

THE LAST INHABITANTS OF MINANHA, BELIZE: EXAMINING THE  
DIFFERENTIAL ABANDONMENT OF AN ANCIENT MAYA COMMUNITY

A Thesis Submitted to the Committee of Graduate Studies  
in Partial Fulfillment of the of the Requirements for the Degree of Masters of Arts  
in the Faculty of Arts and Science

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## ABSTRACT

The Last Inhabitants of Minanha: Examining the Differential Abandonment of an Ancient Maya Community.

Maxime Lamoureux St-Hilaire

This thesis explores the abandonment of the ancient Maya site of Minanha, situated in the North Vaca Plateau of west-central Belize. The purpose of this research is to study, through a behavioral-contextual approach, the 12 on-floor assemblages that were excavated across the entire social spectrum of the Minanha community, from commoners to royal elites. The research methods include a careful "type-variety: mode" ceramic analysis, and detailed contextual, architectural observations. Specifically, this thesis explores the timing of the abandonment for each segment of the Minanha community, as well the differential abandonment processes responsible for the creation of each of the 12 on-floor assemblages excavated at the site. Additionally, intra- and inter-site comparisons allow for a regionally integrated reconstruction of the abandonment scenario for the broader Minanha community. Finally, this study of settlement abandonment will serve to inquire into ancient Maya rituals and social organization, and into the socio-political dynamics at Minanha during its last phase of occupation (810-1050 A.D.).

**Keywords:** Minanha, Belize, ancient Maya, settlement abandonment, gradual abandonment, termination rituals, Classic Maya collapse, social organization, household archaeology, behavioral archaeology.

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### **CHAPTER THREE: DATA**

The purpose of this research is to explore the abandonment processes for the different segments, or geographically defined strata, of the Minanha community through the study of 12 on-floor assemblages. This chapter begins by outlining the sampling strategy adopted by the Social Archaeology Research Program (SARP) and explains how my research sample came to be excavated. This is followed by an overview of each of the seven architectural groups and 12 structures from which these on-floor assemblages were recovered. This overview focuses on the geographic location and function of those architectural groups and structures, and briefly describes the context and material of the on-floor assemblages.

#### **THE COMMUNITY APPROACH OF SARP**

Gyles Iannone (2006b:16), the principal investigator of SARP, adopted a community approach for studying the site of Minanha. This approach emulated the research design of the Xunantunich Archaeological Project (XAP), directed by Wendy Ashmore and Richard Leventhal (Ashmore et al. 1994; Iannone 2006b:16). The XAP “[...] adopted a balanced perspective in their examination of the Terminal Classic transition, with investigations being carried out in both the epicenter and surrounding hinterlands” (Iannone 2006b:16). Similarly, one of the premises of Iannone’s community approach, which was inspired by the work of Yaeger and Canuto (2000), was to study equally all the segments of the Minanha community. Therefore, members of SARP first surveyed the Epicenter, then a one square km zone encompassing the surrounding area,

the Site Core Zone, and finally a second one square km zone situated to the south-east of the Epicenter, in the Contreras Valley. Over the course of 12 years, 14 architectural groups were mapped in the Epicenter, 39 were found in the Site-Core zone (Figure 3.5), while 98 were identified in the Contreras zone (Figure 3.8).

The research program was divided into two phases. Phase I concentrated on the intensive archaeological study of the Epicentral royal court complex (Iannone 2006b:1) where nine groups and 25 structures were partially excavated (Hills, personal communication 2011). Phase II focused on extensive survey and excavation of the Site Core Zone and the Contreras Zone (Iannone 2006b:2). According to the XAP classification scheme (Ashmore et al. 1994), all of the 137 groups in these two zones were stratified based on seven types. The parameters of this classification scheme are the quantity of mounds, their height, and their degree of formal arrangement (see Appendix B). In order to look at every stratum, or segment, of the community, a stratified random sample of 20% was employed to select all the architectural groups to be excavated (Iannone 2006b). However, the stratified random sample was reduced to 15% for the Contreras Zone due to the ever-increasing number of groups discovered during the detailed reconnaissance (Iannone 2009:4). At the end of the 2009 field season, after the detailed investigation of 8 architectural groups and 37 structures in the Site Core Zone, as along with 15 residential groups and 41 structures in the Contreras zone, Phase II was completed (Iannone 2009).

As previously mentioned, seven architectural groups excavated during Phases I and II are studied in this thesis. During the excavation of these groups, on-floor assemblages were recovered from 12 structures. Those 12 on-floor assemblages, which constitute the best archaeological marker for the abandonment of the site, were

interestingly distributed across the three segments of the Minanha community: 1) Epicenter; 2) Site Core Zone; and 3) Contreras Zone. The Epicenter (segment one) encompasses the royal court complex, which includes a variety of elite residential, administrative, and ritual structures. The Site Core Zone (segment two) includes all the architectural groups situated around the Epicenter and encompassed by the one square km survey zone, while the Contreras Zone (segment three) corresponds to the numerous architectural groups situated in the one square km survey area of the Contreras Valley.

## **THE 12 ON-FLOOR ASSEMBLAGES OF THE MINANHA COMMUNITY**

This section explores the 12 structures that revealed on-floor assemblages. First, I will present the four structures from the Epicenter which had on-floor assemblages: Structures 12A, 43L, 44L, and 45L. I will then present Structures 76S and 91R, the two buildings from the Site Core Zone which revealed on-floor assemblages. Finally, I will discuss the six structures from the Contreras Zone which contained an on-floor assemblage: Structures MRS4-M1, MRS15-M2, MRS15-M3, MRS15-M5, MRS89-M1, and MRS89-M4.

### **Segment One: The Epicenter**

The Epicenter of Minanha (Figure 3.1) constitutes the most prominent architectural concentration of the site. The heart of the Epicenter is Plaza A, which represents the most public space at the site. Group F, an important elite courtyard, lies to the west of Plaza A. The border between these two architectural groups is occupied by

Structure 12A, a large range structure. During the excavation of Structure 12A, an important on-floor assemblage was uncovered.

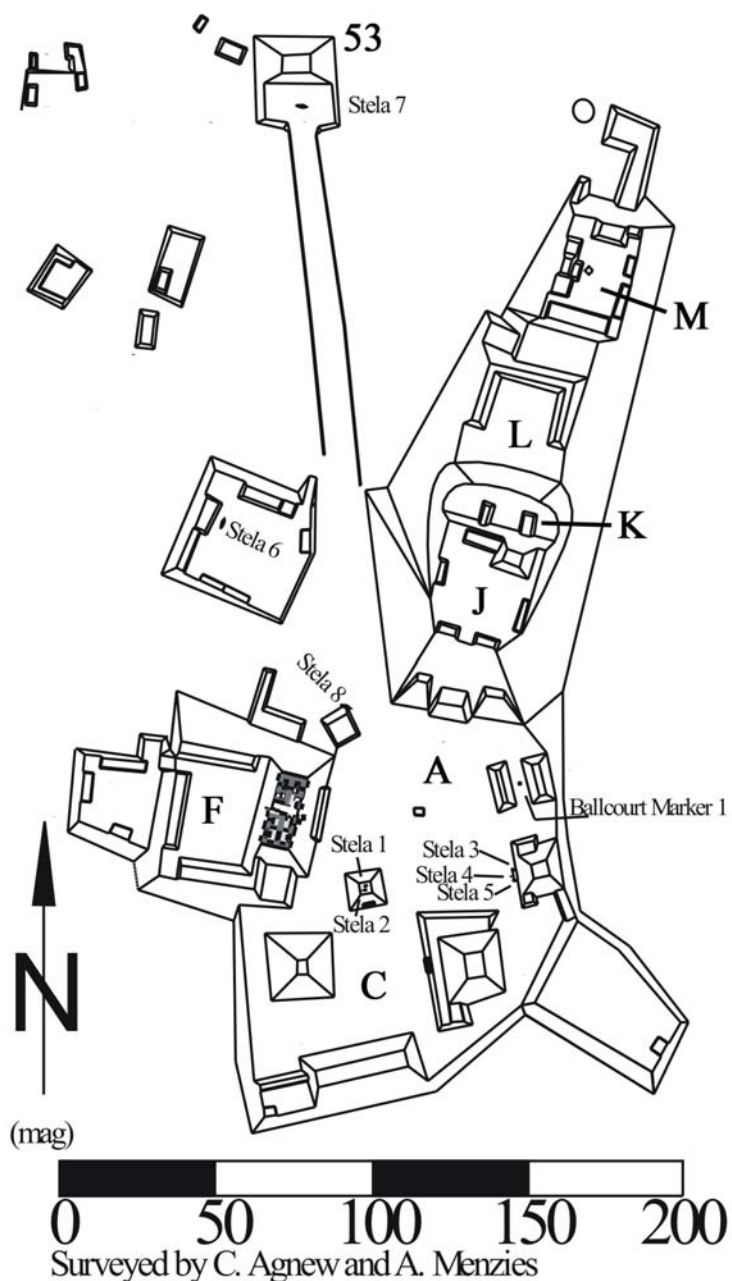


Figure 3.1. The Epicenter; Segment I of the Minanha community (SARP).

To the north of Plaza A lies the North Acropolis, towering 22 m above the plaza floor. The southernmost group on the acropolis is Group J, which was the royal



residential courtyard. The acropolis extends further north in a succession of three architectural compounds (Groups K, L, and M). During the excavations of Group L, on-floor assemblages were found in each of its three structures (Structures 43L, 44L, and 45L).

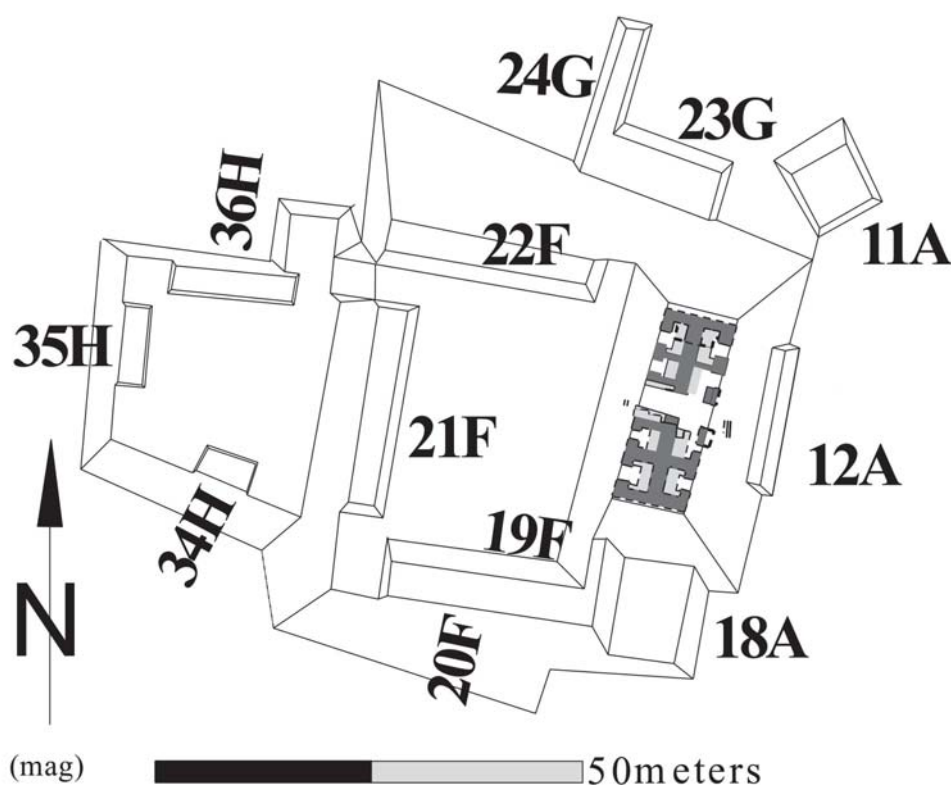


Figure 3.2. Top-plan of the architectural complex including Structure 12A (SARP).

*Structure 12A.* Structure 12A is a range structure which borders the western side of the main plaza of Minanha and constitutes the eastern edge of Courtyard F (Figure 3.2). Structure 12A – which is 6.47 m tall, 40 m in length, and 20 m in width (Seibert 2002:7) – is one of the few vaulted masonry structures identified at the site, and has the typical top-plan of a tandem range structure, with two rows of four rooms facing opposite directions (Plaza A and Courtyard F). Structure 12A also has a central passageway that would have led individuals from Plaza A to Courtyard F. This narrow corridor, which

connects with the two central rooms facing Plaza A, represents a very restricted control point for the courtyard group.

The strategic position of this structure and its layout has led SARP archaeologists to ascribe it a public and administrative function (Seibert 2000, 2001, 2002). More specifically, following Harrison (1999), this structure, characterized by its passageway corridor, has been assigned to the *passage structure* function-type (Seibert 2002:7). Therefore, its eastern face, overlooking Plaza A from a wide staircase, would have had a public function, while its western face, which could only be accessed from the restricted Courtyard F, would have had a more private function (Seibert 2002:7-8). The excavations conducted in 2002 revealed that Structure 12A had at least two construction phases, both dating to the Late Classic period. It is during the Terminal Classic occupation of the second Late Classic phase of construction that the extensive on-floor assemblages of Structure 12A were created.

The on-floor assemblage of Structure 12A was divided into seven features (Features 12A-F/1 to 12A-F/7) which, interestingly, were mainly found lying on the floor of its passageway corridor (Figure 3.3). More specifically, Feature 12A-F/1 was placed just to the left of the entrance of the central passageway, and included the upper section of four jars (including the lips, rims, and parts of the shoulders), three of which were stacked. The three stacked jar mouths were of the Zibal Unslipped type, while the other was a Cayo Unslipped. The same feature also included one broken Dolphin Head Red bowl.

Features 12A-F/2 and 12A-F/3 were simpler, as both included a partial jar, but did not include any diagnostic sherds. Nonetheless, I have tentatively identified these as Cayo Unslipped, on the basis of surface, temper, and estimated size. Feature 12A-F/2 was

placed just beside the bench of the southern passageway front room, about a meter away from Feature 12A-F/1. Feature 12A-F/3 was roughly placed in the middle of the passageway.

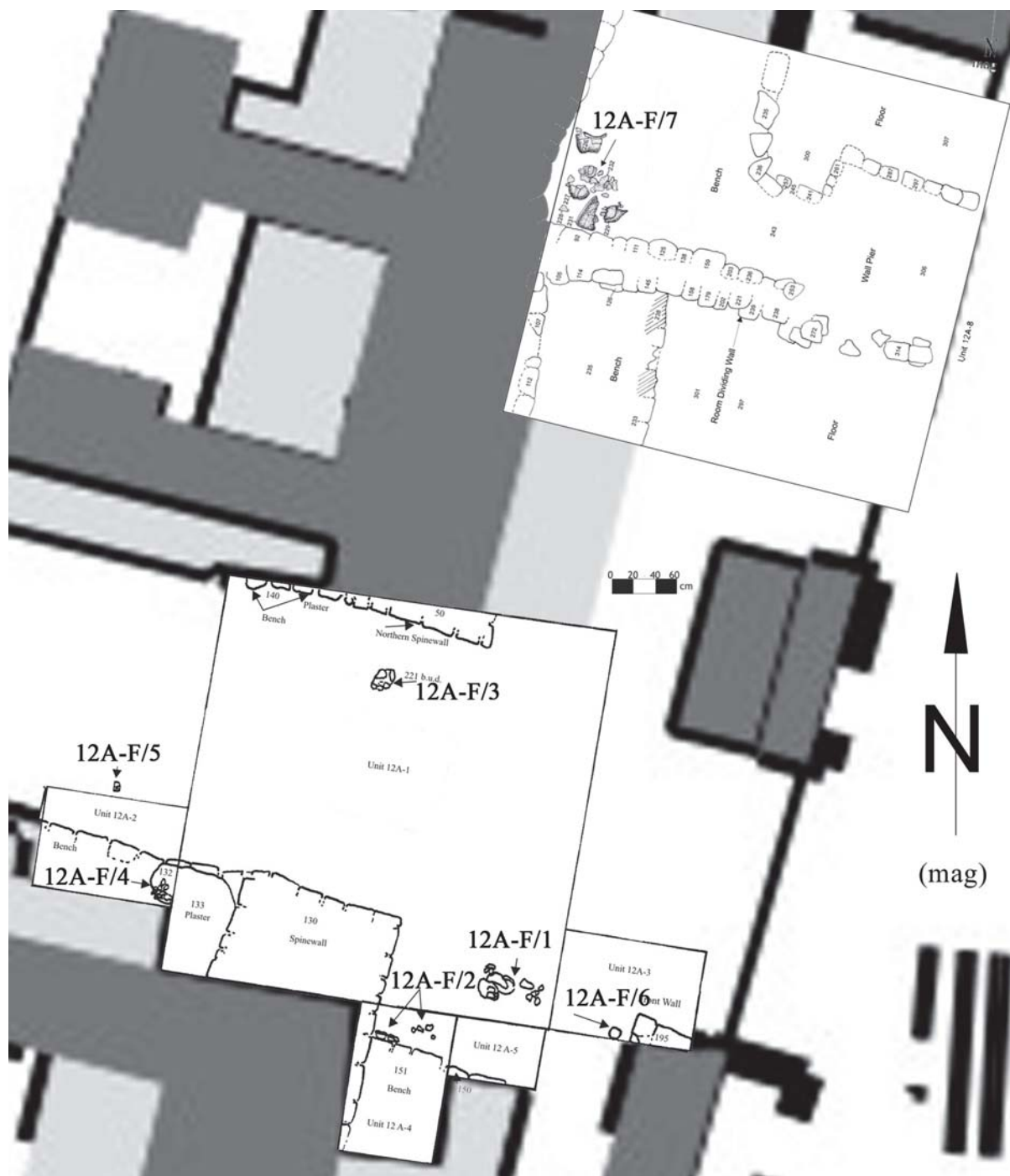


Figure 3.3. Top plan of Units 12A-1, 2, 3, 4, 5 and 8, showing Level 3, or the terminal floor occupation, and its seven features. The units top-plans were superimposed on the reconstruction to provide a clearer architectural context (SARP).

Feature 12A-F/4 was found on the southern bench facing the central passageway, and is a single fragmentary vessel which was ascribed, during excavations, to the Late Classic. Unfortunately, I was unable to locate the vessel for analysis. Feature 12A-F/5, placed on the floor in front of the same bench, included the upper section of a partial Cayo Unslipped jar.

Feature 12A-F/6, which was found on the floor just beside the eastern entrance to the corridor represents the only non-ceramic artifact from the assemblage. It is a large ground stone disc, which looks like a giant circular rubbing stone, and is similar to the pigment grinding stones from the House of the Scribes in Aguateca, Guatemala (Inomata 1997:346; Inomata and Stiver 1998:442-447; Seibert 2000:48). This has led Seibert (2000:48) to suggest that some scribal activities may have taken place inside this structure, which strengthens the hypothesis of an administrative function for Structure 12A.

Finally, Feature 12A-F/7, which was excavated on the bench of the north-eastern room, included five partial vessels. These are a Zibal Unslipped jar, a Dolphin Head Red bowl, a Mount Maloney Black bowl, and the only two fine volcanic ash tempered vessels of the on-floor assemblage: two Platon Punctated-Incised dishes (see Figure 4.4, p.110, for an example of this type of vessel).

*Group L.* Group L is located on Minanha's North Acropolis, at approximately 50 m north of the royal court residential courtyard, Group J (Figures 3.4 and 3.5). Group L is architecturally intriguing, organized in a U-shaped patio group, with its courtyard opened towards Group J. Unlike Structure 12A, Group L's buildings were not made of vaulted masonry. Its buildings consisted of a masonry substructure, accessed by two out-set steps,

supporting perishable structures with low lying double-faced walls (Pauw 2007:113-115). Structure 45L was slightly more elaborate than its flanking counterparts, having a two-tiered substructure for supporting its rooms (absent in Figure 3.4). Of importance are the large masonry benches present within the perishable structures (Pauw 2007:113-115), which were the largest benches excavated at Minanha (Iannone, personal communication 2011). The location of Group L, atop the North Acropolis, suggests that the group held a special position in the settlement hierarchy (Pauw 2007:194).

