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The Editorial

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This eighth issue of *The Mayanist* kicks off our new submission format. For the first seven issues, our papers all stemmed out of an AFAR conference—either Maya at the Playa or Maya at the Lago. However, this issue is the first to stem from a concise submission project headed by our co-editor Matthew Longstaffe (Ph.D. Candidate, University of Calgary). If you, *reader*, are interested in proposing a thematical issue for *The Mayanist* and in acting as a future guest editor, please do email the editor-in-chief (see above) with a detailed suggestion.

We, *The Mayanist* team, are thus doubly excited to introduce this new, concerted issue on the theme of *Ancient Maya Intermediate Elites*. Issue 8 contains two articles and two reports, along with one book review. The two articles, by Melissa Burham and John Walden, respectively address intermediary elites among the Preclassic and Classic Maya. The first report, by Matthew Longstaffe and colleagues, focuses on the architecture of an intermediary elite group from the site of Yaxnocah. The second report, by Xanti Sirani Ceballos and colleagues, centers on residue analyses from vessels associated with intermediary elites from the site of El Palmar. Altogether, these four papers nicely bridge the Preclassic to the Classic periods and span the entire Central and Southern Lowlands, covering sites located in modern Belize, Guatemala, and Mexico. The book review, by Maxime Lamoureux-St-Hilaire, discusses Kenneth Selligson's brand new *The Maya and Climate Change* (Oxford University Press).

We are once again proud to feature the *ajtz'ib* Walter Paz Joj, who collaborated with our authors to produce more beautiful original artwork. As usual, publishing *The Mayanist* would be impossible without our layout maestro, Joel Skidmore. Our team has grown again, now featuring a team of four dedicated copy-editors from Mount Royal University headed by Kento Ammond and including Morea Carle, Gregory Gaves, and Adam "A.B." Brotherton. We now turn to our Guest Editor, Matthew Longstaffe, so that he may break down the theme and papers from this issue.

From Our Guest Editor

This special issue of *The Mayanist* explores the topic of intermediate elites, a term we introduce to broadly refer to the heterogeneous subset of people in ancient Maya societies that occupied an intermediary social position between apical rulers and the commoner masses (Elson and Covey 2006:2). I have long been interested in this topic, and it has been my great privilege to bring together current research on this important, although understudied, aspect of ancient Maya social organization. As you will see, the authors approach this theme with different questions in mind, the result of which is a series of articles and reports that touch on diverse areas of inquiry, including sociopolitical dynamics, social and ritual-religious integration, urbanization, foodways, socioeconomics, and so much more.

What differentiates "elites" from "non-elites," and how clear are these divisions? These are fundamental yet unresolved questions with implications for how we approach the study of the ancient Mayas. Until relatively recently, past Maya societies were thought to be structured by a rigid, two-stratum social system of elites and commoners. Although some scholars have been raising doubts about this characterization for decades (e.g., Chase and Chase 1992; Sharer 1993), it is today more evident than ever that the Mayas' social reality was far more complex than these cut-and-dry categories suggest. Ancient Maya communities were complex social arenas made up of various subgroups and factions with different (and often competing) goals and objectives in mind. In addition to rulers and those broadly referred to as "commoners" (Lohse and Valdez 2004), communities included people whose social station fell somewhere in between. One of the aims of this issue is to bring attention to these myriad intermediary social actors who intersected the complex systems and institutions that structured and rationalized aspects of the ancient Maya world.

Although this issue is structured around the topic of "intermediate elites," our intent is not to introduce yet another rigid *a priori* category to the analysis of Maya social organization. Instead, I – and encourage others to – think of this term as a heuristic wherein the social position of intermediary actors is relative, depending on the historically contingent community and institutional context(s) of analysis. This approach allows recognition of many different types of intermediary actors who contributed (in various ways) to the social complexity and richness of Maya societies. Thus, intermediate elites should be analyzed on a case-by-case basis; this is clearly illustrated by the articles in this issue, which I am pleased to introduce.

The first article in the issue, *Becoming an Intermediate Elite: Ritual Cooperation and Urbanization at Late Preclassic Ceibal*, by Melissa Burham, delves into the social relations and processes that gave rise to incipient intermediate elites at Ceibal, Guatemala. The Late Preclassic was a time of increasing urbanization, social stratification, and political centralization. Burham considers the evidence to argue that incipient intermediate elites at Ceibal oversaw the construction of, and activities at, outlying minor temple groups to support social cohesion as these processes unfolded. Drawing on several years of excavation data and analyses, this article provides an invaluable perspective on the role of intermediate elites as social agents during a period of emergent

sociopolitical complexity.

Next, John Walden's *The Political Roles of Inter-Hierarchical Agents in the Classic Maya Lowlands* offers a theoretical take on intermediate elite agents to explore the dynamics of Maya political systems. While most scholarship on Classic period political organization focuses on the actions of apical elites situated within royal courts, this article considers political actors who occupy an "inter-hierarchical" social position – that is, somewhere between the bottom and the top of the social ladder. Walden articulates an agent-focused framework that charts intermediate elites' shifting and variable relationships as they interact with suzerains, peers, and subordinates, effectively "peopling" the middle hierarchical level. These relationships are envisaged as intermediate elite "faces": a downward face projected to client commoners, a lateral face to peers, and an upward face to apical elites. Recognition of intermediate elites' shifting strategies speaks clearly to the notion that Classic Maya polities were dynamic arenas of political competition, populated by subgroups and factions with competing discourses, goals, and intents.

Next, my colleagues from the Proyecto Arqueológico Bajo Laberinto (PABAL) and I contribute a report titled *Managing the Marketplace: The View from Ximbal Che, an Intermediate Elite Architectural Group at Yaxnohcah, Campeche.* We synthesize data from our ongoing field investigations to describe the developmental history of Ximbal Che and to reconstruct the integrative socioeconomic practices of the people who lived at this architectural group. Building on a growing body of knowledge on ancient Maya marketplaces and socioeconomic systems more broadly, we explore the possibility that during the Late Classic, Ximbal Che was the residential and administrative site of an intermediate elite corporate group that structured day-to-day life around organizing and administering Yaxnohcah's Sakjol marketplace, located next door.

Finally, Ancient Maya Standard-Bearers' Foodways: Chemical Residue Analyses of Ceramic Vessels at the Guzmán Group of El Palmar, Campeche, by Xanti Sirani Ceballos and colleagues, offers insights on intermediate elite foodways. The article focuses on the Guzmán Group, El Palmar, Campeche—an outlying courtyard group notable for once being home to a lakam ("standard-bearer") named Ajpach' Waal. This report, which presents the results of a geochemical prospection study on ceramic vessels from various contexts at this group, gleans insights into Guzmán Group standard-bearers' food-related practices in everyday life and on more ceremonial occasions.

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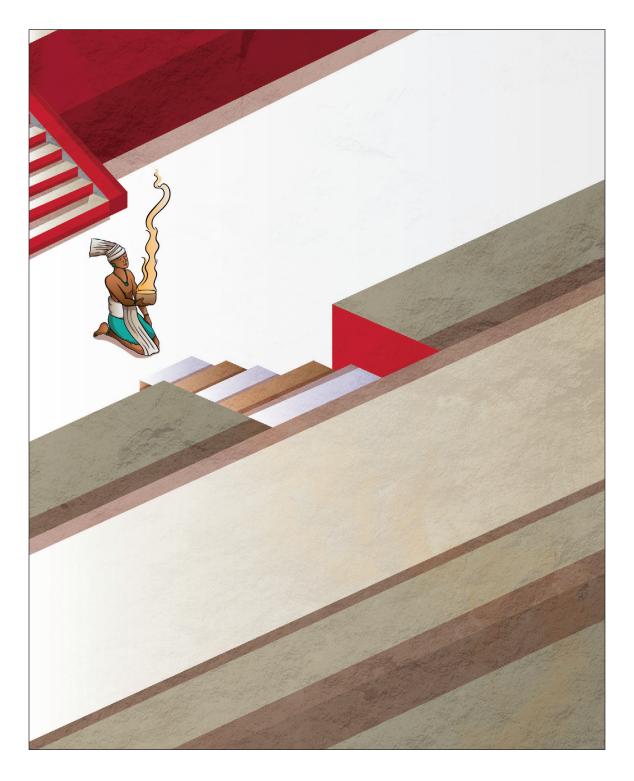
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Becoming an Intermediate Elite: Ritual Cooperation and Urbanization at Late Preclassic Ceibal

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Abstract. Classic Maya art and texts detail the deeds not just of royalty, but also of nobles, priests, and subordinate rulers who comprised the intermediate elite echelon of society. However, much less is known about the intermediate elites of the Preclassic, even though it is widely accepted that the first states, along with some of the first dynasties, were established by the end of this period. In a similar vein, although we know intermediate elites played important roles in integrating large and dispersed populations of ancient Maya polities, we know less about the processes and social relations that gave rise to these midlevel ranks. This paper explores these issues by focusing on data collected from outlying minor temples at Ceibal, Guatemala. More specifically, I examine evidence that intermediate elites resided in outlying areas during the Late and Terminal Preclassic periods, when the settlement grew into a thriving regional center. As people settled permanently in different areas outside the epicenter, the residents built a minor temple complex. Most minor temples are associated with at least one large domestic platform or truncated pyramid that was possibly an elite residence. This close association between temple and elite residence suggests emergent elites oversaw the construction of and ceremonial life at minor temples. Furthermore, drawing from the theory of collective action, I examine how central and intermediate elites developed reciprocal and interdependent relationships as they collaborated to create and diffuse ritual practices during the Late Preclassic. By mediating ritual knowledge from center to outlying populations, local leaders may have gained an elevated status in their own communities.

Keywords: Preclassic Maya, ritual, collective action, incipient elites, Preclassic elite residences



Classic Maya art is replete with imagery of rulers and nobles performing sacred ceremonies, waging ritualistic warfare, and convening with deities. Although they were the heads of states, there is limited evidence that rulers exerted great amounts of control over the daily lives of the populace, particularly when it comes to economic activities (e.g., King 2016; Triadan and Inomata 2020). These findings have instigated longstanding debates about the degree and nature of centralization of ancient Maya polities (Fox et al. 1996). Most scholars now favor loosely centralized models of organization that pay particular attention to integrative mechanisms operating at different levels of society (e.g., Foias 2013; Marken and Fitzsimmons 2015). It is not surprising, therefore, that a growing body of research (e.g., Elson and Covey 2006a) focuses on sub-royal and local leaders, often called "intermediate elites" because of their important roles as intermediaries between lay-

people and higher-level rulers.

Most studies on intermediate elites focus on the Classic Period, after dynastic rulership and social hierarchies were well established. However, much less is known about intermediate elites of the Preclassic period (ca. 1000 BC–AD 300) or their roles in the emergence of the earliest Maya states. Yet, the developments of the Preclassic arguably laid the foundation for Classic period polities (Estrada-Belli 2011). Studying the roles of emergent leaders at all social scales during the Preclassic can thus inform our understanding of Classic period organization more broadly. This paper explores the emergence of intermediate elites at Ceibal, Guatemala (Figure 1) during the Late and

Terminal Preclassic periods (ca. 350 BC-AD 300), when the settlement grew into an important regional center. More specifically, I focus on identifying intermediate elites at outlying minor temple complexes and explore how they supported social cohesion in the face of increased urbanization, social stratification, and political centralization.

Becoming an Intermediate Elite

In the simplest terms, intermediate elites are individuals whose rank is below top-tiered, central decision/policy-makers (referred to here as central or ruling elites) and above that of commoners (Elson and Covey 2006b:4-9; Lohse and Valdez 2004). Some have highlighted the precarious positions intermediate elites held, since they had to appease both their constituents as well as their overlords (e.g., Marcone and López-Hurtado 2015). Nevertheless, intermediate elites occupied a pivotal position to uphold, question, or effectively rebel against the ruling body. While it is important to consider the strategies that intermediate elites employed to integrate the populations that supported them (e.g., Walden et al. 2019), we must pay equal attention to the dynamic relationships between ruling and intermediate elites to explore how the fragile structures of ancient Maya polities were maintained over centuries.

As Elson and Covey (2006b:8) explain, segmenting political authority – including granting power to subordinate elites – ironically helps maintain central power and prevent political upheaval. This framework implies that subordinate elites exist at the behest of their overlords specifically for supporting a central regime, a perspective that some Mayanists have leaned into (e.g., Chase and Chase 1996). However, competition among ruling and subordinate elites can create unstable

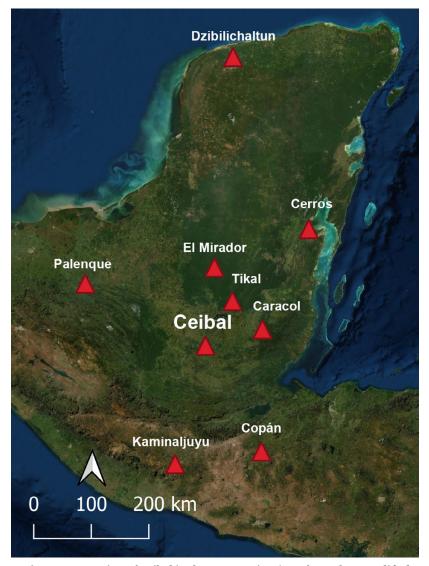


Figure 1. Location of Ceibal in the Maya region (map by author, modified after Burham 2022:Figure 1).

relationships and cause factionalism (Elson and Covey 2006b:14-15). Arguably, the relationships between ruling and intermediate elites need to be mutually – though not equitably – beneficial to alleviate the tensions born out of competing interests and uneven power relationships.

The theory of collective action (Blanton and Fargher 2008) is a useful framework in this regard because it focuses on the ways in which people simultaneously support mutual interests and individual agendas. The key idea is that by investing in common interests, people enhance their own well-being on greater levels than they would alone. Following others, Carballo and colleagues

(2014:106-108) suggest that four key, overlapping mechanisms underlie cooperation, including reciprocity, reputation, retribution, and reward. Epigraphic studies demonstrate that Classic Maya rulers enlisted sub-royal individuals at varying levels of society to support their authority (e.g., Foias 2013:117-123). In exchange, both rulers and intermediate elites may have been rewarded through inclusion in (or punished through exclusion from) prestige exchange networks, participation in local and public rituals, and/or exchange of ritual knowledge (e.g., Lamoureux-St-Hilaire 2020:260-263). Because the status of both ruler and intermediate elites relied on mutual support and recognition of each other's authority (i.e., reciprocity and reputation), they developed interdependent relationships. While ranking between ruling and intermediate elites appears to be hierarchical at face value, the codependent nature of their relationships arguably created counterbalancing and complementary power dynamics (Crumley 1995), which helped maintain an otherwise fragile system. Although I focus on collective action between ruling and intermediate elites, it is worth noting that these same mechanisms help explain the establishment of hierarchies between elites and commoners more broadly.

We need to be careful not to assume these arrangements were created consciously with much foresight of the eventual outcomes. In fact, the collective action framework emphasizes the organic nature behind the emergence of social hierarchies, as people "self-organize" into specialized roles to achieve collective goals (Scarborough et al. 2003). For example, while not using the collective action model, Spencer (1993:48-58) suggests that institutionalized authority followed the construction of the Purrón Dam in the Tehuacán Valley, which was originally built by small, de-centralized groups. In this case, some "aspiring leaders" achieved status by coordinating construction and maintenance of the dam, which was a crucial source of water in the arid landscape. Although Spencer places emphasis on self-aggrandizers, his study importantly demonstrates how the fleeting and unstable nature of authority in egalitarian societies can become formalized and longstanding as people willingly follow - and as a result become subordinate to - the leaders of a system in which individual success relies on group cooperation. Alternatively, Joyce (2004) suggests that collective efforts to build public ceremonial architecture unintentionally created and naturalized social divisions, as access to certain spaces and practices became increasingly restricted to fewer individuals. It is important to remember that even as they gain social standing, leaders were bound by responsibility to their people and to the ideology that justified their higher status. These perspectives shy away from the view that elites were self-aggrandizing power mongers and instead examine how leadership gradually translated into rulership at different social scales.

In a previous publication, my colleagues and I explore the relationships between ritual and the emergence of social complexity at Ceibal (Burham et al. 2020). Here I briefly revisit those arguments to focus on the emergence of early intermediate elites later in the paper. As many have noted (e.g., Bell 1992; Turner 1969), ritual simultaneously unites people through common experiences while fostering social hierarchies, since few specialists are recognized as possessing the knowledge and ability to perform certain rites, to handle sacred objects, or to access ritual spaces. Many scholars agree that the power of ancient Maya rulers and sub-royal elites was grounded mainly in their roles as ritual-religious leaders (e.g., Demarest 1992; Freidel and Schele 1988). This has led some to suggest that emergent elites strategically employed ritual to elevate their status, eventually leading to divine rulership in the Classic period (e.g., Lucero 2003). Research at Ceibal suggests

that the development of public ceremonialism was a complex process involving negotiations and participation among people in the center and outlying areas (Inomata et al. 2015a). A collective action framework allows us to consider how sharing ritual knowledge, rather than monopolizing it, helps create reciprocal and mutually beneficial relationships between different social actors.

Incipient Elites at Ceibal

Identifying Elites

Although the archaeological identification of elites has been a subject of debate among Mayanists (D. Chase and A. Chase 1992), they are commonly identified on the basis of greater access to exotic items, use of status symbols, extravagant burial treatments, and association with elaborate architecture (A. Chase and D. Chase 1992:4-7). Elite residences, in particular, have often been distinguished from those of non-elites based on assumptions that they are located close to public architecture, constructed of special materials and techniques, and are more sizeable than non-elite domiciles (Christie 2003:4; Inomata and Triadan 2003:157-158). While the size and amount of buildings in a residential compound may reflect the development cycle of a domestic group more than social standing (Tourtellot 1988a), domestic architecture can be used to determine higher status if we consider whether the buildings required supra-household labor organization to construct. Larger domestic buildings reflect the ability of the residents to compel labor outside their household, while the size and grandeur may have symbolically differentiated the residents from others in the community (Inomata and Triadan 2003:157). This reasoning has been particularly fruitful for distinguishing elites in the Early and Middle Preclassic/Formative settlements across Mesoamerica (Blake et al. 2006; Spencer 1993; Triadan et al 2017). In this paper, I consider all these principles to assess whether (intermediate) elites resided in outlying areas of Ceibal.

