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Dedicated to
the memory of
Michael D. Coe
(1929-2019)

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Yaxchilan from the Perspective of Guatemala: New Data on Settlement, Fortifications, and Sculptural Monuments

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In this paper we offer an update and synthesis of what is currently known regarding the settlement, fortifications, and monuments found in the portion of the Classic period Maya kingdom of Yaxchilan that lies within the modern borders of Guatemala. The settlement, defenses, and sculpture pertain primarily to the reigns of Shield Jaguar III, Bird Jaguar IV, and Shield Jaguar IV, from c. AD 680–810 of the Late Classic period. At this time the Yaxchilan rulers extended the physical borders of their kingdom to the north, west, and east into what is today the Sierra del Lacandon National Park (Parque Nacional Sierra del Lacandón, or PNSL) in Guatemala. The spatial extent of these rulers' authority east of the Usumacinta River is evidenced primarily by the location of carved monuments bearing images and texts that depict the kings (Martin and Grube 2008; Mathews 1988; Schele 1991:78). Their images are shown on lintels and other carved stones located within hinterland settlements that were governed by *sajal* loyal to Yaxchilan, while material remains recovered over the course of excavations provide a further line of evidence that rural communities conceived of themselves as part of the larger Yaxchilan polity (Golden and Scherer 2006, 2013; Golden, Scherer, Muñoz, and Vásquez 2008).

The earliest publication of Yaxchilan-affiliated monuments in Guatemala was

the fantastical adventure story of Dana and Ginger Lamb ([1951]1984). Embedded within this largely fictionalized account were visits made by Dana Lamb and his Mexican travel companions to a yet-unknown site in Guatemala (likely to the east or southeast of La Pasadita) that was the source of at least two looted monuments from the reign of Shield Jaguar IV that are now held in private collections (Scherer et al. 2017). Ian Graham (2010:453–467) was the first professional fieldworker to visit and document Yaxchilan-affiliated sites in Guatemala. Graham, led by local guides and accompanied by Martine Fettweis on later trips to La Pasadita, was drawn by reports of monuments being looted at La Pasadita and Tecolote. More recently, Paulino Morales and Carmen Ramos (Morales 2000; Morales and Ramos 2002) undertook a reconnaissance of sites near the town of La Técnica, mapping settlement and together with Hector Escobedo (2001) providing the initial documentation of a Yaxchilan-style stela at El Kinel.

Beyond these initial forays, the bulk of the research concerning settlement in Guatemala that was once subject to the dynasty of Yaxchilan has been conducted by members of our research team. Begun in the late 1990s, this work has involved reconnaissance, mapping, and excavation of sites in and around the PNSL. Regional explorations began initially as part of

the Piedras Negras Archaeology Project, led by Stephen Houston and Escobedo, including a foray to La Pasadita (Golden 2003). Regional survey, though, was undertaken in earnest beginning from 2003 to 2010 under the auspices of the Proyecto Regional Arqueológico Sierra del Lacandón, initiated by Golden and Scherer in collaboration with A. René Muñoz (Golden et al. 2004; Golden et al. 2010; Golden et al. 2006, 2008; Golden et al. 2003; Scherer et al. 2007; Vásquez et al. 2005). After a pause in research in Guatemala of several years, investigations resumed in 2016 under the auspices of the Proyecto Paisaje Piedras Negras-Yaxchilan, directed first by Griselda Pérez Robles and currently directed by Mónica Urquizú (Pérez Robles et al. 2016; Urquizú et al. 2017).

The earliest investigation of the kingdom of Yaxchilan by our research collective was completed by Golden and colleagues during a brief expedition to the site of La Pasadita in 1998 (Golden 2003; Golden et al. 1999). Beginning in 2003 we began a more intensive investigation of ancient settlement in Guatemala with a focus on understanding the political and social landscape of the hinterlands of the neighboring Yaxchilan and Piedras Negras kingdoms. A number of publications have resulted from those efforts, focused especially on the northern border of the Yaxchilan polity (Golden and Scherer 2006; Golden et al. 2005; Houston, Golden, Muñoz, and Scherer 2006), as well as ancient communities closer to Yaxchilan itself (Houston, Escobedo, Golden et al. 2006; Scherer et al. 2014). All of these data figure prominently in our own interpretations of community and kingdom within the polity of Yaxchilan (Golden and Scherer 2013; Golden, Scherer, Muñoz, and Vásquez 2008). In 2008, our final year of research focused largely on Yaxchilan-affiliated settlements in Guatemala, we undertook mapping and excavations at the site of Tecolote, once home to a border lord who served the interests of the Yaxchilan king. In addition to studies of architecture in the site core, our investigations focused on the documentation of its associated defensive system (Scherer and Golden 2009, 2014a).

While our research in Guatemala continued until 2010, growing concerns about security as well as the expansion of research efforts into neighboring areas of Chiapas, Mexico, resulted in a hiatus for investigations in the PNSL. In 2016 and 2017, however, we resumed archaeological fieldwork in Guatemala, focused chiefly on evidence for economy and warfare at Piedras Negras, the results of which are currently being

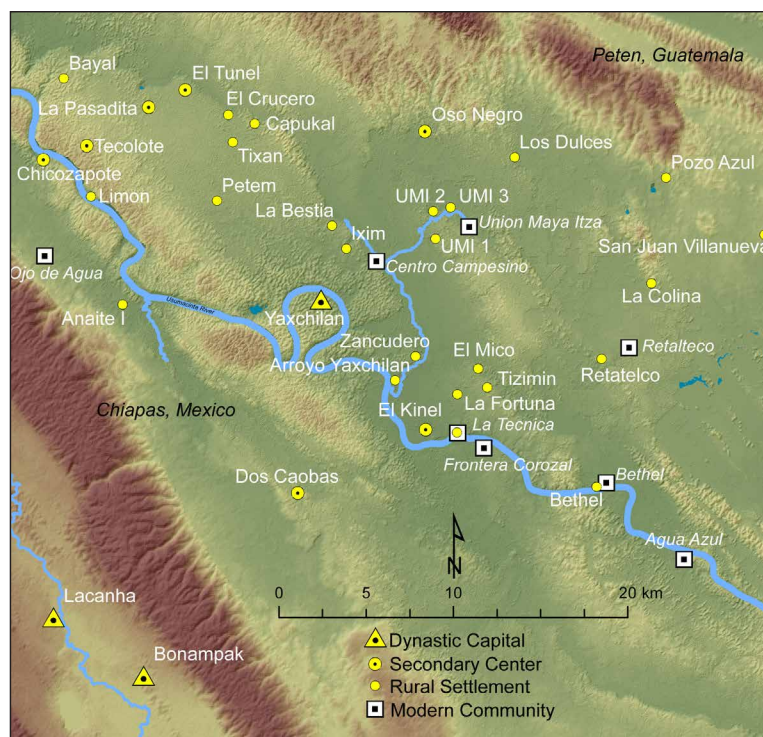


Figure 1. The location of sites discussed in this text, including new sites identified during the 2016 and 2017 field seasons of research (map by Charles Golden).

prepared for publication. During those field seasons, we also briefly conducted survey in the southern portion of the PNSL, in areas immediately adjacent to the polity capital of Yaxchilan and extending towards the northern border of the kingdom. In years prior, much of this zone was inaccessible due to an illegal occupation surrounding Centro Campesino, Guatemala, immediately across the Usumacinta River from the urban core of Yaxchilan. That settlement has since been abandoned and an official park ranger station is now maintained there by CONAP (Consejo Nacional de Áreas Protegidas) and the Defensores de la Naturaleza.

In 2016 and 2017 the identification of new settlements and other anthropogenic features in the kingdom of Yaxchilan was accomplished through opportunistic pedestrian survey (Figure 1). GPS coordinates were recorded for each anthropogenic feature and brief notes were taken. Additional systematic survey is needed to fully understand settlement in the kingdom of Yaxchilan, ideally utilizing pedestrian survey in combination with remote sensing techniques such as lidar and total station mapping. Nevertheless, the preliminary results reported here contribute to our understanding of the general pattern of settlement in the kingdom. We also present new information gathered regarding the distribution of fortifications in the kingdom of Yaxchilan. Finally, we update and clarify the original location of monuments that have originated from this zone. This article offers only a preliminary assessment of the study zone, and we anticipate that future research on the ground or via remote sensing campaigns will build on these findings.

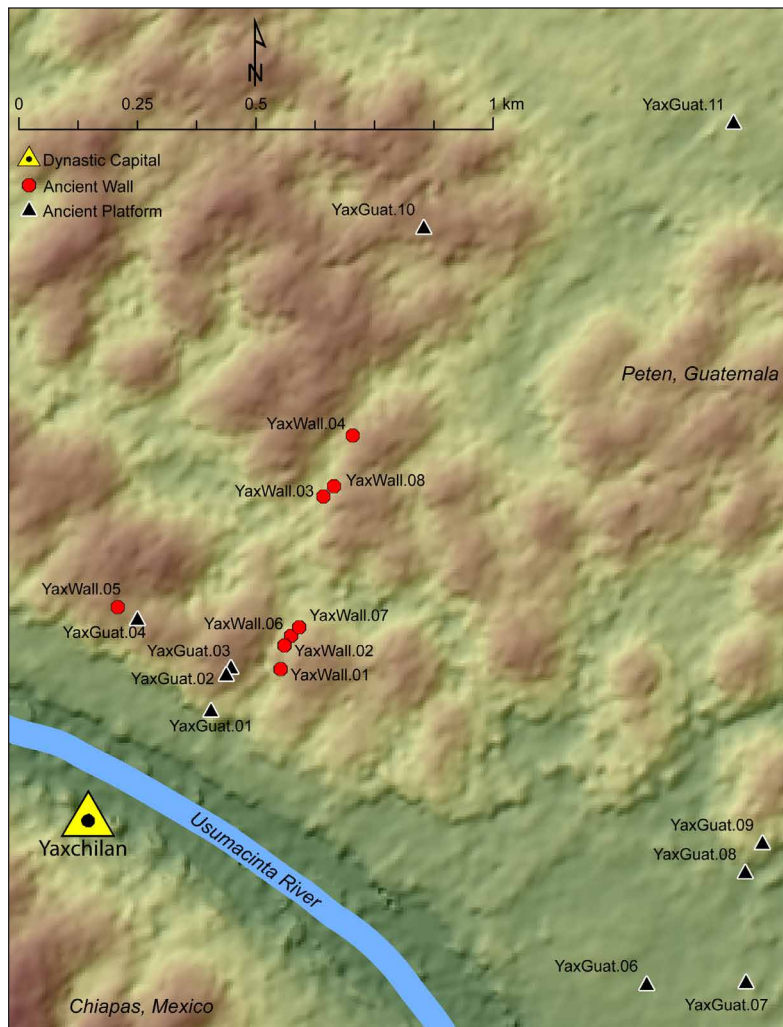


Figure 2. The location of settlement and defensive walls at Yaxchilan-Guatemala (map by Charles Golden).

Settlement

The settlement located immediately across the river from the monumental core of Yaxchilan is identified here as Yaxchilan-Guatemala (Figure 2). Our reconnaissance also located five new settlement clusters beyond this zone: Centro Campesino, Ixim, La Bestia, El Crucero, and Petem. Of these, Centro Campesino and Ixim could simply be considered outlying settlement from the Yaxchilan core. However, since the GPS coordinates form two distinct clusters we have chosen to treat them as separate sites here. We also include observations made at La Pasadita.

Yaxchilan-Guatemala

As anyone who has visited Yaxchilan knows, the Main Plaza consists of a long narrow expanse of flat terrain immediately adjacent to the bank of the Usumacinta River in Chiapas. Much of the surrounding terrain towards the west in Mexico consists of steep hills. Many of the hills located closest to the Main Plaza are topped by multi-doored temples, including those of the Small

Acropolis and Temple 33. Contrasting with the monumental core of Yaxchilan in Mexico, on the Guatemala side of the river the terrain is open and low-lying, giving way to small hills. Immediately across the river from the epicenter of Yaxchilan, a long expanse of flat open terrain parallels the river bank, similar to the Main Plaza on the opposite shore. We did not identify any architectural features here, though a millennium of periodic overbanking of the Usumacinta River may have buried small structures and other anthropogenic features under meters of fine sediment.

Looking more broadly at the area of Guatemala that surrounds the omega-shaped bend in the Usumacinta River, the terrain to the northwest of the bend is especially rugged and remains unexplored by our research team. The terrain to the southeast of the bend is also hilly and the areas closest to the river remain unsurveyed by our team. Further to the southeast, however, we have conducted reconnaissance, including at the Preclassic site of Zancudero and at Classic-period El Kinel (Golden and Scherer 2006; Houston, Escobedo, Golden et al. 2006). The latter is located in the agricultural fields of the modern community of La Técnica, which itself sits atop a Late Preclassic site of the same name. This region around Zancudero, El Kinel, and La Técnica is for the most part flat, and the land adjacent to the river consists of very deep fluvial sediments making this ideal agricultural land in the present as in the past.

A mix of flat expansive terrain and relatively modest hills is located directly across the river from the epicenter of Yaxchilan. A narrow valley between the hills heads north-northeast away from the river on the bank opposite the monumental core of Yaxchilan. It is within this valley that our team identified defensive features, as described in the following section of this paper. We did not identify any significant masonry structures on the valley floor; however, a number of the hilltops feature low structures. Moreover, at least one hillside was heavily modified by the ancient Maya, perhaps with terraces for agriculture (YaxGuat.01). We also identified additional terracing to the northwest (YaxGuat.04). The placement of structures atop the hills immediately northeast of Yaxchilan contrasts with the location of settlement elsewhere in the zone near the epicenter, which is generally located atop hills but at low elevations, a matter we will return to in this paper's discussion section.



Figure 3. View north from YaxGuat.07 illustrating flat basin rimmed by low hills (under tree cover) and possible architectural platforms at the treeline (photo by Charles Golden).

Eventually the valley that leads north-northeast from the Yaxchilan epicenter opens into a broad, flat, expansive area where the site cluster of Ixim is located (described below). At approximately 1.5 km from the riverbank we located two mound structures. We have identified these buildings as part of Yaxchilan-Guatemala. They are notably isolated from other settlement clusters, though the settlement gap may simply be an artifact of our incomplete survey.

An expansive flat zone, at least three square kilometers in area, is located east of the Yaxchilan monumental core on the Guatemala side of the river (Figure 3). This area remains incompletely surveyed, and periodic overbanking of the river has likely buried some structures under fluvial sediment. Nevertheless, we identified at least one large and formal architectural group (YaxGuat.07) consisting of at least three structures. This group is located 1.2 km east of the epicenter of Yaxchilan. The largest building in the architectural complex consists

of a single large mound (approximately 3 meters high) that may be the remains of a collapsed vaulted structure. A causeway (YaxGuate.06) leads west-northwest (278 degrees E of N) away from the architectural group in the direction of the monumental core of Yaxchilan. Although the full extent of the causeway is unknown, at least 200 meters of this feature is visible in Google Earth satellite imagery.

Notably, no such causeways are known for the epicenter of Yaxchilan. Rather, it may be that a series of such roadways connected important outlying groups to the monumental core. If so, full documentation of the feature may help reveal locations along the Usumacinta River from which canoes embarked for the monumental core on the Mexican side of the river. Complete clearing of the vegetation if not excavation will be required to fully define this architectural feature. At least two other low platforms were identified 230 and 300 meters north of this architectural complex.

Centro Campesino

For much of the first decade of the twenty-first century, until internal conflicts led to the voluntary removal of the community, a large illegal settlement known as Centro Campesino was located 3.3 km northeast of Yaxchilan in a patch of flat, fertile terrain on the west bank of the Arroyo Yaxchilan. A park ranger station now occupies the former hamlet (Figure 4). At least three low mounds were noted on the road leading into the Centro Campesino camp and it is likely that additional structures are located in the vicinity, although some structures were possibly destroyed during the construction of the illegal settlement. A portion of the modern dirt road through the middle of Centro Campesino seems to overlay a long, low, ancient structure as evidenced by a large quantity of exposed cut limestone blocks visible in the path. Considering the form of this anthropogenic feature, it may be a causeway that either connected the center of the ancient community to the Arroyo Yaxchilan or perhaps was part of a longer *sacbe* that ran from Centro Campesino to other nearby ancient communities such as Ixim or Unión Maya Itza. Indeed, a contemporary road currently runs between Centro Campesino and the modern community of Unión Maya Itza. Two other ancient structures were located along this road.

Ixim

Centro Campesino is situated on the southern edge of a large valley that runs parallel to the Usumacinta River and connects the center of the kingdom of Yaxchilan to the northern border sites, including La Pasadita and Tecolote. Walking northwest along this valley we encountered a dense concentration of settlement about 2 km to the west-northwest from the middle of Centro Campesino, identified here as Ixim (Figure 5). The settlement consists of a string of least 24 mound groups spread along a line of about 1.4 km. Most of the mound groups are located on slightly elevated areas and the general impression is that this may be an ancient agricultural community, with houses located on the low rises above the fields. Terracing was noted on at least one of the modest hills within Ixim. All the structures are relatively small and there is no apparent site center, although further survey is needed to confirm the absence of a civic ceremonial core.