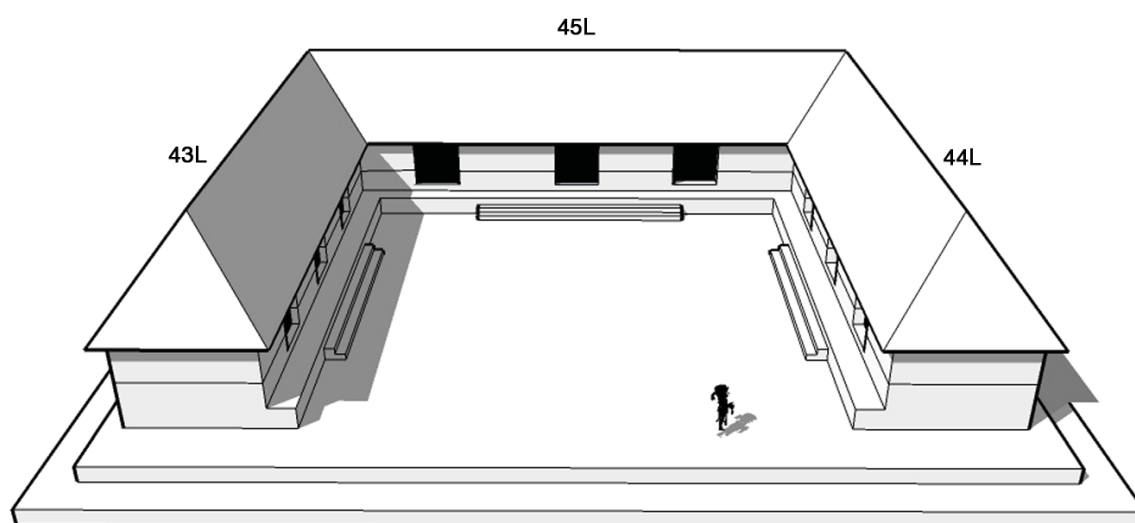


Figure 3.4. Computer-modeled artistic reconstruction of Group L, facing North (Illustration by Derek Pauw).

The conjunctive study of Group L's architecture and artifactual collections did not yield a clear answer regarding its function (Pauw 2004, 2005, 2007). Although its architectural layout suggests a residential function, Group L has no associated ancillary structures, shrines, or burials, which are normally found in residential groups (Pauw 2007:195-196). This suggests that if Group L was residential, it would have been atypical. Furthermore, the group yielded only one construction phase (dated to the Late Classic period), which created a "cookie-cutter" plan, where each room had the exact same proportion; a unique case at Minanha. The occupation of Group L appears to have been

contemporaneous with Group J's use as the royal residential courtyard, and likely lasted during its Terminal Classic occupation as well. Based on this set of data, Pauw (2007:203) suggests that the original Late Classic function of the group was communal, proposing "boys pre-marital house" or "scribal training school" as the more likely functions for the group, and "community-house", or *popol-nah*, as an alternative hypothesis. It is then suggested that the occupation of Group L, after the demise of the royal court during the Terminal Classic, may have shifted towards residential functions (Pauw 2007:204-205). It appears that Group L, which was closely tied to the royal residential courtyard, was dynamic in nature and probably had some sort of residential focus (especially during the Terminal Classic), with a range of associated complementary functions, ranging from administrative to ritual, as exemplified by its probable extensive termination ritual (see Chapter Four for a discussion of the matter).

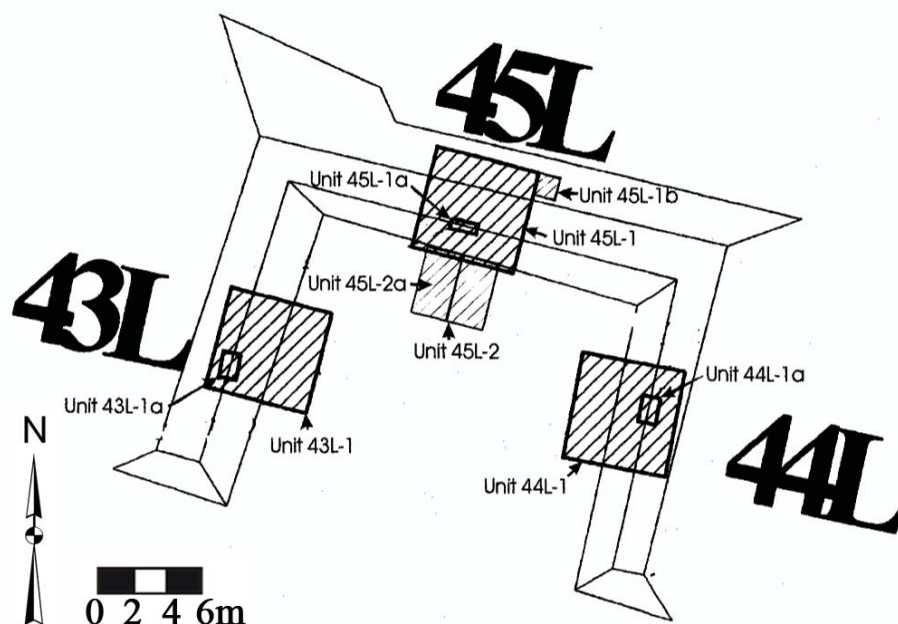


Figure 3.5. Isometric Plan of Group L, showing its excavations units (SARP).

Quite interestingly, all three structures of Group L revealed an on-floor assemblage. These were recovered along the central axis of each structure, as this was where the excavation units were set (Figure 3.5). These assemblages were situated on the floor of the Late Classic construction, but are associated with the Terminal Classic occupation of the group.



Figure 3.6. Top plan of Unit 43L-1, showing Level 3, or the terminal floor occupation, and its three on-floor features (SARP).

*Structure 43L.* The western building of the group, Structure 43L (Figure 3.6), revealed three on-floor features (Features 43L-F/1, 43L-F/2, and 43L-F/3), which were all situated in the northern portion of the excavation unit. The first feature was found lying on the patio floor, beside the front step; the second feature was found on the northern part

of the building platform, just in front of the structure's front wall; while the third feature was recovered on the floor within the northern half of the room, in front of the bench. These features included three partial vessels, including a partial Cayo Unslipped jar, and a partial miniature vessel. Feature 43L-F/3 also included a ground stone celt.

*Structure 44L.* The eastern building of the compound, Structure 44L, had the simplest on-floor assemblage of the group (Figure 3.7). Indeed, this assemblage only consisted of a single partial jar (Feature 44L-F/1) placed on the floor of the structure's room, in front of the bench.

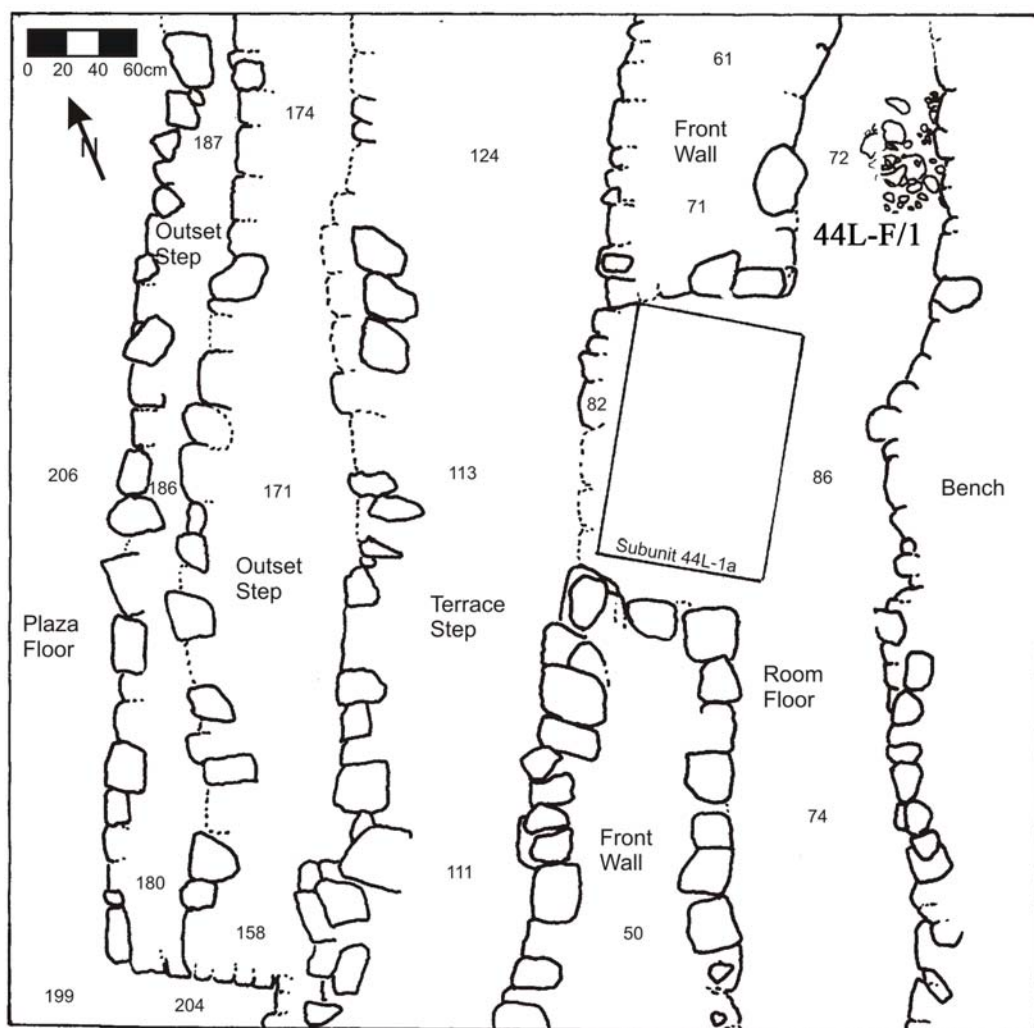


Figure 3.7. Top plan of Units 44L-1, showing Level 3, or the terminal floor occupation, and its on-floor feature (SARP).



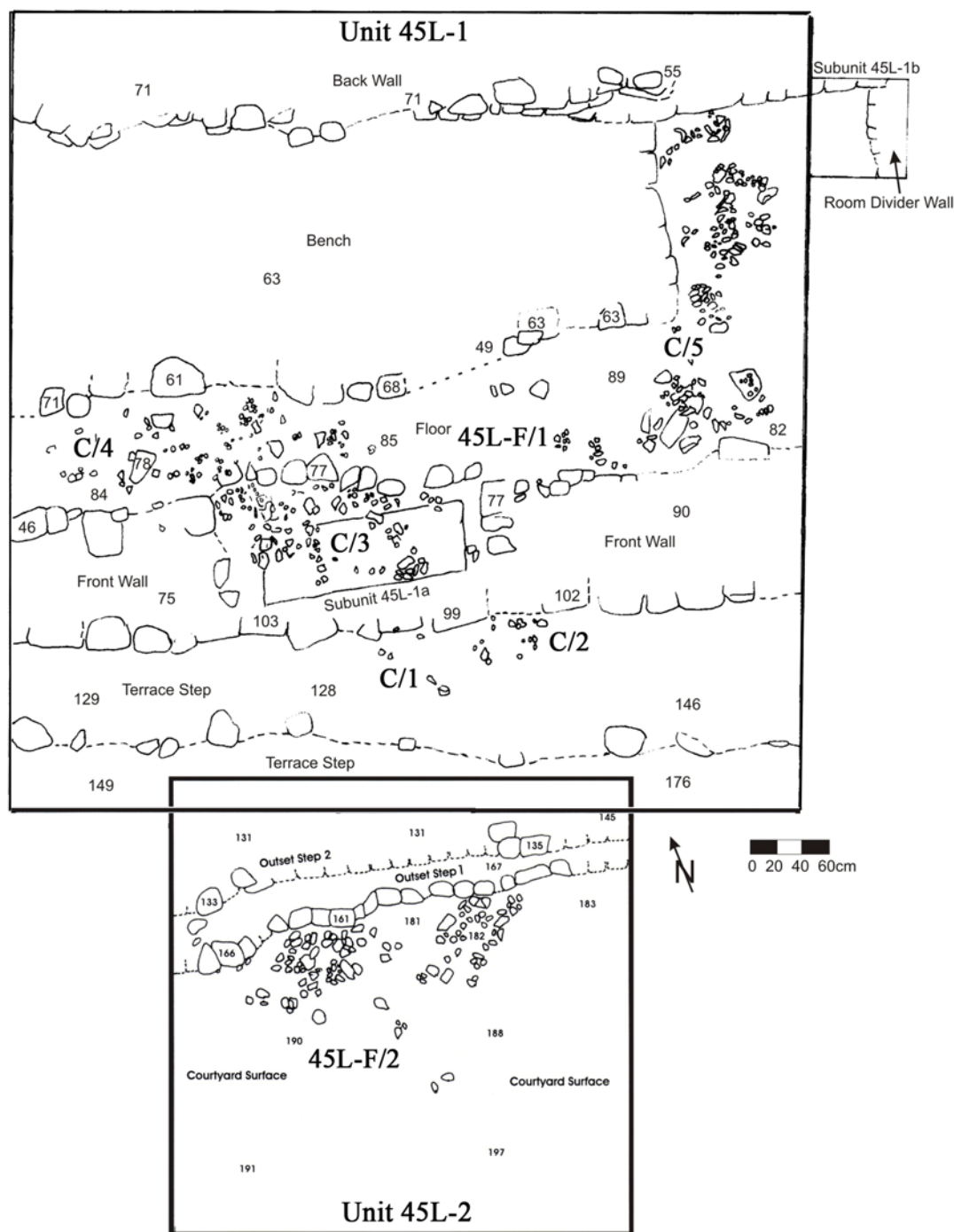


Figure 3.8. Top plan of Units 45L-1 and 45L-2, showing level 3, or the terminal floor occupation, and its two on-floor features, Features 45L-F/1 and 45L-F/2 (SARP).

*Structure 45L.* The northern structure of the architectural group, Structure 45L (Figure 3.8), yielded the most important on-floor assemblage of the group. This assemblage consisted of two features (Features 45L-F/1 and 45L-F/2) representing two

extensive layers of artifacts, including numerous ceramic sherds. Feature 45L-F/1, which covered the entire floor of the room, was divided into five clusters (C/1, C/2, C/3, C/4 and C/5). Clusters C/1 and C/2 were found on the substructure's floor, directly in front of the entrance to the building. Cluster C/3 was excavated on the room's floor, inside the doorway. As for Clusters C/4 and C/5, they were also found on the room's floor, scattered around the bench. Feature 45L-F/2, on the other hand, was excavated on the courtyard floor, in front of the steps of the structure.

Taken as a whole, these two on-floor assemblages represented an extensive layer of "loose" on-floor ceramic material (totaling 142 diagnostic sherds), including partial and complete vessels (n=4) and numerous (n=15) lithic artifacts, including several intact pieces (such as chert bifaces and ground stone tools). The reconstructible vessels, which were only part of Feature 45L-F/1, included two ink / poison pots (see Figure 4.3, p.106, for an example of this type of vessel), one miniature vessel, and one Late Classic Mount Maloney Black bowl. Feature 45L-F/2 did not include any reconstructible vessels, and consisted of a large quantity of sherds (see Chapter Four for a discussion of this material).

## **Segment II: The Site Core Zone**

The Site Core Zone refers to the area surrounding the Epicenter. This zone comprises 39 architectural groups (including isolated structures), eight of which were excavated during the second phase of SARP (Figure 3.9). Other groups, including Group R, were excavated for particular reasons (see below). On-floor assemblages were recovered from the two largest of those 39 groups, Group R and Group S.

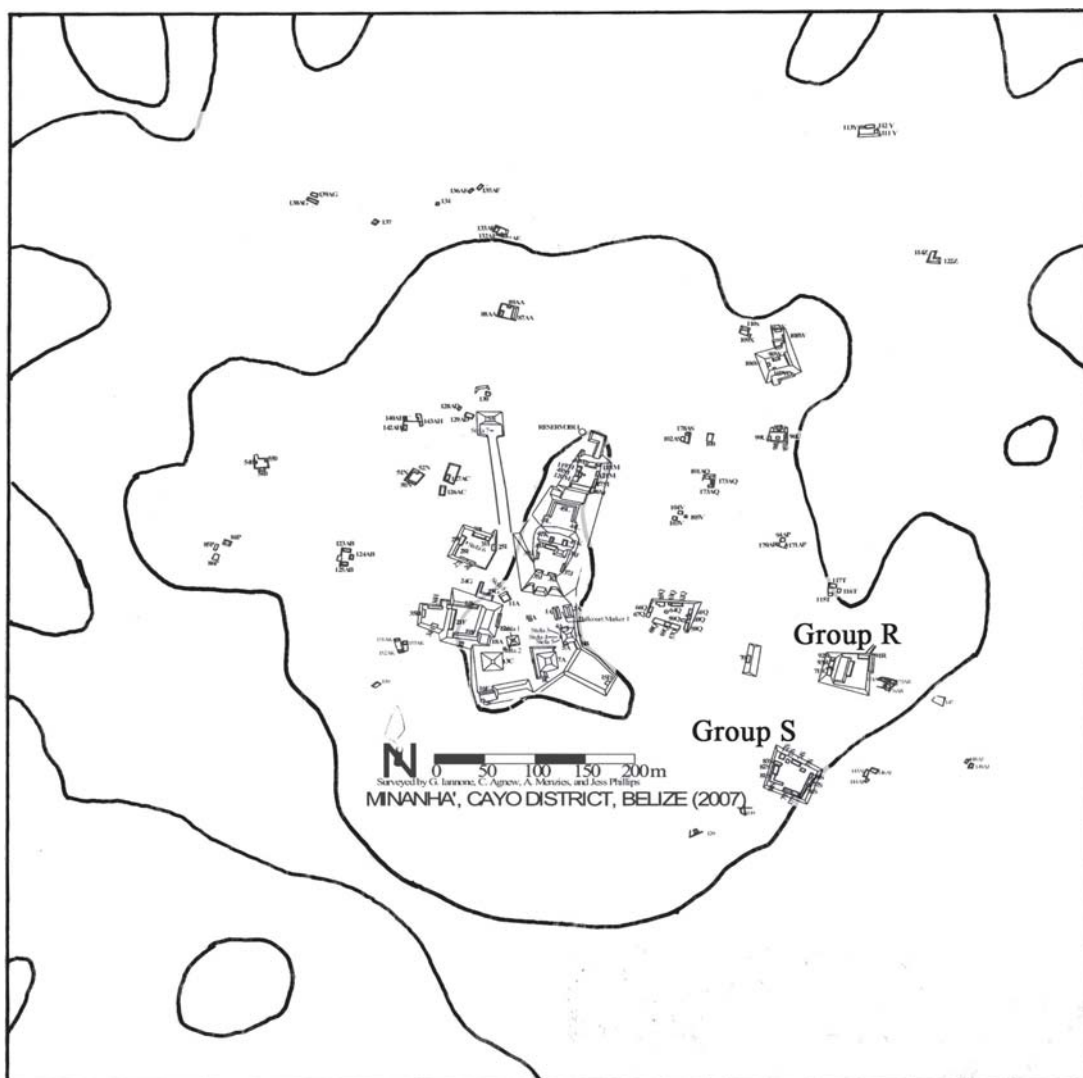


Figure 3.9. The one square km of the Site Core Zone; Segment II of the Minanha community (SARP).

*Structure 91R.* Group R (Figure 3.10) is one of the most unusual architectural groups at Minanha. It is also the second largest settlement unit of the Site Core Zone. Unlike all the other excavated architectural groups at the site, Group R was not part of the original sampling strategy, but was rather excavated specifically because of its size and unorthodox architectural composition (Herbert et al. 2002; Prince 2000; Prince and Jamotte 2001). It was suggested that Group R was an administrative complex which might have served as an entry check point for Minanha's Epicenter (Prince and Jamotte

2001:63). However, the materials recovered from Group R's excavations have yet to be fully analyzed in order to confirm this hypothesis (Herbert et al. 2002:79).

