



May 18, 2022 • Modern K'iche' Maya Long Count: 0.0.9.9.15 • 7 Men 8 Zip • G6

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Becan: Our "First Love" Site by Joseph W. Ball and David Webster

A Follow-up to "Rahabilitating Becan" in Joe's Own Words

Dave Webster and I have intended to write something together about our time at Becan and the multiple outcomes of the 1969-1973 Becan project for over fifty years. Annual SAA meetings came and went, and with them an annual single malt toast to the project and a reaffirmation of our need to do it more justice than it had received in the literature year after year. Somehow, we never quite found time to follow through.

We each moved on into demanding but rewarding academic careers and responsibilities at our respective universities, and Becan faded further and further into our backgrounds. We each also continued active field and lab work in archaeology, mostly in the Maya area.

Then suddenly, two and a half katuns had passed, and we both found ourselves looking back on our Becan days with nostalgia, but also becoming painfully and somewhat indignantly aware that the great Río Bec regional center had never received the attention and promotion that it very much deserved, and that it was persistently being misrepresented in what literature did touch on it as little more than another modest southern Campeche center, one encircled by a Late or Terminal Classic "borrow pit"



Mask of Sun God Kinichna on Structure XX. It retains a lot of its original rich polychromy, including blue, yellow, white, green, and the ever present red.

Photo: Karl Herbert Mayer, 2009.

for architectural fill that might or might not also have functioned as a water control system, even possibly as a water-filled "moat."

Dave especially felt piqued at the cavalier way in which his work and findings regarding the Preclassic dating of the earthworks and their significance for the very early role of warfare in Maya civilization were being either ignored or dismissed, and I had become increasingly irritated by the dismissive treatments that were appearing in the otherwise rich and informative literature from south of the border.

At the 2019 SAA meetings in Albuquerque, we both agreed to put aside our other ongoing projects and finally do our joint paper and give Becan its due and restore it to the archaeologically prominent place that it deserves. Given its central geographical position smack in the center of the peninsula, midway between the Bay of Chetumal on the Caribbean and the Laguna de Terminos

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Jim Reed,
Editor

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IMS Streaming:

May 18, 8 pm EDT
Agriculture & Arboriculture in Ancient Maya Art & Writing
with Marc Zender

May 25, 8 pm EDT
Exploring the Peabody Museum at Harvard
with Keith Merwin

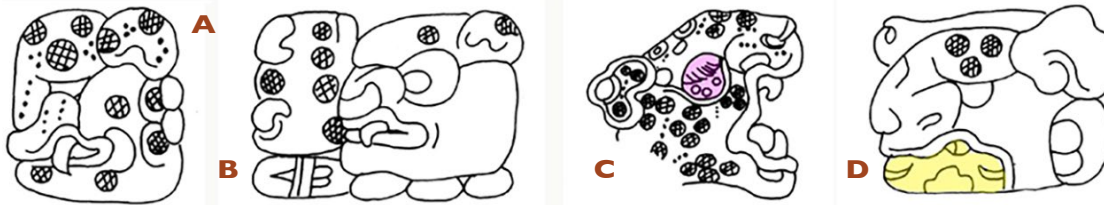


Fig. 1: Not all day signs retain the same value outside of a calendar context, but the T524 hix sign does. In some of these instances, hix is represented by a jaguar that is distinguished from the b'ahlam jaguar by its T524 eye (pink highlight).

Hix: Male Jaguars in Maya Art and Hieroglyphic Writing

by Karen Bassie-Sweet

There is significant evidence that the word *hix* specifically refers to a male jaguar in contrast to *bahlam*, the generic term for *Panthera onca*. In Classic and Postclassic period inscriptions, the fourteenth day name of the *tzolk'in* calendar is represented by a logograph of a feline's eye with three black spots (the T524 sign), and it occasionally has phonetic complements that indicate it represents the word *hix* (Stuart 1987:19) (see **Fig. 1**). The fourteenth *tzolk'in* day name is also *Hix* in the Postclassic-early colonial period calendar of Yucatan and in the surviving highland calendars (Akateko, Chuj, Ixil, Kaqchikel, K'iche', Pokomchi, Q'anjob'al, Mam, and Tzeltal) (some sources write the word as *ix*). In Q'eqchi', *hix* refers to a jaguar although the term does not appear in other Mayan languages outside of the calendar context (Sedat 1955:264; Wilson 1972:399). Evidence that *Hix* represents a jaguar is found in an 1722 CE record of K'iche' day names where the fourteenth day name is not *Hix*, but rather *Balam* "jaguar" suggesting an equivalency between the terms *hix* and *balam* (Weeks et al. 2009:77). In a colonial period Yucatec document regarding day names, *Hix* is described as "The fierce jaguar. Bloody his mouth; bloody his claws. Devourer of flesh. Killer of men" (Thompson 1950:82). As Thompson noted, the day name *Hix* is parallel to the Central Mexican calendar day name *Ocelotl* "jaguar".¹

Portraits of felines marked with the T524 *hix* sign or named as such in an adjacent caption text are common in Maya art. For instance, Vessel K771 depicts a way animal co-essence that takes the form of a roaring feline sprawled across a cartouche that represents a pool of water. The overly-endowed genitalia indicate it's a male. The personal name of this feline in the adjacent caption text is composed of a water lily blossom representing water (blue highlight water), a cartouche representing the pool of water (green highlight) and the T524 *hix* sign (pink highlight). The illustration of this water pool feline is a full figure depiction of his glyphic name (Bassie-Sweet and Hopkins, in press).

Vessel K791 illustrates another water pool *hix*, and in this case the feline head is tilted backwards and his

¹ The word ocelot was coined by the French naturalist Georges Louise Leclerc from the Nahuatl term *ocelotl*. His choice has regrettably caused a great deal of confusion because *ocelotl* refers to jaguars. This is clearly seen in Sahagún's descriptions of Nahuatl four-footed animals where he begins with the *ocelotl* (*ocelotl*) and explains it is a fierce feline that roars "like the blowing of trumpets" of the animals" (Sahagún 1959-63 vol. 11:1-2). In their translation of Sahagún, Anderson and Dibble's glossed *ocelotl* as ocelot despite the fact that the biologist they consulted thought the description clearly indicated a jaguar. They also translated the other occurrences of *ocelotl* in the manuscript as ocelot, and hence, the famed pairing of eagle and jaguar warriors became eagle-ocelot warriors. Numerous researchers have incorrectly referred to *ocelotl* as ocelot. I am guilty myself of falling into this trap. In my 2008 volume, I followed Anderson and Dibble and referred to eagle-ocelot warriors. See Saunders (1994), for an overview of researchers who have mistakenly identified the *ocelotl* as an ocelot.

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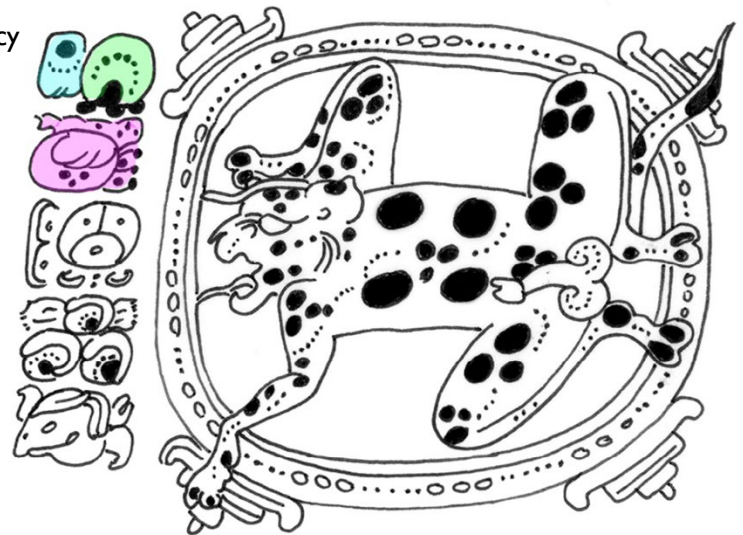


Fig 2: Roaring feline sprawled across a cartouche representing water.

mouth is wide-open in the process of an exaggerated roar. Yet another *hix* co-essence is seen on vessel K792, and he too is illustrated roaring. In the Bonampak battle mural, the ruler Yajaw Chan Muwaan is decked out in a tunic of feline skin (Miller and Brittenham 2013:fig. 119). He wears a headdress that features a huge feline head with the *hix* sign in its eye. The mouth of the *hix* is wide-open in a ferocious roar.

