From Court to Court: The Ka'kabish Ballcourt in Relation to the Political Landscape of Classic Maya North-Central Belize

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ABSTRACT

From Court to Court: The Ka'kabish Ballcourt in Relation to the Political Landscape of Classic Maya North-Central Belize
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This thesis presents the excavation and analysis of Structure D-6 at the Maya city of Ka'kabish in what is now North-Central Belize. Structure D-6, together with Structure D-7, comprise the site's only known ballcourt. Performance theory is used in tandem with the existing literature about the Mesoamerican ballcourt's crucial function within the legitimization strategies of Maya elites to understand Ka'kabish's position in its political landscape. Comparisons are also made between Ka'kabish and Lamanai's markers of elite activity to judge the plausibility of various degrees of political integration between the two sites. This study is significant as North-Central Belize is traditionally overlooked by scholars of the ancient Maya in favor of the more extensively analyzed Central Petén and Yucatan Peninsula, leading to simplified, static constructions of the region's political history. The findings of this study suggest a more dynamic, complex past for these cities and this area than previously thought.

Keywords: Classic Maya, Belize, Ka'kabish, Sociopolitical Organization, Monumental Architecture, Ballcourt, Performance Theory

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TABLE OF CONTENTS

Chapter **Page #**

LIST OF FIGURES

LIST OF TABLES

Chapter 1: Introduction

The politics and rituals of the Classic Maya are an oft-studied subject amongst the archaeologists who specialize in this ancient society. Examinations of divine kingship, warfare, cosmology, human sacrifice, monumental architecture, royal inscriptions, and other such features of Classic Maya politics can be found in abundance within archaeological literature. However, most studies of these topics are set within the complex web of diplomatic relationships between the Classic city-states of the Petén Basin, such as Tikal, Yaxchilan, and Calakmul, due in part to both their long excavation histories and central location within the Maya heartland.

By comparison, analyses of the political landscape of Classic North-Central Belize have been sparse and somewhat simplistic. For decades, archaeologists believed the polity of Lamanai stood alone as the region's only major seat of power because of its copious amount of ceremonial architecture and abnormally rich, unbroken occupation history which spanned the Formative Period (1000 BCE-250 CE) all the way to Spanish colonization in the 1500s CE (Pendergast 1986:226; Graham 2001:53; Valdez and Scarborough 2014:261). In recent years, excavations at the nearby site of Ka'kabish have uncovered evidence which challenges this evaluation. Located only 10 kilometers northwest of Lamanai, the city sports a profusion of markers for elite activity and an occupation history nearly as impressive as Lamanai's (Haines 2008; Haines et al. 2020). Due to these discoveries, current research at Ka'kabish is dedicated to determining the composition of the region's political landscape; part of that work focuses on defining the relationship between it and Lamanai (Haines et al. 2016; Haines et al. 2020).

Formal architectural ballcourts and the games they hosted are among the most iconic features of ancient Mesoamerica in both the public and professional eye. For the Maya, these ritualized ballgames played a vital role in the political strategies of elites, serving as a method to legitimize their authority, promote their militaristic prowess, and negotiate social contracts with other groups in the local region through the performative game and the feasts which often accompanied them (Fox 1996; Gutierrez 1990; Inomata 2006; Schele and Freidel 1990:76). The importance of the ballcourt for Classic Maya elites therefore makes Lamanai's exceptionally late construction of theirs at the end of the Late Classic Period (9^{th}-10^{th} century CE) quite surprising for what was once described as the sole significant power in North-Central Belize (Hammond 2015:1506; Pendergast 1982:533). On the other hand, Ka'kabish's only ballcourt had yet to be explored. For this thesis, I conducted excavations and analyses of a portion of the Ka'kabish ballcourt to contribute to our understanding of Classic North-Central Belize's political landscape.

1.1: Research Objective and Questions

The goal of this research is to examine the Ka'kabish ballcourt in conjunction with other markers of elite activity at Ka'kabish and Lamanai to better define the site's political role in Classic and Postclassic North-Central Belize. To achieve this objective, two key questions guided the study:

1. What is the construction history of the Ka'kabish ballcourt?
2. Based on the information provided by the monumental architecture of the sites, were Ka'kabish and Lamanai integrated, and if so, to what degree?

1.2: Significance

Classic Maya North-Central Belize has often been regarded by researchers as a political backwater compared to the Classic Period Belize River Valley (Novotny et al. 2018:654; Thompson et al. 2021:3; Wrobel et al. 2022:7) to say nothing of Guatemala's Petén Basin which has occupied much of the literature about the Maya (Adams and Adams 2003:140; Guderjan 2006; Hammond 2015:1506; Rice and Rice 2018). By refining our understanding of this understudied region, more complex, nuanced questions can be asked of Ka'kabish and Lamanai which will lead to more dynamic studies than afforded by the preexisting narrative of a lone major political power with no nearby equals (Hammond 2015:1506; Houk 2015:236; Pendergast 1992:74). Further, Ka'kabish and Lamanai are in close proximity to each other. This allows for questions regarding heterarchy and mobile royal courts, two more modern political models which so far are underrepresented with the Classic Maya literature, to be discussed in relation to these sites.

1.3: Thesis Chapter Outline

This thesis is composed of seven chapters, including this one. The focus of the subsequent chapters is as follows:

- Chapter 2 introduces the Maya people, their geography, and their chronology. Special attention is paid to the Classic Period and its politics as it is the subject of this thesis.
- Chapter 3 is an overview of the Maya ballgame and the formal architecture courts which hosted them. This chapter also provides a brief recap of Maya cosmology

and the creation myth to which the ballgame owes its prominence within Maya society.

- Chapter 4 is dedicated to the theories regarding politics and ritual to which this thesis subscribes, with particular attention paid to performance theory. The chapter also extensively explains how the Maya ballcourt and its game functioned as a political tool. Finally, this chapter details the methods used to gather the data from the Ka'kabish ballcourt during the 2022 field season that is presented in this thesis.
- Chapter 5 presents the collected data in three ways. First, it provides an overview of the mapped looters' tunnels which were used alongside excavation to establish the structure's construction phases. Second, it describes each level of excavation as defined in the field before compiling them into natural and cultural layers from which the ballcourt's construction history can be gleaned. Finally, it introduces the ceramic and lithic artifacts found through excavation that can be used to date these phases.
- Chapter 6 analyzes the data and discusses their relevance in the context of the research questions outlined earlier. First, it examines the significance of the Ka'kabish ballcourt's chronology in comparison to both North-Central Belize and, to a lesser extent, the greater Maya heartland. Second, it evaluates the applicability of multiple models of political relationships between Ka'kabish and Lamanai based on the newly gathered information from the ballcourt and existing data from other monumental structures.

- Chapter 7 concludes the thesis by summarizing the findings of this study, acknowledging the potential shortcomings of this research, and offering possible avenues for future research built upon the foundation provided here.

Chapter 2: Background

2.1: Introduction

The designation ‘ancient Maya’ refers a group from Mesoamerica composed of various indigenous peoples united by a shared language family and ideology. They occupied parts of what is modern-day Mexico, Belize, Guatemala, Honduras, and El Salvador (see Figure 1). Their homeland was a tropical karst landscape, meaning that the dissolution of limestone led to a diverse topography of mountains and cliffs above caves and sinkholes that acted as natural water reservoirs. Differences in terrain and precipitation across the Maya subarea resulted in the formation of numerous microenvironments, though archaeologists have traditionally separated them into three major zones: the Pacific Coast in the east, the Highlands towards the south, and the Lowlands in the north and west, which are further subdivided into Northern and Southern Lowlands (Figure 1). In general, the Highlands have a cooler climate than the Lowlands but witness either more or less annual rainfall depending on which part of the Lowlands they are compared to. The Highlands have a mean annual precipitation of roughly 2500 mm (Franco-Gaviria et al. 2017:77), while within the Lowlands, the Northern Lowlands receive roughly 500 mm of annual precipitation while the Southern Lowlands receive about 4000 mm (Hoggarth et al. 2017:83). Similarly, the Maya Highlands have a moderate annual temperature of 18°C in the modern day while the Maya Lowlands exhibit a hotter temperature of 26.5°C (Franco-Gaviria et. al 2018:77; Manoharan et. al 2009:3). As my research is set in the Southern Lowlands, that will be the primary subregion discussed going forward.

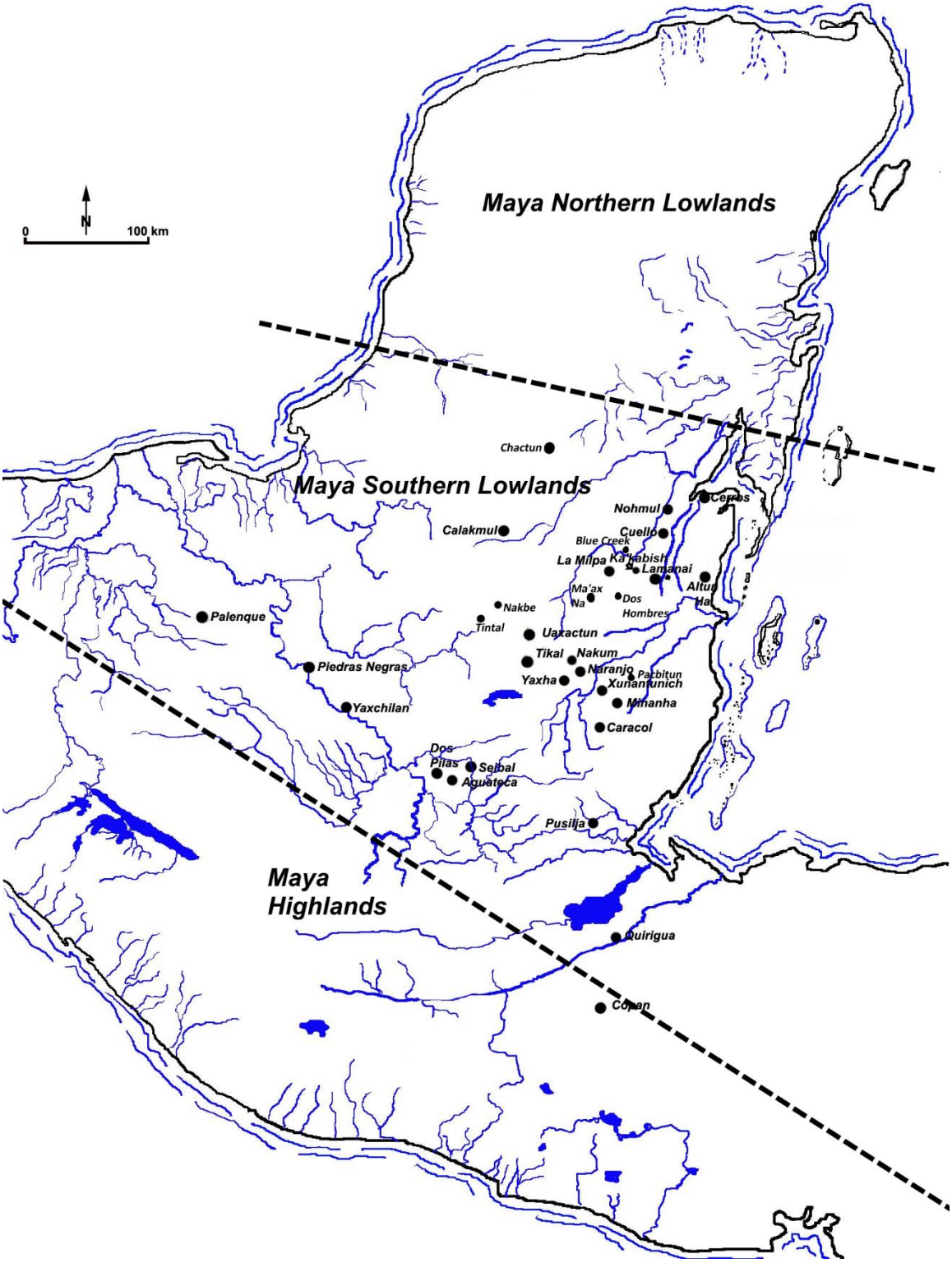

Figure 1: Map of Maya region with the locations of Classic Period centers, including Ka'kabish and Lamanai. (Adapted from KARP files, used with permission.)

Sedentary villages first appeared within the Maya area during the Middle Formative Period, circa 1000 BCE (Inomata et al. 2013:467; Valdez et al. 2021:502). The Maya people continued to expand and thrive all the way to the Spanish Colonial Period (Graham et al. 1989; Oland and Palka 2015; Rice and Rice 2018), which marked the turn from the Prcolumbian Maya to the modern Postcontact Maya. During the two and a half millennia of their history, the ancient Maya underwent many technological and sociopolitical revolutions. Major cities rose and fell, manufacturing and subsistence systems intensified, interaction networks expanded, and power found itself alternating between centralization into the hands of a few and dispersal across numerous autonomous settlements. The purpose of this background chapter is to provide a brief overview of the important developments that occurred within the Maya Southern Lowlands in chronological order, beginning with the period denoting the start of their sedentary society and ending just before the arrival of the Spaniards. As with any complex civilization, archaeologists have reached diverging conclusions on specific topics, so this review will also attempt to highlight the major positions involved in certain arguments.

Table 1: Date Ranges of Maya Chronological Periods (drawn from Demarest 2004, Estrada-Belli 2011)

Postclassic	Late	1200-1541 CE
	Early	~900/1000-1224 CE
Classic	Terminal	~800-~900/1000 CE
	Late	600-~800 CE
	Early	250-600 CE
Formative	Terminal	100-250 CE
	Late	400 BCE-100 CE
	Middle	1000-400 BCE
	Early	2000-1000 BCE

2.2: The Formative Period

The first evidence for complex sedentary Maya societies appears during the Formative Period (2000 BCE-100 CE). Archaeologists once thought the Formative Period to be a simplistic predecessor to the complex Classic Maya society (Adams 1969:21; Coe 1965:22). However, it is now understood that much of what was once thought to be exclusively Classic in origin, such as monumental architecture or the calendar system, originated in the Formative Period (Bricker 1982:103; Coe 1965:23; Estrada-Belli 2011).

The first permanent Maya villages were settled during the Middle Formative Period (around 1000 BCE) in regions such as the Pasion River, Belize River Valley, and Mirador Basin (Hansen 2001:3; Inomata et al. 2013; Rice 1976). These villages quickly developed into complex settlements, as evidenced by the rapid construction of monumental architecture and establishment of trade networks. The earliest form of Maya monumental structures, the E-Group, appeared around 950 BCE at Ceibal and rapidly proliferated throughout the region by 700 BCE (Doyle 2012; Inomata et al. 2013; Rice et al. 2019:550). This period also witnesses the first construction of ballcourts within the Mirador Basin and Yucatan Peninsula, though many of them were quite small and short-lived (Andrews and Robles Castellanos 2004:8; Hansen 2001:6). Meanwhile, long-distance trade can be inferred through the presence of Guatemalan Highland obsidian throughout the Maya Lowlands by the end of the Middle Formative Period (Aoyama 2017:225; Brown et al. 2004:232). While the political authority and power typically required to organize the construction of monumental structures may not be explicitly found during the Middle Formative Period, the presence of systems such as long-distance

trade networks at some sites does indicate the beginnings of a status hierarchy within and between these settlements due to the gradually restricted access of specific goods from some levels of society (Brown et al. 2004:224; Doyle 2012:373).

The Late Formative Period (400 BCE-100 CE) is characterized by increasing sociopolitical complexity and stratification. The earliest written inscriptions by the Maya belong to these centuries, as seen in San Bartolo, Guatemala, and Uaxactun (Kovac et al. 2016:25; Saturno et al. 2006:1281). From what little of these inscriptions could be translated, archaeologists gathered that they referred to important building blocks of the Maya cosmology such as jade and blood as well as mortal *ajaws*, which translates to "lords" in various Mayan languages (Kovac et al. 2016:21; Saturno et al. 2006:1282; Taube 2005:30; Taube 2017:275). Taken together, these inscriptions imply that divine kingship, which defines the Classic Maya, had a precursor during the Late Formative Period.

These developments in social hierarchy throughout the Formative Period culminated within the city-states of the Mirador Basin. Sites such as Nakbe, El Mirador, and Tintal built some of the most extensive ceremonial centers to ever exist amongst the Maya during the Late Formative Period and required a significant administrative elite presence to gather the labor and resources necessary to construct them (Dahlin 1984:18; Hansen 2001:10). These sites prospered until the Terminal Formative Period (100-250 CE), during which many of these large cities suffered either temporary hiatuses or complete abandonment for various reasons, such as environmental decay or military conflict (Dahlin 1984:19; Estrada-Belli et al. 2001:119; Hansen 2001:14; Zralka et al. 2018:249). However, the collapse of the old guard was not universal. Some settlements,

such as Tikal and Holmul, not only survived the transition but thrived, taking advantage of the void left behind by the previous cities to situate themselves as leaders of this transformed Maya world (Callaghan 2013; Estrada-Belli 2011:133-139). The volatile political landscape of the Terminal Formative Period opened opportunities for prospective rulers to negotiate new power networks both within and between communities in ways which emphasized their greatness as an individual (Callaghan 2013:336; Reese-Taylor and Walker 2002:104).

Between the foundation of ritual associations to the supernatural and the material wealth gathered in the Late Formative Period, Maya lords now had all the tools at their disposal to implement the political philosophy that defined the next few centuries: divine kingship.

2.3: The Classic Period

The Classic Period has typically been described as the apex of Maya elite expression and power. Spanning roughly 250 CE to around 900 CE, the period is defined by the proliferation of divine kingship as the primary sociopolitical strategy. However, rather than one *ajaw* centralizing authority into one or two major centers, a profusion of Classic Period rulers and kingdoms competed for dominance over their part of the Maya world, resulting in a dynamic and diverse political landscape.

During the Classic Period, the production of staple crops such as maize, beans, and squash intensified through various means such as terrace farming, house gardens, and wetland exploitation (Neff 2012; Negrete et al. 2020). This allowed for a significant increase in population density within Maya cities to ~100 persons/km^2 by the Late Classic Period (Chase and Chase 1998; Canuto et al. 2018:2; Hernández Espinoza and

Márquez Morfín 2015:749; Johnston 2003:136). With higher crop surpluses came an expansion of the Maya market economy (Demarest 2004:165; Masson and Freidel 2012:476). Elites benefited from the advancements in both fields by centrally inserting themselves within their operation. For example, the ruling lineages of many sites maintained artificial and natural water reservoirs to diminish the impact of droughts and the dry season, thereby making farmers dependent on these sources to sustain their crops (Chase and Cesaretti 2019:9; Lucero et al. 2011:483). Similarly, elites hosted highly visible and lucrative markets within the city center, drawing in larger crowds through the congregation of vital goods in one location. They could then tax these exchanges, accruing greater wealth from the surplus while minimizing the gains made by non-elites in these trades (Demarest 2004:165; Masson and Freidel 2012:461; McKillop 2021). Elites could then convert this increase in economic power into ideological and political capital, the two of which are the subject of the following subsections.

2.3.1: Cosmology in the Classic Period

The Maya perceived the world as composed of three realms: the upper, divine world; the surface world, where humans resided; and the underworld, land of the dead (Lucero 2018:333). Within this cosmology, the breath of life imbued all things with a soul, which in modern terms is called ‘animism’ (Lucero 2018:333). Finally, duality maintained the balance of the world (Lucero 2018:334). Many processes of nature combined two opposite halves, and these were embodied within their myths and histories, such as the resurrection of the Maize God.

Water serves as a clear example of the dual nature of Maya cosmology. Water, as the necessary component for agriculture and human existence, symbolized life. A variety

of ritual activities invoked its power. The jade worn by rulers represented water and the breath of life, which these elites now controlled in a physical sense as well through their reservoirs (Taube 2017). Some Maya ceremonial courts centered around a symbolic well or spring that linked the performances to the maintenance of irrigation cycles (Taube 2017:273). Water also linked the world of the living to the dead. The caves surrounding Maya settlements simultaneously housed the portals to the underworld and acted as freshwater sources (Zralka et al. 2017:470). The burning of blood brought rainclouds (Taube 2017:275), and ballcourts, which have been characterized as portals to the underworld (Cohodas 1991; Fitzsimmons 2009:72), gained a new architectural style during the Late Classic Period which enabled them to be ritually flooded during storms (Taube 2017:276).

Death also occupied a prominent role in Maya cosmology. Obsidian, which earlier was identified as a major economic resource, also constructed the environment of the Maya underworld (García Patzan and Rega 2019:31). Within ritual caches, obsidian often symbolized underworld spirits such as *am* spiders (Freidel and Schele 1988:559; García Patzan and Rega 2019:32; Tozzer 1941:130). The Maya ballgame, as a method for conflict resolution, also became analogous to death (García Patzan and Felicia Rega 2019). Decapitation rituals in iconography showed blood spurting from players' necks as snakes, the messengers of the underworld (Figure 2). Within the Maya creation myth, the *Popol Vuh* (see Section 3.2 for explanation of text), the ballgame was played in the underworld by the Hero Twins against the Lords of the Night to rescue their father from death and resulted in his rebirth as the Maize God.

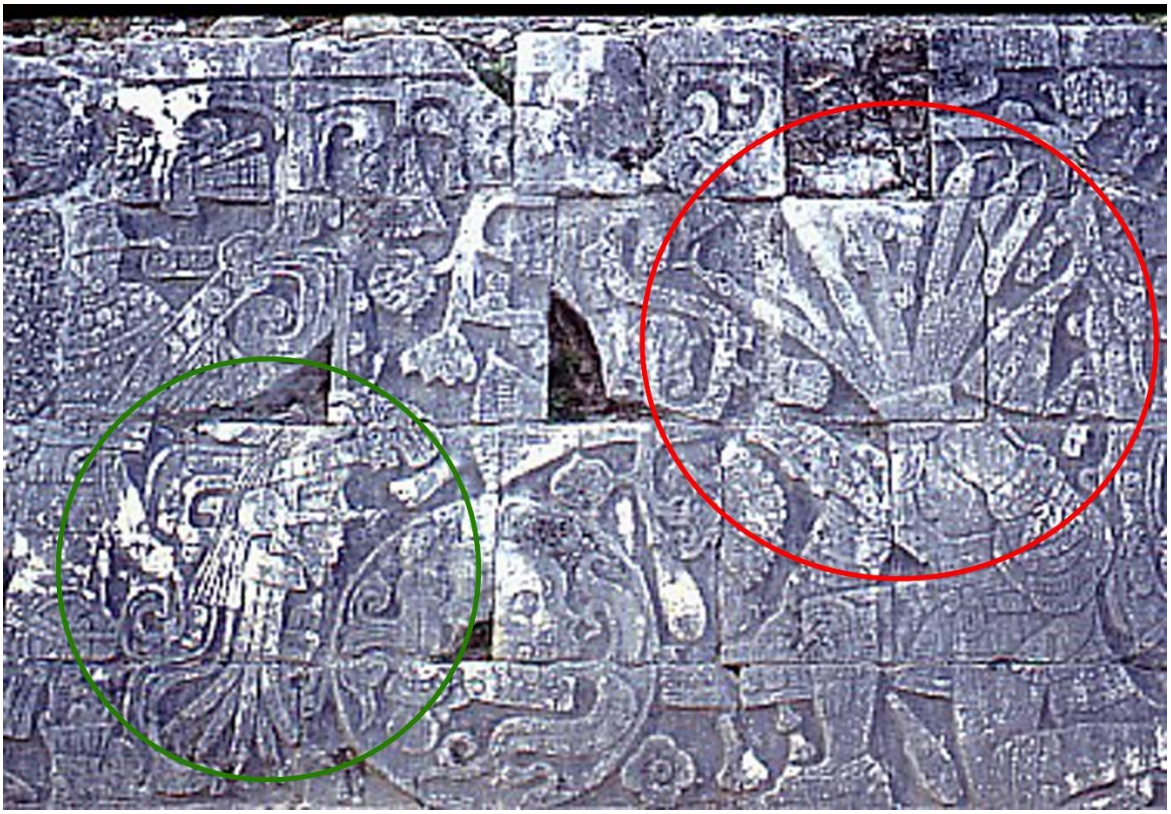

Figure 2: Ballcourt Frieze from Chichen Itza depicting decapitation ritual. Note the blood emerging as snakes from both the decapitated player, highlighted in red, and from the head held by the victorious player, highlighted in green. (Photo by Haines 1991, used with permission.)