Middle Preclassic Elites and Ritual

Ceibal became a permanent ceremonial center around 950 B.C., when an E-group assemblage was carved out of natural bedrock in the Central Plaza (Figure 2; Inomata et al. 2013). At the same time, a substantial clay platform, called Platform Sulul, was constructed approximately 100 m to the southwest of the E Group (under the A-24 platform, see Figure 2), and possibly had a domestic function (Triadan et al. 2017:235-237, 260). Most people, however, did not begin to use ceramics or build permanent dwellings (i.e., durable, often elevated constructions repeatedly rebuilt over time) until a couple centuries later (Inomata et al. 2015b). At the East Court, northeast of the Central Plaza (see Figure 2), Triadan and colleagues (2017:247-253) found a tall, expansive platform (K'at) dating to the end of the Early Middle Preclassic (Real 3 facet, ca. 775-700 BC), which supported domestic buildings. The construction of the K'at and Sulul platforms clearly involved communal labor and great material investment. The fact that these buildings were occupied by few people suggests the residents were early or incipient elites.

Some evidence of status differentiation during the latter centuries of the Middle Preclassic has been identified in outlying areas of Ceibal as well, including personal adornments, elaborated

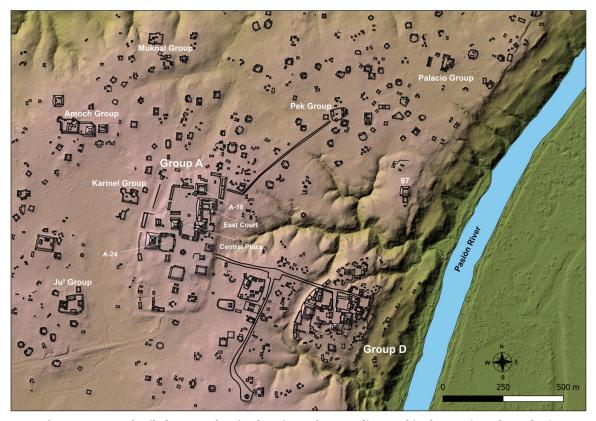


Figure 2. Map of Ceibal center, showing locations of groups discussed in the text (map by author).

burials, and supra-household ritual activities (Burham 2019:148-151; MacLellan 2019:93-9,138). However, it is unclear if any individuals were *intermediate elites* in the sense they served to support a central regime, or if they even could be considered elites (see A. Chase and D. Chase 1992). The relationships between emergent elites in the center and people in outlying areas were complex and appear to have been horizontally oriented (MacLellan and Castillo 2022). Regardless, a degree of social ranking was established on public and local scales by the end of the Middle Preclassic period.

Outlying Elites in the Late and Terminal Preclassic

A profound social and cultural shift occurred across the Maya region beginning in the Late Preclassic, including mass urbanization and the emergence of dynastic rulership at some centers (Ringle 1999; Saturno 2006). As I describe elsewhere (Burham 2022), Ceibal grew into a large regional center in a piecemeal fashion over the Late and Terminal Preclassic periods. Minor temples (pyramid-plaza complexes built on smaller scales than their counterparts in monumental cores) were systematically constructed as people settled permanently in new outlying areas (see Figure 2). This pattern suggests that ritual was an important consideration during urban expansion.

Many Mayanists have argued that minor temples, and minor centers more broadly, were

important ritual and administrative centers that helped integrate dispersed populations into larger political domains (Bullard 1960; Iannone 2004; Ringle 1999; Tourtellot et al. 2003). However, it is not clear who was involved in establishing or governing them, especially during the Preclassic. Did central elites commission their construction and select local (intermediate) elites to oversee them, or were local people emulating the monumentality of the center and choosing their own leaders? Did elites even preside over each temple? While it is reasonable to assume that construction of these temples required leadership, that access was restricted to few specialists, and that ruling elites were involved in their construction on some level, we need to consider different lines of evidence to understand the relationships between minor temples and intermediate elites, and between minor temples and monumental epicenters. Gair Tourtellot (1988b:377), who conducted an extensive survey of outlying areas of Ceibal, noted that some minor temples were associated with large domestic platforms or other possible residences of local elites (who he references as "chiefs"). Below I focus on five minor temple groups to explore his suggestion in detail. Following the arguments outlined in the beginning of this section, we would expect the houses of intermediate elites to be more elaborate than those of non-elites, denoting the residents' status. I concentrate mainly on size and elaborateness of the domestic architecture and their association with temples to evaluate if they could have been elite residences.

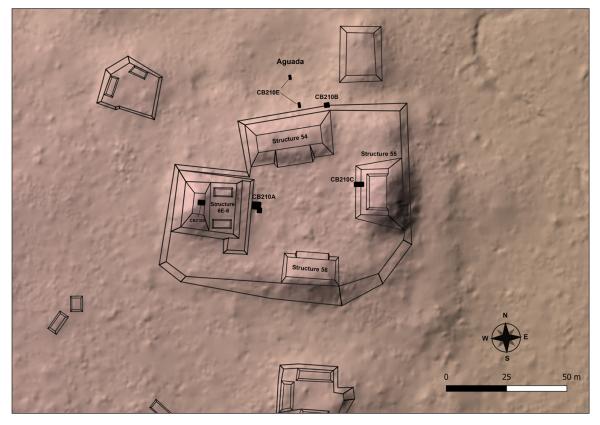


Figure 3. Map of the Jul Group, showing locations of excavations (map by author).

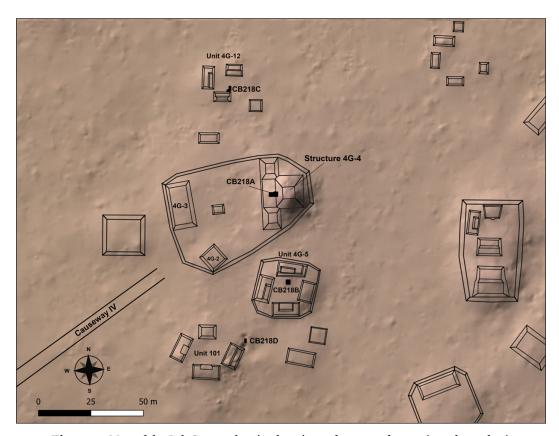


Figure 4. Map of the Pek Group, showing locations of excavated areas (map by author).

The Jul Group. The Jul Group is located ca. 600 m southwest of the Central Plaza. The group consists of four buildings, including two standalone pyramids and two large range structures, facing inward onto a plaza (Figure 3). The complex sits on a large basal platform, possibly built on a natural rise. Superficial excavations of Structures 6E-6, 54, and 55 revealed their final versions date to the Late Classic, although the group was occupied through the Terminal Classic. Excavations in front of the western pyramid, Structure 6E-6, revealed the group was established at the end of the Middle Preclassic (Escoba 3 facet, ca. 450-350 BC), but both pyramids were probably built in the Late Preclassic, like most others in outlying areas (Burham 2022; Tourtellot 1988b). Excavations behind Structure 54 revealed the northeast edge of the basal platform extended to this area by the Late Preclassic. The final iteration of Structure 54 measured 35 x 18 m at its base, while Structure 56 was approximately 24 x 14 m. These versions were built of stone masonry and possibly had vaulted roofs, indicating high levels of material and labor investment. Although we did not excavate deeply into the structures, their size and morphology suggest they served administrative and residential functions, and thus, were possibly the residences of local elites during the Late Classic. However, like most large buildings at Ceibal, these structures may have Preclassic cores. This interpretation is supported by the fact that Structure 54 was built over Late and Terminal Preclassic strata. In other words, these structures could have been elite residences as early as the Late Preclassic, but

more work needs to be done to confirm this interpretation.

The Pek Group. The Pek group is located ca. 750 m northeast of the Central Plaza and is connected to Group A by Causeway IV (Figure 4). The main complex consists of a winged pyramid (Structure 4G-4) facing westward on a plaza and a low, Late Preclassic platform (Structure 4G-3), where Tourtellot (1988:180) found a tayra skull amulet. Excavations at the foot of the temple revealed the first version was built during the Late Preclassic Cantutse 1 facet (ca. 350-300 BC) and was occupied through the end of the Terminal Preclassic (Junco 1 facet, ca. AD 175-300). To the south of the temple, the residents built a substantial (approximately 30 x 30 m at its base) domestic platform (Unit 4G-5). Excavations in the middle of the platform revealed the first version was constructed in the Cantutse 2 facet (ca. 300-150 BC). While we do not know the horizontal dimensions of the earliest version of the platform, it was approximately 30 cm in height, and was raised an additional 40 cm during the same facet. The platform was eventually built up to 2 m by the end of the Terminal Preclassic. Given its proximity to and contemporaneity with the temple, it is possible that this was the residence of an early elite.

The Amoch Group. The Amoch Group is located approximately 570 m northwest of the Central Plaza. The standalone pyramid is massive, measuring 34 x 36 m at its base and 9 m in height. A large, multi-tiered residential platform was built across the plaza of the pyramid (Figure 5). The

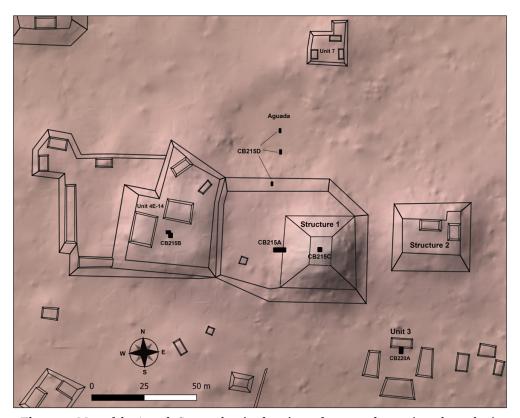


Figure 5. Map of the Amoch Group, showing locations of excavated areas (map by author).

highest tier of the platform towers 3 m above the plaza below. Standing atop the platform offers an impressive view of the plaza and pyramid, and one could imagine how the sound of ceremonies would have reverberated between the buildings. Excavations of Structure 1 suggest the first version was built in the Late Preclassic Cantutse 2 facet (ca. 300-150 BC) and was remodeled many times until the end of the Terminal Preclassic. Although we did not reach bedrock in the excavation of the residential platform, we found that it was built up mostly, if not entirely, during the Late Preclassic and resurfaced during the Terminal Preclassic, making it contemporaneous with the pyramid. To the east of Structure 1, the residents built a truncated pyramid (Structure 2), which closely resembles Structure A-18 in the center and Structure 97 located northeast of Group A (see Figure 2). The bulk of each of those seemingly residential structures was built during the Late Preclassic (Triadan 2015; Triadan et al. 2017:254). Structure 2 was possibly also a tall residential platform dating to the Late Preclassic. The platform and Structure 2 are closely associated with Structure 1, and both clearly required communal labor to construct. These buildings may have been occupied by local elites who presided over the pyramid during the Late and Terminal Preclassic periods.

The Muknal Group. The Muknal Group is a modest minor temple complex located ca. 700 m north of the Central Plaza. It consists of a standalone pyramid facing south with two low platforms flanking its east and west sides (Figure 6). Tourtellot (1988b:148-153) extensively excavated the pyramid, finding that it dates entirely to the Late Preclassic and was ritually buried at the end of the Terminal Preclassic, when the group was abandoned. Our test excavations revealed the group was established more specifically during the Cantutse 3 facet (ca. 150-75 BC). During the Late Classic, after the group was reoccupied, the residents built a lavish patio group, including stone buildings

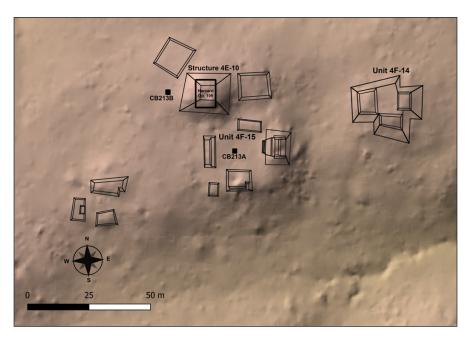


Figure 6. Map of the Muknal Group, showing locations of excavated areas (map by author).

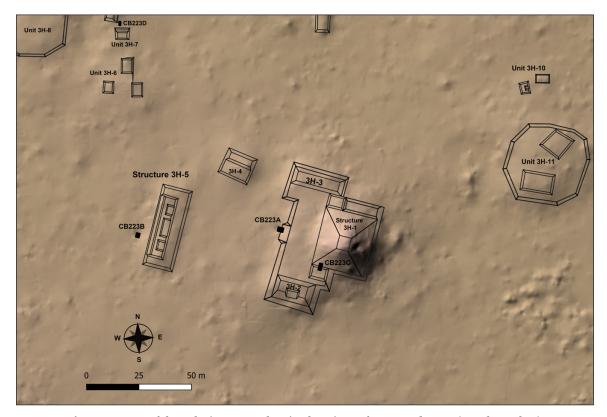


Figure 7. Map of the Palacio Group, showing locations of excavated areas (map by author).

with benches and possibly vaulted roofs, to the south of the pyramid (Tourtellot 1988b:180-182). There could be an earlier patio group underneath, but it was more likely an open plaza in Preclassic times. A LiDAR survey (Inomata et al. 2017) revealed a substantial residential platform a short distance to the east of the pyramid. Like many platforms at Ceibal, it was probably constructed in the Late Preclassic, which means it would have been occupied contemporaneously with Structure 4E-10. Given its proximity to the temple and its large size, it is possible that this platform was the residence of a local elite.

The Palacio Group. The Palacio Group, located 1.2 km northeast of the Central Plaza, is a large, impressive complex, consisting of a 10 m tall pyramid on the east side and a palace on the west side of a plaza (Figure 7). The bulk of the pyramid was built in the Late and Terminal Classic periods, but the first version of the temple and plaza date to the Junco 1 facet (ca. AD 175-300). The Palacio Group is the latest minor temple complex in the sample to be built, and it was occupied for a short time before outlying areas of Ceibal were abandoned for approximately 200 years. Our test excavation behind the palace revealed a shallow Terminal Classic midden, but no earlier Classic or Preclassic layers were found underneath. It is therefore unclear if a Preclassic construction is underneath the later version. While this was certainly the residence of a local elite during the Terminal Classic, we cannot determine if or where an elite resided in the group during the Terminal Preclassic.



Figure 8. Top: Monument 2 in façade of Structure 1-Sub 2 (photo by author). Bottom: Sierra Red vessel that contained Burial 147 (photo by T. Inomata, courtesy of the Ceibal-Petexbatún Archaeological Project).

Two large residential platforms to the northwest and northeast of the complex are potential locations (see Figure 7), though they are not located as close to the temple as the large residential platforms are in the other cases discussed above.

Late Preclassic Ritual Practices

In contrast to previous periods, ritual practices of the Late and Terminal Preclassic periods undertaken in the Central Plaza, at minor temples, and in domestic contexts became remarkably similar (see Inomata et al. 2015b). In the Central Plaza, caches consisting of sacrificial burials, often placed in large Sierra Red pots, became common. At the Amoch Group, during the Cantutse 3 facet (ca. 150-75 BC), the residents placed a large limestone altar in front of an earlier version of Structure 1. The altar is associated with various construction episodes and was eventually incorporated into the façade of the structure during the Terminal Preclassic (Figure 8). Similar to contemporaneous caches

in the plaza, a child sacrifice (Burial 147) was placed in a large pot underneath the altar. Ritual similarities at all scales of society continued in the Terminal Preclassic period. For instance, at the Karinel Group, MacLellan (2019:84-85) found Cache 159, a large deposit of Sierra Red and Achiotes Unslipped bowls and round stone artifacts placed in a large intrusion. A child burial was interred higher in the intrusion, possibly as an offering. At the Amoch Group, the residents deposited Cache 166, consisting of a partial Iberia Orange bowl and a large sherd from a Velorio Dichrome vessel, into a Terminal Preclassic floor atop the large residential platform (Figure 9). Caches 159 and 166 closely resemble larger, contemporaneous caches deposited in the Central Plaza (see Burham et al. 2020).

Discussion

To summarize, I have explored evidence for the existence of local elites in outlying areas of Ceibal during the Preclassic period. Excavations at Ceibal also provide an idea of what Preclassic elite residential groups looked like. Similar to their Classic Period counterparts, Preclassic domestic compounds consisted of patio groups at least as early as the late Middle Preclassic (MacLellan 2019:137-138; Triadan et al. 2017). However, elite patio groups were probably built on large basal platforms, some of which towered 3-6 m above surrounding areas. With the possible exception of the Palacio Group, each minor temple is associated with at least one potential elite domestic platform that was occupied contemporaneously with its associated temple during the Late and Terminal Preclassic. This evidence suggests local elites resided at each temple. If this interpretation is correct, it is reasonable to conclude they oversaw construction and ritual activities at the respective complex.

Ritual practices at Ceibal further elucidate the relationships between central and emergent intermediate elites. In the Middle Preclassic, domestic rituals bared little resemblance to public rituals in the Central Plaza (MacLellan 2019). While public ritual helped integrate populations, sacred knowledge and access to specialized objects used in those rites was restricted to few people in the center. Middle Preclassic public rituals, which involved greenstone and obsidian objects exchanged through elite-led networks, promoted hierarchical power structures between central elites and the

rest of the population (Aoyama et al. 2017). However, MacLellan and Castillo (2022) suggest that Middle Preclassic domestic and supra-household ritual practices existed in tension with public rituals in the Central Plaza. Smaller-scale rituals in domestic settings may have counteracted the centralizing forces of public ceremonies in the center for some time.

