Let's Talk of Graves, Eccentrics, and Epitaphs
The Socio-Political Implications of Recent Discoveries on Structure A9 at Xunantunich, Belize
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Introduction

The upper Belize River Valley site of Xunantunich has been the focus of sporadic archaeological attention since the late 19th century. In spite of this long history of archaeological attention, and with the exception of Structure A1 (Leventhal 2010), few of the monumental buildings in the site’s epicentre had ever been intensively or extensively investigated. In an effort to redress this omission, and to further develop the site for its tourism potential, the Belize Department of Archaeology, through the Ministry of Tourism and Culture, initiated a four-year program of excavation and conservation at Xunantunich that lasted from 2000 to 2004. During the lifespan of this Tourism Development Project (TDP), we successfully excavated and conserved six of the major structures in the site epicentre. In addition to the latter, we also conserved the fragile East Frieze at the summit of the large Castillo palace complex; we also located fragments of a carved monument, and discovered one of the first elite burials in the site’s epicentre (Audet 2006; Awe 2008; Helmke et al. 2010:101-107). Eleven years later, and in an effort to continue the achievements of the TDP, we returned to the site in 2015 to begin the Xunantunich Archaeology and Conservation (XAC) Project. This new, multi-year, and collaborative effort between the Belize Institute of Archaeology and the BVAR Project has two major objectives. The first goal is to continue the efforts of the TDP through the excavation and conservation of the monumental architecture in the site core. The second goal is to acquire data that will further our understanding of the role of Xunantunich within the socio-political landscape of the Late Classic period (A.D. 650 – 900) Belize River Valley.

During the initial 2015 field season, our XAC Project excavated and conserved Structure A20, and we began excavating and exposing the architecture of Structures A2, and A3 (Figure 1). Structure A20 is a small shrine on the upper west flank of the Castillo. Linda Neff (1995:38-58) of the Xunantunich Archaeological Project (XAP) had previously excavated Structure 20 in the mid-1990s, but had reburied the building following her investigations. Structures A2 and A3 represent the northern and central temple pyramids of the site’s eastern triadic group. The southern mound of this triadic group, Structure A4, had been excavated and conserved by the TDP in 2004.

In the second year (2016) of operation, while Structures A2 and A4 were being conserved, our excavation and conservation efforts moved to Structure A9. This pyramidal mound is located on the west side of Plaza A-II, just northwest of Structure A1, and southwest of Structure A13. Like most of the buildings at Xunantunich, Structure A9 had received limited archaeological attention in the past. The first excavations on A9 were those conducted in the 1920s by British medical doctor and archaeological enthusiast Thomas Gann. When we began our investigation in 2016, a large crater at the summit of the mound still bore evidence of Gann’s earlier explorations. We know from Gann’s (1925:61-62) brief report of his excavations that he discovered a simple burial just below surface at the summit of the
building. In the 1990s, archaeologists working with the XAP Project, under the direction of Richard Leventhal and Wendy Ashmore, also excavated a small trench on the south flank of Structure A9. The XAP excavation uncovered the southern basal terrace and buttress of the structure. In this paper, we provide a brief review of the latter investigations and describe the work we conducted in 2016, and also examine the socio-political implications of the recent discoveries on Structure A9.

Archaeological Investigations on Structure A9

As was noted above, Structure A9 was first excavated by Thomas Gann almost a century ago. Gann (1925:61-62) subsequently provided a brief description of these investigations in Chapter 4 of his *Mystery Cities of the Maya: Archaeology and Adventure in Central America*. Besides informing us that his excavation was located at the summit of the structure, which he refers to as Mound E, Gann (1925:62) also reports that,

Two feet beneath the surface, and not contained within any chamber, were found portions of a human skeleton, consisting of fragments of the leg and arm bone, vertebrae, and part of the skull, which had probably belonged to a young adult. The corpse had been fully extended, with the head pointing towards the north. At the feet were found half a broken flint spear-head covered with a white patina, and a broken obsidian knife. The face had been covered by a shallow,
circular, saucer-shaped vessel of yellow pottery, upon which were outlined geometrical devices in red; this was broken into small fragments by the large blocks of limestone which had been piled upon it. On each side of this pot were found two very beautiful little orejeras, or earrings, of translucent light green jade, evidently just as they had fallen from the ears when disintegration set in. It was impossible to tell the sex of the skeleton from the bones found, but these tiny ear ornaments would indicate that it was that of a female, as the ear plugs worn by the men were very much larger, and heavier, though the spear-head would point to its being a male. The excavation was continued to a depth of six feet through the structure of the mound, but, as nothing further was discovered, it was discontinued […]