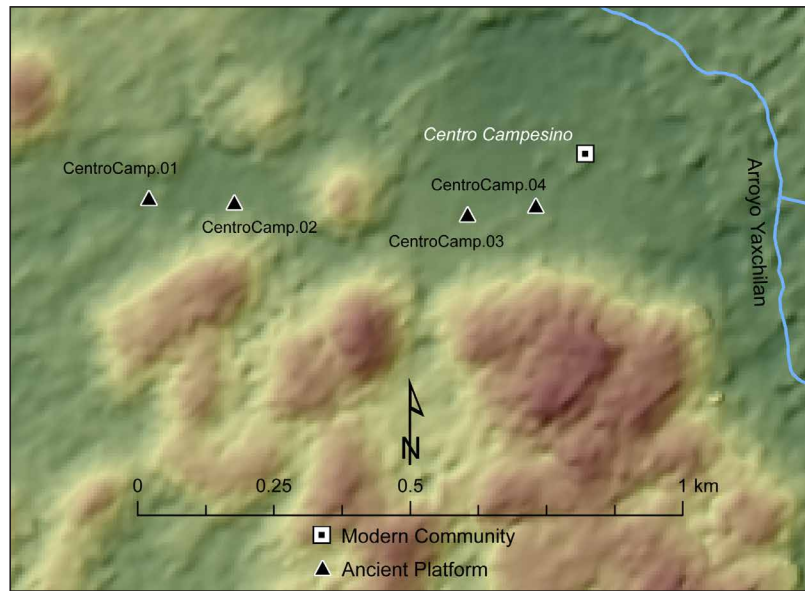


Figure 4. The location of settlement at Centro Campesino, Peten, Guatemala (map by Charles Golden).

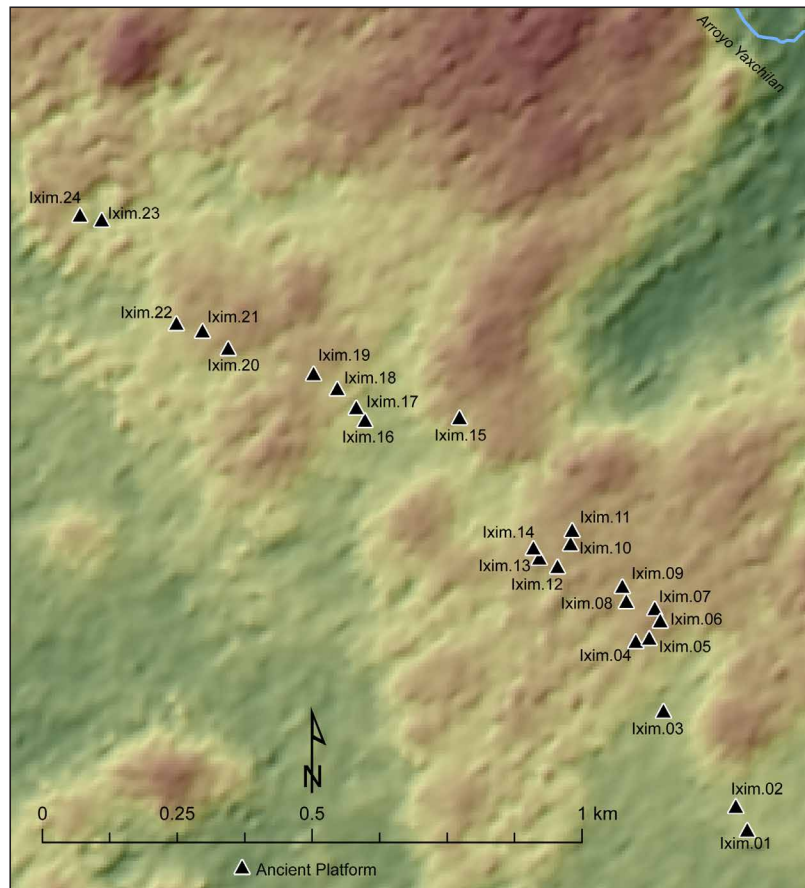


Figure 5. The location of settlement at Ixim, Peten, Guatemala (map by Charles Golden).

La Bestia

About 750 m north of Ixim is the site core of La Bestia, so named because of the challenges of pedestrian survey through abandoned agricultural field where the recent regrowth of vegetation included vines running along the ground that seemed to grab at one's feet and made walking under the hot sun yet more difficult (Figure 6). In contrast to Ixim, La Bestia has both monumental architecture and a clear civic-ceremonial center. The site is located on a natural rise in the middle of the expansive valley that connects Yaxchilan to its northern border sites. The main plaza consists of at least five structures and covers an area of approximately 400 square meters.

The largest of La Bestia's buildings (Bestia.04) is on the southern edge of the plaza and is at least five meters tall. In recent decades the structure was bisected by looters who left a gaping trench in the facade (Figure 7). The thick vegetation made it impossible to

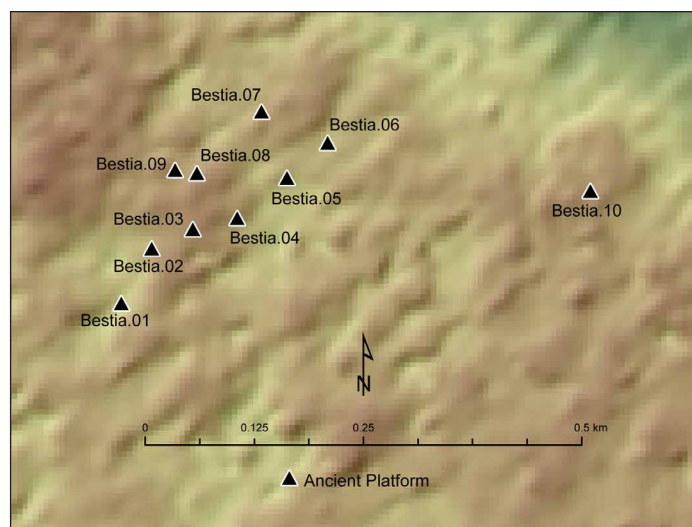
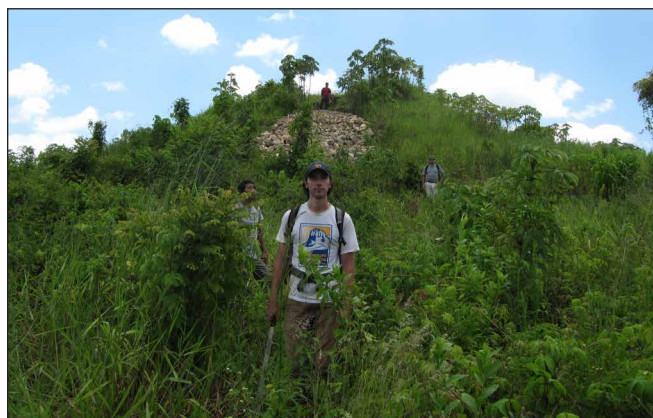


Figure 6. The location of architecture at La Bestia, Peten, Guatemala (map by Charles Golden).



a



b



c

Figure 7. Principal structure at La Bestia (Bestia.04) illustrating: (a) the overall size of the structure; (b) the location of the looters' cut (the individual in the foreground is standing at the base of the platform, the highest individual is at the start of the cut); (c) details of the looters' cut (photos by Andrew Scherer and Charles Golden)

determine the precise form of the structure. However, extrapolating from general architectural patterns in the kingdom of Yaxchilan, the building is likely a large pyramidal platform that was once topped by a long multi-doored temple structure. However, project members saw no obvious vaulting stones or intact room spaces in the remains of the superstructure. At least two phases of construction of the basal platform were evident in the looters' cut. Collapsed rubble in the looters' trench makes details difficult to discern; however, the vague outline of what appears to be grave architecture suggests that the looters may have encountered a burial chamber. Ceramics found in the cut suggest a construction date no earlier than about AD 700. A small column altar found on the backside of the building appears to have been moved in recent years, hauled from elsewhere in the site to its present location near a collapsed modern shack.

A second large structure (Bestia.06) is perhaps 3–4 m tall and is located 270 m to the northeast of Bestia.04. There is also a low mound (Bestia.05) between these structures in what might be the center of the plaza. A third large structure (Bestia.07), about 2–3 m tall, is situated 245 m north-northeast of Bestia.04. There is a possible raised causeway running between the two buildings. An additional pair of structures (Bestia.08 and Bestia.09) is located 140 m to northeast of Bestia.04. At least one of these structures may have had a stone roof judging by the presence of vaulting stones. The remaining structures identified at the site include a single low mound (Bestia.01) and two modified hilltops (Bestia.02 and Bestia.10).

La Pasadita

Scherer and Alcover completed a brief trip to La Pasadita to assess the status of the site and locate settlement and other anthropogenic features along the way. On the positive side we did not identify any new looting at the site. The principal structure, the source of its looted monuments and the murals, had collapsed sometime between Graham's initial visits to La Pasadita and those of Golden and colleagues (1999). By the time of this most recent visit, further deterioration was evident due to the environmental conditions and lack of interventions (Figure 8). It is our goal to return to La Pasadita in the future to both protect and preserve what remains of this structure and conduct formal research at the site.



a



b

Figure 8. Principal structure at La Pasadita: (a) in 1998 (photo by Charles Golden); (b) in 2016 (photo by Omar Alcover).

El Crucero

While travelling to La Pasadita from Centro Campesino we encountered a single mound. This structure had been partially destroyed a few years prior to our arrival when a small house was built on the site. We called the location El Crucero due to its proximity to a point where the trail crosses an arroyo (Figure 1). The presence of artificial stone at the crossing suggests it was modified in antiquity either to facilitate crossing of the arroyo or to dam the waterway.

Petem

Returning to Centro Campesino from La Pasadita we took an alternate route along an old logging road. This flat and easily traveled modern path almost certainly follows the ancient route between Yaxchilan and some of the northern border centers,

including La Pasadita and Tecolote. Although we were moving quickly in order to arrive back at Centro Campesino by nightfall, we managed to identify two large, elaborate patio groups. Each group consisted of a large platform, about 2–3 m high, capped by a series of large superstructures, each again about 2–3 m tall. Some of the superstructures may be the remains of collapsed vaulted structures. The architectural groups are located to the southwest of two large *aguadas*, one 1.5 km to the northwest and another 3 km to the northwest. Due to the proximity to these two water sources the site is identified here as Petem. Unfortunately, there was insufficient time for us to explore the site further, although the impression is that with so many large structures there must be a formal civic-ceremonial core nearby, perhaps comparable in size and scale to La Bestia.

Defenses

The documentation of defensive features has been a central element in our regional research in the kingdom of Yaxchilan (Golden and Scherer 2006; Scherer and Golden 2009, 2014a). Our prior work focused on the secondary centers at the limits of the polity where all the known defensive systems have been reported to date. Our reconnaissance in 2016 and 2017 identified walls in other parts of the kingdom, including near the civic ceremonial core on the Guatemalan side of the river (Figures 2 and 9).

The general form of all fortifications, including those identified in 2016 and 2017, is the same: low walls that are most often located at a low point between two hills, running from one toe-slope to the other and generally situated perpendicular to the easiest route of travel (Scherer and Golden 2009). Some of these features bisect paths that are used today. They are uniformly built of loose dry-fill rubble, which could be interpreted as evidence for hasty construction but more likely simply reflects the expediency (not rapidity) of their construction. The walls themselves are too low to have served as effective barriers but are instead interpreted as the stone foundations of wooden palisades or barricades, the stone being necessary to reinforce wooden constructions sunk into the shallow soils of the region. For the kingdom of Yaxchilan, only the walls located near Tecolote have been excavated and none produced ceramic material or post-molds. However, similar features at La Mar, a Piedras Negras secondary center, have produced both, with the ceramics

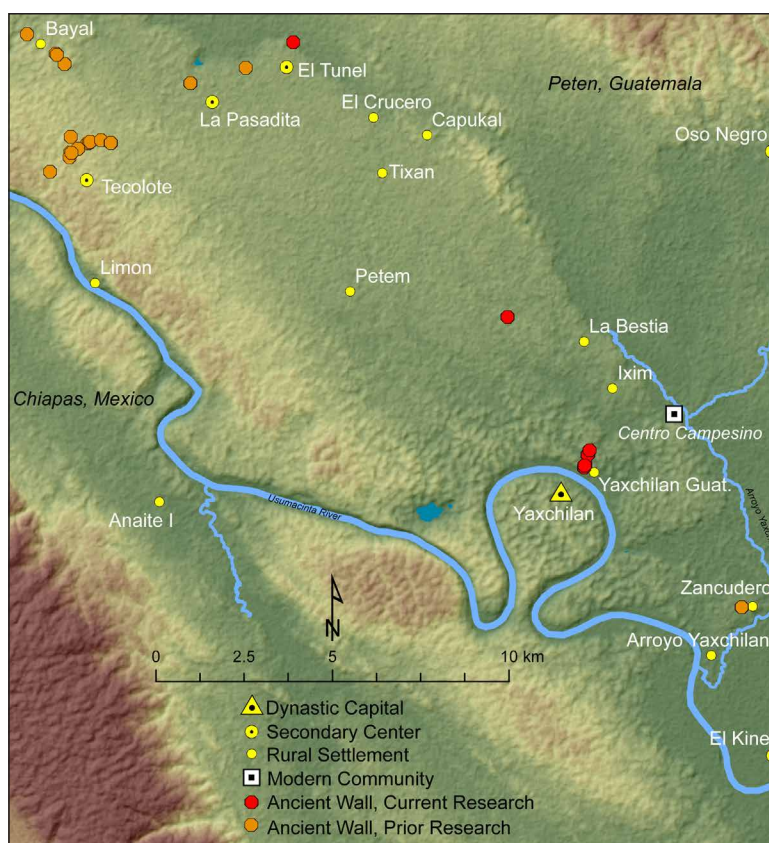


Figure 9. All the known defensive walls in the Guatemalan portion of the kingdom of Yaxchilan (map by Charles Golden).

dating to the Late Classic period (Scherer et al. 2013).

Thus, what we have referred to as “walls” here and in other publications are probably best understood as the foundations of barricades, obstacles put in place either temporarily or permanently to hinder the mobility of invaders and create choke points from which defending warriors could stage counterattacks. Spanish accounts of Maya fortifications used during the conquest help clarify the form and function of such defensive features. In describing the siege of Chamula, a Tzotzil settlement 160 km to the west of Yaxchilan, Bernal Díaz writes:

Then we began to shoot many arrows and fire muskets at the people in the fort, but we could do them no harm whatever on account of the great *barricades* they had [erected] but on the contrary they constantly wounded many of our men. We stood fighting in this way all that day and they did not give way at all to us, and if we attempted to get through them to where they had constructed their *barricades and battlements*, there were over a thousand lancers at their posts for the defence of those whom we were endeavouring to get through. (Díaz del Castillo [1632]1912:4:306, emphasis added)

Díaz describes Chamula as a “fortress.” Although the modern town of San Juan Chamula has since moved to a lower elevation, its Late Postclassic predecessor was situated atop a hill, surrounded by steep descents, some of which are described “like going into the bottomless pit” (Díaz del Castillo [1632]1912:4:307). At no point, however, does Díaz describe

Chamula as circumscribed by a wall. Instead, the barricades seem to have been strategically positioned to block entrances into the town, and these were reinforced by warriors as noted in the passage above. So effective was this defensive system that the Spaniards needed to construct a small siege engine with a wooden covering in order to protect twenty men from the onslaught of projectiles hurled at them by the Chamulans from their walls (Díaz del Castillo [1632]1912:4:306-307).

The Lienzo de Quauhquechollan, a pictorial account of the Conquest produced by a Nahua community that assisted the Spaniards in their invasion of Guatemala, provides numerous illustrations of barricades employed defensively by the Kaqchikel. The barricades are shown as a cross-hatched structure embedded into a foundation, shown as grey-brown or light cream-brown linear ovals. The cross-hatched features seem to be unambiguously wooden poles, the size, shape, and color all consistent with other objects (spear shafts, tree trunks) comprised of wood illustrated on the lienzo. The foundational features are more ambiguous. The color is the same as that used to illustrate the pit portion of the spear-pit traps and also to depict the borders of roads, the edges of rivers, the ground surfaces from which trees spring, and in one instance the foliage of trees. It may very well be that most of the barricade foundations in the highlands were built from earth in contrast to the stone used in lowland barricade construction described here. Alternatively, it may be that the stone foundations were covered in dirt, in both the highlands and perhaps also in the lowlands.

Curiously, one of the barricades shown on the lienzo is light cream-brown in color, the same as that depicted for a pyramid, ballcourt, and other masonry constructions. Although this may be artistic variation, it could also signify the artists' memory of at least one stone foundation for a barricade encountered during the conquest of Guatemala. Otherwise, the barricades on the lienzo are depicted as distinct from the masonry stone walls that are shown surrounding the communities of Quauhquechollan and Cuchumatanes. In both instances the stone walls are depicted as linear arrangements of stone blocks topped by a stepped motif.

Florine Hasselbergs (2008:132) suggests the barricades on the lienzo operated as "fortification glyphs." Following Ross Hassig's (1988:8) interpretation of the use of barricades by Aztec tributaries, Hasselbergs (2008:132) further suggests that the barricades served as statements of resistance and rebellion, suggesting that "since most movement was based on foot travel, blocking a road was obviously not very effective for barring traffic or stopping armies." We suspect that this interpretation is overlooking the potential value of these features, which could have been expediently raised or dismantled as needed. Although such barricades would not have been able to impede travel entirely, they would

have slowed travel and re-routed attackers onto more treacherous, irregular terrain where they would be easier to ambush by defenders. Moreover, such delays would have afforded defenders valuable time to either prepare themselves for a counterattack or to retreat. Finally, they would have slowed the attackers if retreat proved necessary.