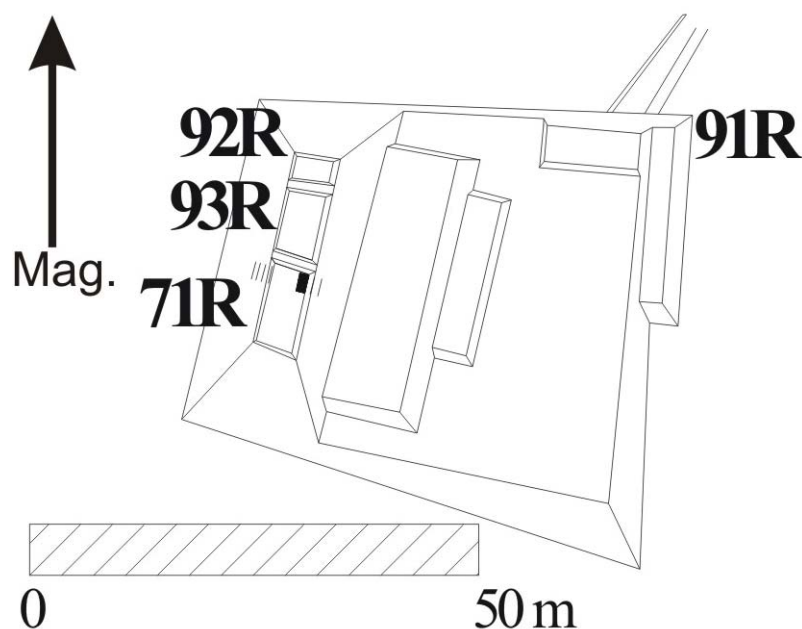


Figure 3.10. Isometric plan of Group R (SARP).

Group R is situated on a raised platform measuring approximately 50 m by 50 m, and has one major elongated sub-structure supporting three perishable structures (71R, 92R, and 93R) on its western side. It also has a smaller structure, Structure 91R, on its north-eastern corner, which is a low, but wide (12 m in length), south-facing substructure that supported a perishable structure containing a rectangular bench. Structure 91R had two construction phases, both dating to the Late Classic period. During the excavation of Structure 91R, an on-floor assemblage was found on its terminal floor (Prince 2000). The on-floor assemblage from Structure 91R (Figure 3.11) was found along its central axis, lying on the preserved plastered floor of the room, in front of the bench. The on-floor assemblage included four partial vessels: one Terminal Classic dish of the Platon Punctated-Incised type (see Figure 4.4, p.110, for an example of this type of vessel), one Terminal Classic bowl of the Mount Maloney type, one Alexanders Unslipped jar, as well

as non-diagnostic sherds from a second jar which, on the basis of surface, paste, and estimated size, I assigned to the Cayo Unslipped type.

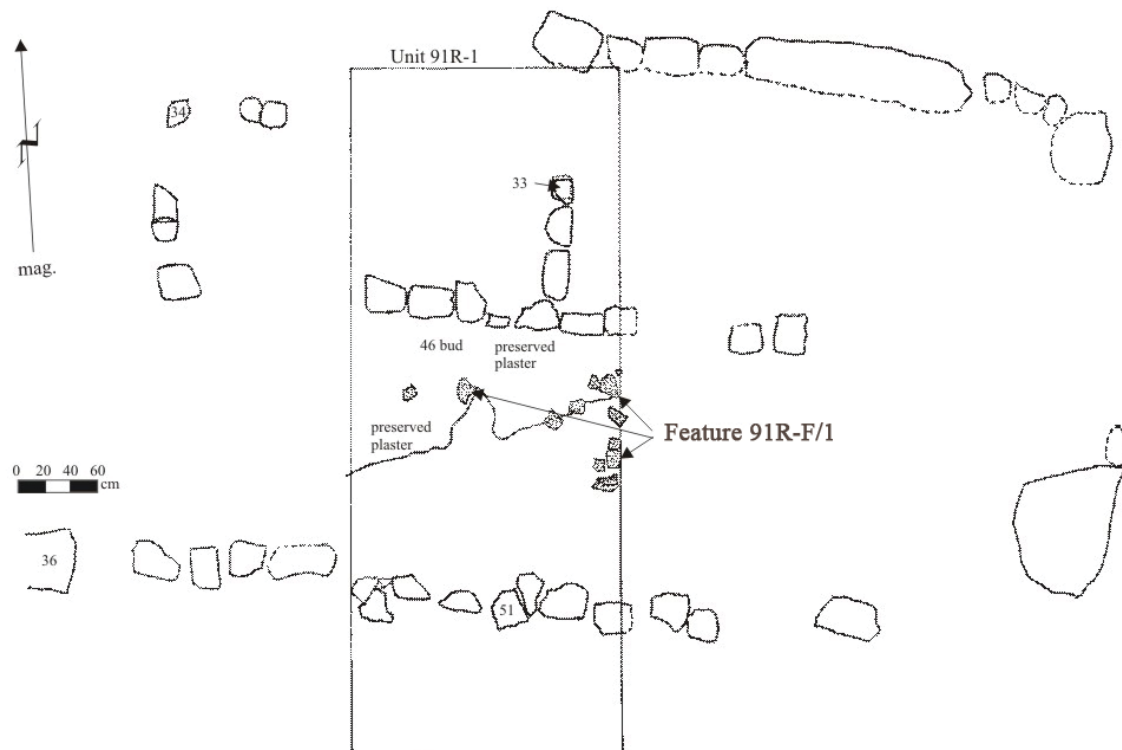


Figure 3.11. Top plan of Structure 91R, showing Level 3, or the terminal architecture, and its on-floor feature, 91R-F/1 (SARP).

*Structure 76S.* Group S (Figure 3.12) is the largest architectural group in the Site Core Zone. Following Becker (1999, 2009:69), its layout is a perfect plaza-plan 2, being a residential group with a shrine or temple on its eastern side. It is composed of a large raised courtyard (measuring ca. 50 m by 50 m) which is circumscribed by nine residential structures, one small platform, and a tripartite temple. All of these structures have been excavated during three seasons of field work. Indications are that the group was probably settled in the Early Classic period (Zehrt 2006, 2007). Of interest for the present study is the northern structure of the tripartite eastern shrine, Structure 76S. This structure yielded three major construction phases (dating back to the Early Classic period), plus a

modification to its terminal architecture (Zehrt 2006). The terminal architecture of Structure 76S consisted of an unusual C-shaped platform topped by a C-shaped bench, with a small, extension-like, northern platform. The actual superstructure, if there was one (absent in Figure 3.12), was perishable. Unlike the other on-floor assemblages included in this study, the examined material from Structure 76S, which was recovered from its above-floor levels, was not originally labeled as an on-floor assemblage (Figure 3.13). However, the reason why it is included in this study is that, after reexamination, it appears that this on-floor material did constitute a massive on-floor assemblage.

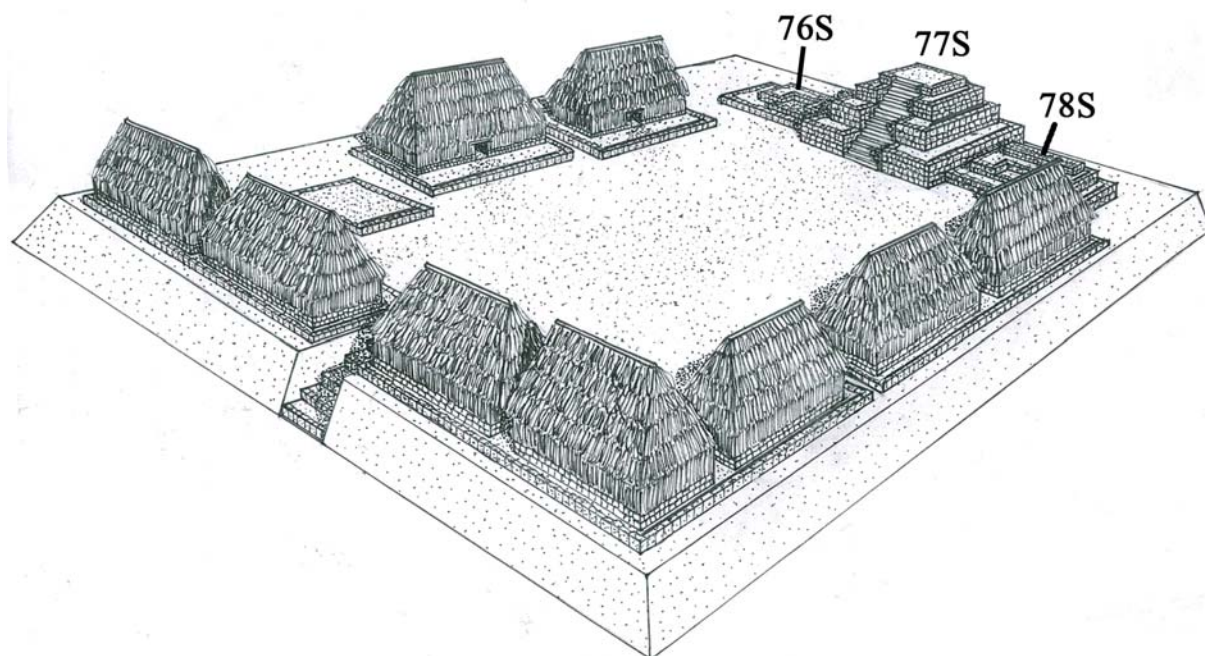


Figure 3.12. Artistic reconstruction of Group S, facing North-East (illustration by the author).

Specifically, a very large amount of material, including lots of pottery, was recovered from the above-floor levels (Levels 1 and 2). These sherds, which included 564 diagnostics, were scattered across the surface of the structure, with the majority concentrated along its central axis (Zehrt 2007). This ceramic material was fully analyzed and the results of this analysis are discussed in Chapter Four. In association with this on-

floor assemblage, a feature (76S-F/1) labeled as *Offering Termination-Cache (Structural)* was excavated. Feature 76S-F/1 consisted of the infilling of the interior space of the small “room” formed by the C-shaped bench (Zehrt 2006:38). This feature was constructed by sealing the space between the door jambs, and capping the enclosed space with capstones, and the feature probably held some perishable material, as well as a small adze and a few ceramic sherds (Iannone et al. 2006:125; Zehrt 2006:38).

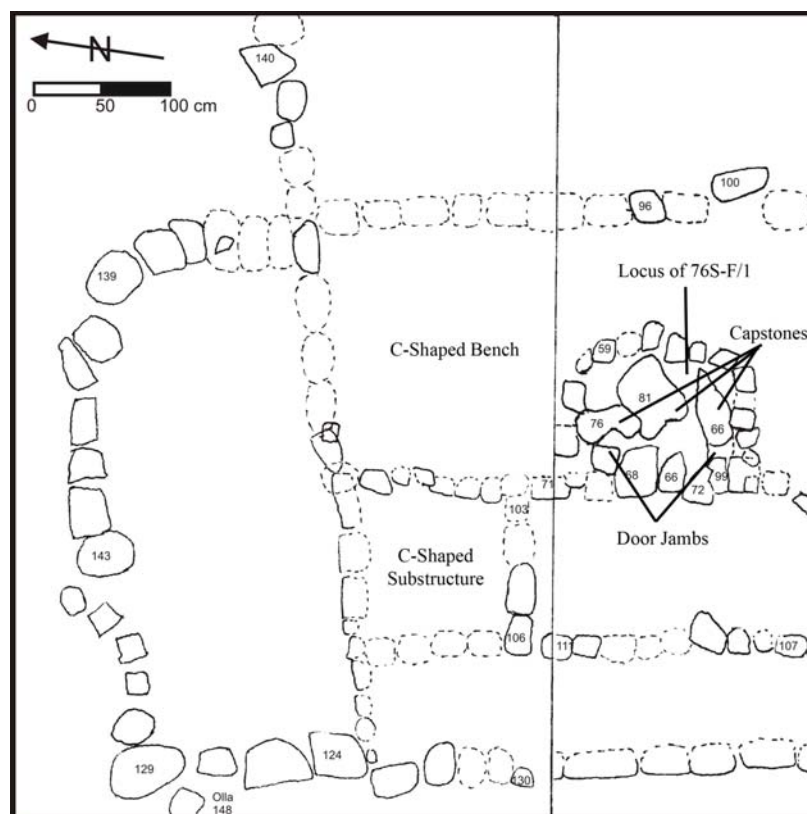


Figure 3.13 Top plan of Unit 76S-1, showing Level 3, or the terminal architecture, and the structural termination cache, Feature 76S-F/1 (SARP).

### Segment III: The Contreras Zone

The Contreras Valley is particularly impressive because its landscape is almost entirely anthropogenic (Macrae 2009) (Figure 3.14). Indeed, this agricultural and hilly area was both extensively and intensively modified by the construction of agricultural

terraces (Macrae 2009; Macrae and Iannone 2009). Three of the 98 architectural groups of the Contreras zone are important for this study: Groups MRS4, MRS15, and MRS89.

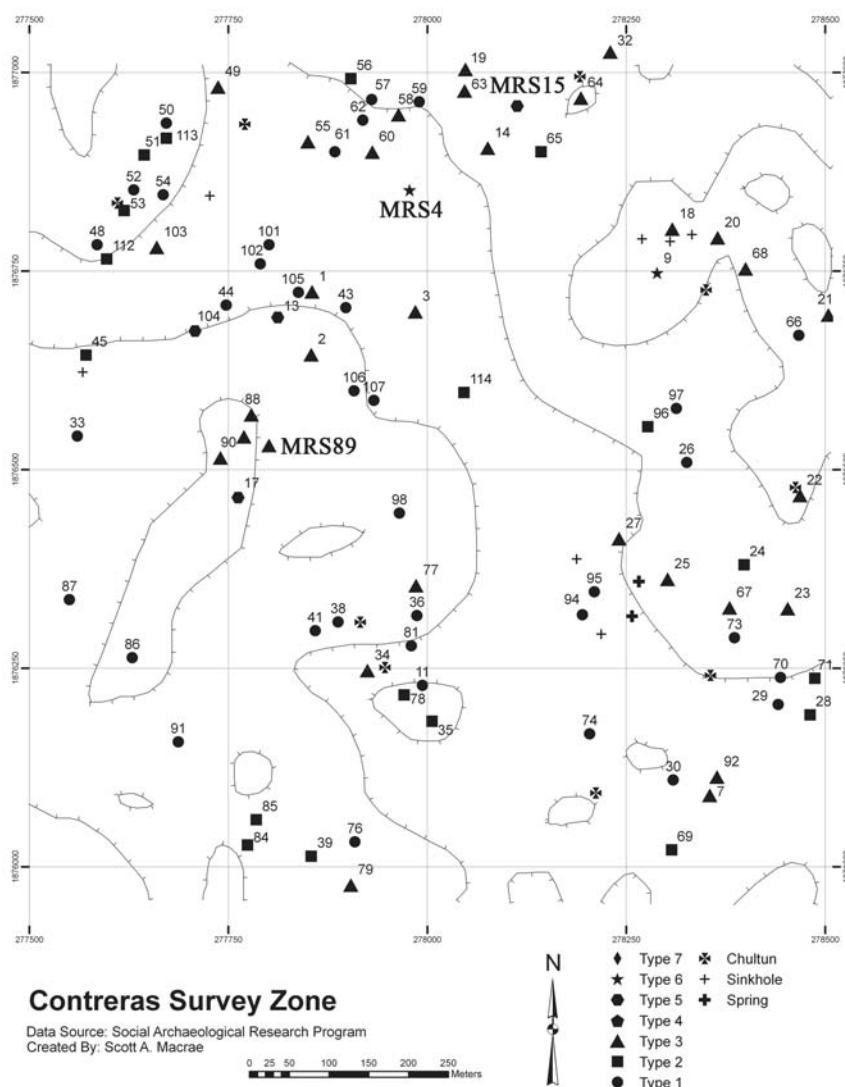


Figure 3.14. The square km of the Contreras Zone; Segment III of the Minanha community (SARP).

*Structure MRS4-M1.* Group MRS4 (Figure 3.15) is the largest of the architectural groups in the Contreras Zone. As with Group S, it is orthogonally organized in the plaza-plan 2 style, but in a much simpler way. Group MRS4's structures are built atop a large sustaining platform (ca. 40 m by 45 m), and include three large domestic structures, as well as three smaller ones. All of these domestic structures are located on the southern,



western, and northern sides of the platform, while the eastern side is occupied by a small pyramidal temple, Structure MRS4-M3. The latter, as with the eastern shrine of Group S was an important, ritually-charged structure. Indeed, it contained two burials and two caches, which were all placed along the primary axis of the structure (Schwabe 2003). The burials contained a total of four individuals (Snetsinger, personal communication, 2011). Structure MRS4-M3 has proved to yield three phases of construction, with the antepenultimate phase dating back to the Terminal Preclassic period. This is also the case for Structure MRS4-M5, the second largest residence of the group (McCormick 2008:57-59).

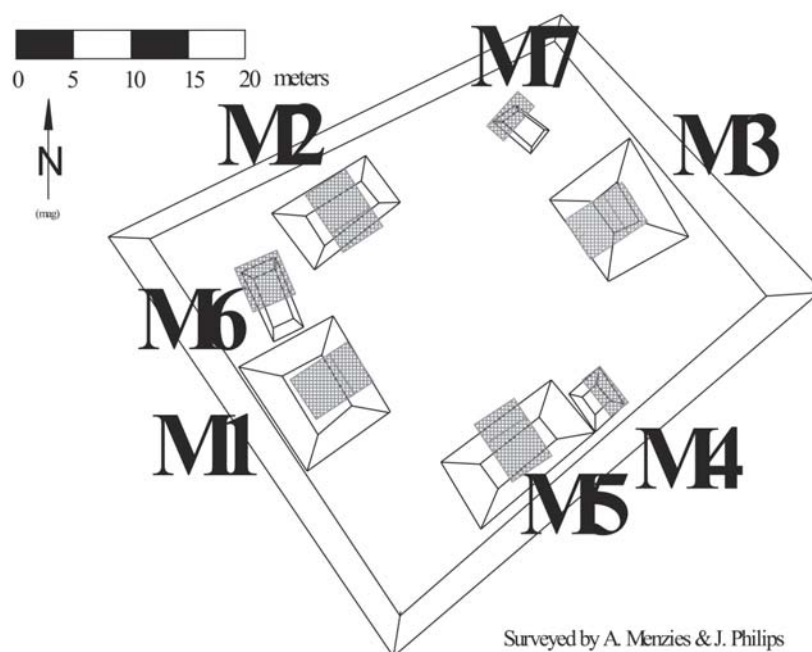


Figure 3.15. Isometric plan of Group MRS4 showing the excavation units (SARP).

The important structure for this study is the largest residence of the group, Structure MRS4-M1 (Figure 3.16). Unlike the two aforementioned structures, it only has one phase of construction, dating to the Terminal Classic period (McCormick 2008:50-53). Structure MRS4-M1 consisted of a fairly large substructure accessed by two steps, and an additional small outset step for accessing its room, which yielded a rectangular

bench. The excavation unit was set along its primary axis, and this is where five ceramic clusters (Clusters C/1, C/2, C/3, C/4, and C/5) representing its on-floor feature were located. These ceramic clusters were recovered, in an organized fashion, on the various "steps" of the structure, and represent a total of six fragmentary vessels, as well as several individual sherds. Four of these vessels were plainware jars, one was a Yalbac Smudged Brown bowl, and the last one was a Chiquibul Scored-Incised censer (see Figure 4.1, p.103, for an example of this type of vessel).