The most common intertwining of death and cosmology was in ancestor veneration. Mortuary cults and ancestor veneration opened communication between the living and the supernatural because the deceased served as mediators between the two sides (Demarest 2004:176). Numerous Formative rituals transformed during the Classic Period into methods of honoring ancestors. Bloodletting, which was previously practiced to facilitate agricultural cycles through the direct use of blood, instead emphasized the act of sacrifice as key to contacting ancestors (Munson et al. 2014: 2). E-groups, which once functioned as solar calendars through observation, transformed into centers of ancestor

veneration as part of the efforts of rising Classic elites to legitimate themselves (Zralka et al. 2017).

Iconography and inscriptions facilitated the distribution of this cosmology into public consciousness. For example, most of the evidence recovered archaeologically for bloodletting does not come from stingray spines or obsidian blades, but instead from artwork and hieroglyphs (Stemp et al. 2014:424). Monumental inscriptions, such as the Holmul temple frieze (Figure 3), connected elites to the supernatural, thereby justifying to the city's inhabitants why this individual deserved to become a venerated ancestor (Estrada-Belli and Tokovinine 2016). Late Classic Maya rulers fused traditional Maya symbols with foreign Teotihuacan imagery to invoke militarist connotations, which was meant to skew public perception of them as mediator to the distant past (Stuart 2000:498).

As this section emphasized, cosmology was deeply intertwined with politics in the Maya world. While the concepts likely originated during the Formative Period, during this timeframe elites began monopolizing the rituals that materialized that cosmology. This formed the foundation for the institution of Maya divine kingship.

2.3.2: Politics in the Classic Period

Divine kingship formed the basis for Classic Maya politics. On the one hand, rulers positioned themselves as central to the Maya cosmological order by acting as the special intermediaries between the supernatural realm and the human world (Dunning and Kowalski 1994:85; Lucero 2007:409). These rulers publicized and naturalized their ritual communication to the gods through elaborate performances within their city's ceremonial plaza, which were later memorialized in exaggerated artistic depictions

Figure 3: Holmul Temple Frieze. The central character represents a deified ancestor, with the two ancestral spirits flanking him offering him food. The main inscription on the frieze identifies multiple Holmul rulers (Estrada-Belli and Tokovinine 2016:163). Photo by Alexandre Tokovinine, courtesy of Holmul Archaeological Project.

(Inomata 2006:810). Ruling families also strengthened their unique role as intermediaries through the construction of monumental architecture such as temples and ballcourts. Royal groups built grand temples to specific gods with the intention of attracting worshippers from other temples through their elaborate presentation (Lucero 2007:421-422). At the other end of the spectrum, ballgames within the urban center congregated the outlying dispersed small communities of the hinterland during festival events (Fox 1996; Golden and Scherer 2013). These minor settlements would then be more easily persuaded to attend royal ritual performances scheduled for the same day (Rega 2020:34). In all such cases, elites emphasized their mortal half through the expression of financial power when sponsoring these constructions.

On the other hand, rulers became divine as well. They took on specific supernatural titles and played the role of major deities in certain ritual performances (Webster 2000:87). Emblem glyphs, which are currently understood as the distinct signifiers of Maya kingdoms (Biro 2012; Palka 1996:211), elevated the ruler above lower-rank elites and nobles by designating the ruler as 'holy' (Houston and Stuart 1996:292). In depictions of royal funerals, the deceased often took on the symbolism of deities such as the Maize God or Sun Deity (Freidel et al. 2010; Zralka et al. 2017).

Since the Maya region consisted of numerous independent kingdoms and dynasties, significant competition between royal families existed. Most of the textual evidence detailing warfare dates from slightly before the Late Classic Period through to the Terminal Classic Period (Webster 2000:90). Among the most well-known of these is the long-standing hostility between the kingdom of Tikal and the kingdom of Calakmul (Connell and Silverstein 2006: 398-404; Martin and Grube 1995; Woodfill and Andrieu

2012:204). These two giants commanded smaller polities to fight alongside them and persuaded other large kingdoms, such as Caracol, to lend their support to the conflict (Connell and Silverstein 2006:400; Folan et al. 1995; Martin and Grube 2008; O'Mansky and Demarest 2007:20). Similar long-term rivalries are documented at numerous other Maya sites throughout the Peten (see Webster 2000). Artifactual evidence for Classic Maya warfare comes from spear and arrow points found alongside battle-scarred buried individuals (Aoyama 2005), as well as defensive walls dating towards the end of the Late Classic Period (Demarest et al. 1997).

In the Early Classic Period, warfare often strengthened diplomatic relationships through defeating a common foe, while the reinstating of vanquished rulers created individual dominance and tributary relationships that lasted the lives of those specific rulers (Golden and Scherer 2013:405-407). There is also a substantial amount of evidence for inter-kingdom marriages taking place after warfare, which may relate to the reciprocal taking of captives during combat (Harrison-Buck 2021:575).

These longstanding rivalries during the Classic Period likely relate to one of the most important political events in Maya history which occurred near the Classic Period's start: the Teotihuacan *entrada*. On 11 Eb, which corresponds to January 16, 378 CE, a Teotihuacan general known as Siyah K'ak' arrived at Tikal and deposed the former ruler, Jaguar Paw (Estrada-Belli et al. 2009:241; Nielsen and Helmke 2008:467; Stuart 2000:483). Not long after, the general installed a young boy, Nun Yax Ayin, to the Tikal throne. This marked a brief period of direct Teotihuacan influence over Tikal and nearby Maya sites (Stuart 2000). Beyond inscriptional evidence, Teotihuacan's physical presence in the Lowlands also can be seen through monumental architecture mirroring

the ceremonial center of the central Mexican city (Houston et al. 2021) as well as murals excavated at Holmul (Estrada-Belli et al. 2009).

Any direct imposition by Teotihuacan would have been short-lived. Within a century of the *entrada*, the city started its decline that culminated in a final abandonment between 550-600 CE (Beramendi-Orosco et al. 2021:1078; Clayton 2020:1). Despite this, Teotihuacan imagery persisted in Late Classic iconography at sites such as Copan and Dos Pilas (Martin and Grube 2008:61; Stuart 2000:491). This imagery was typically short-lived, used by a dynasty's founder before their descendants returned to traditional Maya ancestor-based legitimization upon accession to the throne (Borowicz 2003; Sharer 2003). This may mean that revolutionary rulers, without preexisting lineages to exploit, used Teotihuacan militarist iconography to connect themselves to a powerful state, thereby granting them access to a form of legitimate authority.

2.3.3: Summary

The Classic Period continues to fascinate archaeologists and the public alike because of its diverse, grand kingdoms. Starting with the survivors of the Terminal Formative Period, the Maya ended the Late Classic Period with numerous divine rulers competing in ostentatious displays of wealth and power that remain visible to us in their monumental architecture, inscriptions, and iconography. Agricultural intensification allowed for population densities to rapidly increase over the centuries, while warfare and trade connected the whole of Maya Mesoamerica into a complex interaction web. However, as the 8th century CE closed, many Classic *ajaws* would soon be reminded: no king rules forever.

2.4: Terminal Classic Period

During the 9th and 10th centuries CE, many Maya Lowland sites experienced significant demographic decline, with some such as Tikal and Calakmul seeing as much as a 90% reduction in population during this period (Braswell et al. 2004:188; Valdes and Fahsen 2004:158). This phenomenon led to early archaeologists declaring this period as the Classic Maya 'collapse', but more recent studies have determined that such a term is misleading. Numerous parts of the Maya region continued to thrive until the very end of the Terminal Classic Period, such as Nakum in the Peten (Zralka and Hermes 2012) or Ixtonton in the Mopan Valley (Laporte 2004:203-208). Other areas, such as parts of the Northern Lowlands and Belize, not only survived the Terminal Classic Period but in some cases remained occupied and successful up until Spanish contact (Aimers 2007a; Graham 2012; Mixter 2020).

While the Terminal Classic Period did not mark the extinction of the Maya people, it did involve the collapse of the political model of divine kingship and dynastic rule (Rice et al. 2004:10). Many ideological or political facets of society did decline in frequency or were outright abandoned following the Terminal Classic Period, such as monumental architecture, writing, and the Long Count calendar (Aimers 2007a:346). While elites remained in the urban centers of most of the declining Classic Maya kingdoms, they are only attested to sporadically due to the above three features gradually disappearing. Cities close to each other often have similar final inscribed dates, suggesting variation in when elite activity ended within Classic Maya kingdoms (Ebert et al. 2014:347).

Archaeologists have suggested numerous causes for why these major kingdoms rapidly declined. Among the most common are environmental factors. Stable isotope analysis of sediment within parts of the Maya subarea suggests that severe droughts overlapped with each other, creating roughly a century-and-a-half of unfavorable agricultural conditions interspersed with small wet seasons (Medina-Elizalde et al. 2010; Frappier et al. 2014; Iannone 2014; Medina-Elizalde et al. 2010). As Maya rulers may have gained some of their practical power from water management, instability in precipitation over such a long period could have reduced their control over the dispersed rural population. Combined with other issues facing the Classic Maya, this would have resulted in a significant loss of legitimacy and authority, explaining why the political model collapsed specifically. At the same time, this interpretation faces a significant paradox. As rainfall is greater in the southern lowlands, it should be expected that they would experience fewer symptoms of drought than the northern lowlands. Therefore, it is difficult to reconcile the northern migration of the Maya people with severe droughts that would be far worse in that region than the one they are abandoning.

Another popular explanation for the collapse of Classic Maya divine kingship is an increase in warfare. Many of the last inscriptions of the Terminal Classic Period depict scenes of warfare, with the western kingdoms in particular demonstrating numerous inscriptions related to conflict (Webster 2000:112). In the Petexbatun region, the largest fortifications date to the start of the Terminal Classic Period (Demarest et al. 1997:230). An increase in warfare could have led to rulers being put into dangerous situations more frequently. With warfare demonstrating the fallibility of the ruler, the legitimacy of their claims to divine connections could have been called into question, leading to

disillusionment and commoner migrations away from the urban core. Approaching the problem from another perspective, resource shortages also weaken a ruler's legitimacy since they no longer were providing subsistence security for their people. As resource shortages make other political strategies such as monumental construction or ritual feasting difficult, rulers may have been pressured into going to war to retain their authority. Ironically, the constant conflict ultimately served to weaken their control (Carleton et al. 2017:215).

Realistically, the Classic Maya political collapse likely resulted from multiple factors destabilizing the region all at once. Some of the resource shortages suggested above, such as maize, would be rooted in the droughts attested to by staple isotope analysis (Carleton et al. 2017:215). Since climate change often exacerbates detrimental conditions such as disease, it is probable that various crises stacked atop each other until the Maya could no longer handle them all at once (Acuna-Soto et al. 2005:407). The different subregions of the Maya area also did not experience these issues equally. The Petexbatún Lake region shows plenty of evidence for warfare, yet little for climate change. Some sites appear to face no problems whatsoever and continue unabated into the Postclassic Period based on item manufacture and building construction (Aimers 2007b; Graham 2004). The main conclusion that should be reached for the Terminal Classic Period is that political collapse was diverse across the Maya Lowlands, and therefore any type of 'collapse' cannot be easily summarized as one general event.

2.5: The Postclassic Period

The Postclassic Period began at around 1000 CE with the rise of the Northern Yucatan Peninsula as the main seat of Maya society and ended during the 1550s with

Spanish conquest. Most of the regions with continuous Maya occupation shared similar access to aquatic natural features such as rivers, lakes, and the coastline, all of which supported favorable conditions for subsistence and trade (Andrews et al. 2003:151). As a result, some of the Maya population moved from the central Peten Basin towards coastal regions such as the Yucatan Peninsula and northern Belize (Bermingham et al. 2021:5; Cucina and Ortega-Muñoz 2022:4-5; Willermet et al. 2013:448).

The Early Postclassic Period, which spans 1000 CE to about 1200 CE, featured Chichen Itza as the dominant center during its first half. Based on dates prior to the end of monumental inscriptions, Chichen Itza first rose as a major city during the Terminal Classic Period (Andrews et al. 2003:152). It was to this Terminal Classic Period that much of Chichen Itza's monumental activity dates, including the construction of the largest ballcourt in Mesoamerica (Andrews et al. 2003:152; Ringle 2004:170). With Chichen Itza came a significant shift in cosmology, seen by the downplaying of the previous main god of the pantheon, the Maize God, in favor of Kukulkan, the Yucatan equivalent of Quetzalcoatl and therefore possibly a hybridization of Maya and Central Mexican concepts (McLeod 2018). With this realignment, legitimacy and authority still came from ties with the supernatural but not from rulers directly identifying themselves as divine beings like during the Classic Period. Instead, the cult of Kukulkan ruled through councils, with specific individuals within that ruling group gaining extra power through their military prowess and accomplishments (Ringle 2004).

Around 1100 CE, Chichen Itza experienced a significant political collapse, leading to a century of decentralization in the political landscape until Mayapan took over as the primary center during the Late Postclassic Period (Andrews et al. 2003:153).

Mayapan's government also consisted of a ruling council, but this time formed by a confederacy of the many small states inhabiting the Yucatan Peninsula. Once more, trade sustained the city's practical power, while the cult of Kukulkan provided its ideological backbone. This centralized state lasted for three centuries until around 1450 CE, when violent conflict erupted between the ruling lineages of the *mul tepal* council, represented by mass graves, butchering of elite bodies, and the burning of corpses (Paris et al. 2017).

Following the collapse of Mayapan, the Postclassic Maya continued in a decentralized state like what followed the fall of Chichen Itza. A century later, the Spanish *conquistadores* reached the Yucatan Peninsula. With their arrival, the Spanish enforced significant political, religious, and economic changes upon the Maya, setting the trajectory for Maya society today.

2.6: Conclusion

This chapter introduced the ancient Maya people, their chronology, and their geography. It then provided a brief overview of their society's history, with special attention given to the Classic Period's cosmology and politics as that is the primary topic of this thesis. The next chapter provides a deeper discussion about one particular aspect of Maya society where cosmology and politics intertwined: the Mesoamerican ballgame and the formal architecture ballcourts which hosted them.

Chapter 3: Mesoamerican Ballcourts in the Maya Region

3.1: Introduction

Ballcourts are among the most iconic architectural features of ancient Mesoamerica, second only to temples. While there is a degree of variation between each ballcourt, nearly all of them can be identified by the presence of two distinct architectural features: two range structures and a playing alley (Figures 4 and 5). Additionally, some playing alleys possess extra architectural features, such as a ballcourt marker or hoops. The range structures are two parallel, rectangular buildings that had playing surfaces to bounce the ball on as well as, in some cases, limited seating for attendees (Stark and Stoner 2017). The wall on each range structure which faces towards the other range structure features a sloping design. The playing alley was the corridor between the two range structures where players participated in the game. This corridor usually rests slightly lower than the range structures' slopes to define the space in which players can maneuver (see Figures 4 and 5). Where present, the ballcourt marker is a large, round stone inserted into the playing alley's center. This marker was often either carved or painted with a unique scene, usually of a ballgame itself with specific political or mythological symbolism (Holden 2009:25; Miller and Houston 1985:56; Taladoire 2015:163).

Ballcourts are found in nearly all of Mesoamerica's state-level societies, including the popular Aztec empire and Maya Lowlands. Each hosted their own variation of the Mesoamerican ballgame, yet the courts all served a similar purpose: to legitimize the political authority of the ruler and ritually link them to the maintenance of cosmological order (Offner 1993:70; Scarborough and Wilcox 1991; Tokovinine 2002; Zeitlin 1993).

Presumably the ballgame was also a popular pastime amongst the wider Mesoamerican population and played in informal settings for entertainment and pure sport; however, as the focus of this thesis is on the sociopolitical role of formal architectural games, this latter type will be the primary subject of discussion.

Iconographic evidence for the ballgame first appears during the Early Formative Period in the Olmec urban center at San Lorenzo (Blomster 2012:8020). Specifically, the archaeological record contains numerous ceramic figurines of ballgame players wearing standardized costumes from this period (Blomster and Salazar Chavez 2020:3). However, the first formal architectural ballcourt belongs to the site of Paso de la Amada in the Soconusco region of Chiapas, Mexico, and dates to 1650 BCE (Blomster and Salazar Chavez 2020:3; Rodríguez-López et al. 2016). The Maya heartland would not see its own ballcourts until over a millennium later, during the Middle Formative Period, within the Mirador Basin and Northwest Yucatan (Andrews and Robles Castellanos 2004:8-9; Hansen 2001:6). These early Maya ballcourts were generally around 20 meters in length and five to eight meters in width, and may have resulted from foreign immigration to the sites based on associated ceramic material (Andrews and Robles Castellanos 2004:8-9; Hansen 2001:6).

Figure 4: Example of Mesoamerican ballcourt at Copan. (Photo by Aleksi Pihkanen, licensed under CC BY 2.0).

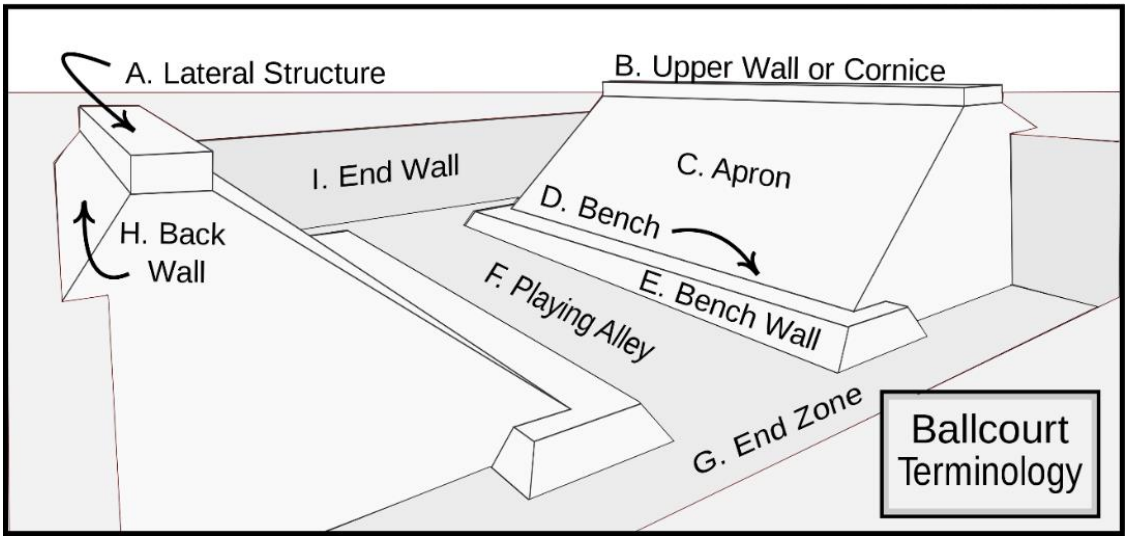

Figure 5: Diagram depicting architectural parts of a Mesoamerican ballcourt. Licensed under CC BY 3.0.

Maya ballcourts saw a major surge in construction activity during the Late Formative Period, with preexisting courts undergoing significant renovations at the same time sites in Belize and the Northeast Petén constructed their first ones (Hansen 2001:6; Rega 2020:41; Scarborough et al. 1982). That multiple smaller sites constructed their first courts during this period may imply a fragmented distribution of political power during this time, similar to that seen in the Late Classic Period (Feinman and Nicholas 2011:103; Rega 2020:42). It was during the Formative Period that the ballgame, played within the formal court, firmly cemented itself as a major political and ritual tool. The techniques seen in the construction of the ballcourts were consistent with those of other public structures, and the courts were positioned near elite residences and the ceremonial center (Scarborough et al. 1982:32; see Figures 6 and 7 for examples). Taken together, it is possible to view the Late Formative ballcourts as the result of contemporary rulers competing to elevate their status in the greater Maya political world through sponsored construction.

However, a noticeable hiatus in ballcourt use occurs during the Early Classic Period (Figure 8; see also Appendix B). When El Mirador collapsed towards the end of the Late Formative Period, the ballcourts at nearby sites such as Nakbe were abandoned and the ones in the northwestern Yucatan fell into disuse (Andrews and Robles Castellanos 2004:10; Hansen 2001:6; Rega 2020:39). Within the Petén, only a handful of sites, such as Palenque and Copan, demonstrated active maintenance and utilization of ballcourts (Scarborough et al. 1982:22). This absence was followed by a complete revival during the Late Classic Period, to which the vast majority of known Maya ballcourts date

or postdate (Andres et al. 2017; Liendo Stuardo 2015; Rega 2020; Rice 2018; Schultz et al. 1994).

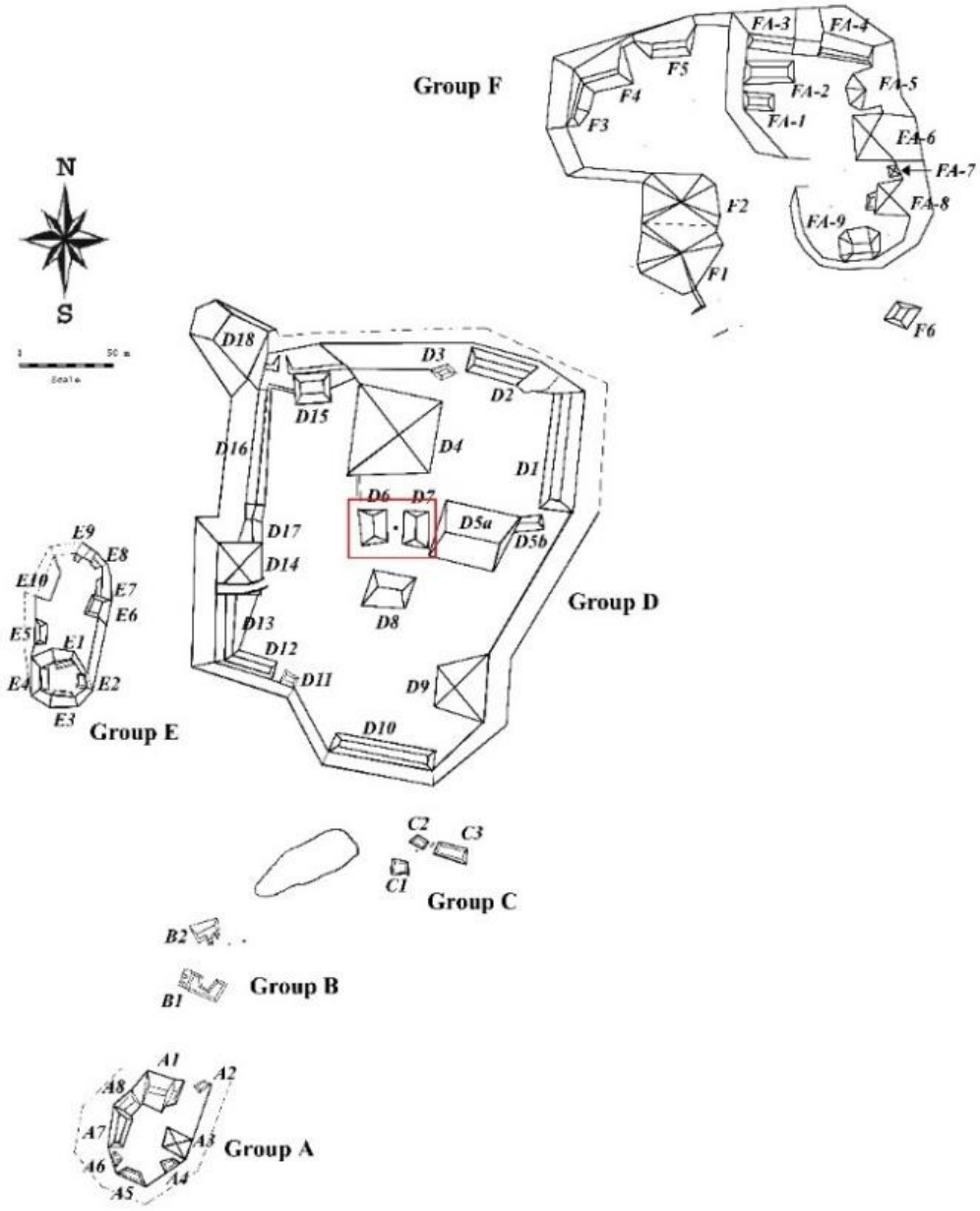

Figure 6: Site Map of Ka'kabish. Ballcourt highlighted in red. (Adapted from KARP files.)