Five walls (i.e., barricade foundations) were identified at Yaxchilan-Guatemala in 2016 and 2017, providing the first evidence that the polity capital was fortified. The location of these features is surprising considering that they are located in the heartland of the kingdom, in an area that by all material evidence was closely tied into the exchange of goods and common social practice with the polity capital itself (Golden and Scherer 2013; Golden, Scherer, Muñoz, and Vásquez 2008). Moreover, these barricades were located near the river, which would have served as Yaxchilan's most important line of defense. It may be that Yaxchilan wanted to be prepared for an attack that breached the outer line of defenses maintained by its border lords along the northern limit of the kingdom (at Tecolote, La Pasadita, etc.). Alternatively, it may be that the defenses functioned to slow attacking warriors who arrived by canoe on the Usumacinta River but were directing their attack against the settlement on the Guatemalan side of the river. Additional walls have been reported on the Mexican side near the epicenter of Yaxchilan, including a large feature that closes off the chokepoint at the omega-bend in the river (Echauri Pérez and Tejeda Monroy 2019). Excavation is needed within these features to determine if they were built close to the time of Yaxchilan's collapse (suggesting an escalation in war events) or were constructed much earlier in the Classic period, reflecting a landscape of endemic warfare.

Two other walls were found during the 2016 and 2017 survey. The first was located 2.2 km to the west-northwest of La Bestia. This is the first wall to be found midway between the polity capital and the kingdom's border. It may be that it was built to slow attackers who had penetrated the heartland of the kingdom, or it may simply signify that some sites within the kingdom possessed their own defenses. The second wall was located 700 meters to the north of the site of El Tunel, first identified in 2004. El Tunel remains poorly understood and its epicenter has not yet been securely located. El Tunel is located 2.4 km to the east-northeast of La Pasadita and was, as best as we understand, another site located along Yaxchilan's northern border. In that context, the new wall at El Tunel brings the total of walls at the northern limits of the kingdom to nineteen. When combined with the other walls noted above, ranging from the relatively small palisade bases to the massive stonework of Zancudero, the total number of walls known for the Guatemalan side of the Yaxchilan kingdom is 26.

Coupling the archaeological evidence for

Classic-period barricades with evidence from Conquest-era documents allows us to summarize a few key observations regarding Maya defensive systems. Barricades are a particular type of defensive feature (distinct from stone walls) that were placed along routes of travel, were constructed from lashed wooden beams, had a foundation of either earth or stone, could be either raised in defense or were permanently placed, and were highly effective even against Spaniards equipped with steel blades, firearms, and horses. Their ubiquity in the kingdom of Yaxchilan (and throughout the Usumacinta River region) during the Classic period and their continued use during the Postclassic period suggests the efficacy of barricades as a form of military defense.

Monuments

The discovery of carved hieroglyphic monuments bearing not only the emblem glyph but also the very images of the lords of Yaxchilan has been critical for mapping the greater kingdom of Yaxchilan to its secondary subordinate sites located within Guatemala. The general formula of these secondary site monuments is that they bear the image of the king of Yaxchilan in the company of one of his vassals, either dancing, dressed as warriors (and usually parading over captives), or with the king shown seated on a throne receiving tribute from his subordinates. Although not recognized for what they were at the time, the first reported monuments in Guatemala created by sculptors associated with Yaxchilan appeared in Dana and Ginger Lamb's ([1951]1984) account of their purported journey to the "lost site" of Laxtunich.

Two decades after the Lambs' journey, Ian Graham (1972, 2010) made the first of several visits to La Pasadita where he was able to match the measurements of sawn monument remains with the carved faces of lintels housed in Berlin, Germany, and Leiden, Netherlands. In removing these sculptures using hand- and chain-saws, looters cut the monuments' central image from the larger bulk of the sculpture making them easier to transport. As a result, it is possible to tie a looted monument to its source site by linking a monument to the remaining "carcass" left behind. A lintel fragment in the Metropolitan Museum of Art in New York is likely also from La Pasadita as it features Tiloom, a local noble bearing the title of *sajal* who also appears on the other two La Pasadita monuments. Other Yaxchilan secondary site monuments have surfaced in private collections and may either be from sites in Guatemala or Mexico (Mayer 1995:74-79). Despite our best efforts, we have yet to locate any of the unprovenanced monuments' carcasses.

In the late 1990s, residents of the modern community of La Técnica found a small monument, likely



Figure 10. El Kinel Monument 1 (photo by Charles Golden). Now housed in the Community Museum and Tourist Information Office at La Técnica Agropecuaria.

a stela, at the site of El Kinel, which is located just west of the town (Figure 10; Houston, Escobedo, Golden et al. 2006; Morales 2001; Morales and Ramos 2002). This monument is unique among the known Yaxchilan monuments in Guatemala in that it bears only the image of the king (Shield Jaguar IV), without any subordinate lords. The residents of La Técnica found the sculpture while building a road through the community, near a small mound in an unimposing architectural group. In light of El Kinel's proximity to Yaxchilan it is plausible that the monument was moved to El Kinel following the collapse of the royal dynasty at Yaxchilan. Certainly the sculpture's small size (110 cm long, 56 cm wide, 20 cm thick) would have made transport feasible. It is further possible that it was originally placed in the area we are describing here as Yaxchilan-Guatemala and was later moved to El Kinel.

In the early 2000s, the illegal occupation at Centro Campesino greatly exacerbated looting and other illicit activities in the southern reaches of the Sierra del Lacandon. Much of the area immediately across the river from Yaxchilan was clear-cut and roads were opened into the forest to the north. During this time at least three monuments were removed from the park. Two of these were intercepted together in the modern community of Retalteco, located 15 km to the east of Centro Campesino and along the road that was used to reach the illegal occupation (Houston, Golden, Muñoz, and Scherer 2006). The first of these sculptures is a circular stone with a crude incised human face (Figure 11). We have previously hypothesized that this stone was the cover for a cistern or *chultun* (subterranean storage chamber). The former seems most likely given the numerous cisterns documented in the region, particularly at Tecolote, some of which were associated with otherwise uncarved circular stone covers (Scherer and Golden 2014b:Fig. 10.4). The second of the monuments is a lintel fragment from the lower portion of a scene which includes the feet of Bird Jaguar IV, two of his wives, and his *baah sajal* (head lord) K'an Tok Wayib (Figure 12).



Figure 11. Incised face on possible cistern lid (photo by Charles Golden). Photographed in the former office of the Instituto de Antropología e Historia, Flores, Peten. Present location unknown to the authors.



Figure 12. Lintel fragment reported to be from Tecolote (photo by Charles Golden). Photographed in the former office of the Instituto de Antropología e Historia, Flores, Peten.

At the time of their interception, the authorities received no information regarding the possible source of either monuments beyond the general area of the PNSL. The article we initially published detailing these sculptures describes them as “possibly from the area of Retalteco.” During our 2016 and 2017 field seasons, a local area resident reported to us that he was told by people with first-hand knowledge that the lintel fragment was in fact pulled from a building at Tecolote. To date no other sculptures have been found at Tecolote, and the preservation of its principal structure is owing to the fact that its lintels are uncarved and so have not tempted looters who will otherwise rip lintels from their place, destroying the integrity of the buildings, as was the case at La Pasadita. At Tecolote, however, there are other collapsed vaulted buildings at the site that we have not fully investigated, and one of those is likely the source of this monument fragment. Moreover, it is highly probable that the rest of this fine monument is still at the site. Epigraphically and contextually, Tecolote makes for a logical source for the monument. Thus far, Tecolote is the largest of Yaxchilan’s known secondary centers in Guatemala, and so it would be logical that it was the seat of power for one of Bird Jaguar’s most prominent subordinates.

The third Yaxchilan monument to surface in Guatemala in recent years is a drum altar currently in the possession of the Fundación La Ruta Maya in Guatemala City and recently described by Nikolai Grube and Camilo Alejandro Luín (2014; see also Zender et al. 2016:45-46). Compositionally the sculpture resembles a codex-style vase in that it depicts a courtly scene wrapped around the circumference of the object. The sculpture depicts Shield Jaguar III receiving captives from two subordinate lords as a third courtier looks on. The altar appears to have been carved in memory of a brother of Shield Jaguar and was associated with his tomb. This would suggest that this kingly relative is interred somewhere in Guatemala where he likely served as a local governor in life. The monument’s dedication date is likely June 14, AD 764, making it the earliest known Yaxchilan-style monument found in Guatemala. Indeed, it is also the only known monument depicting Shield Jaguar III recovered in Guatemala; all other Yaxchilan-style monuments provenanced to Guatemala feature either his son, Bird Jaguar IV, or his grandson, Shield Jaguar IV. Considering the timing of this monument’s appearance in a private collection, we suspect that, like the monuments intercepted at Retalteco, it was extracted during the illegal occupation at Centro Campesino. Moreover, considering the relatively early date of the monument, it may have originally come from closer to Yaxchilan, before the northern border sites were formally established, perhaps even in the area we are calling here Yaxchilan-Guatemala.

Conclusions

Despite the limited scope of our recent research in the Guatemalan portion of the kingdom of Yaxchilan, we have gained new insight into the southern reaches of the polity. Overall, settlement is dense in this region and it is likely that a significant portion of the polity’s populace dwelled here by the eighth century, attracted to the relatively forgiving terrain and the deep, rich fluvial sediments along the Usumacinta River. Although much of this settlement is modest, the identification of La Bestia and Petem with their more substantial architectural presence suggests that some minor nobility were scattered throughout the landscape. Nevertheless, the Yaxchilan kings’ most important vassals were housed at the border sites as evidenced, for example, by the identification of Tecolote as the source of what has come to be erroneously known as the Retalteco monument. Indeed, it is also the border sites that possess the greatest concentration of defensive works, which are probably best referred to as barricades. Nevertheless, our recent work demonstrates that even the polity capital had its defenses.

The border lords were undoubtedly tasked with the defense of the kingdom, and judging by Late Classic settlement patterns they were largely successful, at least through much of the Classic period. Settlement at border sites like Tecolote and La Pasadita are notable for being largely situated atop hills and generally away from natural bodies of water, instead relying on artificially constructed cisterns to collect and maintain water. Defense was clearly a concern. In contrast, settlement near the polity capital is located in flat, lowland areas and positioned to take advantage of abundant natural sources of water, including the Arroyo Yaxchilan and the Usumacinta River. Future research, especially lidar survey which is planned for the near future, will refine our understanding of settlement in the Guatemalan portion of the kingdom of Yaxchilan.

Acknowledgements

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Mike Coe, Yaxchilan, 2012.

Appreciating Mike: A Tribute to Michael D. Coe¹

STEPHEN HOUSTON

Michael Coe (May 14, 1929–September 25, 2019) was an archaeologist, writer, and teacher who made the ancient world come alive for scholars and the public alike. His passing, after a long and fulfilling career, left his students and friends in sorrow. But they remember and cherish his presence in their lives. Over decades, Mike, as we called him, had been a steadfast supporter, an unceasing font of insight, almost up to the end in his hospital bed—during his final weeks, emails went back and forth, his comments as incisive as always. Above all, he set an example of intellectual courage, driven by a wide-ranging curiosity that took him on paths impossible to reproduce today. The Germans, who created the modern university, have a word for people like Mike: the *Doktorvater*, “the doctor-father.” And so he was for us.

Like a dig, an archaeological life has many levels. In Mike’s case certain themes defined that body of work. Equipped with a gifted “eye” and a feisty disdain for error, he took on accepted wisdoms and exploded them through close to twenty books, some reissued as revised editions, along with hundreds of essays and innumerable talks presented with astonishing fluidity. *The Maya*, now in its ninth edition, drew many of us to New

World archaeology. A particular satisfaction for me was taking a companion journey with that very volume. As an undergraduate, I was studying for a year at the University of Edinburgh. Numbed by axe typologies, Beaker ware, and Mesolithic chert, I happened to read the book while waiting to board a Laker Airways flight from London to New York. (Struggling financially, the airline had devised a chaotic system of standby travel. The misery helped to focus the mind.) How on earth had I overlooked this civilization! Years later, Mike asked me to coauthor the latest edition. On closer reading, the book disclosed its genuine novelty. Buried within was the first edition from 1966, a work of great daring that asserted claims now widely held to be true: that the Maya had cities, that their glyphs lay within decipherment, thanks to Tatiana Proskouriakoff and Yuri Knorosov, and that nameable, interpretable kings, queens, and courts enlivened the Maya world and filled

¹ The introduction is a much reworked version of an obituary that appeared in *The Guardian*, October 5, 2019. Helpful comments came from Charles Golden, Mary Miller, Sarah Newman, Colin Ridler, Andrew Scherer, and Karl Taube.



Mike Coe, New York City, 1971, working on the Grolier Club exhibit, "Ancient Maya Calligraphy" (photo: Paul Hosefros, New York Times).

its cities with tombs. Later editions took that audacious exploration—such ideas were not generally known—and shaped it into a bestselling yet authoritative book. I was fortunate to catch a ride at various stages of its existence.

One of Mike's intellectual fascinations was in first things. Until Mike, of course, many had seen the Olmec civilization of Veracruz and Tabasco, Mexico, as late, clearly posterior to the beginnings of the Maya. Mike trounced that view, ever the advocate of Olmec priority and contemptuous of complacent points of view. If "frenemy" had been current during the 1950s and 1960s, it would have applied to Eric Thompson, someone Mike both respected, as expressed in many comments to me, yet disagreed with on just about everything. Mike's excavations in early villages of coastal Guatemala and nearby Mexico, and then at the sprawling Olmec city of San Lorenzo, Mexico, confirmed an early date. This was a time in American archaeology when the "New World Neolithic" needed exploration. For us, in eastern Mesoamerica, Mike was its Robert Braidwood, a figure from the Old World who looked large and planned field research accordingly; indeed, I was told by an older professor at Yale, Ben Rouse, that this was one reason for hiring Mike. How our mentor went about his work still inspires awe. He had seen the peerless mapping project of Hal Conklin, his colleague at Yale and, among other abilities, an ethnographer of terraced agriculture among the Ifugao of Luzon in the Philippines. From this Mike created, with cartographers and his old friend, Dick Diehl, a rich portrait of the vegetative, hydrological, and agricultural setting of an ancient American city, San Lorenzo Tenochtitlan. The beauty of those maps, the almost loving description of local ecology, the superb renderings of Olmec carvings, and the careful excavations that undergirded the whole rank among the best

and most evocative efforts of any archaeologist in the twentieth century.

Mike's interest in "firsts" could also trigger his love of a "scoop." Karl Taube, Dick Diehl, and I, along with Carmen Rodríguez Martínez and Ponciano Ortiz Ceballos, saw this firsthand. Carmen and Ponciano had heard rumors of an object with what appeared to be glyphic signs, but from an Olmec context. This proved to be the first example in early America of linear, sequenced signs—that is, of writing. The trip to see the text was unforgettable. It was my first view of the lush lands along the Coatzacoalcos River, elbow lakes leaping with fish yet hemmed by villages emptied of men who had gone "north" for work. We saw the muck of El Manatí (a perfect *altepetl*, sacred springs with rounded hill in the background), thrilled to the thick, fragrant air, with Mike's non-stop energy to motor us along. Then there was the object itself. Crossing the Coatzacoalcos on a ferry, we entered the village that housed the text, parked near a cinder-block building, and approached warily, for access was anything but certain. Outside



Mike with Monument 34, Group D Ridge, San Lorenzo Tenochtitlan, 1967 (photo: Estate of Michael Coe).



Mike discussing Olmec pottery with Carmen Rodríguez Martínez, Veracruz, 2006 (photo: Karl Taube).



Mike and Richard Diehl examining the Cascajal Block, the earliest Precolumbian writing, Veracruz, 2006 (photo: Karl Taube).

wallowed a pig of some 300 pounds. Inside, in a diabetic coma, was the owner himself, seated upright in a chair, slit-eyed, looking at nothing. His sons removed the block from a box, peeling off the ragged blankets that kept it snug. An expert photographer intrigued by electronic gadgets, Mike took numerous photos with his digital camera. Our euphoria was palpable, Mike's most of all: a bemused smile, a shared look of amazement, a slow shaking of the head at this prodigy of all finds. But I also recall that we needed to leave quickly. If overlong, our stay carried physical risk.

There were other adventures of an intellectual sort. As one example of many, Mike shattered the perception that Maya imagery and texts on vases had little importance. *The Maya Scribe and His World* (1973) was possibly the most influential book ever written on Maya art and its hieroglyphic texts. It prompted several of us to apply to work with Mike at Yale. My own copy, a graduation present from a family friend, has long broken its spine from heavy use. I have called it a "CRISPR" book that does not so much edit DNA as our very minds.² Prepared with eloquence and sparkle, it opened up a world of gods, dread spirits, dynastic scribes, and courtly ladies, all legible in the hieroglyphs and highlighted in the accompanying imagery. The books of this civilization, the Classic Maya (c. AD 250 to 850), had long rotted away. In a way, Mike found them again, but as enduring calligraphy on painted pottery. He compelled scholars to take these productions seriously, and to depths still not fully realized, a perspective that has dawned on me as I read subtle, recent works on Chinese calligraphy. *The Maya Scribe* further revealed the existence of a fourth Maya book, nicknamed "the Grolier"—the others tucked away in Dresden, Madrid, and Paris—now confirmed to be the earliest surviving volume in the Americas. This was another scoop for Mike, with the added observation that such finds do not come to everyone. They require perception and bold commitment.

