

*An Investigation of Preclassic Maya Architecture:
The Round Platforms of Cahal Pech, Belize*

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ABSTRACT

In the area of the ancient Maya Lowlands, there is an architectural tradition just recently coming to light in regional scholarship. Round structures, sometime referred to as platforms based on their low height and usual lack of superstructure, are low circular constructions that appear to flourish in the Preclassic Period (900 BC- AD 300). However, after the transition to the Classic Period (AD 300- 900), these round forms are entirely replaced by a more rectilinear building tradition. The relative popularity of the round structures -- present in many sites across the region -- and the sudden abandonment of the form has intrigued Maya scholars. One such structure was partially excavated at the site of Cahal Pech in the Upper Belize River Valley in the 2012 field season. The structure appeared to fit the current pattern having an apparent Preclassic date based on excavation depths and stratigraphy. The function of this structure and others like it remained elusive at the time of excavation. In current scholarship, there are two theories that dominate the literature on the original use of this form of architecture. Through artifact analysis conducted during the 2013 field season, the author sought to verify a Preclassic chronology as well as elucidate a function associated with the structure. Perhaps the conclusions made about the Cahal Pech example can be applied to applied to the examples of the form elsewhere in Belize and wider Maya Lowland region.

INTRODUCTION

During the 2012 field season at Cahal Pech, Belize, excavations in the playing alley of the eastern ballcourt sought to uncover more of a round structure initially exposed in a previous 1995 investigation of the same area. Over two weeks of excavation, a partial section of the round structure was revealed and reported.

Round structures are intriguing constructions in Maya scholarship. They are present across the Maya world including the present-day countries of Mexico, Guatemala, and Belize. Particularly intriguing is that they exist almost exclusively in the Preclassic period (1200 BC-AD 300), most concentrated in the Middle Preclassic (900-300 BC). After the transition of Maya society to the famous Classic Period (AD 300-900), highlighted by kings and monumental architecture, the round structures all but disappear. Experts in architectural theory attribute this abandonment of form to the change in ideology associated with the flourishing of the Classic Period (McGuire 1983, Aimers et al. 2000).

Many of the round structures are concentrated in the Maya Lowlands, specifically in Belize (Aimers et al. 2000), which has inspired many projects there to study the structures further, including the Belize Valley Archaeological Reconnaissance (BVAR), through which this research was completed. The number and similarity of these forms across the archaeological record indicates that the structures served some special or specific function. This thesis will work to analyze two of the most prominent theories on the ancient function of round structures using both theories of archaeological architecture and artifact analysis to interpret the change and possible function of these forms. The first function-theory in circulation marks the round platforms as indicators of specific household identity while the second theory emphasizes a ritual nature to the activities performed in association with the structure.

Study of the most recent round structure excavated at Cahal Pech (below the eastern ballcourt) was continued in the 2013 field season via artifact analysis. Analytical focus was given to three main artifact classes -- ceramic, shell, and bone. These three were the most conducive to onsite study (sans laboratory) and yielded the most pertinent information to the case. Within these classes, the most attention was given to ceramics which would be used to date the structure and chronology of construction as well as shed light on the possible intended use of this rare form.

Through the analysis of objects excavated from in and around the structure and the consideration of architectural theory, this paper aims to date and classify the function of the round structure. Perhaps this classification may eventually be interpreted onto other round forms at Cahal Pech (and perhaps beyond), but the main focus of this research is the round structure below the eastern ballcourt.

RESEARCH PROBLEM

Architecture is one of the primary sources from which archaeologists make inferences about the social organization and relationships that existed in the ancient Maya past. Both religious and social ideologies are reflected in the very purposeful decisions of size, shape and location at the time of construction (McGuire 1983). Specifically highlighted in this thesis is the question of round platforms that appear in the Preclassic (900 BC – AD 300) Maya cities in Mexico, Belize, and Guatemala (Awe and Campbell 1989). These platforms are generally constructed with fill retained by a varying number of courses of cut limestone and covered with a plaster floor (Hansen 1998). Once they were abandoned, they were buried or partially destroyed in the construction of new and different types of buildings.

The rarity of these structures, along with the short but important period of time in which they were “in style,” is what makes them so significant to scholarship. They are few in number, only appearing in the Preclassic period, and disappearing again right before the cultural height of the Maya civilization, known as the Classic period (AD 300 – 900) (Awe 2006). For the most part, these platforms are an enigma. Their function, the reason for their abandonment before the Classic period, and how they reflect societal activities at this transitional time is unclear. Little is known about what led to the abandonment of this style in favor of larger, civic buildings. This thesis addresses these questions by analyzing the structures and associated artifact assemblages at Cahal Pech, an ancient city which was occupied continuously from about 900 BC to AD 800 (Awe and Campbell 1989).

My research is informed by two field seasons at Cahal Pech, a key Maya site in western Belize where the structures have been identified. The focus of my inquiry is the circular architecture which is partially exposed beneath the playing alley of the eastern ballcourt. The feature is analyzed in its stratigraphic context along with the associated artifact assemblages excavated in the 2012 field season. There was no evidence of burials or residential structures associated with the platform, but excavations yielded a number of artifacts largely interpreted to be domestic refuse. However, a ritually interred cache which was excavated next to the platform suggests that ritual activities were also associated with the circular structure. I hypothesize that the combined domestic-ritual space of the Preclassic circular platform was replaced, over the course of the transition, to discreet spaces as evidenced by the shift toward civic, monumental architecture in the Classic Period.

Investigation of this problem is important to both the archaeology of Cahal Pech as well as to the study of this structure type in general since there is no consensus on the purpose of

these buildings. My study contributes to the ongoing debate by employing an archaeological approach, one necessary especially since Maya hieroglyphic writing was only just emerging during this time period and epigraphic analysis still remains rudimentary. Therefore, the information that the Maya wish to convey cannot be read from their own words but rather must be interpreted from artifact and architectural use and form.

THEORETICAL CONSIDERATIONS

Analysis of ancient architectural design and function is a valid approach to understanding societal concerns and cultural practices, especially in the absence of a writing system. Aimers et al. (2000: 73) express this essentiality in architecture when he suggests that architecture, as an object, yields information about function but perhaps more importantly, stands as a visible cultural expression that mirrors the ideas and concerns of ancient societies. Symbolic preferences and social organization can be seen in the overall design of a structure as well as in the investments made in its construction, often in the form of material and effort expended. For example, in a socially stratified society, symbolic function in the form of structural investment for some buildings distinguish them from other surrounding buildings in order to communicate some desired message, which can be ideological or social (McGuire 1983). This information is disseminated to the public in visible, monumental form.

In archaeology, our study of architecture is often biased by the degree of preservation, especially for hierarchical societies such as the Maya. This is because there are elite rulers who can invest more into substantial buildings of more durable material, like stone. These materials can be observed in the archaeological record thousands of years later, unlike the perishable structures of non-elite residents that formed a higher percentage of the population. In this way,

archaeologists must be careful not to assume that the stone architecture unearthed is a full representation of the architecture present in the ancient occupation of the site (McGuire 1983). Even so, architecture is a part of the lives of the royals and the commoners, a characteristic that is almost completely unique to this form of evidence from the past (McKillop 2004).

With this caution in mind, archaeologists can deduce from architecture a significant amount about the society in which the structure was originally built. After all, no cultural artifact (architecture, pottery sherd) should be taken into account outside of its cultural context. The size, style, and material of a building may point to the relative complexity of the society and the roles that the designers and builders of the structure played in that society. For example, monumental architecture, like a pyramid, tells us that there is an organizational structure influential enough to collect the stone and commission the labor to construct the design. It also indicates that some kinds of information were intended to be conveyed and shared, such as religious beliefs or even ostentatious display. Of course, it is possible that both of these messages can be applied to the monument. Nonetheless, the archaeological remains of this pyramid would tell archaeologists that it was designed and built by a stratified society that had a power structure capable of expressing and enacting their dominance through large -scale construction projects (McGuire 1983).