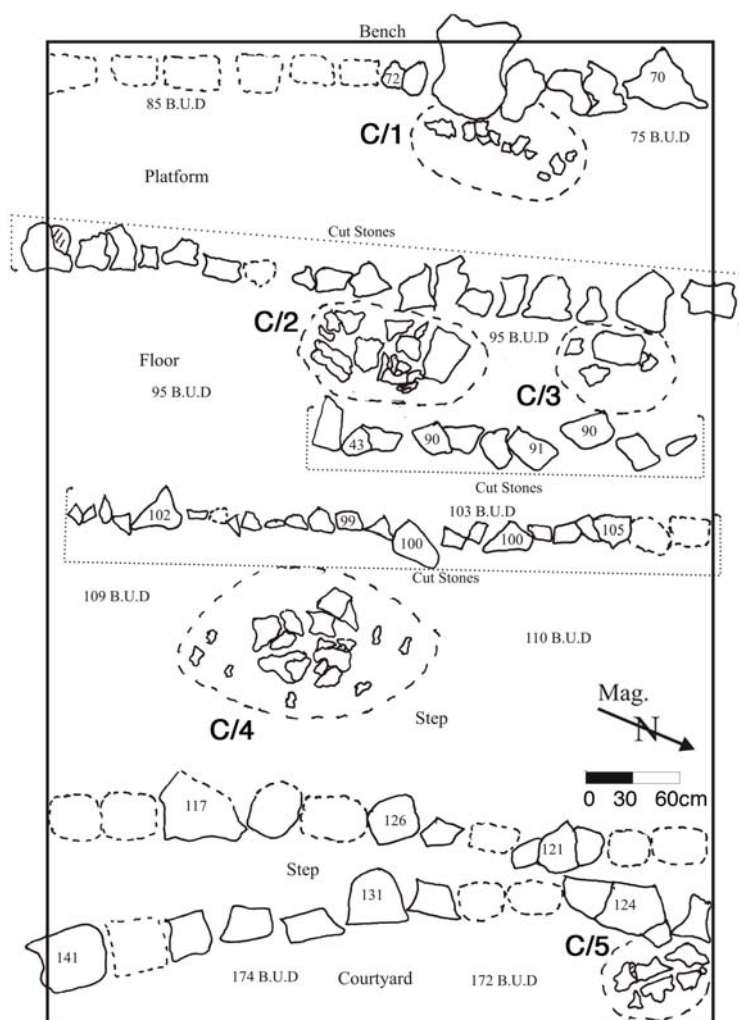


Figure 3.16. Top plan of Unit MRS4-M1-1, showing Level 3, or the terminal architecture, and the five clusters of its on-floor assemblage, MRS4-M1-F/1 (SARP).

*Group MRS15.* Group MRS15 is among the few larger groups of the Contreras Valley, and is composed of two distinct patio groups, which is unusual at Minanha (Figures 3.17 and 3.18). These two patio groups are situated quite close to one another, on two adjacent terraces of different elevation. Both groups consist of three domestic structures, with the largest one placed on the eastern edge of both patios. These patios are open on their western side, and oriented towards their relatively close, and significant neighbor, Group MRS4 (McCane et al. 2009:15).

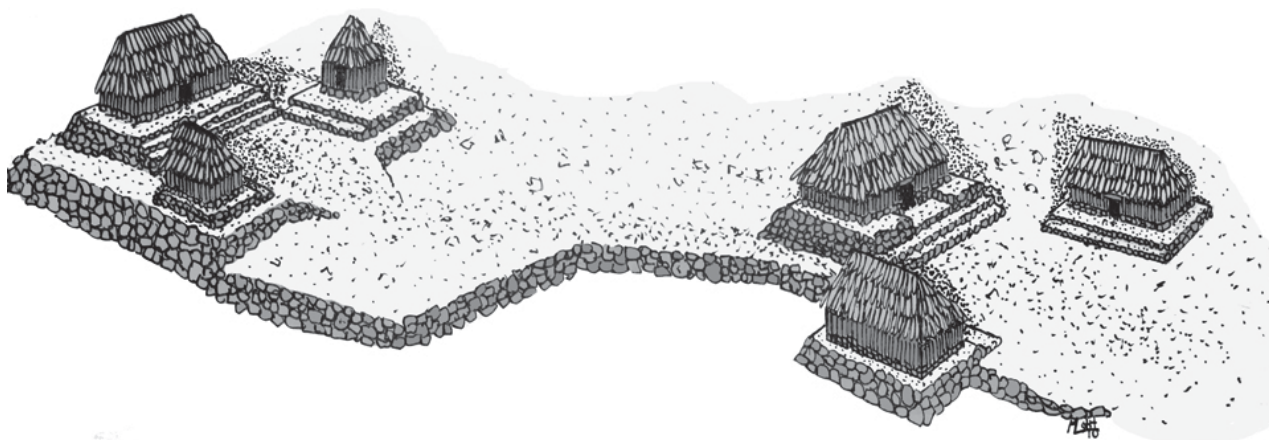


Figure 3.17. Artistic architectural reconstruction of Group MRS15, facing south-east (illustration by the author).

Structure MRS15-M2 is the largest and earliest building of the group (McCane et al. 2009:18). Its first phase of construction is associated with a dedication burial, which was placed on the bedrock, and was dated to the Middle Classic period. Being the only structure with an associated burial, and located on the eastern edge of the group, Structure MRS15-M2 was likely the ancestral focus of the group (McAnany 1998:279). Overall, it seems that while this eastern patio was settled during the Middle Classic period, the western patio was built only during the Terminal Classic period. Group MRS15 revealed on-floor assemblages on three of its structures.

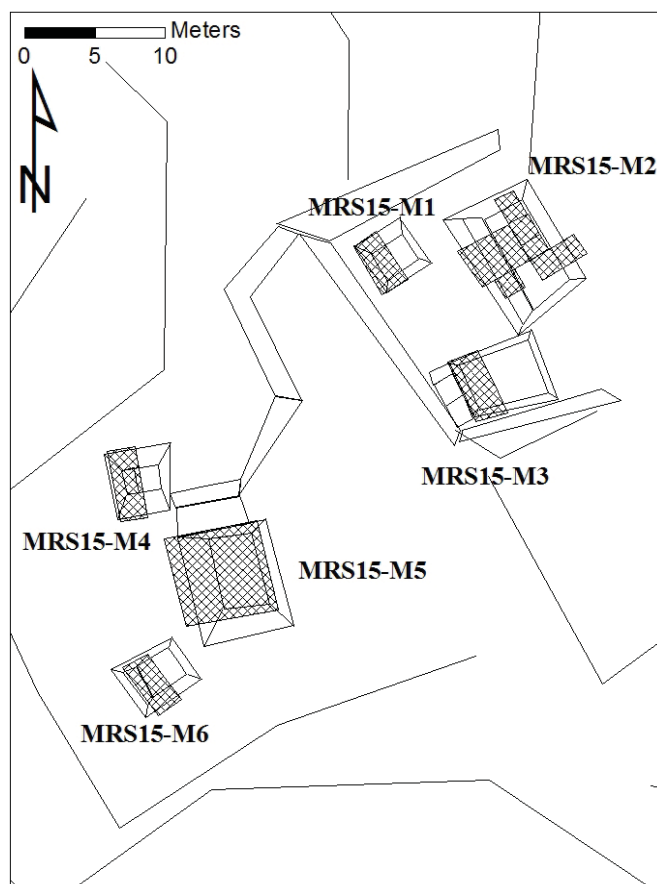


Figure 3.18. Isometric plan of Group MRS15, showing its excavation units and its surrounding agricultural terraces (identified by single black lines on the map) (SARP).

*Structure MRS15-M2.* Structure MRS15-M2 is a rather elaborate domestic structure. It originally had three steps leading to a platform, which supported a large perishable structure that comprised two benches (the occurrence of two benches in one structure is exceptional) (Figure 3.19). One bench was rectangular and placed along its northern side, while the second was L-shaped and occupied the south-eastern corner of the building (McCane et al. 2009:18). Structure MRS15-M2 yielded the most important on-floor assemblage of the group, with two features, and some associated material. The on-floor features excavated on the floor of Structure MRS15-M2, Features MRS15-M2-F/1 and MRS15-M2-F/2, represent a considerable quantity of material. These features, placed side-by-side on the floor of the room, in front of the L-shaped bench, may be

considered as a whole. Feature MRS15-M2-F/1 included four partial vessels: one small Cayo Unslipped jar, two Chiquibul Scored-Incised censers (see Figure 4.1, p.103, for an example of this type of vessel), and one brazier base, while Feature MRS15-M2-F/2 included two complete bowls of the Yalbac Smudged Brown and Daylight-Orange type-varieties. Other material associated with Structure MRS15-M2's floor, though not incorporated within the formal features, included a roller-stamp (Figure 2.5), an ink / poison pot (see Figure 4.3, p.106, for an example of this type of vessel), and a partial metate. Additionally, two unidentified lithic artifacts and a few unclassified small bone fragments were associated with the on-floor assemblage (McCane et al. 2009:21-24).

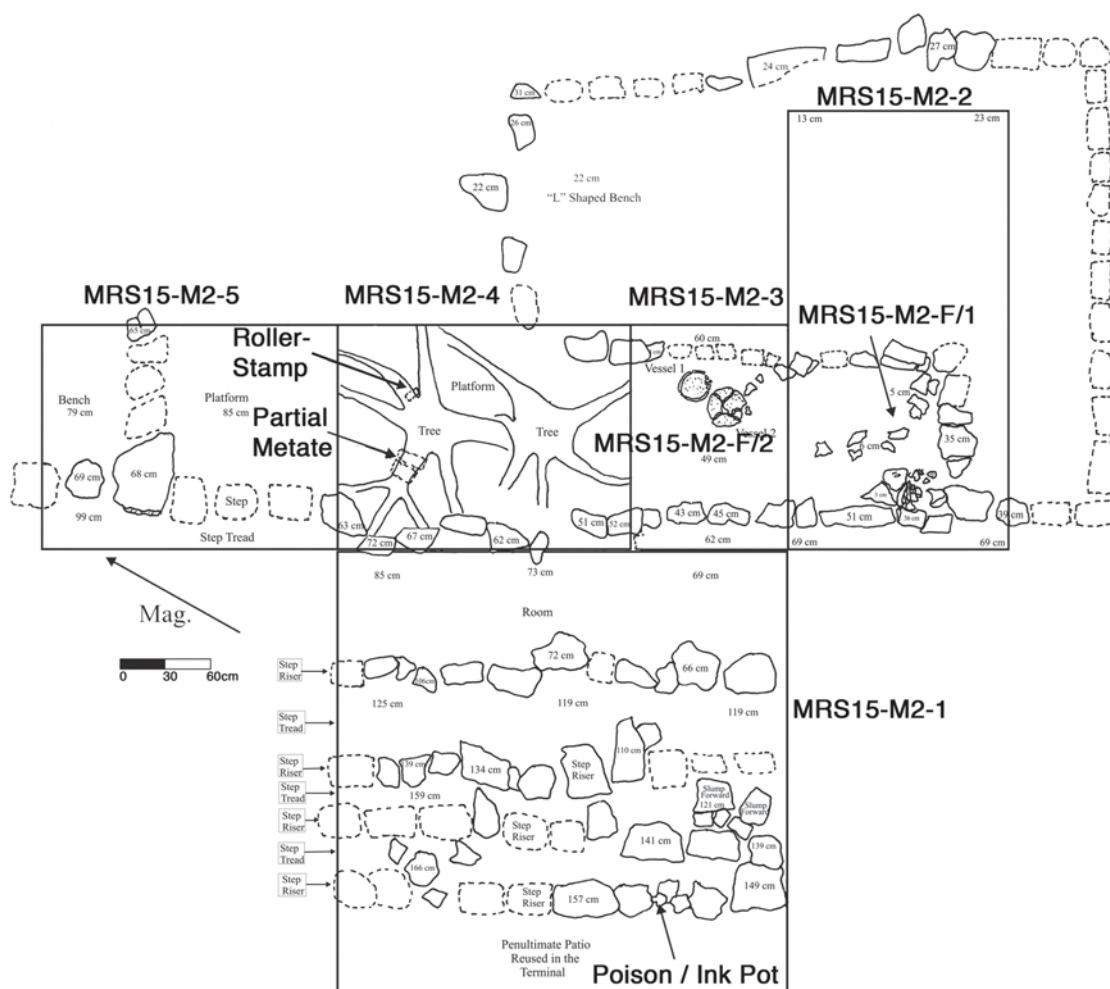


Figure 3.19. Top plan of Structure MRS15-M2, showing Level 3, or the terminal architecture, and its two on-floor features, MRS15-M2-F/1 and MRS15-M2-F/2 (SARP).

The on-floor materials appear to have been mixed, through natural formation processes, with the above-floor levels. Therefore, the ceramic material (including almost 500 diagnostic sherds) from these levels was analyzed for Structures MRS15-M2, MRS15-M3, and MRS15-M5, and the results of this analysis are presented in Chapter Four.

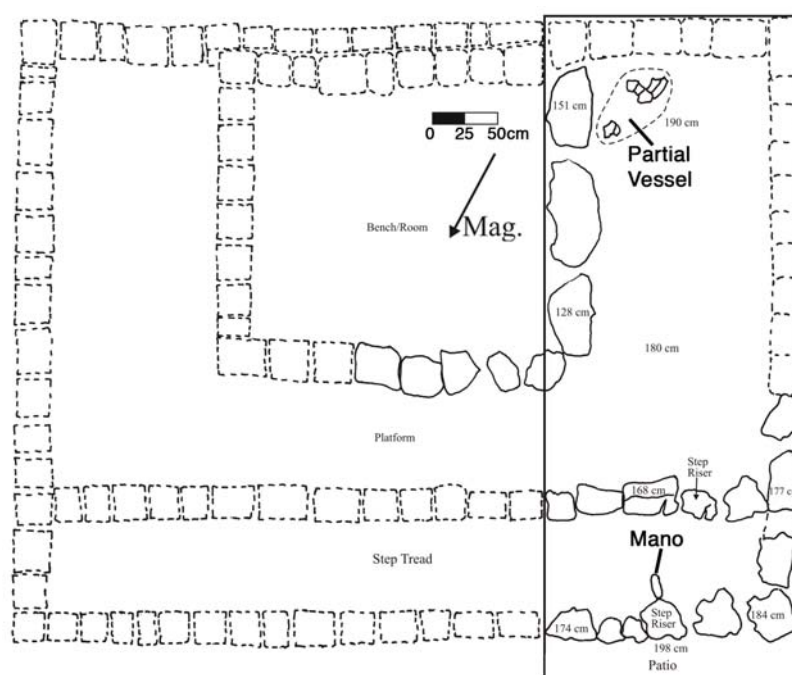


Figure 3.20. Top plan of Structure MRS15-M3, showing Level 3, or the terminal architecture, and its on-floor assemblage (SARP).

*Structure MRS15-M3.* Structure MRS15-M3 is a medium-sized domestic structure, and is composed of a wide building platform (almost 6 m in width) accessed by a step, on which was constructed an unusual square platform (Figure 3.20). At the time of excavation, there was a large tree growing on the middle of this platform and, consequently, the excavation unit was set on the western third of the mound. An on-floor assemblage was excavated close to the western edge of the substructure. This on-floor assemblage was quite simple, and included only one partial unidentified calcite-tempered



example of this type of vessel), typical of the Terminal Classic. This vessel was found halved, on the second step of the front staircase of the building, along its central axis.

*Group MRS89.* Group MRS89 is smaller than any other group discussed in this thesis. It is situated, along with three other small residential groups, atop a small ridge that dominates the south-western portion of the Contreras Valley (Figure 3.22). Group MRS89 is composed of four small domestic structures orthogonally arranged around a patio (McCormick 2007:89-95, 2008:17-23). Interestingly, two of its structures yielded on-floor assemblages.

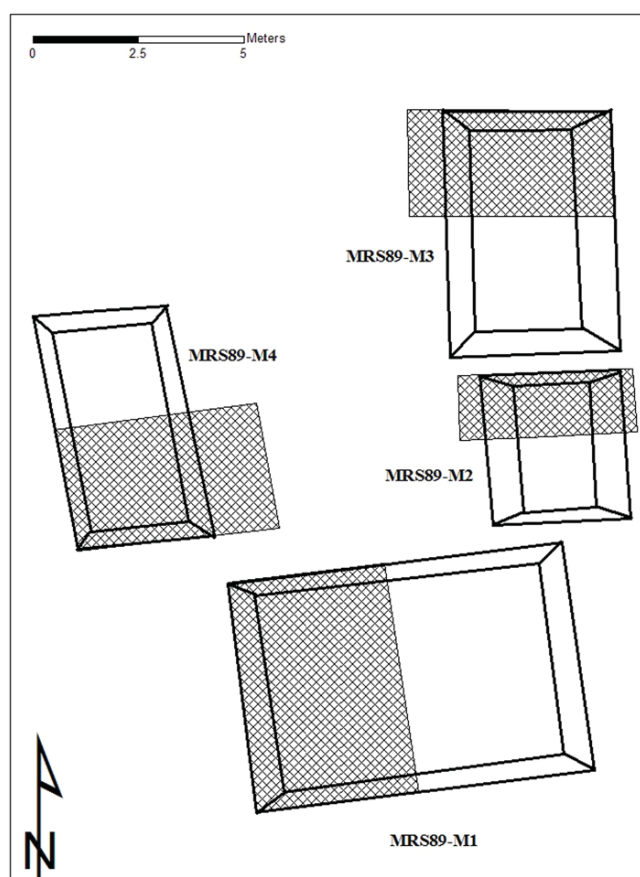


Figure 3.22. Isometric plan of Group MRS89 (SARP).

*Structure MRS89-M1.* Structure MRS89-M1 was a small residence with the typical, simple design of a substructure supporting a perishable structure that yielded a bench along its back wall, and only had one phase of construction. This structure yielded



an on-floor assemblage, Feature MRS89-M1-F/1, which consisted of a layer of sherds scattered on the floor of the room, and on the substructure in front of it, along the central axis of the building (McCormick 2007:90), where a doorway would have been (Figure 3.23). These sherds were refitted into seven partial vessels: three bowls, two jars, one dish, and one censer. Two of the bowls were of common type-varieties (Rubber Camp Brown and Garbutt Creek Red), while the third one was a rare bowl of the Belize Red type. The dish was also of the Belize Red type, the censer was of the Chiquibul Scored-Incised type (see Figure 4.1, p.103, for an example of this type of vessel), while the jars were both of the Cayo Unslipped type. A small stone scraper was also associated with the ceramic material.

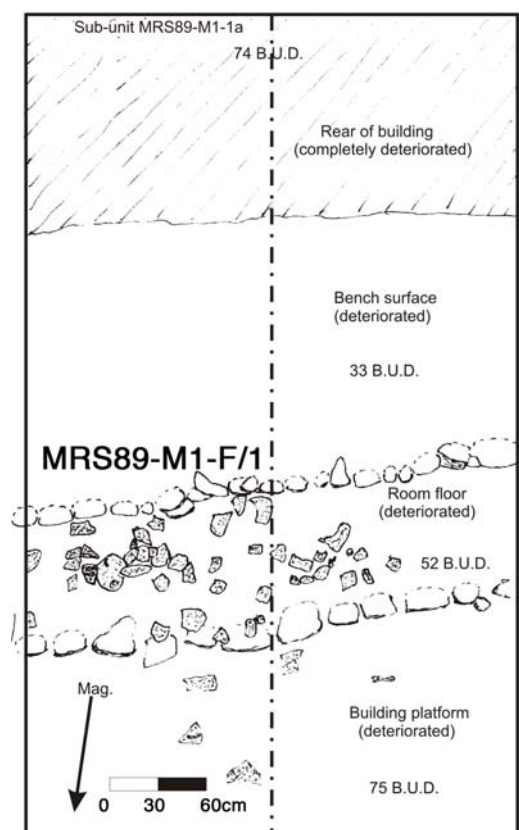


Figure 3.23. Top plan of Structure MRS89-M1, showing Level 3, or the terminal architecture, and its on-floor feature, MRS89-M1-F/1 (SARP).

*MRS89-M4*. Structure MRS89-M4 (Figure 3.24) was an even simpler domestic structure composed of a building platform supporting a small perishable structure that did not contain a bench. A simple on-floor assemblage, Feature MRS89-M4-F/1, consisting of an unidentified partial jar, was recovered on the floor of the substructure (McCormick 2008:20-22).