The identification of the *hix* feline as a jaguar raises the question – why did the Maya have two terms for jaguars? Imitating the territorial and mating vocalizations of game animals to attract them is a common hunting technique used all over the world. In the past, Maya hunters lured jaguars by re-creating their roar using a string and gourd instrument that imitates this sound (Emmons 1996:73; Nations 2006:56). Male jaguars roar as a warning to other territorial and mating competitors, and also during coupling with the

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A Follow-up to “Rahabilitating Becan” in Joe’s Own Words

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on the Gulf, and also between the early Kaanu'l home, Dzibanché, and their later political capital, Calakmul, it had to have played a very significant role in the politics and events of the Snake Kingdom's history from Preclassic to Terminal Classic times. The result was the 2021 *Ancient Mesoamerica* article that is featured in the 2022 February and March issues of the *IMS Explorer*.

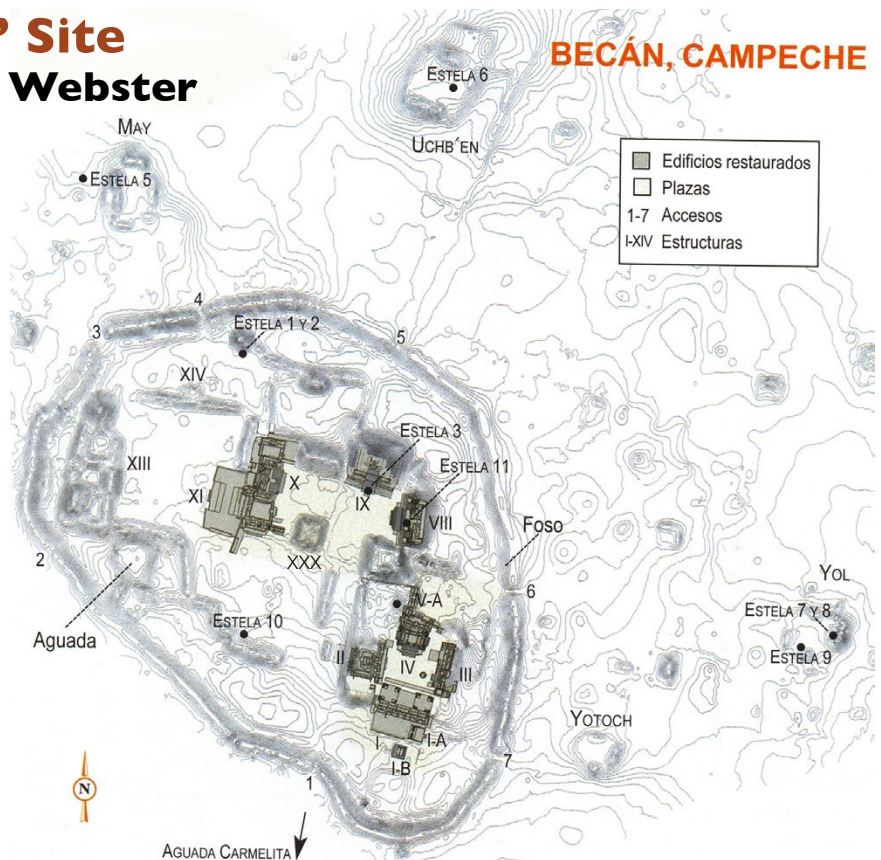
After Becan, David moved on to a tenured position and eventual Distinguished Professorship at Penn State, and I did the same at San Diego State. We both enjoyed fulfilling classroom and seminar teaching experiences at our respective institutions, and both are proud of the many graduate and undergraduate students who earned their degrees studying with us and under our direction. Several in each case are now themselves prominent Mayanists or archaeologists specializing in other areas.

Dave went on to conduct important field research in Yucatan, and at Copan, Piedras Negras, and Tikal, becoming known as the doyen of Maya warfare studies, and an important and often controversial figure in the study of Classic period demographics. I continued to focus on ceramic studies, working at Chinkultic in Chiapas, Acanmul in Campeche, and Vista Alegre on the northeastern coast of Quintana Roo, but spending the majority of my career in the upper Belize Valley at the sites of Buenavista del Cayo, Las Ruinas de Arenal, and Cahal Pech.

My research interests in the late 1970s and after were largely theoretical and methodological, and involved pioneering for the Maya lowlands the long and well accepted approach to behavioral archaeology well established by the 1970s in the



The Terminal Classic Circular Dance Platform at Becan was likely associated with the cult of the feathered serpent god, Kukulcán/Quetzalcoatl, in his aspect as the wind. Source: latinamericanstudies.org



Latest available INAH plan-map of Becan. Courtesy of Mexico's Instituto Nacional de Arqueología e Historia/Campaña.

United States and the Valley of Oaxaca – locating on-floor deposits of cultural “trash” resulting from the rapid or gradual abandonment of a site and exposing 100% samples of these deposits by means of large, extensive striping excavations. I conducted active fieldwork in the Belize Valley from 1981 to 1993, and since then have continued to work on and write up the almost too abundant and rich data collected over that decade. In 2003 through 2005, I co-directed a comparable program at Acanmul, Campeche, there working with faculty of the Universidad Autónoma de Campeche with the support and funding of the Mexican government through the Consejo Nacional de Ciencia y Tecnología (CONACYT). My Belize program – codirected with my archaeologist wife, Dr. Jennifer Taschek – produced the first survey maps of Buenavista (1984), Las Ruinas (1991), and Cahal Pech (1984), and in the late 1980s helped pioneer the advocacy of site restoration and archaeological tourism as a source of sustainable growth and stability for the economy of Belize. Today, David and I continue to work on and write up the many years of rich data that we recovered over the last fifty years, but Becan will always remain dear to our hearts as our “First Love” site.

The Mysteries of Becan

Becan is far from having given up all or most of its secrets, or even a reliably complete sample of these despite the numerous Norteamericano and Mexican projects that have tapped the site's archaeology. When I look over its map today, and review the literature produced by the several teams that have worked the site, whether for research or touristic development, I see numerous locations that remain untouched, largely unknown, and fertile ground begging for future investigation. The massive

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Becan: Our “First Love” Site

by Joseph W. Ball
and David Webster

A Follow-up to “Rahabilitating Becan” in Joe’s Own Words

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West Acropolis (Ruppert and Denison’s Str. XIII) is an elaborate and complex masonry palace in the full, pure Río Bec Architectural Tradition with multiple ground-level and elevated courtyards surrounded by vaulted masonry buildings.

Minimally tested in 1970, the complex begs for a major project of its own – but one oriented to sound behavioral anthropological archaeology – not just touristic restoration! There are more than enough Disneylandish archaeological parks in the area now, and what is needed is more solid scientific information and data-grounded knowledge of their actual overall culture histories.

Structures X and XI (the ballcourt) sit astride and bisect an enormous open plaza area that also remains entirely uninvestigated and effectively unexplored. It is loosely defined on its east by Strs. VII and VIII, on its west by the Str. XIII acropolis, on its north by the enormous Late and Terminal Classic residential apartment complex associated with the giant Preclassic Str. IX, and along its south, southeast, and northwest by a series of low linear platforms of undetermined date.

Originally, in pre-Bejuco times (before ca. 550 CE), these low platforms appear likely to have defined the entire plaza. We know nothing of their chronology, or their functions. In the middle of the plaza, which also corresponds to the precise spatial center of the site as a whole, is a squarish looking platform (Str. XXX) that no one has thought to clear, map, or test.

It is likely a genuinely square, four-faced, probably four-staired platform of the class of structures considered to be “Founder’s Platforms,” much like Str. E-VII-sub at Uaxactun, or the Castillo at Mayapan, that represent the focal point from which the original Preclassic iteration of Becan was laid out. If so, it is very likely the oldest

Becan aerial view from the southwest, showing cleared section of the defenses. Causeway I and Structure XXIII are in foreground, with Structure IV at center. For scale note the trucks in the parking



lot near Causeway VII at center right. From David L. Webster’s “Earthworks at Becán: Implications for Maya Warfare”. The images above and below live on mayaruins.com



Becan aerial view from the east. Causeway VII is in the lower foreground. It is almost impossible to form a proper impression of the magnitude of these earthworks from the ground. From David L. Webster’s “Earthworks at Becán: Implications for Maya Warfare”.

dating to the very end of the Middle or start of the Late Preclassic. It needs to be investigated.

At the plaza’s southeast corner, partly buried beneath collapse from Str. II and the late southeast acropolis supporting Terminal Classic Strs. I-IV, is a second ballcourt, one consistently overlooked or ignored by all investigators. When does this ballcourt date to? When was it built, by whom, and when was it abandoned? Not only interesting, but very easily and quickly resolved historical questions – “cheap” archaeology!