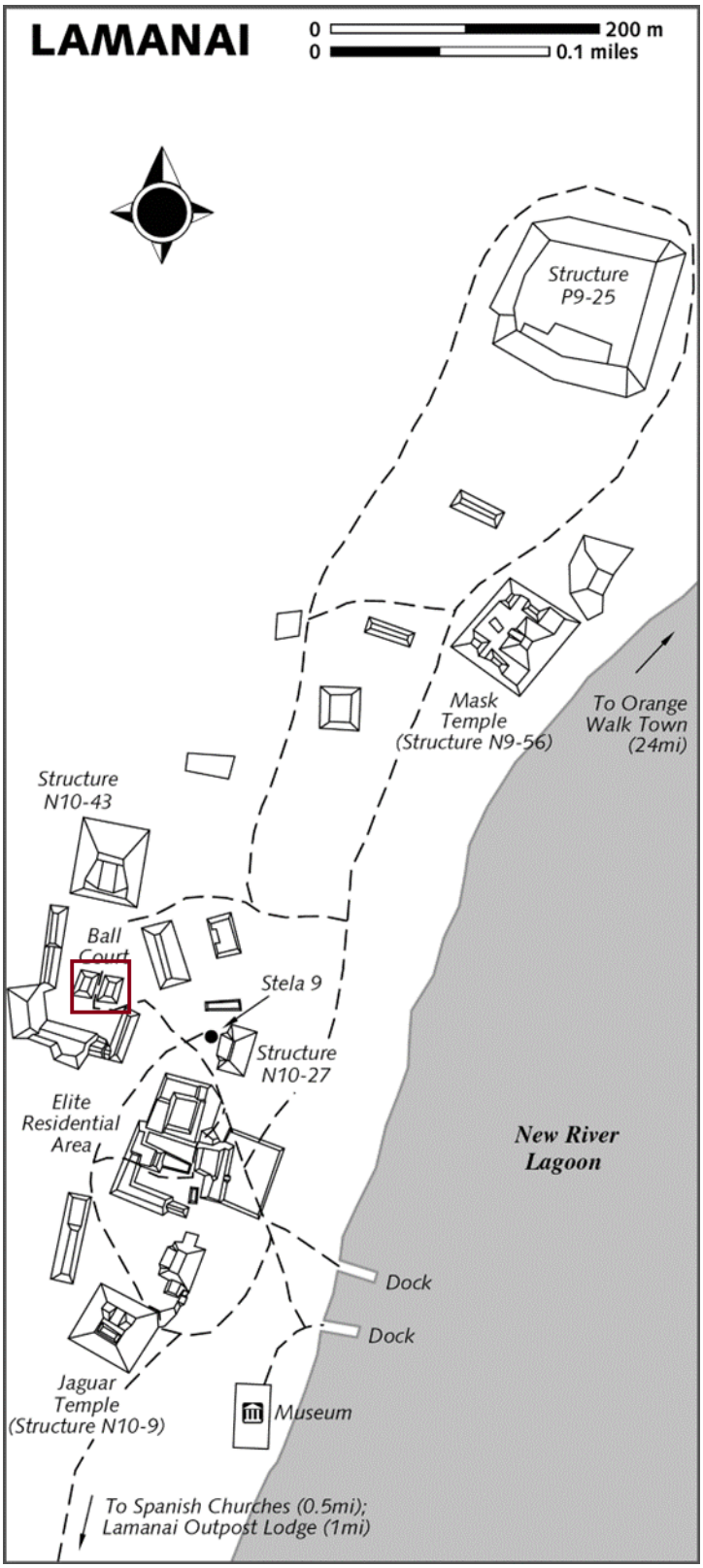

Figure 7: Site Map of Lamanai. Ballcourt highlighted in red. (Adapted from Lamanai Archaeological Project.)

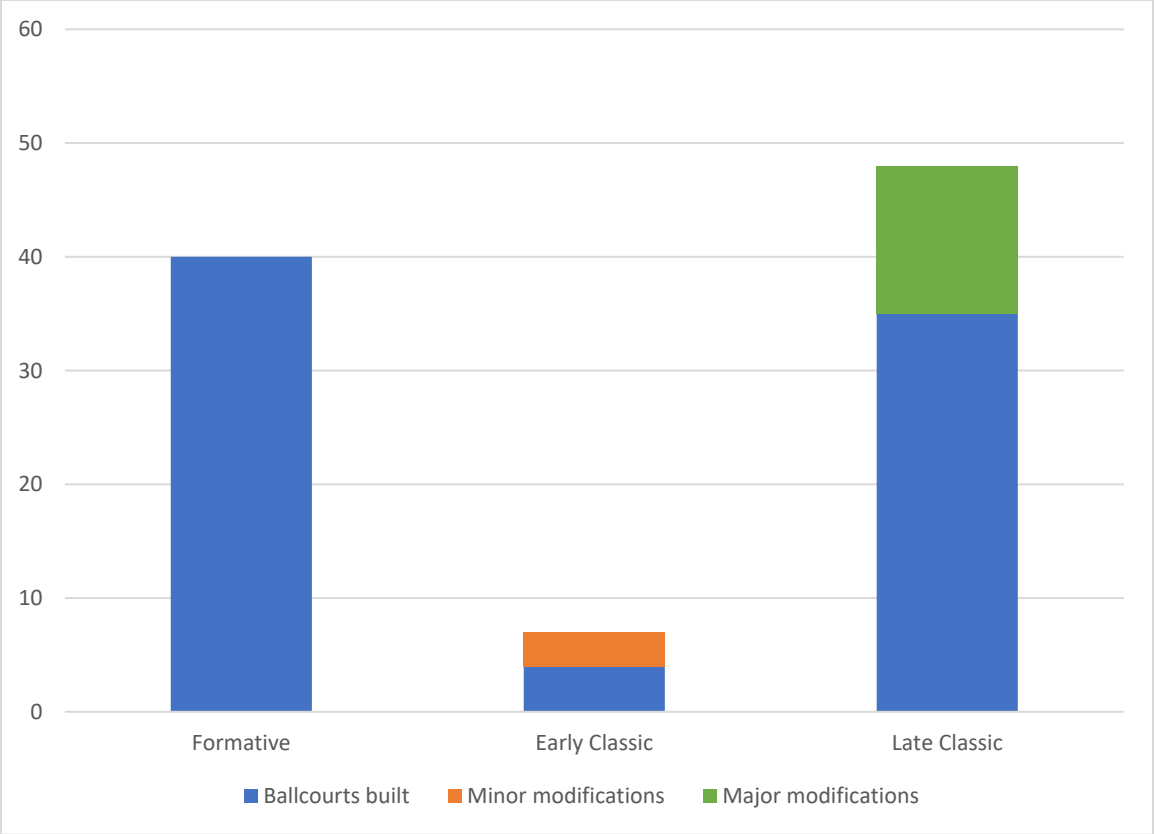

Figure 8: Graph of Maya ballcourt construction from Formative through Late Classic Periods. Data used found in Appendix B.

Of the fourteen types of ballcourts found in Mesoamerica (Taladoire 1981), the Maya Lowlands only exhibit four. Most courts are Type I or Type II, but the occasional site incorporates Type III or Type VII (see Figure 9) (Schultz et al. 1994:45). These types differ by the angle of their playing surfaces (see Figure 10), which would impact what trajectories the ball could bounce off them and necessitate different strategies from the players (Healy 1992:237; Schultz et al. 1994:45). Some studies suggest that this is the reason that most ballcourts only have one construction phase; radically altering the nature of the game played could briefly increase the chance of errors during the ritual and thereby diminish the commissioning ruler's projected infallibility (Healy 1992:237; Schultz et al. 1994:45).

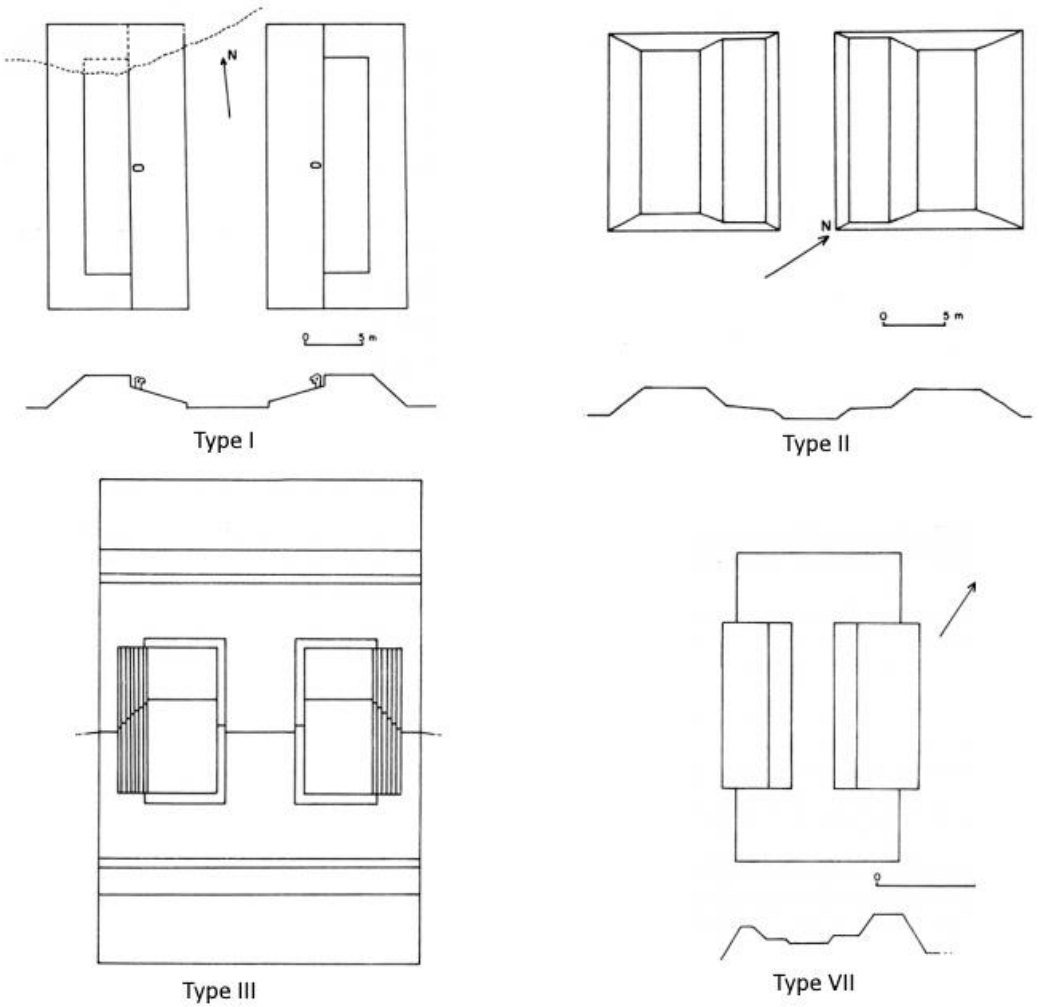

Figure 9: Ballcourt Types found in the Maya Lowlands. Drawings by Eric Taladoire, 1981, adapted by author.

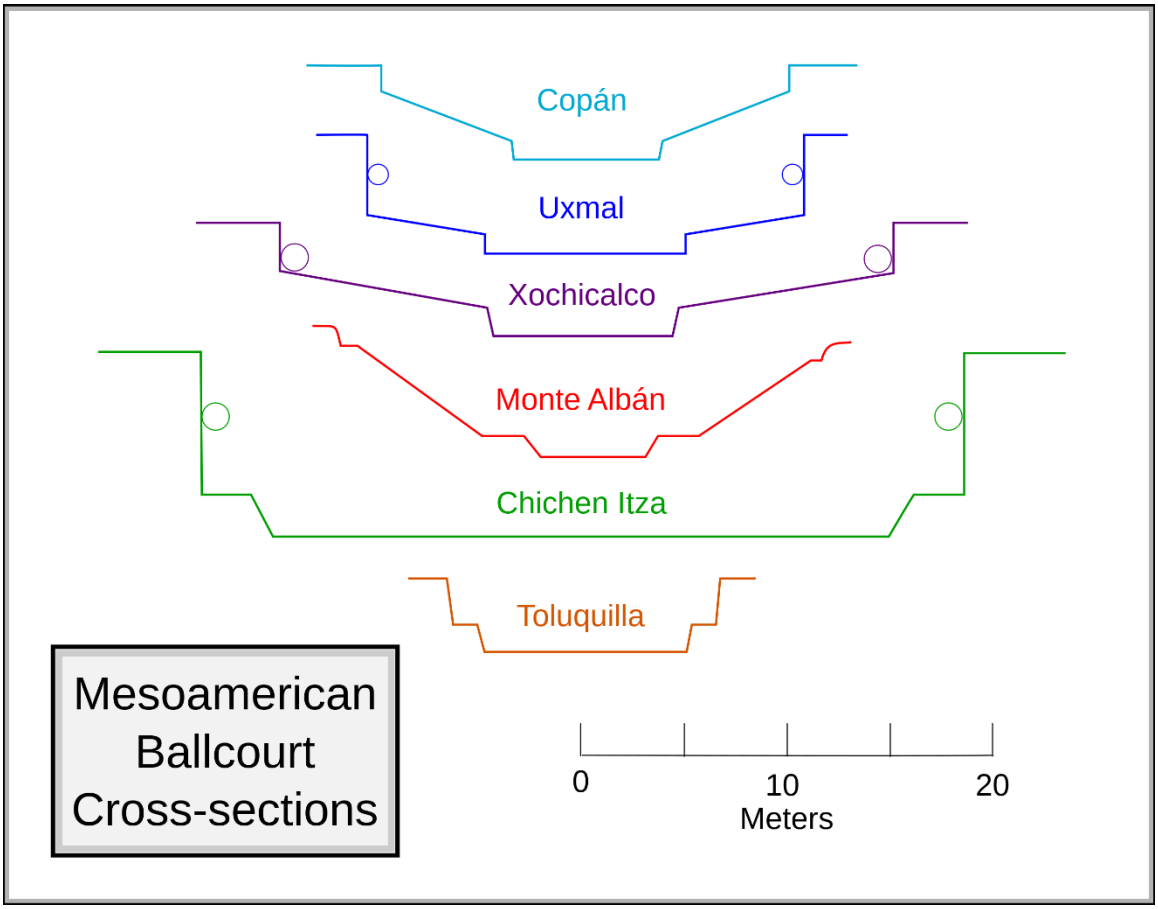

Figure 10: Mesoamerican ballcourt cross-sections demonstrating diversity in playing surface angle and shape. Diagram by Craig Fisher, licensed under CC BY-SA 4.0.

3.2: The *Popol Vuh* and the Ballgame

The *Popol Vuh* is the Postclassic iteration of the Maya creation myth as told by the K'iche, one the various Maya peoples. While some scholars believe that the myth likely had multiple variations based on region (England 1987:522; Chinchilla 2017:33,40; Stuart 2001:215), it is presumed that all versions recounted the exploits of a pair of ancestors known as the Hero Twins against the underworld deities called the Lords of the Night. The ballcourt of Xibalba (the Postclassic term for the underworld) served as the primary setting of the myth, and its plot was often advanced during ballgames between these two factions. Therefore, a careful reading of the legend may offer insight into the political and ideological meaning of the ballcourt in Maya society.

While a summary is provided below, the full story has been translated by multiple authors over the last few decades, such as Dennis Tedlock (1996) and Munro Edmonson (1977).

The tale begins with an earlier set of twins who are masters at the ballgame. However, the noise of their playing disturbs the Lords of the Night, whose residence in Xibalba is just beneath the twins' earthly ballcourt. The deities challenge them to a game in retaliation and trick the pair during the game, killing them and placing the head of one in a calabash plant to warn those who would upset the gods. One of the Lords' daughters comes across the skull and is mystically impregnated by it when it spits in her hand. The woman flees to the mortal realm and eventually gives birth to the Hero Twins, Hunahpu and Xbalanque.

One day, the new twins find the ballgame gear of their predecessors and begin playing the game. Once again, the Lords are angered by the ruckus and summon them to Xibalba to answer for their behavior. Each day, the Twins would play ball with the Xibalbans, and at night they would be tested in the underworld's various Houses. Eventually, the Hero Twins would succeed where their progenitors failed thanks to their great wit.

After one such trial, Hunahpu was decapitated by the bat god Camazotz and the Lords of the Night used his head as the ball for the day's game. However, Xbalanque managed to save his brother while humiliating and deceiving the Lords. He first placed a gourd atop Hunahpu's neck as a temporary head. During the game, he then kicked his brother's real head outside the court into the grass, where a rabbit was waiting to trick the Lords into following it by bouncing away like a ball. Xbalanque then retrieved his

brother's head and reattached it. He then placed the gourd in the grass in place of his brother's head. The Xibalbans, called back by Xbalanque claiming he found the ball, were humiliated upon kicking the "ball" and splattering squash all over themselves, once again appearing foolish against the Hero Twin's guile.

By the end of the myth, the Twins successfully tricked the Lords into sacrificing themselves and as a reward for overcoming them ascended into godhood, becoming the Sun and Venus (Ashmore 1991:212; Vail 2017:476). Death was no longer an unbeatable force to whom humans had to give offerings and cower in fear from; all souls now had hope that, upon entering Xibalba, they too could defeat the Lords of the Night and rise as a deified ancestor for their people (Schele and Freidel 1990:76).

One key point in the *Popol Vuh* to take note of is that, while the Hero Twins could freely enter Xibalba and retain their bodies, the Lords of the Night could not enter the mortal realm as anything more than abstract concepts and could therefore never reign as sentient beings over humans. This fact composes part of the basis for Maya divine kingship: the ruler, as a human form of godhood, occupied a liminal cosmological position and therefore served as liaison between the two worlds (Helmke and Nielsen 2015:36; Koontz 2008:12). By performing in the ballcourt, "he was the earthly manifestation of the Hero Twins and reenacted their triumph over death through ritual" (Schele and Freidel 1990:76).

The nature of the Hero Twins' resurrection also signifies the ruler's role as the divine mediator between the two realms. As the Sun and Venus, the Twins are constantly alternating between who is visible in the sky. As implied by the earlier story, the underworld was thought to lie directly beneath the earth. Thus, at dawn and dusk one

twin descended back into Xibalba as he dipped below the horizon while the other rose out of it towards the heavens as he emerged on the opposite side. By emulating the Hero Twins during ritual ballgames, rulers could justify their position in Maya cosmology as mediators between the living and the supernatural (Blainey 2010:271; Fox et al. 1992:177; Taube 1993:66).

The ballcourt itself, as the setting where the Hero Twins and the Lords of the Night directly interacted, was the arena of negotiation for men and gods in Maya cosmology (Schele and Freidel 1990:76; Taladoire 2015:174). It was here where rulers, simultaneously mortal and divine, could communicate with the supernatural forces that governed the cycles of life within the Maya world. It was here where rulers could play out the consequences of confrontation with each other, where triumph and defeat could be defined for all to see. And just as sacrifice and rebirth was integral to the *Popol Vuh's* plot, so too was sacrifice in the ballgame necessary to renew cosmic order (Matthews and Garber 2004:52; Schele and Freidel 1990:126). The ballcourt's position within cities also represented its nature as the location for competition and cooperation. It was typically built centrally within the ceremonial core rather than towards the edges, and thus could be interpreted as a portal both to the underworld and between the various cosmologically divided sections of the main plaza (Holden 2009; Matthews and Garber 2004:55; Schele and Freidel 1991).

The language and iconography used by the Maya to describe the balls used often referenced the events of the *Popol Vuh*. For example, balls and heads are often conflated due to the story of Hunahpu's decapitation. One word for head, *pol*, may refer to the hollowness of rubber balls, and various vessels depict skulls symbolically placed within

balls (van Bussel 1991:253-255). Other reliefs show rulers kicking the heads of their enemies down stairwells in the same manner they would for a ceremonial ballgame (Miller and Houston 1985:52; Schele and Grube 1990:3-5). While it is unlikely that real human skulls were ever used in the game, the origins of this symbolic comparison could source from the *Popol Vuh*.

Evidence for rulers framing themselves as incarnations of the Hero Twins can be found as early as the Late Formative Period. According to one argument, elites transformed the creation myth from a story about ethnic brotherhood into a celebration of hierarchy between the living representations of the ancestral twins and their worshippers (Freidel and Schele 1988:549). This change was necessary to justify the deepening inequality that came with the flourishing of elites as society stratified. Once they had a new purpose for the *Popol Vuh*, elites propagated it in a variety of ways. They tied themselves into cyclical history through dated inscriptions accompanying stelae portraits (Carter 2014:353; Freidel and Schele 1988:549; Tuszyńska 2019:28). They wore jade accessories representative of the Maya pantheon (Freidel and Schele 1988:552; Halperin et al. 2018:760; Taube 2005:32). And, as we've already discussed, they sponsored and took part in the ballgames at which the Twins so famously excelled.

3.3: Other Symbolic Themes of the Ballcourt

Beyond, or perhaps related to, the appropriation of the *Popol Vuh*, the ballcourt also utilized cosmological concepts such as fertility and the underworld in its symbolism. Specifically, water and obsidian feature prominently in the rituals conducted within the structure. These signify the central role the game held in maintaining the agricultural cycle through sacrifice.

In greater Mesoamerican cosmology, rubber was perceived as the ‘blood of trees’ since the key ingredient in its production is sap. Therefore, rubber served as an alternative to human blood in burnings meant to call forth rain clouds from black smoke (Stone 2002:22; Taube 2017:275). As the balls used in the game were made of rubber, it is highly probable that most ended their use-life in such burnings. The aforementioned link between balls and skulls further suggests their function as substitutes for human offerings.

Outside the Maya Lowlands, one ballcourt style associated with the highlands is completely enclosed by four stone walls. In some of these courts, a pair of aqueducts in the northern corners allowed for water to both enter and exit the playing area (Taube 2017:272). Iconography on one Late Formative ceramic vessel depicted the flooding one would expect in such a ballcourt, proving the system was not just for drainage (Taube 2017:273). The most likely explanation is that these aqueducts ritually transformed the ballcourt into a water basin, perhaps as a celebration of the rainy season or to turn them into temporary wells for irrigation (Taube 2017:273). While the courts of the Maya Lowlands were often open-ended and therefore could not hold water in this manner, these other Mesoamerican examples do support the ballcourt’s connections to water, fertility, and the agricultural cycle.

On the other hand, the ballcourt symbolized the afterlife through obsidian. For example, obsidian signified the underworld based on Maya descriptions of Xibalba as a land filled with sharp shards of volcanic glass jutting from all surfaces (García-Patzán and Rega 2019:31). These obsidian blades often found their way into the ballcourt in two different ways. The first of these rituals may have occurred during or directly after the

court's construction when a cache of sacred materials was buried within the playing alley as part of a dedication ritual, meant to animate the structure. Obsidian artifacts were one of the most common types of objects interred, often in the form of blades (Fox 1996:485). In a sense, the ballcourt was given life through the insertion of the underworld's soil.

The second ritual happened more frequently. Bloodletting and decapitation sometimes followed a game, usually inflicted upon the losing side. While stingray spines or animal bones could do the deed, obsidian was also a common choice in public elite contexts (García-Patzán and Rega 2019:34; Stemp et al. 2014). Therefore, both the act of sacrifice and the material of the blades used link the ballgame with the underworld.

While slightly more tenuous, iconographic depictions of decapitations in ballcourts also indicate the game's connections to the afterlife. On one wall of Chichen Itza's Great Ballcourt, a victorious player holds the severed head of another he defeated (Figure 2). Opposite him kneels the headless body of the losing player, which spurts blood out of the neck that transforms into serpents (García-Patzán and Rega 2019:34). In Mesoamerican cosmology, the snake is the envoy of the underworld since it makes its home beneath the ground. It represents death owing to its lethal venom, yet it also embodies rebirth since it 'renews' itself when it sheds its skin (de la Garza 2002:76). It perfectly encapsulates the ideological purpose of the ballgame ritual: through pain and death, life springs forth, and the cosmological cycle which mortals depend upon is preserved.

3.4: Conclusion

This chapter introduced Mesoamerican ballcourts and the centrality of their games to the Maya cosmology. As this thesis's goal is to examine regional politics through monumental architecture, it is important to understand why we believe ballgames and ritual are important to the political strategies of high-status individuals. Therefore, the next chapter will expand upon the groundwork laid out in this one by providing theories and hypotheses which demonstrate how paramount ballcourts and ballgames were to the political strategies of Maya elites during the Late Classic Period.