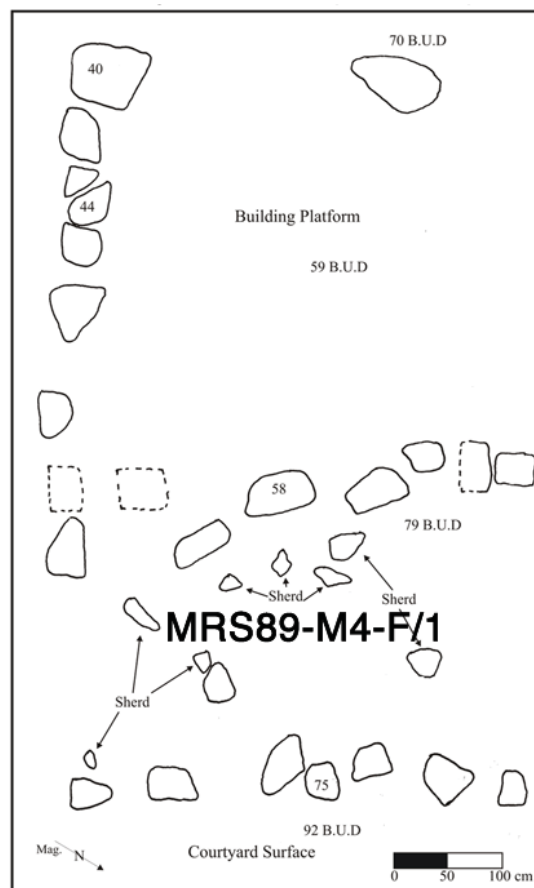


Figure 3.24. Top plan of Structure MRS89-M4, showing Level 3, or the terminal architecture, and its on-floor feature, MRS89-M4-F/1 (SARP).

## SUMMARY

The 12 on-floor assemblages which are the object of this research were found in each segment of the Minanha community. Within the Epicenter, four on-floor

assemblages were found: one in Structure 12A, and one in each of the structures of Group L (Structures 43L, 44L, and 45L). Two on-floor assemblages were found within the Site Core Zone: one in Structure 91R, and one in Structure 76S. Finally, six on-floor assemblages were found in the Contreras Zone: one in Structure MRS4-M1, three in Group MRS15 (on Structures MRS15-M2, MRS15-M3, and MRS15-M5), and two in Group MRS89 (on Structure MRS89-M1 and MRS89-M4). This distribution of on-floor assemblages represents an interesting opportunity to study the differential abandonment scenarios for each stratum of the social spectrum represented at the site of Minanha. In the following chapter, these assemblages will be examined in further detail, and the behaviors responsible for their deposition will be postulated.

## **CHAPTER FOUR: BEHAVIORAL-CONTEXTUAL ANALYSIS OF THE ON-FLOOR ASSEMBLAGES**

In the previous chapter, I examined the architectural context for each of the 12 on-floor assemblages included in my research collection, and presented an overview of the material included in each assemblages. In this chapter I describe my ceramic analysis, and then apply the interpretative method (presented in Chapter Two) to each on-floor assemblage. During this process I will examine the composition and context of the on-floor assemblages. More precisely, I will first study the classes, types, and completeness of the vessels. Secondly, I will analyze the context of the assemblages in terms of patterning, and association at the structure and group levels. Throughout this process comparisons are made consistently within the collection and at the inter-site level.

At the end of the chapter, I will provide a synthesis aimed at classifying the 12 assemblages with respect to the different categories of settlement abandonment processes. I will conclude by providing a chronology for the abandonment of the site and discuss the behaviors responsible for the deposition of each assemblage.

### **CERAMIC ANALYSIS**

#### **Methods**

All the material discussed in this thesis, apart from Group L's ceramics (which were analyzed by Derek Paauw in 2005), was analyzed between the months of May and July, 2010, at Martz Farm, Cayo District, Belize. I followed the type-variety: mode analysis methods described by James C. Gifford (1976), and used Sabloff's (1975) formal

attribute description for ceramic vessels. This analysis method, adapted by Dr. Iannone, has been consistently used by SARP archaeologists. My collection included 1177 diagnostic sherds, which either comprised parts of the rim or base, or yielded some decorations, or appendages, such as a foot. In terms of terminology, as we do not have defined a ceramic typology for Minanha proper, I followed the ones established for Barton Ramie (Gifford 1976) and Xunantunich (Lecount 2002) in the Belize River Valley to the North, and Caracol to the south (Chase and Chase 2004).

For behavioral purposes, I considered the completeness of the vessels as a diagnostic aspect during my analysis. The vessels represented by two or three sherds (or roughly 10% of the vessel) were considered *fragmentary*, those represented by more than three sherds (or between 10 and 80% of the vessel) were classified as *partial*, and vessels that were reconstructible in their entirety, or that were only missing a few sherds (80% or more of the vessel), were considered *complete*. Consequently, I used individual vessels (either fragmentary, partial, or complete) for analytical units in the case of on-floor assemblages. However, in the case of above-floor material (including material recovered on the surface, or in the humus, slump, or fall levels) where individual vessels were comparatively scarce, I used individual sherds for my analytical units.

### **Limitations**

This research consisted of my first formal type-variety: mode ceramic analysis. Therefore, I likely made some mistakes in my classification of sherd types, but I can assure the reader that I conducted this analysis to the best of my abilities. Other limitations to this study include the context-labeling issue. Indeed, on-floor assemblages are detectable only if they are carefully excavated. It is therefore possible that such

assemblages have been overlooked during the excavation of architectural structures at the site. Moreover, as exemplified by structures from Group MRS15, ceramic sherds that were part of the original on-floor assemblages may well have shifted, due to natural or cultural formation processes, towards above-floor levels. This is why, ideally speaking, I would have processed the ceramic material from the above-floor levels for each assemblage, as I did for Structures 76S and Group MRS15. This would have allowed me to search for sherds that were part of the on-floor partial and fragmentary vessels. Unfortunately, due to time constraints, this was not possible. Doing so could have played a role in changing the completeness of the on-floor vessels, and also may have provided information as to the terminal function of the structures, especially in the cases where the ceramic material had not been fully analyzed by another member of SARP.

Another limitation of the present study is due to time constraints and excavation strategy choices, and relates to horizontal exposure of structures. Indeed, none of the excavations described in this thesis targeted the entire surface of mounds; they either focused on one of their halves, or their central axis. Therefore, some of the inferences presented in this thesis could be invalidated if the whole of the terminal floor for each structures were to be excavated.

## **ANALYSIS OF THE 12 ON-FLOOR ASSEMBLAGES FROM THE MINANHA COMMUNITY**

In this section I present the results of my behavioral-contextual interpretational analysis. I begin with an overview of the whole collection, and then proceed with each assemblage. I will first look at the assemblages from the Epicenter, and then move on to

the Site Core Zone, and finally the Contreras Zone. For every case I postulate the behaviors, or abandonment processes, responsible for the deposition of the assemblage.

## Overview

I will begin by presenting the 11 on-floor assemblages<sup>2</sup> (Table 4.1) , then proceed with the results of the analysis of the four above-floor levels assemblages<sup>3</sup> (Tables 4.3 and 4.4).

*On-floor Material.* The *primary class*, or form, of vessels may be very informative regarding their function, as well as the role they played in the behavior responsible for their integration into the archaeological record. The classes of vessels statistically considered in this study are jar (or *olla*), bowl, dish, and censer (or *incensario*), the latter being grouped with brazier. Other vessel forms which were statistically insignificant were grouped with unidentified ones. However, in many cases, I refer to those uncommon vessels in my qualitative analysis.

Not surprisingly, the most common class in the on-floor collection is the jar, with 40.8%. This percentage is very high in comparison to the other classes present in the on-floor assemblages, and slightly higher than the average for Minanha (38.2%), although within the standard deviation (see Table 4.2). All jars contained in the assemblages were of coarse paste and span three types, with a strong tendency towards Cayo Unslipped. Bowls, mostly of calcite temper, represent 24.4%, which is slightly lower than the average for Minanha (30.1%). Bowl is the class that has the most variety in types (n=8).

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<sup>2</sup> This number excludes the assemblage from Structure 76S, as its material all came from Levels 1 and 2, and was only later associated with the floor of the structure (see below).

<sup>3</sup> This number includes the above-floor assemblages of Group MRS15, and the total number of analyzed structures remains 12.

Dishes, with two ash-tempered types, were rarer and only represent 10.2% of the total, which is less than half of the average for Minanha's assemblages (23.2%), and is even out of the wide standard deviation for this class. Censers (including braziers) are generally a rare class (with an average of 0.4% ). Therefore, with 10.3%, and even if censers are the least represented class, it is very significant to find this class of vessel in such proportions: about 25 times higher than the site average. The only type of censer represented in the assemblage is the Chiquibul Scored-Incised censer (see Figure 4.1, p.103, for an example of this type of vessel), and the only brazier, from MRS15-M2, is the base of a Composite Three Prong Brazier (Figure 4.2). The "Other / N/A" category includes the vessels which were unidentifiable, one censer lid, three ink / poison pots (see Figure 4.3, p.106, for an example of this type of vessel), and two miniature vessels.

<i>Structure</i>	<i>Jar</i>	<i>Bowl</i>	<i>Dish</i>	<i>Censer/Brazier</i>	<i>Other/N/A</i>	<i>Total</i>
12A	8	3	2	0	1	14
43L	1	0	0	0	2	3
44L	1	0	0	0	0	1
45L	0	1	0	0	3	4
91R	2	1	1	0	0	4
MRS4-M1	4	1	0	1	0	6
MRS15-M2	1	2	0	3	1	7
MRS15-M3	0	1	0	0	0	1
MRS15-M5	0	0	1	0	0	1
MRS89-M1	2	3	1	1	0	7
MRS89-M4	1	0	0	0	0	1
<b>Total and percentage</b>	20 40.8%	12 24.4%	5 10.2%	5 10.2%	7 14.3%	49 100%

Table 4.1. Count of the vessel classes from the on-floor assemblages. Units refer to single vessels (either fragmentary, partial, or complete).

<i>Form/Group</i>	<i>AC</i>	<i>AQ</i>	<i>K</i>	<i>U</i>	<i>V</i>	<i>X</i>	<i>Average</i>	<i>Standard Deviation</i>
Jar	28.1%	36.5%	35.3%	40.0%	42.0%	47.3%	38.2%	6.5%
Bowl	28.7%	29.9%	26.9%	34.0%	36.3%	24.8%	30.1%	4.3%
Dish	39.6%	28.8%	14.2%	14.4%	16.5%	25.7%	23.2%	10.1%
Censer	0.0%	0.5%	1.1%	0.4%	0.6%	0.0%	0.4%	0.4%
Others/N/A	3.6%	4.3%	22.5%	10.9%	4.4%	2.2%	8.9%	7.7%

Table 4.2. Averages and standard deviation of vessel classes for six groups of the Minanha community (after Longstaffe 2010 and Slim 2004).



*Above-Floor Material.* I decided to group the material from the above-floor levels separately from the on-floor assemblages because they represent two very different type of assemblages. In effect, the humus and slump levels, comprising the above-floor levels, mainly contained individual sherds, no complete vessels, only several partial vessels, and relatively few fragmentary ones. Consequently, single sherds were used for analytical units. Moreover, they represent 1060 sherds out of a total of 1176 (or 90%), and including them with the on-floor assemblages would have been statistically misleading.

<i>Class</i>	<i>Jar</i>	<i>Bowl</i>	<i>Dish</i>	<i>Censer/Brazier</i>	<i>Other/N/A</i>	<i>Total</i>
<b>76S-1</b>	263	211	72	3	15	564
<b>MRS15-M2</b>	42	48	47	16	11	164
<b>MRS15-M3</b>	59	29	4	0	13	105
<b>MRS15-M5</b>	100	51	24	35	16	226
<b>Total</b>	464	339	147	54	55	1060

Table 4.3. Count of the vessel classes from the above-floor assemblages. Units refer to single sherds.

<i>Class</i>	<i>Jar</i>	<i>Bowl</i>	<i>Dish</i>	<i>Censer/Brazier</i>	<i>Other/N/A</i>	<i>Total</i>
<b>76S-1</b>	46.5%	37.3%	12.7%	0.5%	2.7%	100.0%
<b>MRS15-M2</b>	25.6%	29.3%	28.7%	9.8%	6.7%	100.0%
<b>MRS15-M3</b>	56.2%	27.6%	3.8%	0.0%	12.4%	100.0%
<b>MRS15-M5</b>	44.2%	22.6%	10.6%	15.5%	7.1%	100.0%
<b>Total</b>	43.8%	32.0%	13.9%	5.0%	5.2%	100.0%

Table 4.4. Percentages of the vessel classes from the above-floor assemblages.

The proportion of non-identifiable classes for above-floor assemblages was significantly reduced because I was able to access all the material for my analysis. Consequently, the percentage of each class was increased, in contrast to the on-floor material. Jars are still the dominating class, with a slightly above average percentage (43.8%), followed by a normal proportion of bowls (32.0%), a low proportion of dishes (13.9%), and a high percentage for censers (5.0%). The “Other / N/A” category (5.2%),

includes a pot stand, two censer plugs, some rare vase (referring to relatively tall, cylindrical-shaped containers) sherds, and unidentified vessels.

### **Detailed Analysis: Epicenter**

*Structure 12A.* Structure 12A's on-floor assemblage (Figure 3.3) includes the largest number of partial vessels (n=14) found at the site, which were all either placed along the central passageway of the structure, or on the bench of the north-eastern room of the structure.

In terms of dating, one of the two fine-tempered dishes present in Feature 12A-F/7 was a typical Terminal Classic Platon-Punctated-Incised dish (with linear incisions around the hole in their rattle-feet; see Figure 4.4, p.110, for an example of this type of vessel). Also, Feature 12A-F/5 included the mouth of a Cayo Unslipped jar, which had a pie-crust lip, also characteristic of the Terminal Classic (Aimers 2003:154). Even though there are two Zibal Unslipped jars in the assemblage, which are generally ascribed to the Middle Classic (Gifford 1976), and even if several of the diagnosed partial vessels date to the Late Classic, it seems that this on-floor assemblage was created early in the Terminal Classic.

In terms of patterning, Features 12A-F/1 to 12A-F/6 were placed along the central passageway of this structure, which would have effectively blocked, in a symbolic manner, the access to Group F. If the placement of these vessels was accompanied by the purposeful collapsing of the corridor's vault, which is hard to assess, then the blockage would have been physical also. Such a case was observed at the site of Hershey, in the Sibun River valley of east-central Belize, where the accessway leading to an elite courtyard was ritually terminated, and then covered by collapse debris (Harrison-Buck et

al. 2007, 2008). In that case, however, the assemblage included human remains, and it is thus considered to be a desecratory termination ritual.

There were eight partial jars in the whole on-floor assemblage. Interestingly, three of the jars, represented by their mouths (part of Feature 12A-F/1), were stacked one inside the other. The stacking of vessels has been observed in ritual contexts elsewhere, including Santa-Rita Corozal, Cerros (both situated in northern Belize) and Pacbitun, and is referred to as a symbolic opening towards the underworld (Chase and Chase 2005:116; Healy et al. 2004:230-231; Walker 1998:86). I cannot confirm that this was the meaning of the stacking of *ollas* in Structure 12A, but such a patterning for partial vessels clearly expresses a special purpose.

The case of Feature 12A-F/7, which was placed on the bench of one of the public rooms facing Plaza A, is harder to interpret. In contrast, the only excavated room which faced into Courtyard F did not yield any on-floor material. Thus, it is plausible that, if a termination ritual was performed outside of the passageway, as expressed by Feature 12A-F/7, it would have been aimed at terminating the public function of Structure 12A, as opposed to its more private function associated with Courtyard F. This is supported by the fact that the only non-ceramic artifact present in the assemblage was the aforementioned large rubbing stone (Feature 12A-F/6), which was associated with scribal, administrative functions.

Structure 12A has not revealed the complete regeneration of life cycle within its architecture; it only yields the termination part. Even if it is possible that other ritual features were missed by the excavation units, the non-domestic, non-ritual, and administrative function of the building supports the lack of association with interred ancestors.

In summary, it seems plausible that Structure 12A was ritually terminated sometime during the early Terminal Classic (ca. 810-850 A.D.) by individuals who were seeking to terminate its accessway corridor, as well as its public function. It may be possible to link the obliteration of the passageway to Group F rather than to Structure 12A itself. However, further excavations would be necessary in Group F in order to determine this. The agents who performed this termination ritual carefully stacked purposefully broken jar mouths and placed numerous other partial vessels, some of fine quality, on the floor and benches of this corbelled-vaulted building. Given the form and partial nature of the vessels, it appears that the vessels could have been involved in feasting activities, which might have taken place in either, or both, Courtyard F and Plaza A.

It has been argued that feasting events should create middens including twice as many serving, or ceremonial vessels, as they include jars (Hageman 2004; Clayton et al. 2004). This is not the case here, where jars represent almost 60% of the assemblage. Nonetheless, this assemblage is not a midden, and its vessels were probably individually selected; therefore the ratio is not applicable to this particular case. Consequently, I do not reject the feasting theory for this assemblage. The vessels could subsequently have been ritually broken at the locus of the feast, and then carefully laid on the floor of Structure 12A. Finally, the vaults of Structure 12A were potentially dismantled, a fact that would have physically blocked the access to both the structure itself and to Courtyard F. Situated in such a prominent place within Minanha's most public space, this terminated structure would have had a strong impact on the Epicenter's landscape and function.

*Group L.* The excavations of Group L revealed a type of on-floor assemblage that is unique at Minanha. It has the particularity of occupying every structure of the group

(Paauw 2004, 2005). The most important assemblage came from Structure 45L (Figure 3.8), where two on-floor features were excavated. These extensive, yet well patterned, on-floor assemblages are larger than the on-floor assemblages of Structure 43L and 44L, and would have effectively symbolically blocked the access to Structure 45L.

Interestingly, two miniature ink / poison pots (see Figure 4.3, p.106, for an example of this type of vessel) were found in Feature 45L-F/1, as well as another unidentified miniature vessel, which altogether represented three of four recovered individual vessels (the fourth one being a bowl). This ratio is curious, but not surprising, as miniature vessels have a greater chance of remaining relatively intact than larger, more fragile ones (Inomata 2010b:160). However, given the rarity of ink / poison pots, their association with a potential termination ritual may be significant. Indeed, Paauw (2007:217) suggests that the miniature vessels may relate to scribal activities, a function that was also suggested for Structure 12A (see above), although there is a possibility that ink / poison pots were containers for tobacco powder (Inomata, personal communication 2011). Nonetheless, if ink / poison pots were used for scribal activities, this could be indicative of a certain administrative function for Group L. At Yaxuna, in the northern Yucatan, a "poison bottle" was also found mixed within a thick layer of white marl, in a terminated elite residence, Structure 6F-4 (Freidel et al. 1998:142). As very few individual vessels were present in the on-floor assemblage of Structure 45L, the on-floor 'loose' sherds (n=142) are discussed here for a better understanding of the abandonment processes of the building.

The loose ceramic material from Structure 45L included a very high proportion of jars (57.7%), and less than 20% of both dishes and bowls, which is relatively low (Tables 4.5 and 4.6). This assemblage also has the particularity of including 5.6% vases, which is

a rare form at Minanha (with an average of 0.9%). This distribution for the vessel forms, with very few serving or ritual related sherds, likely indicates a utilitarian, domestic function for the vessels included in the on-floor material (Paauw 2007:214). However, the presence of eight vase sherds is contradictory to this assertion. The scarcity of reconstructible vessels, and the importance of individual sherds, could support the hypothesis that this ceramic material was gathered from surrounding middens and then dumped on, and in front of Structure 45L. However, the presence of several intact chipped stone artifacts and of the complete and partial vessels contradicts this hypothesis.

<i>Primary Class</i>	<i>jar</i>	<i>bowl</i>	<i>dish</i>	<i>vase</i>	<i>Others / N/A</i>	<i>Grand Total</i>
<b>45L-F/1</b>	55	15	26	3	3	102
<b>45L-F/2</b>	27	8	0	5	0	40
<b>Total</b>	82	23	26	8	3	142

Table 4.5. Count of the on-floor loose ceramic material from Structure 45L. Units refer to single sherds.

<i>Primary Class</i>	<i>jar</i>	<i>bowl</i>	<i>dish</i>	<i>vase</i>	<i>Others / N/A</i>	<i>Grand Total</i>
<b>45L-F/1</b>	53.9%	14.7%	25.5%	2.9%	2.9%	71.8%
<b>45L-F/2</b>	67.5%	20.0%	0.0%	12.5%	0.0%	28.2%
<b>Total</b>	57.7%	16.2%	18.3%	5.6%	2.1%	100.0%

Table 4.6. Percentage of the on-floor loose ceramic material from Structure 45L.

