache vessels). The only other use context of these items was in public ritual areas. The occupants of Group 719 had the ability to possess and utilize restricted religious objects. A similar pattern of access to effigy censers and cache vessels at Santa Rita (Chase 1992: 132–133); hence this characteristic was not limited to Zacpetén. Certain religious activities were monopolized and controlled by the highest social elite.

Correlation among residence size and the possession of obsidian cores, greenstone, and serpentine show a continuum of social inequality at Zacpetén. Size and cores measure differential access to economic resources in the form of storage space and access to interregional trade, and greenstone and serpentine were prized, rare items with symbolic importance. The residence that exceeded all others in regards to these variables also possessed items generally restricted to public activities. The family that occupied the residence exceeded the continuum of "haves" and "have-nots" and existed in an entirely different social category. These individuals were likely members of the Kowoj hereditary nobility who directed public ritual performances at Zacpetén.

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