Chapter 4: Theory and Method

4.1: Introduction

Chapters 2 and 3 introduced the Maya and delved into the importance of ballcourts during the Classic Period. This chapter introduces theories regarding performance and ritual useful to understanding the ballcourt's value as a political tool for the Maya. I start with the most important theory for this research, performance theory, before considering multiple broader theories about ritual in the archaeological record and their applicability to the Maya context. I then discuss various hypotheses and previous studies about the political aspect of formal architectural ballcourts and the ballgames during the Maya Classic Period.

Following the discussion about theory, I will outline the methods used during the 2022 Ka'kabish field season to gather the data provided in the next chapter. I will describe the decisions made during excavation, mapping, and lab analysis and the rationale behind them.

4.2: Performance Theory

From an outsider's perspective, it might seem appealing to study the ballgame as a form of sport. To be sure, there are certainly some instances where that would be the most accurate way to analyze it. Children playing hip ball in an open field after completing their chores for the day would not be anything other than leisure, and plenty of adults likely also played against each other for recreation. Further, ethnographic and archaeological evidence suggests that onlookers gambled on some games' outcomes, something that only makes sense in a true competitive environment (Rice 2018). None of

these situations are alien to modern audience readers familiar with sports such as basketball or hockey.

However, within the formal architectural ballcourts found in Maya ceremonial centers, the ballgame most closely aligns with ritual performance. It would be disingenuous to call the ballgame 'fake', as it required exceptional athleticism of the players, and the injuries they received were all too real (Buikstra et al. 2004:197-201). However, the outcomes of these grand formal games were likely scripted. As the losing side in these public games sometimes were sacrificed by decapitation, and at times the rulers themselves led teams as an active participant, it would be ludicrous to presume elites left everything to chance and thereby risked their own lives while playing (Andres et al. 2017:1292; Boot 1991:239). Therefore, the most reasonable way to interpret the game played within the formal architectural court is as performative ritual, and thus performance theory is useful to understand the game within broader Maya politics.

Performance theory, as applied to the Classic Maya, relates to Clifford Geertz's concept of a theatre state. Originally coined for use within Bali, theatre states express elite power and authority through dramatizations of their cosmology via public spectacles rather than through traditional Western methods such as warfare or economic manipulation. In other words, it is not that ritual serves the state, but the state that serves ritual (Geertz 1980:13). This radical definition, if left as-is, does not suit the Classic Maya and their multifaceted elite strategies even in the context of ballgames. Iconography and epigraphy suggest that the ballgame served as a metaphor for real warfare, manifesting glory earned on the battlefield in a public setting (Gutierrez 1990). As mentioned previously, some lower-stakes games likely were open to wagers, typically

by elites, which factored into their overall approach to wealth-building (de Montmollin 1997:37; Rice 2018:613). Neither of the above suggests a state which eschewed conflict and capital in favor of costumes. Still, expanding upon Geertz's ideas and granting performance a primary role within Maya state politics is worthwhile.

Performance, as defined by Takeshi Inomata, is "creative, realized, achieved acts which are interpretable, reportable, and repeatable within a domain of cultural intelligibility" (Inomata 2006:806). Performance builds communities, transmits and transforms meaning, and acts upon the world as experienced by its participants. Rather than privilege either 'thoughts' or 'actions', performance theory analyzes how the two combine to define the social relationship between the performers and the audience and construct the identities of all involved (Inomata 2006:807).

Since large public performances gather individuals from a wide variety of backgrounds into one location, they serve as an effective way to negotiate the social contract within complex societies (Inomata 2006:808). While both performers and audience members act together as they all witness the same performance, they notably are not required to think in solidarity. While a public ideology is overtly displayed, each group has its own private agenda which may or may not correspond to that message. Non-elites also are granted the opportunity to resist elite propaganda in various ways, whether subtly by directing their attention elsewhere or openly through mockery or parody (Inomata 2006:808). Performance thus is not merely an expression of dominant ideologies meant to unify disparate individuals into one state; it is a multivocal act which creates the opportunity to reach a compromise which is accepted, or at least tolerated, by all social strata.

A clear example of the above within the Maya context is ritual procession. Processions incorporated members of nearly all ranks within Maya society into the performance, whether they were audience or performer (Miller 1986:80-83; Morton 2012:149). All attendees could join in the festivities through singing, dancing, following the parade, and generally contributing to the soundscape of the event (Healy 1988:27; Sanchez 2007:41). In doing so, they expressed their consent to the message broadcast by the procession, be it the designation of the next-in-line to the throne or the ruler's centrality to maintaining cosmological order (Miller 1986:24; Morton 2012:148). At the same time, the audience could express their disapproval of the advertised ideology. Just as they could generate a soundscape unified by one song or chant, they could transform it into an indecipherable cacophony by turning their attention towards alternatives such as conversations amongst each other or feasting on food and drink sold by nearby vendors (Grimes 1992:69). As audience participation was the primary goal of many of these processions (Sanchez 2007:41), elites needed to overcome mass resistance lest their plans to legitimize their authority crumble. Thus, performance is not merely the imposition of dominant meanings; it is an active process to find the message which best resonates with all parties and thereby forms the values and social relations of the state.

Performance also develops more than high-level ideology; it is fundamental to trust-building between elites and non-elites. Part of a state's strength sources from projecting stability and demonstrating its value in the daily lives of its members. As defined in Blanton and Fargher's (2008) "collective action" theory, the more the public trusts the state, the stronger it becomes (Golden and Scherer 2013:399). On the other hand, most non-elites only regularly interact with the members of their household. The

dilemma the state therefore faces is how to build trust between the ruler, who is an outsider to the household, and their subjects. One viable solution is building trust through major communal events such as feasts (LeCount 1996:286; Robin et al. 2010), public markets, and performances (Golden and Scherer 2013:402). In such activities, people from different groups can subconsciously evaluate each other, judge morality, and demonstrate faith despite mutual unfamiliarity (Golden and Scherer 2013:403). While these irregular events also allowed non-elites to build trust amongst each other, it was imperative for the ruler to come out of the event having gained trust not just with fellow elites but throughout the entire social hierarchy so that they could preserve their political security. While trust-building may not have been the conscious reason for performances, it was still a result of the integration of performances into Maya society and maintained the political community centered around the royal court (Golden and Scherer 2013:405).

When urban populations were smaller, performances could occur more regularly and be attended by a greater proportion of the population. The ruler could reach most of the state's constituents with each ballgame, feast, or procession and thereby form strong relations with all their subjects. However, the larger a population grew, the more restricted these public events became (Looper 2009:228; Lucero 2003:543; Rodríguez 2012:16). Where once the majority of a city's residents could fit within the maximum capacity of a plaza or ballcourt, now only a small percentage could access these performances (Stark and Stoner 2017). Highly visible royal spectacles transformed into secluded affairs, and fewer non-elites received the chance to build trust with the ruler. The limiting of the ruler's accessibility often coincided with the rise of nonroyal nobles and the elevation of secondary centers (Golden and Scherer 2013:408). Even when the

royal court tried to reach everyone in the kingdom, it could never compete with the local nobles who could regularly build trust and loyalty amongst their non-elite neighbors (Golden and Scherer 2013:412).

While it may be slightly too extreme to claim that states legitimize themselves solely through spectacle rather than war or economics, there is plenty to justify performance as a key part of the political strategy of societies such as the Maya polities. Performance constructs communities, negotiates social relations and meaning, and builds trust between its participants.

4.3: Theories about Ritual

Working on the premise that ballgames are performative, and performance is by nature inherently ritualistic, then it follows that ballgames are rituals. Political power sources from economic, ideological, and military power, and in turn political power creates social power (Earle 1997; Mann 1986:2). By granting elites ideological control and the ability to express their economic influence, grand state-sponsored rituals generate political and social power for those who can maintain them. Therefore, it is necessary to spend some time briefly examining various theories regarding the nature of ritual in archaeological contexts.

While the term ‘ritual’ can apply to a wide variety of practices, most incorporate six key qualities that separate them from other activities. They are usually more formal than everyday life, reference a real or imagined past, repeat on regular schedules, broadcast the sacred, present themselves publicly, and follow strict codes of conduct (Bell 1997). Based on iconography, the formal Maya ballgame meets all these criteria in some way or another. The costumes worn were far more elaborate than daily dress

(Tremain 2011a:67); the rulers emulated the heroes of the creation myth (Blainey 2010:271; Fox et al. 1992:177; Taube 1993:66); the game regularly occurred on key dates in the agricultural cycle and was played for an audience; and the outcome was likely already decided before the match began (Andres et al. 2017:1292; Scarborough and Wilcox 1991:143.

There are a few ways to frame the function or purpose of rituals in past societies. One such way is through its structural meaning. Rituals are employed by society's elites to transmit a sponsored message to the public in an easily digestible manner. In this paradigm, both state and religion are relatively stable, and by proxy the rituals which they promote must be static as well (Fogelin 2007:57). Under this philosophy, ritual's greatest asset to the state beyond promoting its legitimacy is to retain cultural knowledge over long spans of time.

An opposite stance perceives ritual as a creative and transformative process. Rather than preserving the core ideology of the state, rituals continuously redefine the fabric of what it means to be a member of the group (Fogelin 2007:58). The symbols and information itself are of little value on their own; what gives them purpose is how agents manipulate them to best accomplish their goals which will change depending on the obstacles society faces at any specific time (Fogelin 2007:59).

A third perspective downplays the social and ideological connotations of ritual in favor of its materiality. Ritual's impact on society was not how it organized power structures and relation networks; it was how it physically manifested them within the material world to eternalize the results of social negotiations (Swenson 2015:335). Without material, the results of rituals would be ephemeral, easily abandoned at any

side's convenience. The objects instead mark the lasting spatial and temporal significance of the performance and thus are historically particular (Swenson 2015:340).

Of these three arguments, I believe the second is the most productive way to analyze the Maya ballgame. The first argument's assumption that states and religion are relatively stable is unreasonable to expect in general and does not accurately describe the history of the Maya. After all, nearly every period within their chronology contains major political strife. The end of the Late Formative Period saw the total collapse of El Mirador, leading to a tumultuous period where some sites fell while others vied to take over the city's place at the top (Callaghan 2013; Estrada-Belli 2011; Zralka et al. 2018). The Early Classic Period witnessed great upheaval after the interference of a foreign military power, leading to a significant transformation in Maya political strategies at some cities halfway through (Houston et al. 2021; Laporte 2003; Stuart 2000). The Late Classic Period's political landscape was ever-changing, with various secondary centers rebelling against traditional site hierarchies while previous political titans stumbled thanks to constant conflicts, all of which ultimately culminated in the Classic Maya Collapse (Carleton et al. 2017; Webster 2000). Finally, the Postclassic Period alternated between periods of high centralization around one city and decentralization into a fragmented array of provinces (Andrews et al. 2003; Paris et al. 2017). Nothing in this recap indicates long-term stability for the Maya polities.

On the other hand, the third theory fails not because of its arguments, but the material reality of the Maya archaeological record. While there are plenty of icons, inscriptions, ethnographic accounts, and architectural structures related to the ballgame, practically no material evidence of the ritual survives. All that remain are a few balls

found within flooded contexts which managed to avoid both rubber's rapid degradation when exposed to heat and the sacrificial burning which marked the end of most balls' use-life (Fox 1996:493; Stone 2002:23). Therefore, a study of the ballgame's materiality is destined to fail; even if counting monuments as material, they do not encompass the full range of physical entities involved. Therefore, the only theoretical framework which can be successfully applied to the Maya ballgame is the second, practice-based approach.

As for the origins of rituals, I find that the most compelling argument believes that they replicated and expanded upon existing domestic ones (Lucero 2003). Personal household rituals, such as dedications and ancestor veneration, have long traditions within their respective societies but do not have the same high-level social significance many archaeologists attribute to ritual in their theories (Lucero 2003:531; Swenson 2015:340). Over time, elites slowly increased the spectacle of their own ritual activities and brought them into public ceremonial contexts, yet the core function and structure of these rituals matched their counterparts, which continued to be practiced by non-elites (Lucero 2003; Robin 2016). In doing so, elites created the kind of solidarity previously discussed in performance: the ritual activities undertaken by individuals of different social standing were almost identical apart from scale, but the practitioners' beliefs did not have to align (Lucero 2003:543; Robin 2016:224). Once again, ritual promotes solidarity in action, but not in thought.

It is highly probable that the formal ballgame came from such a genesis. As discussed earlier, the first evidence of ballgames comes from figurines dating centuries prior to the first formal architectural ballcourts (Blomster and Salazar Chavez 2020:3). It stands to reason that Mesoamericans of all social statuses participated in field ballgames

amongst each other, whether for simple recreation or small-scale appeasement of the supernatural. With the first ballcourts, which took considerable power to harness the labor and resources needed for their construction and maintenance (Chase 2023:362; Halperin et al. 2019:10; Walden et al. 2019:12), the inhabitants of early Mesoamerica created dedicated spaces in which their games were played. These ballcourts also could draw in crowds through their permanence, expanding the scope of their games beyond local amusement (Scarborough and Wilcox 1991; Stark and Stoner 2017). As time passed, these games became massive events with elaborate costumes, feasting, larger playing arenas, higher stakes through human sacrifice, and other modifications that increased the spectacle of their ritual expression. Nonetheless, the elite ballgame resonated with its non-elite audience because it retained the essence of its domestic parallel (Lucero 2003:543; Robin 2016:224).

It is important to remember that non-elites were not simple-minded dupes who unquestioningly accepted whatever the elites peddled to them. Beyond previous discussions of the multivocal nature of performance and the opportunity for individuals to enact resistance, non-elites had intimate familiarity with the so-called ‘dominant ideology’ (Gonlin and Lohse 2007; Robin 2016:227). Archaeologists typically privilege elites in ideology, as royal courts supposedly had esoteric knowledge of the rituals and cosmology that composed the state religion (Bélisle 2019; Inomata 2007:132; Liu 2003). However, if the origins of state-sponsored rituals were in domestic contexts, then is it not the case that elites merely adopted their ‘dominant ideology’ from the masses? Even if elites had aggrandized the original concepts, the common Maya farmer was still intimate enough with the underlying theology to critically assess the message elites imparted in

their rituals (Robin 2016:227). Non-elites were just as intellectually capable as elites regarding this ‘esoteric knowledge’, and thus had the agency to challenge, or even develop, complex state ideologies (Robin 2016:228). Ritual is not just a tool to advance elite power; it was a process in which the social relations and community’s meaning were continuously negotiated by all constituents of the state.

4.4: The Ballcourt and Politics

While the previous sections discussed the importance of performances such as ballgames in constructing and defining social communities, many other factors contributed to the ballcourt’s importance as a political institution in the Maya world. More than a space for the ruler to project their proclaimed divinity to the masses, the ballcourt was an arena for elites to indebt others through their affluence and demonstrate the military might they commanded.

In constructing ballcourts, Maya rulers clearly displayed their ability to organize large quantities of resources for the erection of structures not necessary for subsistence living. Mobilizing the large number of laborers needed to complete the project in a timely manner required more than a big ego. The workers would either need an incentive such as payments in rations that compensated them for the time spent away from their own fields, or they needed to feel compelled to pay back social debts incurred by previous instances of high-status generosity through corvee labor (Abrams et al. 2012; Thompson and Prufer 2021). Once the ballcourt was built, the elites still directed numerous goods towards the hosting of games and festivals at the ballcourt itself (Baron 2006:232; Fox 1996:494). Both the sponsor of the ballcourt’s construction and their descendants who maintained its

relevance needed significant economic power to effectively utilize a ballcourt for ideological and political purposes.

The ritual deposition of dedication caches into ballcourts also allowed elites to transform economic capital into political power. Ballcourts created a social and sacred space within the ceremonial core of the city, and the items found in caches, such as obsidian, jade, and shells were representative of that (Fox 1996:485). However, materials such as these do not appear to be native to the Peten Basin; for cities located there, they likely were acquired from the surrounding coasts and highlands (Freidel et al. 2002; Rathje 1971). By depositing sacred luxury goods within ballcourts, elites expressed not only their far-reaching influence in long-distance trade networks but also their favorable access to resources and labor.

The presence of oversized decorated ceramic vessels near ballcourts indicated their secondary function as sites of feasting (Fox 1996:490). Serving vessels frequently composed the majority of the ceramic assemblages found within ballcourt excavations (Fox 1996:490; Hendon et al. 2009:6; Rice 2018:611; Smith 2003:3), and their association with censers and figurines denotes a ritual function (Fox 1996:491). In many societies, elites have used surplus wealth in feasts to gain favor and power in non-kin relations, situating themselves as providers for the masses (Hayden 1996; Joffe 1998:298). Elite-sponsored feasts created debts that non-elites were pressured to repay that, as these feasts demonstrated elites' access to surplus food and most non-elites were subsistence farmers, typically were social, leading to asymmetrical relationships (Fleisher 2010; Pullen 2016).

Mortal material debts were not the only kind manifested within the ballcourt. As noted previously, ritual sacrifice was an integral part of the ballgame's resolution. Within Mesoamerican cosmology, the gods made significant sacrifices to create the world which humans inhabit, and so it is the responsibility of mortals to in turn sacrifice amongst themselves to pay back this great debt (Koontz 2008:18). The basis of Maya divine kingship as described earlier grants the ruler two manifestations: a human side which can cross between the world's layers and a divine side which emulates the reincarnated Ancestral Hero Twins (Blainey 2010:271; Fox et al. 1992:177; Taube 1993:66; Webster 2000:87). It may be that the ballcourt was a forum which allowed for the negotiation of debts for both sides of the *ajaw*; feasts gave the mortal ruler new debtors to advance their political agenda, while sacrifice temporarily appeased the supernatural entities with whom the divine ruler consorted. This can be compared to Monaghan's (1999) concept of the "sacred covenant", a social contract bindings gods, rulers, and the general population in a complex relationship of obligations.

The ballcourt also functioned as a platform for elites to promote their military successes. It long has been understood that the Maya engaged in warfare with the intention to take captives, some of whom would be sacrificed at a later date through a variety of means, including decapitation, within the ballcourt (Berryman 2007:394; Earley 2023:250; Schele and Miller 1986:210). War-related glyphs accompany iconographic depictions of ballgames and the *Popol Vuh*, leading to the conclusion that ballgames were scripted ceremonial 'battles' (Gutierrez 1990:108; Taladoire and Colsenet 1991:174). While some scholars suggest that the ballgame substituted for real warfare in Maya society (Taladoire and Colsenet 1991:174), the volume of data

indicating violent battles within the Maya heartland suggests this is not the case (Aoyama 2005; Webster 2000).

Rather than function as war itself, this ritualized 'combat' most likely confirmed cross-polity relationships determined by real prior conflicts. Extending beyond microscale politics, the ballgame cemented the organization of macroscale alliances and dominance (Andres et al. 2017; Demarest 2013:375; Santley et al. 1991:4-9; Schele and Miller 1986). For example, ballplayer panels found at Tipan Chen Uitz depict elites from various centers playing ball with each other (Andres et al. 2017). The players are identifiable as rulers due to the terminology used in the associated inscriptions and royal paraphernalia within their costumes and equipment (Andres et al. 2017:1291). These panels match a relatively homogenous design found throughout the Snake Kingdom, such as at Naranjo, which implies they were a marker of vassalage to Calakmul (Andres et al. 2017:1296). If that is the case, then Calakmul may have had a standardized script for its ballgame that broadcast the terms of its dominance, whether gained through conquest or conference, over its new holding. These performances would have seen ruling elites from both cities compete and likely allowed room for improvisation during the game, yet the script ensured that the event always started one way and that Calakmul always came out victorious. There was no uncertainty, nor was the conflict resolved within the ballgame; that had all been determined long before the masses bore witness to their city's new place in the political landscape.

The distribution of ballcourts throughout subregions of the Maya Lowlands also gives insight into how centralized power was across centers. Macroscale studies of Maya provinces, such as those done in Palenque and the Belize River Valley, drew their

conclusions based on the spacing of public architecture between sites (Chase et al. 2014; Liendo Stuardo 2015). An evenly spaced distribution of elaborate ceremonial centers and ballcourts indicates a decentralized political landscape, where intermediate elites competed amongst each other to attract hinterland populations to their performances and gain greater power and influence than their peers commanded (Liendo Stuardo 2015). On the other hand, finding grand ballcourts in relative regional isolation implies that power was highly centralized within the host city.

By adding temporality to these studies, it is possible to map the shifting power relations of a region as local ballcourts and other public architecture rise to prominence and fade into obscurity. The Late Classic Period in particular, due to the abundance of ballcourt constructions dating to this period, provides a profusion of data regarding the fortunes of various sites. One notable hypothesis posits that very late ballcourt constructions built adjacent to palaces may have been organized by emerging local elites who capitalized on rising political instability to secure their own autonomy and legitimize their right to rule (Feinman and Nicholas 2011:103). However, the chaos caused by the fragmentation of elite power alongside reduced resource availability meant minor rulers could not maintain control over the hinterlands as effectively as the divine rulers, contributing to the Classic Maya Collapse (Golden and Scherer 2013:415). Previous research on Lamanai's ballcourt suggests an initial construction date during the 9th or 10th century CE, practically in the middle of the Terminal Classic Period, which matches this pattern of ballcourt construction (Pendergast 1982:533), which raises the possibility that the city was not North-Central Belize's original sociopolitical core.

4.5: Methods

This section covers the decisions made in Operation 23 of the 2022 Ka'kabish Archaeological Research Project field season: the mapping of Structures D-6 and excavation between Structures D-6 and D-7, which collectively comprise the site's only confirmed formal architectural ballcourt (Figure 11). During the survey of Ka'kabish in 2007, archaeologists found two parallel rectangular structures within the site's ceremonial core and labelled them D-6 and D-7. In between these structures was a corridor of relatively flat ground at the center of which rested a large, round, undecorated carved stone. Despite the vegetation masking the masonry of these buildings, the walls which flanked this corridor featured a noticeably gentler slope than the steep inclines of the other three faces of each structure. Based on the presence of all three architectural features that define a ballcourt, Structures D-6 and D-7 were identified as this type of construction. The ballcourt most closely matches Taladoire's Type I ballcourt (1981:140), as each end of the corridor was open and there did not appear to be any benches, which refers to a small ridge at the very bottom of the range structure that some ballcourts have. The undecorated stone was possibly a painted ballcourt marker whose iconography has since been washed away entirely by the elements (Holden 2009:25; Miller and Houston 1985:56; Taladoire 2015:163).

The 2022 field season was originally intended to run from May 23 to June 24, one week less than the project's typical six weeks due to the Belizean government's continued response to the COVID pandemic. However, a multitude of unforeseeable events further interfered with this plan and eventually necessitated another last-minute reduction of the schedule to three weeks: May 23 to June 10. As a result, the plans made

regarding the collection of data needed to not only consider what procedures would best answer the guiding questions behind this research, but also determine what questions took priority and what types of information were the most necessary. Thanks to this archaeological triage, enough data was gathered to construct a meaningful and complex thesis despite the shortened season.

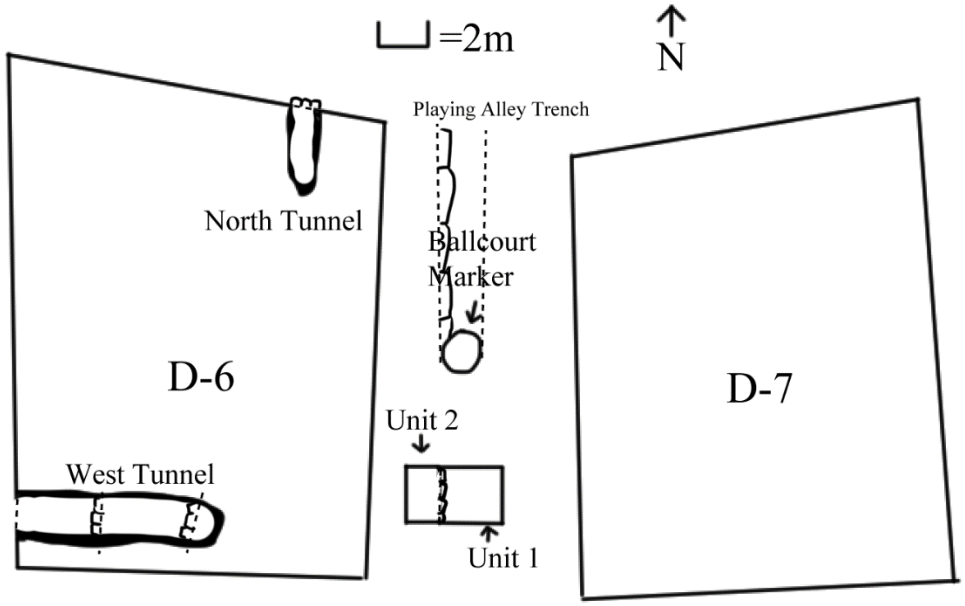

Figure 11: Map of Ka'kabish Ballcourt

4.5.1: Looters' Tunnels

Over the past few decades, *huaqueros* took advantage of the dirt road which bisects Ka'kabish and looted the ballcourt. They unearthed the ballcourt marker and seized the contents of any dedicatory cache which may have been beneath the stone. Further, they carved three tunnels into the ballcourt range structures: two into Structure D-6, one each on its northern and western faces (Figure 12), and one in Structure D-7,

once again at its western side. While some of the more intact cultural material used in the buildings' construction maybe have been removed by the looters as they dug, the architecture and smaller ceramic sherds exposed by their tunneling remained (Figure 12). By cleaning and mapping these tunnels, we could compare the construction phases of these buildings to those of the excavation units placed into the ballcourt's playing alley using datum-standardized elevations taken by Dr. Helen Haines and Tamara Moore. Ceramics found in the process would contribute to generating information regarding the ballcourt's overall construction history. With the tight schedule we had, taking advantage of these tunnels and the small diagnostic sherds that still remained was more efficient than digging new trenches.