Based on Gann’s description of the burial (which we have designated as Burial A9-1), we previously deduced that the interment was likely
an intrusive burial dating to the Terminal Classic period (see Tilden et al. 2017a, 2017b). Intrusive burials dating to the Terminal Classic period are relatively common in western Belize, and have been recorded by BVAR archaeologists at almost all the major centers in the Belize Valley. Our investigations at the summit of Str. A4, in Group B, and on Structure A13 at Xunantunich (Audet 2006; Awe 2008; Green et al. 2018; Watkins et al. 2018), provide several local examples of these intrusive burials. Awe and his colleagues (Awe et al. 2017a, 2017b) have recorded an even greater number of these Terminal Classic interments in several epicentral buildings at Cahal Pech, leading them to suggest that small groups of Maya may have continued to inhabit and/or utilize sites in the Belize Valley for ritual purposes, including inhumations, during or after these centers were being abandoned.
The 1996 XAP excavations on Structure A9 were far less invasive than that of Thomas Gann. They consisted of two operations that were placed on the southern flank of the mound (Figure 2), and extended from plaza level to midway up the structure (Jamison 1996). The XAP operations exposed the base of the southern buttress of the building, and uncovered what might have been a crude wall that was part of a construction pen (Jamison 1996:64). Jamison (1996) concluded that the buttress on Structure A9 was likely modified during the late Hats’ Chaak (AD 650–750) or early Tsak’ (AD 750–900) phases (Figure 3) when modifications were also being made to Ballcourt 2, Structures A1, A8, and A17.

Our investigations of Structure A9 began in 2016 and we completed the conservation of the building in the summer of 2018. For a detailed description of these investigations the reader should refer to Tilden et al. (2017a and 2017b), and to Diane Slocum’s (2018) MA Thesis. A copy of Slocum’s thesis is also available on the BVAR Project’s web page. Our investigations on A9 consisted of three major operations (see Figure 2). The first operation was located at the summit of the mound and was designed to clear Gann’s 1920s excavation (see Figure 2), as well as to identify and record architectural features he may have exposed. The second operation encompassed the entire eastern base of Structure A9. Besides stripping and exposing the terminal phase architecture of the mound, this operation also included several small penetrating units along the butt of Stela A4, and at the base of the structure’s central stairway. The third operation consisted of an axial trench that extended from the eastern base of A9 to just below the summit excavation.

Within the first three weeks of operation, our investigations made several significant discoveries. The finds included Hieroglyphic Panels 3 and 4 on the southern and northern flanks of the stairway, Burial A9-2, plus two caches that were discovered below the first step of the building’s central stairway, and below the base of the uncarved Stela A4. The test units at the base of the mound also recorded four plaza floors (Figure 4). Two of these floors (Floors 1 and 3) represent the resurfacing of earlier (Floors 2 and 4) plaza surfaces and are not associated with any major building efforts. The axial trench (Figure 5) revealed that Structure A9 was likely erected in a single major construction episode. If there is an earlier construction phase, one that may be associated...
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with Plaza Floors 3-4, that structure would have to be deeply buried beneath A9, and less than half a metre in height. This architectural data reflects a construction sequence and pattern similar to what we recorded on Structures A2, A3, and A14 (Santasilia and Tilden 2016), and to that of Structure A1 which was excavated by Leventhal (Jamison 1996, 2010) in the 1990s. It also serves to corroborate that much of the monumental architecture in the Xunantunich site core was constructed rapidly during the Late Classic period Hats’ Chaak phase.

The Structure A9 Caches, Burial and Hieroglyphic Panels

Structure A9 Cache 1 & 2

We uncovered the first Structure A9 cache (Cache 1) just below the butt of the fragmented Stela A4 (Tilden et al. 2017b). The cache (Figure 6a) contained 28 eccentric implements, “14 of which were bifacially worked, and 14 of which were denticulate flakes or unifacially modified flake eccentrics. Bifacial eccentric forms in the cache included a scorpion, several crescentic forms, two denticulate laurel leaf bifaces, and a solid circular disk” (Sullivan 2017:104).

Cache 2 was located along the central axis of Structure A9, at the base of the building’s lowermost step. The cache (Figure 6b) contained nine obsidian eccentrics, several large and small marine shells, a fragment of branch coral, plus a number of freshwater snail shells. Other exotics included several small fragments of jadeite and pyrite, plus five pieces of an unidentified red mineral, possibly hematite or cinnabar (Sullivan 2017:108; Tilden et al. 2017b). In addition to the cosmologically significant number of eccentrics, Sullivan (2017:108) notes that “The combination of obsidian, jadeite and marine shells within caches is a common ritual practice throughout the Maya lowlands, evoking [concepts pertaining to] the primordial sea.” For detailed descriptions of the Structure A9 caches, plus an analysis of how the A9 caches compare with other caches at both Xunantunich and the Upper Belize Valley, please refer to Sullivan (2017) and Tilden et al. (2017b:337-343).

Figure 6a-b. Caches 1 and 2 from Structure A9 at Xunantunich (after Sullivan 2017).