In contrast to previous periods, similarities in ritual deposits and ceremonial architecture between the center and minor temple groups during the Late and Terminal Preclassic periods show that some people in outlying areas had access to specialized ritual knowledge. The lens of collective action allows us to explore the significance of these patterns in relation to the formation of intermediate elites. The development of these new practices likely resulted from negotiations among various community members to foster consensus

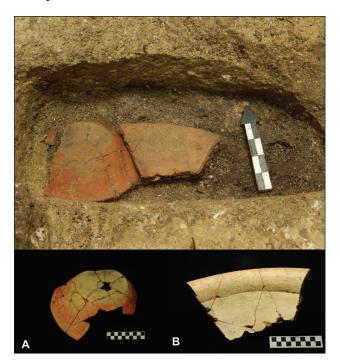


Figure 9. Top: In-situ photo of Cache 166 from the Amoch Group. Bottom: Detail photos of vessels from Cache 166 (photos by author).

and community in the face of exploding population sizes and increased social differentiation. People in outlying areas were not simply emulating rituals originating in the center, but rather, some were actively involved in creating them (Burham and MacLellan 2014). Rather than co-opting or monopolizing ritual practices, established central elites cooperated with other, local ritual leaders to reach common goals, which included integrating larger populations into one cohesive society.

Through this collective involvement in creating dominant ritual practices, the power that would have been exclusive to the central elites was dispersed among different social actors in the community. These arrangements arguably fostered reciprocal and interdependent relationships among central and newly established intermediate elites: the authority of local leaders hinged on their relationships with established central elites, while central elites relied on intermediate elites to integrate subordinate populations so that they would willingly provide tribute and labor for the



central regime. In a way, by entering these relationships, new intermediate elites gave up part of their autonomy, as they assumed specialized roles in society that required (quite literal) sacrifices on their part. Both central and intermediate elites may have taken these positions not as a power grab, but because of their deep sense of responsibility to their people and their commitment to the beliefs they were imparting on the community.

Central elites undoubtedly held more prominent positions than did their intermediate elite counterparts. Even still, at Ceibal, there is little evidence that a preeminent central ruler existed during the Preclassic, and there is limited evidence of ranking among different minor temple groups (Burham

2019). There was undoubtedly competition and factionalism among different intermediate elites and temple communities during the Preclassic. However, the relationships between, or rather the social network comprised of intermediate and central elites may have helped mitigate conflicts among distinct sectors of society and promoted social cohesion among a growing populace. At the same time, because they all drew from the same source of power (ritual knowledge) and because they relied on their counterparts to recognize and legitimize their individual authority, elites may have developed mutually beneficial yet counter-balancing political relationships amongst themselves. The presence of so many recognized elites may have limited the power that any one individual could achieve.

We cannot be sure how specific individuals in outlying areas were positioned to become intermediate elites. Were they aspiring aggrandizers or were they established leaders that naturally took the responsibility of communicating with central elites? This point warrants further research. However, we can say their roles as ritual leaders were crucial for solidifying their higher status and involved collective cooperation with the center. Similar to their Classic period iterations (Tsukamoto et al. 2015), outlying temples were important venues for social and political negotiations of different leaders, as well as between leaders and subordinate populations. They were places where local ritual specialists mediated the knowledge they gained from working and learning with central elites. In this way, these specialists assumed an elevated status among their own communities while also supporting the authority of central elites. Rituals performed at minor temples

resembling ceremonies in the Central Plaza may have allowed people to more closely observe and participate in them, and, in turn, perform the same rites in domestic settings on their own. Access to and acceptance of this knowledge may have motivated laypeople to accept the authority of local elites, even though it meant they became political subjects. Shared practices at all levels of society would have been crucial for alleviating tensions arising from increased social stratification and stress as people continued to settle in early urban centers.

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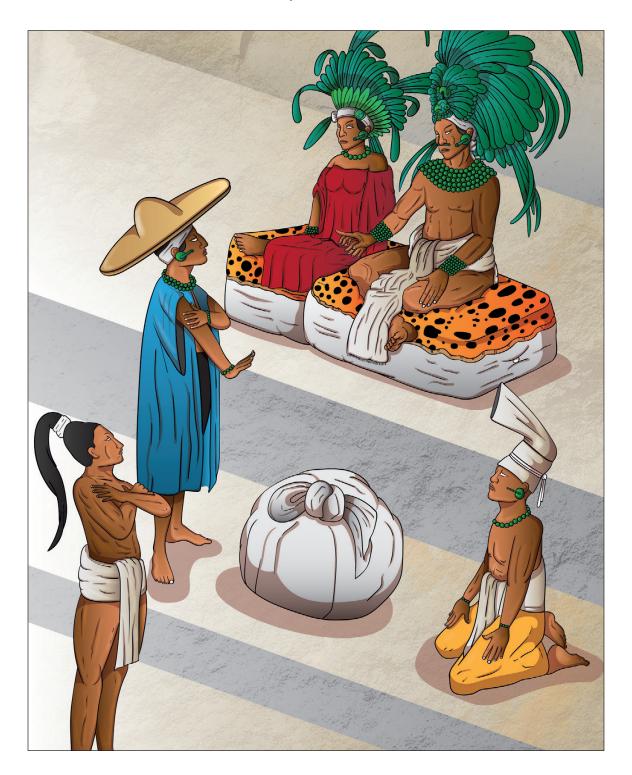
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The Political Roles of Inter-Hierarchical Agents in the Classic Maya Lowlands

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No ancient polity was solely comprised of kings and commoners. Instead, a broad range of inter-hierarchical actors existed between those situated at the top and bottom of ancient social ladders. Drawing upon epigraphic and archaeological perspectives on Classic Maya political dynamics, this article showcases the importance of investigating intermediate elite agency. Moreover, the article articulates a theoretical framework for investigating the role of inter-hierarchical agents within a political system grounded in the three "faces" which intermediate elites constructed through their relationships with commoner subordinates, peer elites, and apical elite suzerains. The framework provides a novel agent-based perspective on ancient political dynamics.



In ancient and modern polities alike, multiple intermediate actors exist between those at the bottom, and those at the top of the social ladder (Claessen 1978:537-538; Gledhill 2000:127). Examples of such individuals include chiefs, warlords, lineage heads, neighborhood leaders, nobility, governors, gentry, administrators, and so on. By investigating the roles of the sub-royal elites who headed the internal components of polities and interacted with the commoners, we can achieve a more comprehensive understanding of political dynamics (Elson and Covey 2006; Garrison et al. 2019:134; Iannone 2003; Marcus 2006). These intermediate elites walked a political tightrope, balancing the demands of their superiors with the expectations of their subordinates, while simultaneously endeavoring to preserve or amplify their own power (Conlee and Schreiber 2006:95; Connell 2010:313; McAnany 1995:139; Schortman 2010:379-380). This social position,



which is "inter-hierarchical" in nature (sensu Gluckman 1968), meant that intermediate elites could foment political change or generate stability, depending on their relationships with their subordinates and suzerains. Although anthropological archaeologists have only recently begun to focus on inter-hierarchical agents (Elson and Covey 2006; Porter 2004), these types of actors have long received the attention of social scientists interested in factionalism, the co-option of client rulers, and patron-client relations (Bailey 1969; Harriss-White 1997; Rudolph and Rudolph 1966).

In this article, I develop a framework which effectively "peoples" the middle hierarchical levels of Maya polities with inter-hierarchical agents

(sensu Robin 2003:308). This article has three goals: (1) to introduce Classic Maya (AD 600-900) intermediate elites; (2) to showcase the importance and interpretative value of including intermediate elites in reconstructions of political dynamics; and (3) to articulate a framework for investigating political dynamics grounded in intermediate elite agency, which could be employed in any archaeological context. This article presents a research agenda for examining different hypotheses about the roles intermediate elites may have played in Classic period political dynamics. Whereas Classic period epigraphic, iconographic, and archaeological materials offer important insights into the roles inter-hierarchical actors fulfilled, much remains unknown at this time. The framework presented here, coupled with a more explicit focus on intermediate elites, offers one avenue for better understanding these oft overlooked, but influential actors.

Epigraphic and Archaeological Perspectives on Classic Maya Intermediate Elites

The Classic Maya geopolitical landscape was dominated by several larger competing polities like Calakmul, Caracol, Naranjo, and Tikal, which each controlled a hierarchically nested network of smaller polities (Figure 1). The royal courts at the apex of the competing hierarchies were focused on a ruling household whose political power and authority rested on patron-client relationships with secondary and tertiary elites to access their clientage networks of subordinate elites and commoners (Martin 2020; Pohl and Pohl 1994; Sharer and Golden 2004). Generally, polities fell in and out of the aegis of hegemons as the political power of their overlords waxed and waned (Marcus 1993). There are numerous instances in which rulers of smaller polities exhibited all the trappings

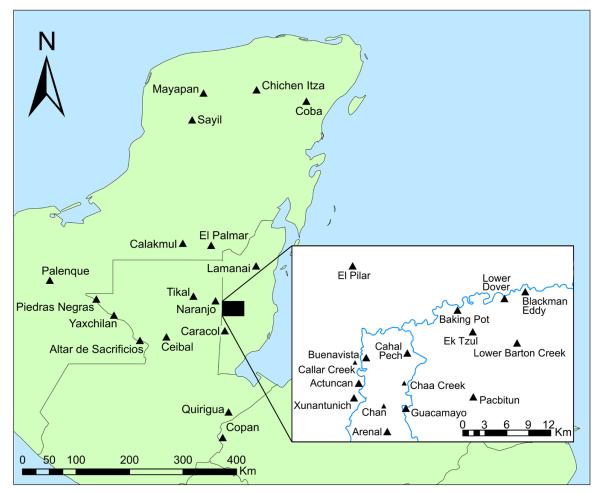


Figure 1. Map of the Maya Lowlands showing important political centers and those noted in text (map by J. Walden).

of autonomous kingship (Awe 2013). While some of these seemingly autonomous polities only came to manifest such traits when larger regional hegemons were in decline, other smaller polities were bound together through lateral alliances allowing them to resist hegemonic co-option (Foias 2013:89). The proliferation of this patron-client system engendered high degrees of intermediate elite agency resulting in polity-level instabilities. Fear of losing clientage networks to rivals could impede elite's coercive abilities (Pohl and Pohl 1994; Robin 2012:330). The degree of intermediate elite agency is evident in the numerous examples of intermediate elites maintaining diplomatic relationships across great distances, and potentially using these contacts when machinating to overthrow their suzerains and appropriate their power (Foias 2013; Golden and Scherer 2013; Martin 2020; Tsukamoto 2020).

Advances in epigraphic decipherment have revealed numerous elite titles including *ajk'uhuun* (worshipper, scribe or political mediator), *chak tok wayaab'* (a priestly position), *sajal* (provincial

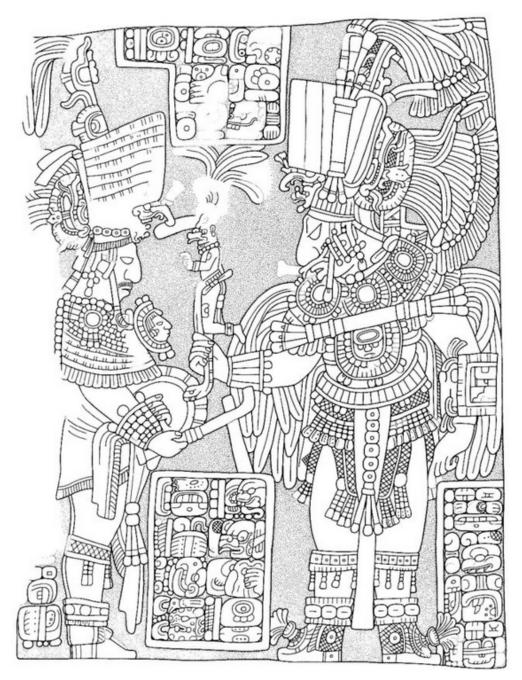


Figure 2. Yaxchilan Lintel 42, Head-*sajal* K'an Tok Wayaab, and Yaxun B'ahlam IV and performing a K'awiil scepter and axe-dance dance together (Yaxchilan, Lintel 42, drawing by Ian Graham. © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, 2004.15.6.6.13).

lord), b'aah sajal (head sub-lord), sajalob' (those beneath him), and lakam (a neighborhood-level official; Beliaev 2004; Estrada-Belli et al. 2009:246-48; Jackson 2013, 2015:245-8; Lacadena 2008:269; Tokovinine 2013). Descriptions of the roles and duties associated with these positions partially reflect the primacy afforded to ritual in the inscriptions. Many duties performed by these titled elite are indeed ritualistic in nature, such as scattering offerings, fire drilling, conjuring, commissioning civic-ceremonial architecture, playing ball, and venerating ancestors, often with their overlords (Jackson 2015: Table 9.1; Beliaev 2004; Estrada-Belli et al. 2009:246-48). Figure 2 provides an example of this dynamic, Yaxchilan Lintel 42 shows the ruler Yaxun B'ahlam IV performing a K'awiil scepter and axe-dance dance with head-sajal K'an Tok Wayaab. Yet, these titles also reflect multifaceted positions related to intermediate elite actors and not purely a priestly, warrior, or scribal class (Jackson 2013; but see Zender 2004). The ajk'uhuun title has been translated as "One who keeps, guards" or "One who worships, venerates" (Jackson and Stuart 2001:226; Zender 2004:194). Despite these recorded roles, there are numerous examples of aik'uhuuns bearing multiple different courtly titles throughout their lifetimes. Examples include Kelen Hix of Toniná who was both an *ajk'uhuun* and a *ti'huun*, Ahkmo' of Yaxchilan held both the *ajk'uhuun* and sajal titles at varying times, Mak'an Chanal of Copan held the ajk'uhuun title simultaneously with a local lordship "Lord of Koxop" (Jackson 2013; Martin and Grube 2000:206), and K'ahk' Way Na' of La Corona held an *ajk'uhuun* title and was an *anaab* (a priestly office) of the ruler Ti K'awiil (Lamoureux-St-Hilaire 2018:450-451). These examples suggest that at least some of the epigraphically documented elite roles were filled by intermediate elites with their own domains and client bases. These elite titles could become hereditary in polities with less centralized political control of intermediates. Lords of the K'utim family of El Cavo retained their saial title after the death of the Piedras Negras ruler who appointed them, a pattern which stood in stark contrast to the situation at Yaxchilan, where titles were reallocated following the death of an incumbent in office (Golden et al. 2008:253).

In addition to illuminating the various titles and duties of intermediate elites, the epigraphic corpus provides an understanding of the indirect strategies of incorporation whereby client elites were recruited in brokerage positions (Carter 2016; Sharer and Golden 2004:41). Autonomous local elites were potentially offered honorific titles with a restricted array of duties to incrementally curtail their political agency. These titles are far more common in the western Maya Lowlands and are sparse in the hinterlands of larger polities like Tikal, Calakmul, and Caracol. The geospatial distribution of titles may reflect more powerful apical regimes not needing to rely on honorifics to recruit client elites (Carter 2016:235; Foias 2013:155, 225; Jackson 2013:86-87). The growing awareness of the role of patron-client relationships within Classic Maya politics means that inclusion of intermediate elites within discussions of ancient politics is essential for achieving a holistic reconstruction of society.

Archaeology provides a complementary and contrasting picture. Maya archaeologists traditionally connected minor centers with rural nobility who possessed less wealth, power, and authority than apical rulers who resided in the major centers (Bullard 1960:369; Willey et al. 1965:580). The inter-hierarchical capacity of such actors is perhaps most evident in their location at the epicenters of large clusters of commoner settlement. Despite being enmeshed in commoner networks, intermediate elites frequently possessed ostentatious and sometimes sumptuary wealth

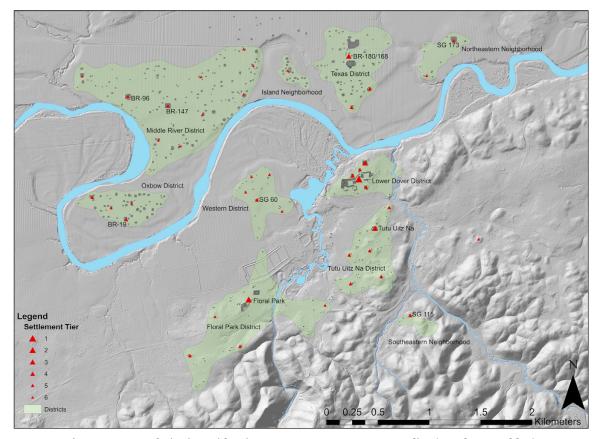


Figure 3. Map of Districts with Minor Centers at Lower Dover, Belize (map by J. Walden).

items which likely trickled down tributary networks from apical elites (see Figure 3 for an example of settlement clustering at Lower Dover in the Belize River Valley). These larger settlement clusters are roughly akin to those termed districts by Smith (2011; for examples see Adams and Smith 1981; Arnauld et al. 2012:209; Ashmore 1981:51; Eberl 2014; Hutson 2016:80; Iannone 2004; Lemonnier 2012:194; Lohse 2013; Prufer et al. 2017; Robin et al. 2012:114; Thompson et al. 2018; Yaeger 2000, 2010b:245). The sociopolitical implications of this hierarchical nesting have long been clear to archaeologists; "this overall design of Maya settlement of community units arranged in an ascending hierarchy suggests a parallel structure of organization in society, of similarly ascending foci of authority with minor leaders in minor centers and paramount rulers governing from major centers" (Willey et al. 1965:579-580).