Then there is the enigmatic Str. VII. Situated between the southeast acropolis and the magnificent late sixth/early seventh century Str. VIII, Str. VII is an elevated elite residential patio-complex closely similar to other elevated architectural courtyard-complexes such as best known from Kohunlich to the east. When does it date from, and who actually resided there? Is it the site’s “missing” Early Classic elite residential compound? Or is it another Terminal Classic Northern Maya addition? Or neither.

These are just a few of the many intriguing mysteries whose solutions Becan still guards. Who will return to the site to address them? And when? 🏛️



surviving construction on site, possibly

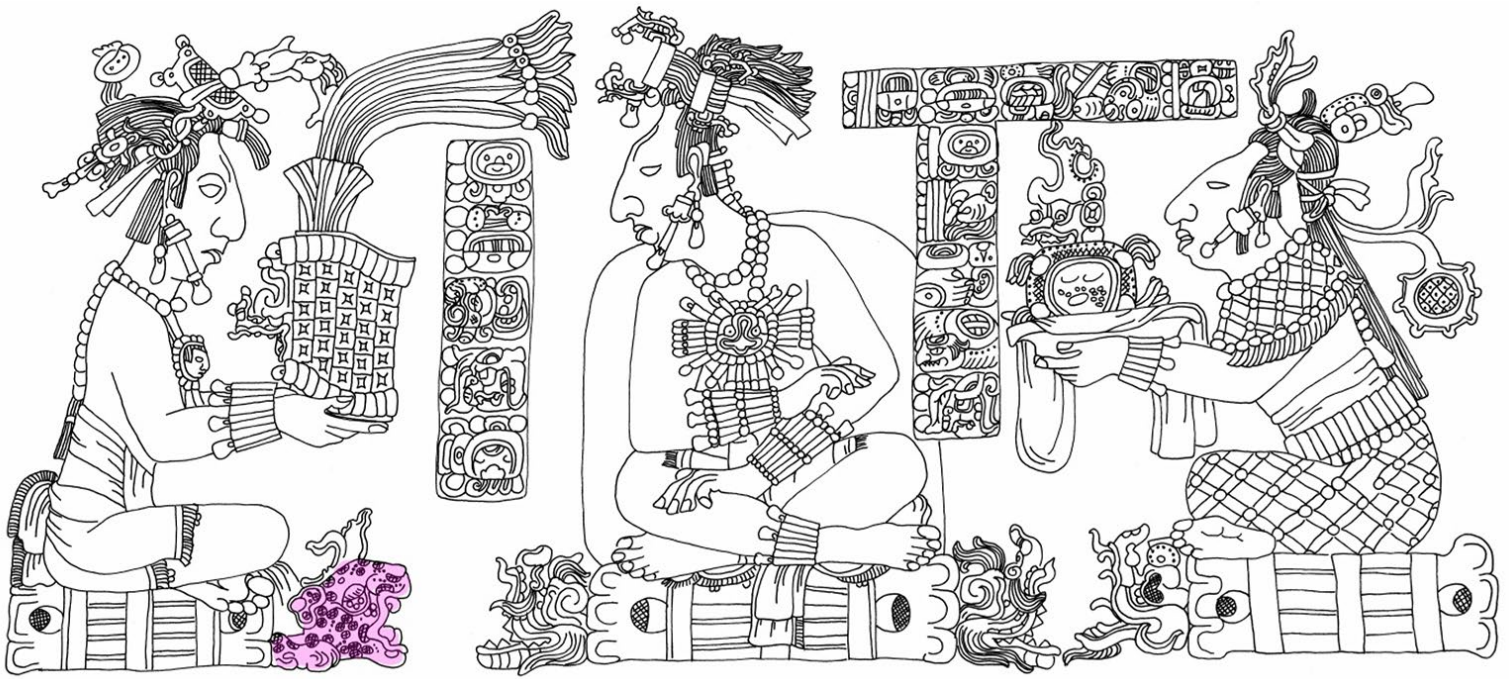


Fig 3: On the Palenque Palace Tablet, the king K'inich Janaab Pakal I sits on a throne decorated with a hix feline with a roaring mouth. Although jaguars, pumas, and ocelots scream and growl, only jaguars roar. Some researchers have concluded that the hix feline is an ocelot (*Leopardus pardalis*) (Spanish *tigrilla*) (Helmke et al. 2015).² Given that the hix feline is illustrated roaring, I find this identification unconvincing. Furthermore, the Kaua description of a killer feline hardly fits the timid nature of the ocelot.

Hix: Male Jaguars in Maya Art and Hieroglyphic Writing

by Karen Bassie-Sweet *continued from page 2*

female (the courtship sequence involves a fairly intense physical struggle). The fact that the K771 *hix* displays not only testicles, but a prominent penis suggests that he is in mating mode. Jaguars are the supreme predators of the forest, and warriors were naturally identified with this feline across Mesoamerica. I suggest that the *hix* feline represents a roaring male jaguar defending his territory, and as such, he makes a quintessential role model for Maya lords. A jaguar roar sounds like a cross between a low pitched grunt and cough. It is possible that *hix* is an onomatopoeic word that imitates the jaguar's roar.

The jaguar is ubiquitous in Maya art. Numerous Maya lords include *b'alam* and *hix* in their name phrases, and Maya lords are often depicted dressed as jaguars or wearing jaguar skin elements.³ Prime examples of this attire are seen in the Bonampak murals where various warriors sport jaguar-skin capes, tunics, sandals, and headdresses in both court and battle scenes (Miller and Brittenham 2013). Jaguar skin frequently decorates the base of spears. Jaguar skin was also incorporated into thrones as a symbol of high status and it was used to cover codices. Jaguars and jaguar-skins are

particularly well rendered on the Ik site pottery that often features the distinctive rosette pattern, the orange of the fur and the creamy tones of the underbelly. The remains of jaguars are a frequent component in tombs and caches (Pohl 1983). For instance, Yaxchilan Structure 23 Tomb 3 contained 27 jaguar claws (García Moll 2004:268), while jaguar teeth have been recovered at Uaxactun (Smith 1950:table 6, 90). The placement of *ungula* phalanges on either side of the Uaxactun Burial A31 occupant indicated the body had been covered by a jaguar skin. Jaguar bone was frequently carved, like as an *ulna* found in Piedras Negras Burial 82.

Grube and Nahm (1994) cataloged 13 different co-essences that have jaguar characteristics, and even today among the traditional Maya jaguar co-essences are believed to be among one of the strongest. Copan Altar Q documents a series of sixteen Copan rulers beginning with K'inich Yax K'uk' Mo'. The dedicatory cache of the altar contained the remains of 15 jaguars and pumas. It has been suggested that these felids may have symbolized the co-essences of the Copán rulers (Sugiyama 2018). Highland funerary urns frequently feature portraits of jaguars (see **Fig. 4**, next page).

In contrast to the jaguar, the puma is not prominently featured in Maya art and hieroglyphic writing, but there are clear examples of this feline. It has long been recognized that the reddish-colored feline illustrated on page 47c in the Dresden Codex is a puma (Tozzer and Allen 1910: 358), and the adjacent caption text names this puma as *chak bahlam* "red jaguar"; an attested name for a puma⁴ (See **Fig. 5**, next page). Although quite rare, there is a Classic period logograph representing the word *koj* "puma"

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² While a jaguar's maximum body weight is about 100 kg., the diminutive ocelot reaches just 15 kg. Unlike jaguars, ocelots have elongated spots that run together and form parallel black stripes on the nape and oblique stripes near the shoulders. They have white fur around the eyes and bordering the ears as well as white inner ears. Some Mayan terms for the ocelot are descriptive and indicate it was viewed as a type of jaguar or puma. As an example, the Tzotzil term *tz'ib bolom* "striped jaguar" refers to the striped pattern of the ocelot's fur while the Yucatec and Itzaj term *ajšäk zikin* "white ear" refers to the white color of the ocelot ears. The term in Chuj for an ocelot is *tel choj* "forest puma" while Achi has *ch'ut balam* "small jaguar" (Hopkins 2012:311).

³ For example, Shield Jaguar III, Kan Bahlam, K'in Bahlam, Unen Bahlam, K'inich Bahlam, Bahlam Chapaat, Bird Jaguar, K'uk' Bahlam, Yich'aak Bahlam, Yopaat Bahlam, K'ahk' Hix Muut, K'an Mo' Hix, K'altuun Hix, K'elen Hix and Sak Hix Owl.