The plain fact is that academics seldom harbor courageous views. What I see after 32 years as a professional: cautious, crab-like motions or fingers held up to the wind. Mike, despiser of politics and politicians, or pretension of any kind, was not remotely like this. Until recently, the Grolier itself was derided by some as a forgery. Mike's views were resoundingly vindicated in 2018 by teams looking at the original in Mexico. He had also, with the help of his Russian-speaking wife, Sophie Dobzhansky Coe, endorsed the phonetic decipherments of Knorosov. This was during the Cold War and against the views of Thompson, who could hardly have been less enthusiastic. The two would continue to spar until Thompson's death, to the latter's detriment. It took similar pluck for Mike to do, well into retirement, a

² <http://blog.yalebooks.com/2019/09/18/a-personal-canon-stephen-houston-on-five-influential-texts/>



Mike and Sophie Coe at Hadrian's Villa, Tivoli, Italy, 1990
(photo: Natalie Coe).

lucid book on Angkorian civilization, far from his usual writing, and to seek out assistance from Damian Evans, a superlative Khmer specialist, to bring its latest edition up to date. Mike wanted these works to live, to grow in the retelling after his departure.

Moreover, all showed Mike's love of books. He made sure they met the most exalted standards of design and illustration, resulting in collaborations with artists like Felipe Dávalos, Diane Griffiths Peck, and Barry Brukoff. Above all, he worked with Justin Kerr, whose rollout photographs of Classic Maya vases introduced new sources for scholars. Once hooked on the ancient Maya, I had the pleasure of looking at the elephant folia of George Byron Gordon and J. Alden Mason's reproductions of Maya pottery. The rollouts by the Quaker artist, Mary L. Baker, captured their color to a T...if destroying her eyesight in the process. Yet so ponderous were these volumes that they seldom budged from a special rack at the University of Pennsylvania Museum library. Similarly inspired, with keen appreciation for their quality, Mike produced comparable monographs with Peck and Dávalos. Each image would take weeks, however. With Mike's encouragement, Justin soon began to produce photographic rollouts that dramatically accelerated the dissemination of Maya imagery.

Mike's own tale is best told in his own words, *Final Report: An Archaeologist Excavates his Past* (2006). Born in New York City, he descended from a family of immense wealth, for his great-grandfather, Henry Huttleston Rogers, was a founder of Standard Oil. To the Coes came the pleasures of the Gilded Age. There were seasonal estates: Buffalo Bill's hunting ranch near Cody, Wyoming, and, in Gatsbyesque splendor, Planting Fields, a mansion and arboretum on the North Shore of Long Island, since deeded by the family to the state of New York. Until late in life, Mike served as overseer of Coe Hall, Planting Field's house museum. Acquaintances included Evelyn Waugh—a home movie shows Mike exchanging bowlers with the author—Gloria Vanderbilt, and Gene Tunney, the champion boxer, who, in a playful jab, received a black eye from Mike. After prepping at St. Paul's School, Mike entered Harvard College in 1945. An early infatuation with English literature left its mark on his prose.

Few would contest Mike's way with words, the source of his popularity as a writer. He knew that the ultimate goal was to tell a good story. Respecting data, Mike marshaled them into narratives with hints of drama, the conflicts, past and present, that generate interest among readers. There had to be a point to these accounts, a clear arc through and over them. A meticulous outliner, he nonetheless wrote with astounding speed and clarity. Boredom did not figure into his personal algorithm. Yet the thought that he was a "mere" popularizer, a spin pushed by journalists who spoke to me after his death, both belittles the difficulty of synthesizing scholarship for others and the indelible fact that Mike was a scholar through and through. He was as conversant with Maya glyphs as he was with colonial Nahuatl; the ceramic typologies of Veracruz were as adroitly handled as the frontier history and archaeology of western Massachusetts. The person I knew was exceedingly brilliant. I have little doubt that, in Mike, we saw the brainpower of his great-grandfather but enriched by an aesthetic acuity that few possess.

As *Final Report* tells us, a chance visit to Chichen Itza, Mexico, led Mike to anthropology and guidance from the redoubtable Alfred Tozzer, just retired but still powerful at Harvard. But first there was mandatory national service. Recruited by the anthropologist Clyde Kluckhohn, Mike entered the CIA as a case officer. He was sent to Taiwan and stationed in part on islands just off the coast of the People's Republic. With characteristic energy, he used this opportunity to study Formosan ethnography and to learn Mandarin. Side trips to Cambodia and its ruins enlivened his interest in tropical cities. The romance of these trips stayed with him, and he would describe with distinct pleasure the rumors of king cobra hunting along the forested paths of Angkor. A rapture in later life was to ascend in a balloon for special shots of the ruins.

Returning to Harvard, Mike completed his

dissertation under Gordon Willey. He continued to assist Harvard in supervising its museum and program of Precolumbian studies at Dumbarton Oaks, Washington, D.C. How, in addition to that service, Mike completed so many books, monographs, and excavations in the 1960s is a source of wonder to me. In later life, his heart was really at Yale University, after a short stint teaching in the Jim Crow south, an experience he escaped with relief. Mike's time at Yale, from 1960 until his retirement in 1994, saw him rise to an endowed professorship. As he would frequently say, "Yale left me alone," a freedom other professors might pine for. Former graduate students spread his teaching far and wide, including many in art history enticed to classes in anthropology. Notably, Mike would speak and correspond with anyone, provided they were truly interested. He relished quirky, picaresque people, adventures to come, Venice, a superb meal, Victorian paintings. The John Atkinson Grimshaw oils that hung on his walls had all the mood and mystery Mike enjoyed. He found fun in lively theories of the past, Vikings among the Maya, trans-Pacific diffusion, and beliefs about ancient America among some Latter-day Saints, whom he regarded highly. (A teetotaler and vociferous anti-smoker, Mike would declare himself an "honorary Mormon.") Fish around the world, had they known, must have dreaded his visits to the sailfish-saturated currents off Guatemala, the shores of Labrador, or his favorite spots in New England. The third floor of his house on St. Ronan Street—a few doors from where my father-in-law was raised—had its own chamber of mysteries. There, Mike would tie flies and plot his return, with a rod (not a pole!), to the waters of his dreams. His family was a particular treasure: his wife Sophie, who predeceased him, and whom he missed greatly, along with his talented children, Nicholas, Andrew, Sarah, Peter, and Natalie, as well as many grandchildren.

The best teachers do not inculcate doctrine. They

open doors to rooms none of us yet know or fully understand. But they also demand insight. At Yale, the student who failed to say new things or to surprise and delight Mike in seminar understood that more was expected in the future. Yet there was always a large heart. My son, then three, found that Mike liked to push toy cars on a table set outside his second home in Heath, Massachusetts. And I learned a memorable lesson from him too. Mike once remarked—the grammar reflects its own impossibility—"I would have punched myself in the mouth had I met myself as a graduate student"! We were all of us young. Forgive, be kind, find empathy, offer warranted praise. Encourage. There was so much to admire in Mike. His joyful curiosity, his vigor in defending the weak or students in need, his loyalty without end, a spontaneous generosity that offered a life-long model for me and many others. He was a person who was so right about so many things. The recollections below, assembled from grateful students and friends, show why this was so.

Traci Ardren

Every graduate student is a bit intimidated at their first meeting with a new adviser. I arrived at Yale on the recommendation of Steve Houston, completely overwhelmed with the idea of being at an Ivy League school, in the office of Dr. Michael Coe, inside the Peabody Museum of Natural History. It was far from my home in south Florida, culturally and physically. Mike never tolerated anyone calling him Dr. Coe more than once, and we got that cleared up right away. Then he asked me about my undergraduate thesis on women in Classic Maya politics. Because my undergraduate adviser, Anthony Andrews, was a Mayanist, and I had attended the Austin Maya Meetings and worked at Caracol, I had the opportunity to discuss my thesis with many scholars. The vast majority of them thought the topic absolutely unimportant—a piece of fluff that would never turn into a career. When Mike asked about the stelae of Naranjo, he astonished me: there was, Mike noted, a whole lot more to the story of royal Maya women than anyone expected. He told me how hard Tatiana Proskouriakoff had worked to get her ideas published (he knew her!), and I heard the first of many tales about the evils of J. E. S. Thompson. I left that meeting with new confidence in my views of the Maya. The great Mike Coe agreed that I was on to something! That was 1988. He remained curious and enthusiastic about every intellectual left turn I took in the intervening 30+ years. In the past two months alone, he sent me a preface for my edited volume on Maya food and a cover endorsement for another volume. Mike never stopped giving—or being able to meet people on level ground, as he did with me in his office that fall. He found a kernel of inspiration in almost anyone's research and took pleasure in amplifying what they had to offer.



Mike with Cape Cod striper (photo: Peter Coe).



(Top left) seated: Mike, Gillett Griffin, George Stuart, and Jeffrey Wilkerson, Usumacinta River, en route to Piedras Negras, Guatemala, c. 1983 (photo: David Stuart); (top right) Mike with cast of San Lorenzo Colossal Head 1, Ho Chi Minh City, Vietnam (photo: Damian Evans); (bottom left) Mike receiving elephant blessing, Kerala, India; (bottom right) Mike at Paestum, Italy (photo: Natalie Coe).

Tony Aveni

Here's to Mike!

Fall 1969. I was visiting my hometown, New Haven, Connecticut, where I was working on a project with a colleague in Yale's Astronomy Department. Inspired by Stonehenge, I'd developed a passing curiosity about the possibility of astronomically aligned ancient Maya buildings, though I knew all too little about them. One cloudy day, when we couldn't engage Yale's telescopes, I asked a colleague: "Do you know anyone in your anthro department who might know something about the ancient Maya?" "I've heard of this guy Mike Coe," came the reply, "try him." The directory informed me his office was just around the corner from Prospect and Sachem, where the astro department was then located; so I ambled over, knocked on Mike's office door, and he greeted me with open arms. I introduced myself. "So you're an astronomer—wait'll you see this!" he gesticulated, grabbing my arm and pulling me over to a side table, where he had a copy of a pictorial document laid out. "This is a Maya calendar—it's all about the motion of the planet Venus..." And he went on to articulate the astronomical contents of the then-Grolier Codex. Spending that afternoon with Mike, which included leaving with a long list of helpful contacts scrawled out in his own hand, constituted the first step in my permanently shelving my modern astronomical pursuits and giving over the bulk of my scholarly life to the study of astronomy in other cultures.

Fast forward four years. After much advice and consent from Mike, on the evening of a spectacular aurora borealis display I received a call at two in the morning in the very midst of the spectacle I was viewing in upstate New York. It was Mike. He was in Palenque, where he, too, happened to be witnessing the phenomenon—a rare occurrence in tropical latitudes. He spoke in such an excited tone: "Tony! This is amazing! I'm sure the Maya knew about this phenomenon—if only we could find it in the documents!" As far as I know such evidence has yet to be detected, but I've no doubt he was correct—Mike Coe knew a lot about astronomy

Alfred L. Bush

One overarching motivation for Michael's work in Mesoamerica was his belief that the ancient civilizations found there were autochthonous. Having invented themselves, their descendants should find a special pride in their heritage. This belief motivated Michael's many kindnesses to the indigenous members of his working crews on archaeological digs. It also extended to a respect and interest in native peoples everywhere. So he was especially happy to find in the New Mexico Pueblos continuing ceremonial life that could be traced back to its Precolumbian roots. Few things focused Michael's sense of respect and delight in what was indigenous more than the corn dance at Santa Domingo Pueblo on

August 4th each year. And in 1968 a journey west was organized by Michael to share this extraordinary event with his wife and children. I met Michael and his family by prearrangement at the dance, and it was there that I proposed that he curate an exhibition at the Grolier Club in New York City that was to have a far-reaching impact on the study of Maya hieroglyphs and reveal what became the fourth Maya codex, which Michael's scholarship steadfastly upheld as the earliest American book. I was present to watch the family be mesmerized by the Pueblo ceremony. Michael was careful to point out that unlike contemporary native costumes in Mexico which had been imposed by the Spanish, the ceremonial dress of the Pueblos reproduces costumes recorded in Precolumbian kiva murals. But he was content to let the dance and song take its own effect. After several rounds by the pumpkin and turquoise moieties, the Coes and I piled into the family's minibus with the OLMEC Connecticut license plates and drove to Taos. Michael and Sophie wanted to visit the Millicent Rogers Museum, an extraordinary collection of New Mexican arts assembled by the glamorous Standard Oil heiress, who also happened to be Michael's cousin. "Now don't tell anyone who I am," Michael modestly asked as we strode toward the entrance. One foot inside the door and a greeting rang out: "Mike!" It was one of the Ramos brothers, Millicent Rogers' sons, and yet another generation of Michael's cousins. Michael's privileged life and his delight in the survival of indigenous life intersected.

Oswaldo Chinchilla Mazariegos

We invited Mike to give the inaugural lecture in the 2016 Yale Maya Lecture Series. The topic was timely, since the extensive review that he wrote with Mary, Steve, and Karl about the Grolier Codex—now rechristened the Códice Maya de México—had just come out, and he immediately accepted. The room was full on the day of the lecture. I was waiting a few minutes for everyone to sit down before introducing him, when someone accidentally tripped the switch and the lights went out. Mike started talking at once. I whispered, "Let me introduce you!" But Mike was hard of hearing after a decades-old incident with our dear mutual friend Billy Mata. That cost him an ear rupture while braving the warm waters of Lake Amatitlán in search of ancient artifacts, all while using early, flimsy scuba diving equipment. There was no way I could make him stop, especially about one of his favorite topics. Sure enough, he told us how he kept the actual codex in his office upstairs in that very building while preparing his pathbreaking catalog, *The Maya Scribe and His World*, and didn't miss the opportunity to remark how wrong all his detractors had been about the authenticity of the codex. After a while, I'm sure everyone in the audience was astonished at this 87-year-old scholar lecturing passionately, without interruption

but with enviable clarity, while standing in front of the audience for 45 minutes.

At the end, all I could say was “Mike needs no introduction.”

Richard A. Diehl

I suspect I measured up to Mike’s expectations in every way but one: fly-fishing. Lord knows, I should have been good at what Izaak Walton called *The Contemplative Man’s Recreation*, as I had been instructed by the best of the best, the “Dean of American Fly Fishing.” In the 1950s Penn State undergraduates had to take two years of Physical Education. In deference to those of us who refused to break a sweat, the offerings included bowling, target shooting, and fly-fishing. I took all three but did not know that my fly-fishing instructor was George Harvey, the High Priest of the Fly Rod, who regularly fished with President Eisenhower.

When Mike learned this, he assumed that I could hold my own with any young fly rodder. His disappointment was visible when I told him I was actually a hot rodder and had gotten a gift C in the course after consistently wrapping my line around the gymnasium balcony railing.

Nevertheless, he still held out some hope in 1968 or 1969 when he invited me to go fishing with him and his son (Andy or Pete, I honestly do not remember) on a beautiful lake near New Haven. He had just assembled a Heathkit Fish Finder, a diabolical device for locating and revealing the depth of fish hiding beneath the surface. Mike was always a gadget person, and he and the children spent many hours assembling all sorts of devices in the days before Best Buy and the Internet.

In any case, we launched the canoe and began to fish. I spent about five minutes flailing around with my rod and endangering everyone within 50 feet. The younger Coe suggested perhaps I could do better with the paddle and thus help the real fishermen. All three of us were delighted to accept my change of task. In future years I went fishing with Mike many times, but he never allowed me near the rods. It worked out well for both of us.

Kevin Johnston

After being accepted in the Yale Anthropology program in 1985, I was invited by Mike for an interview. Would he take me on as his student? I was surprised when, despite my attempts to steer the conversation towards Maya archaeology, iconography, and epigraphy, Mike kept returning to the topic of fly fishing. Having grown up on the Long Island waterfront I knew plenty about saltwater fishing, but fly fishing in freshwater? Nothing. How, then, to engage? Fly fishers, I knew, tie flies, so I queried him about that. He shared a deep appreciation of fly tying, the various fish-attracting qualities, and the mechanics of fine reels. We spoke of our common New

England experiences as youths salt-water fishing from docks and boats. But freshwater fly fishing, he emphasized, was the more noble and demanding sport. Only in the final minutes did Mike raise the topic of my admission and the department’s offer. All, it seemed, had been arranged in advance. Why, then, limit our conversation to fly fishing? Mike knew my record so he saw no need to discuss it. What he seemed to want was something more personal and revealing: an opportunity for him to describe a non-academic passion, and for me to divulge whether I was a flexible and personable conversationalist, someone who could engage with him over a period of years, and whose repertoire reached beyond academics. At Yale and thereafter we spoke about many things, including his intricate knowledge of Venetian politics and history and his fascination with the Shakers. The last of a generation of gentlemen archaeologists, Mike was voluble, generous, voraciously curious, and a talented raconteur, attributes on display in his classes and many books. Looking back, I see that our brief interaction characterized Mike as a person and a scholar. Mike believed that personalities can drive fields and that the stories told by and about those personalities can point the curious towards fruitful horizons. What’s your story, he seemed to ask, and if we are to work together, can you appreciate mine?

David Joralemon

Mike Coe loved food.