In the field of Maya studies, emphases have centered on Classic Period architecture and the iconic monuments widely recognized by scholarship and the public at large. The Classic Maya built great cities and their ruins have captured interest since Stephens and Catherwood's (1841) nineteenth-century illustrations of the palace and pyramids at Palenque brought them world-renown. Classic Maya architecture has become almost synonymous with architecture of the ancient Americas, featured in contemporary popular film and symbolizing the national

histories of Mexico and Guatemala. Architectural theorists have attributed the Maya pyramids to the embodiment of the royal couple, "tall, imperious, high-crowned" (Scully 1991: 15-16), and as human-built representations of the metaphoric, sacred mountain (Scully 1991). Benavides' (1998) survey of Maya architecture across time in Mesoamerica, shows that Classic Period Maya architecture is but one manifestation of Maya beliefs and cultural practices. He shows that architectonic style can only be understood as the "local application of a constructive system with appropriate materials in a given period" and that style is an aesthetic value closely linked with the culture to which it belongs (Benavides 1998: 131).

It is only recently that scholarship has begun to investigate earlier forms of architecture that are found outside of the better known Classic period centers of the Petén (Palenque, Tikal, Copán). The chronology of occupation and architectural forms varies between regions in the

Period	Date
Early Preclassic	1200-900 BC
Middle Preclassic	1000-300 BC
Late Preclassic	300 BC- AD 300
Early Classic	AD 300-500
Middle Classic	AD 500-700
Late Classic	AD 700-900
Ceramic Phase	Approximate Date
Cunil	1000-850 BC
Jenney Creek	1000- 600 BC (Early Facet); 600 BC- 300 BC (Late Facet)
Barton Creek	300 BC - 100 BC
Mount Hope	100 BC - AD 250
Floral Park	0- AD 250
Hermitage	AD 250 - AD 600
Tiger Run	AD 600 - 700
Spanish Lookout	AD 700-900

Figure 1: Chronology of Occupation and Ceramic Phases in the Upper Belize River Valley

Maya region as Benavides (1998) asserts. My research investigates the lesser known architecture of the Preclassic lowlands in western Belize and a particular architectural style of the Maya. In this area, the Early Preclassic period (Figure 1) is a period of occupation that is poorly understood outside of a few examples of stone tools. The Middle Preclassic, is the period of time in the Lowlands when pottery forms (the early facet Jenney Creek ceramic complex) and architecture are visible in the archaeological record. Based on architectural design and grave good distribution, archaeologists have suggested that the beginning of this Middle Preclassic period showed little differentiation in social stratification. However, in the second half of this period, around 700 BC, the Lowland social structure begins to grow more complex, observed in a changing ceramic complex (the late facet of the Jenney Creek complex) and larger buildings thought to be associated with leadership's ability to implement large-scale construction projects (McKillop 2004). One example of these projects that is fairly consistent across the southern lowland region is regarded as the "Eastern Triadic Group", in which a large pyramid or set of pyramids built on the western side of a plaza is thought to have a significant astronomical alignment. This form began in the Middle Preclassic but continued as an architectural form until the end of the Late Classic period (Hansen 1998).

In the Late Preclassic (300 BC to AD 300), social inequality was apparent, observable in innovations in public architecture including monumentality, façade art, and elaborate triadic arrangements (Hansen 1998). Settlements are often characterized by a core center of monumental or public building with residences on the periphery. In both the core and periphery, there is a common form of building organization though scale differs greatly between the two areas. This form is known as the *plazuela group* in which there are buildings (houses, temples) that surround an open area where specific activities related to the structures take place. In this

period, there was also a prototypical form of temple in multiple sites throughout the region that shared the formal characteristics of short buildings bearing a staircase on one side that was flanked by stucco masks. This could perhaps point to a communication between multiple sites in the region that were beginning to transition to positions of regional importance. Cerros, a Late Preclassic site in Northern Belize, is a key location for archaeologists because it was never built over in the Classic period and so the exposed architecture is that of the Late Preclassic. At Cerros, this plazuela system of a core area of public architecture, temples, and elite buildings with dispersed households in the periphery is quite apparent (McKillop 2004).

The transition from this Late Preclassic period to the flourishing Classic (AD 300-900) is best defined by McKillop (2004: 181) as “the emergence of ruling dynasties [that] can be traced to the erection of the temples and stelae and the placement of elaborate elite burials that signify a growing complexity of political organization and regional and inter-regional communication and negotiation”. Differentiation between social ranks becomes distinct. Segregated residential districts utilized by related kin groups consist of pole and thatch houses built on stone platforms. Where kinship maintains its importance in the household sphere, it is magnified in the elite ranks where royal dynasties emerge (McKillop 2004).

The development of social stratification and ranking during the transitional phases of the Preclassic and the Classic period are apparent in architecture. As McGuire (1983) observes, the elites, and eventually the kings, wanted to convey a message of control. Not only were they able to organize labor for these grand construction projects, but they also implemented mechanisms such as causeways to control movement and constructed temples in regional style to assert a common ideology. Non-elites were not helpless though. They were able to use their own architecture to send a message of the importance of group identity and kinship. This is most

evident in the practice of building houses on top of the exact foot print of the previous house. This was a way of marking their historied claim to the land, backed by the presence of their buried ancestors under the floors of these houses.

Architecture at Cahal Pech

Cahal Pech is located in the Cayo district, which is the westernmost district of Belize that shares its border with Guatemala. The site was occupied from 1200 BC until it was eventually abandoned in AD 900, making it one of the earliest settled sites in western Belize. In the early years of its occupation (Middle Preclassic), the society was fairly sophisticated with circular or apsidal platforms of stone. The presence of imported jade and obsidian suggest that trade was important and that luxury goods were desired for status-conscious authority figures (Awe et al. 1990, Awe 2006). During the Late Preclassic (300 BC- AD 300), Cahal Pech underwent a social transition and became one of the most important centers in the region. This role is interpreted from numerous architectural renovations and the presence of a carved stela which is dated to be the earliest in Belize (Awe and Campbell 1989, Awe 2006). In the Classic period, there was a short period of construction and manufacturing lull but by AD 500, the momentum resumed and many structures were modified due to the economic improvement which some scholars associate with the rise of the Belizean site of Caracol (Awe and Campbell 1989).

Two areas of importance to my research question at Cahal Pech are Plazas B and C. Plaza B is the largest in the site at 50m by 60m and is the most public and accessible of the plazas. As of 1990, the Middle Preclassic could only be determined with certainty in this plaza (Awe et al. 1990). It was most likely used for public gatherings (as opposed to Plaza A which was segregated as an area of residence for the most elite in Cahal Pech). Plaza B housed many of the public, monumental structures including structure B-1, a temple pyramid. Structure B-1 is

also part of a triad group. Two elite burials were excavated at its peak. Many of the buildings on this plaza have undergone many renovations which began in the Middle Preclassic and continued until the Middle Classic period (AD 500-700). One such structure that has gone through multiple phases is B-4 which is located in the southeast corner of Plaza B. The building first appeared in the earliest stages of occupation at the site and continued to be renovated until the Classic period (save for an intrusive burial in the Late Classic). Structure B-4 becomes important to my analysis later when the round structures of Cahal Pech are discussed (Awe and Campbell 1989).

Plaza B is directly west of plaza C, where the Eastern Ballcourt (structures C-4 and C-5) is located. The ballcourt is surrounded by four other features. There are two stelae south of the ballcourt and a circular altar to its north (Awe and Campbell 1989). The playing alley of the ballcourt is situated on top of a round structure from the Preclassic period. The Eastern Ballcourt itself dates to the Late Classic period (AD 700-900) and is thought to have been built in one stage based on the presence of a Classic period wall or structure, Classic period artifacts under the north end of the playing alley, and the lack of remodeling found in the excavation of the parallel structures (Ferguson 1996). In the center of the playing alley, a dedicatory deposit consisting of two juvenile skeletons and hundreds of chert, obsidian, and shell artifacts was interred just before the construction of the ballcourt. This is thought to have been a major event in Late Classic Cahal Pech. The ball game was adopted late in its occupation, probably as a reflection of wider regional changes toward the sport's adoption (Ferguson 1996).

