Myth, ritual, and the Classic-period Maya sweat bath

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The settings and stages of religious ritual anchor ideologies and knit together communities. They are often built to reference and reassert shared beliefs in the myths that give shape to ceremonial life. One such structure in Mesoamerica is the sweat bath (fig. 1; Alcina Franch 1981; Balanzario and Fierro 2017; Girón Méndez 1985; Gossen 1999, 15–17; Groark 1997, 50–54; 2005; Katz 1993; Lillo Macina 2007; Wagley 1949). In contemporary communities, sweat baths are used for medicinal purposes, of which birth and obstetrics are the most widely documented (Cosminsky 2001; Foster and Anderson 1978, 59–60; Messer 1987; Neuenswander and Souder 1977, 98–103; Virikki 1962, 79). Sweat baths are also conceived of as liminal locations and animate social relations. They are understood as the womb of the earth, the cave wherein humans were first created and return to after death, but also as the body of grandmother deities, great creators in Mesoamerican mythology (McCafferty and McCafferty 2008; Moedano 1977; Prechtel 1990). Paradoxical in nature, grandmother deities both give and take life; they are the embodiment of the ferocious earth that simultaneously sustains and destroys the conditions for human life. While these aged deities and their relationships to sweat baths are well attested for most of Mesoamerica, less is known regarding their associated myths and rituals dating back to the Early Classic period.

In this article, I present evidence of an Early Classic–period sweat bath from the site of Xultun, Guatemala, known as Los Sapos (fig. 2). With both a preserved iconographic program and two complex deposits reflecting the place's identity and related rituals, the Xultun case study offers insights into long-standing practices and relationships Mesoamerican peoples have maintained with sweat baths. I first provide a general summary of sweat bath architecture, which I follow with an introduction to the structural features of Los Sapos. Next, I review the existing data regarding the ideological history of sweat baths for the Classic Maya and foreground the discussion of the Los Sapos iconography. Unlike most representations, there is a limited comparative corpus for the figure portrayed at Los Sapos. As such, the present iconographic study incorporates formal analysis and builds to a comparative study that draws on Mesoamerican visual culture. I also include archaeological evidence of ritual deposits and material negotiations alongside ethnohistoric and ethnographic records, which add richness to the discussion of myth, ritual, and emic relations with sweat baths. Overall, I argue that a reptilian earth deity—related ideologically and iconographically to aged deities known from a broad corpus of Mesoamerican mythology—is portrayed and embodied at Los Sapos. Akin to other ferocious reptilian earth monsters (Heyden 1975, 2005, 21–22; Seler 1963) and aged grandmother deities (Chinchilla Mazariegos 2017, 2018), the figure portrayed at Los Sapos is interpreted as a primary actor in the events of creation and destruction, one whose name is tentatively translated as **IX-TZUTZ-?-SAK(IL)** (Marc Zender, pers. comm., 2019).

Architecture

The Mesoamerican sweat bath—also referred to as a steam bath, sweat house, sauna, *tuj* (Quiché of the Guatemalan Highlands; Edmonson 1965, 127; Orellana 1987, 58), *temazcal* (from the Nahuatl term *temazcalli*; Campbell 1985, 306; Karttunen 1992, 222), or *pib na* (Classic Mayan; Stuart 1987, 38)—illustrates significant variability in its form and placement within the built and natural environment (Alcina Franch et al. 1982; Cresson 1938; Girón Méndez 1985; Halperin 2017; Satterthwaite 1952; Servain 1986; Taladoire 1974). In plan, these structures may be circular, square, or rectangular with walls composed of stone, mud, wattle, or living rock. Their dimensions and overall size have a considerable range, as they could be built in large ceremonial centers and adjacent to residences, fitting dozens of people or as few as one to two individuals. The roofs can be of wooden slats and tiles, domed with plaster or mud, or low but wide vaults constructed of masonry architecture covered in plastered stucco. Entrances are generally low, narrow, and easily sealed to trap or contain steam, the intensity of which is moderated by flues or exit holes. These entrances also serve the purpose of draining the structure; thus, doorways are associated with sunken channels that

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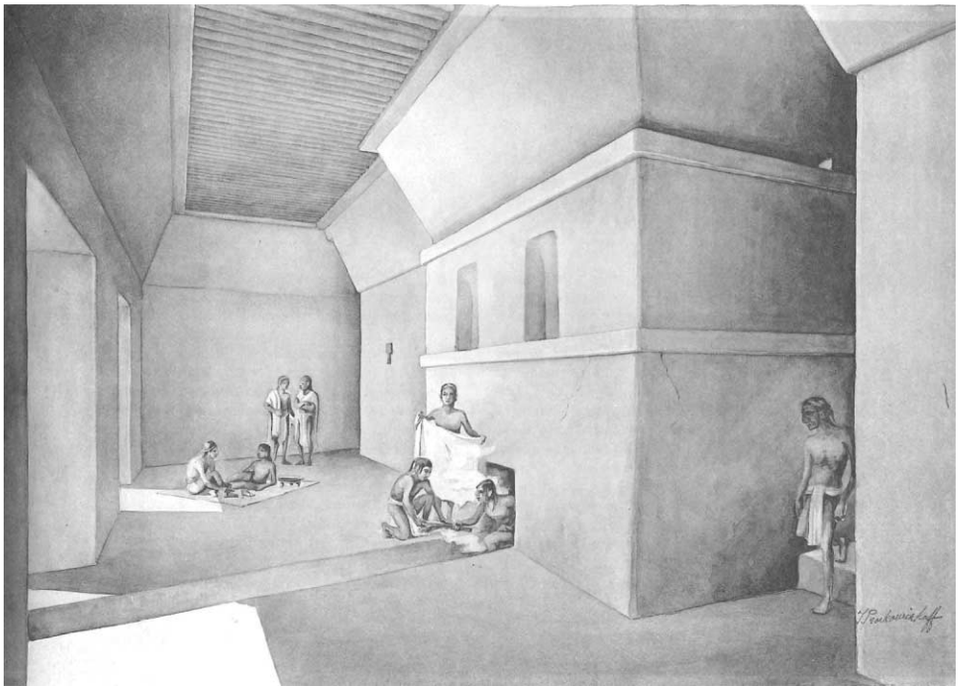