Hix: Male Jaguars in Maya Art and Hieroglyphic Writing

by Karen Bassie-Sweet *continued from page 5*

(Zender quoted in Miller and Brittenham 2013:91). It is a portrait glyph of a feline with a T521 *winik* “human being” sign in its mouth (**Fig. 1D**, yellow highlight).

Pumas are known to be more aggressive than jaguars in their interaction with humans, and the puma logograph appears to incorporate this behavior to distinguish a puma from a jaguar. This eating convention is similar to the logograph of a youthful man with a water glyph in his mouth to indicate the action of drinking. The pre-accession name for the Piedras Negras ruler K'inich Yo'nal Ahk II was *Koj* “puma” and a prominent youth featured in the Bonampak murals was also named *Koj* (Chooj). A number of Classic period vessels illustrate secondary lords wearing a headdress in the form of a puma head (K2781, K5062) and a secondary lord in the Bonampak murals wears a puma-skin cape (Miller and Brittenham 2013:136). Burials at Uaxactun and Copan contained puma skeletal remains and teeth, further attesting to their high esteem in the Classic period. Some of the highland funerary urns feature red felines without spots that could also represent pumas.

In sixteenth-century Yucatan, Landa described a temple dedicated to the deity Cit Chac Coh “father red puma”. During the month Pax, the war captain called Nacom was feted in this temple and treated like a deity (Tozzer 1941:165). Landa also stated that warriors dressed in jaguar and puma skins when they went to war (Tozzer 1941:122). Roys (1933:197) noted that head chiefs were referred to as pumas and jaguars in Yucatan. In the *Popol Vuh*, the second generation of K'iche' lords were given puma and jaguar claws. Seventeenth-century bishop of Chiapas Francisco Núñez de la Vega (1988) noted that pumas were thought to be the strongest co-essences, and even today among the Tzotzil of San Andrés Larráinzar pumas are believed to be among the most powerful of the co-essences along with the jaguar and the coyote.



Fig 5: Stylized version of the jaguar depicted on page 8 of the Dresden Codex. Note the water lily and the tell-tale spots.

In the Chuj region, powerful men have both puma and whirlwind co-essences (Hopkins 2012:43). Still, the fact that young lords were named after pumas, but Maya kings were named after jaguars indicates that jaguars were higher ranked by the Classic Maya.

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⁴ On Dresden page 8, there is a jaguar complete with spots and water lily motif. The adjacent caption text names this jaguar. The nominal phrase is composed of *chak* “red” and a portrait glyph that does not resemble a jaguar (See **Fig. 5** above) What this might represent is unclear, but it

does not look anything like the jaguar glyph used to represent the puma on Dresden page 47.



Fig 4: The original Altar Q in the Copan Sculpture Museum. Photo: Arian Zwegers from Brussels, Belgium.

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Unbundling the Past: Events in Ancient and Contemporary Maya History for May

by Zach Lindsey

3 May 1901 CE: On 12.14.6.13.5 10 Chikchan 3 Pop G4, Mexican Federalist troops entered Noj Kaaj Santa Cruz X Báalam Naj (today known by the less-clunky but still lengthy Felipe Carrillo Puerto). Their victory here represented the official end of the more-than-50-years "Caste War" (sometimes known as the Maya Social War) between the Maya of Yucatan and the Mexican Federal government, though small-scale disputes would continue well into the 1930s. In some ways, the invasion was the end of a movement, but Maya scholars like Carlos Chablé Mendoza see the continuation of Maya traditions and the increased access to bilingual education in rural Yucatan as a sign that not all was fruitless – the folks who died in the war helped give hope to new generations.

11 May 544 CE: On 9.5.10.0.0 8 Kaban 10 Pop G4, Chak Tok Ich'aak of La Corona celebrated a period ending. The date comes from Altar 5, the earliest known dated monument at the site. The altar itself is beautifully carved, and a temple was built around it much later. In fact, this same date was mentioned more than a hundred years later on Stela I. But a nearby ruler's tomb from the 500s, which may have been Chak Tok Ich'aak's, was fairly modest, suggesting Altar 5's beauty was a herald of things to come. Small though it was in the early 500s, La Corona developed an important relationship with the Kaanul

Chak Tok Ich'aak's name glyph and title from La Corona Altar 5. He is described as a Sak Wayis, which probably means he wasn't an ajaw but a lesser lord appointed to the leadership of the city; he may have even been an outsider, since he is noted as "arriving" on Altar 5. Original artwork by Zach Lindsey.



Marcello A. Canuto, co-director of the La Corona Regional Archaeological Project (PRALC), indicated: "This discovery allows us to identify a new king of La Corona, who had important relations with Dzibanche, capital of the Kaanul kingdom, and with the nearby city of El Perú-Waka'."

dynasty. It went on to produce so much artwork it became the infamous

"Site Q," a looter's paradise. Chak Tok Ich'aak himself may have eventually become ruler of El Perú, though the jury's still out on that. And it all started here, with Chak Tok Ich'aak's modest altar to remember this day. 🏠 🐾

Wednesday, May 18 • 8 pm ET



Detail from the Terminal Classic Upper Jaguars Mural, Chichen Itza, Yucatán, showing fruit trees and wild game in close proximity to houses and temples. Painting by Adela Breton, courtesy Bristol Museums.

Agriculture & Arboriculture in Ancient Maya Art and Writing

with **Dr. Marc Zender**, Associate Professor, Tulane University

Access and download this active hyperlink: <https://us02web.zoom.us/j/82407047429>

As the result of decades of work – including the arduous mapping of Maya cities and landscapes, the meticulous cataloging of plant and tree species around settlements, and the truly transformative imagery of ancient fields and towns recently revealed by LiDAR – it is now increasingly clear that Maya agriculture and arboriculture comprised a complex, sustainable set of practices often taking place directly within and beside ancient settlements. Old debates arguing for ancient sites as either vacant ceremonial centers or dense urban landscapes have given way to more nuanced views of “garden cities”

surrounded by a “managed mosaic” of forest preserves, milpas, and orchards. Perhaps surprisingly, Maya art and writing have hitherto contributed little to these new insights. In part, this is due to their relatively restricted genres, only rarely featuring overtly agricultural themes. There are no painted ceramics or sculptured reliefs depicting cornfields, for instance, and no ancient maps of settlements representing the interspersed fields, forests, and orchards which are now thought to have characterized the ancient landscape. However, a close look at the Maya script reveals numerous signs explicitly-derived from the “forest gardens” as well as some



In this scene from an unprovenanced Late Classic codex-style vessel (K1247), Maya nobles carefully relocate a valuable fruit tree while simultaneously warding off two frugivorous curassows. Drawing by Alexandre Tokovinine (from Stone and Zender 2011:70)

key agricultural tropes upon which royal inscriptions often relied. Further, ancient imagery does reveal numerous points of contact with developing views of Maya agriculture and arboriculture, including orchards adjacent to palaces, and game and forest preserves alongside settlements. Some orchards may even have been targeted in warfare. As will be seen, our appreciation of agricultural and arboricultural references in Maya art and writing is immeasurably deepened by considering them in the light of recent archaeological discoveries.



Dr. Marc Zender received his PhD from the Department of Anthropology & Archaeology of the University of Calgary in 2004. He has since taught at the University of Calgary (2002-2004) and Harvard University (2005-2011), and is now Associate Professor of Anthropology at Tulane University, New Orleans, where he teaches linguistics, epigraphy, and Mesoamerican indigenous languages (e.g., Yucatec Maya, Classical and Modern Nahuatl). His research interests include anthropological and historical linguistics, comparative writing systems, and archaeological decipherment, with a regional focus on Mesoamerica (particularly Mayan and Nahuatl/Aztec). He is the author of several books

and dozens of academic articles exploring these subjects, and has conducted archaeological, linguistic, and epigraphic research at numerous sites across the Maya area. In addition to his research and writing, he is also the editor of *The PARI Journal*.



K'awiil Chan K'inich, Lord of K'an Hix: Royal Titles and Symbols of Rulership at Cahal Pech, Belize

by Jaime Awe and Marc Zender

Excerpted from *Mexicon* 38(6):157–165, 2016

Recent archaeological investigations in the site core at Cahal Pech, Belize (**Fig. 1**) uncovered a series of tombs and crypts in Structure B1, the central pyramid of the site's eastern triadic assemblage (sometimes referred to as an E-Group). Two of the tombs, Burials B1-2 and B1-7, contained rich assemblages of cultural remains that clearly serve to identify the graves as those of members of the ruling lineage of this Belize Valley center (Awe 2013).