The elite occupants of minor centers have become the explicit focus of attention in recent years. While archaeology has complemented epigraphic perspectives in documenting intermediate elite engagement in ritual and feasting (Ceballos et al. this volume; Connell 2010; Iannone 2003; Tourtellot et al. 2003; Tsukamoto 2017; Walden et al. 2019; Yaeger 2000), myriad other activities and roles are apparent archaeologically in contrast to the epigraphy. These include

hosting marketplaces (Chase and Chase 2003; Chase et al. 2015; Dahlin et al. 2007; Longstaffe et al. this volume), trade (McAnany et al. 2003), water management (Iannone 2003), agricultural management (Iannone 2003, Connell 2010; Conlon and Powis 2004; Chase and Chase 2003), border control (Driver and Garber 2004; Tourtellot et al. 2003), and craft production (Masson 2003). The variability in intermediate elite roles likely reflects the different degrees of integration in different polities, local resources and trade networks, and the agency of the intermediate elites themselves (Robin et al. 2014). The role of inter-hierarchical actors in trade and exchange in the Classic Maya Lowlands is comparatively under-examined. Recent revelations about the significance of marketplace exchange in Classic Maya economies suggests that various elites probably stood to gain from patronizing merchants and marketplaces (Eppich and Freidel 2015; King 2020:18), although it remains highly likely that in addition to sponsoring commerce, some elites engaged in mercantilism themselves (for ethnohistoric perspectives see Feldman 1985:15-21; Tozzer 1941:39). Archaeological reconstructions of the role of intermediate elites in Classic period mercantilism are sorely needed as our understanding of the status of merchants is problematized by the fact such aspects of life were rarely, if at all, documented epigraphically and iconographically (Tokovinine and Beliaev 2013). To summarize, epigraphic sources and archaeological data do sometimes overlap; the most obvious being the presence of ritual paraphernalia and ceremonial architecture at minor centers which seems to corroborate the idea that junior elites possessed ritual duties (Walden et al. 2019). There are, however, many contrasts between the two sources. In many instances it remains entirely possible that the epigraphically known intermediate elites are individuals of much higher status than those commonly investigated through settlement archaeology. For instance, sajals were lords of very large subordinate centers with scaled-down "micro courts" (Webster 2002:158). In the absence of hieroglyphic evidence, such major centers may be misinterpreted as autonomous capitals. These issues are exacerbated by the fact that known intermediate elite titles are less common in certain regions. Our understanding of how the epigraphy and archaeology intersect will improve over time as more residences associated with known titled intermediate elites, like Mak'an Chanal of Copan, or Ajpach' Waal of the Guzman Group, El Palmar are uncovered (see Jackson 2013; Tsukamoto 2020).

The Importance of Including Intermediate Elite Perspectives in our Discussions of Classic Maya Political Dynamics

Scholarly interpretations of the role of Classic Maya intermediate elites have often been tied to preconceptions about the degree of political centralization (or how much power was nucleated at the apex of society), hence intermediate elites came to represent "lightning rods for arguments over the structure of total societies" (Schortman and Urban 2003:137). Generally, advocates of more centralized scenarios envisioned intermediate elites as passive automatons who unquestionably served apical elite interests in a well-developed bureaucracy (see critiques in Foias 2013:61; Schortman and Urban 2003:131). Proponents of decentralized or segmentary scenarios considered power to rest in the hands of recalcitrant intermediate elites seeking the disintegration of their overlord's political authority (Ek 2020; Walden et al. 2019:2). These sorts of blanket interpretation can only gain from a focus on intermediate elites as proactive political agents—an approach which

promises to illuminate the circumstances under which they acquiesce, quietly resist, or revolt. In some instances, intermediate elite resistance could result from overwhelming tribute demands on the part of their suzerains, but in other instances intermediate elites took advantage of power vacuums to topple their overlords. In some cases, commoner dissatisfaction towards apical policies could even manifest as intermediate elite resistance (Berdan 2006:163; Brumfiel 1994a). It seems likely that multiple different factors could arise simultaneously, a power vacuum or problems at the apical level, coupled with commoner unrest over apical tribute demands, and historic mistrust between an intermediate elite and their suzerains could result in an attempt to break away (Golden and Scherer 2013).

Investigation of political centralization has recently gone out of fashion in favor of localized agency perspectives (LeCount and Yaeger 2010:21; Marken and Fitzsimmons 2015). However, as Pohl and Pohl (1994:144) argue, "the degree of centralization in a polity depended on the relative power of the ruling patrilineage, subterritorial rulers, and local elites", meaning that apical elite centralization and intermediate elite agency can be construed as flip sides of the same coin (Roscoe 1993:114). Monitoring the waxing and waning of intermediate elite agency over time provides a mirrored picture of apical elite centralization. Teasing apart the complex webs of interaction between intermediate elites and other hierarchically situated agents highlights political dynamics and overcomes the "sterility" of the centralization debate (Marken and Fitzsimmons 2015). Essential to this endeavor is a social network approach which, following Mann (1986:1), conceptualizes polities as "overlapping and intersecting socio-spatial networks of power". The political process unfolded through networks of personal patron-client relationships between hierarchically nested agents situated within and between polities (Davenport and Golden 2016; LeCount and Yaeger 2010:28-30; Marken and Fitzsimmons 2015; Martin 2020; Munson and Macri 2009). As such, focus on the strategies and agency of intermediate elites in relation to their suzerains and commoner subordinates simultaneously provides bottom-up and top-down views of political dynamics.

Articulating a Framework: Agency, Practice, and the "Faces" of Classic Maya Intermediate Elites

The intermediate elite concept is employed as a heuristic to shine the analytical spotlight on the agency of those situated in brokerage positions within social networks (Walden et al. 2019:2). Rather than replacing a dichotomy (elite vs. commoner) with a trichotomy, an intermediate elite focus provides a fleshed-out, agent-driven approach which effectively "peoples" the nested hierarchical levels of Maya polities with agentive actors (Robin 2003:308). The concept retains the most explanatory potential when reflexively applied to study the fluid behavior, political strategies, and interaction born of an inter-hierarchical position (Tung and Cook 2006:69; for political strategies see Bailey 1969; Kurnick 2016). In other words, intermediate political actors should not be envisioned as static. The rise and fall of polities and overarching political networks could suggest that if an intermediate elite actor usurped power from their suzerain, they could potentially become an apical elite themselves. Similarly, if the political power of an apical suzerain was eclipsed by a higher-level hegemon, then the intermediate elite concept would become useful for studying how this deposed ruler retained power in the face of co-option. This interactional approach studies the

interactions of elites with one another, subordinates, and various institutions to model upward and downward pressures and examine the agency of intermediate actors within these dynamics (see Marcus 1983:12-13). Such an inter-hierarchical lens may actually inform us about apical elite power structure and political centralization at the polity level, while also speaking to commoner lived experiences. In acting as a buffer between commoners and apical governance, and in encouraging compliance or resistance, intermediate elites play pivotal roles in defining how commoners articulate with overarching leadership structures. While intermediate elites are well positioned to mobilize commoner subordinates for their own political machinations, in some contexts, commoner clients could shift allegiance to other intermediate elite patrons, meaning commoners could exert agency over their patrons (Bailey 1969:54). While an inter-hierarchical position could provide substantial scope for intermediate elite strategizing, intermediate elites could end up becoming subservient to the demands of their commoner clients to an even greater degree than their apical elite patrons (Lemarchand 1977: 291-292).

A practice-based approach is ideal for examining intermediate elite agency (Bourdieu 1977; Giddens 1984). Following Gardner (2008), agency is defined as the extent to which humans actively shape the world around themselves. While it is simple to map a monolithic division of elites and commoners onto Gidden's 'hierarchically flat' vision of a dichotomy between actors and institutions (see critique in Gardner 2004:35), agency and structure only take us so far because the structure (commoner subordinates, peer intermediate elites, and apical elite overlords) needs to be construed not as institutions in the Giddensian sense, but agents who fluidly reacted to one another (Kurtz 2001:175-177). One solution, following Mouzelis (2003:26-27), is the division of actors based on their inherent agency. This scheme involves construing apical elites, who possessed the most power and authority, as "macro-actors". In contrast, intermediate elites could be considered "meso-actors", because they possessed some degree of agency yet less than the ruling elites. Lastly, commoners can be considered "micro-actors" as these individuals had the least capacity to effect political change. This method works when approaching the agency of an individual actor however, each class of social actor could enhance their political agency through alliance with peers. This logic is most often attributed to the lower classes who are regularly seen as possessing collective agency (Robin 2003), although a similar logic is true of actors of all statuses. For instance, a closely allied cabal of intermediate elites would possess greater bargaining power in negotiating relationships with their commoner subordinates or apical elite suzerains, just as a league of apical elites could better quell internal factionalism (Brumfiel 1983). As such, actors of a specific hierarchical status may actively encourage competition among actors situated above or below themselves with intent to prevent collusion and the formation of lateral coalitions which would allow subordinates or suzerains to renegotiate power relations (Conlee and Schreiber 2006; Morris 1998:307-308).

This hierarchical approach to agency can be situated within a traditional processual action framework, where political systems are envisioned as arenas where actors, arranged into coalitions and factions would pursue strategies to negotiate power and outcompete rivals (Bailey 1969). This agent-centric approach goes hand-in-hand with a focus on hierarchically nested patron-client relationships (Bailey 1969:43), which maps well onto our current understanding of Classic period political dynamics (Arnauld et al. 2017:33-34; Martin 2020). The goal then becomes diachronically charting the political agency of intermediate elites, and identifying their shifting roles and strategies

as they articulate with suzerains, peers, and subordinates. These may be surmised as intermediate elite "faces", where each face represents a distinct inter-hierarchical relationship (Marcone 2012; Walden 2021). A downward face was projected to their client commoners, a lateral face to their peer intermediate elites, and an upward face towards their apical patrons. These faces did not exist in isolation. Intermediate elites with a strong downward face would have a greater follower base to negotiate their upward face. By charting how elites articulated specific faces towards peers, suzerains, and subordinates, we can reconstruct whether such relationships were exploitative, collectively beneficial, or a combination of both (see Feinman 2017:463-464). Examining these overlapping intermediate elite faces highlights the intersection of elite and non-elite levels of organization (McAnany 1995:91). The theoretical approach presented is sufficiently abstract to be applied to inter-hierarchical actors situated in a range of positions, be they of sajal or similar rank and running a secondary center, or lakam, or similar rank and situated at the head of a neighborhood or district within a larger polity. Ultimately, employing this approach to study political dynamics requires a firm understanding of the geographical landscape (and its productivity and resources), the relative wealth and power of intermediate elites, commoners, and apical elites, and the specific strategies employed by these various actors (such as ritual strategies and economic roles). Fortunately, archaeological reconstruction of this overarching context is entirely possible.

The Downward Face

Intermediate elite interaction with subordinate followers can be construed as a downward face. Cultivating respect, legitimacy, or authority with commoners allowed elites to attract clients, preserve their loyalty, and rely on their followers (Eisenstad and Roniger 1984; Scott and Kerkvliet 1977). In essence, a strong client base would grant intermediate elites' access to commoner labor and military support, staple goods such as basic foodstuffs, and locally produced prestige goods or locally grown high-value crops (Arnauld et al. 2017:33-34; Baron 2018; McAnany et al. 2002; Neff 2010; Ringle et al. 2020). In theory, the policies intermediate elites used to secure a strong client base could vary along a coercive/consensual spectrum (Miller and Tilley 1984:7, 14). For instance, intermediate elites might garner the loyalty of their followers by shouldering the burden of top-down tribute extraction, distributing wealth items, engaging in kinship/marriage alliances (Blankenship-Sefczek et al. 2019), hosting large feasts and rituals to perpetuate shared identities, or employing ideologies to mask status distinctions between themselves and their subjects, or accentuate differences between themselves and other intermediate elite/commoner dyads (Walden et al. 2020). In essence building group identity and integrating people on one scale, like the district, would inherently undermine commoner integration into other hierarchical social units like the polity. Subsequently, if intermediate elites built long-lasting bonds with their subjects it would have implications for broader patterns of commoner integration into a polity. Intermediate elites could also employ less benevolent strategies to ensure the compliance of followers (Bentley 1986:290). While these may eventually build resentment, they could be combined with more communally beneficial strategies to alleviate hostility. A loyal commoner base would prove fundamental to intermediate elites who were actively resisting, or seeking to topple their apical suzerains (Brumfiel 1994b:92; Pohl and Pohl 1994). Intermediate elites would also exercise a downward face to commoners outside their patronage. Elites may attempt to poach the client base from under rival intermediate elites by offering incentives to their clients. Obviously, intermediate elites would not have complete free reign in constructing a downward face as their agency would be impacted by that of other intermediate elites, commoners, and apical elites. A range of physical geospatial factors may likewise function to delimit an intermediate elite's ability to recruit and cajole client commoners. For instance, apical elites would rely on intermediate elites for tax or tribute collection from their subordinates, although intermediate elites would always have options about whether to pursue these duties, and how. Ultimately, understanding the intermediate elite downward face requires an understanding of how their policies impacted – and were impacted by – commoners. While a research focus on intermediate elites can provide a mirrored image of the governance policies of the apical elite, investigation of commoners can provide clues about how intermediate policies shaped commoner lifeways.

The Lateral Face

Much of the archaeological literature on politics is concerned with how elites maintained their authority and power over their subordinates. Less ink is spilled on the articulation of a horizontal face with their competing peers (Bailey 1969:60; Spencer 1994; see Renfrew 1986). Relationships among intermediate elites could vary greatly based on the effectiveness of top-down apical strategies applied to ensure competition to prevent the formation of a unified intermediate elite front and ensure ongoing relationships of dependence. Such intermediate elite collaborations could vary greatly, depending on their own historically contingent relationships, those with commoner subordinates, and geospatial factors such physical distance from one another. Likewise, competition could develop between intermediate elites which was not fomented top-down, examples include raiding between centers, or competition for client commoners. In many instances intermediate elites could form horizontal alliances which could in theory signal bad news for apical elites and commoners alike since lateral unions would have effectively increased intermediate elite negotiating power (Jacobson 2001). Commoners could not easily switch patrons to avoid onerous tribute burdens if most of their potential patrons reached agreement on tax rates (Brumfiel 1983:277), although a range of subtler forms of resistance could arise (Scott 1985). Switching patrons may involve physically shifting residence, although this may be less problematic if a household possessed kin in nearby polities. A similar but different dynamic could play out at the apical elite level. Numerous hypothetical situations could result in intermediate elite horizontal alliances, but one likely possibility involves apical elite overreach or abuses of power (McAnany 1995:141).

Upward Face

Intermediate elites also possessed an upward face directed to their suzerains. Intermediate elite clients were vital for ongoing apical elite governance, but apical elites were well positioned to offer incentives for compliancy on the part of their subjects. Essentially, intermediate elites

could maintain their upward face by regularly and routinely ensuring tribute and/or taxation was passed up tributary networks to their patrons (LeCount and Yaeger 2010). In addition to staple goods, intermediate elites may be responsible for conscripting war parties from their client bases or labor gangs for monumental construction (Abrams 1994). Intermediate elites may also play a vital role in the dissemination of polity-level identities and ideologies which legitimated the apical ruler of a polity (Tung and Cook 2006; Walden et al. 2020). The range of incentives apical elites could offer for intermediate elite compliancy was often extensive (LeCount and Blitz 2005:68-69; Martin 2020). Apical elites could ensure the downward flow of prestige items and material wealth to their subordinates (LeCount 1999), honorifics and titles (Golden and Scherer 2013), marriage alliances (Martin 2020), land grants (Taschek and Ball 2003:385), and skilled workers and artisans (Houston 2016:403). Moreover, less tangible benefits of a strong upward face might involve the ideological benefits of an alliance with a divine lord (Fitzsimmons 2015; Houston and Stuart 1996). Intermediate elites may also be able to draw upon apical elite military resources giving them a military edge over other peer intermediate elites and potentially allowing them to resort to a more coercive downward face with their commoner subordinates (Canuto and Barrientos Q. 2020:194).



Just as the downward face could engage with commoners outside the immediate patronage of an intermediate elite, the upward face could also articulate with other apical elites, or even their apical elites' overlords. For instance, rather than topple their immediate patron, intermediate elites may seek patronage under one of their peers or even their suzerain. The upward intermediate elite face may also extend emically to ancestors or patron deities, since the Maya construed their social/ritual obligations to non-human entities in a similarly hierarchical manner (Baron 2016:111; Trigger 2003:412-3).

Ultimately, all three intermediate elite faces operated in articulation with one another. For instance, the construction of mortuary shrines may

appease the ancestors but could escalate competitive rivalries with other intermediate elites. Generosity towards certain subordinates might ameliorate that relationship but undermine the authority of peer elites. A strong upward face may require exploitation of subordinates to move sufficient tribute and taxation up the hierarchy, thus destabilizing the downward face. The picture, then, may become far more complex than outlined here—for instance empirical investigation of the downward face may reveal different strategies targeted at high and low-status commoners or different strategies and associated faces may be targeted at commoners residing in different places. The same may be true of lateral relations—no doubt some relationships and associated faces would involve alliances while others might be competitive or even outright hostile. An intermediate elite may similarly have a compliant relationship with the local apical elite regime, but also a close alliance with a foreign regime which they could use for leverage. All of these different faces articulate with the others and have meaningful political consequences. The techniques adopted by intermediate elites can serve to ameliorate or exaggerate these interactions whether intentional or not. For example, an intermediate elite desirous of territorial expansion may push client commoners to settle contested borderlands to pull an apical elite into a border conflict. Ultimately the proposed framework allows us to explore multiple scenarios and eventually understand how different intermediate political actors navigated their distinct relationships.

Conclusion

I argue that an intermediate elite perspective on political change is particularly important, because of the extent of patron-client relationships in Classic Maya political dynamics, and the correspondingly high degrees of intermediate elite agency. Moreover, the inter-hierarchical role of such actors means that adopting this perspective can also offer insight into commoner lifeways and apical elite governance (see Walden 2021; Walden et al. 2023). Focusing on the different intermediate elite faces directed at distinct political actors has the potential to document complex local political dynamics. The approach facilitates the investigation of polities not as monolithic, but as socio-politically divided entities. Ultimately, this approach adds much needed dynamism to ancient political interactions, and embraces the factionalism which no doubt was at the heart of Maya politics, whether it be within polities, or at the regional scale. The approach eschews classification for a strong focus on behavior, practice, and the actual functioning of political systems. The intermediate elite lens on these dynamics is fundamental to achieving this due to their unique positioning at the interstices of different hierarchically arranged groups.