Figure 1. Reconstruction of one of the Classic-period (ca. AD 250–800) sweat baths (structure P-7) at Piedras Negras (Coahuila, Mexico). Drawing by Tatiana Proskouriakoff; gift of the Carnegie Institution of Washington, 1950. © President and Fellows of Harvard College, Peabody Museum of Archaeology and Ethnology, 50-63-20/13321.

connect the exterior to a hearth or furnace, termed a firebox, inside the structure. All features considered, a sweat bath consistently has a steam chamber, a firebox, and a drainage channel and is able, either through the small size of the doorway or other means of enclosure, to contain heat and steam.

Sweat baths were integral components of the ancient Maya built environment (Benavides and Ojeda Mas 2015; Child 2006; Matarredona Desantes 2014). Beginning in the Preclassic period (ca. 900 BCE; Hammond and Bauer 2001), sweat baths were constructed within caves and settlements, where they were often built into bedrock or other natural rock features (Andrews and Andrews 1980, 31–33; Moyes 2005). Hidden in caves or tucked away in residential contexts, Preclassic-period sweat baths were private spaces (Zralka et al. 2019). Around the Early Classic period (beginning ca. 250 CE), sweat baths were built atop platforms within monumental ceremonial centers and alongside palace structures, staircases, ball courts, and plazas (Agrinier 1992, 237, 243; Domenici et al. 2019; Ichon 1977; Lowe and Agrinier 1960, 34–36; Satterthwaite 1952, 72; Smith 1950, 20, 30). Their prominent locations when compared to their Preclassic antecedents suggest that they became increasingly entangled in public ritual performance within ceremonial spaces. Specifically, it was important to view individuals as they entered and emerged from the steam issued from the doorway.

By the beginning of the Late Classic period (approximately 400–500 CE), the use of sweat baths changed again. Smaller, private sweat baths were built within palatial complexes (Braswell et al. 2005; Chase and Chase 2005, 2008; Folan et al. 1995; Helmke 2006; Rivero Torres 1987; Ruz Lhuillier 1952). Meanwhile, sweat baths continued to be built within the ceremonial centers of Maya cities, but their architectural design was modified to enhance privacy and eliminate direct observation from public audiences. Outer sanctuaries were occasionally built around the primary steam chambers and included additional benches and rooms (Child 2006; García Moll 2003, 95–99). As their use was no longer a visible component of public ritual, the architecture evolved so that the actual sweat bath (the steam chamber in these later designs) became codified and reused without