Burial A9-2

We uncovered Burial A9-2 just below modern ground surface, approximately midway up the axial trench on Structure A9 (see Figure 5). Three of the vaulted tomb’s central capstones had fallen into the burial chamber causing soil and other debris to plummet in and fill part of the chamber. Once cleared, the
chamber measured 4.44 m long (N-S) by 2.14 m wide (E-W) and 2.62 m high. Except at its southern end, the walls of the chamber were well constructed with cut limestone blocks. The east, west, and northern walls were also originally faced with a thick layer of plaster, but much of the plaster had peeled off and fallen onto the human remains and grave goods. The southern wall of the chamber was conspicuously different from the other three walls. Unlike the latter, which were straight sided, built of faced stones and plastered, the southern wall was made of irregular boulders, it listed at an angle, and was not plastered. These characteristics, particularly the irregularity of the boulders and lack of facing stones, strongly suggest that the tomb was accessed from a vaulted passage at the south end of the chamber, and that following the interment of the individual, the south end was sealed from the outside of the chamber. We further concluded that the tomb did not postdate the construction of A9. Rather, the tomb was purposefully incorporated into the architecture of the temple, and both were likely constructed concurrently. In other words, it is possible that Structure A9 was purposely constructed as the funerary temple of the individual who was interred within the structure’s large tomb.

Burial A9-2 (Figure 7) contained the remains of an adult individual who was between 30 to 40 years at the time of death. The body was lying in an extended supine position with head to the south. Because of the disarticulated nature of the human remains, and because several of the bones were lying on top of the grave goods, we believe that the individual was originally placed on a wooden bier or platform (Slocum 2018:69). The funerary bier eventually rotted and collapsed, causing the skeletal remains to fall on top of the grave goods. Beneath and around the skeletal remains were 37 whole and one partial ceramic vessel, jade and shell jewellery, 13 obsidian blades, a spindle whorl, plus a number of other small objects and several large feline and deer bones that clustered together in the north-western corner of the chamber, as though these had been bundled upon deposition in antiquity (Table 1). According to Burke et al. (2017:434, 2018), the presence of both predatory and prey animal remains in the tomb may reflect the predator-prey-dichotomy in Maya ideology, where elite members of society are associated with predators and commoners are associated with prey. This assemblage is comparable to other such bundles including that found in the tomb of the famed Jasaw Chan K’awiil (r. AD 682-734) of Tikal, which contained a dizzying array of carved and inscribed bones (see Moholy-Nagy and Coe 2008: Figs. 189-209). The presence of a big cat phalanx near the hands of the individual in the tomb further suggests that the latter may have been wearing a jaguar or puma cape, or even mittens made of the paws of a large feline, in keeping with contemporaneous depictions in Classic Maya iconography. Given the onomastic precedent, wherein jaguar paws are a central element of several royal Mesoamerican names (see Colas 2014), the inclusion of this paw may have served to name the individual interred in the tomb. This pattern is also reflected in the tomb of the eminent and precisely contemporary Snake king, Yich’aak K’ahk’, ‘paw of fire’ (r. A.D. 686-697), whose

Figure 7. Plan view of Burial A9-2 at Xunantunich (after Slocum 2018).
Table 1. Summary of Xunantunich Structure A9-Burial 2.

<table>
<thead>
<tr>
<th>Grave Type</th>
<th>Vaulted, stone-lined tomb (type defined by Welsh 1988)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of Chamber</td>
<td>4.44 m (N/S) x 2.14 m (E/W) x 2.62 m tall</td>
</tr>
<tr>
<td>Sex of Individual</td>
<td>Female</td>
</tr>
<tr>
<td>Age at Death</td>
<td>30-39 years</td>
</tr>
<tr>
<td>Body Orientation</td>
<td>Supine, head to the south</td>
</tr>
<tr>
<td>Associated Artifacts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6 jadeite beads</td>
</tr>
<tr>
<td></td>
<td>2 teeth have jade inlays</td>
</tr>
<tr>
<td></td>
<td>13 obsidian blades</td>
</tr>
<tr>
<td></td>
<td>37 whole ceramic vessels</td>
</tr>
<tr>
<td></td>
<td>1 partial ceramic vessel</td>
</tr>
<tr>
<td></td>
<td>4 chert flakes</td>
</tr>
<tr>
<td></td>
<td>2 shell pendants</td>
</tr>
<tr>
<td></td>
<td>1 limestone spindle whorl</td>
</tr>
<tr>
<td></td>
<td>½ a shell ring</td>
</tr>
<tr>
<td></td>
<td>bone hair pins</td>
</tr>
<tr>
<td></td>
<td>feline and deer remains</td>
</tr>
<tr>
<td>Approximate Date</td>
<td>Early Hats’ Chaak (AD 670-740) based on the following results:</td>
</tr>
<tr>
<td></td>
<td>• AD 670-775, AMS date on human remains</td>
</tr>
<tr>
<td></td>
<td>• AD 690-890, AMS date on animal remains</td>
</tr>
<tr>
<td></td>
<td>• AD 692, period-ending date on Vessel 15</td>
</tr>
<tr>
<td></td>
<td>• AD 672 or AD 721, period-ending date on Vessel 23a</td>
</tr>
</tbody>
</table>

Figure 8. A selection of glyph-bearing vessels from Burial A9-2. a) Vessel 15 with period-ending date of 8 Ajaw. b) Vessel 22a with Naranjo-style cormorant on the inside and pseudoglyphic text on the outer circumference. c) Vessel 23a with period-ending date of 5 or 10 Ajaw (drawings and photos by Christophe Helmke).
grave has been exposed in Tomb 4 within Str. 2B-sub at Calakmul, where part of the paw of a large feline was found amidst the remains of his headdress (Carrasco Vargas et al. 1999; García Moreno and Granados G. 2000).