Another regional architectural form that is particularly relevant to my research is the round platform. This form emerged in the Maya Lowlands much earlier than ballcourts. Compared to pyramids, round structures are poorly understood in the archaeological record, but

they are distributed widely in time and space between various sites both in the Lowlands and beyond (Hansen 1998). As of 2000, there have been 48 of these structures excavated and published in all of Mesoamerica – Mexico, Guatemala, and Belize (Aimers et al. 2000). Of these, 27 are located in Belize alone. Round platforms may have developed from an earlier, apsidal shaped platform and some scholars believe that the round structure is based on this old oval form (Hansen 1998). They consist of a low platform with varying diameters that is lined with limestone blocks. The top of the structure has a thin layer of plaster for flooring and, depending on the use, may support a wooden superstructure. Structures associated with the Late Preclassic period are more prevalent in the archaeological record. Whether that is because they are constructed more often or because they are more frequently found in excavation for the time period is unknown (Hansen 1998).

At Cahal Pech, there are nine round structures, including the one excavated under the Eastern Ballcourt in the 2012 field season. The form is considered rare because it is not found at all Preclassic sites. The most influential and developmental work in this form was conducted in the 1930s and the form remains an enigma (Aimers et al. 2000).

Four of the nine round platforms at Cahal Pech have been studied, analyzed, and published: one in the ceremonial core and three in the periphery settlement groups of Tolok and Zotz. The round platform excavated in the ceremonial core was located beneath structure B-4, an important temple in Plaza B. Structure B-4 is one of the very first buildings established at Cahal Pech. It was constructed during the Early Preclassic (1200 - 900 BC) when the site was first occupied. Though it was partially destroyed by later construction phases, there is enough evidence to suggest that it was, at its prime, a simple raised lime-plastered platform outlined in lime stone blocks. This round platform is associated with Middle Preclassic stratigraphy and

ceramics leading the archaeologists to interpret it as a Middle Preclassic construction. The B-4 pyramid was then built on top of this platform in the Late Preclassic and was used as a temple until abandoned in the Late Classic. The B-4 structure is not only one of the oldest buildings on the site, but its length of use suggests that it is also one of the most important. Aimers et al. suggest that this importance can be conferred to the round structure itself based on the fact that B-4 was built directly on top of it (Aimers et al. 2000).

The other three published examples come from the settlements on the periphery of Cahal Pech. One round platform was found in the Zotz group which is located 100 meters south of Cahal Pech proper. The round structure here has been interpreted as related to these “patio cluster” in which multiple family households live in the same area and share the same open space amongst the buildings. The platform in question was constructed on a plaster floor and consisted of cut limestone blocks, mortar, and stucco. The top was thickly covered in more lime plaster to create an upper floor but there was no evidence of a post hole, suggesting that this was an open platform. The overall height of this structure was 1.2 m and the diameter was 3.6 m (Aimers et al. 2000). The structure was built over in the Early Classic period by a rectilinear structure. Though it was covered, the archaeological evidence suggests that it had an important role of some kind because there were numerous internments in and around the structure at time of use as well as residue of ceremonial incense. There were also two intrusive Classic period burials in the structure insinuating some important role that was maintained by the structure even when the particular morphology was no longer in use (Aimers et al. 2000).

Excavation at the Tolok settlement, 500 meters south of Cahal Pech, revealed two round structures among the 17 mounds that define the site. These mounds, like a significant amount of Maya Lowland architecture, were situated in groups surrounding their own areas of open space,

or patios. The round structures, named structure 14 and 15 respectively, were located one on top of the other. Structure 15, the earlier of the two platforms, has a date of somewhere between 650 and 500 BC. Its diameter was 5.5 m and its height only 40 cm, as compared to the much taller Zotz platform. Some of its material was taken and reused for the construction of the next platform, called structure 14 (dating to the Middle Preclassic, 500-350 BC). Structure 14 was originally situated in the center of one of these cluster patios surrounded by two to four rectangular, low mounds. This one is much wider than the one at Zotz, with a diameter of 9.5 m but is much shorter, only having a height of 55 cm. As with the Zotz structure, there were no postholes, suggesting that this was also an open platform. Within and around both of these platforms, there were special deposits, including five burials from the Terminal Classic period and four from the Late Preclassic. Most of these burials and other deposits were intrusive, pointing to the continued significance of this form (Powis et al. 1996).

All four of these platforms were morphologically different, both in size and in the fact that some of them had “keyhole” protrusions of varying number and size. They were different in appearance but are all contemporary with each other, which suggests that perhaps the tradition of round platforms was common in the Cahal Pech area in the late Middle Preclassic period. It is thought that this similarity in form may reflect the shared ideology between those in the core and periphery. The sizes of these platforms could be considered monumental by Middle Preclassic standards though they do not compete with the sheer size of the Classic structures. Perhaps then this is a sign that in the Classic period, more construction investment was put into the elite core rather than the common peripheries (Powis et al. 1996).

Is it possible that these different morphologies correlate not only to a difference in preference but also to a difference in function? Scholars have been intrigued with the question of

the role of round structures for two decades, yet their purpose remains unclear. As size, shape, and location vary between the structures that have been published, there are multiple theories involving their meaning. Two main theories about their Middle Preclassic use predominate. Powis et al. (1996) concur with the theory of James Aimers in which he suggests that these platforms were used as performance spaces related to ancestor worship. This is based primarily on the presence of burials within and around the structures (Aimers et al. 2000). Aimers also uses the four platforms at Cahal Pech as a support for his claim and compares them to each other as well as other round platforms throughout Mesoamerica in order to conduct a more complete study. He first addressed why he thinks that these structures disappeared in the Classic period. It is a case not only of change in aesthetic preference toward the contours created by the flat lines of rectangular structures but also of influence from Teotihuacan which many scholars assert had a great influence on architectural design of Maya cities large and small around AD 350-500 (Aimers et al. 2000). This observation may shed some light on their original use. An aesthetic change such as this one could have most likely been related to a change in social order (considering the transition into the Classic period) and in that case information disseminated through architecture about the past ideology would have to be changed as well. The important point here is that often it is the public buildings that everyone is guaranteed to see that undergo the most drastic aesthetic changes. Putting all of this together seems to suggest that the platforms, prior to undergoing the complete shift to a rectangular form, had some kind of public audience.

Aimers also discusses the round platforms' association with ritual activity. The most salient fact about these structures is the multitude of burials found within and around the platforms. There are 18 in one platform at the Zotz group alone. This leads Aimers to interpret

the platforms as a location for lineage/ burial shrines from its construction in the late Middle Preclassic to the abandonment of the site as a whole in the Late Classic. It is possible that there was a primary interred to which other deposits, such as the skull in a dish in the Zotz platform, were dedicated. These platforms could have served as a conduit for communication with past ancestors. The lack of posthole remains suggests that these platforms were not covered by any superstructure in antiquity. This stage-like appearance seems to serve some ceremonial purpose, an interpretation aided by the burnt remains of incense. The type of performance could range from oration by a local leader to a more physical performance by a shaman or different ritual group. The space around the platform is large enough that observers from the surrounding residences could gather around the platform to watch whatever performance may have occurred. Because the earlier platforms were simpler in appearance, Aimers implies that their ritual meaning was conveyed via the actions that took place on the structure (Aimers et al. 2000).

This idea of conveying meaning through associated activity is related to the second of the two main theories of round platform function. Julia Hendon's (2000) perspective posits that the platforms were included in house groups to distinguish one family group from another in a way of unique group identification. Though the two classifications are not mutually exclusive, Hendon suggests a more social aspect in the function of the platforms, rather than the ideological/religious interpretation that belies Aimers' theory. According to Hendon (2000: 300), "the ritual practices performed on [the round platforms], were not only physically embedded within residential compounds but also critical to group identity... providing a way for households to differentiate themselves, as a group, from other households." The premise of this theory is about social relationships between those who do and do not belong to a specific household which are then observed in the architectural evidence excavated in residential space.

The household is essential to human relationships because it binds them to their own group and sets them apart from the households to which they do not belong (Hendon 1999). The symbol of this collective membership resides in architectural type and form. Architecture is also a factor in the analysis of household activities at and around certain structures, a departure from the study of Classic monumental/civic structures (Hendon 1999). Hendon's discussion about round platforms in relation to the family is essential to understanding their function in the residential sphere. The Tolok group burials are associated with family, similar to the ancestral relations in Aimers' theory, but Hendon places greater emphasis on architecture as the domain at the center of household identity. This family tie is bound to ritual performance specific to individual groups, acting as a sort of identity marker. The ritual is given a special stage in the round platforms which are elevated or separated from the surrounding architecture, highlighting its greater importance in household activity and in group identity (Hendon 1999).