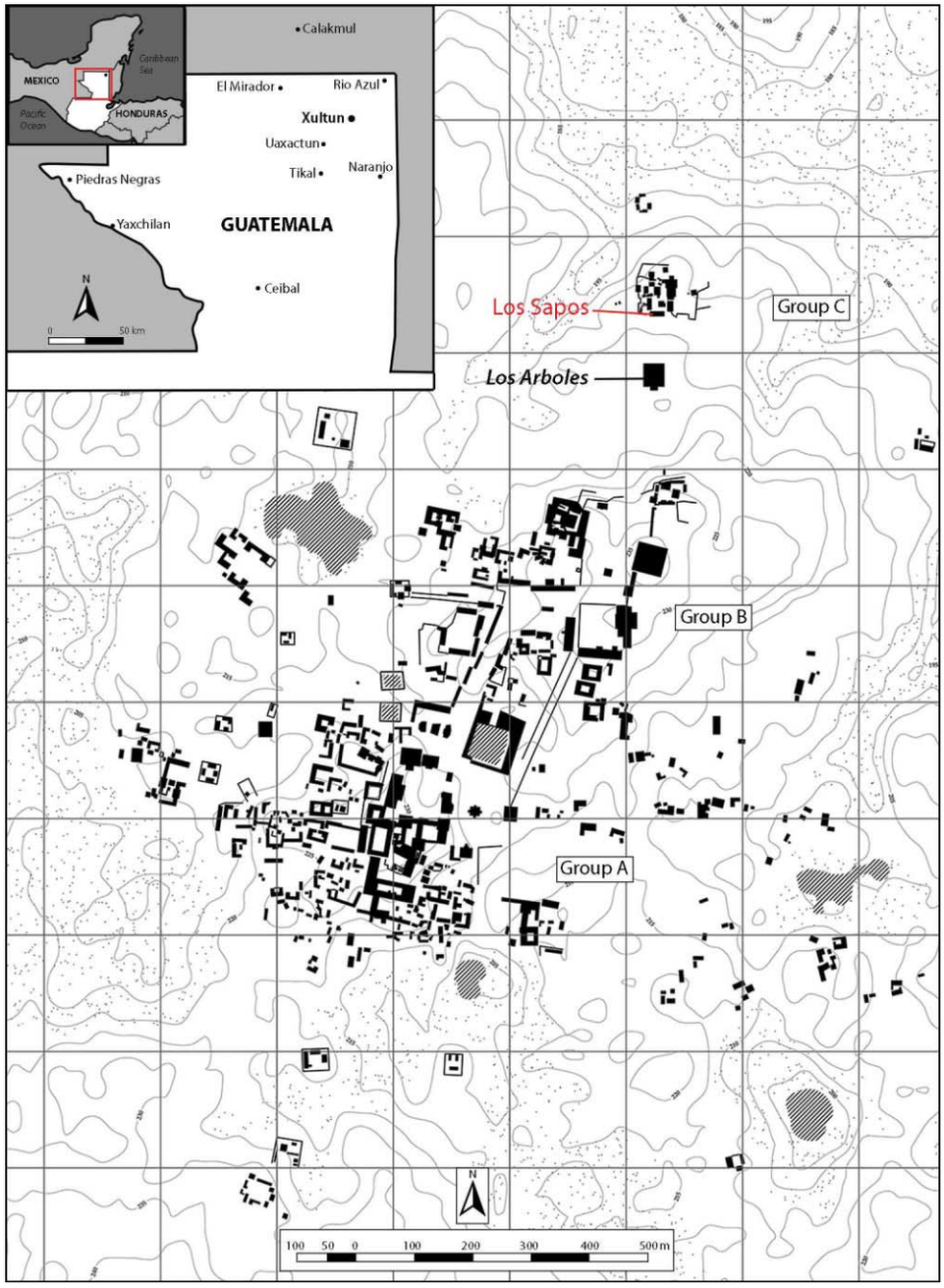

Figure 2. Map illustrating Xultun's position in Mesoamerica and the location of Los Sapos. Map by Carlos Chiriboga, 2016, elaborated by Mary Clarke, 2019, courtesy of the Proyecto Regional Arqueológico San Bartolo-Xultun.

the earlier function of creating and containing steam—what Houston (1996) identifies as a symbolic sweat bath. The symbolic sweat bath architectural design continued to be used well into the Postclassic period (ca. 1050 CE), as is seen in a shrine dedicated to an aged goddess, Ix Chel, at San Miguel on the island of Cozumel, Mexico (Lothrop 1924).

The architecture of Los Sapos largely aligns with the evidence of contemporary Early Classic–period sweat baths at other Maya sites. It is rectangular in form, with a low,