In summary, the case of Structure 45L's on-floor assemblage is quite equivocal. On one hand, the on-floor assemblage appears to be related to elite / administrative activities (with the ink / poison pots and the vase sherds), potentially representing *de facto* or primary refuse while, on the other hand, it seems to be related to domestic secondary refuse (with the overwhelming proportion of jars). Let us look at the two other structures from this group before proceeding with more interpretations.

In contrast to Structure 45L, few materials were left on Structure 43L's floor (Figure 3.6). Its three on-floor features consisted of three partial vessels, including

another unidentified miniature vessel, a partial jar, and an unidentified partial vessel, as well as a heavily weathered groundstone celt (Paauw 2004:43). These features were not centrally aligned, and would not have symbolically blocked the access to the structure. Taken individually, this on-floor assemblage appears to be primary or secondary refuse, and somewhat resembles the on-floor assemblages of Structures MRS15-M3 and MRS89-M4. Structure 44L's on-floor single partial jar (Figure 3.7), isolated in the northern corner of the room, is even less easily ascribed to ritual behaviors, and also looks like primary or secondary refuse.

The six features that made up the on-floor assemblages of Group L include many artifacts, and are quite diverse in terms of raw material. Unfortunately, few of the individual vessels of the on-floor assemblages were identified. Also, even if they were originally assigned to Late Classic dates, Iannone (personal communication 2011) posits that many of them were type-varieties that were used during the Terminal Classic period as well. Therefore, the ceramic material indicates an early Terminal Classic date (ca. 810 A.D.) for the deposition of the on-floor assemblages.

When taken as a whole, the on-floor assemblages from these three structures could be associated with feasting events (Paauw 2007:211-213) that could have taken place in Courtyard L, but the near-absence of reconstructible serving vessels, the presence of several intact chipped stone artifacts, and the high proportion of jars, indicates a different behavior. The material from Structure 45L is not very different from the description of post-abandonment dumping. However, the absence of faunal remains and the presence of usable material, indicates that the assemblage would not have been a midden from daily refuse. The contrast between still-usable material and the midden-like deposit is curious, and it seems plausible that these two categories of material were

deposited at a different time. Therefore, it is possible that the intact material represents *de facto* or primary refuse, which would have subsequently been covered by the rest of the on-floor material. It seems plausible that this material was mostly gathered from surrounding refuse deposits. Paauw (2007:211) also argues that the three structures could have been intentionally collapsed, a fact that would explain why the lithic artifacts (including intact blades and projectile points) would not have been taken away by scavengers. The successive symbolic blocking of the access to Structure 45L by the deposition of a large quantity of refuse along its central axis – symbolically blocking the access to the room – followed by the collapsing of the structure, which would have physically sealed the building off, does represent a good case of reverential termination ritual. Thus, it is possible that this structure was the focus for the ritual termination of this group. I suggest that, early during the Terminal Classic period (ca. 810 A.D.), Structure 45L was terminated and that, probably contemporaneously, some partial vessels were either placed, or simply left, on the floor of its two adjoining structures. Subsequently, all three buildings were potentially purposefully collapsed, a fact that would have kept the material *in situ*. I suspect that the deposition of the on-floor assemblages of Structures 43L and 44L was done complementarily to the formal ritual termination of Structure 45L. Consequently, the termination of Group L is to be understood in the group context, rather than separately for each structure, as is also the case for Groups MRS15 and MRS89 (see below).

As with Structure 12A, Group L did not embody the whole *jaloj-k'exoj*, but only its tail-end, and was closely related to the royal court residential courtyard. Unlike that of Structure 12A, however, the function of Group L is unclear. I suggest that its function was a mix of royal-related administrative activities, but that it also served as a residence,



where "[...] courtiers lived a significant part of their daily lives in [a] domestic setting" (Inomata 2010a:3). Complementary domestic activities, such as food preparation, could have taken place in a 'centralized' kitchen, situated in a neighboring group, such as Group K or M (Iannone, personal communication 2011), as was suggested for Caracol's and Tikal's elite residences (Chase and Chase 2000:74). This highlights the fact that the institutionalized, administrative function of ancient Maya royal courts is not mutually exclusive of its domestic counterpart (Inomata 2010b:3). In other words, as with Structure 12A, the termination of Group L might be related to its ties to the royal court, rather than to ancestral veneration. This termination event, however, would have had a lesser impact than Structure 12A's termination on Minanha's landscape, as it was secluded from the public areas of the Epicenter.

The non-violent termination of royal-related buildings (not palaces), as an outcome of the demise of a royal court, has also been documented at the site of Piedras Negras (Child and Golden 2008). There, during the Terminal Classic, the access to a sweatbath associated with the royal acropolis, Structure J-17, was obstructed by the dumping of refuse on its front steps, in its vestibule, as well as its chamber, a fate that was paralleled at other structures associated with the royal court (Child and Golden 2008:82). A similar termination ritual (albeit in a non-royal context) was also conducted during the Terminal Classic in the sweatbath situated in the most important residential group of the small site of Pook's Hill, Belize (Helmke 2006a:80, 2006b:185-186).

## **Summary**

It appears that the on-floor assemblages recovered within Minanha's Epicenter are related to the ritual deactivation of structures and groups that were functionally related to

the royal court complex. It is possible that these ritual terminations involved feasting activities, but no evidence supports incense-burning activity. Indeed, not a single censer sherd was associated with the on-floor assemblages of the Epicenter; a situation which is in stark contrast with non-epicentral on-floor assemblages (see below). Moreover, these potential termination rituals focused on whole groups, by either blocking their entranceway, or by being conducted on every structure. This is in accordance with the documented tendency of reverential and desecratory termination rituals in epicentral, royal-elite related context, to focus on whole groups, as expressed at Hershey (Harrison-Buck et al. 2007, 2008), Dos Hombres (Sullivan et al. 2008), and Xunantunich (Yaeger 2010). As will be discussed in Chapter Five, these termination events also coincide with the ritual termination of the royal house of Minanha (Iannone 2007), and appear to have been performed relatively soon after the infilling of the royal residential courtyard, early on during the Terminal Classic. Now, we turn attention to the far less documented topic of abandonment at ancient Maya sites: the non-elite context.

### **Detailed Analysis: Site-Core Zone**

*Structure 91R.* Group R, as previously mentioned, is an unusual architectural group at Minanha. Its unusual configuration, combined with its large size (only slightly smaller than Group S), led SARP archaeologists to ascribe a non-domestic, administrative function to all of its structures (Herbert et al. 2002; Prince 2000; Prince and Jamotte 2001). However, Structure 91R, which revealed an on-floor assemblage (Figure 3.10), outside of this unusual architectural context, is in no way different from a large domestic structure.

The on-floor vessels associated with this structure – two coarse jars, and two Terminal Classic diagnostic vessels, a Mount Maloney Black bowl and a Platon Punctated-Incised dish (see Figure 4.4, p.110, for an example of this type of vessel) – were all partial, and positioned in a seemingly disordered manner. Thus, they could have been broken elsewhere before they were placed inside the building. This case is somewhat comparable to Structure 12A's on-floor assemblage, but more similar to the domestic on-floor assemblages of Structure MRS89-M1 (see below).

This on-floor assemblage represents one of the only special features of Group R. If it is, indeed, evidence for a termination ritual, this assemblage is, once more, the only part of the *jaloj-k'exoj* embodied by the structure. Indeed, Structure 91R does not yield a dedication burial, nor any cache features. It is, however, important to mention that a collapsed burial was found in front of the south-eastern corner of the building (Prince 2000:58-65). This burial was radiocarbon-dated to the Early Postclassic period (conventional date [B.P.]:  $1000 \pm 40$ ; 1 Sigma cal AD: [1010-1040]; 2 sigma cal AD: [980-1060], [1080-1150]) and, due to the lack of associated Postclassic material with Structure 91R, was considered intrusive. Therefore, the individual contained in that burial could not have been an ancestor to the agents who left Feature 91R-F/1 on the floor of Structure 91R at moment of its abandonment.

Group R's function has been suggested to have been an administrative complex which might have served as an entry check point for Minanha's Epicenter (Prince and Jamotte 2001:63). However, it seems probable that the seat of such function would have been the large range building consisting of Structures 71R, 92R, and 93R, not the much smaller Structure 91R. Furthermore, the material from Group R's excavation was never formally analyzed, and the administrative function for the group has never been

confirmed. Consequently, the function of Structure 91R is hard to assess. It is hard to postulate, as I did for Structures 12A and 45L, that the on-floor assemblage of Structure 91R was aimed at terminating the function of the building. It would also be far-fetched to ascribe to the same assemblage a termination typical of the *jaloj-k'exoj* complex, as no buried *ancestor* is directly associated with the building.

In summary, it is possible that the four partial vessels from Feature 91R-F/1 were used in an event, such as a feast, within Group R, during the Terminal Classic period (810-900 A.D.), and then ritually broken. Subsequently, these broken vessels could have been placed in the entrance of the building, symbolically blocking its access. It is, however, impossible to confidently ascribe a ritual behavior to this on-floor assemblage. Indeed, the structure does not seem to have been ritually charged at the time of deposition of the assemblage, and it is not possible to securely argue that a termination ritual would have obliterated any specific function. The possibility that the material in this on-floor assemblage was deposited by other means than a ritual is, therefore, the most logical explanation.

In summary, I suggest that Feature 91R-F/1 was deposited on the floor of Structure 91R through mundane activities, such as primary or secondary refuse disposal. This hypothesis is supported by the lack of clear patterning for the on-floor assemblage, although this disorganization may have been the result of subsequent cultural or natural formation processes. Further insights into Structure 91R and Group R itself will only be possible if its excavated material is further analyzed.

*Structure 76S.* The case of Structure 76S is different than any other studied in this sample. As previously mentioned, the material from Structure 76S discussed in this thesis was not originally labeled as an on-floor assemblage. It consisted of a very large amount

of material, including thousands of sherds retrieved from the humus and slump levels (Zehrt 2006:35-38). The diagnostic sherds (n=565) were composed of a very large proportion of jars (46.5%), followed by a high proportion of bowls (37.3%), a low proportion of dishes (12.7%), three censer sherds and two partial miniature vases (represented by one sherd each). During the analysis of this material, numerous diagnostic Terminal Classic vessels were identified (especially fine-tempered dishes). These ceramic data were combined with a set of radiocarbon dates which came from a burial associated with the adjacent Structure 77S, and included these two Terminal Classic dates: (conventional date [B.P.]:  $1200 \pm 40$ ; 1 Sigma cal AD: [770-890]; 2 sigma cal AD: [690-900], [920-950]), and (conventional date [B.P.]:  $1170 \pm 40$ ; 1 Sigma cal AD: [780-900]; 2 sigma cal AD: [770-980]). Taken together, these data indicate a Terminal Classic date for the assemblage. During the analysis of the ceramics, many sherds were refitted, and 33 fragmentary vessels and six partial vessels were identified. Among these broken vessels were several jars, bowls, and a few dishes. Along with the ceramic material, numerous special finds (n=74) of many types of raw material, as well as some faunal remains, were recovered.

It has been postulated by Zehrt (2006:38 2007:70) that a structural termination cache (Figure 3.13) was placed in the entrance of the structure, thus blocking its access. As with Structures 12A and 45L, the doorway of Structure 76S was blocked. Here, however, it was sealed in a much more effective and formal way, which involved placing cut-stones and infilling the doorway with construction material, and capping the whole thing with formal capstones, rather than blocking the entryway with an accumulation of artifacts. Quite unusually, this cache, Feature 76S-F/1, did not include much material –

only a small adze and a few sherds – which may have been part of the construction fill. This may indicate, as Zehrt (2006:38) suggests, that the cache mainly included perishable material. The case of caches which mainly contained perishable material has been documented elsewhere in the Maya subarea (Becker, in press), including Lamanai, where cache-like, empty pits placed in an architectural context are a common feature from the Preclassic to the Terminal Classic periods (Pendergast 1998:56). In the case of Feature 76S-F/1, I suggest that this structural cache's function was not only to enclose material, but also to ritually block the access to the structure.

It was also suggested that the thick layer of ceramic material and its associated artifacts present in the above-floor levels of Structure 76S were, in fact, deposited inside the building at the same time that its structural cache was built, and that these events were probably associated with feasting activities (Iannone et al. 2006:125; Zehrt 2006:37-38). Therefore, all this material, which would have been tossed inside the room of Structure 76S, was a massive on-floor assemblage. It would have been after the collapse of the building, and through the action of natural formation processes, that this material would have migrated upward, and been mixed with the above-floor levels.

The thousands of sherds included in the above-floor assemblage represent a very large amount of material. When coupled with all the other artifact types retrieved from these levels, the entirety of this assemblage could hardly be ascribed to a single event such as a feast (as suggested for Structure 12A). Indeed, it is unlikely that hundreds of jars, representing nearly half of the ceramic material, would have been used during a single feasting event, and that this feast would have also involved several dozens of lithic artifacts.

As Structure 76S was the north wing of the ancestral shrine of Group S, its function was ceremonial. Consequently, the high proportion of jars and bowls (83.9%), the scarcity of fine serving vessels (12.6%), and the virtual absence of censers (only three sherds), is confusing. It seems likely that this material was gathered from elsewhere in the group, potentially from middens, and deposited within the structure, along with the structural cache, in order to hinder further use of the building. The hypothesis that at least some of this material came from a midden context is supported by the fact that several sherds included in the assemblage date to the Middle Classic period (especially Mount Maloney Black bowls), while, as previously discussed, others are typical of the Terminal Classic. The redeposited refuse theory is further supported by the fact that these above-floor levels also included a very large amount and variability of artifacts (dozens of special finds and large lithic bulklots), as well as faunal remains (Zehrt 2006:35-38). Many artifacts were found concentrated in the frontal part of the structure, and along the central axis (Zehrt 2006:35), which is to be expected if the material was tossed inside the room from the front door which was situated in the middle of the building. Nonetheless, it is possible that some of the material present in this massive on-floor assemblage originated from a feast associated with the ritual termination of the structure but, if so, it would probably only represent an unidentifiable fraction of the entire assemblage.

Even if Structure 76S did not yield the whole *jaloj-k'exoj* within its architecture, and only the tail-end, the adjoining pyramidal Structure 77S represents one of the best documented cases, at Minanha, for a complete (and complex) regeneration of life architectural sequence. Indeed, it revealed a dedication burial, and three rededication caches as well as a reentry tomb (Schwabe 2008: 140-157; Zehrt 2007). Despite this, no termination offering was excavated for Structure 77S. This suggests that the ritual

termination for this relatively large eastern shrine complex – constituted of Structure 76S, 77S, and 78S – could have taken place in Structure 76S, and is represented by Feature 76S-F/1, along with its associated massive on-floor assemblage.

As Group S is the largest settlement unit of the Site Core Zone, its four-meter tall eastern tripartite temple – taller than any other structure for this whole segment of Minanha's community – is quite significant. Furthermore, as none of the domestic structures excavated in Group S revealed an on-floor assemblage, Structure 76S is the only candidate for a termination ritual. As no material clearly postdating this feature was excavated within Group S, it is possible that this termination event reflects the abandonment of the whole group. Moreover, the termination of Structure 76S may have had an impact on the landscape of the Site Core Zone that transcended Group S and affected this whole segment of Minanha's community. Elsewhere, at Blackman Eddy in the Belize River Valley, an on-floor, dense layer of sherds was excavated along the central axis of an epicentral ceremonial structure (Structure B1), and was interpreted as being the result of a communal non-feast related ritual, but not of redeposited middens, which represented the abandonment of the whole site (Brown and Garber 2008:168). Although the very large on-floor deposit of Structure 76S appears to be redeposited refuse, I argue that its terminal function was very similar to the one of Blackman Eddy's Structure B1 "deactivating" ritual, and that, in the Site Core Zone context, "This event symbolically represents the death not only of the main ceremonial building and established sacred place on the landscape but also of the site [or segment of the community] in general" (Brown and Garber 2008:168).

To summarize, I suggest that during the Terminal Classic (810-900 A.D.), after centuries of utilization, the inhabitants of Group S blocked the access to the northern



wing of their ancestral shrine with a structural termination cache. Before doing so, they gathered refuse from surrounding middens, including a large amount of ceramic material, which they dumped inside the building. As suggested by Iannone et al. (2006:125), this ceremonial 'dumping event' could have been accompanied by ritual feasting, and at least some of the partial vessels included in the on-floor assemblage could have been used during this event. This termination ritual represents an organized effort to seal off the building, and this is paralleled by the intense and continuous ritual focus on Structure 77S throughout the occupation of the group. The hypothesis that the on-floor assemblage of Structure 76S was simply the result of a massive accumulation of secondary refuse, potentially ensuing from post-abandonment dumping, may not be completely dismissed. However, the fact that it is accompanied by a formal cache definitely points towards the ritual termination hypothesis.

### **Summary**

It appears that the two on-floor assemblages excavated in the Site Core Zone date to the Terminal Classic, but are related to two different abandonment scenarios. Evidence indicates that Structure 91R, potentially a domestic structure, was abandoned without the performance of a termination ritual. Instead, at the time of abandonment, its former inhabitants left some primary or secondary refuse on the floor of its room. On the other hand, the case of the on-floor assemblage of Structure 76S, associated with the construction of a formal cache in its doorway, indicates a complex termination ritual. Indeed, it is possible that the termination of Structure 76S represents the abandonment of the whole of Group S, and was conducted as a communal rite for signifying the abandonment of their social landscape and venerated ancestors interred in the adjacent

Structure 77S. Let us turn attention to the study of the on-floor assemblages that were excavated in the humblest segment of Minanha's community, the Contreras Zone.

### **Detailed Analysis: Contreras Zone**

*Structure MRS4-M1.* Group MRS4 is the most prominent architectural group of the Contreras Zone. The on-floor assemblage discussed here, Feature MRS4-M1-F/1 (Figure 3.16), was excavated from one of its larger domestic buildings, Structure MRS4-M1. In terms of dating, a Chiquibul Scored-Incised censer, diagnostic of the Terminal Classic (see Figure 4.1, p.103, for an example of this type of vessel) (Awe 1985:311-316) was part of the on-floor assemblage. However, given its association with a burial from Structure MRS4-M3, which was radiocarbon-dated (conventional date [B.P.]:  $1050 \pm 40$ ; 1 Sigma cal AD: [980-1020]; 2 sigma cal AD: [900-1030]), this feature has been dated to the Early Postclassic period.

The entire assemblage was found along the primary axis of the structure, on four of its "steps": on the patio floor, on the second step of the substructure, on the small outset step leading to the house, and on the floor of the room. The patterning of these clusters – representing six fragmentary vessels: four coarse-paste jars, one Yalbac Smudged Brown bowl and a Chiquibul Scored-Incised censer – is very well defined. These six partial vessels, individually clustered, occupied almost all the steps leading into the room, and would have effectively hindered, in a symbolic way, access to the building.

The fact that the vessels were only fragmentary indicates that the whole vessels were not broken *in situ*. They were rather probably broken elsewhere, such as in the group's patio. Then, the fragmentary vessels would have subsequently been transported, and placed on the structure. The predominance of jars in the assemblage, coupled with the

presence of only one serving vessel, is not surprising in the case of a domestic structure, but does not point towards these remains as being the results of a feast. However, as previously discussed, these vessels do not represent a midden, and could have been selected among many others, which potentially included more dishes or bowls. Moreover, the presence of a censer indicates a ritual use for at least some of the vessels, and the possibility that these six fragmentary vessels were laid in such a axial pattern, without a definite purpose, seems unlikely.

Structure MRS4-M1 only yielded one phase of construction, and Feature MRS4-M1-F/1 was the only feature revealed during its excavation. However, the eastern shrine of the group, Structure MRS4-M3, revealed a complex *jaloj-k'exoj* ritual program, composed of four features including a dedication burial and two rededication caches. Structure MRS4-M5, the other large domestic structure in the group, also revealed a rededication cache consisting of a small ceramic vessel containing 14 obsidian blades (McCormick 2008:59). The ritual sequence for the group, if taken as a whole, represents the whole architectural cycle of the regeneration of life. However, as with Group S, the final termination ritual did not happen on the same structure as the earlier phases of this ritual sequence.