Sometime in the past two decades, a major storm toppled a large mahogany tree that grew atop Structure D-7. The tree, which also was above the looters' tunnel, caused considerable damage to the center of the structure, as it collapsed and fell into the looters' tunnel. Due to the extensive damage, the time required to stabilize the structure would take far too long with our limited schedule, so we excluded Structure D-7 from the operation and focused our attention on the two tunnels in Structure D-6. After cleaning the tunnel walls with trowels and brushes, the stratigraphy of the walls was deemed mostly identical. This meant only one side had to be mapped for each tunnel, so the teams chose the wall with the best visibility of the architecture. In addition to the profile maps, a map was made of the visible cut-stone wall running east-west across the top of the north looters' tunnel. This stone wall formed part of the north side of Structure D-6-1st.

Figure 12: Western D-6 Looter's Tunnel. (Photo by author.)

Mapping the tunnels took priority for the first week of the field season, as Dr. Helen Haines planned to depart from Belize after that and her expertise was required for both the elevations and training of students. We employed a full artifact collection strategy within the tunnels, as further limiting an already shallow pool of available ceramics seemed inappropriate. Construction sequences were numbered sequentially, with D-6-1st referring to the most recent phase.

4.5.2: Excavation Units in the Playing Alley

While the tunnels provided insight into Structure D-6's architecture and construction history, to fully understand the construction of the area we placed excavation units inside the ballcourt's playing alley. These units provided *in situ* ceramics to chronologically situate the plaster floors found in the playing alley and were correlated to architectural features within the range structure. When searching for the ballcourt marker, looters dug a shallow trench through the playing alley from its northern edge to the halfway point. Examining the path's western side revealed a wall of cut stones. It was unclear it was part of the original construction or created by the looters, so the first 2x2 m excavation unit was placed to test their authenticity. The unit was set a meter south of the ballcourt marker and extended half a meter beyond where the line of stones would have continued.

Workers dug this first unit down to bedrock to uncover the entirety of the construction history in the playing alley. We used the natural and cultural changes in the stratigraphy to demarcate levels which, whether in isolation or combined with others, could define phases of that construction history. Excavations were conducted using rockhammers, shovels, and trowels depending on the composition of the matrices. Only

ceramics the size of a quarter or larger were collected, as anything smaller held little to no potential for dating. Other materials collected included lithics, obsidian, bone, and shell. All substrate from the level which contained human remains was filtered through a screen with 0.6 cm squares. Levels were divided both by changes in soil and distinct architectural changes.

Once the first excavation unit reached bedrock, a second unit was created to the west of Unit 1. This unit was excavated along the uppermost plaster surface westwards towards Structure D-6. The goal was to find the wall associated with the final construction phase of the playing alley. This second unit was not formally measured prior to excavation as the nature of this extension was prospective. After excavation was completed, Unit 2 measured 2 m north-south and extended 1.5 m west.

The western and eastern faces of Unit 1 were unique enough to require their own maps, while the north and south showed little difference between each other. We chose to map the southern wall profile because the division between layers was clearer than the north once both were cleaned. Additionally, three maps were made for Unit 2. A profile map of its southern wall continued the map from Unit 1, while a profile map of the western wall and a floor plan provided a depiction of the slumped wall from multiple angles.

4.5.3: Lab Work

Artifacts were processed on days when inclement weather prevented fieldwork. During these lab days, the artifacts were washed in cool water, dried, counted, and collectively photographed before being stored until analyses could be completed. Dr. Jennifer Newton and her students conducted a preliminary analysis of the human

remains. Dr. Helen R. Haines and Dr. Kerry Sagebiel conducted analyses of the lithics and ceramics respectively in October 2022.

4.6: Conclusion

This chapter provided insight into the important political role the ballcourt played in Mesoamerica and offered competing archaeological perspectives about the nature of performance and ritual in human society. While this thesis aligned itself with certain camps in these debates, the arguments chosen were by no means universally 'correct' or agreed upon. Rather, the theoretical frameworks followed were chosen because they were most applicable to the cultural context. Further, this chapter presented the methods used to collect and record the data which constitutes the backbone of this thesis.

Chapter 5: Data

5.1: Introduction

This chapter presents the data gathered during the three-week long 2022 Ka'kabish Archaeological Research Project field season and contextualized in the lab the following autumn. This data is vital to establishing the construction history of the ballcourt and dating its construction phases, and thus forms the backbone of the comparative analysis provided in the next chapter. The first part of this chapter summarizes the excavation and mapping of the two looters' tunnels and the playing alley, describing each layer and the kinds of material culture recovered in each. The second section defines the characteristics of the artifactual assemblage by type (i.e., ceramic, lithic, obsidian), calls attention to notable representatives from those bulks, and briefly reveals their value in terms of chronology and function. In-depth discussion and analysis of this data is reserved for the next chapter.

Structures D-6 and D-7, alongside the space between them, constitute the Ka'kabish ballcourt. Both structures are practically equivalent in size with an area of roughly 15x20 m each, while the playing alley measures eight meters wide. It should be noted that the structures' measurements are slightly inflated due to the accumulation of soil and debris on them in the centuries since their abandonment, so their exact size and shape cannot be confirmed without further excavation. Structure D-7 was not investigated due to the instability of the building caused by looting and natural disasters, but it is presumed that the visible structure should coincide with D-6's final construction phases due to the need for a functional ballcourt to have two parallel range structures. The

presence of a ballcourt marker further suggests that D-7 was either built or modified contemporaneously with D-6 to form a ballcourt.

5.2: Investigation of Looters' Tunnels

The tunnel on the northern face of Structure D-6 begins about 2.4 m from the building's eastern edge, its entrance is 0.8 m wide, and it extends 1.6 m into the building, while the tunnel carved into the western wall of Structure D-6 was placed 0.7 m north of the southwestern corner, its entrance is 1.5 m wide, and it extends 4.4 m into the building (Figure 11).

The map drawn of Structure D-6's west tunnel reveals two buildings, identified as Structure D-6-1st and D-6-2nd (see Figures 12 and 13). Most of the tunnels' matrix consists of white mortar mixed with large core fill (see Loten and Pendergast 1984 for definition of terms). This fill was primarily composed of large boulders that ranged from 30 to 60 cm in diameter alongside additions of ceramic sherds and lithic flakes interspersed between the rocks. However, in the spaces below the plaster surfaces within the tunnels, builders chose progressively smaller stones to form a ballast layer (sensu Loten and Pendergast 1984) that could support plaster without the possibility of it sinking into gaps within the rocks, implying these surfaces acted as floors. At the bottom of these tunnels was soft dark brown soil with no rocky inclusions. The final exterior layer on the structure consists of collapse from when the top of D-6 crumbled and fell to the ground due to erosion, gravity, and centuries of disuse (sensu Loten and Pendergast 1984).

The northern tunnel contained a single plaster surface situated roughly 25 cm above the bottom of the tunnel (Figure 13). This surface matched the elevation of the topmost visible cut-stone wall course in Structure D-6-1st within the western tunnel. This

plaster surface supported a cut-stone wall that likely formed the north face of the final construction phase. The surface appears to have been modified some time after its construction, extending it at least 1.6 m north based on degraded plaster found on the same level in the collapse.

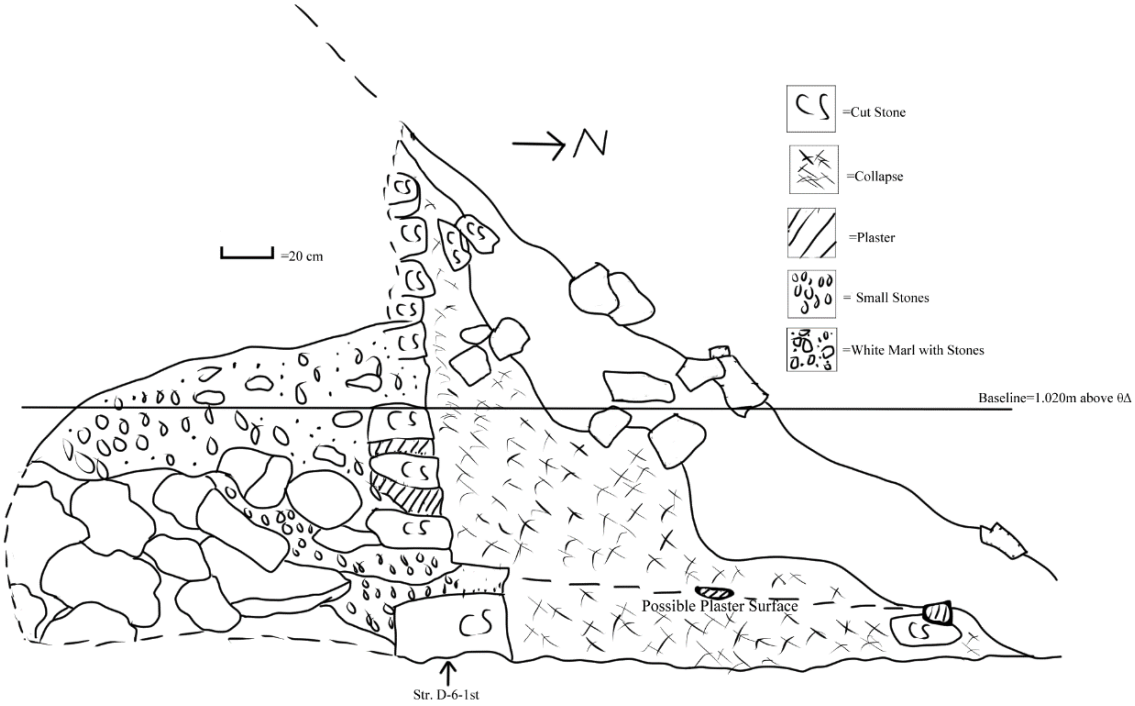

Figure 13: D-6 North Looter's Tunnel, West Profile.

In the western tunnel, a series of four plaster surfaces and low stone steps were found in close proximity to each other (Figure 14). It is possible that this represents a staircase, but the distance between each ‘step’ more closely resembles substructure surfaces. Further inside the tunnel, a cut-stone wall four courses high was encountered. A series of plaster floors associated with the wall suggests that the structured may have been modified twice.

Based on this evidence it is likely that there are at least two construction episodes in Structure D-6. These two are labelled Structure D-6-1st and Structure D-6-2nd, with the former being the most recent construction episode. Structure D-6-1st is visible in both the western and northern looters' tunnels, while Structure D-6-2nd can only be observed in the western tunnel via the cut-stone wall and its immediate surroundings.

In terms of material culture, the northern tunnel was almost completely barren, while the western tunnel contained larger pieces of ceramic in the building fill near the cut-stone wall of D-6-2nd. The recovered sherds from this tunnel, which included two painted pieces from separate vessels, all date to the Early Classic Period. Additionally, eight chert lithics, including a large hammerstone, and two pieces of red painted stucco also were recovered from the building fill. As Maya ceremonial structures were often painted red (Cervini-Silva et al. 2018:563; Goodall et al. 2007:675; Luisa Vásquez de Ágredos Pascual and Campos 2017:93; Straulino et al. 2013:6), these stucco chunks may have either decorated the outside of Structure D-6-2nd or another building before being interred within the fill of Structure D-6-1st.

Based on the data above, we can infer that Structure D-6-1st, which forms part of the ballcourt, was built during the Early Classic Period. While it cannot be determined if Structure D-6-2nd was part of an earlier ballcourt without further excavation, it is likely that another building once occupied this space. This earlier structure may have been torn down and refurbished into construction fill for the ballcourt's range structures, as evidenced by the red stucco, though it is also plausible that the chunk came from elsewhere on the site. More discussion on this topic will be provided in the next chapter.

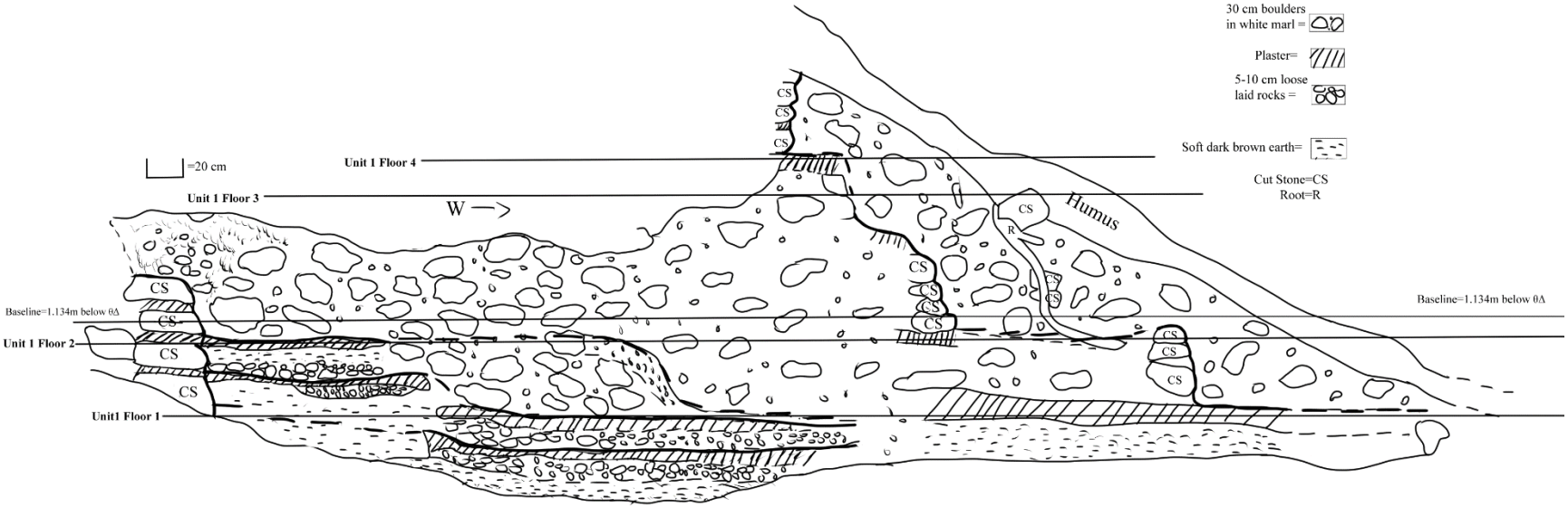

Figure 14: Structure D-6 Western Looter's Tunnel, West Profile

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It would be difficult to make a convincing argument regarding the construction history of the ballcourt using only the handful of ceramic sherds recovered from the looters' tunnels. However, additional information regarding the chronology of these buildings can be gained through comparison of material culture recovered from the units placed in the playing alley, as detailed below.

5.3: Excavation of the Playing Alley

As previously explained, Unit 1 was placed roughly a meter south of the ballcourt marker. The location was placed in an area undisturbed by looting and was chosen in order to verify the authenticity of a possible cut-stone wall seen in a tunnel dug by looters in the playing alley. The goal of Unit 1 was to establish the construction history of the ballcourt's location by digging all the way to bedrock and collecting dateable material such as ceramics and carbon to chronologically contextualize the cultural layers exposed by excavation. Once Unit 1 was fully explored, it was partially expanded westward as Unit 2 to determine how the playing alley floor connected to Structure D-6-1st (Figure 15).

The playing alley units revealed three, perhaps four, cultural or natural layers which were excavated in nine levels distinguished by either visible changes in the soil matrix or unveiling of new architectural features. What follows is a description of each level, grouped based on their associated layer, and the types of artifacts found within. Unit 2 contained no material culture, so all references to ceramics, lithics, or other artifacts correspond to Unit 1.

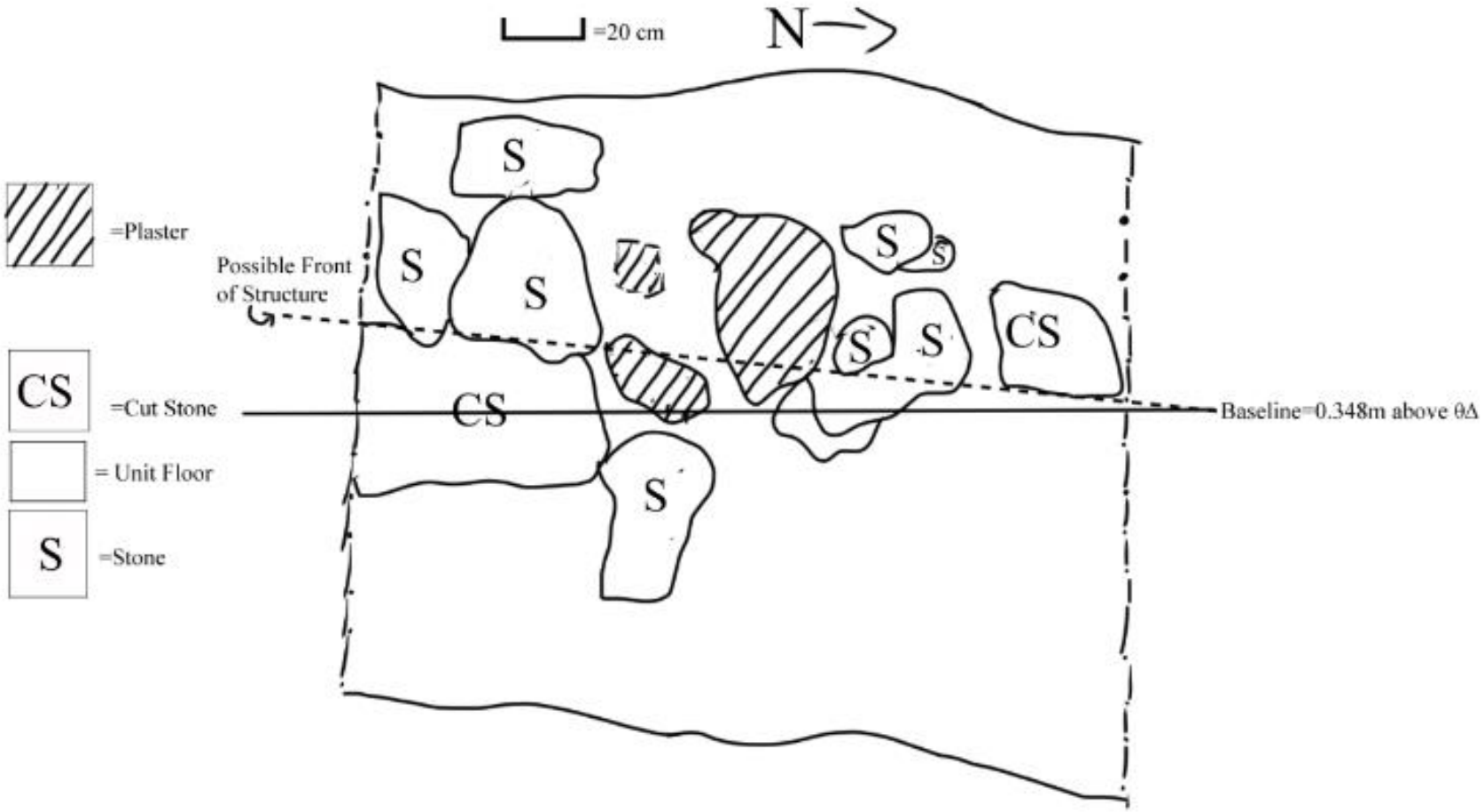

Figure 15: Unit 2 Plan Map

Layer 1: Humus

Level 1

Level 1 consisted of soft dark brown soil and vegetation typical of traditional rainforest humus. The level was closed roughly 5 cm below the surface due to a change in the matrix as well as to separate any ephemeral human activities from each other. This level contained a handful of ceramic sherds and lithic flakes in Unit 1, though they all were too weathered to make any meaningful observations about them (see Tables 3 through 5 in Section 4.4: Artifactual Analysis section). One notable find was a large carved ring-shaped stone roughly the size of a human fist on the surface of this level. This and the following level were the only ones also exposed in Unit 2, though no artifacts were recovered from there.

Level 2

Level 2 is mostly a continuation of the matrix defined in Level 1, though with the addition of larger rocks. At the bottom of this level were small pockets of degraded plaster which may be the remnants of a plaster floor (Figure 16). The level closed roughly 7 cm after it opened due to a change in soil color and reduction of rock size. No cultural material was recovered from this level.

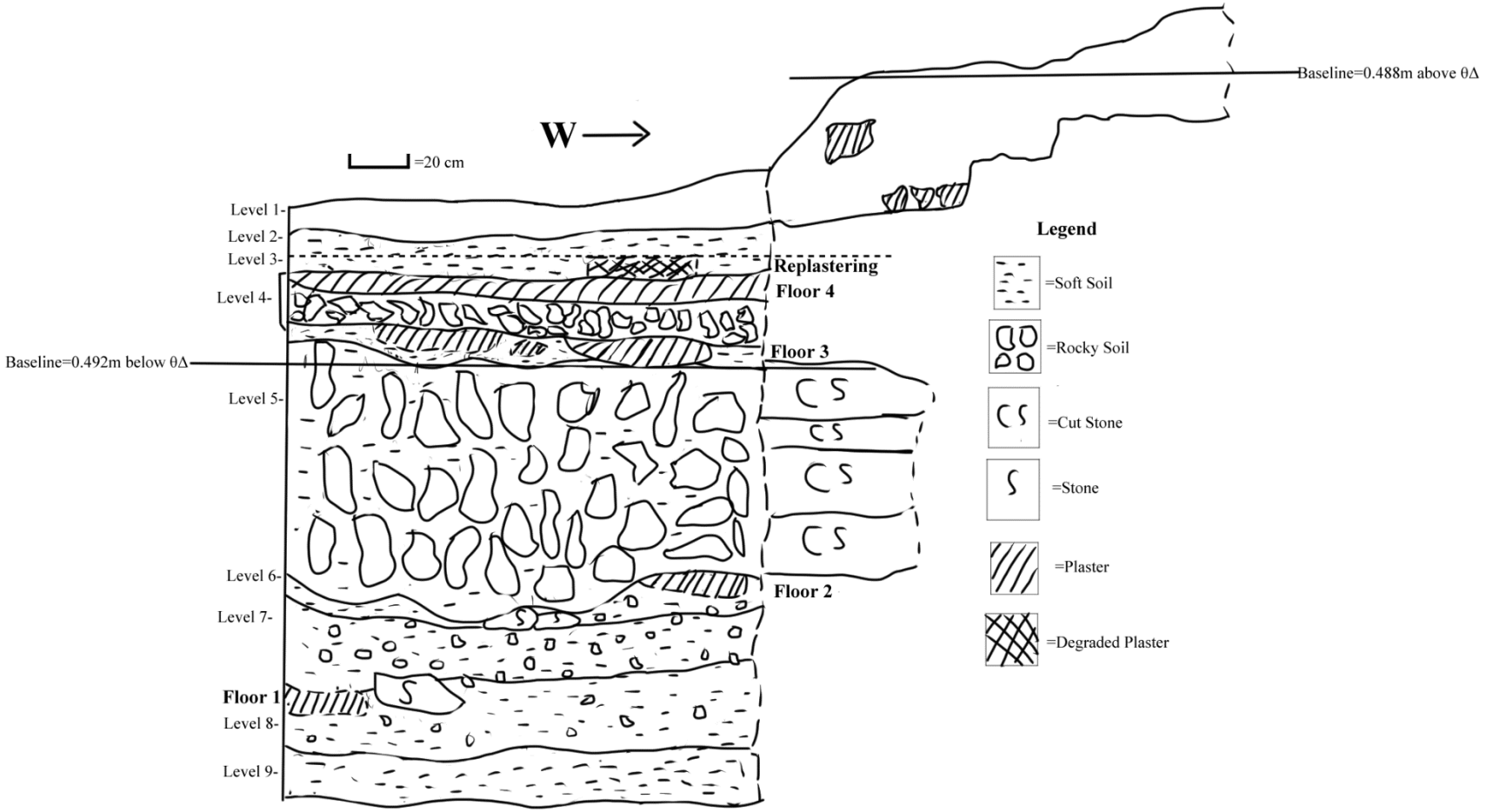

Figure 16: Units 1 and 2 Southern Profile

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Layer Conclusion

The layer constitutes the natural rainforest humus found throughout North-Central Belize. The layer's chronology starts with the abandonment and decay of the Ka'kabish ballcourt and ends in the present day. The smattering of artifacts in this layer does indicate that residents of Ka'kabish did occasionally visit the area for various reasons after the ballcourt's collapse, but for what purpose is unknown.