When I was an undergraduate and graduate student at Yale nearly 50 years ago, Mike organized field trips for his students to visit Precolumbian museum exhibitions and art galleries in New York City. In the middle of the day Mike would take us to one of the Chinese restaurants that he’d heard about from King-lui Wu, a good friend, professor at the Yale School of Architecture, and a passionate follower of great Chinese chefs in New York and which restaurants they were cooking in. A regular lunch stop was Szechuan East on 2nd Avenue and East 81st Street on Manhattan’s Upper East Side. Szechuan and Hunan restaurants with their spicy country food were the most popular Chinese eateries in the late 1960s and early 1970s, eclipsing the more subtle and urbane Cantonese restaurants. Mike always ordered a wide variety of delicious dishes. Since my knowledge of Chinese food at the time was limited to canned Chun King Chow Mein, this was quite a revelation. The conversation was as varied as the food and covered archaeology, art history, and the leading Precolumbian scholars of the time, with a bit of spicy personal gossip thrown in. These Chinese lunches gave Mike’s students a chance to interact with him in a casual setting and him a chance to learn more about us and our interests. I was always impressed by how Mike ordered an ensemble of Chinese dishes that perfectly complemented each other. Dying of curiosity, I once asked him what was the

key to his ordering. He smiled and said it was simple. A great Chinese meal always includes dishes from the major phyla of the animal world—creatures of the sea, land, and air. Shades of Claude Lévi-Strauss. I ended up moving to New York in the middle 1970s and, as luck would have it, I lived in an apartment half a block from Szechuan East. I ate many a meal there over the years and always thought of Mike when I sat down to savor Szechuan shrimp with hot chili sauce, fiery Hunan style lamb, and dry sautéed string beans.

Justin Kerr

When Mike asked me to be coauthor of *The Art of the Maya Scribe* I protested. I did not feel that I had the qualifications to be a coauthor of one of Mike's books. I told Mike that I would be very happy to work with him and supply all the photographs he wanted to use in the book. From time to time Mike would pursue the same question and I declined the honor.

Barbara and I were invited to spend the weekend at Mike's country home in Heath. I loved to go there and sit on the bench under, I believe, a pear tree with Mike and show him the latest batch of rollouts and tell him my thoughts on what some of the scenes meant. Saturday evening Sophie was preparing dinner (which we ate on paper plates, no dishes at Heath). Mike again brought up the idea of my being coauthor of his book. I again protested, but Sophie called from the kitchen, "But Justin what about the scholarship?" I looked over at Mike who had a grin on his face. I was hooked.

Mary Miller

I started preparing these words in Saint Petersburg a few weeks ago, where I imagined Mike and Sophie Coe walking along the Neva, probably tailed by some KGB types, when they first came to meet Yuri Knorosov at the Academy of Sciences over Christmas 1968-69. Mike's work to bring Knorosov's decipherments to an English-speaking audience would turn the Maya world upside-down, usher in the transformative last quarter of the twentieth century in Maya studies, and bring along with the decipherment some colorful characters, including Linda Schele, a cast of disrupters, all. He was the leader of the pack. When meeting with Knorosov, Mike thought back to the charts Tania Proskouriakoff had showed to him in the Harvard Peabody basement a decade earlier, when Mike was a graduate student at Harvard. Without Mike, it would have taken another decade, maybe two, to bring the phonetic and the structural approaches of Maya decipherment together.

The word "disrupter" was not invented until the twenty-first century, but it was made for Mike, whose impact was in both of the very fundamentals of archaeology: when did the Olmec live, he asked, and where? And in the recognition of the systems that provided the key insights into what the Maya of the first millennium

said and believed. Mike had a brain meant for patterns, and so he saw them. He knew that if you looked at enough Maya vases, you could see a system of supernaturals, and a pattern of inscriptions, disrupting the comfortable notions of the meaninglessness of both that had long prevailed.

Most know that Mike had no patience for the things he did not like. I'd like to think that some of Mike's stamina in the past three years came from his contempt for the individual who sits in the Oval Office. And he loved taking aim at the institution he so cared about, Yale University and its many components. Who did not hear him when he shook his head at the "schlock shop" that had replaced the Precolumbian exhibition he had designed for the Peabody Museum when he was curator? He railed against the new School of Management building, but perhaps it was because the Lord Foster spaceship had landed atop his old archaeology lab where his beloved tepalcates, potsherds, had long lived, and where he had meticulously sorted out ceramic sequences in ways so compelling that many followed in his footsteps. (When Will Goetzmann took Mike up to the top of the new building, Mike acknowledged the beauty inside: he would change his mind from time to time, and especially when there were new data, such as the new dating of chocolate preparation and cultivation in Ecuador: he was thrilled to learn from science.) And the Los Angeles County Museum of Art? His outrage at the Jorge Pardo installation there knew no bounds, where he saw only politics and no virtue in the colorful lanterns of the backyard taquería that visually framed LACMA's important collection as if it were tourist art. The curator heard him, and she would set about to modify the installation.

There are things Mike liked: he talked for weeks about the Vietnamese sandwiches that my husband Ed and daughter Alice bought when they took the train and the subway to a new John Adams opera at the Met. He liked vanity plates, especially if they said OLMEC. There are things he approved of, such as paying your taxes, regardless of how you feel about the government. And nothing gave him greater joy than listening to the livestream in fall 2018 from Mexico City, when the scientists commissioned by the National Institute of Anthropology provided incontrovertible technical evidence of the authenticity of the Grolier Codex, something that Mike had been arguing for since 1971.

Mike introduced me to Judge Dee and to Bernie Gunther, among other great sleuths. I had heard him rave about the *Sopranos*: he loved the wordplay, the violence, the performance, the betrayals. And so it was my great pleasure to give him the DVDs of the first season of the *Americans*. They tied together his fascination with espionage, crime, and murder, and perhaps brought him some memories of his days with...shall I just call it The Company?

Over the past few weeks I have returned to many images and stories of Mike. I'll leave you with one. He and Sophie were already at breakfast under the palapa at La Cañada at Palenque one morning in March 1983 when I arrived; strangely, so was Giles Constable, then head of Dumbarton Oaks and a Michael Coe nemesis, just sitting down with some Harvard travelers. As I said hello, the travelers began to gush about the great book they were reading on the Maya. "Oh," said Giles, in a great plummy voice, "you surely refer to Harvard's own Gordon Willey!" "My goodness no," was the answer: "we are reading the amazing Michael Coe!" "And there is the man," I said. Mike heard it all, and he had the last laugh as he signed yet another copy of *The Maya*.

I am honored to have called him my friend.

Megan E. O'Neil

Mike Coe has been one of the most influential figures of my career. During one of the "shopping periods" at Yale, when undergraduates are allowed to attend different classes before registering, I walked into Mike's "Aztecs of Mexico" class and knew my life was transformed, changing my major to archaeology after only two class meetings. In each class, Mike spoke about ancient Mexico with excitement and enthusiasm, bringing obsidian and other materials for us to handle. His passion was like an electric current racing through the classroom. I did not know Mike was already an accomplished and famous archaeologist and author, because even as he spoke dramatically and painted in-depth pictures of the beauty and complexity of the Mexica civilization, he was also approachable, humble, and truly gentle. This combination of his brilliance and fire along with clarity and gentleness characterized Mike's unique personality and voice, which he used to open and enrich the worlds of anthropology, archaeology, and ancient Mexico for students, scholars, and the general public. Mike also was an important leader in Mesoamerican studies, both on an intellectual level, always among the first to speak up, and, on a personal level, for instance, swooping into Austin after Linda Schele's death, in order to keep her graduate students on a continuing path in our coursework. Mike was an incredibly powerful force in our field and also a personal inspiration, mentor, and touchstone for me—and many others. I thought Mike Coe would live forever. I know his legacy will live forever.

Colin Ridler

I first met Mike back in the early 1980s, when I went to visit him and Sophie at their house in New Haven. I had used *The Maya* as an undergraduate reading "Arch and Anth" at Cambridge, and now, as a callow commissioning editor at Thames & Hudson, I wanted to talk to him about updating it—and for advice about who might be the best person to write a new volume in our World of Art series on Mesoamerican art. It was the start of what

proved to be the most rewarding and fulfilling friendship of my publishing career.

Mike and Sophie couldn't have been more welcoming. We ate a delicious lunch prepared by Sophie (it was no surprise that a decade later we were to publish their *True History of Chocolate*, which instantly went into ten foreign languages), and then Mike showed me the art collection he had amassed in the 1950s. I was flabbergasted. As a teenager I had become intrigued by a Victorian painter of moonlit scenes with the curious name of Atkinson Grimshaw. The Ashmolean Museum had one of his works, the Fitzwilliam another, the Tate another couple. Well, at Mike's house I found myself looking at five or six magnificent paintings by this neglected artist. Not only that, in another room was a grand scene by the eighteenth-century painter John Martin. Mike was a collector and art connoisseur of great good taste—so it was no surprise, on that first visit, that he instantly knew who should write our World of Art volume: Mary Miller. No surprise either that his judgment proved sound: her *Art of Mesoamerica* has been through multiple editions and, like Mike's *The Maya*, remains the standard work in its field.

To a publisher, Mike was a dream author—exacting, yes, in his demands for high standards in editing, design, and illustration, but a truly wonderful storyteller, which showed itself particularly in *Breaking the Maya Code*, full of gossip tales about his forebears in the field and colleagues and rivals he knew. We had terrific fun working together on that book, which arose out of a seminar of his on the subject that I attended at Yale. No wonder it was shortlisted for the Pulitzer Prize—and remains very firmly in print. Mike must surely be the most life-enhancing, humane, and generous author I have known, as well as an incomparable scholar and scientist to whom all Mesoamericanists owe a huge debt.

Matthew Robb

By the time I got to Yale in 2001, Mike had formally retired from teaching—but of course for Mike retirement meant working on *The Line of Forts* and returning to his early interest in Angkor Wat. Periodically we'd go to lunch at a Chinese place he favored. We spent a lot of time talking about the history of collecting Precolumbian art and the personalities Mike had encountered over the years—lots of references to pirates and what-not. I tried to soak up as much as I could. As part of these conversations we'd often turn to the cast of characters who had put the Olmec on the map. This inevitably led to discussions of Miguel Covarrubias, and Mike's photographed copy of Covarrubias' lost Olmec notebook via George Pepper (now on Mesoweb). It was in this context that Mike shared his own notebook of Olmec drawings, which he told me he'd made in advance of his excavations at San Lorenzo Tenochtitlan. I don't think they were ever published—to Mike, the drawings were

a necessary exercise, to train his eye for details, carving techniques, and iconography in the event that he uncovered a new monument (which of course he did). That attention to artistic detail was something that impressed me so much about all of Mike's work. One can see it in his publications, which all have a real emphasis and interest in providing images that offered the same level of richness and insight as his texts, achieving a level of scholarly synthesis few (if any) of us will ever be able to match.

Barbara L. Stark

In 1966, a first-year graduate student, I shot down the stairs of 51 Hillhouse and halted to listen at the door of the undergraduate class Mike was teaching. Billowing copal smoke was drifting out, with Mike at the back wreathed in an aromatic cloud, talking about Maya religion and worldview. I went to Yale because of one of his early papers comparing the Maya to the Khmer. At the end of that year, for the last season of San Lorenzo fieldwork, he invited me to do a survey around San Lorenzo that they had planned but not gotten to. I was an immensely ignorant beginner. He didn't know, but I had only recently figured out he wasn't saying "weird jaguar" in his lectures, but were-jaguar. I turned down the opportunity of a lifetime because I felt totally unprepared. Scholars familiar with his research recognize his almost clairvoyant ability to recognize important things. Did he see something in me that I didn't, or was he just desperate? Curiously, after my doctoral work I went on to head two major survey projects in the Gulf lowlands. Now, too late to tell him, a settlement pattern monograph is coming out about those surveys. His publications could be uncanny. At his retirement symposium, in my presentation I claimed that his 1965 *Handbook of Middle American Indians* chapter on the archaeology of southern Veracruz could not exist. It was not possible for anyone to have written it. By now I was a Gulf specialist and knew the fragmentary and confusing archaeological literature he confronted when he wrote the chapter. I remain unable to explain how he produced a still-relevant synthesis conjured from scraps. Mike had striking insights and inspiration. Not just attending Yale, but also my dissertation research I trace to Mike. Intrigued by the work he and Kent Flannery did on the Pacific coast, I wanted to explore early Gulf settlement. Although I failed to grasp the geomorphological magnitude of the Gulf Papaloapan drainage and the near hopelessness of the endeavor, some pesky Classic-period, red-rimmed, brushed tecomates led me into Classic-period topics that dominated my later career. Mike's legendary gift as a writer cannot, sadly, be replicated by his students. Gifts are gifts. But after one symposium at the SAA meetings, Judy Zeitlin remarked that there was something different about the subset of papers that had been given by his students.

I wondered what she meant, but on reflection saw something. They were simpler, clearer, more direct, not pretentious. I believe Judy was right. We had learned not to play professional games, just discover. Our work was a moonlight of his gift.

David Stuart

Among Mike Coe's many contributions was his unfailing support of students and scholars outside the barriers of conventional academia, especially in Maya studies. I'm lucky to consider myself one of them. I was never Mike's formal student, but he was always a looming presence in my learning and development as an up-and-coming "glyphic." I believe I first met him at the very young age of 17, when I nervously presented one of my first papers at the 1980 Princeton University conference on Maya iconography. Mike sat in the front row of the dark auditorium in McCormick Hall, and I can still remember looking down from the podium and seeing the reflection of my bright slides in his round glasses. "That's Michael Coe!" I thought to myself as I nervously stammered through my presentation. To my surprise and happiness Mike later expressed support for some of my ideas, and treated me almost as a colleague.

His clear openness to new ideas and unconventional voices shaped the field of Mesoamerican research in so many ways. He was a strong supporter of two of my more direct mentors, Merle Greene Robertson and Linda Schele, who themselves had unusual beginnings in Maya research. Merle, a teacher at a private high school in California, spent her off time traipsing through the jungles of Mexico and Guatemala, documenting Maya sculpture with beautiful rubbings, and she began to study the intricacies of Maya art as a result. Merle soon took Linda Schele under her wing at Palenque, where together they worked in the early 70s to record its intricate reliefs. It was an era of constant new thinking, and Mike was a happy participant in pushing everyone in new ways. Mike's encouragement, bolstered also by that of his dear friends Gillett Griffin and Betty Benson, led Merle to organize the first Palenque Mesa Redonda conference in 1973, and the rest is history. I was far too young to be a part of that, but my parents George and Gene Stuart were in attendance, and I specifically remember their excited return to the U.S. from Palenque, mentioning the transformational new ideas and someone named Mike Coe being in the center of it all. Without Mike's constant support of Merle and Linda, my own entrance into Maya studies several years later would simply never have happened.

As the decipherment of Maya writing progressed rapidly in the 1980s and 1990s, Mike continued to have a front seat. In the early 1980s I proposed that many Maya vases bore the phonetic hieroglyph *kakaw* (cacao) indicating their contents. Around that time my collaborations with Steve Houston and Karl Taube grew and grew,

and together we rapidly realized the painted texts on Maya vases were not much more than elaborate name tags, indicating their owners, contents, and their terms of reference. Other vase texts were scribal signatures, and as an undergrad at Princeton I was invited by Mike to present a talk at Yale on the identification of named Maya artists. I vividly recall feeling some apprehension at sharing some of these insights with Mike, who a decade earlier had proposed that Maya vases were mostly visions of the Maya underworld, with texts possibly recording ritual chants for the dead. That was all laid out in his stunning and transformational work, *The Maya Scribe and his World*. Mike was right in many ways, but the rim texts on the pots turned out to be more mundane: "So-and-so's drinking vessel for cacao." He was ecstatic at the new advances nevertheless, showing no annoyance at being partially off base. Mike loved the decipherment of the chocolate glyph especially, and this helped lead to his broader exploration of the cultural history of chocolate, written with his dear wife Sophie.

Around that same time in the early 1980s I had the wonderful experience of travelling with Mike and Sophie on a rafting expedition down the Usumacinta River, with the goal of visiting the ruins of Piedras Negras. Gillett Griffin and Mary Miller were part of our group of cheerful explorers. We started off from the small river town nowadays known as Frontera Corozal, stopping at Yaxchilan for a day before we made our way farther down river, into more remote jungle (much of it gone today). We encountered numerous rapids below El Chicozapote, and our rubber rafts dipped, spun, and bobbed for an entire day. I have a fond memory of Mike shouting "Tengo nalgas mojadas!" after a particularly dramatic pass through the whitewater. Sophie was unfazed, of course, and she spent long hours in the raft shaded by an umbrella, a wet hardback copy of Proust's *Remembrance of Things Past* on her lap. The visit to Piedras Negras was far from a touristic adventure. Mike used it to scout out the ruins for a possible archaeological project, envisioning a historical approach to the excavation of Maya ruins, applying the insights of Tatiana Proskouriakoff directly to archaeological research. The idea was novel yet premature in many ways, and the civil unrest of Guatemala made the project unrealistic in those years. Nonetheless Mike's thinking anticipated the methods later applied to Copan and other sites, including Piedras Negras itself, where Steve Houston and Héctor Escobedo developed an important project a decade later.