Both of these theories are critical to the analysis of the round structure under the Eastern Ballcourt at Cahal Pech. Household artifacts or the excavation of more buildings surrounding the round platform may point the analysis more towards Hendon's theory of household identity. On the other hand, ritual deposits or artifacts will bolster the support of Aimers' claim that these structures function as stages for ritual performance.

METHODOLOGY

My research is guided and informed by methods relevant to archaeological analysis of architecture, theoretical considerations about architectural types and forms, and past research conducted at Cahal Pech. The methods employed to investigate the round platform beneath the Eastern Ballcourt at Plaza C are as follows: 1) Excavate the structure to establish stratigraphic

context, 2) Analyze the features, 3) Analyze the artifacts excavated in association with the structures and features, 4) Compare these findings to others at Cahal Pech and other relevant artifact assemblages.

Excavation

Excavations were undertaken in the 2012 field season. Seven excavation units were placed in the playing alley of the Eastern Ballcourt. This number of units was projected to uncover underlying architecture that had been partially investigated in 1995. In the 1995 excavation season, this ballcourt, with western structure C-4 and eastern structure C-5, was excavated for purposes of finding information about the visible structure. The project goals were to determine the age and extent of C-4 and C-5 in their final phase, discover any presence of markers in the playing alley, and to establish a chronology for the phases of construction that led to the final form. Two interments, interpreted to be dedicatory offerings during the creation of the court, were excavated. Evidence of an earlier structure wall, deemed sub-structure 1 was also discovered (Ferguson et al. 1996).

It was the goal of the 2012 excavations to investigate further into this sub-structure and to determine whether there were more structures beneath the playing alley of the Eastern Ballcourt dating to the Preclassic period. Excavation units were plotted in the playing alley, avoiding the area that was already excavated by Ferguson (Figure 2). Once the curved wall was uncovered, more units were placed following the trajectory of the wall. A full description of these units is found in C. Santasilia's 2012 field report (Santasilia 2013). The excavation was split between the units on the interior of the structure (Figure 2) and those exterior to the structure. Within the round structure, the excavation reached bedrock. However, in the exterior units (Figure 2), flooding halted excavations before bedrock was reached. In total, seven (7) units were placed in

the playing alley. The majority were concentrated near the eastern structure of the ballcourt (Str. C-5) where the round structure was located. Only the western most section of the round structure was accessible from the playing alley. We could not access the centerline and, therefore, were unable to determine an exact diameter for the structure, though C. Santasilia estimates that the radius of the structure was approximately 2.5m (Santasilia 2013). It is also unclear whether or not there are burials associated with this structure, as is common for other round structures (Aimers et al. 2000).

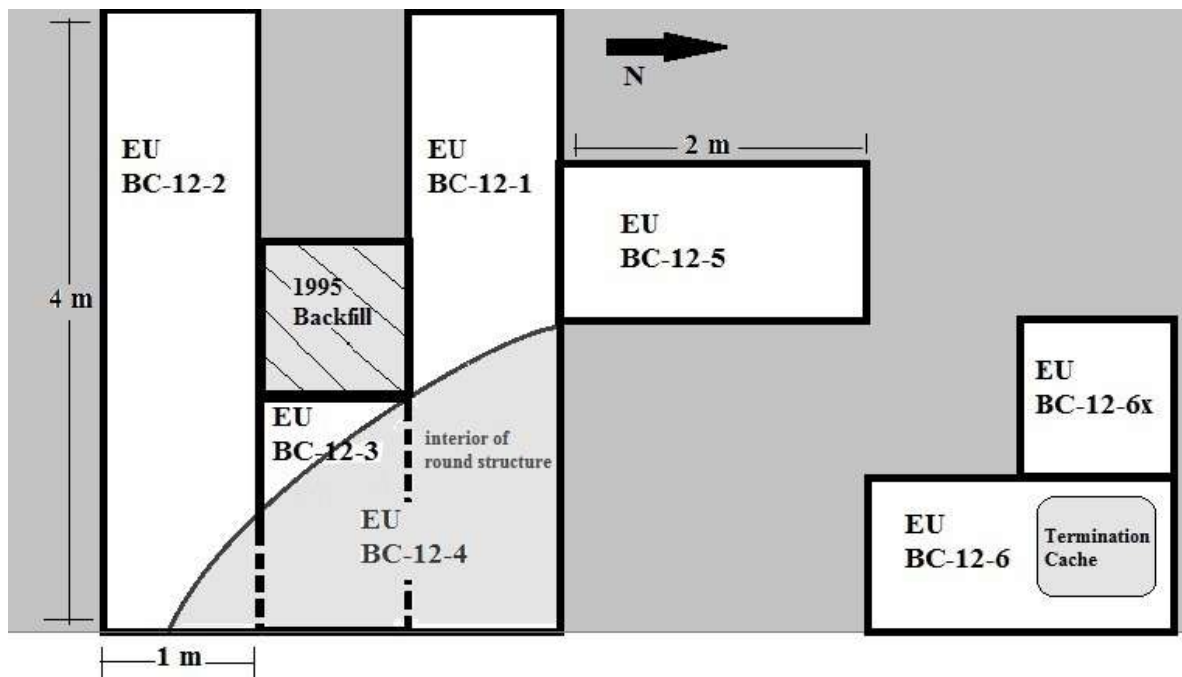


Figure 2: Plan of open units in playing alley. (Figure by A. Villarreal 2013)

My research during the 2013 field season was based on the analysis of all artifact classes found in the seven units in order to interpret the function of the round structure. I present the results of excavations in the analysis section. Analysis of architecture is based on the 2012 excavations and on the field notes and drawings provided to me by the project director. From these sources and from my participation in 2012, I reconstruct the stratigraphic history of the

round structure and its temporal placement. In conjunction with artifact analysis, and general spatial characteristics of the structure I make judgments about its age and function.

Analysis of Features

In order to support inferences about the function and history of the structure, I analyze a cache recovered at the north end of the round structure. If the entire round shape of the structure were exposed, this cache would be located at its northwest corner. This deposit consisted of ceramic sherds surrounding a bone directly on top of an obsidian blade.

Artifact Analysis

In addition to the cache, I analyze artifacts recovered: 1) from the exterior of the round structure on the eastern side of the playing alley, and 2) from the interior of the structure, between the concave arch of the uncovered structure and the western edge of structure C-5. We excavated this area down to bedrock in order to understand both the stratigraphy of the round structure's construction as well as the artifacts associated with the structure when it was in use.

My analysis considers the number and type of artifacts, their spatial distribution across the round platform, and their meaning(s) relevant to the Preclassic occupation.

DATA SAMPLE

The sample included in this report consists of artifact classes excavated from the ballcourt during the 2012 field season. The ballcourt was excavated in its entirety in 1995 by J. Ferguson. In her investigation, the center of the playing alley revealed multiple child burials associated with the construction of the structures that remain above the surface today. One of the burials disturbed a curved wall of another structure beneath the ballcourt but Ferguson was unable to investigate further during that field season (Ferguson et al.1996). In 2012, seven

excavation units were plotted in the playing alley. First plotted were two units, half a meter on either side of the center point in order to avoid the area that Ferguson had already investigated. Once the curved wall was uncovered, more units were placed following its trajectory. The artifacts from this excavation form the study sample in this analysis. The classes and frequencies of the artifacts were collected from the seven units located between the two visible structures of the ballcourt are represented in Figure 3.

The distribution of artifacts was heavily weighted toward ceramics and faunal remains (including freshwater shell, worked shell, and bone), representing about 88% of all artifacts found. Therefore, these two classes were most thoroughly analyzed. Due to relatively low frequencies and time constraints, the remaining artifact classes were washed (when appropriate) and counted. Without access to more intensive study in a laboratory setting, these groups did not reveal any relevant information that was not already gathered from the ceramic and faunal samples. For example, the collection of 28 obsidian fragments may reveal more information to us about the activity of the Maya that once inhabited this area but laboratory analysis is necessary to perform the pertinent studies. Instead, a simple frequency allowed me to assess the percentage of the non-ceramic and non-shell artifacts within the total number of artifacts excavated and determine whether they were relevant to my research question. As such, samples excavated from beneath the ballcourt in 2012 did not reveal any additional information on the function or age of the units that was not already interpreted from the ceramic and faunal assemblage collected.