We submitted samples of both the human and animal remains from Burial A9-2 to the Pennsylvania State University AMS facility for radiocarbon dating, and we sent a sample of the human remains to Dr. Carolyn Freiwald at the University of Mississippi for strontium isotope analysis. Results of the isotope analysis are described further below. Results of the 14C analysis on the human remains produced a date of AD 660 - 775 (2σ calibrated range). The analysis of the animal remains yielded a date of AD 690 - 890 (2σ calibrated range). Both dates share considerable overlap, indicating that the individual in Burial A9-2 was most likely alive during Xunantunich’s Hats’ Chaak phase (AD 670-780) (Tilden et al. 2017a:354). Equally significant is the fact that both of these dates also overlap with the tomb ceramic data that we discuss below.

As we noted above, Burial A9-2 contained one partial and 37 whole ceramic vessels. A detailed description and analysis of this pottery is included in Appendix B of Diane Slocum’s (2018) MA thesis. In the latter study, Slocum (2018:122-124) assigned eight of the vessels to the Tiger Run Complex, and 30 to the Spanish Lookout Complex. Tiger Run (AD 600 – 700) is roughly equivalent to the Samal Phase at Xunantunich (see Leventhal et al. 2010: Fig. 1.4) while early facet Spanish Lookout (AD 700 – 800) corresponds to the Hats’ Chaak phase (AD 670-780) (Tilden et al. 2017a:354). Equally significant is the fact that both of these dates also overlap with the tomb ceramic data that we discuss below.

Vessel 23a, a Benque Viejo Polychrome bowl (Figure 8c), is also decorated with a period-ending date, but unlike Vessel 15, the date on Vessel 23a is painted on the exterior wall of the vessel. In spite of this difference, the execution of the date on Vessel 23a follows the same format as that of Vessel 15, with the numerical coefficient set to the right, after the Ajaw glyph. This format differs from most examples of vessels with painted period-ending dates where the numerical coefficient typically precedes the Ajaw glyph.

Because of the stylistic execution of the numerical coefficient on Vessel 23a, it is a bit more challenging to determine the actual value of the number on this vessel. It is possible, for example, that the number is either a 10 or a five. If it is a 10, the period-ending date would fall on 10 Ajaw or AD 672, a date well within the lifespan of the individual in the tomb. Alternatively, if the number is a five, the date would then likely commemorate a lahuntun, or half-k’atun (a 10-year period) and correspond to AD 721. If the latter date is accurate, it would mean that the vessel was painted 41 years after Naranjo defeats Caracol (in AD 680), and that the individual in Burial A9-2 may not have been alive at the time (for a more detailed discussion see Tilden et al. 2017a:367-373).

Vessel 22a is the third vessel of significant interest in Burial A9-2. This Saturday Creek Polychrome bowl is decorated with a band of pseudoglyphs on the exterior wall of the vessel, and with a cormorant on the interior base of the bowl (Figure 8b). The form, imagery, and stylistic attributes of the vessel share close parallels with polychrome bowls from Naranjo (see Tilden et al. 2017a:371-373). This is especially true of the stylistic rendering of the cormorant. In the Belize Valley, cormorants are conspicuously painted black, and
are generally depicted as a long lean water bird. In contrast, at Naranjo, cormorants are predominantly painted red, and with outstretched wings giving them a decidedly more full-bodied appearance. These similarities strongly suggest that Vessel 22a from Burial A9-2 at Xunantunich was likely an import from the Naranjo region, a possibility we hope to evaluate by future INAA analysis of the vessel.

The Hieroglyphic Panels

Our investigations on A9 uncovered two hieroglyphic panels flanking the central stairway of the structure. Both of these were encountered re-set in secondary contexts. The first panel (Figure 9), which we have now designated as Xunantunich Panel 3, was lying on its side leaning against the southern stairside outset of the building (see Figure 2). The fact that Plaza Floor 1, which is a resurfacing of Plaza Floor 2, lipped up to the lower base of Panel 3 suggests that the panel was placed against the building prior to the last resurfacing of Plaza AII. The second panel, Panel 4 (Figure 9), was discovered north of the Structure A9 stairside outset. Unlike Panel 3, we found Panel 4 broken in two fragments, both of which were lying flat and face down on the plaza floor. We believe that the condition and disposition in which we discovered Panel 4 is likely the result of forces associated with post-abandonment bioturbation and structural collapse. Alternatively, it could be the result of peri-abandonment activity. At Cahal Pech, for example, peri-abandonment activities by Terminal Classic pilgrims or occupants to the site moved and repositioned several of the site’s large monuments. Morton et al. (n.d.) as well as Helmke et al. (2006, 2010, 2015) have recorded similar examples of monument displacement during the Terminal Classic at Caracol, Xunantunich and several sites in western Belize.