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Managing the Marketplace: The View from Ximbal Che, an Intermediate Elite Architectural Group at Yaxnohcah, Campeche

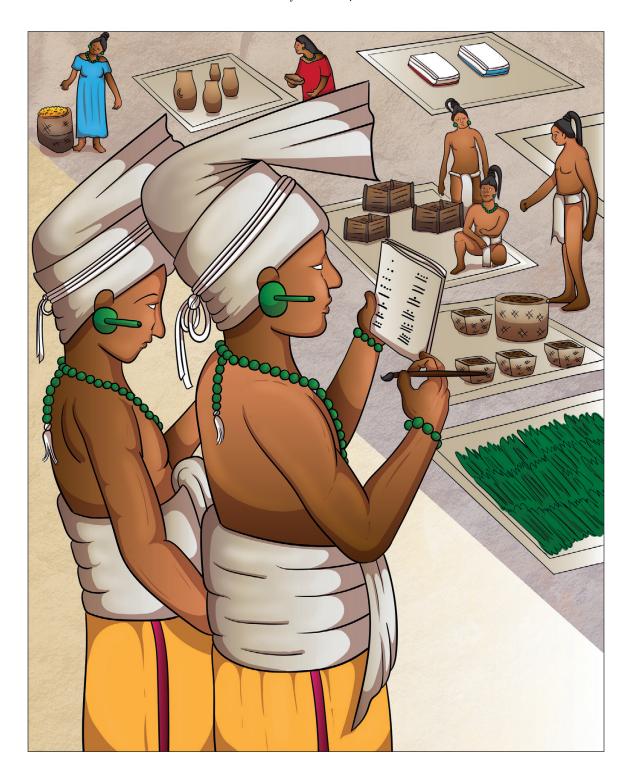
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> In recent years, studies have documented a surprisingly diverse array of social, political, and economic integrative strategies of intermediate elites, enhancing our understanding of ancient Maya social organization. Here, we present the preliminary results of one such study that aims to document practices and activities at Ximbal Che, an intermediate elite architectural group at Yaxnohcah, Campeche. In addition to revealing a complex history of construction, expansion, and remodelling spanning the Late Preclassic (200 BC-AD 200) through to the end of the Late Classic (AD 650-850), our investigations have supplied a glimpse into the shifting socioeconomic strategies of the people who resided at this group. Ximbal Che is located next to Yaxnohcah's Sakjol complex, interpreted as a marketplace constructed and in operation during the Late Classic. We hypothesize that Ximbal Che was the residential and administrative site of an intermediate elite corporate group that played a critical role in integrating its surrounding neighborhood by organizing and administering this marketplace.

> Keywords: Yaxnohcah, intermediate elites, household archaeology, Maya marketplaces, socioeconomic institutions, social integration

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Throughout much of the early and middle twentieth century, Classic Maya society was thought of as a rigid, two-tiered system comprised of nobles ("elites") and commoners ("non-elites"; Becker 1979; Roys 1972; Sanders and Webster 1988). This essentialist perspective treated elites and commoners as if they were homogenous and bounded groups, each representative of one part of an ideal dichotomy, even though many of the material attributes used to define "elites" – for instance, art, monumental architecture, sumptuous interments, and exotic material goods – were found to be relatively common (Bullard 1960; Chase 1992; Gonlin 1993; Haviland and Moholy-Nagy 1992;



Hendon 1991; Willey et al. 1965). In more recent years, it has become accepted that Classic Maya societies are better characterized by a gradation of socioeconomic differentiation rather than a rigid elite/commoner dichotomy (Munson and Scholnick 2021). Debate remains, however, if this shift in understanding merely reflects that wealth can be quantified in terms of material objects, whereas status is the domain of more intangible resources, such as political authority, knowledge, and genealogical pedigree (Hutson 2020:408-409). Nevertheless, as research documents and unpacks variation across the Maya socio-spatial landscape, it has become apparent that archaeological data no longer fits earlier ways of thinking about social organization (Iannone and Connell 2003; Lamb 2022; Longstaffe and Iannone 2022; Lohse and

Valdez 2004; Walden et al. 2019; Yaeger and Robin 2004).

While there are obvious differences between the social extremes – apical elites who ruled polities on the one hand and the poorest of subsistence farmers on the other – it remains far more challenging to identify "the point in archaeological space where these two social units meet, but do not overlap" (Lohse and Valdez 2004:4). One helpful way to address this problem is through the concept of "intermediate elites," defined by Elson and Covey (2006:2) as "those individuals whose status lies between the rulers of a polity and the stratum of commoners." Documenting and explaining variability among these intermediary people are important goals of this special issue of The Mayanist. By identifying their daily practices, political strategies, and social relationships, we can better understand how intermediate elites influenced the institutions that structured ancient Maya social, political, and economic life. This article contributes to this goal by presenting results from investigations at an intermediate elite architectural group at Yaxnohcah, Campeche, called Ximbal Che. We hypothesize that Ximbal Che was the site of an intermediate elite residential corporate group that played a critical role in the socioeconomic integration of its surrounding neighborhood by organizing and administering the Sakjol marketplace located next door. While our research is ongoing, if true, our investigations at Ximbal Che offer an example of a relationship between intermediate elites and Classic period Maya market institutions.

Classic Maya Intermediate Elites

The study of intermediate elites, particularly as they operated as members of social, political, and economic institutions within historically contingent community settings, has become a productive avenue for understanding processes of social integration in ancient Maya societies (Arnauld et al. 2013; Burham, this issue; Jackson 2003; Masson and Peraza Lope 2004; Munson and Scholnick

2021; Robin et al. 2014; Walden, this issue; Walden et al. 2019). Research on this topic has been instrumental in improving our knowledge of how power and decision-making were shared, how planning and policies were implemented, and how institutions developed and operated on a day-to-day basis.

As political domains grew in size and complexity, apical elites appeared to have sanctioned more administrative positions, filling these with loyal officeholders, possibly as part of an intentional political strategy of bureaucratization (Foias 2013:127-133; Inomata 2001; Jackson 2013). Relatively high-ranking, often courtly individuals, may have held titles including *ti'sakhuun* ("speaker of/for the white headband"), *ajk'uhuun* ("worshipper") and *sajal*, a title interpreted as belonging to a governor of urban districts within major capitals or their satellite centers (Houston and Inomata 2009; Jackson and Stuart 2001; Jackson 2013; Martin 2020; Zender 2004). Less commonly identified are *lakam*, who were lower-ranking individuals who held administrative positions with diverse roles and duties, including as diplomats or political emissaries ("standard bearers") or possibly as neighbourhood heads, engaging in tasks such as managing the collection of tribute and organizing warriors (Freidel et al. 2017; Lacadena 2008; Tsukamoto et al. 2015). At El Palmar, Campeche, the fortuitous discovery of a hieroglyphic stairway at an outlying residential group identified the complex as home to Ajpach' Waal, who possessed the *lakam* title (Ceballos et al. this volume; Cerezo-Román and Tsukamoto 2021; Tsukamoto et al. 2015; Tsukamoto 2020).

In the absence of identifying insignia, researchers have more typically relied on indirect and inferential approaches to identifying intermediate elites. For example, minor centers – heterogenous middle-level settlements at the top of hinterland settlement hierarchies – have long been associated with a relatively powerful class of wealthy rural elites (Connell 2003; see also Bullard 1960; Haviland 1981; Willey et al. 1965). More recently, Walden and colleagues (2019) identified several internal social tiers within the Belize River Valley using multivariate analysis of architectural traits, two of which are interpreted to represent intermediate elites. These groups are associated with minor centers resembling down-scaled polity capitals, including large, specialized multi-component centers with ballcourts, causeways, termini groups, and multiple plazas (Group 2), and smaller residential and ceremonial centers centred around a single plaza, resembling up-scaled commoner domestic courtyard groups (Group 3; Walden et al. 2019:9). The people who lived in these latter settlements are interpreted to have engaged in integrative practices such as ancestor veneration, involving commoners in ritual events and ceremonies, and acting as neighborhood heads, presumably similar to lakam. At Uxul in Campeche, Els Barnard (2021) has similarly identified a partially stratified social system with a distinct intermediate social tier by coupling analysis of artifact distributions with statistical tools for identifying wealth inequality.

Archaeological studies have also identified intermediate elite production and consumption practices and activities. Although most craft production was part-time and dispersed across households (Chase and Chase 2004; Masson and Peraza Lope 2004; Sheets 2000), manufacturing prestige goods required masterful skill and access to special knowledge. In certain cases, these producer roles may have been fulfilled by intermediate elites. For instance, at Aguateca, excavations of rapidly abandoned households of some of the highest-ranking courtiers identified residents as highly adept artisans producing ornaments, mosaic mirrors, and elaborate polychrome vessels (Inomata et al. 2002; Inomata and Triadan 2010). At Cancuén, jade and pyrite objects were produced through a



Figure 1. Location of Yaxnohcah. Map by PABAL.

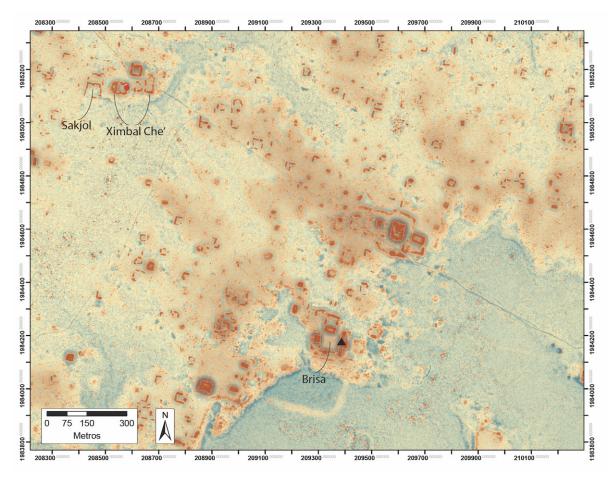


Figure 2. Map of Yaxnohcah, showing the location of Ximbal Che relative to Brisa. Base map created by Shane Montgomery.

status-based division of labour. While the initial shaping of jade objects was conducted in relatively humble residences, final production, including incision and carving – practices that transformed these objects from mundane to sacred – took place in high-status, likely intermediate elite, households (Kovacevich 2013, 2017).

Case Study: Archaeological Investigations at Ximbal Che

Yaxnohcah is located in southern Campeche, on the central karst plateau of the Yucatan peninsula, approximately 21 km southeast of the Classic period site center of Calakmul (Figure 1). For over a decade, the Proyecto Arqueológico Bajo Laberinto (PABAL) has been studying urban processes at Yaxnohcah, using various methodologies, including LiDAR prospection, ground verification, and archaeological investigation (Anaya Hernández et al. 2021; Brewer and Carr 2022; Reese-Taylor and Anaya Hernández 2013; Reese-Taylor et al. 2016; Vásquez et al. 2022). These studies have revealed a sequence of sedentary occupation, spanning 1000 BC to AD 1400, which

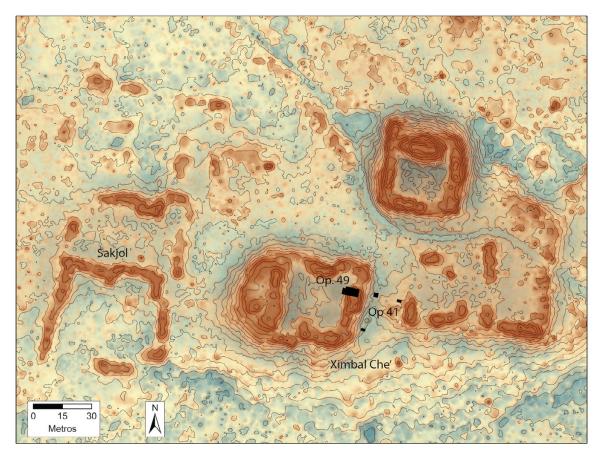


Figure 3. Map of Ximbal Che in relation to the Sakjol Marketplace, showing the location of excavation units. Base map created by Shane Montgomery.

included dynamic periods of urban growth and development during the Middle (1000-400 BC) and Late Preclassic (400 BC-AD 200), as well as during the Late Classic (AD 550-900). A LiDAR survey shows that settlement at Yaxnohcah extends over 40 km² in areas of natural elevation surrounded by a complex system of wetlands with surface streams, including the *bajos* El Laberinto to the north, and El Tomatal, located south of the main civic-ceremonial precinct called Brisa, where Yaxnohcah's only E-group is located (Reese-Taylor et al. 2016).

The focus of this article, Ximbal Che, is an intermediate elite architectural group located in a Classic period neighbourhood 1.25 km northwest of Yaxnocah's central Brisa complex (Figure 2). This neighbourhood, like several others documented at Yaxnohcah, was connected to the civic-ceremonial center via a *sacbe* and featured urban infrastructure including reservoirs and multi-house-hold water tanks (Brewer 2018; Brewer and Carr 2022), temple groups, as well as permanent "built marketplaces" (*sensu* Becker 2015) that served the needs of local vendors, producers, and community members (Anaya Hernández et al. 2021; Ruhl et al. 2018). Directly west of Ximbal Che is the Sakjol marketplace (Figure 3), a site that has been a focus of investigations by PABAL (Anaya Hernández and Radford 2016; Anaya Hernández et al. 2021; Parrott 2020). To contextualize our

case study, we provide a summary of research from Sakjol before proceeding to our description of Ximbal Che.

Sakjol

The Sakjol marketplace is comprised of two contiguous plazas, Sakjol Norte (2081 m²) and Sakjol Sur (2565 m²), both formally bounded on four sides by low (less than 2 m high) narrow platforms that feature two corner entryways, one having a more ample opening for greater access (Anaya Hernández et al. 2021:133-134). In addition, there may be a third, less formal plaza with very low, eroded mounds at the northern margin of the group. One of several proposed marketplaces at Yaxnohcah, Sakjol had an approximate service area radius of 1.25 km with minimal overlap with other markets (Anaya Hernández et al. 2021:137). This spatial distribution is markedly similar to the termini markets at Caracol (Chase and Chase 2014:243).

Shovel tests (35 cm³) on a ten-meter-grid in Sakjol Norte documented several areas of high concentrations of artifacts (>350 per cubic meter), with an average artifact density of 507 per cubic meter and a median of 431 per cubic meter (Anaya Hernández et al. 2021:136). These densities are comparable to those encountered by Cap (2015) in the East Plaza marketplace, Buenavista del Cayo. Analyses of lithics from two 1.5 x 1 m excavation units in the north and south plazas, respectively, found that occupation/use contexts had a higher frequency of middle and late-stage lithic reduction flakes and a higher frequency of flakes with minimal or no cortex than fill contexts (Parrott 2021:97-99). While some early-stage lithic debris was documented (e.g., tested cobbles, primary flakes), these appear in relatively low quantities. Parrott (2021:97) interprets this pattern as indicating that "a diverse array of lithic tool production activities/stages were conducted within the Sakjol marketplace ranging from raw material nodule testing to end-stage bifacial lithic tool production," although at a lesser scale than would be observed in a workshop or a production area.

Ximbal Che

Ximbal Che consists of four patio-focused groups of differing sizes and complexity, three of which share a large basal platform: a courtyard complex next to the marketplace and two secondary patio groups to the east (Figure 3). The courtyard complex sits on an elevated platform (about 2 m tall) and consists of at least nine platform structures between 0.5 and 2 m in height. Formal entry was gained via a wide staircase leading up to a broad landing that overlooks the marketplace to the west. Upon ascending this platform, visitors would pass between two structures, one of which appears to have had a masonry vault, and enter a large, open courtyard (approximately 840 m²). At least one other entrance on the eastern edge of the courtyard complex leads down towards the two smaller secondary patio groups, consisting of low platform structures oriented around small courtyards. To the north, a prominent quadrangle sits atop a 3 m high basal platform bounded on three sides by low mounds, and to its north by a large and likely vaulted structure at least 3.5 m tall. Yaxnohcah's northwest *sacbe*, an important traffic artery that leads to the Brisa complex, intersects with Ximbal Che, integrating this space into the urban fabric of this sprawling city.

Our investigations have targeted the courtyard complex next to the marketplace, where we have excavated one of its most significant structures (Structure 2; Longstaffe 2022) and systematically

Date Range	Period	Uaxactun Ceramic Complex	Yaxnohcah Ceramic Complex
AD 1000–1550	Postclassic	-	Luch
AD 850–1000	Late Classic	Tepeu III	Xikinche'
AD 650–850		Tepeu II	Early Tux
AD 550–650		Tepeu I	Late Tux
AD 200–550	Early Classic	Tzakol	Kiwi'
200 BC-AD 200	Late Preclassic	Chicanel	Wob
400–200 BC			Chay
650–400 BC	Middle Preclassic	Mamom	Um
800–650 BC		Pre-Mamom	Late Macal
1000–800 BC			Early Macal

Table 1. Yaxnohcah ceramic sequence (adapted from Walker 2020:239, fig 10.1).

placed 40 x 40 cm shovel test excavations on a 5×5 m grid in its courtyard (32 test pits total), excavated down to the level of the plaza surface. We have also conducted test excavations between the courtyard complex and the secondary patio groups to the east (Longstaffe 2020; Figure 3). The aim of these (and future) investigations is to generate a multifaceted and chronologically sensitive archaeological database for documenting practices and activities and to study the evolution of the socioeconomic strategy of the Ximbal Che Maya. We especially want to identify material patterns that might connect their activities to the Sakjol marketplace. We have not undertaken excavations in the quadrangle group to the north. Below, we synthesize preliminary findings from our investigations to offer a glimpse into the developmental history of Ximbal Che and highlight shifts in the integrative strategies of its inhabitants over time.