Layer 2: Plaster Surface and Large Fill Ballast

Level 3

Level 3 was composed of light brown soil full of small pebbles, forming a potential ballast to the previous level's plaster. This level appeared to be a continuation of the degraded plaster surface seen at the very bottom edge of Level 2, and therefore marked a new cultural layer distinct from the prior natural Layer 1. The level was quickly closed after 5 cm of excavation once a clearer, more intact plaster surface was exposed.

Level 4

Level 4 was a 10 cm thick continuous plaster surface and its ballast. Excavation revealed a higher quantity of ceramic sherds in this level than the previous three levels combined. All 30 sherds date to the Early Classic Period, and most belong to the Aguila Orange type. The level was closed upon a matrix shift towards a small aggregate ballast (Loten and Pendergast 1984: s.v. "aggregate").

Level 5

Level 5 consisted of a core fill that mixed rocks of 10-25 cm diameters with light brown soil. A cut-stone wall four courses high extended north-south along the level's western profile (Figures 16, 17, and 18), though its origins are contemporaneous with the

following level. This wall displays similar construction techniques as the exposed wall seen in D-6-2nd, and the elevation of Floor 2 in Unit 1 matches the elevation of the uppermost floor in D-6-2nd (Figures 14 and 16); therefore, it is likely these belong to the same construction phase. However, the wall in Unit 1 does not match the elevations of the line of cut-stones in the trench dug in the northern half of the playing alley, so there likely is no connection between them.

Figure 17: Playing Alley Unit 1, looking south. Cut-stone wall visible to right. (Photo by author.)

This was the thickest level at roughly 80 cm between opening and closing precisely because the core level needed to cover this previously built wall (Figures 16 and 18). All 38 ceramic sherds recovered belonged to the Early Classic Period, with Aguila Orange once more being the most common type. Of the 33 lithic flakes, the most notable

find was a microblade stem mixed into the ballast. The level was closed upon the uncovering of another plaster surface.

Layer Conclusion

This layer is best defined as a single construction episode during which the previous building occupying this space was filled over by the core fill layer to make room for a newly built ballcourt. This fill thereby raised the elevation of the area prior to the plastering of a new playing alley surface as seen in Level 4; Level 3 is potentially a minor replastering of the same construction phase.

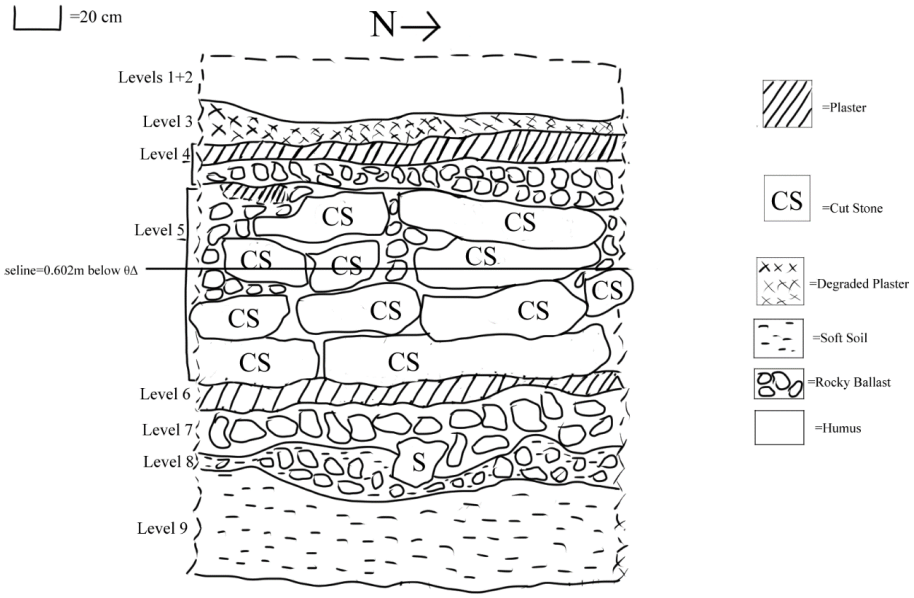

Figure 18: Unit 1 Western Profile.

Layer 3: Plaster Surface and Small Aggregate Ballast

Level 6

Level 6 refers to a slightly uneven 10 cm thick white plaster surface which plausibly functioned as a floor prior to its erosion. As just discussed, this level likely is also when the cut-stone wall covered by Level 5 was built. However, it is unknown

whether the floor slightly predates the wall and continues beneath it, or if it was a simultaneous construction always intended to support it (Figure 18). A total of six sherds belong to this level, with Aguila Orange once more as the most common type. This level was closed upon a matrix shift to fine, greyish-brown sediment with a small aggregate ballast.

Level 7

Level 7 consists of ballast composed of fine, greyish-brown soil mixed with small rocks of 5-10 cm diameter, though towards the western profile the matrix shifts towards a small aggregate of rocks to support the floor and cut-stone wall found in that section of the unit. This level contains the second-highest quantity of ceramics at 123 sherds, with nearly a third of them belonging to the Early Classic Period's Aguila Orange type. Nonetheless, all the identifiable ceramics source to the Early Classic Period, much like the other levels. A multitude of lithics and the broken tip of a stalagmite were also found in this level. The level was roughly 20 cm thick and closed due to the diminishing presence of rocks in the matrix and discovery of human teeth.

Level 8

Level 8's soil matrix was like Level 7's but with more loosely packed rocks and a lighter grey soil color. This level contained the highest proportion of ceramics at 130, the bulk of which were Aguila Orange or Sierra Red. The level also held the most chert lithics, some obsidian fragments, pieces of *Strombidae* shells, and scattered human remains including two full sets of teeth of which one incisor had a black stone inlay on its mesial side. This stone suggests that at least one of the human remains belonged to a Classic Period high-status male, as Maya dental inlays were typically associated with individuals of that description before inlays fell out of favor and other dental

modifications became common among all social ranks during the Postclassic Period (Serafin et al. 2021:126; Tiesler et al. 2017:280). However, as a handful of Maya cities such as Caracol granted all residents access to dental modifications and luxuries that were typically limited to high-status individuals elsewhere in the Lowlands, it is possible this tooth belongs to someone matching a different profile (Chase et al. 2020:357). This level was roughly 30 cm thick and closed due to a shift in soil matrix from small aggregate ballast to very few rocks.

Level 9

The final level was made of soft, light brown soil with very few small rocks. Compared to Layer 3's prior levels, little cultural material was recovered. However, the dominant associated ceramic type was Sierra Red rather than the Aguila Orange found in the rest of the unit. This higher proportion, considered alongside the possibility that the few definitively Early Classic sherds found could be displaced from their original context by natural processes, may indicate that this earliest level represents a Late Formative occupation, but the sherds are generally too eroded and the necessary factors for displacement too speculative to make this claim definitively. This level also was roughly 30 cm thick and closed upon reaching bedrock.

Layer Conclusion

Levels 6 through 8 represent a separate, earlier construction from Layer 2. It is not yet clear what specific purpose this building served, but it plausibly can be linked to some ceremonial function due to the unit's central location within Group D of the ceremonial core, the layer's close horizontal and vertical proximity to the Middle Formative burials and caches which mark the epicenter of the site's ritual founding (Lockett-Harris 2016), and the interment of possibly high-status human remains and obsidian within this layer.

Further excavation is required to determine if the cut-stone wall atop Level 6 was built roughly contemporaneously or subsequently to that floor. Level 9 is grouped in this layer due to the minor presence of Aguila Orange, yet it could be considered its own layer with further excavations.

5.3.1: Construction Phase Observations

There are at least two definitive construction phases in the area now occupied by the ballcourt, labelled D-6-1st and D-6-2nd. The decision to label these phases ordinally is because there may be earlier construction phases which remain unrevealed due to the limitations of this year's field season. Each of these phases include minor remodelling events based on the multiple parallel plaster surfaces found alongside each cut-stone wall, but these are not significant enough to distinguish as separate construction episodes.

What is significant for this thesis is that both structures date to the Early Classic Period based on ceramic evidence found within them. Based on comparing the datum-standardized elevations, Structure D-6-2nd's construction best corresponds to Layers 2 and 3 within Unit 1 of the playing alley. The plaster surface sandwiched between the second and third course of the interior cut-stone wall in the western tunnel is at the same depth as the bottom of the cut-stone wall seen in Layer 5 of Unit 1's western profile, and part of the potential staircase mentioned in the western tunnel is roughly equal in elevation to Level 4 of Unit 1, as seen by comparing the elevations provided by Figures 13 and 15. Based on the obsidian and human remains interred within Layer 3, this construction may have served a ritual function which would indicate the importance of this area for ceremonial purposes regardless of whether this earlier building was part of a ballcourt.

Using the same techniques to compare Structure D-6-1st with the playing alley, this construction episode best relates to Layers 1 and 2 in Unit 1. The very bottom of the Floor 4 in the western tunnel once again aligns with the top of the cut-stone wall in Unit 1, which in this case likely makes it cotemporaneous with the large aggregate ballast that composes Layer 3. Meanwhile, the highest plaster surface in the tunnel matches the elevation of the plaster surface which signified the start of Layer 2 in Unit 1 and composes the floor of Unit 2. Structure D-6-1st represents the formal architectural ballcourt formed by the combination of Structure D-6, Structure D-7, and the playing alley.

Based on the above data, the most plausible construction history for this section of Ka'kabish sees an Early Classic structure of indeterminate function, D-6-2nd, built first followed by an Early Classic ballcourt, D-6-1st. More detailed interpretations will be provided in the following chapter.

5.4: Artifactual Analysis

Artifact analysis in the lab occurred in late October 2022 during a post-season session conducted by Dr. Helen Haines and Dr. Kerry Sagebiel. While graduate students cleaned and sorted the artifacts during the summer on days where excavation was not feasible, the truncated field season prevented initial analysis for most material types due to both time constraints and the absence of the project's material specialists. Dr. Kerry Sagebiel, as the project's expert ceramicist, handled all the sherds unearthed from the ballcourt, while Dr. Helen Haines recorded the data for the lithics due to her specialization in this regard. Photos were taken of exceptional finds, but most are only represented by textual records of their characteristics.

The sole exception to the above were the human remains, which underwent preliminary analyses in the field by Dr. Jennifer Newton, the project's bioarchaeologist. She identified the skeletal remains unearthed and the number of individuals they represented. Detailed analysis of this find has not been conducted at the time of this writing.

5.4.1: Ceramics

Most of the ceramics recovered from the looters' tunnels and playing alley were small, fragmented sherds that could not be reconstructed with any other members of their assemblage. Between this and their haphazard distribution within the construction fill, these sherds are best described as refuse tossed into the aggregate ballast rather than as caches or *in situ* remnants of cooking or storage.

Table 2: Number of Ceramics by Layer and Type in Ballcourt.

Layer	**Level**	**Aguila Orange**	**Sierra Red**	**Balanza Black**	**Joventud Red**	**Other (Type #<10)**	**Eroded**	**Total**
1	1	0	0	0	0	0	3	3
	2	0	0	0	0	0	0	0
2	3	1	0	0	0	1	6	8
	4	7	0	3	3	9	7	30
	5	13	4	3	4	6	8	38
3	6	2	0	0	0	2	2	6
	7	35	12	2	3	28	43	123
	8	42	31	3	6	33	15	130
	9	3	11	0	2	4	31	51
West Tunnel		2	4	0	1	3	5	15
Total		110	64	11	19	69	137	411

Table 3: Number of Ceramics by Layer and Time Period in Unit 1.

Layer	Level	Middle Formative	Late Formative	Terminal Formative	Early Classic	Indeterminate	Total
1	1	0	0	0	0	3	3
	2	0	0	0	0	0	0
2	3	0	0	1	1	6	8
	4	4	0	1	21	4	30
	5	5	6	0	21	6	38
3	6	0	0	0	4	2	6
	7	3	19	1	62	38	123
	8	7	45	2	71	5	130
	9	3	18	0	6	24	51
Total		22	88	4	185	88	387

Most of the ceramics recovered belong to the levels in Layer 3 (Table 2). Aguila Orange was the most common identifiable ceramic type in the playing alley units, with Sierra Red as the next most prevalent (Table 3). As all the layers contain some number of ceramics which belong to the Early Classic Period, this indicates that both construction phases belong to this time, though likely from different years within that Period. Within Level 9 were some highly eroded ceramics which may have belonged to the Late Formative Period; however, the nature of their preservation means such claims cannot be made with absolute surety. It can be argued that this ballcourt dates to the Early Classic Period due to the total lack of Late Classic or Postclassic sherds within the assemblage.

5.4.2: Lithics

The lithics uncovered from the Structure D-6 looters' tunnels belonged solely to the chipped stone tools category, while both chipped and ground stone fragments were recovered from the playing alley. The most numerous type of lithic artifact was chert debitage, with most belonging to the earlier construction phase (Table 4). Only three

ground stone tools were discovered through excavation, all of which were dolomite mano fragments. The overwhelming majority of flakes and shatter seen in this assemblage, alongside the lack of clustering, once more suggests that most of these lithics were pieces of refuse included in the aggregate cores and ballasts beneath each plaster surface rather than *in situ* products of tool production.

Table 4: Lithics by Natural/Cultural Layer, Excavation Level, and Unit.

Layer	Level	Unit	Type	Material	Total
1	1	1	Debitage	Chert	5
2	3	1	Debitage	Chert	2
	4	1	Debitage	Chert	17
	4	1	Microblade Stem	Chert	1
	5	1	Debitage	Chert	13
3	6	1	Debitage	Chert	6
	7	1	Debitage	Chert	26
	7	1	Mano	Dolomite	2
	7	1	Disk	Plaster/limestone	1
	7	1	Stalagmite		1
	8	1	Debitage	Chert	51
	8	1	Biface	Chert	1
	8	1	Mano	Dolomite	1
	8	1	Flake	Obsidian	4
	8	1	Blade Fragment	Obsidian	5
Str. D-6-1st	West Tunnel		Debitage	Chert	3
Str. D-6-2nd	West Tunnel		Hammerstone	Chert	1
	West Tunnel		Debitage	Chert	7

There were only three identifiable chipped stone lithic tools, or fragments of such, found in the ballcourt. The first was a microblade stem from Level 4 of Unit 1. The second was a chert biface, which had its tip broken off, from Level 8 of Unit 1. The third was a chert hammerstone recovered from the western looters' tunnel of Structure D-6. Additionally, three ground stone mano fragments were recovered, two from Level 7 and one from Level 8.

Alongside these more typical Maya lithics were two pieces from Layer 3 which could not initially be identified in the field. During the autumn lab season, the first of these abnormal lithics was determined to be the end of a stalagmite/stalactite while the latter may either be a soft limestone disk or a piece of plaster. Their uniqueness within the assemblage could imply intentional deposition compared to the refuse they accompanied, though this cannot be certain.

5.4.3: Obsidian and Human Remains

Only Layer 3 of Unit 1 contained obsidian artifacts and/or human remains. Excavators recovered in total five blade fragments and four flakes, all of which were small. Two full sets of human teeth, including one incisor with a black stone inlay, were scattered in a short vertical range within the layer. Alongside these teeth were a few skull fragments and one metatarsal.

Like the ceramics and lithics above, these did not follow any particular horizontal arrangement, but their vertical concentration in a narrow band within Layer 3 once again suggests an intended ritual deposit.

5.4: Conclusion

The area of Ka'kabish now occupied by the ballcourt originally housed an earlier structure built during the Early Classic Period, D-6-2nd. This structure may represent a ballcourt, but this cannot be confirmed until further excavation is done. Not long after this earlier phase, the structure was replaced by Structure D-6-1st, and presumably the visible portions of Structure D-7, to create the ballcourt seen today. This new construction episode still occurred during the Early Classic Period based on the types of

ceramics found within the associated cultural layers, confirming that the Ka'kabish ballcourt was built and used during this period. Most of the ceramics and lithics found during the excavation represent refuse used during the construction as part of the aggregate fill. However, some of the artifacts may have also been a ritual deposition that corresponded to the human teeth found in Layer 3. Further analysis about the chronology of the ballcourt, as well as its function in the politics of Ka'kabish and Lamanai, is presented in the next chapter.

Chapter 6: Analysis and Discussion

6.1: Introduction

Earlier in this thesis, I presented various theories regarding performance, power, and ritual which are applicable when attempting to understand the role of ballcourts in the political strategies of Classic Maya elites. In the previous chapter, I presented the data acquired through the 2022 field season excavation of the primary subject of my study, the Ka'kabish ballcourt comprised of Structures D-6 and D-7. This chapter is dedicated to analyzing this data through the lens of said theories to address the overarching question driving this research: What does the Ka'kabish ballcourt tell us about the site's role in the political landscape of Classic Maya North-Central Belize?

This question can be successfully answered by exploring two topics. The first is to politically contextualize the chronology of the ballcourt. While the ceramic analysis from the previous chapter established that the Ka'kabish ballcourt dates to the Early Classic Period, that observation only has meaning when compared to the site's overall construction activity and the region's political history. Explaining the importance of this Early Classic date informs this chapter's second main topic, which is the nature of the relationship between Ka'kabish and Lamanai. As two major Maya cities with roughly contemporaneous occupation histories and little physical distance separating them, there is no doubt that their fates were intertwined. However, the details of their political connection have been unclear; past interpretations of this subject have traditionally been speculative due to the dearth of conclusive evidence to draw from (Haines 2011; Haines et al. 2016). While the Ka'kabish ballcourt alone cannot expose all the facts behind this

ancient political network, the new information it provides sheds some light upon the situation which makes certain explanations more plausible than others.

Prior discussions considered the possibility that Ka'kabish and Lamanai were so significantly integrated with each other that they essentially acted as a single polity (Haines 2008:275). This is not to say that they formed an ancient megapolis, but rather that at one point they cooperatively appealed to the various inhabitants of the region by offering different services, and as a result would have been treated as a single entity in the greater Maya political world. Under this framework, the Ka'kabish core acted as the political and ritual center of what is now North-Central Belize whilst Lamanai served as the mercantile hub (Elizabeth Graham, personal communication to Helen Haines, 2012). This hypothesis was developed under the assumption that Ka'kabish's ballcourt dated to the Early Classic Period. As discussed in the previous chapter, the data obtained through excavation proved that the ballcourt did date to the Early Classic Period. While this revelation allows for further exploration of this model to assess its accuracy, in the interest of avoiding bias I will also examine other plausible interpretations bolstered by the new data.

6.2: The Chronology of D-6 Contextualized

The Early Classic origin of the Ka'kabish ballcourt is intriguing because of how anomalous it is. As mentioned in Chapter 3, the majority of Maya states constructed their ballcourts during the Late Formative or Late Classic Periods, but not in-between (Healy 1992; Joyce Christie 2021; Rice 2018; Scarborough et al. 1982; Schultz et al. 1994). Furthermore, those who did build them during the Late Formative Period generally did not make modifications to their design during the Early Classic Period as well. Therefore,

it is reasonable to claim that the Early Classic Period represents a hiatus in ballcourt construction in much of the Maya heartland, even if elites may have continued to participate in ballgames in fields or Formative Period ballcourts.

One possible explanation proposed is that this absence of ballcourt activity is the result of Teotihuacan's influence on the Maya during the Early Classic Period (Taladoire 2001: 109). Teotihuacan notably contains no formal architectural ballcourt despite the structure's ubiquity throughout Mesoamerica, and the city's status as the hegemonic power of this point in Mesoamerican history led to numerous elites emulating their political strategies to legitimize their authority (Borowicz 2003; Clayton 2005; Sharer 2003; Stuart 2000). Given the Teotihuacan *entrada* into Tikal occurs near the beginning of the Early Classic Period, and the return of widespread ballcourt construction activity throughout the Maya Lowlands starts soon after Teotihuacan's decline at the end of the Early Classic Period, this would be a reasonable argument to make for those Maya cities who allied themselves with Tikal and, by proxy, Teotihuacan. In such a hypothesis, the unusual date for Ka'kabish's ballcourt could be justified by how isolated Maya cities in what is now Belize were from Teotihuacan's general influence due to the significant physical distance between the region and the Peten Basin. If Teotihuacan's influence was weak in Belize, then one would expect elites from the region to maintain traditional Maya practices. However, such an explanation falters when taking into consideration the defining political conflict of the Classic Period: the wars between Tikal and Calakmul.

Tikal and its allies undoubtedly stylized themselves after Teotihuacan following the *entrada*. Iconography from these cities belonging to this period depicts militaristic symbolism akin to that found at Teotihuacan, and burial practices from this time are quite

similar as well (Laporte 2003; Wright 2005:90). On the other hand, Calakmul and its allies represented more direct successors to the major Late Formative powers (Gunn et al. 2014:103), as throughout the Classic Period the rulers of Calakmul continued to utilize traditional Maya political strategies such as matrilineal descent to maintain power (Folan et al. 1995:313; Grube 2004:122; Martin 2005:12; Sharer and Traxler 2006:497; Zorich 2013). One would therefore expect that Calakmul, or its predecessor Dzibanche, would be among the few sites to contain an Early Classic ballcourt given their importance to Late Formative political authority, yet Dzibanche has no known ballcourt (Straulino Mainou et al 2016:51; Villamil and Sherman 2017:454) and Calakmul's only ballcourt was not erected until well into the Late Classic Period during the 8th century (Andrews 1995:79). Meanwhile, one of the very few Maya ballcourts dated to the Early Classic Period belonged to one of the most prominent adopters of Teotihuacan political strategies, Copan (Bower 1990:56; Scarborough et al. 1982:21). If the absence of ballcourts during the Early Classic Period truly sourced to Teotihuacan's influence during this time, then it seems paradoxical that the leader of the self-stylized 'true' Maya did not construct a political arena so central to the society's creation myth while one of the associates of Teotihuacan did (Sharer and Traxler 2006:495-497).

Beyond this contradiction, the notion that the Maya in what is now Belize were ignorant of Teotihuacan's importance in Mesoamerica seems far-fetched. At Altun Ha, one ruler's tomb contained over 240 Pachuca green obsidian artifacts, which are characteristic of Teotihuacan, suggesting some degree of personal connection between that ruler and Teotihuacan (Pendergast 2003; White et al. 2001). Similarly, Copan's founder appears to be from Caracol, in what is now West Belize, yet was familiar enough

with Teotihuacan to travel to the city and become inspired to follow in its footsteps afterwards (Stuart 2007). While such examples may represent short-lived personal relationships with Teotihuacan that did not lead to lasting connections between Early Classic Basin of Mexico and Southeast Yucatan Coast, they do demonstrate that elites from sites in what is now Belize were aware of and knew Teotihuacan's importance as a state. It would therefore be misleading to claim that the lack of ballcourts during the Early Classic Period was the result of the Teotihuacan *entrada*, and that the atypical date of the Ka'kabish ballcourt was because the city's elites were simply oblivious to the spread of Teotihuacan ideology throughout the Maya Lowlands.