No architectural debris or samples were recorded or collected from the 2012 excavation so analysis of the characteristic of the stone used to construct the round structure was impossible.

Finally, it should be noted that the sample collected and studied from the 2012 excavation does not represent the full context associated with the round structure and its surrounding area. First, the entire structure was not excavated, a large portion of it still remaining beneath the Structure C-5 of the ballcourt. Conceivably, the full spectrum of artifacts associated with the structure may not be available or accessible for analysis. For example, the center-line of the round structure was not exposed; doing so may further elucidate the function of the structure. Second, the area outside the structure was not excavated down to bedrock, as was the case on the interior of the structure due to major flooding that occurred during the field season. The resulting data sample collected may show a temporal bias from this area of excavation because lower levels were not uncovered. Undiscovered earlier ceramics or other materials may still exist and be diagnostic of an age and function of the structure and surrounding area that is not recognizable in the current sample.

Artifact Frequencies for 2012 Ballcourt Excavations	
Total Sherds:	4385
Total Diagnostic:	1855
Total Freshwater Shell	786
Total Marine Shell	12
Total Worked Shell	9
Total Faunal Remains	5
Total Obsidian	28
Special Finds	7*
	*4 Ceramic 3 Pieces of Pipe Stem
Total Chert	585
Total Quartz	29
Total Granite	2
Total Slate	4
Total Jadeite	2
Total Serpentine	2
Total Daub	11
Total Artifacts:	5867

Figure 3: Frequencies for all artifacts in 2012 ballcourt excavation. (Figure by A. Villarreal 2013)

Analytical Methodology

All artifacts analyzed in 2013 were done so at the site of Cahal Pech utilizing various methods in the analysis of each class. The most comprehensive analysis was performed on the ceramics. This class of artifact was not only the most represented in the excavation but was also the class for which I had the most comparative data.

James Gifford's 1976 *Prehistoric Pottery Analysis and the Ceramics of Barton Ramie in the Belize Valley* allowed me to compare ceramics from Cahal Pech as the two sites are down the river from each other and would presumably have similar ceramic style and form. I compared my sherds with those reported by Gifford starting with the earliest and working my way forward in time. Some sherds in the assemblage were not represented in Gifford's typology, usually entailing variations of types that were not listed by Gifford. However, in some circumstances,



Figure 4: Cunil examples from Lot BC-12-13.

there were entire types that are not found in the 1976 typology. For example, Cunil pottery (1100-900 BC) was prevalent in the earlier units under the ballcourt but was not described in the Gifford's descriptions of Middle Preclassic ceramics (Figure 4). In this instance other sources had to be consulted that were specific to Cahal Pech (Sullivan and Awe 2013).

Freshwater shell was the second most prevalent artifact in the assemblage. My goal was not heavily based on faunal analysis so only a count of the shell was taken. The number of shell reveals not only the habits of past Maya but can also approximately date specific levels based on

the size and number of shells present. The first step of my analysis was to create a more standardized way to differentiate the sizes of shells, used for the *Pachychilus* shells, commonly known as jute. Analysis was facilitated by the creation of sizing boxes to consistently categorize the shells. The box set consisted of three squares to differentiate between small (2cmx2cm), medium (4cmx4cm), and large (6cmx6cm) shells. Any shells that were too large to fit in the largest box were deemed extra-large.

The examples of worked shell from the excavation were counted, measured, and weighed in 2012 when they were first uncovered. Most of the examples of worked shell consisted of pierced shell pendants.

The site's faunal analyst, N. Stanchly aided by S. Orsini, analyzed the long bone from the center of the termination cache (Figure 5). They analyzed the bone using *Mammalian Osteology*



Figure 5: Long bone from termination cache, Lot BC-12-19.



Figure 6: Obsidian blades from Lot BC-12-4.

(Gilbert 1990). The other bones from the excavation were small faunal remains that were too fragmentary to yield a significant amount of information.

The obsidian was not washed in this case because there is a possibility that future lab tests could determine what was cut with these prismatic blades (Figure 6). Washing the blades would erase any evidence of microscopic plant or animal fibers once cut with the blades.

The other classes of artifacts including chert, marine shell, serpentine, jadeite, quartz, granite, slate, carbon, and daub were counted and recorded. The classes that could be washed were and those that couldn't, such as granite, carbon, and daub were simply recorded. Because of time restraints and the relatively low frequencies in comparison to classes such as ceramic and shell, no further study was deemed necessary.

DATA ANALYSIS

Ceramic Evidence

Most of the ceramics (4385 in total) recovered from the seven excavation units were

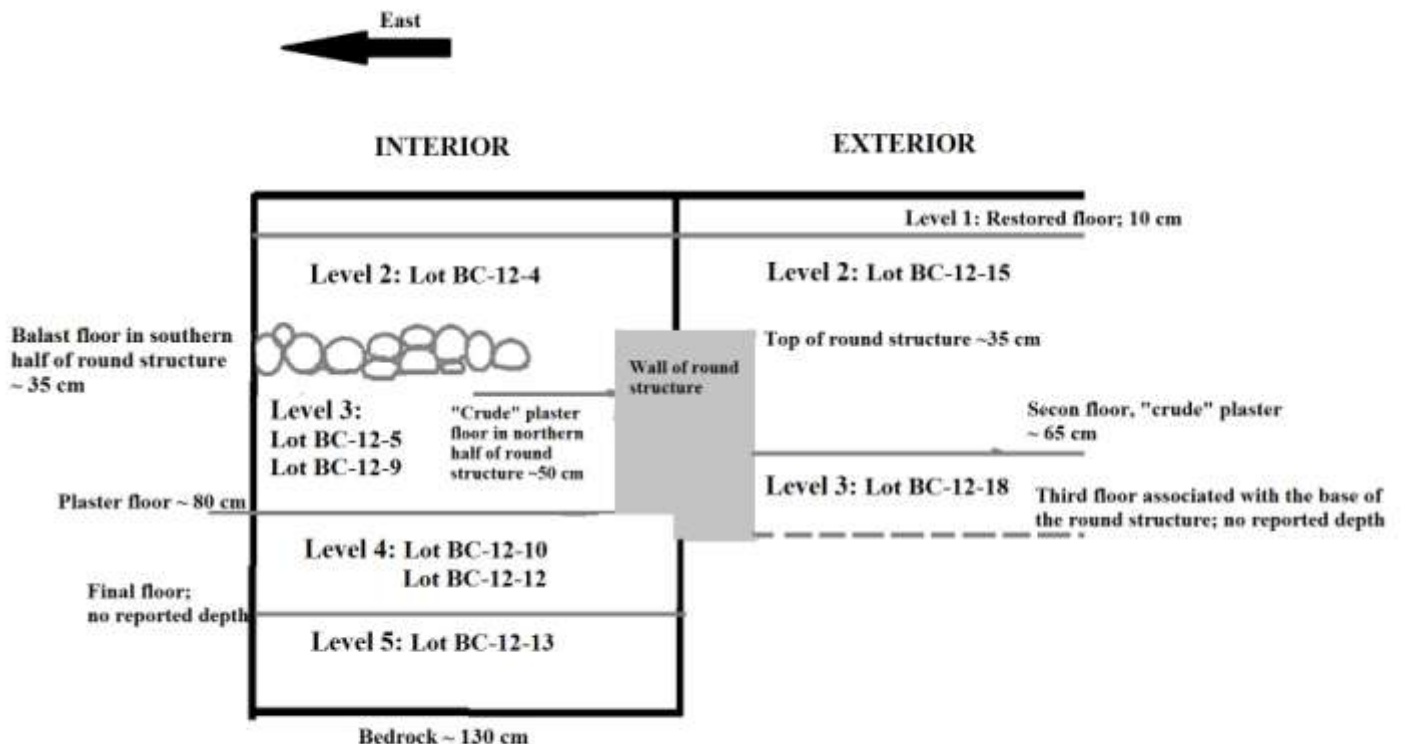


Figure 7: Profile view of excavation levels, facing south. Excavation levels shown with associated lots. (Figure by A. Villarreal 2013).

construction fill. While diagnostic sherds found within construction fill may not be connected to a specific event, they are particularly helpful in determining the chronology of the excavated area, especially in and around the round structure. The ceramics in the interior levels of the structure (which we were able to determine based on the curvature of the wall) allowed me to determine the chronology of the structure's construction phases. Figure 7 shows the excavation levels of the round structure and the lots associated with the dating of these levels.