In summary, it appears that, at least six vessels were used during a ceremony, perhaps in the patio of the group, at some point during the Early Postclassic period (900-1050 A.D.), and then ritually broken. Subsequently, in a gesture aimed at ritually blocking access to Structure MRS4-M1, several large sherds of each of these vessels were laid on the central axis of the building. These partial vessels, individually clustered, were carefully placed on the different "steps" leading inside the room, and would have effectively symbolized the sealing-off of this structure. However, other scenarios, such as

the hypothesis that these sherds were simply taken from a midden and then carried there, cannot be ruled out entirely. Nonetheless, the very well-patterned deposition of the fragmentary vessels suggests a ritual abandonment process for MRS4-M1.

*Group MRS15.* Along with Group L, Group MRS15 yields the highest number (n=3) of on-floor assemblages recorded for one group at Minanha. Furthermore, as with Structure 76S, the material from the above-floor levels for each of these three structures was analyzed. I will first discuss the on-floor and above-floor assemblages of its two larger buildings (Structures MRS15-M2 and MRS15-M5) and will finish with Structure MRS15-M3.

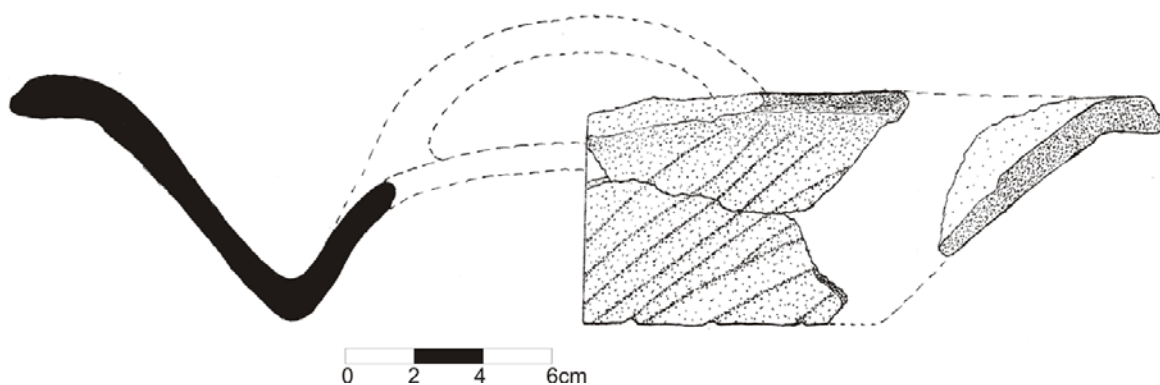


Figure 4.1 Illustration (profile view) of a partial Terminal Classic Chiquibul Scored-Incised censer. This particular vessel was part of the on-floor assemblage of MRS15-M2 (illustration by the author).

The on-floor ceramic assemblage from Structure MRS15-M2 (Figure 3.19) contained only one jar, and a very high proportion of serving and ceremonial vessels, including a partial Terminal Classic diagnostic Chiquibul Scored-Incised censer (figure 4.1). Most interesting, three of these vessels (the complete effigy brazier base and Yalbac Smudged Brown bowl, and the smaller, pie-crust Chiquibul Scored-Incised censer) are, in fact, part of the same artifact (Figure 4.2). Indeed, the brazier from Structure MRS15-M2 matches perfectly the description of the Portable Composite Ceramic Brazier type,

also referred to as *Three-Prong Brazier* (Ball and Taschek 2007). This particular type of vessel is rare, and is composed of a brazier 'base' which supports a container, using three prongs placed on its summit, which was typically covered by a lid; this artifact could have been used for cooking, or heating food, and burning incense (Ball and Taschek 2007:458).

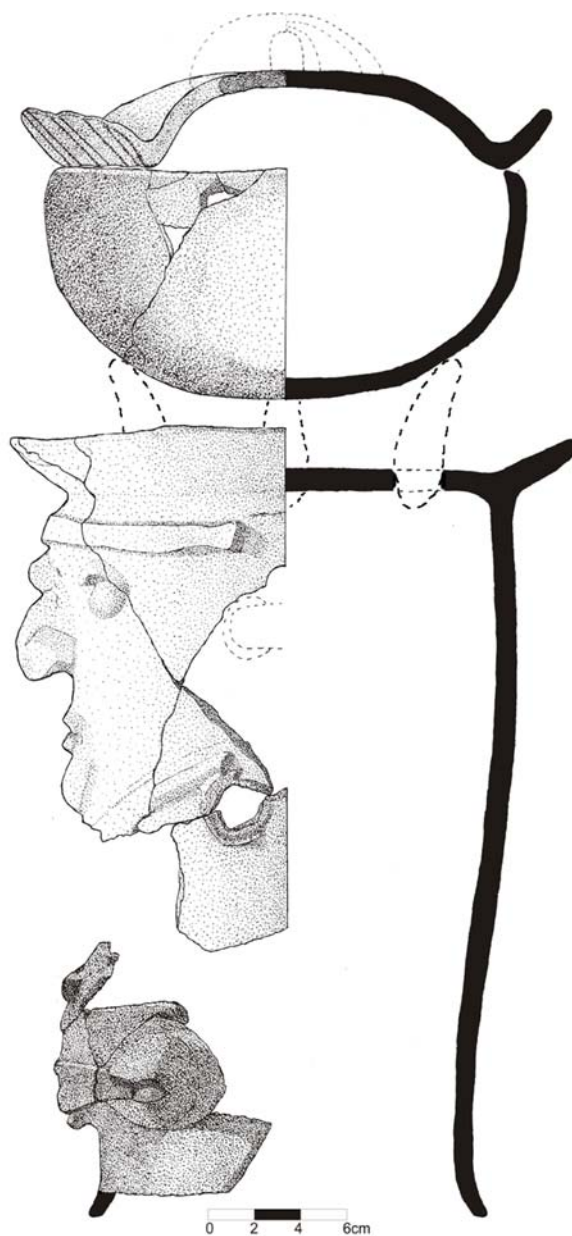


Figure 4.2. Illustration (profile view) of the Portable Composite Ceramic Brazier found during the excavation of the on-floor assemblage of Structure MRS15-M2 (illustration by the author)

Three Prong Braziers have been found throughout the region surrounding Minanha, at sites such as Arenal, and Caracol (Ball and Taschek 2007:461-466; Chase and Chase 2004:361-362), but had not been previously documented for Minanha. The three prongs were not recovered (one was potentially part of the above-floor material), but the partial brazier had three circular holes for holding the prongs. Moreover, the associated complete Yalbac Smudged Brown bowl had its base blackened from apparent intense heating, and the scored lid perfectly matched the rim diameter of this bowl. On a different note, the association of the small Chiquibul Scored-Incised censer with this artifact, for which it serves as a lid, seems to indicate that this type of vessel may have been primarily used as lids, rather than as 'autonomous' censers. The scores of the lid, at the point of contact with a container, may have allowed for the circulation of air (Iannone, personal communication 2011).

The roller-stamp found in association with the floor (see Figure 2.5, p.37) is a unique find at Minanha, but not in the region. Roller stamps have been found at sites throughout the Maya subarea (Smith 2009), including Cahal Pech and Barton Ramie (situated in the neighboring Belize River Valley), but are generally associated with Preclassic period occupations. In fact, the roller-stamp from Structure MRS15-M2 resembles Preclassic examples, rather than Postclassic examples (Smith, personal communication 2011). Therefore, it is possible to suggest that this roller-stamp may have been an heirloom, associated with remote ancestors, and passed on through the generations (Joyce 2000). A roller-stamp has also been found in association with a termination ritual at Dos Hombres, where a small elite courtyard was sealed off by the

deposition of an enormous quantity of material, which included many exotic artifacts, including the roller-stamp (Sullivan et al. 2008:104-107).

A broken, partial metate was found beside this roller-stamp. The presence of a food processing artifact in association with the on-floor material could indicate ties to feasting activities (Stanton and Gallareta 2001:234). Furthermore, broken maize grinding tools (manos and metates), representing a crucial part of daily Maya life, are commonly found in association with ritual deposits, including termination rituals, throughout the Maya subarea (Freidel et al. 1998:141; Lucero 2010:144; Navarro-Farr 2008 et al. 137-138).

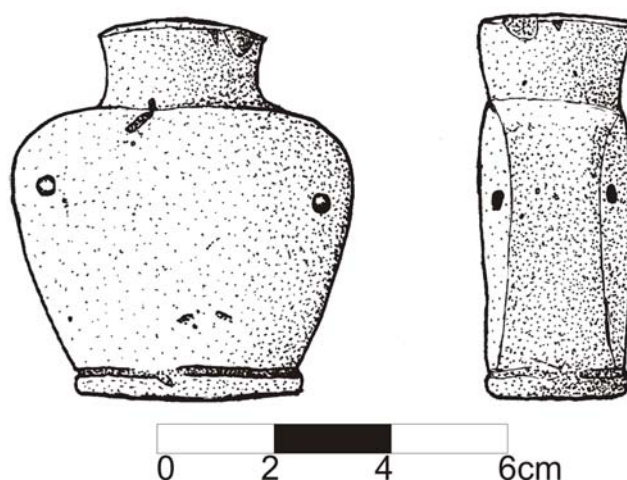


Figure 4.3. Illustration of a complete ink / poison pot. This vessel was found during the excavation of the level 2 of MRS15-M2 (illustration by the author).

A complete ink / poison pot (Figure 4.3) was also found within the slump layer, wedged between two cut-stones on the front staircase's first step. It is likely that the on-floor assemblage originally included this complete miniature vessel (Hills and Iannone, personal communication, 2011). This ink / poison pot could have been left somewhere between the house floor and the first step, and would have then been removed from its original location through natural formation processes. Interestingly, ink / poison pots have also been found in Structure 45L's on-floor assemblage, where they have been associated

with scribal activities. In the case of a commoner's residence, the hypothesis of scribal activity can probably be dismissed. However, Smith (2009:21-22) argues that roller-stamps could have been used, once soaked in ink, to print motifs on either exposed flesh or various types of cloths. Therefore, if ink / poison pots were used for holding ink, rather than poison or tobacco, it is likely that this small container and the roller-stamp were originally associated.

In terms of dating, these on-floor features included two Chiquibul Scored-Incised censers, which are typically associated with the Terminal Classic (Awe 1985:311-316). However, the assemblage also included a Daylight Orange bowl, which is diagnostic of the Early Postclassic period. Portable Composite Ceramic Braziers have been associated with both Terminal Classic and Early Postclassic dates (820-950+ A.D.; Ball and Taschek 2007:461). Therefore, it seems likely that this assemblage was created early in the Postclassic period (ca. 900-950 A.D.).

The above-floor material from Structure MRS15-M2 (164 sherds) contained a very low proportion of jars (25.6%), a normal proportion of bowls (29.3 %), a high proportion of dishes (28.7%), as well as a very significant proportion of censer and brazier sherds (9.8%), 24.5 times higher than the average at the site. Among this assemblage, three fragmentary and five partial vessels were found. Of these, most were fine ash-tempered dishes and Chiquibul Scored-Incised censers. This unusually high proportion of fine serving vessels, combined with all the censer and brazier sherds among the above-floor assemblages, matches with the composition of the on-floor assemblages. These proportions even surpass the expected, previously mentioned, composition for feast-related middens (Clayton et al. 2004; Hageman 2004), with 2.5 times more serving or ritual vessels than storage containers. However, it is important to specify that this



assemblage does not represent a midden. Nonetheless, the presence of a device with probable cooking, and/or incense burning functions (the Three Prongs Brazier), and a food-processing artifact (the partial metate), supports the hypothesis that a feast may have taken place in association with the abandonment of Structure MRS15-M2.

The fact that the on-floor jar and larger Chiquibul Scored-Incised censer (Figure 4.1) were found in partial condition indicates that they were not broken *in situ*, but probably in the patio of the group. These ritually-broken vessels, as well as the partial metate, would then have been placed on the floor of the room. The case of the Three Prong Brazier (including the complete brazier and bowl, and the partial Chiquibul Scored-Incised censer/lid) is, however, different. The brazier base was indeed fairly complete, and it is believed that its missing sherds could have slumped down onto the unexcavated portion of the staircase (Hills, personal communication, 2010), potentially including its prongs and the rest of the lid. Therefore, it appears that the two complete bowls, along with the brazier and its lid, were placed on the floor of Structure MRS15-M2 as complete items. It is impossible to assess if they were broken at the time of their deposition, or if they were placed intact and subsequently broken through natural formation processes. Elsewhere, at Caracol, fairly complete Three Prong Braziers were also found in association with on-floor assemblages (Chase and Chase 2004:261-362). As for the roller stamp and ink / poison pot, which were virtually intact, they could also have been placed at the same time as the complete vessels. It is also important to mention that the structure suffered a great deal of root disturbance (McCane et al. 2009:18). Consequently, it is possible that a certain portion of the above-floor material was originally part of the on-floor material. This is further supported by the fact that sherds

belonging to on-floor partial vessels, including the brazier, were found in the above-floor levels.

All the on-floor material of Structure MRS15-M2 (except for the ink / poison pot) was excavated inside the room, in front of its benches. This on-floor material was therefore not placed along the primary axis of the structure, but would have covered a good portion of the available floor surface. In a symbolic manner, it would have effectively blocked the access to the room. Although the presence of the several complete artifacts could suggest that these represent *de facto* refuse, both the portable and valuable nature of these items contradict this hypothesis.

The structure is also notable as it revealed the only dedication burial of the group, Burial MRS15-M2-B/1, which was radiocarbon-dated (conventional date [B.P.]:  $1460 \pm 40$ ; 1 Sigma cal AD: [570-640]; 2 sigma cal AD: [540-650]), and dates to the Middle Classic period. Even if it proved to contain two phases of construction, no rededication cache was found within Structure MRS15-M2. It is, however, possible that such a feature was missed by the excavation units. Nonetheless, the building was ritually charged by a buried ancestor. A termination ritual would, therefore, fit perfectly in the *jaloj-k'exoj*. The presence of the roller-stamp, representing a potential ancestral heirloom, also supports the hypothesis of *jaloj-k'exoj* related termination ritual for this assemblage. The definite ritual tendency of Structure MRS15-M2 is further supported by the fact it is placed on the eastern edge of the group, a direction associated with ancestor worship at Minanha (as at Groups S and MRS4, for example), and elsewhere in the Maya subarea, including Caracol (Becker 1999; Chase and Chase 1998:319; McAnany 1995:102; 1998:278).

Structure MRS15-M5 is a domestic structure that was slightly smaller than Structure MRS15-M2, but was also the eastern, and predominant building of its patio

group. Feature MRS15-M5-F/1 (Figure 3.21) comprised a single, practically complete, halved Platon-Punctated Incised dish typical of the Terminal Classic (Figure 4.4). The few missing sherds of the dish (including one of the rattle-feet) were probably removed from their original context through natural formation processes. Even if this on-floor assemblage only included a single vessel, its above-floor material contained a great deal of ritual-related material.

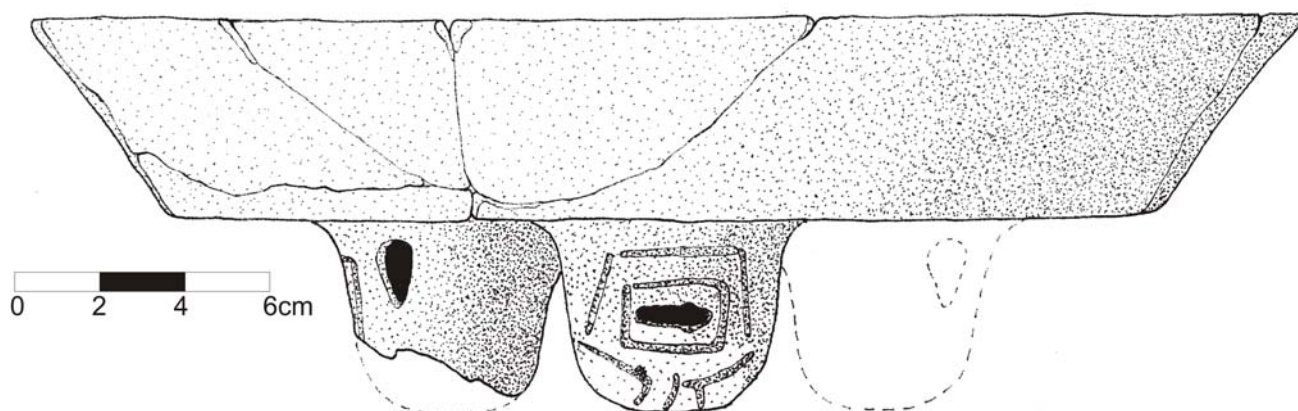


Figure 4.4. Illustration of a partial Platon-Punctated Incised dish typical of the Terminal Classic (part of the MRS15-M5-F/1). Notice the linear incisions around the hole in their rattle-feet (illustration by the author).

The above-floor material from Structure MRS15-M5 revealed an assemblage different from Structure MRS15-M2's, with a predominance of jars (44.2%), followed by bowls (22.2%), and quite unusually, censers and braziers (15.5%) – almost 40 times the average at the site. Dishes were uncommon in the assemblage with only 10.6%. An important aspect of this assemblage is its 11 fragmentary vessels, and five partial vessels, which included four Chiquibul Scored-Incised censers, and an elegantly incised bowl (probably of the Orange Walk Incised type), which decorations likely represented a scene with birds. This assemblage also included two partial Cayo Unslipped miniature vases.

Feature MRS15-M5-F/1, consisting of a complete, perfectly halved, dish lying on a step, resembles the definition of post-abandonment veneration. However, on a

stratigraphic basis, it does not match the definition of post-abandonment veneration and can therefore be dismissed as a hypothesis. Furthermore it seems very unlikely that this dish was deposited in a post-abandonment context as this type of dish is typical of the Terminal Classic, and it is consequently more logical that it was associated with the occupants rather than with post-abandonment visiting agents. Moreover, the composition of the above-floor assemblage – especially its censer component – indicates that a great deal of ritual was taking place within Structure MRS15-M5, at least towards its final occupation. Indeed, the remarkable presence of four partial Chiquibul Scored-Incised censers is telling of the strong ritual component of this assemblage. As with Structure MRS15-M2, natural formation processes probably transferred to above-floor levels material that was originally associated with the floor surface. Moreover, even though Structure MRS15-M5 lacks any other ritual feature, as with Structure MRS15-M2, it is the larger, and eastern structure of its patio-group. It is thus plausible that the termination of Structure MRS15-M5 was complementary to the termination of Structure MRS15-M2.

Structure MRS15-M3 is the third largest building of Group MRS15. The top-plan of this structure is unusual, with a large and high, bench-like, square platform on the middle of its substructure. In contrast to Structures MRS15-M2 and MRS15-M5, the on-floor assemblage from Structure MRS15-M3 (Figure 3.20) does not appear to be a ritual deposit and, certainly, it did not block access to the room. Indeed, the clustered partial bowl and complete mano placed on the western edge of the platform make it much harder to postulate what behaviors were responsible for this on-floor assemblage, which most resembles the ones from Structures 43L, 44L, and MRS89-M4 (see below). It is possible that this on-floor material was placed at the same time as the termination rituals for Structures MRS15-M2 and MRS15-M5 were being conducted. However, I suspect that

the on-floor assemblage of Structure MRS15-M3 was not the result of a ritual. Indeed, the above-floor assemblage for this building was heavily dominated by jars (56.2%), followed by bowls (27.6%), barely contained any dish sherds (3.8%), and no censer sherds. It contained a dozen fragmentary vessels which were almost all jars. The only potential marker for a ritual at Structure MRS15-M3 is its mano which, if taken in association with the partial metate from Structure MRS15-M2, could be related to feasting activities. However, judging by these data, it appears that at the moment of abandonment Structure MRS15-M3 was being used differently than Structures MRS15-M2 and MRS15-M5, and that its function was focused on domestic activities, potentially those of a storage facility.