Emergence, Growth, and Apogee of Intermediate Elites

The earliest evidence of occupation around Ximbal Che consists of pottery recovered from a mixed fill deposit buried under the group's basal platform, which belongs to the Late Middle Preclassic (650-400 BC) Um ceramic complex (Table 1). We do not, however, have concrete evidence for platform architecture at Ximbal Che before the Late Preclassic (200 BC-AD 200). On the eastern side of the courtyard complex, in front of Structure 2, builders deposited a 10-20 cm thick refuse layer directly atop the bedrock containing sherds from the Wob ceramic complex (Table 1). A radiocarbon date recovered from a charcoal sample at the bottom of this fill provides a *terminus post quem* for this incipient construction of cal 170 BC to AD 10 (2075 \pm 30, 2-sigma; LEMA-1953),

or the middle of the Late Preclassic period. Two boulder and cobble fills were subsequently placed atop this refuse, levelling out the undulating bedrock to provide a solid construction core, which was then capped with 20-30 cm of tamped *sascab* and surfaced with a very thick (10-20 cm) layer of lime plaster (XC-2-Sub 3; Figures 4 & 5). Interestingly, this platform had a north-south primary axis and sloped up towards the north, starkly contrasting with later iterations of Structure 2. At, or near, the top of this platform, we documented a large post-hole (~25 cm x 25 cm) cut through the plaster floor and underlying layer of tamped *sascab* (Figure 6).

The Late Preclassic artifact assemblage derives from secondary construction fill contexts. These materials – likely gathered from nearby middens and then deposited into the platform during the construction process (Hayden and Cannon 1983) - provide us with some insights into the practices and activities of the people residing in the area around Ximbal Che at this time. This assemblage includes artifacts such as everyday utilitarian objects, including ceramics, chipped-stone tools and debitage (e.g., expedient bifaces, unifaces, drills, and utilized flakes), metates, and obsidian blades. We also recovered a few examples of worked and unworked marine shell, speleothems, and a quartz crystal. This assemblage is typical of an incipient subsistence-focused homestead engaged in cooking, serving, and storage, small-scale production of chipped-stone tool manufacture, and other intermittent craft production, possibly involving the drilling and incising of marine shell. Direct material evidence for ritual practice is scarce, although the quartz crystal and speleothems may relate to rituals associated with water, rainfall, and fertility (Brady and Prufer 2005; Moyes and Brady 2012). A few meters east of Structure 2, we documented a layer of rich, dark brown to black organic soil deposited on the bedrock beneath the later basal platform. These soils, which may have been used as mortar to level the bedrock (Rice et al. 2018) or were part of a small household garden, were likely transported from a bajo, although additional tests are required to show this was indeed the case (Hansen et al. 2002: Hiquet et al. 2021:147).

At the onset of the Early Classic (Kiwi' complex; AD 200-550; Table 1), there were extraordinary changes in the configuration of Ximbal Che. At this time, the basal platform was raised and expanded, as evidenced by Early Classic construction fills without a Late Preclassic antecedent, and the north-south platform (XC-2-Sub 3) was buried under a layer of marl and cobble fill to facilitate the construction of a new, larger platform (XC-2-Sub 2; Figure 4). Notably, the primary axis of this platform was shifted to an east-west alignment, orienting its face inwards to the newly constructed Ximbal Che courtyard complex. While our excavations only revealed a small portion of this platform, we know it was plastered and likely had two levels, as evidenced by a two-course high step documented at the eastern end of the excavation unit [3]; an additional step was documented further east [6], possibly representing the top of this platform (note: numbers in brackets signify features labelled on Figure 4).

The final form of the Structure 2 substructure (XC-2-Sub 1) was built in two renovation events, the first of which was during the Early Tux facet of the Late Classic (AD 550-650; Table 1; Figure 4). At this time, a plastered landing was added at the base of the structure, extending approximately two meters east from the front face of the landing [4] and over top of the earlier platform [5]. An earlier step was left intact [6], abutting a newly installed 60-cm-high terrace face [7], the apex of which marked the top of this plastered platform [9]. Lacking a staircase, access to the platform was likely achieved via the axial stair of the adjoining range structure to the south, which would only

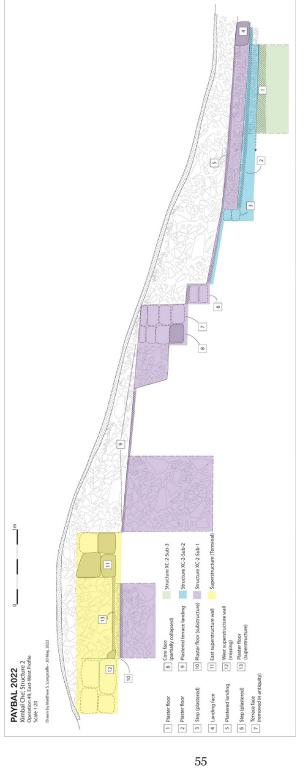


Figure 4. Excavated section of Ximbal Che Structure 2 (east-west profile, facing south). Color overlays show different phases of construction. Drawing by M.S. Longstaffe.



Figure 5. Photo of Late Preclassic tamped sascab and plaster floor of Structure XC-2-Sub 3. Photo by M.S. Longstaffe.

require a short series of north-south steps to access the terrace landing. The second renovation event, dating to the Late Tux facet of the Late Classic (AD 650-850; Table 1), extended this platform further east at the height of the frontal terrace, creating a long and broad platform [10]. There is no evidence to support the presence of a masonry room atop this platform, but it presumably held a perishable roof or awning of some kind. Around this time, Ximbal Che's basal platform was again raised and expanded.

A final major renovation was undertaken at the summit of the terminal substructure during the Late Tux facet of the Late Classic, adding a masonry superstructure with fine ashlar walls [11] (Figure 7). Partial excavations of this superstructure exposed the walls and a raised interior floor [13] of a room measuring 1.4 m wide and extending beyond the 4 m length of the excavation unit. The superstructure was vaulted, as evidenced by the thickness of the walls (~0.8 m) relative to the narrowness of the room, as well as the documentation of many large vault stones on and around the mound (Gilabert 2020). One entrance was documented along the front face of the superstructure near its northern end, the threshold of which sat 20 cm above the surface of the terrace landing. Presuming the structure was symmetrical, there was likely a second entrance further south, just outside the margins of the excavation unit. Unfortunately, we could not expand the unit's size to test this assumption due to a large tree. No residential features, such as masonry benches or room dividing walls, were documented within the excavated portion of this room.

Classic period artifacts stem from various secondary contexts, including sealed construction

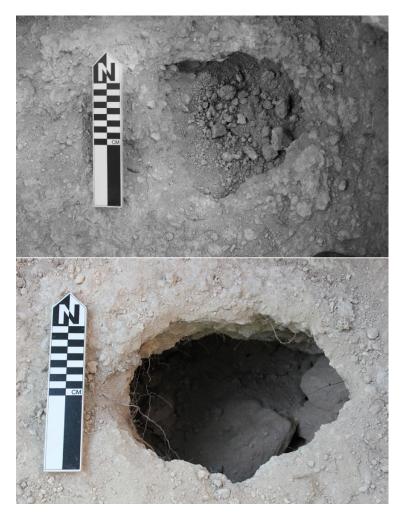


Figure 6. Photo of posthole associated with Late Preclassic platform (Structure XC-2-Sub 3) at Structure 2 (before [top] and after [bottom] excavation). Photos by M.S. Longstaffe.

fills, unsealed architectural fall and collapse, and refuse deposits collected off the eastern edge of the courtvard complex. Apart from one example of an abandonment-related on-floor assemblage (discussed below), we have yet to encounter primary contexts such as burials or caches at Ximbal Che. Generally, the Classic period artifact assemblage is larger and more diverse than earlier periods but exhibits a continued concern with meeting basic domestic needs, despite the observed increased architectural complexity. This assemblage includes a high proportion of utilitarian pottery, lithic debitage from different stages of the reduction process, utilized flake tools, formal chipped-stone tools including celts, bifaces, choppers, drills, and scrapers, obsidian prismatic blades, and manos and metates. In addition, several examples of centrally perforated ceramic or ground stone discs that may be spindle whorls (Chase et al.

2008; Halperin 2008) were recovered from fill and unsealed contexts.

In terms of ceramic types, the Early Classic Kiwi' assemblages are standard, reflecting the widespread nature of the Tzakol ceramic sphere throughout the Maya lowlands at this time (Figure 8). Interestingly, however, our excavations recovered types and varieties not previously identified at Yaxnohcah, such as sherds from the Ciricote group (common at Calakmul), Discordia Black, and San Clemente Gouge-incised. The ensuing Early Tux (AD 550-650) and Late Tux (AD 650-850) ceramic assemblages are likewise among the most diverse recovered at Yaxnohcah. This observation is intriguing as it may imply that the Ximbal Che Maya had unfettered access to many types and forms of vessels, possibly because of their hypothesized patron relationship with the Sakjol market-place. We intend to explore this idea further through contextual analysis of pottery recovered from



Figure 7. Ximbal Che, Structure 2, Terminal Architecture: (a) exposed portion of masonry wall of the superstructure, facing east; (b) terrace landing, showing possible cut through plaster and superstructure room. Photos by M.S. Longstaffe.

Ximbal Che and distributional studies of residential contexts elsewhere at Yaxnohcah to evaluate differences in access patterns (e.g., Chase and Chase 2014:245; Hutson et al. 2017:257-266) and to assess intra-site diversity (e.g., Wurtzburg 1991:206-220). Most of these ceramics are utilitarian wares, although some signal prestige, suggesting other non-market-based exchange processes may



Figure 8. Examples of Classic period pottery recovered from excavations at Ximbal Che: (a) Langostino Red Bowl (Early Tux); (b) Tres Mujeres Incised Carinated Bowl (Late Tux); (c) Large neck jar (Late Tux); (d) Dos Hermanos Red Globular jar (Kiwi'). Photos by D.S. Walker.

also be at play. These include, for example, a Cabrito Cream Polychrome vase fragment with relic polychrome painting — a type generally attributed to the eastern Peten and rare in Yaxnohcah — recovered from a midden off the eastern edge of Structure 2 and a large sherd with well-preserved painted iconography from a Palmar Orange Polychrome vase recovered in association with boulder and cobble debris spilled out from the collapsed platform terrace (Figure 9).

Termination of Structure 2

We have no evidence of continued occupation at Ximbal Che beyond the Late Tux facet of the Late Classic period, suggesting the group was abandoned before the onset of the Xikinche' complex (AD 850-1000; Table 1). Our investigations suggest, however, that this group's inhabitants carefully planned this process. Before abandonment, Structure 2 appears to have been emptied of most of its contents, and its superstructure and substructure were swept clean. The only *in situ* artifacts documented on-floor from terminal occupation contexts were fragments of a *metate* left leaning against the doorjamb of the masonry superstructure entrance (Figure 10). This was possibly deposited as part of a structure termination ritual aimed at physically and symbolically blocking access to the room (Lamoureux-St-Hilaire et al. 2015; Sion 2016:339). In addition, outside on the terrace landing, we excavated an intrusive semi-circular cut in the plaster floor next to the southern margin

of the superstructure doorway devoid of artifacts (Figure 7). We suspect this feature once housed a cache but was removed by Ximbal Che's inhabitants as part of the abandonment process.

The vaulted masonry superstructure of Structure 2 appears to have collapsed not long after abandonment, as evidenced by the well-preserved plaster floors of its superstructure and areas of the exterior landing abutting its masonry walls. Interestingly, all the facing stones from the terrace of the terminal substructure appear to have been removed in antiquity, likely stone-robbed soon after Ximbal Che was abandoned. Only the basal course of the core face remained *in situ*, still in alignment behind where the terrace face would have been constructed [8]. Upper sections of the core face had subsequently collapsed, spilling the construction core out of the platform onto the landing below; no cut stones were noted in this pile of rubble.

Discussion

The nature of Ximbal Che – including its material inventories, overall configuration and complexity, the quality of architecture, and the timing of construction – suggests that during the Classic

period, the group may be best described as the site of an intermediate elite residential corporate group (Hayden and Cannon 1982; see also Gillespie 2000; Hyde 2014). The residential corporate group pattern is often attributed to the linking of multiple nuclear and extended families with common descent ties, with one family holding an elevated social position over the others and maintaining control over the group's social, political, and economic endeavours. As such, residential corporate groups typically manifest materially as multiple residential and ancillary structures, centred on open-air patios that likely served as activity areas (Ashmore 1981:48-50), with one "first tier" group that is larger and more formal than others, reflecting a "special purpose" role (Lohse 2004:130). In Maya studies, corporate groups are often associated with a common reliance on a limited-scale agricultural and water resource base (Dunning 2004; Hageman and Lohse 2003; Vogt 1970). More broadly, however, they are best described as localized, hierarchically organized social units (Havden and Cannon 1982) that may engage in various integrative socioeconomic strategies and practices beyond those related to subsistence.

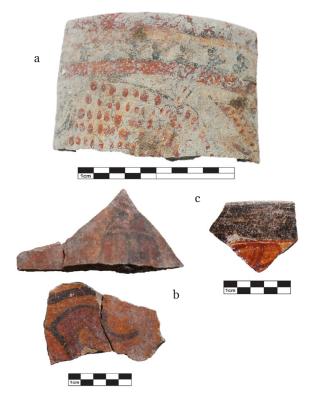


Figure 9. Examples of Classic period painted pottery recovered from Ximbal Che: (a) Palmar Orange Polychrome (Late Tux); (b) Palmar Orange Polychrome (Late Tux); (c) Saxche Orange Polychrome (Early Tux). Photos by M.S. Longstaffe (a) and D.S. Walker (b-c).



Figure 10. Metate recovered from the doorway of the masonry superstructure, in situ (top) and after excavation (bottom). Photos by M.S. Longstaffe.

The Integrative Strategies of Ximbal Che

Initially, we hypothesized that Structure 2 functioned as an eastern ancestor shrine based on its surface configuration (Becker 2003; Hageman and Lohse 2003; Palka 1997). Eastern ancestor shrines are a regular feature of domestic compounds at some centers in the eastern Maya low-lands, most notably at Caracol, where 70% of residential groups likely contain a shrine (Chase

and Chase 2017). They are, however, much less prevalent in the southern Peten and the Central Karstic Uplands. At Tikal, for instance, Becker (2004:129) estimates that only 14% of residential groups had an eastern shrine. Our extensive excavations at Structure 2 returned no evidence for ancestor-based rituals. Thus, in the absence of mortuary assemblages or other ritual deposits, it appears that ancestor veneration was not the function of Structure 2 (McAnany 1995). Instead, the northern, more monumental quadrangle was likely the focal point of this corporate group's ritual and mortuary activities.

Beyond basic subsistence activities such as chipped stone tool manufacture, cooking, storage, and possibly some intermittent crafting involving weaving and cloth production, our data provide few indicators of intensive craft specialization, suggesting they were not likely vendor-producers for the marketplace or other types of exchange. Instead, we suspect they were integrated into the marketplace system through administrative means, perhaps as managers of the Sakjol neighborhood marketplace. This hypothesis aligns well with the idea that provisioning urban services through socioeconomic institutions like marketplaces required the creation of positions within Maya society

to tend to bureaucratic matters and record keeping, many of which were likely filled by a burgeoning social subset of intermediate elites (ASZ Chase 2021; Foias 2013:127-133; ML Smith 2018:305-307). If correct, Structure 2, in conjunction with its attached range structure to the south, was likely part of this administrative apparatus.

We find support for this hypothesis by analyzing Ximbal Che's built environment. Many identified marketplaces are positioned to intersect with adjacent elite residential compounds (Anaya Hernández et al. 2021; Chase et al. 2015:247; Ruhl et al. 2018; Shaw and King 2015:181), suggesting they had administrative control over these facilities to some degree. In this regard, the broad summit with an outset terrace overlooking the



market may have been designed to facilitate supervision, including activities such as controlling access, maintaining order, adjudicating disputes, and collecting tax or other payments from market participants (King 2015; Masson and Freidel 2013:207; Shaw 2012). Some have argued that these types of specialized roles, along with other administrative duties – such as liaising with political authorities, scheduling, and accounting – were critical for the successful operation of these socioeconomic institutions (Eppich and Freidel 2015; Freidel et al. 2017; King 2015:170-171; Paris et al. 2021:59; Shaw 2012; Tokovinine and Beliaev 2013).

In the absence of textual records, the archaeological record of the Maya provides little detailed information about the inner workings of socioeconomic institutions like marketplaces (Longstaffe 2021). Following Holland-Lulewicz and colleagues (2020:1), it is important to remember that institutions, at least in the sense that we have employed the term, are "organizations of *people* that carry out objectives using regularized practices and norms, labor, and resources" (emphasis added). While it is difficult to identify direct relationships between people and marketplaces using archaeological evidence alone, especially those activities and practices related to organizing and administering these institutions (Hudson 2004; Masson and Freidel 2013; Shaw 2012), this is one of the aims of our ongoing research at Yaxnohcah. Clearly, more work remains to be done to test our hypotheses and refine our interpretations. More broadly, if we can better characterize marketplace institutions as they existed at different times and places, we will be on our way to developing a more nuanced understanding of the variable ways Maya economic systems were organized and operated. The research presented here is a first step towards achieving these ambitious goals.

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Ancient Maya Standard-Bearers' Foodways: Chemical Residue Analyses of Ceramic Vessels at the Guzmán Group of El Palmar, Campeche, Mexico

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This article examines the foodways of Maya standard-bearers at the site of El Palmar during the Late-to-Terminal Classic period (600-850 CE). While epigraphic studies revealed the political importance of standard-bearers in dynastic interactions, their daily life has remained underexplored. Previous research identified a residential compound of standard-bearers at the Guzmán Group, a small plaza compound located 1.3 km north of El Palmar, Campeche. Extensive excavations of four structures surrounding the plaza uncovered the sequence of spatial configurations, yielding several material remains that included serving vessels. The serving vessels became greater in number and size when the plaza space was remodeled for public gathering. Chemical residue signatures of building floors signaled food-related activities. These lines of evidence suggested to us that the standard-bearers appear to have organized feastings repeatedly on the plaza.