Among the most significant discoveries in the tombs were three bone rings, a bone pin, and fragments of turtle shell that were decorated with low-relief inscriptions. The inscriptions, along with the rich contents of the tomb, provide compelling evidence that Classic period Belize Valley elite employed symbols of rulership that are more typically associated with elite rulers of tier one polities (such as Tikal, Calakmul and Caracol) in the Maya lowlands (see Martin and Grube 2008:17–21). We provide here a brief description of the contexts in which the artifacts mentioned above were discovered, and we present our preliminary interpretation of the inscriptions on the rings, pin, and turtle shell.

Contexts of Burial B1-2 and B1-7

As indicated above, Burials B1-2 and B1-7 were discovered within Str. B1, the central pyramid of the site's "E-Group" or eastern triadic assemblage (see Awe et al 2017).

Burial B1-2

Burial B1-2 was initially excavated by Peter Schmidt in 1969. Although Schmidt never published a report of his investigations, archived copies of his notes at the Belize Institute of Archaeology indicate that the burial was placed in a large tomb located approximately 1.5 meters below the summit of Str. B1. The tomb

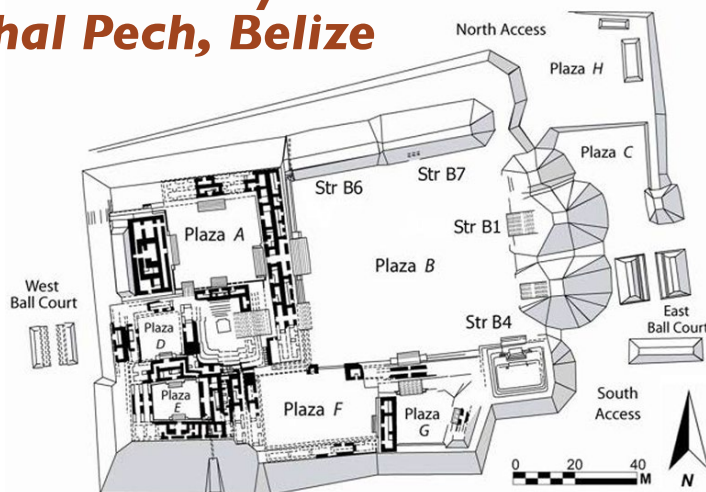


Fig. 1: Map of Cahal Pech site core. Map by BVAR Project, prepared by Mark Campbell, Christophe Helmke, Rafael Guerra.

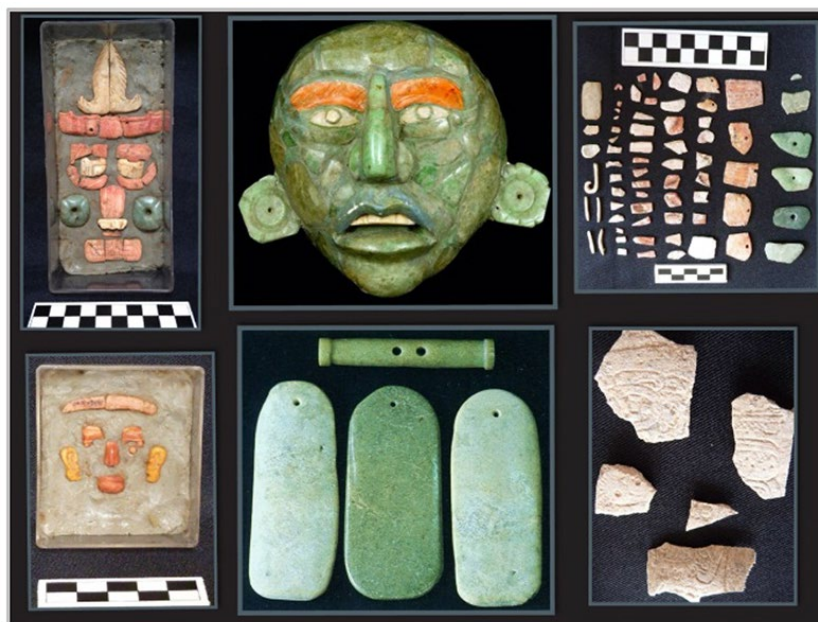


Fig. 2: Jade and shell artifacts from Burial B1-2. Photographs by Catharina Santasilia and Jaime Awe.



Fig. 3: Ceramic vessels from Burial B1-2.

Photographs by Catharina Santasilia and Jaime Awe.

contained the remains of a single adult individual. Schmidt's notes, and his illustration of the burial, indicate that the individual was lying in an extended position with head to the south, an orientation typical of Belize Valley burials (see Awe 2013).

Burial B1-2 contained a large and diverse assemblage of grave goods (**Figs. 2–3**). Above the pelvis of the individual was a beautiful anthropomorphic mask made from several pieces of jadeite and marine shell. Other polished stone objects included six jade beads, six jade ear flares, a perforated jade tube, and three jade celts. A similar set of jade tubes and celts were found in Burial B1-7. Two additional mosaic masks, made predominantly from shell with a couple pieces of jade, were located just below the skull, and several obsidian blades were placed near the feet of the individual.

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Ceramic artifacts included eight pottery vessels (**Fig. 3**, previous page). Six of the vessels were polychrome and two were monochrome. One of the vessels, a Saxche Cream polychrome (**Fig. 3**, Vessel 6), is chalice-shaped and depicts an individual in the act of autosacrificial blood-letting (see Stone 1987:37, 1995). Another vessel (**Fig. 3**, Vessel 6), a basal flanged bowl, is typical of Early Classic Dos Arroyos Orange polychromes. There is also a brown fluted vase (**Fig. 3**, Vessel 1) that is similar in form and stylistic treatment to an early Late Classic fluted vase from Burial BI-7. These and other similarities between Burials BI-2 and BI-7 suggest an almost coeval date for the two burials, with BI-7 predating BI-2 by a few years at most.

In an effort to accurately record the stratigraphy of Str. BI, and to explore for other possible burials below the location of Burial BI-2, we reopened, in 2012, the area where Schmidt had excavated in 1969. This operation not only identified the original location of Burial BI-2, but also located several fragments of turtle shell in the unexcavated northeastern corner of the grave. Although the shell fragments were poorly preserved, a few glyphs, carved in low relief, were still discernible on the surfaces of the plastron fragments (see **Figs. 6–7**). The significance of these glyphs, and other inscriptions carved on grave goods found in Burial BI-7, are described further below.

Burial BI-7

Burial BI-7 was also discovered in a large tomb about 3 m below the summit platform of Str. BI, and just west of where Burial BI-2 was located (Santasilia 2012, 2013). Although the human remains in the grave were in a very poor state of preservation, we were able to determine that the burial contained the skeletal remains of at least three adult individuals (Novotny et al. 2015). The earliest individual (Individual 3) interred in the tomb was represented by the articulated bones of the feet, and fragments of lower limb bones such as the fibula. These remains were discovered at the north end of the chamber, indicating an orientation with the head to the south. The rest of the skeleton was not found in situ but the discovery of skeletal fragments inside some of the pottery vessels, and throughout the fill in the tomb, suggests that the remains of this individual (Individual 3) were likely disturbed during the subsequent interment of Individual 2 and then redeposited throughout the tomb. Although multiple burials are conspicuously rare in the upper Belize River Valley, this tradition is typical at sites in the Chiquibul sub-region of western Belize, notably at Caracol (Chase and Chase 1996), Caledonia (Healy et al. 1998) and the upper Macal River drainage (Awe et al. 2005).

Burial BI-7 contained the largest number of grave goods of any burial yet discovered at Cahal Pech. The eight ceramic vessels (**Fig. 4**) in the tomb included two Early Classic, basalflanged, Dos Arroyos Orange polychrome bowls, a stuccoed vase, a bichrome bowl, a Late Classic Silkgrass fluted vase, and three monochrome red dishes. Polished stone objects included 12 jade beads, three jade celts or belt plaques, two jade bar pendants, a jade effigy pendant depicting the maize god, and three pairs of jade ear flares. Shell and bone objects



Fig. 4: Ceramic vessels and shell objects from Burial BI-7. Photographs by Jaime Awe and Catharina Santasilia.



Fig. 5: Bone and shell artifacts from Burial BI-7. Photographs by Catharina Santasilia and Jaime Awe.

were represented by three deer antler rings, eight bone scribal styli, three bone pins, four shell adornos with obsidian and Spondylus shell inlays, a shell inkpot with the remains of red, black, yellow and blue pigments, a bone spatula carved with a hand design, a necklace made from dog teeth, seven spindle whorls, and numerous other small objects (**Fig. 5**). One of the bone pins and two of the deer antler rings were carved and inscribed. Stylistic analysis of the ceramic vessels from the tomb, glyphic paleography, and radiometric dating of the human remains, all suggest that the burials date sometime between the end of the Early Classic period, and the start of the Late Classic (AD 550–650) (Awe 2013; Novotny et al. 2015; Zender 2014).