In contrast to Structures MRS15-M2 and MRS15-M5, the near absence of ritual paraphernalia in its above-floor levels, combined with the domestic nature of the on-floor assemblage, suggests that it consisted of abandonment refuse of either *de facto*, primary or secondary deposition. This means that, among the six structures from Group MRS15, only Structures MRS15-M2 and MRS15-M5 revealed a ritual component associated with the abandonment of the group, which indicates that the termination ritual may have focused on the larger and eastern buildings of both patios.

To summarize, it appears that early during the Postclassic period (ca. 900-950 A.D.), a complex termination ritual was performed at Group MRS15. During this event the former inhabitants of the group performed a ceremony which involved a great deal of incense burning and a feast. Subsequently, they ritually smashed the Chiquibul Scored-Incised censers and other vessels used during the ceremony and laid them on the floor of Structures MRS15-M2 and MRS15-M5. Then they placed a Three Prong Brazier and at least three more vessels used during the ceremony on the floor of the same buildings.

These complete serving vessels potentially contained some sort of food offerings at the time of their deposition. The inhabitants then abandoned their households while leaving on the floor of Structure MRS15-M3 some material which they did not wish to carry away with them.

*Group MRS89.* Group MRS89 is the smallest of the settlement units in this study, but nevertheless yielded two on-floor assemblages (Features MRS89-M1-F/1 and MRS89-M4-F/1). The first feature was found on Structure MRS89-M1, which was a fairly large domestic building situated on the southern edge of the patio group. Feature MRS89-M1-F/1 (Figure 3.23), with its seven partial vessels (three bowls, two jars, one dish, and one censer) could be related, as was the case for several other on-floor assemblages at the site, to a feasting event. Indeed, as with Structure MRS15-M2, the ratio of serving and ritual vessels is 2.5 times higher than for storage vessels. As the vessels were only partial, they were probably broken, probably ritually, at another locus and then transported, in their partial state, and deposited in the doorway. As for the small stone scraper included in this assemblage, there is a possibility that it partook a role in this ritual breakage, and ended up on the floor of the structure during the same event, but this is impossible to confirm. This termination offering, placed on the room's and substructure's floor, where the doorway would have been, would have blocked the access to the building in a symbolic way.

Structure MRS89-M1 only contained one phase of construction, which was dated to the Middle Classic period. A dedicatory offering was associated with this construction phase. This offering consisted of a secondary burial placed within an upside-down jar, situated within the construction fill of the substructure, along its the central axis. This feature contained the only human remains found within Group MRS89. Therefore, it

appears that Structure MRS89-M1 was the ritual focus for the group. Between this dedication offering and the termination offering, Structure MRS89-M1 (as with Structure MRS15-M2) contained both ends of the *jaloj-k'exoj*.

A second, smaller on-floor assemblage was found on Structure MRS89-M4 (Figure 3.24). The excavation unit was set on the southern half of the building, and revealed Feature MRS89-M4-F/1 lying on the substructure's floor, in front of where the room would have originally been. The partial jar was therefore not aligned along the central axis of the building. Taken alone, it would be hard to postulate what behavior was responsible for the creation of this assemblage. However, as with Groups L and MRS15, this simple on-floor assemblage is associated with a rather clear example of a termination offering from a neighboring structure. Therefore, when considered in association with Feature MRS89-M1-F/1, it is possible to postulate that this single partial vessel was deposited at the same time as the termination ritual for Structure MRS89-M1 was being performed. This case is similar to the on-floor assemblage from Structure MRS15-M3.

In summary, it is possible to postulate that during the Terminal Classic (810-900 A.D.), the inhabitants of Group MRS89, just before abandonment, performed a ritual that involved a feast, which likely took place in their patio. After ritually breaking vessels used during the ceremony, they would have scattered several portions of these onto the floor of Structures MRS89-M1, and perhaps MRS89-M4. Another possibility is that the material from Structure MRS89-M4 was simply left, as primary or secondary refuse, on the floor of the substructure.

## Summary

The on-floor assemblages (n=6) retrieved from the Contreras Zone represent half of my sample. It appears that the Contreras Zone was gradually abandoned over a long period of time, starting during the Terminal Classic and lasting until the Early Postclassic period. It seems that the abandonment of these residential groups was marked by reverential termination rituals which were aimed at symbolically blocking the access to the larger domestic structures of the groups. These termination rituals seem to have involved communal ceremonies, which likely took place in the patios of these groups, and most probably involved feasting activities, as is represented by a high frequency of serving dishes and the presence of food-processing artifacts – and incense burning – as suggested by the presence of at least one partial Chiquibul Scored-Incised censer at each group. These reverential termination rituals focused on ancestral veneration and embodied the *jaloj-k'exoj*.

The fact that several on-floor assemblages were found in association with commoners' context differs from what has been documented elsewhere in the Maya subarea. Indeed, at Caracol, on-floor material is extensively documented from the site's epicentral elite residences and temples, but rarely documented in a commoners' context (Chase and Chase 2000, 2004), although this distributional difference could simply be the result of differential sampling strategies. In terms of ceramic types, however, we see certain parallels between Caracol and Minanha. At both sites, diagnostic Terminal Classic plainwares (especially Chiquibul Scored-Incised censers) are commonly found in the non-epicentral residential groups (Chase and Chase 2004:361-362). This shared ceramic distribution suggests that the surrounding population of the sites kept on living in their residential groups after the abandonment of the sites' epicenter. However, at the site of



Caracol, Terminal Classic finewares (such as Platon-Punctated Incised or Belize Red vessels) are mostly found in association with epicentral, elite architectural complexes (Chase and Chase 2004:363). The case is obviously different at Minanha, where ash-tempered dishes and bowls of fine quality were found in association with the on-floor assemblages at Groups R, S, MRS15, and MRS89. Therefore, in contrast to Caracol, it appears that the non-epicentral, commoner population of Minanha had a greater access to status-related ceramics during the Terminal Classic and Early Postclassic periods.

So far, I have discussed in detail the architectural context and material composition of the 12 on-floor assemblages that were excavated throughout the community of Minanha. During this analytical process, it became apparent that different abandonment processes characterize the three segments of the community. In the following pages, I provide a synthesis of this analysis, and explore further the differential abandonment processes of the Minanha community.

### **SYNTHESIS: THE ABANDONMENT OF THE MINANHA COMMUNITY**

In this synthesis, I begin by examining the artifactual and contextual trends which emerged during the analysis on the on-floor assemblages from Minanha. I then ascribe to each assemblage the appropriate abandonment scenario (as presented in Chapter Two).

#### **Artifactual and Contextual Trends**

The behavioral-contextual analysis of the on-floor assemblages from Minanha revealed some variety in terms of abandonment processes. In Table 4.7 the nine material and contextual traits that proved to be the most meaningful for interpreting the

abandonment processes are presented. By carefully observing the distribution of these traits, it is possible to postulate differential behavioral trends for the various on-floor assemblages.

*Gradual and Organized Abandonment.* The foremost observation regarding this set of assemblages is that Minanha was not abandoned rapidly. Elsewhere in the Maya subarea the main evidence for rapid abandonment is the presence of fully reconstructible, *de facto* material (Beaudry-Corbett and Bishop 2002:117; Inomata and Triadan 2010:369-372). Also, in the context of a military-related rapid abandonment, structures generally exhibit evidence of intense burning, and human remains and weapons are associated with on-floor assemblages (Chase and Chase 2004:365; Harrison-Buck 2007; Palka 2003:127-128; Suhler and Freidel 2003: 139-140). At Minanha, the situation is quite different. Most structures (apart for Structures 45L and 76S) did not yield large amounts of on-floor material that could have been left at the time of a "catastrophic" abandonment, exhibited no traces of intense burning, and included no human remains, and very few weapons. Additionally, very few completely reconstructible vessels – or *de facto* material – were found among these assemblages. The only structure that contained a large amount of material, some reconstructible vessels as well as intact artifacts (including two projectile points), is Structure 45L. However, the on-floor assemblage of this building mostly included scattered sherds, which appear to have been redeposited inside the building after previous breakage. Structures MRS15-M2 and MRS15-M5 also contained some complete vessels but, as previously noted, both buildings yielded only a small amount of this material, which is ceremonial in nature, and does not seem to have pertained to daily household activities. It seems that, until abandonment, Minanha's building floors were carefully swept and that very few usable, complete vessels or other types of artifacts were

left on the floor of the structures at the time of their abandonment. Additionally, between the 12 structures, the approximate abandonment dates for the whole community span over a century, and the concept of “rapid abandonment” definitely does not allow for such a lapse of time. Even if the two groups that yielded four on-floor assemblages (including only one complete, miniature vessel) from Minanha's epicenter appear to have been abandoned around the same time, the scarcity of on-floor deposits from this zone does not support the hypothesis of rapid abandonment. In contrast, 29 on-floor assemblages, comprising 140 relatively complete vessels, were excavated in Caracol's rapidly abandoned epicenter (Chase and Chase 2004:351-352). Admittedly, Caracol is much larger – which partly explains this discrepancy – but the distribution of these 29 deposits is in stark contrast with Minanha's epicenter's four on-floor assemblages. These sets of evidence allow me to affirm confidently that Minanha was abandoned in a gradual and organized way.

*Royal-Court Related Terminations.* Among the obvious trends present in Table 4.7 is the correspondence between the lack of association with *jaloj-k'exoj* structural rituals (such as a dedication burial) and structures associated with the royal court of Minanha. Moreover, each of these cases is associated with the Epicenter, with the exception of Structure 91R. Among those, Structures 12A and 45L, represent strong cases of termination rituals, while Structures 43L and 44L are closely associated with Structure 45L. Facing the lack of association with any *jaloj-k'exoj* related feature, it seems plausible that the ritual termination of these structures was not related to ancestral veneration. Instead, I suggest that the purpose of the termination rituals of Structures 12A (and potentially Group F), 43L, 44L and 45L was to symbolically bring an end to their royal court-related, administrative, non-domestic, or domestic function, rather than to

Structures	Partial / Frag. Vessels	Compl. Vessels	Ritual / Feast Assemb.	Domest. Assemb.	Symbol. Blocking	Physical Blocking	<i>Jaloj- K'exoj</i>	Assoc. <i>Jaloj- K'exoj</i>	Royal- Related Function	Abandon. Date
12A	✓		✓		✓	?*			✓	ca. 810-850 AD
43L	✓			✓		?*			✓	ca. 810 AD
44L	✓			✓		?*			✓	ca. 810 AD
45L	✓	✓		✓	✓	?*			✓	ca. 810 AD
91R	✓			✓					?	ca. 810-900 AD
76S	✓			✓	✓	✓		✓		ca. 810-900 AD
MRS4-M1	✓			✓	✓			✓		ca. 900-1050 AD
MRS15-M2	✓	✓	✓		✓		✓			ca. 900-950 AD
MRS15-M3	✓			✓				✓		ca. 900-950 AD
MRS15-M5	✓	✓	✓		✓			✓		ca. 900-950 AD
MRS89-M1	✓		✓		✓		✓			ca. 810-900 AD
MRS89-M4	✓			✓			✓			ca. 810-900 AD

\*Potential blocking through collapsing of the Structure

Table 4.7. Synthesis of the artifactual and contextual data of the on-floor assemblages.

release an accumulation of ancestral *k'ulel*. The ceremonies associated with these ritual deactivations potentially involved feasting, but no incense burning. Furthermore it seems that the potential purposeful, ritual collapsing of buildings may be related, at Minanha, to this particular type of termination ritual. Finally, if we consider that the blocking off of Structure 12A's passageway was aimed at terminating the access to Group F, it seems that these royal court-related terminations focus on whole groups, rather than on single structures.

The case of Structure 91R is different, because its gateway function, which would have related it to the royal court, was never demonstrated, and its on-floor assemblage does not represent a strong case of termination ritual, and is not associated with another on-floor feature. Therefore, I suggest that the on-floor assemblage of Structure 91R was not the result of a ritual, but was rather deposited through mundane or natural formation processes.

*Jalok-K'exoj-Related Terminations.* A different trend that emerges from this analysis is the correspondence between the symbolic blocking of doorways, domestic or ceremonial function for buildings, and the direct, or broader association with *jalok-k'exoj*-related ritual features. In the case of Structures MRS15-M2, MRS15-M5 and MRS89-M1, these factors are also associated with ritual and/or feast-related ceramic assemblages. The correlation between these four factors represents convincing cases for termination rituals aimed at releasing the powerful ancestral *k'ulel* of architectural structures. The case of Structure MRS4-M1, where the assemblage was quite domestic, is still convincing. As I have previously discussed, the material present in these rather small on-floor assemblages were not middens, and only include a few selected vessels, which could well have been originally associated with many more. Furthermore, the assemblage from Structure

MRS4-M1 is a good example of a well-patterned, purely symbolic blocking of the access to a building. The termination ceremonies associated with these domestic structures appear to have involved both feasting and incense-burning activities.

The case of Structure 76S is unique at Minanha. There, the behaviors responsible for the creation of the on-floor assemblage and its associated cache were different, but ritually significant. Once more, this assemblage was domestic in nature, but the presence of the very large amount of material, including many types of non-ceramic artifacts, expresses the special nature of this on-floor assemblage. I also believe that the association with the cache that effectively blocked the building's doorway (Feature 76S-F/1) points towards a ritual function for Structure 76S's on-floor assemblage. Moreover, Structure 76S is associated with one of the most *jaloj-k'exoj* ritually-charged buildings at the site, Structure 77S, and this ceremonial context strengthens the termination hypothesis for Structure 76S. While feasting activities may have been related to the termination of Structure 76S, very few censer fragments were recovered from this assemblage.

Finally, the case of Structures MRS15-M3 and MRS89-M4 are different. The on-floor assemblages of these structures did not block the access to the building, and were very mundane in nature. However, in contrast to Structure 91R, both buildings were in close association with at least one of the aforementioned termination ritual cases. In other words, I suspect that the on-floor assemblages from Structures MRS15-M3 and MRS89-M4 were deposited, in a complementary manner, during the ceremonies responsible for the creation of the termination offerings of Structures MRS15-M2, MRS15-M5 and MRS89-M1.

*Differential Abandonment Dates.* According to the dates obtained from the analysis of the on-floor assemblages, it appears that the three segments of the Minanha

community were abandoned at different periods. It seems that, by the early Terminal Classic period, the Epicenter of Minanha had been abandoned. Thereafter, before the onset of the Early Postclassic, the Site Core Zone had also been mostly abandoned. The on-floor data from the Contreras Zone is less definite. There, it seems that the abandonment was conducted over a longer period of time. Group MRS89, a smaller group situated on a ridge and settled in the Middle Classic, was abandoned before the onset of the Early Postclassic period. The larger MRS15 Group, established during the Middle Classic, and in close spatial relationship with the most prominent group of the Valley, Group MRS4, appears to have been abandoned early in the Early Postclassic period. Finally, Group MRS4, established during the Terminal Preclassic, endured until well into the Early Postclassic period. These abandonment dates for the Contreras Zone indicate that the groups established earlier, and situated in more productive areas of the valley, were occupied for the longest time (see Chapter Five for further discussion on the matter).

Obviously, these dates represent only a small sample of the whole community, but they all point in the same direction. As will be discussed in the next chapter, this chronology for the abandonment of Minanha corresponds to our current understanding of the socio-economic dynamics of the site during the last centuries of its occupation. The abandonment scenarios for the different segments of the community have now been postulated. However, in order to make the results of this analysis comparable to other studies, I will now formally apply the behavioral typology (as defined in Chapter Two).

### Abandonment Processes for the On-Floor Assemblages

The purpose of Table 4.8 is to present the list of possible formation processes for each of the 12 on-floor assemblages of the Minanha community and to classify them in three different categories. The table does not include any new hypotheses, but rather serves as a synthesis for the conclusions of the detailed analysis of each on-floor assemblages. Each letter present in the table refers to the abandonment processes typology presented in Chapter Two, and each postulated formation process relates to the *Gradual and Organized Abandonment* category.

Structures	Gradual and Organized Abandonment Processes	Presence of Reverential Termination Ritual
12A	<b>D1, D2</b> , (G, H, J)	Yes
43L	A, B, <b>D1, D2</b> , (G, H, J)	Maybe
44L	A, B, <b>D1, D2</b> , (G, H, J)	Maybe
45L	<b>D1, D2</b> , (G, H, J)	Yes
91R	A, B, (G, H, J)	No
76S	<b>D1</b> , (G, H, J)	Yes
MRS4-M1	<b>D1</b> , (G, H, J)	Yes
MRS15-M2	<b>D1</b> , (G, H, J)	Yes
MRS15-M3	A, B, C, <b>D1</b> , (G, H, J)	Maybe
MRS15-M5	<b>D1</b> , (G, H, J)	Yes
MRS89-M1	<b>D1</b> , (G, H, J)	Yes
MRS89-M4	A, B, <b>D1</b> , (G, H, J)	Maybe

\*Normal character refer to secular cultural formation processes, bold characters refer to ritual formation processes, and characters in parentheses refer to natural formation process.

**Legend:**

A: Primary Refuse; B: Secondary Refuse; C: *De Facto* Refuse; D1: Original Exposed Offering; D2: Collapse Debris Resulting from Ritual Demolition; E: Primary Refuse as a Result of Squatting; F: Secondary Refuse as a Result of Squatting; G: Disturbance as a Result of Squatting; H: Secondary refuse, or collapse debris, resulting from the disintegration of architectural features I: Exposed Offering as a Result of Post-Abandonment Veneration; J: Disturbance by Natural Formation Processes. For a detailed list of the abandonment processes, please refer to Chapter Two.

Table 4.8. Postulated gradual and organized abandonment processes for the on-floor assemblages.



Among the postulated abandonment processes, natural formation processes (H and J), as well as post-abandonment disturbances (G) are impossible to rule out, and are therefore present in each case.

*Reverential Termination.* A first category of on-floor assemblage includes the ones from Structures 12A, 45L, 76S, MRS4-M1, MRS15-M2, MRS15-M5, and MRS89-M1. I suggest that each of these on-floor assemblages represents the material remains of reverential termination rituals. Consequently, these on-floor assemblages were attributed to ritual abandonment processes (D1 and D2).

*Secular Abandonment Processes.* A second category of on-floor assemblage applies only to Structure 91R. In this case, I suggest that the on-floor assemblage is the result of mundane formation processes, and is not related to termination rituals. Consequently, this on-floor assemblage was attributed to secular formation processes (A and B).

*Potential Reverential Termination.* A third category of on-floor assemblage includes the ones from Structure 43L, 44L, MSR15-M3, and MRS89-M4. These cases are less secure. They represent on-floor assemblages found in association with postulated reverential termination ritual. I suggest that these assemblages were created at the same time as their associated exposed offerings were deposited. Consequently, these on-floor assemblages were attributed to ritual abandonment processes (D1 and D2). However, as they lack clear ritual characteristics possessed by the first category of assemblages, it is impossible to rule out the role of secular formation processes in their creation. Consequently, these on-floor assemblages were also attributed to secular formation processes (A and B).

These three categories of behaviors presently appear to fit the range of variability in abandonment processes observed at Minanha. However, further investigations and the application of this model to other case studies might reveal that these categories of gradual and organized abandonment need to be refined, and even subdivided.

## CONCLUSION

This chapter discussed the differential abandonment scenarios for the three segments of the Minanha community. This was done by methodically applying the behavioral and contextual interpretative framework defined in Chapter Two to the 12 on-floor assemblages recovered from the site.

Following this analysis, I suggest that the three segments of the Minanha community were abandoned gradually, at different time periods, and that this was done in an organized way. I also suggest that two types of termination rituals are identifiable at Minanha: 1) For epicentral structures, the termination rituals symbolically terminated the building's royal-court related functions; and, 2) For non-epicentral structures, the rituals terminated the structures by releasing the ancestral *k'ulel* accumulated within them. Finally, I dismissed the hypothesis that Structure 91R had been ritually terminated.

Now that I have discussed how and when the Minanha community was abandoned, two of my research questions have been achieved. In Chapter Five, I explore what this abandonment scenario can tell us about the Minanha community and, therefore, answer my third research question. Finally, I explore the broader methodological and theoretical implications of my thesis for the study of settlement abandonment and ancient Maya society.

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