Following our discovery of Panels 3 and 4, Helmke and Awe (2016a, 2016b) published two articles that describe the decipherment of the hieroglyphic texts, as well as the socio-political and historic significance of the monuments. This was followed up in two papers by Simon Martin (2017; Martin and Velásquez 2016). Here, we provide a brief overview of this information and recommend that readers refer to the aforementioned publications for details on the significance and implications of the hieroglyphic texts.

In the Helmke and Awe’s (2016a, 2016b) original study of the two monuments, we noted that Panel 4 contains a single major clause that starts with the date 18 K’ank’in. Interestingly, this date, which corresponds to December 7 in AD 642, also occurs on a panel from the hieroglyphic stair discovered by Teobert Maler (1905) at the site of Naranjo in Guatemala. Equally significant is the fact that the clause on Panel 4 provides an articulate description of the dynastic re-establishment of the powerful Classic Period Snake dynasty from its original seat of power at Dzibanche (in Quintana Roo) to the site of Calakmul located 130 kilometers to the southwest (in Campeche). Given the manner in which it is recounted on Panel 4, this relocation process was evidently thought to be completed by the lahuntun Period Ending of 9.10.10.0.0. (or December 7, AD 642).

The inscriptions on Panel 3 contain three statements. The first statement refers to the death of Lady Batz’ Ek who passed in AD 638. Inscriptions at the site of Caracol, located about 50 kilometers south of Xunantunich, identify Lady Batz’ Ek as the mother of K’an II, the most prominent ruler of that site’s royal lineage (Helmke and Awe 2018; Martin and Grube 2000:91). The second statement on Panel 3 includes another death statement, this time for Waxaklajuun Ubaah Kan, a ruler of the Kanu’l or Snake Dynasty who died in AD 640. The third statement refers to a ballgame, played following the capture of Waxaklajuun Ubaah Kan in AD 642, thereby reiterating one of the events that had been mentioned at the start of the narrative presented on the hieroglyphic stair.

Prior to the discovery of the Xunantunich panels, the transfer of the Snake Dynasty from its original seat of power at Dzibanche to Calakmul had only been conjectured by epigraphers (Martin 2005, 2017). A direct reference for this change, however, had never been recovered. Our panels also made it clear that the transfer of power from Dzibanche to Calakmul was not peaceful, but rather the result of a “civil war” between these two factions of the Snake Dynasty. The Dzibanche faction under the leadership of Waxaklajuun Ubaah Kan
lost that conflict, he was taken captive, and may have met a rather sudden end at the hands of his dynastic relative, as is suggested by the interposed ti yeh-tuun, or ‘by the edge of a knife’ (Helmke and Awe 2016a:10).

With the establishment of its new seat of power at the city of Calakmul, the Kanul’ or Snake Dynasty eventually became one of the most powerful kingdoms of the Classic period Maya world. From about AD 562 to almost the end of the 7th century, the kings of the Snake Dynasty established strategic alliances that enabled them to defeat and subjugate their major regional competitors in the Maya lowlands. These successes also allowed them to exact tribute from the defeated polities, and to establish Calakmul as one of the largest and most dominant city states in the ancient Maya world.

But what does all this have to do with Xunantunich? What role, if any, did Xunantunich play in the political turmoil that afflicted the central Maya lowlands in the late 6th and early 7th centuries? To answer these questions, we turn again to the two panels we discovered in front of Structure A9. Shortly after their discovery, we begun to ponder the origins of the panels because neither the raw material they were made from, nor the style of execution and palaeography of the inscriptions compare to other monuments at Xunantunich. In the case of the raw material, both panels were carved from a very dense limestone that appear to be quite different from that used to carve the other monuments at Xunantunich. The dense limestone, in fact, is far more similar to that used for monuments at Caracol than it is to the raw material used for monuments at nearby sites. In the case of their stylistic attributes, Panels 3 and 4 are both decorated with two medallions, each of which contains sets of four hieroglyphs. Both Helmke and Awe (2016a) and Slocum (2018:61-
68) note that while “The use of medallions” and “the style of the glyphs” is very similar to those present on the Naranjo Hieroglyphic Stair, and on monuments at Caracol, this practice is conspicuously absent at Xunantunich.

The Naranjo Hieroglyphic Stair was first documented at the Guatemalan site of Naranjo by Austrian explorer Teobert Maler in 1905. In a subsequent visit to the site in 1909, epigrapher Sylvanus G. Morley (1909) recorded the calendrical information carved on the stair. In yet another visit to Naranjo in the 1970s, British epigrapher Ian Graham (1978, 1980) illustrated and recorded the monuments of the site, as well as each of the panels. Graham’s documentation of these hieroglyphic panels remains the primary source of information on the Naranjo Hieroglyphic Stair because all but one fragment of the stair was subsequently displaced or looted from the site and have disappeared into the illicit antiquities market since the 1970s.