At this moment there may not be a satisfactory explanation for why ballcourt construction activity is rare amongst the Early Classic Maya, so determining the significance of Ka'kabish's ballcourt compared to the entire Lowlands may currently be impossible. However, discussing what other events occurred within Ka'kabish and Lamanai around when the ballcourt was built is a more academically lucrative endeavor. Within Ka'kabish, the Early Classic Period represented an era of fluorescence. Following the significant increase in population at Ka'kabish during the Late Formative Period (McLellan 2020:135), rulers likely utilized the abundance of manpower and resources available to them to commission numerous monumental structures to strengthen their claims to power, as was done elsewhere in the Formative Maya Lowlands (Chase and Chase 2017:59; Doyle 2012:373; Hansen 2001:6). Most of Ka'kabish's monumental architecture, many of them the temples and tombs emblematic of Classic Maya kingship, was built prior to the Late Classic Period, with the Early Classic Period containing the highest quantity of construction activity (Haines and Helmke 2016; Haines et al. 2020:52;

Tremain 2011b). As the Early Classic Period can be described as the zenith of Ka'kabish's sociopolitical history, it is fitting that the city's ballcourt, another hallmark structure of Classic divine kingship, belongs to that era.

The lack of artifactual evidence for the Late Classic Period and beyond in the ballcourt may be explained by the Early Late Classic hiatus at Ka'kabish between 600 and 800 CE. No monumental construction activity, whether that be the genesis of a new building or the remodeling of an old one, has yet been discovered in any part of the city during these centuries, and even evidence for household occupation such as manufacturing or depositing objects is scant (Haines et al. 2020:53; Moore 2020). While there were Maya residents still living within Ka'kabish, the rapid decline in elite power compared to the golden age of prosperity just a century or two earlier could explain a temporary abandonment of the ballcourt. However, as the ceramic evidence demonstrates, the ballcourt never rebounded. Even when local elite activity resumed after 800 CE (Haines and Sagebiel 2015:364; Haines et al. 2020:53), the ballcourt remained effectively terminated as not even the humus layer offered a Late or Postclassic sherd during excavation.

In isolation, the brief use-life of the Ka'kabish ballcourt presents a conundrum. While it is true that the site experienced a significant construction hiatus between 600-800 CE, that does not explain why Ka'kabish's elites avoided refurbishing it afterwards despite returning to other Early Classic monuments (Haines et al. 2016:174; Haines et al. 2020:53). As the ballcourt is so central to Classic Maya cosmology (Freidel and Schele 1988:749; García-Patzán and Rega 2019; Schele and Freidel 1990:76; Taube 2017:273), one would expect it to be a high priority for rulers seeking to reestablish themselves after

a period of absence. However, if we take nearby Lamanai into consideration, the answer to this paradox begins to get clearer.

The hiatus in activity at Ka'kabish coincides with the erection of Stela 9 at Lamanai during 625 CE, depicted in Figure 19 (Haines et al. 2016:173; Haines et al. 2020:53; Pendergast 1988). That stela serves as the introduction of a Teotihuacan-emulating *ka'loomte*, or warrior-ruler, from the east (Haines et al. 2020:53; Martin 2016; Reents-Budet 1988:22). By placing this stela in Lamanai's ceremonial core, this ruler from an unknown city effectively claimed the city as part of his dominion. For as long as the stela stood, Lamanai also experienced an era of poverty (Graham 2004:225; Haines et al. 2016:174; Houk 2015:217), albeit not as dramatic as Ka'kabish's. Once Stela 9 was torn down two centuries later (ca. 800 CE), most likely in violent conflict based on evidence of burning on its surface (Graham 2019:239; Pendergast 1988:4), Lamanai reemerged as a political and economic powerhouse in North-Central Belize until the arrival of the Spanish during the 16th century (Aimers 2007b; Graham 2001; Pendergast 1985). As part of this rebirth, Lamanai constructed its own ballcourt within its first century of restored autonomy (Pendergast 1982:533).

To summarize, the fate of Ka'kabish's ballcourt was intricately linked with the state of Lamanai. During the Early Classic Period, a time when both Ka'kabish and Lamanai were prosperous (Loten 1985:85; Pendergast 1981a:42; Powis 2002:517), one of Ka'kabish's *ajaws* commissioned the construction of a ballcourt within the site's ceremonial center. At the start of the Late Classic Period, when a foreign ruler, possibly from Altun Ha (Haines et al. 2020:53), took control over what is now North-Central Belize, the ballcourt was abandoned whilst the elites of both sites were made vassals to a

third party. After the *Ka'loomte* of the East's lineage was deposed, Lamanai built its own ballcourt, which seemingly made the one at Ka'kabish obsolete as it remained unused for the rest of the site's occupation history.

Figure 19: Recreation of Stela 9, Lamanai, by Louise Belanger. (Photo by Haines 2019, used with permission.)

Naturally, this description leaves us with another question: what was the relationship between Ka'kabish and Lamanai, and how did it transform over the centuries? The next section seeks to provide satisfactory answers to these.

6.3: Ka'kabish and Lamanai

The various specific models which could define the relationship between Ka'kabish and Lamanai during the Classic Period can be sorted into two broader categories: collaborative and competitive. As there is not space in this thesis to cover every possible permutation of the connection between the two cities, the focus of this subsection will be to analyze the plausibility of these two interpretive camps. As there is no definitive proof available in the data gathered in the 2022 field season or in any excavation prior, it will not be possible to provide an objective, conclusive answer as to whether Ka'kabish and Lamanai were cooperative or combative with each other. Rather, my objective is to reveal what information I considered when determining which explanation is more likely to guide future research which can test the validity of that interpretation.

As the project began under the assumption that Ka'kabish and Lamanai, after an autonomous Formative Period, were integrated during the Early Classic Period and therefore collaborative, an examination of the former category will act as the starting point. One of the primary reasons why that early assumption was made was because of the emphasis on Lamanai's mercantile prowess by the site's current Principal Investigator. Based on her excavations of the site, Elizabeth Graham proposes that Lamanai rose to prominence in Maya North-Central Belize due to its advantageous location near the entrance of what is now the New River Lagoon (Graham 2011:200;

Pendergast 1977:131). River travel was essential for Maya trade as it hastened transportation of goods and therefore allowed for longer-distance networks to be established (Cap 2021:174; Guderjan 1995). The economic power granted by controlling long-distance maritime trade was significant enough that some evidence suggests that during and after the Classic Maya collapse, elites from major inland sites such as Calakmul migrated to coastal and riverine settlements similar to Lamanai to maintain power in a post-divine kingship era (Folan et. al 2016:296; Gunn et al. 2017:13). By controlling the New River Lagoon, Lamanai could not only function as a mercantile hub for local trade in North-Central Belize but also serve as a gatekeeper for trade between the Caribbean and the Maya Lowlands (Cockrell and Simmons 2017:161; Pendergast 1991:176; Simmons and Graham 2017:177).

6.3.1: Ka'kabish-Lamanai Heterarchy Model

Heterarchy is defined by Crumley as "the relation of elements to one another when they are unranked or when they possess the potential for being ranked in number ways" (Crumley 1995:3). At the start of the 21st century, Maya specialists examined both Tikal and the Three Rivers region under the lens of heterarchy to judge its viability for the Lowlands (Becker 2004; Scarborough et al. 2003). While the results at Tikal were inconclusive, this model applied exceptionally well to the Three Rivers region as each of the larger sites located there, La Milpa, Dos Hombres, and Maax Na, appeared to specialize in distinct societal niches that complemented the others as a larger, complex sociopolitical unit (King and Shaw 2003:75). Further, heterarchical organization has been suggested as one way to understand the dynamic shifts in power during the Classic Period (Becker 2004:133; Cook 2007:67), as well as a way to examine complexity originating

from horizontal relations of power (Hendon et al. 2009). These factors make a heterarchical model for Ka'kabish and Lamanai quite appealing, as each site appears to specialize in a specific type of social power and saw dramatic oscillations in their political strength during the Classic Period.

Lamanai is notable for the sparsity of elite tombs commonly seen at other major Classic Maya sites. While it is possible there are more yet to be found, in the decades since Lamanai's first excavation season only two tombs have been uncovered, neither of which conform to 'standard' Maya mortuary style or practices (Pendergast 1981a:38). The Early Classic Period at Lamanai demonstrates some monumental construction in terms of temples and palaces, yet there are almost no tombs and no ballcourt until the Terminal Classic Period onwards. Conversely, Ka'kabish contains one tomb and multiple crypts of a more consistent style to those in the Peten Basin where divine rulers were interred, and as the data behind this study has proven, it had a small ballcourt that dates centuries prior to the one at Lamanai (Haines and Helmke 2016; Haines et al. 2016:172-173). Notably, both types of monumental architecture which Ka'kabish exhibits, and Lamanai does not, during the Early Classic Period have symbolic connections to the underworld. The relationship between tombs and death should be self-evident, and as mentioned earlier ballcourts have significant connections to the Maya Underworld as portals to that realm (Cohodas 1991; Fitzsimmons 2009:72). It could be that such urban organization reflects Maya cosmology, as Ka'kabish's western direction to Lamanai mirrors the westward journey of heavenly bodies such as the Sun and Moon towards Xibalba (Lucero 2018:333; Watanabe 1983:724).

An integrative heterarchical model of the relationship between Ka'kabish and Lamanai would therefore depict the two cities as a single political entity during the Early Classic Period. In this framework, the assumption is that Lamanai functioned as the economic center, legitimizing elite authority by providing and controlling the region's residents' access to trade resources and, based on Lisa Lucero's hypothesis on Maya power and water management (Lucero et al. 2011), the largest body of fresh water in the area. Conversely, Ka'kabish would be assumed to have acted as the primary political hub, drawing in crowds via performative rituals central to maintaining Maya cosmology as well as through the feasts and festivities which typically accompanied such spectacles (Fox 1996; Inomata 2006; Waller and Offenbecker 2020:46). This relationship would be broken by whatever factors led to the hiatus in activity seen in Ka'kabish during the 7th to 9th centuries, from which Lamanai gains more prestige and power than Ka'kabish. This is based on the construction of the ballcourt and the greater number of newly built tombs in Lamanai following the Terminal Classic Period (Dormon 2007:28-31; Pendergast 1981a:38-43), thereby allowing the city to be self-sufficient in terms of performative rituals while Ka'kabish still may have relied on Lamanai's trade networks for economic prosperity.

One possible implementation of this model organizes these two sites under one royal lineage that traveled between the sites depending on what role was required of them at any given time (Ball and Taschek 2001; Haines 2008:275). At Ka'kabish, they were the divine intercessor between the supernatural and the mortal worlds, communicating with the gods and reenacting critical moments of mythicized history. At Lamanai, they were the secular ruler organizing marketplaces, distributing goods, and collecting tariffs

from the riverine trade network. It is possible that this potential Ka'kabish-Lamanai mobile court would have originated from separate royal lines from each site that merged into one through either diplomatic means, such as marriage, or violent means, such as warfare, at the end of the Formative Period (Harrison-Buck 2021; Willey 1990:4-5), but no inscriptions or material evidence related to the above exists at either site.

Such a model complements the comparative case study of the mobile royal court at Cahal Pech and Buenavista, as the Buenavista palace was more specialized for ritual events such as feastings and ballgames while Cahal Pech served more personal royal needs (Ball and Taschek 2001:166, 173). Further, these two dynastic seats experienced fluctuations in primacy over the centuries, much like Ka'kabish and Lamanai based on the evidence discussed so far (Ball and Taschek 2001:167). While some archaeologists in the Belize River Valley argue against Ball and Taschek's particular application of this model in the region (Audet and Awe 2005: 359; Leventhal and Ashmore 2004), the theoretical foundation of the model has merit, thereby justifying its consideration for the Ka'kabish-Lamanai situation.

A key difference between these two cases is that while Cahal Pech and Buenavista's royal projects such as tombs and ballcourts alternated in "perfect 'complementary opposition'" (Ball and Taschek 2001:185), Ka'kabish and Lamanai do not display such symmetry (Haines et al. 2016:173). Further, a mobile royal court, by definition, necessitates that there is only one royal lineage across the two centers (Ball and Taschek 2001:170); until we can reasonably declare that Ka'kabish and Lamanai shared a dynasty during the Early Classic Period, this line of reasoning remains hypothetical.

There are issues with the above hypothesis beyond the lack of evidence proving whether Ka'kabish and Lamanai had one or two royal lineages. If the region had a royal lineage powerful enough to maintain two significant cities, each with their own monumental plazas, then it would be reasonable to think they had the wealth needed to build a ballcourt at both sites. In other Maya examples in which rulers held authority over multiple settlements within a region, they built ballcourts throughout their domain so that their trust-building and power-reinforcing performances reached a larger audience than if their hinterland subjects had to travel to a static location instead (Ball and Taschek 2001:183; Golden and Scherer 2013:413; Thompson 1931:63). If we argue that maintaining the cosmographic orientation described earlier was more important, that only leads to further questions as to why this dichotomy was not reinforced more strictly. Ka'kabish and Lamanai both contain temples during the Early Classic Period, even if Lamanai's were larger, and Lamanai still has two tombs dating to this time, though that amount may be far fewer than Ka'kabish's. The presence of these structures at each site indicates that both cities hosted the performances and processions associated with temples and palaces, therefore allowing residents to participate in these forms of social negotiation without leaving the boundaries of their hometown. Why would such accessibility not be provided for the ballgames held within architectural courts as well?

6.3.2: Ka'kabish-Lamanai Hierarchy

Of course, a symbiotic relationship between these two sites does not require that each side was equal during the Early Classic Period. Another hypothesis which suggests a collaborative relationship argues that Ka'kabish and Lamanai always had a hierarchical relationship, not just after the Late Classic Period. Unlike earlier narratives about Classic

North-Central Belize's political landscapes (Pendergast 1986: 226; Graham 2001: 53; Valdez and Scarborough 2014:261), however, Ka'kabish holds an entirely dominant position in this model during the Early Classic Period. Archaeologists have dedicated a significant amount of research over the past few decades to demonstrate that Maya politics was far more dynamic than the static power explanations from the early 20th century (Estrada-Belli 2011; Helmke and Awe 2012; Marcus 2003). It therefore would be unsurprising if Ka'kabish acted as the face of the region during the Early Classic Period before power switched to Lamanai during the Late Classic Period.

Part of the justification for a Ka'kabish-centric Early Classic Period in North-Central Belize stems from the material evidence connecting the city to major states in the Peten during the Late Formative and Early Classic Periods. While Ka'kabish and Lamanai share many of the ceramic styles found within their assemblages, Ka'kabish contains more Teotihuacan-style ceramics, such as the Balanza Black sherds found within the ballcourt and dozens of examples found throughout the site over the past decade (Haines et al. 2016:172), while Lamanai only demonstrates one Central Mexican ceramic vessel (Pendergast 1981b:97). As mentioned earlier, one of Ka'kabish's tombs more closely resembles the type found in the Central Peten than those of Lamanai, and Ka'kabish contains the only corbel-vaulted tomb so far found in the region (Haines and Helmke 2016; Haines et al. 2016:172-173; Helmke 2020:268). While both disparities may be due to the smaller sample size of tombs from Lamanai, it may be that Ka'kabish, if it served as the cosmological center of the region during the Early Classic Period compared to Lamanai's economic focus, was the more prominent of the two cities at first.

After the hiatus during the 7th to 9th centuries, Lamanai took advantage of the gap in power and situated itself at the topic of North-Central Belize's political landscape.

That very hiatus is also where the shortcomings of this model present themselves. Current archaeological research in the region correlates the hiatus experienced at Ka'kabish and decline in Lamanai with the erection of Stela 9 at Lamanai in 625 CE. No aspects of this model contradicts the broader strokes of this interpretation; in fact, a conquest by a third party would be the perfect catalyst for shifts in power and political authority between sites. Yet if the *Ka'loomte* of the East's goal in erecting the stela at Lamanai was to assert his authority over the whole region, why would he not place it in the ceremonial core of the previous sociopolitical leader's territory? It could be argued that controlling Lamanai would be more impactful since it was a key trade port, yet Ka'kabish's ties to the Central Peten demonstrate it was not completely reliant on Lamanai's merchants to maintain its high-upkeep performances. It should be expected that another physical marker of the unknown *ka'loomte*'s dominance would be present at Ka'kabish if it had been the head of the region prior to the incursion, yet there is no such evidence at this time. All this supports either an equal relationship between Ka'kabish and Lamanai or a Lamanai-centric model during the Early Classic Period if their relationship was cooperative.

6.3.3: Ka'kabish-Lamanai Hostility

A competitive relationship between Ka'kabish and Lamanai may make up for the shortcomings found in the cooperative explanations, and the ballcourt itself plays a more active role to support such an interpretation beyond its date. Research by Feinman and Nicholas (2011:103) into ballcourt construction in the Late Classic Period posits that

towards the Terminal Classic Period, Mesoamerican elites from midsized city-states constructed ballcourts in a ploy to boost their authority during an era of decline and emerging political contests. This phenomenon finds correlates in the Maya area after the defeat of Calakmul at Tikal's hand and the subsequent balkanization of its former territories at the start of the Late Classic Period (Iannone 2010:365). Numerous minor settlements such as La Milpa (Hammond et al. 1998; Houk and Zaro 2011; Schultz et al. 1994), Minanha (Longstaffe and Iannone 2022:14; Moodie 2013), and Xunantunich (LeCount and Yaeger 2010) gained autonomy and developed their own royal courts complete with plazas, ballcourts, shrines, and water management systems during this period.

While the ballcourt at Ka'kabish dates far earlier than the Terminal Classic Period, this hypothesis may still be applicable. Ka'kabish and Lamanai were at roughly equal strength in terms of political authority during the Late Formative Period, yet towards the period's end Lamanai built the largest Formative Period temple in what is now Belize (Belanger and Belanger 2017:29; Pendergast 1981b:96). In doing so, the Lamanai lineage who sponsored the High Temple likely garnered a wider audience from the surrounding countryside who worshipped there during larger ceremonies (Lucero 2007:409), thereby granting that lineage greater power and prestige than at Ka'kabish. Rather than participate in an endless architectural competition by constructing sequentially larger temples, one Early Classic Ka'kabish ruler may have decided that commissioning a ballcourt would give his city the advantage in an ideological war over the hinterland's patronage. Part of the ballgame's performance served to promote the ruler's upcoming victory over the gods of death in the vein of the Hero Twins' own

ascension at the end of the Popol Vuh, promising that they shall become an ancestral spirit who shall support the continuation of their royal lineage after their death (Bower 1990:56; Cohodas 1975:102; Hill and Clark 2001:334; Miller and Houston 1985:52). Therefore, constructing a ballcourt instead of another kind of monumental structure not only would serve to elevate the Ka'kabish ruler who ordered its creation but also established a legacy from which other Ka'kabish rulers could draw upon for legitimacy.

The natural follow-up question to this narrative is 'why did Lamanai not build its own ballcourt afterwards'? The Ka'kabish ballcourt, much like the ones Feinman and Nicholas used to support their hypothesis, is smaller than many of the large ballcourts seen at major sites in the Peten Basin and Yucatan Peninsula (de Montmollin 1997:26-27; Fox 1996:488; Schultz et al. 1994:50), and the ballcourt at Lamanai is roughly of equivalent size to Ka'kabish's as each of the Lamanai range structures measure at roughly 17x20 m compared to Ka'kabish's 15x20 m (see Figures 6 and 7). The Lamanai royal lineage already demonstrated their economic capital and influence, which presumably eclipsed that of the Ka'kabish lineage, through the commissioning of the High Temple during the Late Formative Period. However, it may be that building such a massive pyramid diminished the lineage's ability to respond to a change in strategy in their competition for status. We've already seen the sparsity of tombs within Lamanai (Pendergast 1981a:38); perhaps that was not the result of manifesting Maya cosmology in urban planning, but instead reflected Lamanai's inability to finance new monumental structures while maintaining the grand temples it had already built. This is not to say that Lamanai was destitute during the Early Classic Period; after all, excavations revealed an abundance of material wealth within the ceremonial core (Loten 1985:85; Pendergast

1981a:42; Powis 2002:517). Instead, Lamanai elites may have believed their efforts were better spent maintaining and refurbishing existing architecture, managing the trade port, and indulging in their luxurious lifestyle instead of commissioning more buildings.

If Ka'kabish and Lamanai engaged each other in a contest of prestige and influence, it begs the question why this never escalated into a traditional war. Ka'kabish and Lamanai are only 10 kilometers apart from each other, yet as briefly mentioned earlier, there is no evidence at either site which indicates open hostility between the two cities. Numerous major centers within the Maya Lowlands contain defensive walls to keep invaders out (Bracken 2023; Demarest et al. 1997; Russell 2013; van Tuerenhout 2001), remnants of weapons such as spears and arrows found in the vicinity of these fortifications (Aoyama 2005; Aoyama and Graham 2015; Inomata and Triadan 2009: 69-71), and partial demolition of structures and sacred places resulting from raiding (Helmke and Brady 2014; Serafin et al. 2014; Wahl et al. 2019). The former two are so far completely absent from Ka'kabish and Lamanai and the latter is only seen on Stela 9 after it was torn down long after the Early Classic Period.

Many archaeologists have argued that ballcourts often served as analogues for warfare within Mesoamerica (Gutierrez 1990; Santley et al. 1991; Shelton 2002). Iconographic and textual evidence at various Maya cities depict a victorious ruler's ballgame against the captives of a defeated enemy, always ending with another triumph for the ruler and the sacrifice of these captives (Miller and Houston 1985; Zaccagnini 2003; Zender 2004). Given the performative nature of these formal ballgames, the contest was most certainly rigged in favor of the ruler; from this, many archaeologists have deduced that part of the ballcourt's function was to serve as the theater for dramatic

recounts of the ruler's success in combat, manifesting the glory found in combat within the city's walls where the general populace can witness it (Freidel 2007:18; Gutierrez 1990; Miller 1989; Taladoire and Colsenet 1991:174). It is possible that the ballcourt at Ka'kabish was built for such a purpose rather than for pacifistic emulations of Maya cosmology. However, therein lies the conundrum; to have ballgames that promulgate superiority over a vanquished enemy, there must be a war through which to vanquish them. As it stands, there appears to be no indication that any conflict between Ka'kabish and Lamanai turned violent, nor for war with rivals outside North-Central Belize.

Further, the tomb in Structure D-5 at Ka'kabish displays remarkable similarities to the two tombs found at Lamanai. Tomb D-5/1 matches the distinct cocoon-style burial only found at Lamanai in the Maya area and contains similar mortuary artifacts, albeit assuredly not made by Lamanai crafters (Haines et al. 2016:173; Haines et al. 2020:49). Were these two symbolically fighting for influence over the New River hinterland, emulating a unique practice only found at Lamanai would effectively be the same as admitting defeat for the Ka'kabish royal who ordered the tomb's construction.

6.4: Conclusions

Based on the evidence to date, I propose that the relationship between Ka'kabish and Lamanai was not hostile. The cities share too many similarities between one another in their artifact assemblages to be engaged in a symbolic conflict for status, and the lack of any markers for violent battle is too blatant to ignore. Other regions within the Maya heartland see escalations from competitions for prestige to overt warfare between city-states of far greater distance that the 10-kilometer gap between the subjects of this chapter (Chase and Chase 2003:173; Webster 1998:31), the most prominent of these

being the centuries-long rivalry between Tikal and Calakmul (Martin and Grube 2008:121). If Ka'kabish and Lamanai were rivals I would expect one of their rulers to eventually embark on a campaign against the other for territory or prestige, yet so far as we know this does not appear to occur. Therefore, the most logical interpretation as I understand it is that Ka'kabish and Lamanai had a cooperative relationship from the Late Formative Period to the start of the Late Classic Period.

6.4.1: Interpretations

The nature of this cordial relationship is harder to determine confidently. As the preceding discussion demonstrates, there are issues with both a heterarchy model, where Ka'kabish served as the political zone and Lamanai acted as the economic hub, and with a hierarchy model, where one of the cities was subservient to the other. With the current evidence available, the heterarchy seems the more plausible of the two; the Early Classic ballcourt and greater number of tombs at Ka'kabish make its ceremonial center too ritually prosperous to be a suburb or vassal to a stronger Lamanai, while Lamanai's own massive temples and strategic position along trade routes make it too economically independent to be subjugated by Ka'kabish.

The heterarchy allows for both sites to specialize in their strong suits and support each other; Ka'kabish drew in audiences to witness performative rituals and communications with the supernatural while Lamanai saw rural and urban residents congregate in its marketplaces and ports to exchange goods. Elites profited at both sites, either through inserting themselves within the cosmological cycle or collecting taxes from every trade agreement, and the region prospered to the extent that an ambitious ruler from the east sought to enrich his territory through conquering them at the start of the

Late Classic Period. Lamanai, as the trade center, retained some sense of normalcy during these centuries as it continued its preexisting specialization by producing goods which get redirected to the foreign ruler's city. Ka'kabish, on the other hand, lost its original purpose as the ceremonial core now that the pair are vassals to another. This allowed Lamanai to emerge stronger following the end of the hiatus during the 8th century, as it had not atrophied in the manner Ka'kabish did. This leads to its supremacy during the Late Classic Period and beyond.