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Analysis of the Inscriptions on the Turtle Shell Fragments and Rings

Since there is no particular ordering principle at work in the inscriptions on the turtle shell, bone rings, and bone needles – that is, they are not part of a larger epigraphic program, none of them contain hieroglyphic dates, and there is no indication of topical overlap – we will present them, purely for convenience, in the numerical order of the burials from which they stem.

Incised Turtle Shell Fragments from Burial B1-2

As we noted above, the incised turtle shell fragments were recovered during our 2012 excavations of the area where Peter Schmidt had located Burial B1-2 in 1969. Although still unpublished, many of the materials recovered from this burial are curated in the Institute of Archaeology, as are some of Schmidt's notes and a plan of the burial. These, coupled with the compact nature of the incised turtle shell fragments discovered in 2012, make it likely, but not certain, that no earlier fragments had come to light in 1969 (if they did, then apparently they no longer survive).

According to Norbert Stanchly (pers. comm. 2012), the fragments are part of the upper (dorsal) carapace of an American Freshwater Turtle (or Slider).

The first large fragment reveals the badly eroded verb **pa-ta-la-ja**, *patlaj* 'it was fashioned.' This may have been the initial glyph of the inscription, but it is impossible to discount the possibility of other introductory material, such as calendrical information or adverbs, given comparable inscriptions on other portable objects. The five remaining fragments with hieroglyphic inscriptions can be seen in **Fig. 6**, each of which bears partial remains of one to two glyph blocks. Their order is for the most part uncertain (see below), but the individual hieroglyphs can be read as follows:

- (1) **a-ku AJ...**, *Ahk Aj...*, 'turtle, he of...'
- (2) **u-ju...**, *u-ju...*, 'his/her/its *ju*...'
- (3) **K'AN-na-HIX-...-wa**, *K'an Hix...w*, 'Yellow/Tawny Jaguar...'
- (4) **yu-...**, *y-u...*, 'his/her/its...'
- (5) ?

The spelling **a-ku** for *ahk* 'turtle' is very common in Mayan hieroglyphic inscriptions, frequently appearing in the names of both humans and gods. Coupled with the fragmentary nature of the inscription (much of the text is certainly missing) this explains why we did not initially connect the spelling to the object this text was incised on: namely, a turtle shell. But given the fragmentary **u-ju...** spelling, which could conceivably have once recorded **u-ju-chi(-li)**, *ujuuch(il)* 'his/her/its shell', a common collocation on other carved shells, we speculate that these two fragments once provided the sequence **u-ju-chi(-li) a-ku AJ...** for *ujuuch(il) ahk aj-...*, or 'It is the turtle shell of *aj-...*' (see **Fig. 7**). The *aj-* prefix frequently marks an agentive, appearing in titles of occupation (e.g., *ajtz'ihb* 'scribe') or origin (e.g., *ajchikunahb* 'he of Calakmul'), so it is possible that the damaged signs which follow once provided this information for the owner of the shell.

Even more intriguing is the third turtle shell fragment, which records a nominal (perhaps titular) element also known from

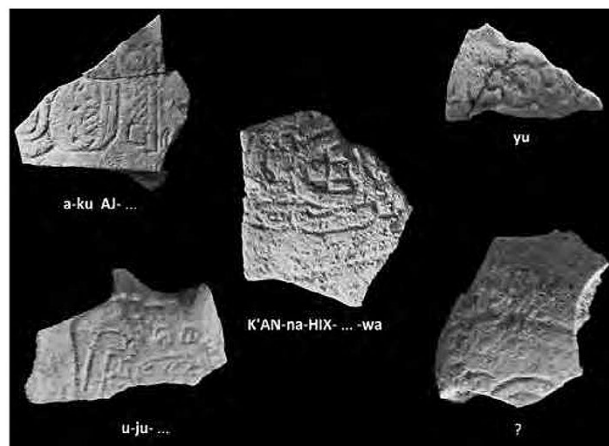


Fig. 6: Five turtle shell fragments with inscriptions from Burial B1-2. Photographs and analysis by Marc Zender.

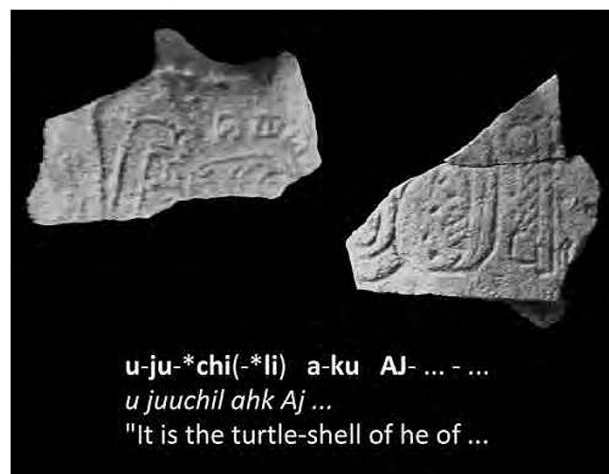


Fig. 7: Suggested ordering of two turtle shell fragments. Photographs and analysis by Marc Zender.

the two incised bone rings (to be discussed below), and which can be transcribed as **K'AN-na-HIX-...-wa**. We will discuss this element in more detail below, but for now it will suffice to note that this is a strong candidate for a traditional title for Cahal Pech nobility.

To summarize the foregoing, this object appears to have been an incised turtle carapace. What its function was can only be guessed at; perhaps a drum like the musical instruments occasionally depicted in Maya art? Like many portable objects, however, it apparently included a brief dedicatory text describing its fashioning, a brief description, and the name (and possibly title) of its owner, only part of which survives.

Incised Bone Rings from Burial B1-7

Among the rich offerings of jade, shell and bone discovered in Burial B1-7 at Cahal Pech, the two small incised bone rings are perhaps the most unique and distinctive (**Fig. 8**).

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Both suffered substantial erosion (mostly scratches and surface pitting) following their deposition in the tomb, though the first ring remains intact and is substantially better preserved, whereas the second was discovered in four roughly equal-sized fragments, and its inscription has suffered greatly as a result.

The rings are very small (less than two centimeters in diameter), very thin (2-3 mm thick, on average), and very finely incised, with glyph blocks about 1.5 cm square. Each ring bore four glyph blocks, and close analysis of the inscription reveals that the texts were perfectly parallel, the only textual variation coming from a well-attested glyphic substitution in the third block of the K'IN(ICH) logogram (on the more poorly-preserved ring) for the logo-phonetic spelling K'IN(ICH)-ni-chi (on the better-preserved ring). Otherwise, and despite the erosion, the two texts are completely identical.

Since practically all inscriptions on portable objects begin with a possessed “name tag” – such as ‘his cup’, ‘his bone’, etc. – it was obvious that these two inscriptions had to begin with the *yo-?-bi* collocation, as indicated in the drawings (Fig. 9). Ever since David Stuart’s (1987) publication detailing the decipherment of the syllable *yo*, it has been clear that this sign serves to record the third person possessive prefix *y* on nouns beginning with the vowel *o*, and there is no other potential possessive marker in either of these texts. Similarly, the syllable *bi* has been well-known since the 1950s, and has more recently been recognized as frequently providing the instrumental suffix *ib* (or *-Vb*) on nouns derived from verbs (Houston et al. 2001).

The only mysterious element in this ‘name tag’ was the middle sign, often nicknamed ‘k’in-imix’, because it resembles the ‘sun’ sign (K'IN) infixed into T501 Imix. However, the behavior of this sign in other contexts makes it clear that it represents a single CV syllable, not a compound. The sign is relatively rare, however, and has only been documented in the following different contexts:

- (AJ-/a)#- ... -ni (a common, but poorly understood title)
- ya- ... -ni (a possessed form of the title on K5070)
- ju- ... (Cancuen Panel 1, and Naj Tunich drawing 88)
- AJ- ... -su (Panel fragment, Denver Museum of Science and Nature)
- ... -sa (El Peru stelae [2 examples])
- yo- ... -bi (Cahal Pech [2 examples])

The contexts are not numerous, and they are not such that a strong phonetic value can yet be proposed that makes sense of all of them. Nonetheless, the new Cahal Pech context is sufficiently probative that it can be used to propose a tentative phonetic reading of *so*, which will require testing as new contexts emerge.