A subsequent analysis of Graham’s photographs and drawings by Linda Schele (see Schele and Freidel 1990) resulted with several very interesting observations. The study revealed that the inscribed sections, or blocks, of the stair were out of syntax, that the stair was missing some fragments, and that the blocks had been set in an illegible order, some even mounted on their sides (as in the case of Panel 3 at Xunantunich and probably Panel 4 also). Even more interesting was that, in spite of the scrambled order of the glyph blocks, the inscriptions indicated that the stair had been commissioned by K’an II, ruler of Caracol, in AD 642 to record the preceding two decades of his reign, including the defeat of Naranjo in AD 631. Schele and Freidel (1990) also argued that K’an II purposely erected the hieroglyphic stair in the capital of his defeated enemy in an apparent effort to add “insult to injury.” Schele and Freidel’s conclusion, however, bothered later epigraphers for it failed to explain why the inscribed blocks of the stair were placed out of syntax and order, unless this occurred in antiquity, following political reversals that saw the re-emergence of Naranjo under the regency of Lady Six Sky (Helmke 2017). These inconsistencies eventually led Simon Martin (2000:57-58) to offer an alternative hypothesis. He proposed that the hieroglyphic stair was originally erected by K’an II at his own capital of Caracol in AD 642. Thirty-eight years later, in AD 680, K’ahk’ Xiix Chan Chaahk of Naranjo avenged his city by attacking and defeating Caracol, and then dismantled and transported most of the fragments of the hieroglyphic stair to his capital city of Naranjo (with one panel left at Ucanal during the returning triumphal march). These fragments were subsequently mounted on a building at Naranjo, but purposely reassembled out of order to make them illegible (or out of syntax), in much the same way as at Xunantunich where the panels were mounted on their sides.

When we put all these seemingly disjointed pieces of information together in a cohesive manner, the following picture begins to emerge. It is apparent that following his defeat of Naranjo in AD 631, K’an II commissioned the carving and construction of a hieroglyphic stair that was erected at his capital city of Caracol. The date on Panel 4 indicates that the stair was completed and erected in AD 642. Besides describing his defeat of Naranjo, the text of the hieroglyphic stair also mentions the death of the mother of K’an II, Lady Batz’ Ek’, the death of Waxaklajuun Ubaah Kan of the Snake dynasty, and the transferal of the Snake dynasty’s seat of power from Dzibanche to Calakmul. The reason why K’an II makes reference to these events on the hieroglyphic stair was because he was an ally of the Snake dynasty, and because his mother may have been affiliated with that dynasty, coming to Caracol as part of a marriage alliance in AD 584. In AD 680, 49 years after their defeat by Caracol, the ruler of Naranjo, K’ahk’ Xiix Chan Chaahk, exacted revenge on Caracol, then moved most of the blocks of the hieroglyphic stair to Naranjo.

While the latter information certainly allows us to contextualize the hieroglyphic texts of Panels 3 and 4 at Xunantunich, and while it also helps us to determine the origins of the two monuments, two major questions still remain unanswered. That is, how did two fragments of the so-called Naranjo Hieroglyphic Stair make their way to Xunantunich, and why were they placed on the flanks of Structure A9? One potential, but hypothetical, answer was that the elite individual interred in Burial A9-2 was somehow connected with the AD 680 military
campaign that resulted in the defeat of Caracol, and with the subsequent dismantling and removal of the stairs from their original location at Caracol. Inscriptions at both Naranjo and Xunantunich indicate that the two sites were close allies during the 7th and 8th centuries (Helmke and Awe 2012; Helmke et al. 2010). We therefore hypothesized that if the individual in Burial A9 participated in the defeat of Caracol in AD 680, it is likely that the panels may constitute a type of trophy or their share of the war booty. This could also explain why the two panels were eventually placed on the flanks of the stairway of the individual’s funerary temple.

To validate this hypothesis, however, the individual in Burial A9-2 would have had to be alive and of mature age during the battle between Naranjo and Caracol in AD 680. As we noted above, AMS 14C dating of the human remains in Burial A9-2 produced a date of cal AD 660–775, and that of the deer bone yielded a date of cal AD 690–890 (Figure 10). Although both assays have a spread of about a century, the two dates overlap and serve to confirm that the individual in the tomb could certainly have been alive and old enough to participate in the battle between Naranjo and Caracol. The period-ending dates on the two ceramic vessels found in the tomb provide additional confirmation for this possibility (see Figure 10). Recall that one of the possible period-ending dates on Vessel 23a may be 10 Ajaw or AD 672, and that on Vessel 15 is 8 Ajaw or AD 692. Again, both of these dates overlap with the known historical dates and the war event, and provide additional support for the hypothesis that Xunantunich likely participated in the battle against Caracol.