Mike was working and developing fresh insights up to his last days. His last large project, of course, was the full publication and analysis of the Grolier Codex, which he had brought to light in the early 1970s. Just a few weeks before his passing, Mike wrote me about a sculpture fragment from Piedras Negras that was about

to be auctioned in Paris, showing the head of an elaborate bird, a detail of a costume of a Maya warrior. "It looks like Spearthrower Owl," he wrote me, referring to a ruler of Teotihuacan I had identified in the inscriptions some years ago. When his email arrived it so happens I was writing a paper touching on precisely the same interpretation. Mike was spot-on, as usual, and once more I thought of the irony in the title of his autobiography, *Final Report*. Mike had much to do and to say after that wonderful book appeared, for he was always honing his ideas and scholarship. Mike's insights and contributions were constant and always improving, and none were ever final.

Karl Taube

When Steve Houston, Louise Burkhart, and I began the graduate program in the Department of Anthropology at Yale University in 1980, it was a whole new environment, and perhaps somewhat more so for me coming from northern California. To be honest, it took me a semester to understand the relation of my role as a graduate student to my professors, including Mike.

Looking back at the time, I realize that I was a very junior scholar with nothing to show for myself, but Mike always treated me as someone whose thought had value. It is hard to stress how important it was for our ideas to be contemplated by such a major figure in our field. If it wasn't for that, I do believe that my research would have withered quickly on fallow land.

To provide a few examples of how Mike treated us, in 1983 I attended a presentation by Nicholas Hellmuth concerning the "Principal Young Lord," and during his talk it became clear to me that this was the Classic Maya Maize God. Within the same week I mentioned this to Mike, who previously identified this being as an aspect of the Hero Twins of Popol Vuh fame. I brought this up with him while cataloging the San Lorenzo material. He paused for about 30 seconds and then said "You know, I think that you are right." Without his initial and immediate support I doubt that I would have ever presented my argument at the 1983 Mesa Redonda de Palenque concerning the identification of this being.

As a second example, when we began the graduate program, Steve and I attended a graduate seminar offered by Mike concerning Maya writing and iconography. Steve took with alacrity to understanding the Primary Standard Sequence, a highly ordered glyphic text that Mike argued was perhaps a form of a "Book of the Dead." During the seminar, Steve found that in fact there was little support for this, and Mike took it fully in his stride. Subsequently, in 1984 I realized that some texts of the Primary Standard Sequence concerned the ownership of bowls, and Steve quickly realized that this substituted for the much more common glyphic compound for "vase." We both told Mike together of our findings, and he was thrilled by it.

With these two anecdotes, I would like to stress how Mike was so supportive of junior scholars who approached established research in new ways. Mike and his research were not about fragile ego, but he truly loved the glorious field of ancient Mesoamerica, and to get it right was the most important thing. That, to me, is testimony to academic greatness.

Javier Urcid

Mike's contributions to Mesoamerican studies are as colossal as the Olmec heads (I fondly remember the tailored plates of his van in New Haven, which read "OLMEC"). As to his intellectual generosity, Michael was a giant (I reminisce of the time I spent in his library after he shared with me the key to his office). And when it comes to scholarly openness, Michael was monumental. I will never forget his solution to our differences concerning the interpretation of the "Danzantes" of Monte Albán. If you read that section in *Mexico's* eighth edition, you will see what I am talking about.

Barbara Voorhies

I had never heard of Mike Coe before entering the graduate program in Anthropology at Yale and at that time was not even certain I would specialize in archaeology. I had had only one class in anthropology as an undergraduate, so I thought I should keep open the options concerning my choice of subdisciplines. Mike was teaching his undergraduate class on the ancient Maya, and I reasoned that I had better sit in on it in the hope of learning something anthropological. When I asked his permission to attend he informed me that the class, held in a small room at 56 Hillhouse Avenue, was already at capacity but that I could bring a chair. So I did. And just like that my future was sealed. Later, Mike took Matsuo Tsukada (a researcher in the Department of Biology) and me to Guatemala to get us started on our respective field projects. For one week we ostensibly bought supplies, but mostly visited exotic tourist destinations. Mike regaled us constantly with stories about archaeologists and, with characteristic, infectious gusto, shared information about that spectacular country and its Maya peoples. The second week we went to the Izabal lake basin where Matsuo scoped out the feasibility of taking lacustrine sediment cores, while Mike made the logistical arrangements so that I could conduct an archaeological survey of that huge basin. The only trouble was that at the time I spoke no Spanish and had no prior experience in archaeology. Despite these minor impediments I survived the summer and returned the following year to continue fieldwork for my dissertation. I owe an enormous debt to Mike for his forbearance and most of all cherish his enthusiasm for all things Maya that remained undiminished until the end of his life.

Gordon Whittaker

As an Australian student in the U.S., I had gotten used to spending Christmas wandering the halls of an empty campus in search of food and company. My first holiday season at Yale proved to be a wonderful exception—Mike invited me to enjoy a sumptuous Christmas feast with Sophie and his children. I was treated to delicacies my Antipodean palette was little accustomed to, and exotic wines that loosened my garrulous tongue. Soon after spinning an Aussie yarn about venomous serpents while confessing my fear and loathing of the creatures, I noticed six-year-old Natalie get up and slip out of the room, presumably on a call from nature. A couple of minutes later, just as I was winding down my horror stories and beginning to devote my attention to newly poured wine, I felt a light tap on my shoulder. Turning around, I found myself gazing into the beady eyes of Snakey, the family pet lovingly coiled around Natalie's neck, whose existence had up to this moment been unknown to me. As I slowly attempted to lower myself back into the seat that I had just leapt from, Mike remarked that if I wanted to be a Mesoamericanist I had better start getting used to snakes. Natalie took this as her cue to drape the uninterested serpent around my quivering neck, where it remained for the rest of the meal. By the time the meal was over, I had learned a valuable lesson and even developed a certain fondness for the lithe but (fortunately) lethargic reptile.

Judith Francis Zeitlin and Robert N. Zeitlin

Among Mike Coe's astounding array of talents and accomplishments, his matchmaking abilities are less well known but of great personal relevance to us. Judy was a second-year advisee of Mike's in September 1969 when Bob first entered the Yale Anthropology graduate program. Mike subtly but persistently encouraged us individually to get to know one another better, allegedly "because of your mutual interests in Mesoamerica." Despite our shared classes, it was not until the first of several great parties that Mike and Sophie hosted at their home that a real friendship and budding romance began. Newly married the following summer, we embarked on a month-long Mexican road trip, visiting major archaeological sites across the country before focusing our search on Oaxaca's isthmian coast. Even though our trek to San Lorenzo to photograph a newly recovered Olmec monument for Mike was marred by a camera failure, he was pleased that his effort to steer us to the southern Isthmus of Tehuantepec for dissertation projects was a success. Nearly 50 years later (and still married), we remember Mike not only as the brilliant scholar that is his abiding legacy, but as an unwavering supporter we were privileged to have as our teacher/mentor. Mike's example of following one's intellectual curiosity, regardless of current academic trends or assumptions, remained a touchstone throughout our own careers.

The Classic Mayan Causative

MARC ZENDER

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"There does not seem to be any evidence of causative forms in the hieroglyphic inscriptions" (Hopkins and Josserand 2010:54).

"... a possible causative transitive *-se/-es* (or *-esa*) ... [is] infrequent and [its] existence is debatable" (Law and Stuart 2017:147).

Given that the existence of a productive causative affix in Classic Mayan inscriptions has recently been questioned, the purpose of this paper is to revisit some of the evidence previously presented in favor of this identification (e.g., Zender 1999:78 n. 48, 2004a:195, 2005:7 n. 5, 2010a:84), as well as to update those studies with several additional contexts which have only come to light in recent years.¹ As will be seen, the evidence in favor of the original identification is considerable. Nonetheless, it can readily be admitted that of the seven unproblematic contexts presently known, the causative appears without further derivation in only three of them: a state of affairs which has certainly impeded the recognition and acceptance of its identification more than might otherwise have been the case.

From a comparative perspective, causatives are valency-increasing operations; that is, they increase the number of arguments governed by the predicate (see Dixon 2000; Dixon and Aikhenvald 2000; Song 1996). In the specific case of causatives, a new argument is added to the verb, and this is now understood to be the subject or agent (i.e., the causer). This in turn causes the original subject to become the object or patient (i.e., the causee), which is now compelled to *do* or *be* something by the new subject. A classic example is provided by the Spanish *hacer* + infinitive construction, which converts the simple intransitive *el corre* 'he runs' into causative *le hago correr* 'I make him run.' (Note that English *make* + infinitive has essentially the same function.) All languages have ways to express causation, and three broad types of causative are widely recognized in the literature. In addition to periphrastic causatives of the type just exemplified in Spanish and English, there are also lexical causatives, which express the causative relationship directly. A common example is English *he dies* compared with *I kill him* (i.e., *I cause him to die*), where *kill* directly encodes the causative relationship. Equally common are morphological causatives, which express causative relationships through affixes and other verb-stem changes (e.g., tone, vowel length, reduplication). Although Spanish and English have no causatives of this type, morphological causatives are very common in other languages, where a strong case has been made

that they arise via grammaticalization; that is, by the development of particles and auxiliary verbs used in periphrastic constructions into affixes and other morphological markers (Song 1990; see also Operstein 2014 for a convincing account of the origin of the Proto-Zapotec causative affix **k-* from an earlier particle for the potential mood).

As recently noted by Polian (2017b:212), "most Mayan languages show a causative (transitivizer) suffix which originally involved an /s/ (Smith 1976:57), e.g., K'ichee' *-isa*, Mam *-sa(a)*, Yucatecan *-(e)s(a)*, Huastec *-θ*, etc. It applies at least to intransitive stems, and often also to adjectives, but normally not to transitive stems. For example in K'ichee' *kam* 'to die' > *kam-isa* 'to kill' (Larsen 1988:195). On the basis of these and other cognates, Kaufman (2015:354) reconstructs Proto-Mayan **-i-sa* as a causativizer of intransitive verbs, noting that it "probably contains the vi thematic vowel *-i-*" and is therefore "to be analyzed [as] */-i-sa/*." Kaufman (2015:1028-1029) further notes that descendants of Proto-Mayan **-i-sa* are "found in all branches of Mayan" apart from Greater Q'anjob'alan, where it was evidently replaced by the periphrastic causative **aq'* 'put, give' + dependent verb.

According to Kaufman and Norman (1984:145), Proto-Ch'olan most likely inherited this suffix as **-esä*.² They further note that, while both branches of Ch'olan retained a vowel-final version of this suffix, *-se*, only the Eastern branch manifests a consonant-final allomorph, *-es* (Kaufman and Norman 1984:99). Nonetheless, they also observe the presence of consonant-final *-es* in Tzeltalan languages and note that "if these are

¹ A previous version of this paper was presented at the Third Annual Workshop of the Textdatenbank und Wörterbuch des Klassischen Maya project at the Rheinischen Friedrich-Wilhelms-Universität Bonn in December of 2017. I'm grateful to my fellow presenters for their feedback, especially Dmitri Beliaev, Albert Davletshin, Christian Prager, Frauke Sachse, Alexandre Tokovinine, and Gordon Whittaker. I would also like to thank two anonymous reviewers for thoughtful suggestions that have greatly improved this paper.

² I think Proto-Ch'olan **-esa* more likely, but I've expressed the reasons for my uncertainty regarding the reconstruction of Proto-Ch'olan **ä* [□] elsewhere (e.g., Zender 2010b:6 n. 7). It might also be noted here that Becquey (2014:778-783) reconstructs **-esaa* on the basis of similar concerns, although I think the suggestive evidence which he cites in favor of Proto-Mayan **-isaa* (e.g., Kaqchikel *-isa*, with final [a] rather than [□]) has other explanations, and that Wastek *-tha?* and K'ichee' *-isa* provide adequate evidence to urge acceptance of Kaufman's (2015:335) reconstruction of Proto-Mayan **-isa*.

<u>Ch'olti'</u> <chamai et> <i>cham-ay-et</i> die-IV-B2 you died (Morán 1695, f.69, l.32; cf. Robertson et al. 2010:70)	<achamçe> <i>a-cham-se-Ø</i> A2-die-CAUS-B3 you killed them (Morán 1695, f.80, l.1; cf. Robertson et al. 2010:85)
<u>Ch'orti'</u> <i>cham-ay-Ø</i> die-IV-B3 he died (Hull 2016:87)	<i>u-cham-se-Ø</i> A3-die-CAUS-B3 he killed him (Hull 2016:88)
<u>Acalan Chontal</u> <chami> <i>chäm-i-Ø</i> die-CMP-B3 she died (Smailus 1975:37 [f.157, l.19])	<uchanzen> <i>u-chäm-se-n-Ø</i> A3-die-CAUS-INC-B3 he kills him (Smailus 1975:102 [f.168, l.9])
<u>Chontal</u> <i>chäm-i-Ø</i> die-CMP-B3 he died (Delgado 2004:48)	<i>u-ts'äm-s-i-Ø</i> A3-die-CAUS-CMP-B3 he killed him (Delgado 2004:117)
<u>Ch'ol</u> <i>chäm-i-Ø</i> die-CMP-B3 he died (Vázquez 2011:288)	<i>i-tsän-s-ä-Ø</i> A3-die-CAUS-CMP-B3 he killed him (Vázquez 2011:442)

Table 1. Ch'olan forms for 'die' and 'kill' (orthography respects the source, interlinear glosses by the author).

archaic, then they constitute evidence for reconstructing *-es* causatives for proto-Greater Tzeltalan (and hence for proto-Cholan)" (Kaufman and Norman 1984:100).

It will be useful at this point to examine a typical intransitive verb and its causative expression in the Ch'olan languages, preparatory to identifying analogous forms in the Classic Period inscriptions. Following Polian's K'ichee' example above, I have gathered attested Ch'olan forms for 'die' and 'kill' in Table 1.

The Eastern Ch'olan (Ch'olti' and Ch'orti') causatives are models of clarity and simplicity: the causative verb stem now takes a prefixed ergative (Set A) pronoun to cross-reference the new subject, a causative affix (*-se*) to express the new relationship, and a suffixed absolutive (Set B) pronoun to cross-reference the new object. By contrast, the remaining Western Ch'olan forms, while broadly similar to the Eastern Ch'olan model, also include explicit aspectual suffixes (both incomplete and complete) and various morphophonemic assimilations and reductions triggered by the presence

of the causative affix. Most notably, the final /m/ of the verb root *chäm* frequently undergoes homorganic nasal assimilation to the /s/ of the causative affix, resulting in an /n/.³ Additionally, however, the initial postalveolar affricate *ch* /tʃ/ of the verb root undergoes a dissimilative change to alveolar *tz* /ts/ in Ch'ol, while in Chontal it also undergoes glottalization to *tz'* /tʃʰ/. As Josserand and Hopkins (2010:52) have noted, such changes are frequent enough in Western Ch'olan languages that "a number of causative stems ... are not always recognizable for what they are." As will be seen, causatives in the inscriptions behave much more like Eastern Ch'olan exemplars, though whether this is because of the close

³ It should be noted that this kind of assimilation is also documented in Eastern Ch'olan, although it is not so frequent as in Western Ch'olan. Thus, Morán lists an alternate form, <Achance> (i.e., *a-cham-se-Ø*) 'you killed them' (Morán 1695, f.80, l.1) for the entry discussed in Table 1.



Figure 1. Blocks 1–3 of Clause 1, Copan Str. 9N-82 hieroglyphic bench (photographs by the author).

relationship that has been argued to obtain between Ch'olti', Ch'orti', and the inscriptions (Houston et al. 2000), or because Early and Late Classic causatives of ca. AD 500–800 still reflect a state of affairs closer to Proto-Ch'olan, cannot be satisfactorily resolved on the basis of present evidence.

Ut'abse 'he raised it'

The first context we will consider is the carved bench from Copan Str. 9N-82, a well-preserved full-figure inscription of sixteen glyph blocks which has already received ample attention in the epigraphic literature (Riese 1989; Stuart 1992; Zender 2004:266-272). The opening clause of the text runs from blocks 1–6 (Figures 1 and 2), the first two of which provide the date 9.17.10.11.0 11 Ahau 3 Chen, or July 7, AD 781 (Stuart 1992:180). Following the date, the next four blocks (3–6) can be analyzed as in Table 2.

So far, this is a typical self-referential dedicatory passage. The verb is written with the full-figure portrait glyph of the elderly, chapfallen God N (T1014c **T'AB**), who cradles a syllabic sign (T17 **yi**) in his left arm and strokes his chin with his right hand.⁴ The intransitive verb *t'ab*- 'rise, go up' is sufficiently widespread in Ch'olan languages that Kaufman and Norman (1984:133) were able to reconstruct it for Proto-Ch'olan, but note that here it appears in a characteristically Eastern Ch'olan form (e.g., Ch'orti' *t'abay* 'go up, ascend,' Hull 2016:427). As I've noted elsewhere (Zender 2004:268), K'awiil

K'uk' is said to be the predecessor and may also be the father of Mak'an Chanal, and his portrait (identifiable due to the *quetzal* and *k'awiil* elements in his headdress) is carved on the bench support directly below his name in the text.

The next clause (Figure 3, #7-9) introduces our causative:

ut'abse yo[h]k'ol ch'ahoom um ti' ... xook
 u-t'ab-se-Ø y-ohk'-ol⁵ ch'ah-oom⁶ Um Ti' ... Xook
 3A-go.up-CAUS-3B 3A-above-REL smoke-AGN Um Ti' ... Xook
 He raised it above the Censer, Um Ti' ... Xook.