The language of Classic Mayan inscriptions is generally recognized to be closer to Eastern Ch'olan, of which Ch'orti' is the sole surviving member. For this reason, we might expect an Eastern Ch'olan word for ‘ring’ to have been something like *osib*, from **och-es-ib* ‘thing for inserting (a finger into); a ring’, with characteristic syncopation and consonant shift. In its possessed form, in Mayan glyphs, a word for “ring” would therefore have been written as either *yo-so-bi* or *yo-si-bi*. Given that the ‘k'in-imix’ syllable never substitutes for the two known *si* signs, *so* presently emerges as the best candidate (see also Zender 2014), though we caution that more contexts are needed before this sign can be confidently regarded as deciphered. Thankfully, the two glyph blocks following the possessed noun are much more transparent,

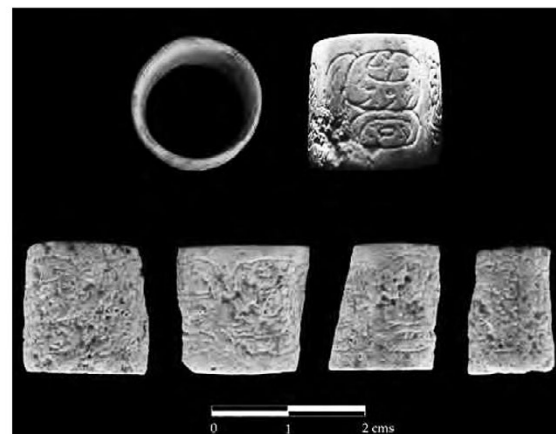


Fig. 8: Bone rings with inscriptions from Cahal Pech. Photographs by Marc Zender.

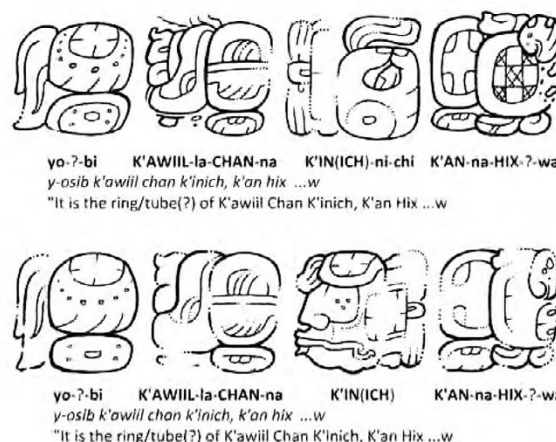


Fig. 9: Inscriptions on the two bone rings from Cahal Pech. Drawings and analysis by Marc Zender.

and they provide the personal name K'awiil Chan K'inich. The name is a compound deity name common in Mayan inscriptions, meaning something like ‘the Sun God (K'inich) is like Lightning (K'awiil) in the Sky (Chan)’. And the name is already attested as that of a mid-8th century king of Dos Pilas, Guatemala (see Martin and Grube 2008:60-63), though here it must be that of a namesake. Whether it represents the name of one of the tomb’s occupants or of the original owner or commissioner of the ring (if an heirloom) cannot yet be ascertained.

The final glyph block on the rings also includes an undeciphered sign: K'AN-na- HIX- ... -wa. The elements K'an Hix are clear enough, and probably mean ‘Yellow (or Tawny) Jaguar’. In an earlier study (Zender 2014), the junior author tentatively identified the jaguar-elements of these signs as BAHLAM rather than HIX (both of which basically mean

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'jaguar'), but the recent discovery of an incised jade plaque at Nim li Punit containing the same collocation clarifies that the sign in question is indeed HIX (Prager and Braswell 2016:Fig. 6b).

That said, the appearance of the K'AN-na-HIX- ... -wa collocation at the close of a nominal string on the rings (and on the incised turtle shell), suggests that it may have served as a title, perhaps a traditional title of nobility from Cahal Pech. Recently, as Prager and Braswell (2016:5) have noted, another example of this title has been discovered on an incised jade plaque at Nim li Punit, which might suggest that its bearer (a royal woman) hails from Cahal Pech. Further speculation will have to await additional contexts, but it is worth noting that, of four presently-known examples of this title, fully three of them appear at Cahal Pech.

Incised Bone Needle Fragment from Burial B1-7

Centrally located in Burial B1-7, but not recovered until screening and post-excavation cleaning of the finds, was a small fragment of an incised bone needle (**Fig. 10a**).

The fragmentary inscription is hardly dramatic, but enough survives to read it as **ba-ki**, *baak*, 'bone'. Like most portable objects with inscriptions, there was probably a possessive marker **u** preceding this short text, thereby rendering **u-ba-ki**, *ubaak*, 'his/her bone'. Several parallel inscriptions are known, most famously at Tikal (see **Fig. 10b**), as first identified by David Stuart (1984; see also Houston and Stuart 2001). As with the parallel texts, the possessed noun would have been followed by the name of the needle's owner. Unfortunately, we did not recover any other fragments of the needle, thus this information has been lost to us.

Concluding Remarks

Considering the dearth of inscribed architectural and monumental texts at Cahal Pech, the discovery of four (admittedly brief) texts in three years of excavations of burials within Structure B1 is highly significant. It suggests that, like their elite counterparts at sites in the central lowlands, the Classic period elite rulers of Cahal Pech also manipulated inscription-bearing objects as a reflection of their royal status. Like Baking Pot and Altun Ha further down river, the material remains in the royal tombs at Cahal Pech further serve as tangible manifestations of the status, wealth, and power of this Belize River Valley center. It is quite likely that the affluence of these medium-size centers was a result of their ability to successfully exploit their advantageous location on an important central lowland Maya trading route. Hopefully, future research at Cahal Pech and other Belize Valley sites will yield additional historical information that will allow us to better understand the Classic period political landscape of this important Maya sub-region.

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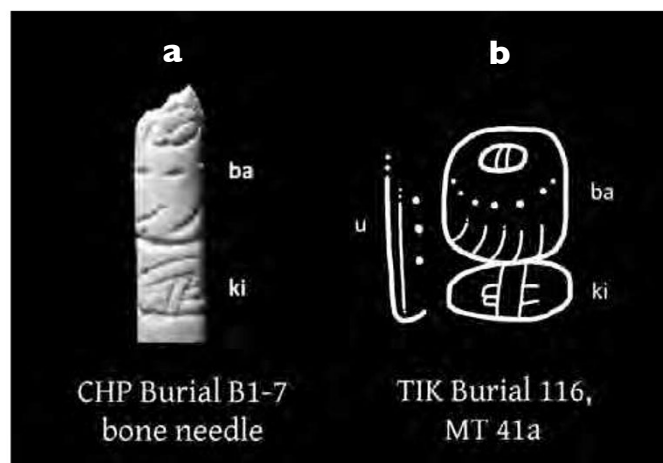


Fig. 10: Bone needle texts: (a) the Cahal Pech needle; (b) a parallel text from Tikal. Photograph by Catharina Santasilia, drawing by Anne Seuffert.

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The corbel-arch corridor at Cahal Pech.

It is one of Belize's most ancient and unique archaeological sites. The name Cahal Pech, meaning “Place of the Ticks” in the Yucatec-Maya language, was given to the site in the 1950s, though its original name has been lost to time. Though relatively small in size, Cahal Pech packs quite a punch with 34 classical-era structures, some of which reach over 25 meters in height (like Structure B1). “Ceramic-using populations may have been in place as early as ca. 1200 BCE at Cahal Pech” noted Jaime Awe in 1992.

Hawkesworth Bridge is a one lane suspension bridge built in 1949 and imported from Middlesbrough, England.

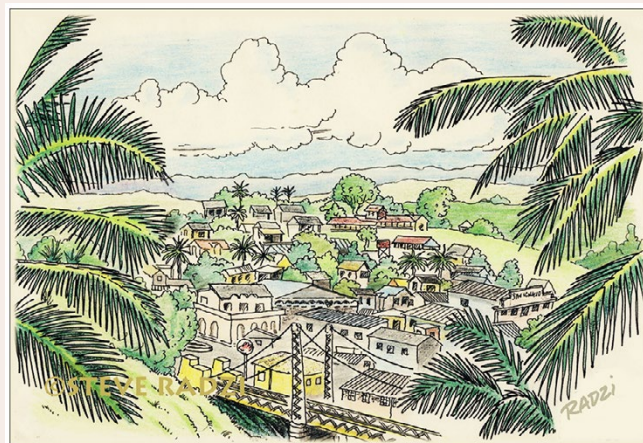
It crosses the Macal River linking San Ignacio to its sister-town Santa Elena.