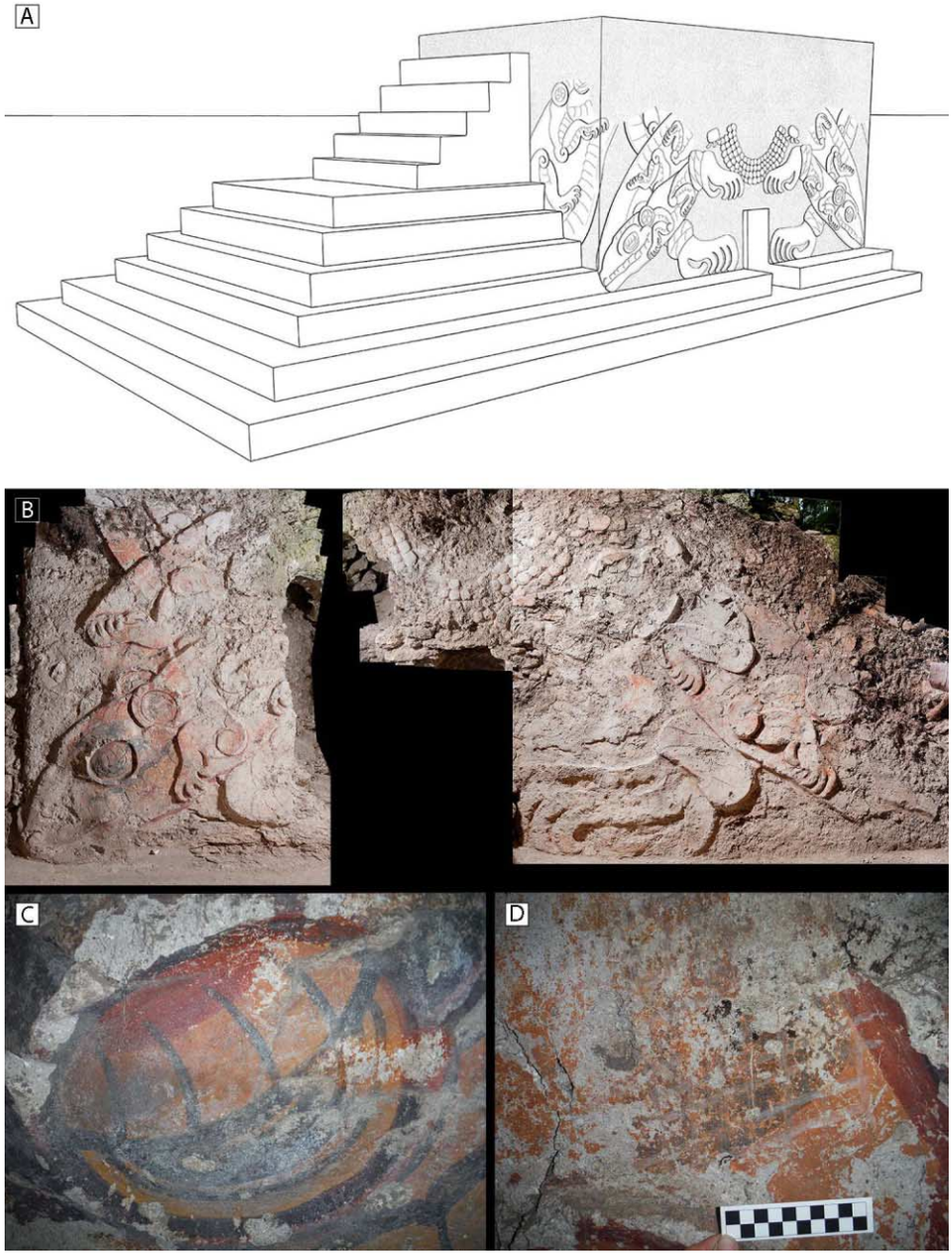

Figure 3. *A*, Reconstruction of Los Sapos, the sweat bath at Xultun (Guatemala), depicting both preserved facades and the adjoining staircase. Illustration by Mary Clarke, 2014. *B*, Composite photograph of the north facade. Photo courtesy of the Proyecto Regional Arqueológico San Bartolo-Xultun, 2012. *C*, *D*, Details of the painted iconography. Photos: Mary Clarke, 2014.

narrow doorway set in its north facade (fig. 3). Within the structure, the firebox is centered at the base of the southern wall. The small size of the doorway and the presence of a firebox indicate that the structure was able to create and contain steam. An enclosure built around the main steam chamber was not identified, but there is a sequence of platforms and stairs, running both east–west and north–south, connecting the roof of the

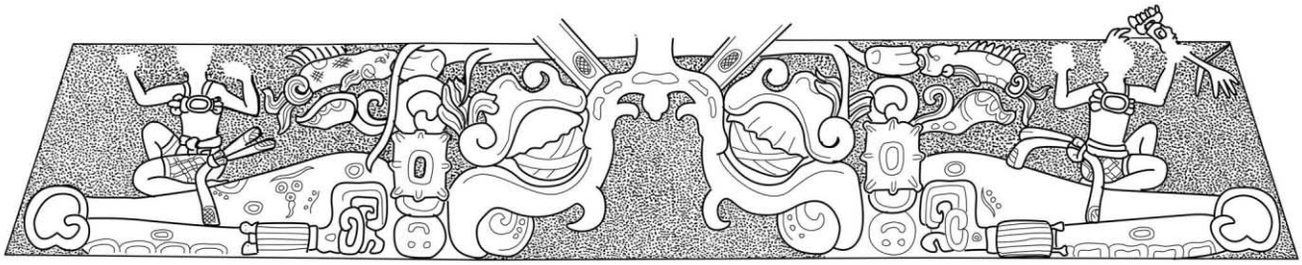

Figure 4. Reptilian figure depicted on the entablatures of the north and west facades of the symbolic sweat bath at the Temple of the Cross (Palenque, Mexico), Late Classic period. Illustration by Mary Clarke, 2019, after Taube (2010).

sweat bath to the surrounding plazas. Two other examples of Early Classic–period sweat baths from the site of Uaxactun, Guatemala (A-V, sub-C, rooms 7 and 8) are similarly positioned on either side of a monumental staircase (Smith 1950, 20, 30). This placement suggests that sweat bath use was intended to be a highly visible action, one that engaged surrounding open spaces, staircases, and structures. This performative element at Los Sapos is interesting to consider alongside the preserved iconography: one would enter and exit the sweat bath by passing through the body of the primary figure depicted on the facades, then climb up the stairs along the figure's back, and finally stand or otherwise perform on top of the structure, that is, atop the figure's head or perhaps within its mouth. The Los Sapos data indicate not only a performative element of sweat bath use in the Early Classic period but that the primary figure was both a participant in and a place for the related rituals.

Ideology

The earliest description of figures associated with sweat baths in Maya mythology are found within the epigraphic record at the site of Palenque, Mexico. Dating to the Late Classic period (642 CE), three symbolic sweat baths—the Temple of the Cross, the Temple of the Sun, and the Temple of the Foliated Cross (Child 2007; Houston 1996)—include extensive hieroglyphic inscriptions that describe and blend mythological and historical events (Stuart 2005). Each structure is characterized as the natal sweat bath of a supernatural deity—the locations where the gods of the Palenque triad (GI, GII, and GIII) were born or reborn at different points in mythological history (Kelley 1965). The sweat baths also served as the locations where historical figures performed ritual work, such as blood sacrifice, ascension, and political/supernatural negotiations. These natal sweat baths formed the city's ceremonial core, were considered a mythological location, and were collectively attributed to the being of a single deity. Stuart (2005) identifies this being as the "Palenque Triad Progenitor," one that is responsible for the generative acts that created these gods. Scholars have debated the gender of this figure: some refer to it as a female genitrix (Lounsbury 1976; Schele 1978; Schele et al. 1977), while others envision it as a male deity akin to the maize god (Stuart 2005, 180–83), all presuming a gender binary. The consistent trait all agree on is that this figure's body created gods and was understood as the location Matwil (Stuart 2005, 79, 169), a watery place associated with conch shells, the sea, and cormorants and other waterbirds—a place of divine origin and ancestral emergence in Palenque creation mythology. Additionally, the entablatures of the north and west facades of the Temple of the Cross may in fact depict this figure as reptilian, with the deity's mouth forming the entrance to the outer sanctuary (fig. 4).