⁴ David Stuart (1998:416-417; Stuart et al. 1999:37) proposed the **T'AB** value for T1014c on the basis of its substitution with the T45.843 'step' verb, which formally evolved from a foot (T45) ascending steps (T843), and often appears in contexts calling for a verb of motion. Also relevant were substitutions with **?-ba(-yi)** collocations in three inscriptions from northern Yucatan. Although offered tentatively, Stuart's proposal remains productive. Other proposals—such as **HUY** (MacLeod 1990:143-147) and **HU' ~ U'** (Mora-Marín 2007)—involve mistaken analyses of the T45 element (which is never syllabic **hu**, **ju**, or **u**) and/or mistaken equations of T1049 **T'AB** 'decendent's-spirit-ascending' (e.g., K791, K2914, K4387) with Landa's second <u> sign. The iconic motivation is uncertain, but perhaps **T'AB** 'ascend' invokes the Atlantean god's established role as a 'lifter, raiser.' Alternatively, as Stephen Houston (personal communication 2016) points out to me, pM **t'ab* 'to eat without teeth' (Kaufman 2003:1168) may reference the aged god's absent dentition. Outside of verbal contexts, this logogram reads **ITZAM** (Martin 2015).

t'ab[aa]y yotoot mak'an chan[a]l yal ix ... utz'akbuul k'awiil k'u[k']
 t'ab-aay-Ø y-otoot Mak'an Chanal y-al ix-... u-tz'ak-bu-il K'awiil K'uk'
 go.up-IV-3B 3A-home Mak'an Chanal 3A-child lady ... 3A-line.up-CAUS-REL K'awiil K'uk'
 The home of Mak'an Chanal, child of Lady ... (and) follower of K'awiil K'uk', went up.

Table 2. Analysis of blocks 3–6 of Copan Str. 9N-82 hieroglyphic bench.

4

5

6



ma-k'a-na-CHAN-la

ya[YAL]-la-IX[?]-?

u-TZ'AK-bu-li-K'AWIIL[k'u]

Figure 2. Blocks 4–6 of Clause 1, Copan Str. 9N-82 hieroglyphic bench (photographs by the author).

The verb is again written with the full-figure form of T1014c T'AB, his left arm appropriately upraised as if in the act of lifting. He is preceded by T1 u and followed by a full-figure insect, the animated form of T520 se.⁷

Intriguingly, the T45 'foot' element of the more typical T45.843 T'AB sign is also inserted between the Old God and the insect, perhaps as a disambiguating mechanism intended to ensure that the reader interprets T1014c as

⁵ In a Ch'olan context, we might have expected *-ahk'ol* 'above' (Kaufman and Norman 1984:139), as in contemporary *ya-k'o(-la)* spellings at both Copan and Palenque (see Stuart 2017:3; Zender 2017:14 n. 23). The discrepancy might be explained in at least three ways. The simplest explanation is carving error, perhaps stimulated by the usual *yotoot* following such dedicatory verbs, as in block 3 above. Another possibility is regressive vowel assimilation, motivated by the stressed *o* of *ahk'ol* (note also the long, stressed *oo* of nearby *ch'ahoom*.) A third possibility is Yukatekan influence, where Yukatek *-o'ok'ol* and Itzaj *-ok'ol* (Hofling 2017:718) indicate that Proto-Yukatekan had innovated **-ohk'ol*. Yukatekan syntax might also be indicated by the *ch'ahoom* title preceding the personal name (see Lacadena 2000). It may be relevant that Miller (2015:514) identifies some non-local individuals in burials associated with Structure 9N-82.

⁶ This composite, full-figure logogram is remarkable in its incorporation not only of the distinctive headband with escaping tendrils

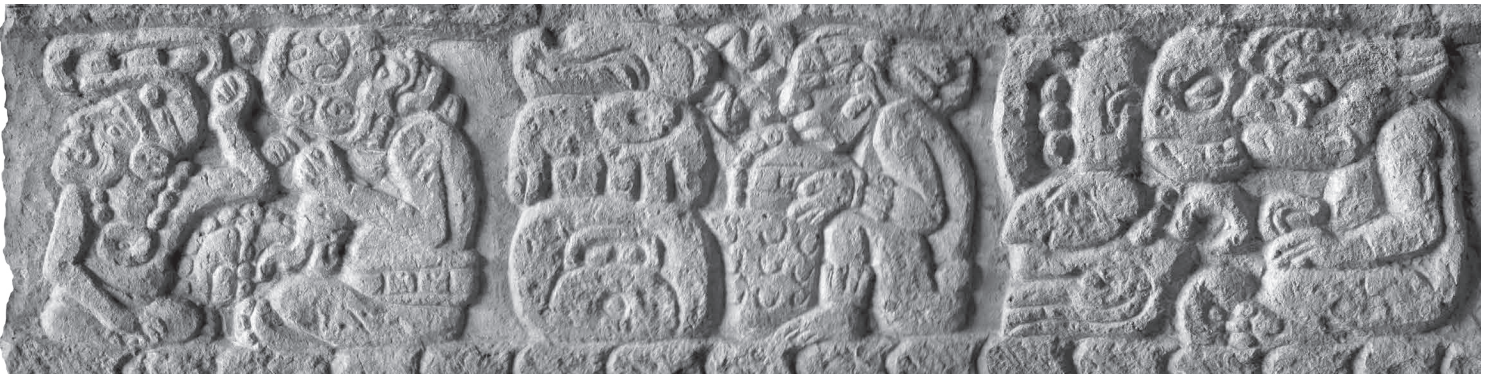
of smoke characteristic of the CH'AHOOM head variant, but in the figure's functional pose, huddled before an incense-burner into which he deposits [po]mo, *pom*, 'incense.' As Stephen Houston (2014:117) has noted, these multiple, layered contributions to meaning must surely comprise a nearly unique collaboration of figural, phonetic, and lexical signifiers in a single logographic context.

⁷ The head-variant of T520 se has long been recognized from controlled substitutions in *ka-se-wa* spellings of the month Zec (e.g., YAX L.41, B1 and YAX St.12, D1). Some years ago now, I also noted its substitution for se in spellings of *teles* 'crested basilisk' (e.g., Kuna-Lacanha L.1, D1-C2 and L4-K5; see also Davletshin 2011:3, Krempel 2016:62). Full-figure versions, while rare (see, e.g., YAX Throne 2, east, block 2 in Mayer 2008:Fig. 5), nonetheless reveal the 'percentage' markings and 'death eyes' associated with insects. I therefore suggest that the se value derives from a term like Ch'orti *ses* 'louse' (Hull 2016:366) or Ch'ol *ses* 'avian mite, coloradilla' (Hopkins et al. 2011:203).

7

8

9



u-T'AB-se

yo-k'o-lo-CH'AHOOM

u-mu-TI'-?-XOOK

Figure 3. Clause 2 of Copan Str. 9N-82 hieroglyphic bench (photographs by the author).



Figure 4. Scene from an unprovenanced vase in a private collection (drawing by the author).

T'AB rather than **ITZAM**. The implication of this causative construction is that the house-raising of clause 1 was indeed conducted by Mak'an Chanal, and that it took place "above" the final resting place of Um Ti' ... Xook. This remote predecessor of Mak'an Chanal may well have been the occupant of one of the early burials in Patio A, perhaps even the Middle Classic "priest" in Burial VIII-36; Um Ti' ... Xook was in any case also honored by a depiction on the bench support below his name and titles, as revealed by the *xook* in that figure's headdress (Zender 2004:269-272). I omit the rest of the bench text here, since its contents don't bear directly on the question of causative *-se/-es*, and because it is both well understood and amply discussed elsewhere.

Before turning to additional examples of the causative, however, it might be noted that, whereas the *t'abaay* of clause 1 is exclusively Eastern Ch'olan, the *ut'abse* of clause 2 is fairly widespread within Ch'olan languages (e.g., Chontal *t'ab-se* ~ *t'ä'se* 'lift,' Becquey 2014:185; Ch'olti' <tabse> 'subir (i.e., raise),' Morán 1695, f.64, l.21; Ch'orti' *t'abse* 'raise up, elevate, put up high, keep safe, lift up,' Hull 2016:427). For this reason, and unlike *t'abaay*, its presence here can't be taken as positive evidence for an Eastern Ch'olan affiliation of the script. Rather, *ut'abse* in both Eastern and Western Ch'olan merely preserves a form of causative derivation that must already have been present in Proto-Ch'olan.

Hiin t'absaan 'this is what they lift'

A polychrome vessel in a private collection provides our second context (Figure 4). The main scene depicts two elderly Itzams attempting to lift carved deity effigies with the assistance of their two servants, the duck-billed Wind Gods (Ik' K'uh). Associated captions describe the scene, while a lengthy text—now, sadly, mostly eroded beyond legibility—may once have provided a fuller context. Directly above the seated Itzam is an L-shaped caption that can be read as follows:

hi-na T'AB sa-ni 4-TUUN-ni ITZ(AM)[?tzi]-?ma
hiin t'absaan chan tuun itzam
hiin t'ab-(e)sa-VV₁n-Ø Chan Tuun Itzam
 DEM.PRO.⁸ go.up-CAUS-AP-3B Chan Tuun Itzam
This (is what) the Chan Tuun Itzam lift.

Although complicated slightly by the *-VV₁n* (< *-oon) antipassive of derived transitives (for which see

⁸ Alfonso Lacadena (2000:167) first proposed **hi-na** as *hiin*, 'he, she, this one,' citing Ch'ol *hini* 'él, ella, ése, ésa, éste, ésta' (Aulie and Aulie 1978:65) and Proto-Ch'olan **ha'-in* 'this, that' (Kaufman and Norman 1984:139). Hull et al. (2009) have proposed an alternative analysis of *hiin* as the first person independent pronoun, but Beliaev and Davletshin (2006) provide strong support for Lacadena's original solution.

Lacadena 2000 and Zender 2010:13, n. 22), the preceding -s- can hardly be interpreted as anything other than the syncopated remnant of a causativizing suffix. In this case, given the otherwise inexplicable *a* of the antipassive suffix, we have our first evidence of the archaic -*esa* causativizing suffix, whose original final vowel has been preserved (and lengthened) by the following antipassive suffix. The same outcome can be found in Ch'orti', where e.g., *chamsan* AP. 'kill' (Hull 2016:88) stems precisely from *cham* 'die' + -(*e*)*sa* + -VV₁*n*.

A parallel causative antipassive context can also be found on the recently-discovered La Corona Element 56, an all-glyphic block which most likely comprises "the second part of a longer text with its first portion still missing" (Stuart et al. 2015). As its discoverers note, this long and important text "recounts several important events involving the La Corona ruler named Chak Ak' Paat Kuy" and "[s]ome of the history mentioned on Element 56 describes ceremonial dressing and adornment, no doubt reflecting the complex process of royal investiture before Chak Ak' Paat Kuy's inauguration on September 9, 689" (Stuart et al. 2015). It is precisely in the context of the final events leading up to the king's accession that we come upon a short five-glyph passage containing yet another causative (Figure 5 and Table 3).

The subject of both passages is Chak Ak' Paat Kuy, named explicitly in previous clauses, and therefore unstated here. It is he who establishes a new settlement (of unknown location) a scant nineteen days before his official accession, and he who populates that new settlement with people from Saknikte' (La Corona). The second verb, *hulsaan*, clearly stems from the intransitive root *hul-* 'arrive here' (Kaufman and Norman 1984:120), which is derived as a causative with the archaic causative -*esa* before being antipassivized with -VV₁*n* (from



Figure 5. La Corona Element 56, pC5–pC7 (drawing by Mary Kate Kelly, courtesy of Proyecto Regional Arqueológico La Corona, PRALC).

*-oon). It's possible that *ajsaknikte'* was considered a sufficiently generalized noun phrase that it was in fact incorporated into the antipassive construction (i.e., 'he

6-**IK'-5-YAX-SIJOOM-ma** ?**KAJ-yi-AHK-TUUN-ni** **HUL-sa-ni-AJ-SAK-NIK-TE'**

wak ik' ho' yaxsijoom kajaay ahktuun hulsaan ajsaknikte'

wak Ik' ho' Yaxsijoom kaj-aay-Ø Ahktuun hul-(e)sa-VV₁*n*-Ø aj-saknikte'

6 Ik' 5 Yaxsijoom establish-IV-3B⁹ Ahktuun arrive-CAUS-AP-3B¹⁰ AG-Saknikte'

(On) 6 Ik 5 Yax, Ahktuun was established (and) he brought people there, (namely) those of Saknikte'.

u-19-la-ta-12-'Imix' 4-**SAK-SIJOOM-ma-JOY-ja-ti-AJAW**

ubaluunlajun la[h]t lajchan 'imix' chan saksijoom jo[h]yaj ti ajaw[il]

u-baluun.lajun-laht lajchan 'imix' chan Saksijoom jo<h>y-aj-Ø ti ajaw-il

ORD-19-NCL 12 Imix 4 Zac encircle<PASS>-IV-3B PREP lord-ABSTR

Nineteen days later, (on) 12 Imix 4 Zac, he was encircled in (the) kingship.

Table 3. Passage of La Corona Element 56.

⁹ This analysis, and a **KAJ-yi** value for T550, were first suggested to me by Dmitri Beliaev and Albert Davletshin (personal communications 2015).

¹⁰ This analysis was first suggested to me by Alfonso Lacadena (personal communication 2015); see also Prager (2018:4-5).

<tali uchandzac aHau ukaua pax/ua uppenel chanpel acathanihi>
 tali uchantz'a[h]k ajaw uk'aba'] paxwa up'eneel chanpel akat'aniji
 tal-i-Ø u-cha-tz'ahk-ajaw u-k'aba' Paxwa u-p'eneel Chanpel a-ka-t'an-i-Ø-iji
 come-CMP-3B ORD-4-line.up-lord 3A-name Paxwa 3A-son Chanpel ASP-1A-speak-CMP-3B-CLT
 The fourth ruler in line, named Paxwa, son of Chanpel, whom I've already mentioned, came.

<hain ahau yuual uia/lahulçi vinic tixchel>
 ha['jin ajaw yu[w]al uyalal']hulsi winik tixchel
 ha'in ajaw yuwal u-ya-la'-hul-s-i-Ø winik Tixchel
 DEM.PRO lord ADV 3A-DEM-MANY-arrive-CAUS-AP-3B person(s) Tixchel
 This was (the) king who then brought many people there to Tixchel.¹¹

Table 4. Passage from “king list” of *Paxbolon-Maldonado Papers*.

people-of-La-Corona-brought’); if not, however, then Ajsaknikte’ was mentioned rather in apposition to the verbal phrase, indicating by means of a stative/equational relationship with whom the king has populated the new settlement.

Intriguingly, a very similar passage appears in the early seventeenth-century Acalan Chontal *Paxbolon-Maldonado Papers* (Archivo General de Indias, Mexico 138). There, in the “king list” section of this document (f. 156, ll. 3-5), we can read a brief account of the fourth ruler of the Cozumel-derived dynasty of Acalan-Tixchel (Table 4).

Here, the intransitive verb *hul* ‘arrive’ is once again derived as a causative (i.e., ‘cause to arrive’), although this remains an active transitive construction without further derivation as an antipassive. La Corona Element 56 (dedicated in AD 690) and the *Paxbolon-Maldonado Papers* (written in 1612 but undoubtedly copied from earlier sources stretching back into the 1500s) can thus be seen to touch on very similar themes, including an evidently long-standing cultural practice whereby new rulers founded towns and could compel their subjects to settle them.

Ajnunsaa Chan K'inich

A fourth context, albeit one with numerous examples, has only recently become clear with the discovery in 2015 of Naranjo Stela 46 (Figure 6). Here, for the first time, the second glyph in the royal name of Ajwosal Chan K'inich (to use the previous nickname, popularized by Martin and Grube 2008:71) could at last be identified as T206 NUM.¹² As Martin et al. (2017:672) have recognized in their initial publication on the new stela, the new context allows the first confident transliteration of the king's name, which I propose should be analyzed as follows:

AJ-NUM-sa(-ji) CHAN-na-K'IN(ICH)¹³

ajnunsaa Chan k'inich
 aj-num-(e)sa-aaj Chan K'inich
 AG-pass.by-CAUS-NOM sky K'inich
 K'inich is the Passer in the Sky (or, perhaps, the Sky-Passer)

Here, the intransitive verb *num-* ‘to pass by’ is first derived as a causative, presumably with *-esa*, which leads to syncope of the *e* and the form *numsa*. At this point it is quite possible that contact between *m* and *s* results in homorganic nasal assimilation of *m* to *n*.¹⁴ The resultant causative *numsa* ~ *nunsa* ‘cause to pass’ is then nominalized with *-aaj*—cf. Ch'orti' *mek'saj* n. ‘a hug’ < *mek'-e* tv. ‘to hug’ (Hull 2016:277-278). The resultant

¹¹ Here I would like to acknowledge perceptive studies of these and other passages in the *Paxbolon-Maldonado Papers* by Restall (1998), Smailus (1975), and Wald (2000) that have greatly influenced my thinking. The translation and analysis above is, however, my own.

¹² T206 NUM was tentatively proposed by David Stuart (2012) on the basis of a comparison between a personal name on CRN Step 1, block VI (**nu-mu-lu a-nu-CHAHK**) and an unrelated but clearly parallel name on Chancala Panel 1 (T206-**a-nu-cha-ki**). Stuart further noted that Proto-Ch'olan **num* ‘pass by’ (Kaufman and Norman 1984:127) provides an iconic motivation for the ‘snake,’ and that the archaic Ch'ol noun *ñumol* ‘surplus’ (Hopkins et al. 2011:165) provides a potential explanation for non-verbal contexts of T206.