We assessed feasting and the degree to which standard-bearers' foodways were articulated with their political life through ceramic analyses based on the type-variety-attribute system and chemical analyses of residues preserved inside the ceramic vessels. Thirty-one complete or semi-complete vessels were selected from primary contexts that included a termination ritual and burials found underneath the structures' room floors. The results attested that feasting became increasingly common from the second half of the Late Classic to the Terminal Classic period (726-850 CE) when burial offerings reflect a growing tendency of large plates, cylinder vases, and tripod bowls with chemical residues. This study highlights the importance of understanding foodways in Classic Maya society and its political significance.

Keywords: Maya standard-bearers, Feasting, El Palmar, Ceramic Analysis, Chemical Residues.

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The study of foodways has long been a central topic in household archaeology, providing scholars with information not only about people's daily lives but also the cultural, economic, political, and symbolic implications of food-related activities (Staller and Carrasco 2010). Nevertheless, ancient foodways are only now becoming a focus of Maya archaeology. This is primarily due to two issues. First, as the tropical climate typical of the Maya Lowlands accelerates the deterioration of organic substances, macrobotanical remains are seldom found unless they were carbonized. Secondly, the ancient Maya abandoned most sites gradually, leaving behind few food-related artifacts. Exceptional cases are the rapidly abandoned sites of Aguateca, Guatemala, and Joya de Cerén, El Salvador (Inomata et al. 2002; Lentz et al. 2014; Sheets 2000). Careful excavations and subsequent meticulous laboratory analyses of these rapidly abandoned sites have demonstrated that both elites and commoners performed a variety of food-related activities that consolidated and transformed social relations.



Scholars have developed diverse methods to tackle the environmental and contextual constraints of gradually abandoned sites in the Maya Lowlands. Stylistic and iconographic analyses of ceramic vessels have uncovered specific foods and drinks that rulers and high-ranking nobles consumed (e.g., Houston et al. 1989; LeCount 2001; Reents-Budet 1994; Saturno et al. 2005). Ethnohistoric and ethnographic studies documented the continuity of those food-related activities, including feasting (e.g., Blom 1928; Gabriel 2007: 158; Pugh 2009: 373; Redfield and Villa Rojas 1934; Tozzer 1941). The chemical residue analyses of excavated ceramic containers have provided empirical evidence for their functions (Barba et al. 2014; Pecci et al. 2017).

The present study provides an additional insight into ancient Maya foodways. We focus on a social group who held the title of *lakam* (the Yukatek Mayan word for "banner"; Barrera Vázquez 1980: 434). Tsukamoto and Esparza Olguín (2015) identified this social group as belonging to "standard-bearers" (a term adopted here) and their residential compound through epigraphic studies of inscriptions carved on a stairway attached to a temple of the Guzmán Group—a *plazuela* (i.e., a small plaza compound) located 1.3 km north of the El Palmar epicenter, Mexico. Subsequent decade-long horizontal and stratigraphic excavations at the Guzmán Group yielded substantial data that elucidated the standard-bearers' cultural, economic, political, and social roles (Tsukamoto 2017; 2020; Tsukamoto et al. 2015; Tsukamoto et al. 2018). This article is focused on the foodways of these standard-bearers, especially their feasting practices, as evinced by ceramic analyses based on the type-variety-attribute system and chemical residues.

Feasting in Ancient Maya Society

Anthropologists and archaeologists recognize that feasting is closely tied to the negotiation of power and identity (Dietler and Hayden 2001; LeCount 1996; Rice 2009). In Classic Maya society, these activities were not just a tool to preserve status but a critical means to exchange goods and information (Lamoureux-St-Hilaire 2020). In the Late Classic period, cacao drinking (*kakaw* in Classic Mayan) was integral to ritual activities and politics (LeCount 2001). Redfield and Villa Rojas (1934) documented other festival and ritual foods and beverages among the modern Yucatec

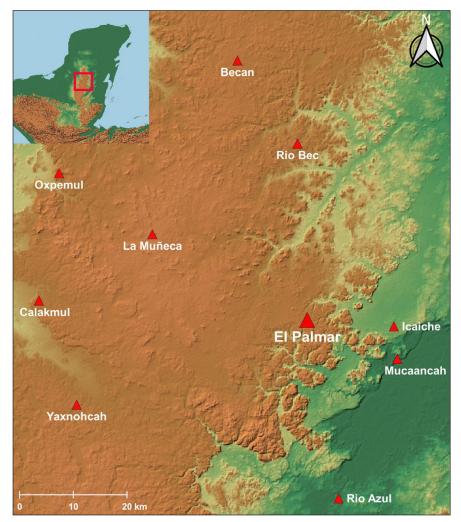


Figure 1. Map representing the location of El Palmar and its neighboring sites.

Maya including atole, *balché*, and tamales. Atole is a thick, semi-liquid maize gruel that was called *ul* during the Classic period (Houston et al. 1989). Spectacular murals found at the Chiik Nahb complex, a possible marketplace of Calakmul, illustrate two individuals drinking atole, one with a blue vase decorated with glyphs and another with an orange bowl (Martin 2012). *Balché* is an intoxicating fermented drink made from the bark of a leguminous tree which is soaked in honey and water. Yucatec colonial documents report that people consumed this drink during festivals (Blom 1928; Tozzer 1941). The modern Yucatec Maya consume *balché* during communal agrarian ceremonies when a ritual specialist places an offering on an altar and spills the drink to the four directions as part of a feast. The Lacandon also offer *balché* to supernatural entities during special ceremonies (Gabriel 2007: 158; Pugh 2009: 373). Tamales (*waaj* in Classic Mayan) consist of steamed maize dough with or without vegetables and meat. In ancient Maya society, tamales

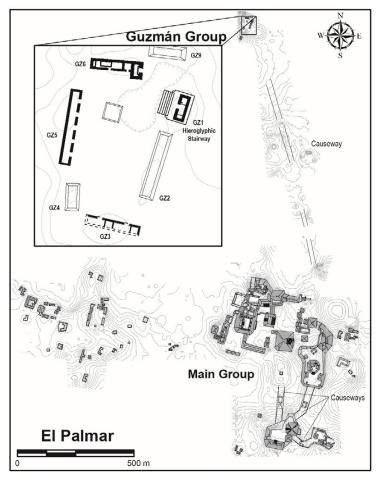


Figure 2. Map of the El Palmar Main Group and Guzmán Group.

appear in mythological, religious, and political scenes that can be traced back to the Late Preclassic period (Saturno et al. 2005). These studies provide the foundation for the study of Classic Maya foodways. Below, we articulate the study of foodways within the historical context of El Palmar's standard-bearers.

El Palmar and Standard-Bearers

El Palmar is located in southeastern Campeche, Mexico; a region where several polities such as Calakmul, Becan, Oxpemul, and Rio Bec flourished during the Classic Period (250-900 CE; Figure 1). Epigraphic studies of several carved monuments found in the plazas of El Palmar indicate it was the seat of the dynasty known as *sakh'ook wak piit ajaw*, or "White Valley, the Lord of Six Palanquins," which dates back to at least 554 CE (Esparza Olguín et al. 2019; Tsukamoto and Esparza Olguín 2021). Our recent LiDAR survey, covering an area of 94 km², detected a total of 559

plazas and plazuelas in and around El Palmar's central Main Group.

The Guzmán Group plazuela is surrounded by a small temple with a hieroglyphic stairway (Structure GZ1) and six other structures (Structures GZ2-GZ6, and GZ9; Figure 2). The stairway's inscriptions include a genealogical list of standard-bearers and a description of the journey of their descendant and protagonist, Ajpach' Waal. According to this text, Ajpach' Waal played the role of ambassador in negotiating political alliances between Copan, Calakmul, and El Palmar in 726 CE (Tsukamoto et al. 2015; Tsukamoto and Esparza Olguín 2015). While his political status was high, the osteobiographical study of Burial 1 (believed to contain Ajpach' Waal's remains) revealed health problems at the time of his death, which occurred between 726-770 CE (Cerezo-Román and Tsukamoto 2021). The analysis of his grave offerings signal a gap between this standard-bearer's high political position and low economic status (Tsukamoto et al. 2020).

Archaeological studies have revealed the standard-bearer's activities in the plaza. Horizontal excavations exposed Structures GZ1, GZ3, GZ5, and GZ6 (Figure 2; Tsukamoto et al. 2018), where

Sample ID	Form	Ceramic Type	P	C	PH	PR	FA	СН
GZ1 – OF1	Vase	Palmar Polychrome: Palmar	Polychrome: Palmar 5 3		9.02	9	1	2.5
GZ5 – OF6	Vase	Zacatel Cream Polychrome: Unspecified	5	2	8.79	8	2	2
GZ5 – OF7	Vase	Infierno Black: Fluted	4	0	8.06	9	3	2
GZ3 – OF11	Vase	Infierno Black: Bolocantal	2	4	9.16	9	0	2
GZ6 – OF4	Cuenco	Tinaja Red: Tinaja	5	3	9.45	8	0	2.5
GZ3 – S17	Cuenco	Infierno Black: Bolocantal	5	3	9.14	9	0	2
GZ3 – S31	Cuenco	Egoista Resist: Egoista	4	3	9.57	9.5	0	2
GZ3 - S32	Cuenco	Tinaja Red: Tinaja	5	3	8.94	9	0	2.5
GZ5 – S45	Cuenco	Tinaja Red: Tinaja	4	1	8.33	8	2	4
GZ3 - S48	Cuenco	Corona Red: Corona	3	2	9.06	8.5	2	2.5
GZ3 - S50	Cuenco	Saxche Orange Polychrome: Saxche	4	3	8.91	8.5	0	2
GZ3 – S59	Cuenco	Infierno Black: Bolocantal	4	2	9.12	8.5	0	2.5
GZ3 - S60	Cuenco	Infierno Black: Bolocantal	5	3	9.13	9	0	2.5
GZ1 – S66	Cuenco	Chantuori Black-on-orange: Unspecified	4	3	8.86	8.5	0	4
GZ1 – S67	Cuenco	Chantuori Black-on-orange: Unspecified	5	3	9.21	9	0	2.5
GZ1 – S68	Cuenco	Tinaja Red: Tinaja	5	2	9.3	9	0	2.5
GZ1 – OF2	Cajete	Zacatel Cream Polychrome: Unspecified	5	3	9.33	9	1	2.5
GZ6 – OF3	Cajete	Egoista Resist: Egoista	5	3	9.66	8	0	2
GZ5 – OF5	Cajete	Tinaja Red: Tinaja	5	3	9.42	9	1	1.5
GZ1 – S02	Cajete	Desquite Red-on-orange: Unspecified	1	2	8.71	8	0	2
GZ6 – S10	Cajete	San Clemente Gouge-Incised: San Clemente	1	0	8.28	8	0	2
GZ3 – S33	Cajete	Tixcacal Orange Polychrome: Tixcacal	4	3	9.13	8.5	0	1.5
GZ6 – S43	Cajete	Desquite Red-on-orange: Unspecified	5	2	8.98	8.5	0	2
GZ3 – S51	Tripod Cajete	Saxche Orange Polychrome: Dzaptun	2	2	9.05	9	0	1.5
GZ1 – S69	Cajete	Corona Red: Corona	2	2	8.97	9	0	2.5
GZ3 – OF10	Plate	Saxche Orange Polychrome: Saxche	5	2	8.68	8	0	2
GZ5 – OF8	Plate	Saxche Orange Polychrome: Saxche	4	4	9.77	8.5	2	2.5
GZ5 – S72	Jar	Tinaja Red:Tinaja	4	2	8.93	9	0	2.5
GZ5 – S73	Jar	Encanto Striated:Unspecified	4	4	9.1	9.5	2	3
GZ3 – S74	Jar	Encanto Striated:Unspecified	3	4	9.12	8.5	3	3
GZ5 – OF9	Flask	Not Identified	3	6	9.42	8	0	2.5

Table 1. Chemical residues of vessels from the Guzmán Group. P: phosphate, C: carbonate; PR: protein; FA: fatty acid, CH: carbohydrate.



Figure 3. Vessel from Burial 7, used on feastings (Photo: Kenichiro Tsukamoto).

a complete chemical residue analysis took place on the room floors of GZ3 and GZ5, along with partial analysis on GZ1 and GZ6 (Ceballos Pesina et al. 2021). Structure GZ1, located on the plazuela's east side, is a temple featuring a terrace atop its hieroglyphic stairway which was designed to host theatrical performances on large treads, leading to a single-chambered shrine with two benches placed at the north and south ends (Tsukamoto 2014). Our chemical analyses on the floors revealed concentrations of proteins and fatty acids in the doorway where a semi-complete bichrome tripod dish was found (Table 1, GZ1-So2). This evidence suggests that Ajpach' Waal and his descendants repeatedly conducted food-related rituals in this doorway. Structure GZ6 is a three-room building enclosing the plazuela's north end. Chemical residue analyses suggest that the smaller, middle room was used for food storage (Ceballos Pesina et al. 2021:82). A large throne-like bench was placed in the west room, which probably served for meetings and receptions. This room also contained a lateral bench along its west wall, on which Tsukamoto and his crew (2015) found a round mano and a

portable censer, suggesting the occurrence of private activities.

The two other buildings appear to have had different functions. Structure GZ3 encloses the south end of the plazuela. The building's north side contains two rooms, each of which contained an eastern lateral bench—a common characteristic of residential buildings in the Maya area. The high values of phosphates and fatty acids detected on these rooms' floor suggest that the standard-bearers prepared, consumed, and/or stored food there (Ceballos Pesina et al. 2021:81). Structure GZ5 — which flanks the plaza to the west — is a single-gallery building with five doorways. In contrast to GZ3, phosphate and fatty acid values were low on GZ5's floor; suggesting that its principal function was not food-related. Scholars widely postulate that this type of gallery-like buildings served as administrative or commercial facilities (e.g., Andrews 1975:43). We should note that both Structures GZ3 and GZ5 have more rooms facing outward from the plaza, implying additional functions. The Guzmán Group was abandoned around 850 CE.

Feasting in the Guzmán Group

Evidence of feasting in the Guzmán Group comes from two types of contexts – a termination ritual and four burials -- from which we recovered a total of 31 vessels discussed here. These 31 vessels are comprised of four vases, 21 bowls, two plates, three jars, and a tobacco flask. The standard-bearers performed a termination ritual when abandoning the plazuela (Tsukamoto et al. 2015; Tsukamoto et al. 2018), where horizontal excavations uncovered numerous termination deposits, including sherds in and around Structures GZ1, GZ3, and GZ6. Sherd refitting analyses indicate that most ceramics from the termination deposit were large serving vessels. Since an increase in serving vessel size correlated with the construction of this public plazuela, Tsukamoto (2017) suggested the standard-bearers had used these large vessels for feasting inside this plazuela. Stratigraphic excavations beneath the floors of GZ1, GZ3, GZ5, and GZ6 uncovered four burials (Burials 1, 5, 7, and 8) dated between the Late and the Terminal Classic. The burials featured offerings that included ceramic vessels, some of which showed evidence of use-wear (Figure 3). Four cylinder vases were most likely used for beverages, while tripod bowls and plates were for solid foods. Burial 1, found below the floor of Structure GZ1, contained two polychrome vessels as offerings (Tsukamoto et al. 2015:207): a cylinder vase that could have been used for chocolate, atole, or balché and a polychrome tripod bowl in which two clay balls were placed, probably tamale "imitations". Microscopic analyses with a scanning electron microscope (SEM) identified either cacao (Theobroma cacao) or tablote (Guazuma ulmifolia) under the latest floor of Structure GZ1's southwest corner (Tsukamoto et al. 2020:1255). Below, we turn to the chemical residue analyses which revealed additional evidence for feasting.

Method

We sorted ceramic vessels based on the type-variety-attribute system and then selected samples for chemical residue analyses. In the type-variety-attribute analysis, the identification of forms and decorations hints at contents since the iconography and epigraphy of some painted vessels has associated specific foods and drinks with certain vessel forms. For example, Classic period nobles used cylinder vases, especially those depicting courtly scenes and glyphic texts, to drink chocolate and other



Figure 4. Monochrome vase (GZ3-OF11) from Burial 8 (Drawing and photo: Xanti Ceballos).

ceremonial beverages (Reents-Budet 1994). Tripod plates and *cajetes* (i.e., bowls with flared and outcurved sides) were often used for tamales, while *cuencos* (i.e., bowls with incurved and round sides) were used for maize-based beverages such as atole (Boot 2009; Houston et al. 1989).

We selected ceramic vessels recovered from the two context types (i.e., the termination ritual and four burials). When a vessel was sufficiently preserved to identify its form, we classified it as a vase, plate, dish, bowl, or jar (following Sabloff 1975:22-25). We applied the terms cuenco and cajete to sort our samples by the specific food-related activities mentioned above. A sample ID (S) was assigned to each vessel and, in the case of the burial offerings, an extra ID (OF) was added. Here we'd like to highlight that vessels used as grave offerings in the Maya area were not solely funerary in function but were extensively used prior to their deposition (Hall et al. 1990; Houston et al. 1989; Stuart 1988, 1989; also see Coe 1973).

Luis Barba and Linda Manzanilla pioneered chemical residue analyses of archaeological features and artifacts (Barba 1986; Barba and Denise 1984; Manzanilla and Barba 1990). Their studies identified repetitive activities that chemically permeated room floors and open spaces such as courtyards, patios, and plazas. For example, they noticed that areas where food was consumed were rich in phosphates, while sleeping areas were poor in organic residues. Scholars have continued to apply chemical residue analyses to different activity areas that include ritual spaces, causeways, and marketplaces, refining the methods to be quantitative (e.g., Terry et al. 2004; Terry et al. 2000; Terry et al. 1998; Parnell et al. 2001). The methods developed to detect residues in activity areas have been shown to be equally powerful for identifying residues on pottery. Ethnoarchaeological and laboratory studies carried out on ceramic vessels allow scholars to infer the kinds of food and beverage they contained (Barba et al. 2014).