Chronology of the Structure

The ceramics from each lot dated the level with which they are associated and thus gave us an understanding of when the activity around this area took place. The top of the round structure was located in Level 2 approximately 35 cm below surface level, providing a logical divide that excavators decided used to delineate the interior and exterior of the structure. As a result, there are layers may have and interior and exterior that are separate and date to different time periods.

Interior level 2

The interior Level 2 is, in actuality, associated with two lots, BC-12-4 and BC-12-8. However, the latter lot is unusable in terms of dating because it is the backfill from J. Ferguson's 1995 excavation (Santasilia 2013). The disruption from this backfill makes Level 2 more difficult to date. Lot BC-12-4, from unit BC-12-2, runs 4 meters East to West, with its eastern portion coinciding with the top of the round wall. While the context is not perfectly associated with the structure, it can at least give us an idea of the date above the round structure. Lot BC-12-4 contained a wide mix of sherds ranging from Gifford's Jenney Creek phase to the Tiger Run phase. Savana Orange, Sierra Red, Mountain Pine Red, Minanha Red with its characteristic flanges, and a variation of Balanza Black (which will be discussed in detail in future sections of

this paper) are the types that appeared most often. Thus, this lot of sherds has a final phase of Tiger Run which would place it in the Early Late Classic Period (circa AD 600-700).

Exterior level 2

The exterior Level 2 found the round wall at 35 cm but continued down until a second floor was found approximately 65 cm below surface level in lot BC-12-15 from the second level of excavation unit BC-12-5, an extension unit created to follow the curvature of the wall. This lot yielded a wide range of sherds with multiple examples of Jenney Creek sherds, from Savana Orange to Jocote Orange-Brown as well as a number of Hermitage phase sherds including Minanha Red, Caldero Buff-polychrome and again, Balanza Black. The most diagnostic characteristics in this lot were the appendages on various sherds. There were labial, medial, and basal flanges as well as ring bases which are characteristic of the Classic period (Figure 8). This mix of sherds may be classified as Early classic if not for the three Belize Red or ash ware sherds present in the lot. Though three (3) is a fairly low number, both J. Awe (through personal communication) and I believe that these sherds are indicative of a transitional period. Because



Figure 8: Characteristic Classic period flanges (Minanha Red).

they are not identical to fully fledged Spanish Lookout examples, their presence may suggest a Late Classic date for this level. The Late Classic dates for both the interior and exterior Level 2 is supported even more strongly when considering that the Late Classic ballcourt discussed by Ferguson (1996) was constructed almost directly above this level.

Interior level 3

At the bottom of the interior Level 2, as seen in Figure 7, a ballast floor, which covered the southern portion of the round structure, was excavated. This floor was uncovered at approximately the same depth as the wall of the structure, 35 cm. This suggests that it was either the final floor of the structure or that it was used in aiding the covering of the structure. The



*Figure 9: Examples of Hillbank Red: Rockdondo Variety
with distinctive rim shape*

northern end of the structure did not appear to have this ballast floor but instead a "crude" plaster floor found approximately 50 cm deep. The original 2012 report considers the interior Level 3 to consist of the space between the ballast floor at 35 cm and a depth of 80 cm where a different plaster floor occurs. This level encompasses the "crude" plaster floor in the northern section.

The lots in this level include BC-12-5 and BC-12-9. Lot BC-12-5 has sherds that range from Cunil and Jenney Creek to Mount Hope and Floral Park. Cunil and Jenney Creek were represented with only two sherds each. Mount Hope included one Old River Unslipped sherd while Floral Park had two sherds that were heavily eroded but determined to be two varieties of Aguacate Orange. Most of the sherds in this lot were Polvero Black from the Barton Creek phase. Because the lot ventured into the Mount Hope and Floral Park phases, however, I consider this lot to have a Protoclassic date (circa 0-AD 300). Lot BC-12-9, also associated with the interior Level 3, was also heavily Barton Creek including nearly every variety of Sierra Red as well as Hillbank Red: Rockdondo Variety (determined by its very specific rim shape) (Figure 9). One sherd may have been Floral Park's Aguacate Orange with a characteristic ring base but it is unclear due to being heavily eroded. One of the bags from this lot (Bag 1/10 from 15 June, 2012) was ~73% Barton Creek. Such a heavy concentration signifies the Late Preclassic period (circa 200-100 BC), meaning the round structure was in use in the Late Preclassic at least.

Exterior level 3

The exterior Level 3 is important for understanding the initial construction of the round structure. According to the 2012 field report (Santasilva 2013), the floor at the bottom of this level corresponds with the base of the round structure, insinuating that the round structure had to have been constructed in the same period. Lot BC-12-18 is associated with the exterior Level 3. The sherds in this lot either belong to Cunil, Jenney Creek, or Barton Creek including Savana Orange, Sampoperro Red, Sayab Daub Striated, Chunhinta Black, Polvero Black, and Paila Unslipped. These types give the lot a clear Late Preclassic date, though the presence of far more Jenney Creek than Barton Creek examples leads me to believe it is an earlier phase of this period. Because the base of the round structure is associated with the floor at the bottom of this

level, it appears that the structure was built in this earlier phase of the Late Preclassic (perhaps around 300-200 BC). Unfortunately, the depth of the exterior third floor was not reported. This piece of data is crucial in determining if, in fact, this is the absolute base of the building. If the exterior third floor occurred at 80 cm deep, it would indicate that the 80 cm deep floor on the interior of the structure would run under the round wall, thus creating an uninterrupted plane and a more concrete date for the structure's construction. However, without the depth of the exterior third floor, it is impossible to speculate.

Levels 4 and 5 (interior)

Though this completes the chronology of the round structure, with a construction date of the Late Preclassic around perhaps 300 BC and discontinuation at least by the Early Late Classic (Tiger Run approx. AD 600-700), it might be pertinent to discuss the two remaining levels on the



Figure 10: Examples of Reforma Incised: Mucnal Variety from Lot BC-12-10, Bag 1/3

interior of the structure. Unfortunately, excavation on the exterior stopped at the base of the round structure due to heavy flooding. However, the excavators were able to reach bedrock on the interior of the curved wall. The fourth and fifth levels inside the wall are very interesting

when trying to understand and determine the use of the area both before the building was constructed and as a whole.

Level 4 was broken into a northern and southern section. The associated lots were BC-12-10 and BC-12-12 both, belonging to the fourth level of excavation unit BC-12-4. Lot BC-12-10 had both Jenney Creek and Barton Creek examples, including Savana Orange, Reforma Incised, Sierra Red and Polvero Black. However, I believe this is an earlier portion of the Barton Creek phase because the percentage of Jenney Creek to Barton Creek in both of the ceramic bags from this lot is heavily weighted toward Jenney Creek. For example, in bag 1/3 from 18 June 2012, about 81% of the 59 diagnostic sherds were from the Jenney Creek phase (Figure 10). However, in lot BC-12-12, the number of Sierra Red (from Barton Creek) far outweighs the numbers of any other type, representing about 72% of the total sherds for this lot. Taking both lots into account, I believe this level is the earlier stages of the Late Preclassic period (circa 300-200 BC).

The sherds in the fifth and final level before bedrock, Lot BC-12-13, belonged to the Cunil or Jenney Creek phase. This gives the level a solid Middle Preclassic date (circa 600-300 BC). This was evidenced by the dense presence of the Savana Orange and Reforma Incised types. Of the 196 diagnostic sherds in this lot, 120 (about 61%) of them were some variety of Savana Orange or Reforma Incised, two of the most distinctive and indicative types of pottery in Middle Preclassic Cahal Pech. There were also 28 Cunil sherds which, though not included in Gifford's typology, are distinguished by the coloration, thickness, and ashy texture. Half of the Cunil sherds had a gray paste with a dark core and the other half had a lighter slip with remnants of a characteristic red slip (Figure 4). Additionally, the types in this lot appear to encompass almost all of the sherds listed by Gifford in the Jenny Creek phase including the Savana Orange

varieties, Reforma Incised, Jocote Orange-Brown, Sibun Punctated, Sampoperro Red, Joventud Red, Black Rock Red, Sayab Daub Striated varieties, Cooma Striated, Chunhinta Black, Deprecio Incised, and Pital Cream. The evidence and location of this lot just above bedrock puts first occupation of this area solidly in the Middle Preclassic (circa 600-300 BC).