One of the best sources for Classic-period Maya conceptions of supernatural birth is the vessel popularly known as the Birth Vase (Taube 1994). Different scenes from a supernatural birth event are illustrated across the four sides of this vessel, which dates to the Late Classic period (fig. 5). Several aged deities serve as midwives for a young goddess on side 1. On sides 1, 2, and 3, the aged deities merge some of their physical traits with those of a jaguar, a ferocious figure associated with the night, the stars, fire, and warfare (Chinchilla Mazariegos 2017, 107). Taube (1994, 669–75) interprets the vase as a representation of a *k'ex* ritual, where offerings of fire, smoke, blood, and flint are presented in exchange for the life of the depicted newborn. Chinchilla Mazariegos (2018) opines that this offering is being made to the aged deities themselves, as it is they who are in control of the life of the child. The watery setting of this exchange is made explicit on sides 1, 3, and 4 with the basal elements depicting a water lily skull with blooming flowers and a complex rhizome (Hellmuth 1987, 191;

Figure 5. Birth Vase, Late Classic period. Height: 25.3 cm. *A*, Side 1: birth scene with a young goddess being aided by several aged goddesses. *B*, Side 2: additional birthing scene where the mouth of a serpent stands in for the birth passage. *C*, Side 3: allegory of birth, where the fate of an individual is determined. *D*, Side 4: preparation of an offering, likely for the aged goddesses depicted on side 1. Photos: Justin Kerr, K5113, Justin Kerr Maya Archive, Dumbarton Oaks, Trustees for Harvard University, Washington, DC (CC BY-SA 4.0).

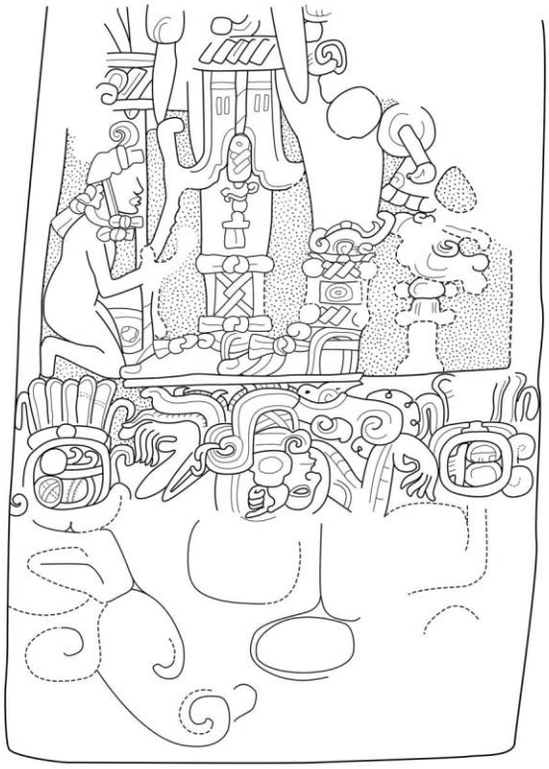

Figure 6. Stela 6 from Yaxha (Petén, Guatemala), Early Classic period. Illustration: Mary Clarke, 2019, after a field sketch by Ian Graham.

Houston 2010, 74; Stone and Zender 2011, 173; Stuart 2005, 151). These scenes illustrate a popular conception of supernatural birth for the Classic Maya: it occurred within a dark, watery setting and required an offering to the ferocious, aged deities who aided in the creation of new life.

The watery environment of sweat baths is also associated with caves (Brady and Ashmore 1999; Heyden 1981, 19–20; Houston 1996, 142; Lucero and Kinkella 2015; Moyes 2005; Thompson 1959). The term *ch'e'n* found in Classic Maya inscriptions has been translated as "cave" (Vogt and Stuart 2005), although it may also be translated as cleft, valley, well, hole, or cistern, among other linked concepts (Tokovinine 2013, 25–43). As such, the term *ch'e'n* has various uses, meanings, and pairings. One particularly significant concept is *chan ch'e'n*, or "sky cave," which, according to Tokovinine (2013, 39), may denote "the part of the world where gods act and dwell." This location is depicted as a toponymic register on three monuments from Yaxha: Stelae 6, 10, and 13 (fig. 6). In these examples, the open maw of a reptilian

Figure 7. Three-dimensional scan of the monumental staircase leading to the North Acropolis at Yaxha. The Yaxha Goddess is shown in full-figure form, with half of her body on each side of the staircase. Image courtesy of Alexandre Tokovinine, 2018.

creature, the so-called Yaxha Goddess, is the setting for the period-ending or time-renewal rituals performed by the kings documented on these monuments.