**Strontium Isotope Analysis of the Burial A9-2 Human Remains**

Prior to our investigations, researchers at Xunantunich had noted that the site did not rise to prominence until sometime between the 7th to 8th centuries AD (LeCount and Yaeger 2010b; LeCount et al. 2002). They further surmised that Xunantunich’s rapid growth at this time corresponded with a shift in the polity’s political organization, a shift which saw it transition from an autonomous political center to a polity subordinate to Naranjo (Ashmore 2010; LeCount and Yaeger 2010b, 2010c). They also suggested that Xunantunich was either a dependent ally or a directly ruled annexed province of Naranjo, and that the site’s rulers could have either been members of a local elite family that was elevated to this new position of authority, or they could have been outsiders inserted into the valley’s political landscape (LeCount and Yaeger 2010b, 2010c). Considering that the elite individual in Burial A9-2 was likely alive during these dynamic political times, we concluded that their remains would be ideal to test whether the individual was local or foreign. To make this determination, we forwarded samples of the human remains to Dr. Carolyn Freiwald for strontium isotope analysis at the University of Mississippi. Research by Freiwald et al. (2014) had previously established that the mean strontium values for the Belize River Valley sites was about 0.7086 with a range between 0.7082 and 0.7090. Results of the

![Figure 10. Chronology of events associated with Burial A9-2 and with Panels 3 and 4 from Xunantunich.](image_url)
strontium isotope analysis on the Structure A9 individual yielded a value of 0.708386. This value fits solidly within the Belize River Valley strontium signatures, suggesting that the elite individual buried in the tomb was local, and thus not inserted into the Xunantunich political landscape by Naranjo. By extension, it also provides greater support for a patron client or ally relationship between the two sites.

DNA Analysis of the Burial A9-2 Human Remains

During excavation of the human remains in Burial A9-2, our biological anthropologists noted that, while the human remains were poorly preserved, the femurs and fragment of the pelvis were somewhat robust. These and other attributes led them to conclude that the individual was possibly an adult male whose age at death ranged between 30 to 40 years. We further concluded that these characteristics, plus the quality of the tomb and its location in Structure A9, strongly indicated that the occupant of Burial A9-2 was likely an elite male of significant status at Xunantunich. Even more significant was the fact that both our AMS 14C and period-ending dates on the ceramics all suggested that this individual was likely alive during the campaign that led to the defeat of K’an II of Caracol, and the subsequent dismantlement and removal of the hieroglyphic stair to Naranjo. Assuming that this individual actively participated in the battle as an ally of Naranjo, it could explain why the two panels made their way to Xunantunich, perhaps as a trophy or share of the war booty, and why the panels were purposely placed in front of their funerary temple. Given these very plausible conclusions, we were very astonished when results of the DNA analysis established that the occupant of the tomb was female rather than male.

Far from being disappointing, or even perplexing, results of the DNA analysis actually served to make our investigations that much more provocative and intriguing. We should, for example, stop assuming that military engagements and political affairs in ancient Maya society were solely the domain of elite males. Both the hieroglyphic and archaeological records provide us with several examples to the contrary (see e.g. Arden 2002; Josserand 2002; Martin and Grube 2000; Proskouriakoff 1961). Unquestionably, one of the best examples of this situation is that of Lady Six Sky, “warrior queen” of Naranjo (Helmke 2017). Shortly after her arrival to Naranjo from Dos Pilas in AD 682, Lady Six Sky “assumed every … prerogative of kingship”, including “military symbolism” (Martin and Grube 2000:74). As regent of Naranjo, she also successfully waged war with several of her neighbours. During the first three years of her son’s reign, she campaigned, nominally on behalf of her reigning son, against the locality of K’inichil Kab, as well as the cities of Tubal, Bital, Komkom, and even Tikal (Martin and Grube 2000:76). Then, after her son’s eventual ascendance to power, she continued to serve alongside him “for a substantial period” and may even have ensured that the succession passed agnatically from one of her sons to another, rather than generationally (Helmke and Savchenko 2016). This would have ensured Lady Six Sky’s place in the court and at the centre of power (Helmke 2017). Could the Lady in Burial A9-2, therefore, be Xunantunich’s contemporary and equivalent of Naranjo’s Lady Six Sky, a strong and charismatic regent, who served during a time of adversity, bridging the dynastic continuity of the court of Xunantunich? These are questions that we may never be able to accurately answer, nonetheless, these are certainly queries worth pondering.