Lot BC-12-4 Ceramic Deposit

There are three other contexts in which the ceramics played a major role. The first was a ceramic deposit found in the second level of excavation unit BC-12-2, Lot BC-12-4. Whether the deposit was meant as a ritual cache or served some other purpose was not further explored in the 2012 excavations. However, the sheer density of ceramics recovered appears to signify intentional deposition. There were five artifact bags of sherds excavated from the lot, three of which contained over 400 sherds. In total, 1579 sherds were found in this deposit, 463 diagnostic. Though not every single diagnostic sherd was matched to a description in Gifford's



Figure 11: Figurine fragment excavated from the ceramic deposit in Lot BC-12-4

typology of Barton Ramie (1976), the latest phase which determines the earliest possible date of

the deposit was Tiger Run, correlating to the Late Classic period (circa AD 600-700). The type that was key in this determination was Mountain Pine Red. The other phase most prevalent in the lot was Hermitage which, understandably, occurs immediately before Tiger Run and corresponds to the Early Classic (circa AD 300-600). Balanza Black and Minanha Red were two prevalent types which helped determine the Classic period date for the event that resulted in the dense collection of sherds. An unusual ceramic fragment (Figure 11), actually consisting of two separate pieces, appears to be a figurine leg, whose inclusion would most likely be ritualistic in nature and suggests the deposit had a significant role.

Termination Cache

The second context in which ceramic played an important role was another cache, this time related directly to the round structure. The cache was determined to be a "termination cache" by the density and location of the ceramics directly outside the north end of the structure. The cache, located in excavation unit BC-12-5, level 3, lot BC-12-19, consisted of 414 sherds surrounding a faunal bone resting atop a small obsidian prismatic blade. 149 of the ceramics in the cache were diagnostic. The number of sherds in this cache is much lower than in the lot BC-



Figure 12: Balanza Black examples from Termination Cache (Lot BC-12-19) with four distinct basal flanges.

12-4 deposit but its location suggests its importance. The top of this cache aligns with the top course of the round structure and is covered with a layer of plaster, suggesting that it was interred at an event that marked the official and ceremonial disuse of the structure.

Though the deposit is considered a ritual termination cache, no whole vessels were excavated from it and none were reconstructed from the sherds in the lab. Most of the sherds in the cache were Polvero Black and Balanza Black. However, there were Tiger Run types present including Teakettle Black and Mountain Pine Red. Balanza Black, from the Hermitage phase, was by far the most prevalent type, with 83 sherds present (approximately 34% of the entire lot). These Balanza Black sherds diverged from those reported by Gifford in his 1976 typology of Barton Ramie. In the typology, Balanza Black is described as having pastes of various colors that range from buff to dark gray or brown (Gifford 1976). However, Gifford never specifically mentions the distinctly red color that is present in the Balanza Black sherds from the beneath the



Figure 13: Partially restored Balanza Black vessel from termination cache (Lot BC-12-19); most complete restoration in the assemblage

ballcourt. The form of the diagnostic sherds did allow me to determine that the sherds were

consistent with Balanza Black. The majority of diagnostic sherds belonged to basal flange dishes or were rim sherds that matched the line drawings from Gifford's typology. The basal flange is most indicative of the Early Classic Period. Based on the shape, placement, and thickness of these flanges, I was able to determine that there were at least four different vessels in this cache (Figure 12).

Many of the 83 were body sherds that fit in the black-with-red-paste category. A few body sherds were matched with the flanges to form partial vessels but most remained unmatched. Because this was a termination cache, by definition, it means the ceramics were intentionally placed in the location just outside the northern end of the round structure. Finds in other terminations caches suggest there should have been a higher number of vessels present in the cache (LeCount 2010). A few very large olla rims were present, as well as a number of medial and labial flanges of the Minanha Red variety, however, when considering this sherd representation along with the partial Balanza Black flange dishes it might suggest that the Maya who placed the cache were purposefully leaving out the entire vessel. Through personal communication with J. Awe, I believe this is a result of a Maya tradition which involves the intentional separation of portions of the same vessel when interring ceramics. It may explain why there were at least four different vessels of the same type present in the termination cache but none were actually whole. One of the partially restored dishes is shown in Figure 13.

Ritually Significant Ceramics

The third context in which ceramics were key was in the deepest layer of excavation in the round structure. This consisted of lot BC-12-13 (detailed above), the layer determined to be directly above bedrock. The ceramics from this lot would help me determine when this section of the site was first occupied and utilized. The area that is now represented as Plaza B was one of

the first areas to be inhabited and utilized in the entire site (Awe and Campbell 1989). Plaza B is located to the west of our excavation area, separated by the site's main Eastern Triadic Temple group. Based on its proximity to the earliest Plaza in the site, I expected the lowest level of the excavation to have a fairly early date. The ceramics from the Jenney Creek phase and the earlier Cahal Pech-specific Cunil type initially led me to believe this level dated to the Early Middle Preclassic. However, the latest sherds present in the lot, from the late facet of the Jenney Creek phase, determined that the first use of this area was in the Late Middle Preclassic (600-300 BC).

In addition to the representation of very characteristically Middle Preclassic sherds



*Figure 14: Bird's head figurine from Lot BC-12-13;
Proper right and proper left views.*

(including Cunil and Savana Orange types), other ritualistic ceramics serve as evidence of a Middle Preclassic occupation in the area. The first of these special ceramics is a Savana Orange figurine fragment in the shape of a bird's head (Figure 14). The figurine head measures 3x2x2.5 cm and depicts a bird with an open beak whose features are incised and filled with white pigment. Figurine fragments are indicative of the Middle Preclassic in other areas of the site (Sullivan et al. 2009). Another clue to the Middle Preclassic occupation was a Savana Orange tubular spout (Figure 15). This spout was later determined, through personal communication



Figure 15: Fragment of Chocolate Pot Spout from Lot BC-12-13.

with J. Awe, to have been part of a chocolate pot from which the Maya would have poured liquid chocolate or used in ritual performances. The spout and the figurine fragment not only indicates a Middle Preclassic time frame for the first occupation of this area of the site but also creates a foundation for ritual activity in the area.

Faunal Evidence

Shell

The 2012 excavations uncovered freshwater, marine, and worked shell. Freshwater and worked shell were the most numerous and significant in the artifact assemblage of the ballcourt excavations. From the six lots that had marine shell, the one with largest count found merely five, consisting of two conch fragments and three clam fragments. Therefore, I will be focusing on the freshwater and worked shell which each had a higher quantity. Both of these classes were especially prevalent in the lots associated with the Preclassic period.

Freshwater shell was second in quantity only to ceramics. In total, there were 786 shells, 624 of which were from the same lot, BC-12-13. This lot correlated to the level inside the round



Figure 16: Three examples of *Pachyichilus glaphyrus* (spiny jute) of small, medium, and large sizes

structure just above bedrock and was associated with the Middle Preclassic period, as discussed above. It is well documented that freshwater shells, especially jute (Figure 16), are larger and more readily available in Preclassic periods. In this particular lot there were 189 *Pachyichilus indiorum* (smooth jute) and 381 *Pachyichilus glaphyrus* (spiny jute), the highest quantities located and heavy large and extra-large shells of each variety.

Worked shell in this excavation consisted entirely of perforated shell pendants. Eight of the nine examples were from BC-12-13, the interior Middle Preclassic lot just above bedrock (Figure 17) and one was from lot BC-12-2, the second level of unit BC-12-1. The perforated



Figure 17: Eight examples of perforated shell in Lot BC-12-13

shells may be indicative of ritual activity in this time period. Seven of the shells were found together, six of which were smaller and one was larger, suggesting they may have been part of the same object, i.e. a necklace. The other worked shell in the lot was a pierced conch shell with the exterior protrusions of the conch still present. This pendant was found in the Freshwater shell bag from the same lot, therefore it is unclear if it was found in context with other pierced shells or objects. In any case, these eight perforated shells give credence to the ritual nature of this level.