Although the name of this figure remains undeciphered, Tokovinine (2013, 41) proposed an initial decipherment as "ix.tzutz.nik." More recently, Stuart (cited in Nondédéo et al. 2019, 337n3) proposed that **IX-TZUTZ-?-NIK** should instead be read with **SAK(IL)** in place of **NIK**. Marc Zender (pers. comm., 2019) offers a translation that is necessarily tentative given the absence of the full phonetic substitution: "depending on the identity of the unwritten suffix(es) on the verb root, we might have something like 'the lady who finished (?made) squash seed(s)' or 'lady squash-seed-finisher (?maker).'" This deity and the place she embodies is captioned as *te′ nal yax chan ch′e′n*, or "tree corn [place] the blue-green sky cave" on Yaxha stelae, which Tokovinine (2013, 42) suggests is the blue-green center of the world. The sky-cave in this context encompasses the sky, the earth, and the underworld, creating a totality of the world embodied in a single deity: the Yaxha Goddess. The one full-figure representation of this deity appears on a monumental staircase leading to Yaxha's North Acropolis: here her body is split lengthwise so that each half flanks one side of the staircase (fig. 7). This placement highlights the importance of climbing up her back and standing atop her maw. The Yaxha evidence suggests that this figure, known as the Yaxha Goddess and now **IX-TZUTZ-?-SAK(IL)** both embodied the conception of "sky-cave" and provided the setting for the renewal of mythological cycles of time.

Iconography

The primary figure depicted in the painted and sculpted stucco on the exterior of the Early Classic phase of Los Sapos is unique: there are no direct comparisons within the extant corpus of Classic-period Maya art. As is discussed in detail below, the limbs of the primary figure are composed of conflations, or the combination, of multiple animals. While there are some cases where, for instance, the feet of deities transform into serpent tails or fish heads, there are no other known representations of a figure with entire limbs animated by conflated animals. Similarly, there are no known sweat baths with iconographic programs from this early period. As such, this analysis will look at various iconographic attributes independently along with comparanda sourced from the vast corpus of Mesoamerican visual culture, to consider what they might mean when brought together.

The position of the primary figure's body has a particular history within the various cultures of Mesoamerica. It is clearly depicted frontally, or *en face*, with its limbs wrapping around the structure and its appendages framing the doorway. I interpret the position of the figure's body as crouching and oriented vertically so that its head is

up, its midsection or abdomen faces forward, and its bottom is settled between its legs, replicating a common birthing position in Mesoamerica termed *mamazouhticac* (Gutiérrez Solna 1983; Klein 1973; Nicholson 1954; Matos Moctezuma 1997; Quezada 1977, 314; Seler 1901–2, 103). Zoomorphic figures such as toads and other amphibians are often depicted in this pose birthing apotheosized ancestors from their maws (figs. 8*A* and 8*B*). Various representations of Central Mexican deities depict them as frontal crouching figures and include additional birth imagery (figs. 8*C* and 8*D*). According to Klein (1976, 242), "the Mexican earth and moon goddess Tlazoltéotl, who was depicted in displayed frontal form in [the] Codex Borbonicus . . . was known as the 'mother of the gods,' the 'mother of maize,' and the patroness of midwives and pregnant women" (fig. 8*C*). Another earth deity, Tlaltecuhtli—which can take both male and female forms (Henderson 2007; López Luján 2009)—is similarly depicted in many instances (fig. 8*D*). In Mexica mythology, Tlaltecuhtli was brutally killed and ripped apart so that their body formed the earth and the sky, thus becoming a ferocious deity who both consumed and generated life (Garibay 1973). The frontality of the Los Sapos figure draws attention to the figure's genitalia, which are visually equated with the doorway, although nothing conclusively indicates a binary gender identification. Overall, its crouching pose and frontality have generative and destructive connotations that are tied to the creation and destruction of the sky, earth, time, and human populations, implying the embodiment of temporal cycles.

Although the head of the primary figure on Los Sapos has not been preserved, surviving parts of its body hint at its physical traits. The figure's body was painted a muted red-orange and elaborated with black spots with white outlines and volutes. While spots are found on a range of figures in Maya art, volutes of this type are used to signify watery locations; their presence here suggests an aquatic association with the figure. The painted sections of the appendages include scale-like details suggesting claws or nonhuman limbs. Both the spots and claw-like forms suggest that it is zoomorphic or identified with dark, watery settings or both.

The figure is also shown wearing two types of jewelry elements: matching bracelets and anklets, and a beaded necklace. The bracelets and anklets are painted in a manner that appears to depict woven material. Interestingly, Nicholson (1967, 82) identifies similar jewelry as part of Tlaltecuhtli diagnostic markers, which he terms "striated skin cuffs" (although see fig. 8*D*). It is unclear, however, whether the woven bands worn by the Los Sapos figure are made of skin or another organic material. Bracelets and anklets are commonly worn by royal, supernatural, and even zoomorphic figures in Maya art, but the four-strand beaded necklace is a costume element reserved for royal personages in Maya courtly art (Matsumoto and Tremain 2020). It is worn by kings and royal women when performing significant ritual work. Similar necklaces found in royal tomb contexts suggest that the beads were likely meant to represent greenstone. The use of this exclusive costume element in the depiction on Los Sapos suggests there may have been an element of royal portraiture or an ancestral relationship associated with the primary figure.