Conclusion

When we began the Xunantunich Archaeology and Conservation Project in 2015, there was no inclination that our investigations would have revealed the kind of rich and complex data that the excavations on Structure A9 have produced. The caches of eccentric flints, the tomb, and the hieroglyphic panels, all serve to shed new light on the social, political, and ideological significance of this Belize Valley center during one of the most dynamic periods in lowland Maya prehistory. The panels, in particular, solidly place Xunantunich in the midst of the rivalry between the primary centers of Caracol and Naranjo, while at the same confirming the hypothesized transferral of the Snake Dynasty from Dzibanche to Calakmul. The significance of these discoveries is perhaps
best summarized in Simon Martin’s (2017:1) article where he notes that:
The summer of 2016 produced discoveries of tremendous importance for understanding the political history of the Classic Maya lowlands. While excavating Structure A9 at Xunantunich, Belize, Jaime Awe and his team unearthed two inscribed monuments of rare significance, their contents revealed in detailed textual analyses by Christophe Helmke (Helmke and Awe 2016a, 2016b). These inscriptions support and elaborate some existing proposals, while supplying entirely new twists to the story.

Equally important, especially from a methodological point of view, is that our investigations at Xunantunich exemplify the value of applying multi-disciplinary scientific analyses to the study of the archaeological record. It demonstrates, for example, the value of combining meticulous excavation techniques with the application of strontium isotope analysis on ancient human remains, zooarchaeological analysis of animal remains, artifact analysis of grave goods, radiometric dating of human and other organic remains, and the decipherment of ancient Maya hieroglyphic writing in our study of archaeological data. It is only through the application of this type of holistic approach that we can more accurately unravel many of the secrets of the past, while at the same time contribute to the further development of the archaeological record and cultural resources of Belize.

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References

Arden, Traci (editor)
2002 Ancient Maya Women. AltaMira Press, Latham.

Ashmore, Wendy

Audet, Carolyn M.
Awe, Jaime J.  


Awe, Jaime J., Claire E. Ebert, Carolyn Friewald and Kirsten Green  

Awe, Jaime J., Julie A. Hoggarth and James J. Aimers  

Burke, Chrissina C., Katie K. Tappan, Gavin B. Wisner, and Jaime Awe  
2018 Ritual Use of Animals in Ancient Maya Mortuary Contexts: Results of Faunal Analysis from the Structure A9 Tomb at Xunantunich. *Research Reports in Belizean Archaeology* 15:105-114.

Burke, Chrissina C., Gavin B. Wisner, Katie K. Tappan, Dylan M. Wilson, & Norbert Stanchly.  

Carrasco Vargas, Ramón, Sylviane Boucher, Paula Alvarez González, Vera Tiesler Blos, Valeria García Vierna, Renata García Moreno, and Javier Vásquez Negrete  

Colas, Pierre Robert  

Freiwald, Carolyn, Jason Yaeger, Jaime Awe, and Jennifer Piehl  

Gann, Thomas W. F.  

1925 *Mystery Cities of the Maya: Archaeology and Adventure in Central America*. Charles Scribner’s Sons, New York.

García Moreno, Renata, and Josefina Granados G.  

Gifford, James  

Graham, Ian  


Helmke, Christophe  

Helmke, Christophe and Jaime J. Awe  


Awe, Helmke, Slocum, and Tilden


Helmke, Christophe & Ivan Savchenko

Helmke, Christophe, Jaime Awe, and Nikolai Grube

Helmke, Christophe, Christopher R. Andres, Shawn G. Morton and Gabriel D. Wrobel

Helmke, Christophe, Harri Kettunen and Stanley Guenter

Jamison, Tom R.

LeCount, Lisa J., Jason Yaeger, Richard M. Leventhal, and Wendy Ashmore

Leventhal, Richard M., Wendy Ashmore, Lisa J. LeCount, and Jason Yaeger

Maler, Teobert

Martin, Simon


2017 The Caracol Hieroglyphic Stairway. Maya Decipherment: Ideas on Ancient Maya Writing and Iconography: https://decipherment.wordpress.com/2017/01/20/the-caracol-hieroglyphic-stairway/

Martin, Simon and Nikolai Grube
2000 Chronicle of the Maya Kings and Queens: Deciphering the Dynasties of the Ancient Maya. Thames and Hudson, London.

Martin, Simon, and Erik Velásquez

Moholy-Nagy, Hattula, and William R. Coe
The Socio-Political Implications of Recent Discoveries at Xunantunich

Tikal Reports 27A. University Museum of Archaeology and Anthropology, University of Pennsylvania, Philadelphia.

Morley, Sylvanus G.


Neff, Linda S.

Proskouriakoff, Tatiana

Slocum, Diane

Schele, Linda and David Freidel

Santasilia, Catharina E. and Douglas Tilden

Sullivan, Kelsey
2017 Caching It In: Local Patterns in Ancient Maya Ritual Caches of Eccentric Lithics within the Belize Valley. Unpublished MA Thesis, Department of Anthropology, Northern Arizona University, Flagstaff.

Tilden, Doug, Jaime J. Awe, Diane L. Slocum, Hannah H. Zanotto, Chrissina C. Burke, Ashley McKeown, Lee Meadows Jantz, Christophe Helmke, and Jorge Can

Tilden, Doug, Diane L. Slocum, Jaime J. Awe, and Kelsey Sullivan

Yaeger, Jason