Bone

The bone found in the termination cache on the North end of the round structure is the most diagnostic bone found in the excavation. Other instances of bone were quite fragmentary



Figure 18: Deer tibia in situ in the termination cache (Lot BC-12-19)

and did not yield pertinent information to the study of ancient Maya behavior. The bone from the cache, shown in situ (Figure 18), however, was a nearly complete long bone, broken in half in the middle of the shaft. The bone was lying in situ as if it were whole, with no indication of

whether it was broken before or after deposition. The bone was located below a layer of ceramic and directly above an obsidian prismatic blade as well as more ceramic. N. Stanchly and S. Orsini determined that the long-bone was the right tibia of a white tailed deer. Its presence in the cache should be considered ritual because it was the entire hind haunch, considered a good source of food, and because deer legs are often seen used in Maya ritual. The presence of this ritual bone gives the entire cache a ritual nature.

CONCLUSIONS

Through the study of various artifact classes found in the 2012 excavations of the ballcourt playing alley, I was able to determine a number of things about the round structure located below as well as the area as a whole. Through two months of study, where my focus centered on the examination of ceramics, I was able to assess the chronology and possible function of the round structure and surrounding area.

Beginning with the structure itself, ceramic analysis suggests it was first constructed in the earlier phase of the Late Preclassic (perhaps around 300-200 BC). I believe that, thereafter, the structure went through two changes as evidenced by floor changes at different levels. The first reconstruction is noted by the crude plaster floor on the interior of the structure at approximately 50 cm deep. This is at least 15 cm deeper than the top of the structure and associated ballast floor. The first, reconstruction, associated with lot BC-12-5, dates to the Late Preclassic or even Protoclassic (around 300 BC- AD 200). After this plaster floor, the round structure was filled again, this time creating a ballast floor. The fill, associated with lot BC-12-9, again dates to the Late Preclassic or Protoclassic based on a sherd that is likely Floral Park. The ballast floor served as the final floor of the structure before it was covered as it aligns directly

with the top course of the round structure. The amount of ballast present raises the question of whether this floor was created in preparation for the covering event which would also cover the termination cache on the northern end of the structure. Based on the sherds in the termination cache, the covering event would have taken place in the Tiger Run phase of Gifford's typology, dating to the Early Late Classic around AD 600-700.

The contents of the termination cache may begin to point to the function of the round structure and the area in general. The cache, the purpose of which was to terminate the spiritual essence held within a building, did not solely consist of ceramic. Within the ceramics found, in which a unique variety of Balanza Black played an important role, there were also faunal remains and obsidian. A white tailed deer long bone (specifically a tibia) lying in situ on top of an obsidian blade beneath a layer of the ceramics signifies a ritualistic nature of the structure perhaps as a ritual performance platform as outlined by Aimers et al. (2000). Ritual may also be seen within the cache through the intentional fragmenting of vessels placed within. At least four separate vessels were present in the cache based on flange position and size, however, none of them were complete even though there was a plethora of body sherds in the cache. A unique point to consider is that the fragmented vessels were all a variety of Balanza Black unique to Cahal Pech and not included in the descriptions made by Gifford. One can theorize that the Balanza Black, with the distinctly red paste, was significant to the Maya who intentionally fragmented multiple vessels before interring them in the ritual termination cache.

Excavations beneath the ballcourt revealed that the area below Plaza C was inhabited for years before the round structure was built. The level just above bedrock inside the round structure, associated with lot BC-12-13, reveals many distinctively Middle Preclassic qualities such as a large deposit of freshwater shell known as jute (*Pachychilus glaphyrus* and

Pachychilus indiorum). The sherds were limited to the Jenney Creek phase and Cunil type in this level of excavation, indicating that the occupation did not exceed the Middle Preclassic at 300 BC.

Ritual significance of the round structure may also be inferred from the area in which it is constructed. Based on the finds in lot BC-12-13, it is evident that the first occupations of this portion of the site had some ritualistic nature. The ceramic figurine fragment, chocolate spout, and eight perforated shell pendants found in this layer provide proof to this claim. The concentration of ritually significant objects is only matched by the deer bone within the cache. The Late Classic ballcourt, directly above the round structure, was also very important to Maya ritual. The placement of the round structure directly above an already ritually significant area was a gesture indicating this structure too had ritual importance. In the same way, they verified its ritual nature by closing the structure with a termination cache and building an even larger ritualistic structure (the ballcourt) directly above it. The entire area seems to be ritually significant, even in its location directly east of the main temple group of the site (Structures B-1, B-2, and B-3).

The ritual nature of both the round structure and the surrounding area may be further elucidated with continued study and excavation the ballcourt. The round structure was not excavated fully, including the center line of the structure which may reveal significant evidence to the role of the building. Finding the shape of the platform, purely round or keyhole-shaped, might also better highlight a specific ritual role that the structure played in the Late Preclassic. Uncovering construction projects which may surround the round structure will further determine this role. For example, finding quadrilateral structures around the round structure could point to an auxiliary building to support rituals being performed on the round platform or perhaps suggest

that the round platform was itself the auxiliary structure. One option for extended study involves the straight wall of stones reported by C. Santasilia in 2013, running in a straight course from east to west on the southern edge of the excavation area. The structure was not pursued and it remains unclear what the line of stones represented.

Though some excavation has been conducted in this area, it is clear that many unanswered questions remain. The contents of the round structure's centerline, if any exist, may ultimately define the structure's function. For example, any internments made in the structure might support Aimers' hypothesis of ancestor worship being performed in association with this particular form. More pieces of the partially fragmented Balanza Black vessels may be located at other points within the structure. And, just as the round structure was first identified in 1995 as a side mention to the main goal of the excavation, now the straight course of stones has been located and may spawn a completely new investigatory mission.

The evidence before me leads to reflection on the role this structure would have played in the Late Preclassic period, when the entire Maya culture was on the verge of an immense flourishing and a significant change to ruling kings rather than elite families. One of the most apparent expressions of this change towards the Classic Period is seen in the way architecture is constructed. As McGuire (1983) notes, architecture is a perfect vehicle for the expression and dissemination of the ideology of different rulers. Therefore, change in architectural style can be attributed to change in ideology, especially as the change in this style lies on the cusp of larger cultural change. This is especially true when one considers public architecture; the importance of a building as a focal point for a public audience may be observed in a more drastic change in form as ideology shifts over time (Aimers et al. 2000). In many of the Cahal Pech examples from this time period, we see round designs giving way to more rectilinear plans. This may be an

instance of that drastic change. For example, the round structure that lies beneath Structure B-4, though ritually significant, was completely covered over by the rectangular temple that is conserved on the site today (Awe and Campbell 1989). This practice not only shows an abstract change in ideology via a change in design and plan but is also a physical and concrete assertion of power and control by supplanting this new design over the footprint of the old.

The round structure that has been the subject of study in this report can be viewed within the same considerations. Just below the eastern structure of the ballcourt lies the round structure. The placement of the new building literally on top of the old shows that the kings of the early Classic period may have had an ideological and power-driven agenda. As the new regime in power, the round shape of the previous leaders would all be eliminated from view. This may explain why round structures located throughout the Maya world all but disappear at the end of the Preclassic period.

Though this speculation may lead us to reason that the round structure was eventually terminated and covered over, its role during its life cycle must be more deeply inferred. The purpose of this analysis was to reveal whether the building served as a marker of household identity, as is claimed by Hendon, or if it played a ritual role, as per Aimers et al.'s suggestion. In a household setting, one might find ceramics related to eating or cooking, if whole vessels could be defined. Conversely, in a ritual setting, one would expect to find artifacts relating to ritual practice. As detailed above, the termination cache is a perfect example of known ritual activity. The location of the round structure between two other ritually significant levels, the Middle Preclassic level with the figurine fragment/chocolate spout and the ballcourt, also suggests that the intermediate occupation of the area was sacred in nature. The question that remains relate to the finds within the round structure. Besides the termination cache, there were

no ceramics or other artifacts that specifically pinpointed a ritual function to the structure. Many ritual structures not only have a termination cache, but also some sort of dedicatory ritual activity, as is seen in the ballcourt just above (Ferguson et al. 1996). However, no burials were found in or around the round structure. Perhaps, like the dedication to the ballcourt, the dedication would be below the very center of the structure. Unfortunately, however, this area remains below the currently conserved structure C-5, making further excavation into the area impossible during the 2012 season. Finding concrete evidence of a dedicatory cache or other ritually significant goods along the centerline of the structure would confirm the ritual use of this structure with certainty.

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