An Artistic Eye on Cahal Pech with artist Steve Radzi

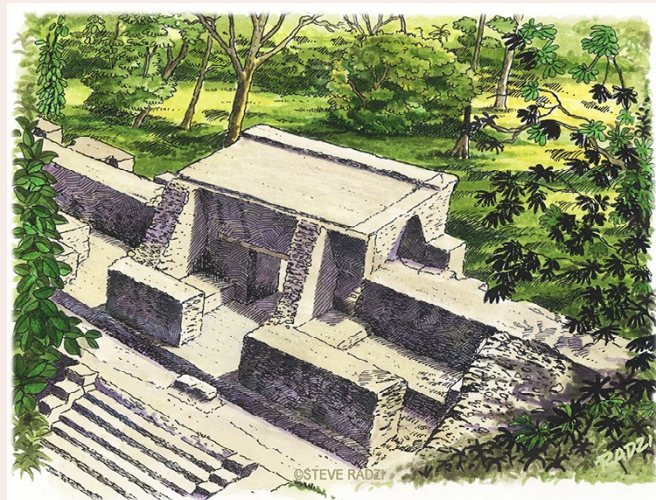
Cahal Pech, on the hill above San Ignacio (Cayo), Belize

To tie in with Marc Zender's report on artifacts excavated in Structure B1 at Cahal Pech, Steve Radzi has submitted these timeless illustrations.

Cahal Pech sits atop a natural hill high above the town of San Ignacio and the banks on the confluence of the Macal and Mopan rivers. It is



Hawkesworth Bridge links San Ignacio to Santa Elena.



Structure A2 in Plaza A at Cahal Pech.

IMS Live Streaming 5.25.2022

Join in the Exploration!

Wednesday
May 25
at 8 pm ET

Access and bookmark this active hyperlink to join the event:

<https://us02web.zoom.us/j/81546813105>

Exploring the Peabody Museum of Archaeology & Ethnology at Harvard with Keith Merwin



Front entrance of the museum.

The Peabody Museum of Archaeology & Ethnology at Harvard is the oldest museum of anthropology in the Americas. Founded in 1866, it has a long and distinguished history. This presentation will cover the incredible collection the Peabody has amassed. The Peabody is the home to the Corpus of Maya Hieroglyphic Inscriptions Program,



Front desk and entrance to the Galleries.

the items from the sacred cenote at Chichen Itza and to the Carnegie Institution of Washington's research. Much of its collection of images and documents are available online and we will talk about how to access and search these resources. But only with a physical visit can you experience the ceramics and stelae.



Keith Merwin spent over 25 years developing software and providing training for customer service operations in government and organizations. He was a principal in a consulting firm providing strategic technology analysis, planning and development. Keith has spoken at conferences in the United States and Europe. Today he is partially retired mostly working as a Travel Consultant planning group trips. Keith is currently writing a book on a journal kept by his ancestor Dr. Raymond E. Merwin an early Mayanist for the Peabody Museum of Archaeology and Ethnology at Harvard University. He is the webmaster and a board member for the Institute of Maya Studies, Inc.

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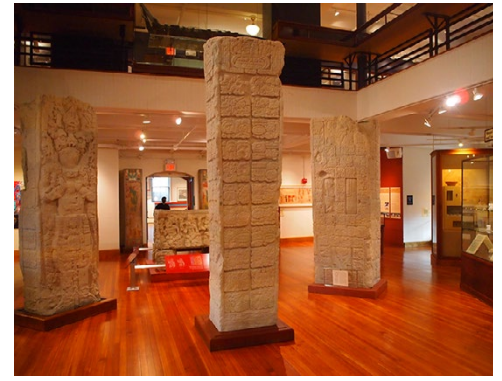


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L) Entrance to the "Latin America" room, upstairs. C) Full-sized replica of Altar Q and several Copan stelae. R) Stelae and other items.

The Peabody Museum of Archaeology & Ethnology at Harvard University by Keith Merwin

In 1866 when George Peabody "committed \$150,000 to be used, according to the terms of the trust, to establish the position of Peabody Professor-Curator, to purchase artifacts, and to construct a building to house its collections."¹ to Harvard College, The Peabody Museum of Archaeology & Ethnology at Harvard University was founded.

The first curator of the Peabody was Jeffries Wyman, an American naturalist and anatomist, from 1866 until his death in 1874. Asa Gray was appointed interim curator until Fredrick W. Putnam was appointed curator (director) in 1875. Putnam is now known as the "Father of Anthropology Archaeology in America". His first major project was to the construction of the museum building that would be finished and occupied in 1877 and still houses the core of the museum. Putnam would help develop not only the Peabody but also the American Museum of Natural History and the Field Museum.

Putnam and the Peabody were selected to develop the archaeological and anthropology exhibition at the 1893 World's Columbian Exposition. Putnam used the exhibition to be the basis of the collection for the Field Museum after the Exposition ended. The current exhibit "All the World Is Here: Harvard's Peabody Museum and the Invention of American Anthropology" covers the Exposition and the founding of the Field Museum after.

The Peabody has been active in field work since the early 1880s. Many of the major sites investigated in the late 1800s and early 1900s were part of the Peabody's Expeditions. Charles P. Bowditch was a major contributor to the Peabody and funded most of the Expeditions. Bowditch also endowed a chair in Archaeology at Harvard University.

The Peabody made an agreement in 1891 to fund expeditions and to publish the work of Teobert Maler. The reports on this work are available online and still relevant.

The first large scale archaeological excavations at the site of Copan was started in 1891 by the Peabody and included study and documentation of the Hieroglyphic Stairway, the stelae and Altar Q. The museum collection contains molds of many of these items and full size replica of many of the stelae and one of Altar Q are on display.

Peabody supported work at Chichen Itza by Edward H. Thompson and many of the items from the dredging of the Cenote are in the Peabody's collection. The Peabody Museum has been returning important items to Mexico since the 1960s and continues to do so. Alfred M. Tozzer

Polychrome ceramic vessel from tomb at Holmul found in 1910.



Display case of Maya ceramics.

spent one season working at Chichen Itza after graduating from Harvard and before beginning a long career at the Peabody and Harvard.

A number of Maya polychrome ceramics are on display. Many of them were excavated from the site of Holmul in Guatemala by the Peabody Expedition of 1910-1911.

¹ Watson, Rubie (2001). *Opening the Museum: The Peabody Museum of Archaeology and Ethnology* (PDF). Cambridge, MA. The Peabody Museum of Archaeology and Ethnology, Harvard University. pp. 4.

The Peabody Museum of Archaeology & Ethnology at Harvard University

by **Keith Merwin** *continued from page 16*

Even the work of Carnegie Institute of Washington (CIW) Anthropology Division including the research undertaken at precolonial Maya sites in Mexico and Central America between 1929-1957 is now housed at the Peabody. This collection includes the 44,000 early images of Uaxactun, Copan, Piedras Negras, Yaxchilan, Coba, Quirigua, Tayasal, Kaminaljuyu, and Chichen Itza.

The Corpus of Maya Hieroglyphic Inscriptions Program begun in 1968 by Ian Graham is an active publication series that supports field research and the archive and publication of ancient Maya inscriptions and art.

Many of the reports, photographic images and other information included in the Peabody collections are available online. Below are some of the links:

Expeditions:

Expeditions and Discoveries – CURIOSity Digital Collections at: harvard.edu

The Corpus of Maya Hieroglyphic Inscriptions Program:



Copan stela replica from molds taken in early 1900s.

<https://peabody.harvard.edu/corpus-maya-hieroglyphic-inscriptions>

Publications:

<https://peabody.harvard.edu/peabody-publications>

Pre-1970 Publications | Peabody Museum at: harvard.edu

An Artistic Eye for the Maya

BECAN – Built in Río Bec style Structure IV. Campeche, Mexico

Becan was discovered by Karl Ruppert and John Denison in 1934. Originating in the middle Pre-Classic, this well-fortified site consists of several massive structures built in the Río Bec style. Several of the monumental buildings and monuments were constructed over a period that ended around 830 CE. Although Structure IV has lost much of its façade, my sketch presents an array of rooms and corridors threading through different levels of this structure. The site is located along Highway 186 in the state of Campeche and just west of the town of Xpuhil.



Steve Radzi has been illustrating Maya sites for many years. In 1995, his original black & white illustrations were exhibited at the IMS Conference at the Miami Museum of Science. In recent times, Steve has colored them, bringing them to life. These illustrations have not been published before. We shall feature his work in this and upcoming issues. Enjoy. You may visit Steve's site for more of his work. www.mayaavision.com

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