The limbs of the primary figure are particularly atypical for Classic Maya visual culture. A combination of amphibian and reptilian elements, specifically toad and iguana, are employed to create zoomorphic conflations that form the primary figure's appendages. The position of these elements in relation to the figure's body are such that one is given to an upper and a lower segment of each limb, with their heads oriented toward the primary figure's joints. Looking beyond the Maya area, several aged deities from Central Mexico, such as Coyolxauhqui, Tlaltecuhtli, and the various Tzitzimime, are depicted with faces animating their elbows and knees, termed "masked joints" (see fig. 8*D*; Acosta 2002; Aguilera 2001; Durán 1994; Matos Moctezuma 1997; Klein 1995, 2000; Seler 1990). Similar to the toads, the maws of these masked joints are also associated with birth and wombs, as is seen in the Codex Borgia (Boone 2007, 174; Díaz and Rodgers 1993; fig. 9). Comparing these cases with the primary figure at Los Sapos, it is interesting that its joints are articulated with creatures' mouths, much like the masked joints present on deities from Central Mexico. However, these choices in representation span a millennium and perhaps illustrate a shared conception of the body, particularly of elbows and knees.

These elements may also follow a logic similar to what Coe (1973, 54) has termed "god markings" (see also Schele and Miller 1986, 42; Houston et al. 2006; Houston 2014). According to Coe, god markings are animating elements affixed to the limbs of supernatural figures, specifically anthropomorphs, and are named as such because they only appear on gods. Houston et al. (2006, 17) state that "god markings reveal some quality of the surface of the god," such as their association with day or night, or even their materiality, being hard or soft, stone or wood. These appear as small applications to various sections of a deity's appendages, where the marking rarely takes up the entirety of the limb or limb segment, as is seen at Los Sapos. I propose that the artists

Figure 8. *A*, Frieze from Balamku (Campeche, Mexico) showing a crouching toad birthing an apotheosized king from its maw. Photo: https://en.wikipedia.org/wiki/File:Balamku1.jpg (CC BY 3.0). *B*, Stela 11 from Izapa (Guatemala), showing a toad whose mouth serves as the location for ancestral rebirth. Illustration: Ayax Moreno, 2007, courtesy of the New World Archaeological Foundation. *C*, Tlazolteotl giving birth from her loins, detail from the Codex Borbonicus, fol. 13. Photo: https://en.wikipedia.org/wiki/Codex_Borbonicus#/media/File:Codex_Borbonicus_(p._13).jpg, public domain. *D*, Monolith from Tenochtitlan showing Tlaltecuhtli in a crouching pose with masked joints. Photo: https://commons.wikimedia.org/wiki/File:Tlaltecuhtli_monolith.jpg (CC0 1.0).

Figure 9. Quetzalcoatl birthed from flint, while other figures are birthed from masked joints of parturient figures and precious disks that stand in as metaphoric wombs, in the Codex Borgia, page 32. Photo: https://commons.wikimedia.org/wiki/File:Codex_Borgia_page_32.jpg, public domain.

at Xultun were using a logic similar to god markings to communicate a quality of the primary figure, which may be understood in terms of the observable behaviors and symbolic associations of the amphibian and reptilian creatures being conflated.

In the Maya world, amphibians are known for their ability to reproduce in large numbers and with great frequency (Furst 1972; Kennedy 1982; Thompson 1970, 258). The nocturnal cane toad (*Rhinella marina*) lays up to 35,000 eggs per birth cycle, which corresponds with the rainy season. Also nocturnal, the *uoh* toad (*Rhinophrynus dorsalis*) only emerges from its underground burrow during the rainy season to give birth. If the toad is taken from the burrow before the rainy season, it appears swollen with water as if pregnant. Both the cane toad and the *uoh* toad breed and lay eggs in water, particularly in safe, secluded locations such as perennial ponds. The associated nocturnal and underground environments of these toads as well as the secluded and watery places where they give birth connote a sense of wet darkness. Furthermore, the *uoh* toad expels a white material from its mouth that has a consistency akin to ground maize, the material from which the current human population is believed to have been shaped by the primordial creators. The toad's mouth is, therefore, visually associated with birth and rebirth, and both Maya and neighboring Izapan art echo this observed behavior (fig. 8*A* and 8*B*). These examples of amphibian traits and depictions indicate that they were associated with fertility, watery underworld settings, and the process of royal rebirth and apotheosis.