Because of their efficacy, we employed semi-quantitative analyses to examine food-related chemical signatures in ceramic vessels to study ancient Maya foodways. The results are shown in Table 1 as ordinal values. The analyses we ran do not detect specific plant and animal species associated with foodstuffs. Nevertheless, scholars have demonstrated the correlation between chemical components detected by semi-quantitative analyses and those detected by more sophisticated instruments (Pecci et al. 2017). For example, the concurrence of carbohydrates and fatty acids in cylinder vases signals the presence of cacao. Kaplan and colleagues (2017) applied liquid chromatography coupled with mass spectrometry to archaeological samples and revealed theobromine, the principal component of cacao. We also examined whether vessels with the same form but different surface decorations (e.g., polychromes vs. monochromes) are associated with distinct functions. Other beverages such as atole and balché leave high values of carbohydrates on vases without fatty acids. The existence of proteins on plates could indicate meat, beans, and insects. High carbohydrate values in bowls may denote tamale, although the chemical residues of tamale depend on its fillings—meats, beans, and vegetables that can represent different values of proteins and fatty acids. The Chiik Nahb murals vividly illustrate a female serving tamales to another person on a flat plate (Martin 2012: 65). Solid foods do not always leave chemical residues on ceramic vessels. Importantly, we recognize that the ancient Maya most likely used ceramic vessels for multiple purposes.

Our chemical residue analyses followed procedures developed by Barba and colleagues (Barba et al. 2014; Barba et al. 1991). Because liquid and soft food residues tend to be absorbed into vessel walls and bases, we took small samples from these sections and ground them in a clean mortar. When vessels were complete or semi-complete, a Dremel drill with a 1/8" tungsten tip was used to take a sherd sample of ca. 2 g. We applied five "spot tests" in the samples to detect the presence of phosphate (P), carbonate (C), protein (PR), fatty acid (FA), carbohydrate (CH), and a pH meter to determine acidity (for detailed procedures see Barba et al. 1991). The analyses took place at the Laboratory of Archaeological Prospection of the Universidad Nacional Autónoma de México (UNAM).

Results

During the 2010-2016 field seasons, we sorted complete and semi-complete vessels and sherds recovered from different Guzmán Group contexts based on the type-variety-attribute system (Ball 1977; Inomata and Triadan 2010; Smith 1955). After attempting to refit all sherds in the laboratory, we identified 86 types and 93 varieties from a total of 34,077 ceramic materials. Among this sorted material, we sampled 31 complete or semi-complete vessels recovered from the primary contexts for chemical residue analyses. The sample includes four cylinder vases, 12 cuencos, nine cajetes, two plates, three jars, and a flask. The residue analyses yielded varying concentrations of chemical signatures, although carbonates and pH values tended to be high due to the karstic geology of the El Palmar region. We report our results below, organized by vessel form.

Cylinder Vases. Analyzed vases consist of two polychrome and two monochrome cylinder vases recovered from Late Classic burials (726-770 CE; Tsukamoto et al. 2020). Of the four cylinder vases sampled, only the vase from Burial 1 of Structure GZ1 had imagery, depicting a mythical fire ritual (Tsukamoto et al. 2015:206, Figure 8). This one and two other vases from Structures GZ1 and GZ5 (OF1, OF6, and OF7) exhibit high-to-middle values of carbohydrates, proteins, and phosphates, and middle-to-low values of fatty acids, while the black monochrome vase from Structure GZ3 (OF11; Figure 4) lacks fatty acids. While the first three vases could have contained cacao, the lack of fatty acids on the Infierno Black: Bolocantal vase (GZ3-OF11) indicates it was used for other beverages (Table 1). There was no significant difference in chemical residues between the polychrome and monochrome vases.

Bowls (Cuencos and Cajetes). Twelve samples were classified as cuencos and nine as cajetes (Table 1). As for the vases, there was no significant difference in chemical signatures between polychrome and monochrome bowls. Unlike the vases, which yielded high concentrations of fatty acids, only four (S45, S48, OF2 and OF5) of the 21 bowls presented this chemical component. Furthermore, protein enrichment patterns were consistent in these forms, including the tripod polychrome cajete containing tamal-like clay balls (GZ1-OF2) mentioned above (Cerezo-Román and Tsukamoto 2021:281, Figure 5a). The middle carbohydrate value found at the bottom of this cajete could be residues of tamale. If this was the case, rich proteins and the low value of fatty acids may represent tamale fillings such as meats or beans. As mentioned above, cuencos were often used for atole, or *ul*, drinking. Although none of the vessels recovered from the Guzmán Group depicted

the *ul* glyph, all cuencos in the samples were rich in carbohydrates and proteins, suggesting the presence of atole (Figure 5). It is equally possible that they were used to serve balché.

Plates. We analyzed two large plates measuring over 30 cm in diameter. This vessel type – a plate with a wide mouth, shallow walls, and flat base – was called *ulak* in Classic Mayan (Boot 2009). One of the plates (GZ5-OF8), depicting a jaguar image, or *wahy* (i.e., an animal spirit companion), came from Burial 5, which was placed below Structure GZ5's latest floor. Our chemical analyses of this plate identified rich carbohydrates, proteins, and fatty acids. Another plate of the Saxche Orange Polychrome type (GZ3-OF10; Figure 6) was found in Burial 8, placed under the latest floor of Structure GZ3's west room. Chemical analyses of this plate detected proteins and carbohydrates, but not fatty acids. Because of their low walls, these serving plates were used for solid foods. The excavations yielded carbonized avocado and nance seeds on Structure GZ5's room floor (Tsukamoto et al 2020: 1256). The standard-bearers possibly served foods such as meat, avocado, and tamale on the *wahy* plate while the latter plate was used for other foods.

Jars. Our sample included three jars that were divided into two groups according to their mouth diameter: (1) a restricted-mouth jar (< 30 cm diameter) of the Tinaja Red type and (2) two wide-mouth jars (> 30 cm diameter; Table 1) of the Encanto Striated type. Restricted-mouth jars are usually associated with the serving, storage, and transportation of liquids, while wide-mouth jars were used to prepare and store foodstuff (Triadan 2000). Our analyses show the Tinaja Red jar (S72) contained food or liquid with a concentration of proteins and carbohydrates that might indicate the storage or preparation of atole and fermented maize drinks. It is unlikely that it was



Figure 5. Cuenco (GZ6-OF4) from a burial offering.



Figure 6. Polychrome plate (GZ3-OF10) from Burial 8 (Drawing and photo: Xanti Ceballos).

used for water because water containers typically only yield high values of carbonate and pH (Barba et al. 2014). The two Encanto Striated jars (S73 and S74) contained fatty acids and proteins and were likely used for cooking foods such as stews.

Tobacco Flask. We found a decorated tobacco flask in Burial 7 of Structure GZ5 (Figure 7). The attire of the figure depicted on the flask indicate it was likely Chahk, the rain or storm god. The flask, which type has not been identified, was originally painted black (Tsukamoto and López Camacho 2018:158). When we uncovered the burial, the flask was found tipped over, spilling congealed



Figure 7. Tobacco flask (GZ5-OF9) from Burial 7 (Drawing: Daniel Salazar).

white liquids out of its mouth—possibly its original contents. Scholars who conducted chemical residue analyses of similar flasks from other sites have identified nicotine, the active ingredient of tobacco, and more recently marigold (Zagorevski and Loughmiller-Newman 2012; Zimmermann et al. 2021). These ingredients can induce mild psychedelic effects, which would have been sought during feasts or other ceremonies. Our analyses revealed phosphates, carbohydrates, and proteins (Table 1). Future analyses with gas chromatography, liquid chromatography-mass spectrometry, and metabolomics will hopefully identify a more specific content for the flask.

Discussion

Through the study of a sizable sample of reconstructible vessels, our study revealed aspects of the foodways of standard-bearers who lived in the Guzmán Group. Chemical residues on jars and some cajetes and cuencos reflect their daily food-related activities, including food preparation, consumption, and storage. While our analyses attested that some vessel forms were associated with certain food-related activities, we found no clear functional difference between polychrome and monochrome vessels. This finding suggests that the Guzmán standard-bearers did not have stylistic vessel preferences for consuming foods and beverages.

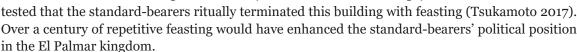
Since feasting was an important theatrical performance in Classic Maya society, foods and

beverages were not just consumed; they enhanced religious and political events. Since the "chemical footprint" of vessels results from repeated activities, the combination of the right chemical residues on certain types of vessels can indicate their regular use during feasts. Our results show that cylinder vases, some cuencos and cajetes, and large polychrome plates probably were use for ceremonial beverages and foods such as cacao, atole, and tamales. When the standard-bearers created an open gathering space adorned with a hieroglyphic stairway around 726 CE, feasting and other ritual events must have been politicized. This is perhaps clearest for Structure GZ1, where a ritually killed, large tripod cajete of the Desquite red-on-orange type (GZ1-So2) was placed as a termination deposit on the terrace in front of the doorway where we identified a concentration of organic residues (Ceballos Pesina et al. 2021). This doorway, highly visible from the plazuela, was ideal for hosting people who would have witnessed and participated in the feasts which regularly occurred there. A ritual specialist may have stood on the terrace, exhibiting this vessel filled with food in front of the participants. The consumption of cacao, atole, tamale, and possibly tobacco, suggests that the standard-bearers had access to prestige foods and beverages. Mild psychotropic effects induced by cacao, atole, balché, and tobacco created emotionally charged environments among feast participants. The Guzmán plaza was large enough to accommodate more people than all the members of the standard-bearer household, suggesting that other elite and non-elite people were present during these commensal events.

In other words, the creation of a new public place led the standard-bearers to regularly organize politically charged feasts, which provided opportunities for the participants to negotiate power and identity (Tsukamoto 2014; Tsukamoto et al. 2015). Our analyses show that ceramic

vessels as offerings were frequently used before being deposited in burials. The clay imitation of tamales found in a tripod cajete of the Zacatel Cream Polychrome type (GZ1-OF2), along with its chemical signature, signal that Ajpach' Waal regularly ate tamales as ceremonial foods—a practice that can still be observed in modern Maya communities.

The quantity and quality of food offered at feasts was probably just as important as the feasts themselves and determined the success of the sponsors (Lamoureux-St-Hilaire 2020). Feasting appears to have continued until the Guzmán Group was abandoned around 850 CE. Charred avocado and nance found on Structure GZ₅'s room floor (Tsukamoto et al 2020: 1256) at-



Conclusion

Our chemical residue analyses of 31 ceramic vessels shed new light on Maya standard-bearers' foodways. The different lines of evidence indicate that the commensal events organized by the standard-bearers became increasingly politicized with feasting around 726 CE and continued until they abandoned their plazuela—at which time they performed a reverential termination ritual. We hope that future analyses will offer more detailed information about their foodways.

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Book Review:

The Maya and Climate Change: Human-Environmental Relationships in the Classic Period Lowlands. KENNETH E. SELIGSON. 2023. Oxford University Press. New York. 284 pp. \$29.95 (hardcover), ISBN: 9780197652923.

by Maxime Lamoureux-St-Hilaire

Mount Royal University

Dr. Kenneth E. Seligson's new book, *The Maya and Climate Change: Human-Environmental Relationships in the Classic Period Lowlands*, is an encyclopedic treatise of ancient Maya environmental archaeology and paleoenvironmental science. The book comprises an easily digestible 203 pages of text subdivided into 8 clever chapters.

The overt objective of *The Maya and Climate Change* is to educate the public on ancient Maya ecology—an approach that partly relies on dispelling misconceptions about the civilization. And its two first chapters – 1. *Shifting the Focus* and 2. *From Camera Lucida to Lidar* – were clearly written with a broad public in mind. In these, Seligson expertly and clearly introduces Maya archaeology and key paleoenvironmental notions. Both chapters are comprehensive, well-illustrated, and include helpful cross-cultural analogies. The whole book also relies on endnotes citations, instead of in-text references, to facilitate the reading process for non-academics.

The book takes an academic turn in the next four chapters – aptly titled 3. Forests; 4. Fields; 5. Water; and 6. Stone – which are far more technical. These thoroughly distill a vast amount of literature on ancient Maya botanical, faunal, hydrological, and geological environments, and address

how Preclassic and Classic Maya people continuously adapted to their multifaceted landscapes. These four chapters rely on complex concepts and vocabulary which, even when defined, may be too technical for the average reader. The *Water* and *Stone* chapters are especially rich, deftly summarizing recent and fascinating sources that many Mayanists remain unfamiliar with. The 17 pages dedicated to lime production are perhaps the deepest dive in any topic, resulting in a productive discussion about this instrumental, yet seldom mentioned resource. I know I will regularly refer to these four chapters for future research and courses preparation. The almost 50-page-long bibliography is another excellent resource for researchers and students alike.

Chapter 7 – Collapse and Resilience – is less focused on the natural world, relying more heavily on landscape, social, and settlement archaeologies. The chapter is a welcome update on the constantly evolving questions of the Preclassic and Classic "collapses". It provides a systemic and historically situated perspective on the entanglement of ancient Maya social institutions and environments. Seligson emphasizes that even though Classic Maya societies were incredibly resilient, the combined toll of millennia of sedentism and harsh climatic factors – especially droughts – eventually led Classic Maya regimes to erode. Notably, the chapter underscores that Maya Civilization – and its rich ecological heritage – is very much so alive today and never disappeared despite successive political implosions.

The final Chapter 8 is entitled *Looking Forward*. While its first eight pages simply summarize Chapters 3-7, the final four emphasize that if Maya Civilization thrived for so long, it was thanks to its responsible adaptations to a changing environment—especially its sustainable landscape management. Consequently, we must today learn from these millennial, Indigenous Maya environmental practices — several of which remain in use — to aim for a sustainable future.

The book may fall a little short of its public education objectives, but its tone is pedagogical and its structure intuitive. Its key points are repeated to ensure the reader remembers them. For example, the fact that "Classic communities learned from the various consequences of Preclassic human-environmental practices and developed new, diverse methods promoting long-term water conservation [and other ecological practices]" (p.112) is paraphrased in every chapter. And while the Highlands are seldom mentioned (which is logical, judging from the book's title), the author adequately covers many Lowland regions while highlighting the great cultural diversity of the broader Maya world. A positive departure from the title is the productive integration of the Preclassic, Classic, and Postclassic periods. To be sure, Seligson incorporates plenty of Indigenous, ethnographic, and ethnohistorical literature to highlight continuities in Maya civilization.

I highly recommend *The Maya and Climate Change* to both scholars and students interested in environmental archaeology and the Maya. As a readable, affordable, short, and comprehensive monograph, this would be a great textbook for a Maya-focused, environmental archaeology course. This valuable contribution to the field will no doubt become a classic reference on ancient Maya ecology.



Melissa Burham is an anthropological archaeologist who holds a PhD in anthropology from the School of Anthropology at the University of Arizona. Her research interests include the emergence of social complexity, urbanization, and community development in ancient Maya society, particularly during the Preclassic period (ca. 1000 BC-AD 300). She has also conducted research on water management and aguadas (reservoirs) as adaptations to urban environments. Her recent research focuses on the development of neighborhoods around minor temple complexes at the lowland Maya site of Ceibal, Guatemala, and how these groups influenced the larger sociopolitical order. Burham was a researcher for the Ceibal-Petexbatún Archaeological Project, directed by Takeshi Inomata and Daniela Triadan, from 2010-2018. As a postdoctoral fellow at the University of Arizona, Burham is currently leading a project that focuses on the transition from the Preceramic to Preclassic periods in the Ceibal area, which will aid in understanding the adoption of a sedentism in the Maya lowlands more broadly.



John Walden is currently a Postdoctoral Fellow at Harvard University and a Research Affiliate at the Max Planck Institute for Evolutionary Anthropology. Walden holds a PhD from the University of Pittsburgh. His research employs aDNA and archaeological data to reconstruct Classic Maya kinship by examining genetic relatedness and archaeological correlates of social connectivity. Walden is attempting to reconstruct kinship networks between the rulers of the several Belize River Valley polities, their intermediate elite client lords, and their subject commoner populations. The research develops new approaches for understanding kinship, the agency of hierarchically arranged social actors, integration across urban and political landscapes, and issues of identity and political affiliation.



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The editors (from left to right): C. Mathew Saunders, Maxime Lamoureux-St-Hilaire (photo by Laura Mueller), and Matthew S. Longstaffe.

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Executive Editor: C. Mathew Saunders teaches anthropology at Davidson Day School and is the Founder and Executive Director of AFAR. He is also the creator of the long-running Maya at the Playa/Lago Conferences. He is co-editor (with Pamela Voelkel) of the book *Maya Archaeology: Tales from the Field* (Precolumbia Mesoweb Press).

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Layout and Advisor: Joel Skidmore is associate editor of *The PARI Journal* and associate director of Precolumbia Mesoweb Press.

Artist: Walter Paz Joj is an independent Kaqchikel artist. He is an *ajtz'ib'* (Maya scribe), graphic designer, and art teacher and researcher with special interests in Maya hieroglyphic writing and music. Walter specializes in the recreation of Maya text and art from the perspective of the Kaqchikel language and culture. He creates his art by combining ancient Maya writing with the use of digital tools, which he publishes on virtual platforms as open galleries. Since 2012, he has developed workshops to teach the Maya writing system to speakers and non-speakers of Mayan languages across many regions of Guatemala.

Copy Editors: This issue's four copy editors are excellent undergraduate students from Mount Royal University, Calgary, Canada. Kento Ammond is an Anthropology student with an interest in human evolution and an eye on graduate school. Adam "A.B." Brotherton is an anthropology major who has found great interest in the fields of cultural anthropology and archaeology, and in the world of the Mayas. As an individual who always wanted to learn about what unites us and makes us human, Morea Carle chose to focus her studies on anthropology for the past three years and hopes to pursue archeology in the next stages of her education. As an aspiring information design major with a passion for anthropology, Gregory Gaves believes that uncovering the roots of human evolution is vital for effective communication, because understanding our past enables us to design meaningful messages for both the present and future.