This research significantly transforms our current understanding of Classic North-Central Belize should my interpretations hold merit. While early excavations into Lamanai led to archaeologists declaring the site as the only major city-state in the region (Pendergast 1986:226), studies from the last decade hypothesized that Ka'kabish and Lamanai were independent, autonomous centers with near-equal political success (Haines 2008; Haines et al. 2020). If my interpretation of an Early Classic heterarchy is correct, then these sites could have been different facets of a much larger political entity in Belize, which would require reexamination of recent analyses of the region's sociopolitical landscape. The Early Classic date for the ballcourt suggests that not only was Ka'kabish flourishing in this era, but it was also where this heterarchy's elites performed as the divine rulers central to Classic Maya authority, not at Lamanai.

6.4.2: Future Research

Further research would be needed to ascertain the nature of this heterarchy, or if it even exists as described. There is currently little way of determining whether each city held their own elites or if they shared a mobile royal court that traveled between each center depending on what was required of them on any given day. A larger comparative

analysis between the royal assemblages of these two sites could help address this question, as would research into the seasonality of activities performed at each site. The potential east-west dichotomy of monumental architecture is also tentative at this moment; while there is an absence of burials so far, the nature of archaeological survey and excavation means this does not entirely translate to burials being absent in Early Classic Lamanai. To determine the validity of this potential cosmographic orientation in urban planning, it may be more practical to examine shared features at each site and analyze if their symbolic expression differs in a way that is meaningful to this question.

Evidence for warfare within the region would disprove this hypothesis; it may be possible that battles did not happen at the outskirts of the cities themselves but instead in a space between the two, such as where the small center of Coco Chan is located (McLellan 2020:218). Rather than seeking answers regarding the relationship between Ka'kabish and Lamanai within these extensively studied larger centers, it may be more effective to examine the smaller sites through which they may have, by proxy, conducted diplomacy. Much like how our knowledge of Tikal and Calakmul's conflict was enriched through excavations of their allies, there may be evidence within the hinterland settlements vital to understanding Ka'kabish and Lamanai.

Chapter 7: Conclusions

This final chapter serves to tie this thesis together into a complete package. First, the findings from the analysis of the field data will be summarized as answers to each primary research question provided in the introduction. Second, the limitations of this research will be acknowledged, and their possible impact on my findings will be briefly discussed. Finally, potential avenues for future research built upon the foundation this thesis provides will be considered.

7.1: Summary of Findings

The three objectives this study sought to accomplish were the defining of the construction history of the Ka'kabish ballcourt, the examination of the political role of the site in Classic North-Central Belize, and the explanation of the relationship between Ka'kabish and Lamanai. In that order:

7.1.1: The Construction History of the Ka'kabish Ballcourt

Based on data from Structure D-6 and Unit 1 in the playing alley, the area which the Ka'kabish ballcourt now occupies underwent at least two construction phases. The more recent phase, Structure D-6-1st, can be definitively identified as a ballcourt due to its contemporaneity with the ballcourt marker and playing alley between Structure D-6 and D-7. The earlier phase, Structure D-6-2nd, cannot be identified as easily, but it may have served a ritual purpose based on the deposit of human teeth, obsidian, and marine shells within what was a ceremonial core during this period. Each of these larger phases also experienced multiple smaller maintenance events such as the replastering of floors seen in the western looters' tunnel of Structure D-6.

All the evidence gathered during the 2022 field season indicates that both of these known phases date to the Early Classic Period, as no Late Classic or Postclassic material was found in the artifact assemblages. This means that the Ka'kabish ballcourt was built centuries prior to the one at Lamanai, and moreover, was constructed during a period when many other Maya centers were, for reasons yet unknown, temporarily abandoning their ballcourts. The absence of ceramics belonging to the Late Classic Period at the Ka'kabish ballcourt also coincides with the site's hiatus between 600-800 CE, not long after which Lamanai constructed its own ballcourt which appears to have replaced the one at Ka'kabish in prominence.

7.1.2: The Political Role of Ka'kabish in Classic North-Central Belize

Based on the Early Classic origin of its ballcourt and the multitude of monumental structures built and refurbished in the city during this period, it is likely that Ka'kabish was a political powerhouse during the Early Classic Period. Excavations prior to this study revealed that Ka'kabish contained more elite burials and had closer material ties to the Petén Basin than Lamanai did. The discovery that the city's ballcourt predates Lamanai's by centuries further supports a model in which Ka'kabish was the political hub of North-Central Belize during the Early Classic Period. However, the events which led to the hiatus in construction activity and goods manufacture in Ka'kabish at the start of the Late Classic Period significantly diminished the center's political power, granting room for Lamanai's rise to prominence. From the Late Classic Period onwards, Ka'kabish is still a major center in the region, but it is likely politically secondary to Lamanai.

7.1.3: The Relationship between Ka'kabish and Lamanai during the Early Classic

Both Ka'kabish and Lamanai wielded their own form of considerable power during the Early Classic Period. Ka'kabish's ceremonial center was ritually robust during the period as it boasted the region's only ballcourt at the time, housed multiple tombs through which elites could legitimize their authority through ties to their ancestors, and possessed numerous temples which competed for the worship of the hinterland populace. On the other hand, Lamanai was economically prosperous as it controlled one of the largest riverine trade routes in the region, and its elites advertised the depths of their coffers through funding their own monumental structures. Neither of these centers appear to be in a position of subservience during the Early Classic Period, which leads me to believe that they represent a heterarchy during this period. In this model, Ka'kabish is assumed to function as the primary political and ritual hub while Lamanai is thought to act as the mercantile center. In this way, both centers get to play to their strong suits while supporting each other's weaknesses, essentially operating as a combined larger political entity, though each with some degree of autonomy.

7.2: Limitations

While excavations unveiled enough information to provide a likely date for the Ka'kabish ballcourt and analyze the site's political role, the shortened field season mentioned earlier in this thesis limited how much data could be collected. Only a small portion of the ballcourt's playing alley was excavated, and Structure D-7 was not examined whatsoever, leaving room for the possibility that ceramics from after the Early Classic Period could be found elsewhere inside it. The number of construction phases also is not exact since there was not enough time to excavate past the cut-stone wall of D-

6-2nd in the western looters' tunnel. It is possible that any number of structures could be behind that wall, which in turn would extend the construction history of the ballcourt. Similarly, we were unable to ascertain how the plaster floor seen in Unit 1 Level 6 connected to the cut-stone wall above it. Depending on if they are attached or separate, that could also modify the construction history depending on if the floor was built prior to the structures or at the same time.

Another limitation is in the assumptions used to make the political models defined in Chapter 5. As mentioned in that section, each model discussed comes with its own set of counterarguments due to the absence of certain evidence. The lack of inscriptions at Ka'kabish make it unclear whether these sites shared a royal lineage or had separate rulers, knowledge which would drastically change what models are applicable. The absence of tombs at Lamanai or markers for warfare in the region also is not necessarily evidence of absence and could instead be the product of where archaeologists have excavated in these two cities over the decades.

7.3: Future Research

In the short term, a second season at the Ka'kabish ballcourt is necessary to confirm the arguments made about its construction history here. Excavations into Structure D-7 alongside another test pit in the playing alley, as well as surface surveys atop Structures D-6 where the audience presumably could watch the games, should be enough to confirm the accuracy of the Early Classic date through the ceramics that would be recovered. As for the number of construction phases, examining how the uppermost plaster floor meets Structures D-6 and excavating past the exterior of Structure D-6-2nd

would be enough to determine whether the two construction episodes currently visible are the only ones to exist or if there are more which need to be inserted.

On a larger scale, more work needs be done examining the plausibility and scope of mobile royal courts and multi-site heterarchies across the Maya heartland. While the turn of the 21st century saw some studies into heterarchical models in the Maya context, little has been done since that initial exploration. Further, a significant number of these studies examined heterarchies within site groups rather than between polities (Becker 2004; Hageman and Lohse 2003; Tourtellot et al. 2003). The paucity of literature on mobile royal courts is even more extreme, as Ball and Taschek's work remains the only significant application of the concept to the Maya world (Ball and Taschek 2001:166). Should the data gathered during this thesis be verified through further excavation, then Ka'kabish and Lamanai may serve as a case study for the possibility of heterarchical organization between settlements ruled by mobile royal courts within the Maya region. Given the model's potential applicability to sites such as Ka'kabish, Cahal Pech (Ball and Taschek 2001), and La Milpa (Tourtellot et al. 2003), further study in these areas may deepen our understanding of smaller Maya political centers.

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Appendix A: Ceramic Data from Operation 23 (Str. D-6 and D-7)

Table 5: Ceramic Data from Operation 23

UNIT	LEVEL	TYPE/ VARIETY	DATE	VESSEL FORM	SHERD
1	1	Eroded	Indeterminate	Jar	1
1	1	Eroded	Indeterminate	Jar	1
1	1	Eroded	Indeterminate	indeterminate	1
1	1		indeterminate	TOTAL	3
1	3	Eroded	indeterminate	indeterminate	6
1	3	Crudware	Terminal Preclassic/ Early Classic	Bowl	1
1	3	Aguila Orange	Early Classic	Bowl	1
1	3		Early Classic	TOTAL	8
1	4	Eroded	indeterminate	indeterminate	4
1	4	Striated	Early Classic	indeterminate	1
1	4	Eroded	Early Classic	indeterminate	3
1	4	Joventud Red	Late Middle Preclassic	indeterminate	3
1	4	Guitara Incised	Late Middle Preclassic	indeterminate	1
1	4	indeterminate orange	Late Preclassic/ Early Classic	Dish	1
1	4	Early Classic red	Early Classic	Plate	1
1	4	Early Classic red	Early Classic	Jar	3
1	4	Aguila Orange	Early Classic	indeterminate	2
1	4	Aguila Orange	Early Classic	Plate	1
1	4	Aguila Orange	Early Classic	Jar	4
1	4	Aguila/Balanza dichrome	Early Classic	Plate	2
1	4	Balanza Black	Early Classic	Plate	1
1	4	Balanza Black	Early Classic	Plate	2
1	4	Dos Arroyos Orange-polychrome	Early Classic	indeterminate	1
1	4		Early Classic	TOTAL	30

1	5	Eroded	Indeterminate	indeterminate	4
1	5	Eroded	Indeterminate	indeterminate	1
1	5	Eroded	Indeterminate	indeterminate	1
1	5	Joventud Red	Late Middle Preclassic	indeterminate	4
1	5	Guitara Incised	Late Middle Preclassic	indeterminate	1
1	5	Eroded	Preclassic	Dish	1
1	5	Polvero Black	Late Preclassic	indeterminate	1
1	5	Sierra Red	Late Preclassic	indeterminate	2
1	5	Sierra Red	Late Preclassic	Dish	1
1	5	Sierra Red	Late Preclassic	Dish	1
1	5	Eroded	Early Classic	Plate	1
1	5	Early Classic red	Early Classic	Plate	1
1	5	Aguila Orange	Early Classic	Jar	1
1	5	Aguila Orange	Early Classic	Jar	2
1	5	Aguila Orange	Early Classic	Jar	1
1	5	Aguila Orange	Early Classic	Bowl	2
1	5	Aguila Orange	Early Classic	indeterminate	2
1	5	Aguila Orange	Early Classic	Plate	1
1	5	Aguila Orange	Early Classic	Plate	4
1	5	Balanza Black	Early Classic	Plate	2
1	5	Balanza Black	Early Classic	indeterminate	1
1	5	Aguila/Balanza dichrome	Early Classic	Plate	1
1	5	Dos Arroyos Orange-polychrome	Early Classic	Plate	1
1	5	black-on-orange bichrome	Early Classic	Plate	1
1	5		Early Classic	TOTAL	38
1	6	Eroded	indeterminate	indeterminate	2
1	6	Early Classic red	Early Classic	indeterminate	2
1	6	Aguila Orange	Early Classic	indeterminate	1
1	6	Aguila Orange	Early Classic	indeterminate	1
1	6		Early Classic	TOTAL	6

1	7	Eroded	indeterminate	indeterminate	32
1	7	Unslipped	indeterminate	indeterminate	1
1	7	Striated	indeterminate	indeterminate	4
1	7	Eroded	Early Classic	indeterminate	6
1	7	Eroded	Early Classic	Plate	1
1	7	Balanza Black	Early Classic	Plate	1
1	7	Balanza Black	Early Classic	Flanged Plate	1
1	7	Early Classic red	Early Classic	Jar	4
1	7	Early Classic red	Early Classic	Jar	1
1	7	Aguila Orange	Early Classic	Plate	2
1	7	Aguila Orange	Early Classic	Dish	3
1	7	Aguila mottled	Early Classic	Plate	1
1	7	Aguila Orange	Early Classic	indeterminate	2
1	7	Aguila Orange	Early Classic	Plate	2
1	7	Aguila Orange	Early Classic	indeterminate	4
1	7	Aguila Orange	Early Classic	Plate	4
1	7	Aguila Orange	Early Classic	Jar	1
1	7	Aguila Orange	Early Classic	Jar	3
1	7	Aguila Orange	Early Classic	indeterminate	13
1	7	Pita Incised	Early Classic	Dish	2
1	7	Early Classic cream	Early Classic	Plate	1
1	7	Aguila/Balanza dichrome	Early Classic	indeterminate	2
1	7	Aguila/Balanza dichrome	Early Classic	Plate	1
1	7	Aguila/Balanza dichrome	Early Classic	Plate	1
1	7	Aguila/Balanza dichrome	Early Classic	Bowl	1
1	7	Aguila/Balanza dichrome	Early Classic	Plate	1
1	7	Sierra Red	Late Preclassic	indeterminate	6
1	7	Sierra Red	Late Preclassic	indeterminate	6
1	7	Eroded	Preclassic	indeterminate	2
1	7	Joventud Red	Late Middle Preclassic	indeterminate	1

1	7	Joventud Red	Late Middle Preclassic	indeterminate	2
1	7	Puletan Red-and-unslipped	Terminal Preclassic/ Early Classic	Jar	1
1	7	Eroded	Preclassic	indeterminate	1
1	7	Flor Cream	Late Preclassic	indeterminate	1
1	7	unknown red and cream dichrome	Late/Terminal Preclassic	Dish	1
1	7	unknown black and cream dichrome	Late/Terminal Preclassic	Bowl	1
1	7	Dos Arroyos Orange-polychrome	Early Classic	indeterminate	2
1	7	Dos Arroyos Orange-polychrome	Early Classic	indeterminate	2
1	7	Eroded	indeterminate	Figurine	1
1	7	Hongo Composite	Late Preclassic	Mushroom stand	1
1	7		Early Classic	TOTAL	123
1	8				
1	8	Puletan Red-and-unslipped	Terminal Preclassic/ Early Classic	indeterminate	1
1	8	Striated	indeterminate	indeterminate	5
1	8	Striated	Early Classic	Jar	1
1	8	Eroded	Preclassic	indeterminate	3
1	8	Joventud Red	Late Middle Preclassic	indeterminate	1
1	8	Joventud Red	Late Middle Preclassic	Bottle	1

1	8	Joventud Red	Late Middle Preclassic	indeterminate	4
1	8	Guitara Incised	Late Middle Preclassic	indeterminate	1
1	8	Puletan Red-and-unslipped	Terminal Preclassic/ Early Classic	Jar	1
1	8	Sierra Red	Late Preclassic	indeterminate	2
1	8	Sierra Red	Late Preclassic	Jar	1
1	8	Sierra Red	Late Preclassic	indeterminate	27
1	8	Sierra dichrome	Late Preclassic	indeterminate	1
1	8	Polvero Black	Late Preclassic	indeterminate	4
1	8	Polvero Black	Late Preclassic	indeterminate	1
1	8	Flor Cream	Late Preclassic	Jar	3
1	8	Flor Cream	Late Preclassic	Jar	1
1	8	Striated	Early Classic	Jar	1
1	8	Eroded	Early Classic	Jar	1
1	8	Chicago Orange	Preclassic	Jar	1
1	8	Eroded	Early Classic	Plate	4
1	8	Eroded	Early Classic	indeterminate	4
1	8	Eroded	Early Classic	Plate	2
1	8	Sierra Red	Late Preclassic	indeterminate	1
1	8	Aguila Orange	Early Classic	indeterminate	7
1	8	Aguila Orange	Early Classic	Plate	1
1	8	Aguila Orange	Early Classic	Plate	1
1	8	Aguila Orange	Early Classic	Bowl	1
1	8	Aguila Orange	Early Classic	Plate	5
1	8	Aguila Orange	Early Classic	Z-angle dish	1
1	8	Aguila Orange	Early Classic	Jar	1
1	8	Aguila Orange	Early Classic	Jar	12
1	8	Aguila Orange	Early Classic	indeterminate	12

1	8	Aguila mottled	Early Classic	Jar	2
1	8	Early Classic red	Early Classic	Plate	1
1	8	Early Classic red	Early Classic	Plate	1
1	8	Early Classic red	Early Classic	Plate	2
1	8	Balanza Black	Early Classic	Plate	1
1	8	Balanza Black	Early Classic	indeterminate	2
1	8	Dos Arroyos Orange-polychrome	Early Classic	Plate	1
1	8	Dos Arroyos Orange-polychrome	Early Classic	indeterminate	2
1	8	Dos Arroyos Orange-polychrome	Early Classic	Plate	1
1	8	Dos Arroyos Orange-polychrome	Early Classic	Plate	1
1	8	Aguila Orange	Early Classic	Cup	1
1	8	Early Classic cream	Early Classic	Creamer	1
1	8	Eroded	Early Classic	indeterminate	1
1	8		Early Classic	TOTAL	130
1	9	eroded	indeterminate	indeterminate	22
1	9	eroded	indeterminate	Jar	1
1	9	striated	Early Classic	Jar	1
1	9	Aguila Orange	Early Classic	Jar	3
1	9	Early Classic cream	Early Classic	Jar	2
1	9	eroded	indeterminate	Jar	1
1	9	eroded	Late Middle Preclassic	Tecomate	1
1	9	eroded	Late Preclassic	Dish	1
1	9	eroded	Preclassic	indeterminate	4
1	9	eroded	Preclassic	Jar	1
1	9	Joventud Red	Late Middle Preclassic	Dish	1
1	9	Joventud Red	Late Middle Preclassic	indeterminate	1
1	9	Sierra Red	Late Preclassic	indeterminate	2
1	9	Sierra Red	Late Preclassic	indeterminate	5

1	9	Sierra Red	Late Preclassic	Dish	2
1	9	Sierra Red	Late Preclassic	indeterminate	2
1	9	Sierra/Povero	Late Preclassic	indeterminate	1
1	9		Early Classic	TOTAL	51
2	1	Sierra Red	Late Preclassic	indeterminate	1
2	1	Aguila Orange	Early Classic	indeterminate	1
2	1		Early Classic	TOTAL	2
West Looters' Tunnel	Interior Fill	eroded	indeterminate	indeterminate	1
West Looters' Tunnel	Interior Fill	Joventud Red	Late Middle Preclassic	indeterminate	1
West Looters' Tunnel	Interior Fill	Sierra Red	Late Preclassic	indeterminate	1
West Looters' Tunnel	Interior Fill	Sierra Red	Late Preclassic	Dish	1
West Looters' Tunnel	Interior Fill	Sierra Red	Late Preclassic	indeterminate	1
West Looters' Tunnel	Interior Fill	Puletan Red-and-unslipped	Terminal Preclassic/ Early Classic	Jar	1
West Looters' Tunnel	Interior Fill	Aguila Orange	Early Classic	Bowl	1
West Looters' Tunnel	Interior Fill	Early Classic cream	Early Classic	Bowl	1
West Looters' Tunnel	Interior Fill	Dos Arroyos Orange-polychrome	Early Classic	indeterminate	1
West Looters' Tunnel	Interior Fill	Dos Arroyos Orange-polychrome	Early Classic	Plate	1
West Looters' Tunnel	Interior Fill		Early Classic	TOTAL	10

West Looters' Collapse	Interior Fill	eroded	indeterminate	Jar	1
West Looters' Collapse	Interior Fill		indeterminate	TOTAL	1
West Looters' Tunnel	Below Construction 1	eroded	indeterminate	indeterminate	2
West Looters' Tunnel	Below Construction 1	Sierra Red	Late Preclassic	indeterminate	1
West Looters' Tunnel	Below Construction 1	Aguila Orange	Early Classic	Plate	1
West Looters' Tunnel	Below Construction 1		Early Classic	TOTAL	4
North Tunnel	Mortar	Sierra Red	Late Preclassic	indeterminate	1
North Tunnel	Mortar		Late Preclassic	TOTAL	1
1	Backdirt likely Levels 5-7	Sierra Red	Late Preclassic	Dish	1
1	Backdirt likely Levels 5-7	Aguila Orange	Early Classic	indeterminate	2
1	Backdirt likely Levels 5-7	Aguila Orange	Early Classic	indeterminate	1
1	Backdirt likely Levels 5-7	Pucte Brown	Early Classic	indeterminate	1
1	Backdirt likely Levels 5-7		Early Classic	TOTAL	5
1	Section Profile Wall	eroded	Preclassic	indeterminate	1
1	Section Profile Wall	striated	Early Classic	indeterminate	1
1	Section Profile Wall		Early Classic	TOTAL	2

Appendix B: Examples of Ballcourt Construction Activity in Maya Region

Table 6: Ballcourt Construction Activity in Maya World

SITE	FORMATIVE	EARLY CLASSIC	LATE CLASSIC	SOURCE
Actuncan	1 built	No construction	Major modifications	McGovern 1993
Atalaya	1 built	No construction	Major modifications	Rega 2020
Blue Creek	None	1 built	Termination	Guderjan 2004
Buenavista	1 built	Minor replasterings	1 terminated, 1 built	Ball and Taschek 2001
Calakmul	None	None	1 built	Andrews 1995
Caracol	None	None	2 built	Grube 1994
Cerros	2 built	Abandonment	N/A	Scarborough et al. 1982
Chactun	None	None	2 built	Olguin and Rivera 2020
Chan Chich	None	None	1 built	Ford 1998
Copan	None	1 built	1 terminated, 1 built	Martin and Grube 2008
Dos Hombres	None	None	2 built	McDougal 1997
Dos Torres	1 built	No construction	Major modifications	Rega 2020
El Chival	1 built	No construction	Major modifications	Rega 2020
El Jimbal	1 built	No construction	Major modifications	Rega 2020
El Pilar	1 built	No construction	No construction	Ferguson 1999
Gran Cacao	None	None	1 built	Lohse et al. 2004
Holmul	None	None	1 built	Estrada-Belli et al. 2001
Ixno'ha	None	1 built	No construction	Lohse et al. 2004
Ixtinto	None	None	1 built	Rega 2020
La Milpa	None	None	2 built	Schultz et al. 1994
La Pochitoca	None	None	1 built	Rega 2020
Lamanai	None	None	1 built	Pendergast 1982
Las Ruinas de Arenal	None	1 built	Major modifications	Ferguson 1999
Ma'ax Na	None	None	1 built	Lohse et al. 2004
Nakbe	1 built	Abandonment	Major modifications	Hansen 2001
Nakum	1 built	Minor modifications	2 built; 1 modified	Calderón et al. 2009
Nixtun-Ch'ich	None	None	1 built	Rice 2018

Pacbitun	1 built	Minor replasterings	Major modifications	Healy 1992
Poza Maya	None	None	1 built	Rega 2020
Preclassic Yucatan	22 built	N/A	N/A	Medina Castillo 2003
Punta de Cacao	None	None	1 built	Robichaux et al. 2015
Quemada Corozal	None	None	1 built	Rega 2020
Quiriga	None	None	1 built	Jones et al. 1977
Sakapuk	1 built	No construction	Major modifications	Rega 2020
Saturday Creek	1 built	No construction	Major modifications	Jeakle 2002
Seibal	None	None	2 built	Tourtellot and Gonzalez 2005
Tikal			1 built; 4 others unclear	Jones 1996
Tintal	1 built	None	N/A	Hansen et al. 2006
Uaxactun	1 built	No construction	1 built	Barrois-Jau 2009
Xtobo	1 built	Abandonment	N/A	Anderson 2011
Yalbac	1 built	No construction	Major modifications	Baron 2006
Yaxha	None	None	2 built	Gómez 2007
TOTAL	40	7	48	