¹³ Other examples of the name explicitly include the **-ji** (e.g., NAR St.47, A8a); nonetheless, it is frequently abbreviated, as here. Most examples of the name also omit both *chan* and *k'inich*, so the present context provides (as so often) a mix of both explicit and abbreviated elements.

¹⁴ Given the logographic spelling, one cannot be certain that this assimilation applied here, but comparable forms in Ch'olan languages suggest it as a strong possibility. Thus, as Becquey (2014:780) notes, “[t]his rule is obligatory in Chol -*ñuñ-sa* ‘cause to pass’ ... and optionally in Acalán Chontal—<chamçe> ~ <chançe> ‘to kill’ ...— and in Cholti—<chamze> ~ <chançe> ‘to kill’.” Indeed, as Hopkins and Josserand (2010:52) have noted, Ch'ol *ñuñsañ* can undergo still further reduction to *ñusañ* (see also Hopkins et al. 2011:166).

u-?UH-la HUB u-K'ABA' yu-k'e sa ta-?AK 7-XIB WIN k'a yo-ma ?AK-na OOK
uh'al hub uk'aba' yuk'esa ta ak huk xib win[ik] k'ayoom akan ook
 uh-al hub u-k'aba' y-uk'-esa ta Ak Huk Xib Winik k'ay-oom Akan Ook
 moon-?ADJ trumpet¹⁵ 3A-name 3A-cry-CAUS PREP Ak Huk Xib Winik sing-AG Akan Ook
 Lunar Trumpet is the name of the singer Akan Ook's noisemaker for Ak Huk Xib Winik

Table 5. Nametag on the Pearlman Conch Shell Trumpet.

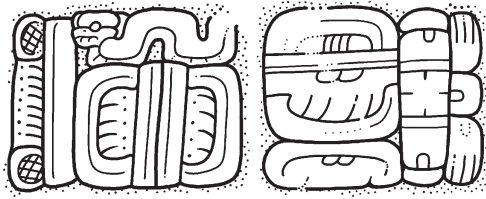


Figure 6. The name of Ajnunsaa Chan K'inich, Naranjo Stela 46, back, F13-E14 (detail of drawing by Simon Martin and Alexandre Tokovinine).

noun *numsaaj* ~ *nunsaaj* 'a causing-to-pass' is then agentivized with initial *aj-*. The final sense must be of an occupation signifying 'one who makes things pass' or, since the causative occasionally operates as little more than a transitivizer—as one may see in, e.g., Ch'orti' *numes* 'to pass, surpass' (Hull 2016:304) and Ch'ol *ñusañ* vt. 'to pass something' (Hopkins et al. 2011:166)—it may mean little more than 'one who passes things.' Given these considerations, I've glossed *ajnumsaaj* ~ *ajnunsaa* simply as 'passer' (but see Martin et al. 2017:677 for an alternative interpretation).

***Yuk'esa* 'his noisemaker (lit. crier)'**

Our fifth context is a derived noun for a musical instrument and has at least two examples. On the unprovenanced Early Classic Pearlman Conch Shell Trumpet, as I noted some years ago now (Zender 1999:78, n. 48), an elaborate nametag dominates the first twelve glyph blocks of its inscription (Figure 7). These can be read as in Table 5.

In addition to another text panel, with twelve further blocks providing the pedigree of the singer Akan Ook, the Lunar Trumpet also contains several iconographic registers including, most appropriately, an image of the Maize God in his lunar aspect. Does Ak Huk Xib Winik perhaps represent a Hunt God whose aspect the singer adopts for performance? Be that as it may, the lexical identification of **yu-k'e-sa**, *yuk'esa*, 'his noisemaker (lit. crier)' proceeds from Tzeltal *ok'es* 'trumpet' (Slocum 1953:46) and Tzotzil *ok'es* 'trumpet' (Laughlin 1975:67), both clearly nominalized causatives derived from the

intransitive verb *ok'* 'cry'—see, e.g., Tzeltal *ok'-* 'cry (coyote)' (Berlin 1968:221). Although the derived term 'trumpet' is not attested in either modern or historically documented Ch'olan languages, it should have had the form **uk'esa*. Thus, note Ch'orti' *uk'-i* 'cry, weep, shed tears' (Hull 2016:468) and the Ch'ol possessed nominalization *y-uk'-el* 'cry of animal, cat's meow, pig's screech, cow's moo' (Attinasi 1973:229). Why there is no explicit

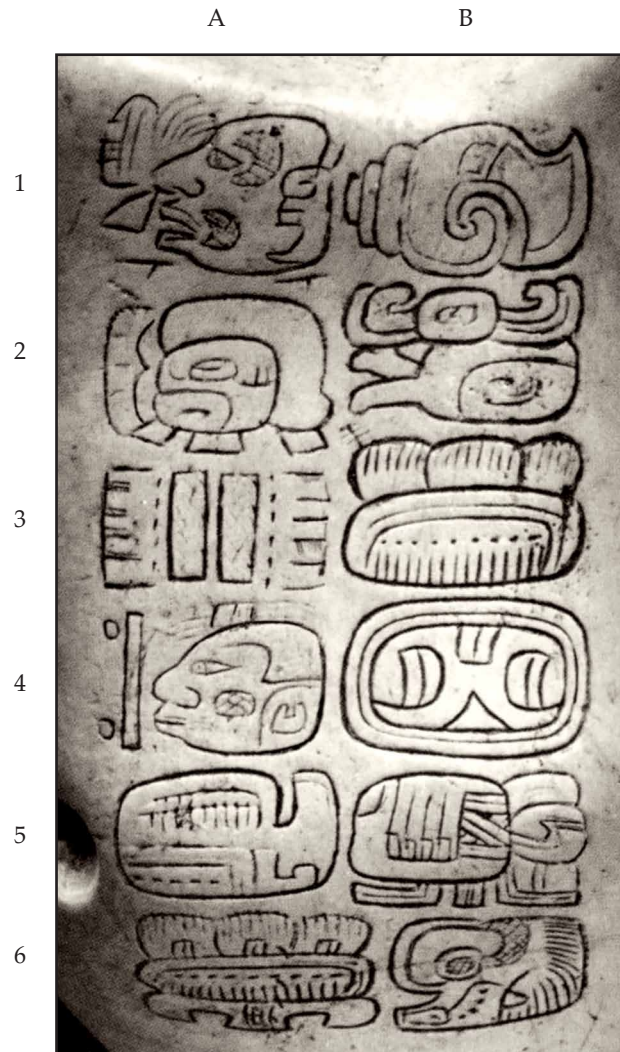


Figure 7. The first text panel of the Early Classic Pearlman Conch Shell Trumpet (after Coe 1982:Pl. 63).

¹⁵ For *hub* 'shell trumpet,' with initial *h-* and short vowel, see Zender (2017:17, n. 32).

B4

A5

B5



Figure 8. Unprovenanced Early Classic jade celt (after Berjonneau et al. 1985:Cat. 333).

nominalizing suffix on this ‘noisemaker’ term remains unclear (although note that the Tzeltalan languages do not have one either), as does the presence of archaic *-esa* despite the lack of a following suffix. Perhaps these mysteries are related and the Early Classic context reflects a time before the change of **-esa* to *-(e)se*. Alternatively, an innovative *-se/-es* causative may have shunted earlier **-esa* to an instrumental role, albeit with the retention of some causative semantics. More data will be needed to test these possibilities.

At first glance, it might seem that Tzeltalan *ok’es* ‘trumpet’ provides a compelling gloss for epigraphic *uk’esa*, but I prefer the more literal rendering ‘noisemaker’ or ‘crier’ because this term can also refer to other kinds of musical instrument. One such is on an unprovenanced jade celt first published by Berjonneau et al. (1985:Cat. 332, 333). Following the opening date, and before the name of its owner, three glyphs provide the verb and two possessed nouns in apposition (Figure 8), which can be read as follows:

u-K’AM-wa yu-k’e-sa u-ka-ya-wa
 uk’am[a]w yuk’esa ukaywak[k]
 u-k’am-V₁w-Ø y-uk’-esa u-kaywak
 3A-take-TV-3B 3A-cry-CAUS 3A-?thunderbolt
 He took his noisemaker, his thunderbolt

The object in question would appear to be the jade celt itself, referred to poetically and somewhat diphthastically as an *uk’esa* ‘noisemaker’ (since celts were worn as pendants on broad belts, and would certainly have chimed against one another with the slightest movement) and as a *kaywak* (a frequent but poorly-understood term for celts, which I have tentatively interpreted as ‘thunderbolt,’ presumably in allusion to Chahk’s thunder axe).¹⁶

Two remaining contexts

Although not as well understood as the five contexts discussed above, two additional examples of causativizing *-se/-es* should be at least briefly touched upon here. The first is one that I have explored in an earlier discussion of the raccoon logogram **EHM** (Zender 2005:7 n. 5) in a short passage of five glyph blocks on Tortuguero Monument 6 (Figure 9), which I would now analyze as in Table 6.

The passage follows an unclear series of events which nonetheless take place *y-itaaj u-k’uh-uul ihk’ ... yax suutz’* (i.e., with his [i.e., the ruler’s] god, Ihk’ ... Yax Suutz’), so it seems likely that this god is also the agent of the causative verb. There are some difficulties,

¹⁶ This suggestion posits the development of a specialized Early Classic (or earlier) lexeme from the same source as Classic Mayan *chahk* ‘thunder,’ namely Proto-Mayan **kahoq* ‘thunder (stone)’ (Kaufman 2003:489). There is already some indication of this development in Proto-Ch’olan **chahuk* ‘lightning, thunder’ (Kaufman and Norman 1984:117)—a form attested epigraphically on PNG Throne 1, left support—not least since the **k > ch* change is now understood as diffused rather than inherited (see Law et al. 2014). Note also the parallels provided by Tzeltal *chahwuk* ‘trueno, rayo, relámpago’ (Polian 2017a:175) and Chontal *chawäk* ‘trueno’ (Keller and Luciano 1997:410). Prior to palatalization **kahuk* is only three changes away from *kaywak*: (1) rounding of **h* to *w*, motivated by following *u* (as in Chontal and Tzeltal); (2) regressive assimilation of **u* to *a* (as in Chontal); and (3) a sporadic epenthesis of *y*. Indeed, one might well posit a pre-Chontal **kawak* (eerily similar, of course, to the Colonial Yucatec day name), which would require only the final (admittedly unmotivated) epenthesis to produce attested epigraphic *kaywak*.

¹⁷ For *xa* as an intensifying particle see Proto-Ch’olan **xa* ‘more’ (Kaufman and Norman 1984:139) and Ch’orti’ *-xa*, which has developed into a suffix (Hull 2016:491).

ha[i] ?xa-a-je-se yo-OHL-la 8-ko-BAAK-li-bi 4-EHM-ma-cha
 haa’ xa ajes yohl waxak ko[hk] baaklib chan ehmach
 haa’ xa¹⁷ aj-es-Ø y-ohl waxak kohk baak-l-ib chan ehmach
 DEM.PRO INTEN wake-CAUS-3B 3A-heart 8 turtle ?-POS-INSTR 4 raccoon
 he has certainly awakened the heart(s) of the eight turtle(s) ... (and) four raccoons

Table 6. Passage of Tortuguero Monument 6.

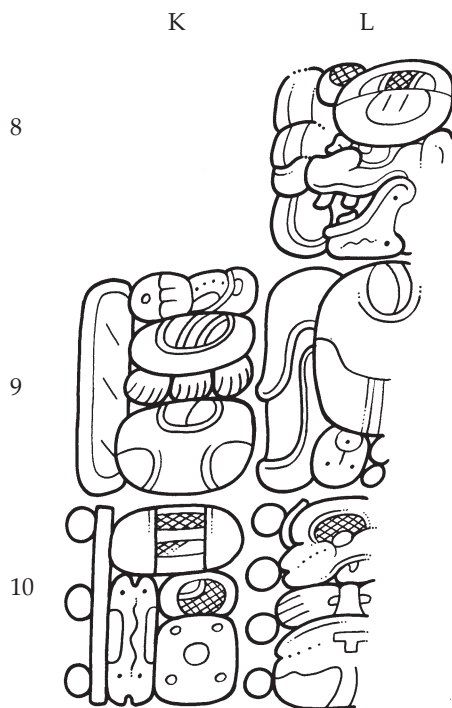


Figure 9. Tortuguero Monument 6, L8-L10
(drawing by the author).

however, not least of which is the lack of an ergative pronoun on *ajes*. Gronemeyer and MacLeod (2010:56, n. 62) have proposed this as an instance of otherwise unattested ergative extraction, known from Yukatekan languages, and perhaps this is the case. However, the decidedly unique ritual context, several remaining uncertainties concerning sign values, and a significant loss of text in the following clause all urge caution in reading too much into this one example.

A final context takes us to Caracol Stela 1, the last known monument of Yajawte' K'inich II (r. AD 553–593), recording his period-ending ceremony of AD 593. On the lower front register of the stela, following the parentage statement connecting the king to his mother, we find the following glyph block in the expected position of 'child of father' (Figure 10):

u-T'AB-se-?le-u-CHIT-CH'AHB

ut'absel uchit [u]ch'ahb

u-t'ab-s-el u-chit u-ch'ahb

3A-go.up-CAUS-NOM 3A-twin 3A-creation

his raised up one, his twin, his creation

Although unique, there are several similarities with other parentage statements. For one thing, the *uchit uch'ahb* portion is reasonably well known (see, e.g., YAX L.10, D6). The *t'ab* is decidedly less common, although even this has precedent in other Early Classic inscriptions. Note, for instance, the 'child of father' passage on Tikal St. 39, pB4-pA5, where we find **T'AB[yi]-u-CH'AHB ya-AHK'AB-li**, *t'abaay uch'ahb ya'k'baal*, 'his creation

(and) his darkness ascend.' On Caracol Stela 1, intransitive *t'ab* has evidently been causativized and then most likely nominalized with a rare **lu**-semblant sign which I would tentatively identify as the Classic forebear of Landa's second **le** (see Zender 2017:11–12, n. 20 for relevant contexts and discussion). The gloss above is no more than a suggestion, pending further examples and a more certain decipherment of the **lu**-semblant.

Conclusions

Having reviewed and discussed seven distinct script contexts of the archaic *-esa* and innovative *-se/-es* causatives in Classic Mayan inscriptions, we may conclude that there is now ample evidence to support the presence of these suffixes by no later than the Early Classic period. As we've noted, the causative suffix appears without further derivation in only three of our seven contexts, and this has certainly impeded its recognition and acceptance (e.g., Hopkins and Josserand 2010:54; Law and Stuart 2017:147). But we have also seen that there are really no acceptable alternatives to the interpretations entertained herein for the *-(e)sa*, *-se*, and *-es* suffixes encountered on verbs and nouns in inscriptions from across the Maya area: from Tortuguero and La Corona in the west, to Naranjo, Caracol, and Copan in the east. And while seven contexts may not seem like very many, it must be remembered that these contexts each stand in for multiple iterations. Thus, there are at least two instances of *yuk'esa*, and scores of *ajnunsaaj*. For these reasons, we may regard seven unique contexts as indicative of a reasonably productive suffix, and one not without a certain degree of regional and temporal

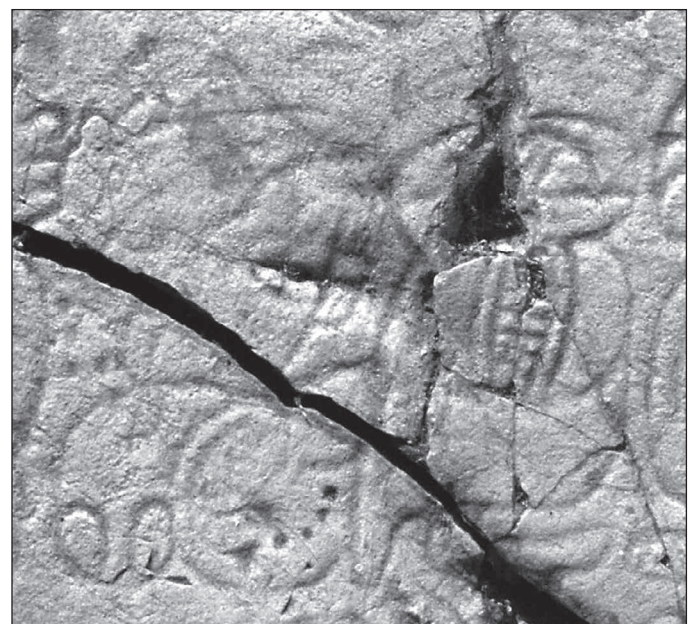


Figure 10. Caracol Stela 1, front, G2 (photograph courtesy of Jorge Pérez de Lara).

variation, perhaps suggesting a development from *-*esa* to -*se/-es* during the life of the script. (There are other candidate causatives, to be sure, such as a rather widespread *ya-?le-se*, employing the *lu*-semblant sign discussed above; but for the moment these still involve too many unresolved issues to be unproblematically admitted to the canon.) Finally, it should not be forgotten that Ajnunsaa Chan K'inich ruled Naranjo for seventy years, from AD 546 to at least 615 (Martin and Grube 2008:70), and every nobleman and commoner who spoke his name during and even long after his influential reign perform also uttered the Classic Mayan causative.

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