In contrast to the watery environs associated with amphibians, reptiles are often manifestations of the ferocious earth (Pugh 2001; Rice 2018; Taube 1989, 1998, 2010). The image of the caiman floating in a body of water is the primary conceptual model of the earth and its relationship with the surrounding sea (Garibay 1973, 26; Seler 1902–23, 4:646–53; Taube 1989). The caiman is seen as the four-sided world, and its rough spine and tail are the earth's hills and mountains. For example, in the sixteenth-century *Popol Vuh* of the K'iche' Maya, a crocodilian figure named Sipac or Zipacna (related to the Mexica figure Cipactli, sometimes identified as Tlaltecuhtli) is described as a monstrous being that creates mountains, dives deep into the earth, and is defeated by the hero twins (Christensen 2003; Tedlock 1996). In a Late Postclassic Yukatek Mayan account, this figure is named Itzam Kab Ayin, or "Iguana Earth Crocodile" (Carlson 2015; Taube 1989; Velásquez García 2006). This account describes the destruction of the world by flood, after which it was created anew through the sacrifice of Itzam Kab Ayin. Stuart (2003, 2005, 68–77) notes that a Late Classic–period Maya version of this myth is found at Palenque on an inscribed platform at the Temple of the Cross. It describes the decapitation of Starry Deer Crocodile or Hole-Backed Starry Deer Crocodile—a figure that embodies both earthly and celestial realms and is related to the later Sipac/Zipacna—linking its death to the creation of the sky and the earth, recalling the myth of Tlaltecuhtli. In some depictions, Starry Deer Crocodile is shown with a hole located at the center of its back, or with an upended vase with a *k'in* motif (signifying day, season, sun, and a unit of time, among other concepts) at its hips or between its legs (fig. 10). Scholars have argued that the hole or passage is related to openings into the earth (Thompson 1972, 150; Freidel et al. 1993, 269) and that the upended vase with the *k'in* motif symbolizes a cosmic birth passage and is thus linked to wombs, vaginas, and vulvas (Hull and Sheseña 2019; Stuart 2005, 167–68; Taube 2009, 105). It may then be possible that this crocodilian figure was, at times, understood as a female earth deity and that her defeat was an event that re-created the world or periods of time.

The exterior facades of the Los Sapos sweat bath depict a figure with clear iconographic and ideological

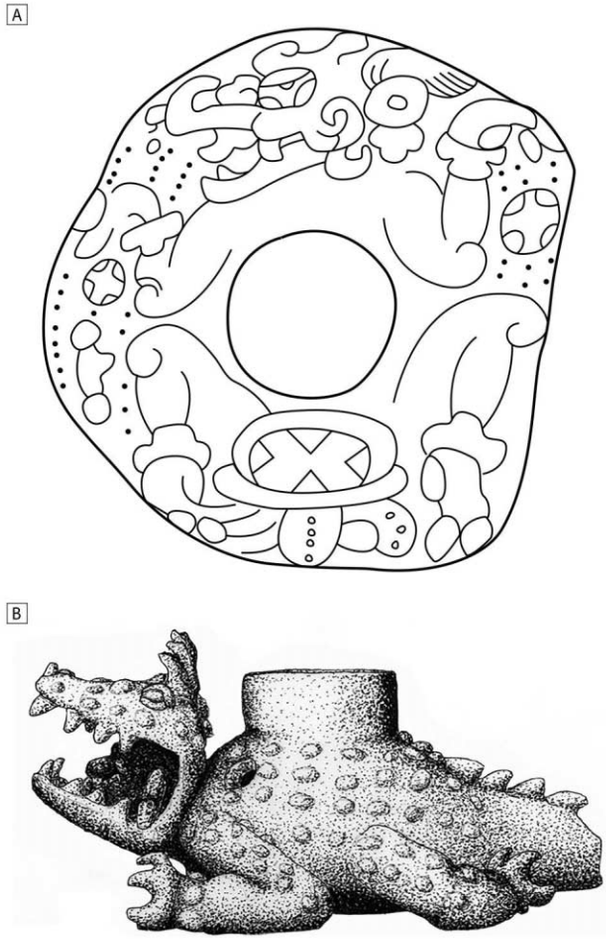

Figure 10. Depictions of the Hole-Backed Starry Deer Crocodile. *A*, Incised jade ear spool with the Starry Deer Crocodile swimming in a rain of precious elements. Illustration by Mary Clarke, 2019, after Taube (2010). *B*, Ceramic figurine from Santa Rita (Corozal, Belize), showing crocodile with an opening in the back. Drawing: Prudence Rice, 2018.

ties to the earth, creation and destruction, earth's watery interior, and aged deities throughout Mesoamerica. The creatures that constitute the limbs of the primary figure, in their conflation of amphibian and reptilian traits, can be understood as an emic representation of the linked concepts of birth and death, creation and destruction. Importantly, the birth glyph in Classic-period Mayan script, while initially thought to be an upended frog, has been considered an iguana and more recently a conflation of both species (Proskouriakoff 1961; Schele and Fahsen 1991). The *en face* representation of the figure's body in a crouching pose similarly connotes birth and death as well as the surface of the earth. The birthing position of the primary figure emphasized that those who exited the structure, newly purified by the steam bath and associated rituals (Coe and Furst 1977), were being reborn. However, one could also climb up the figure's spine and stand on top of its head or within its mouth, suggesting that it could also be perceived as the surface of the earth or as a defeated deity. The figure's pose also recalls the contemporary depictions of the **IX-TZUTZ-?-SAK(IL)** or the Yaxha Goddess.

The Yaxha Goddess and the Los Sapos figure share an association with reptiles, the position of their bodies, their claw-like hands and feet, the staircase up their backs, and an emphasis on activity above their heads or in their mouths. Furthermore, select royal women during the Early Classic period took the name of **IX-TZUTZ-?-SAK(IL)** (Tuszyńska 2015), which might explain the element of royal portraiture suggested by the beaded collar worn by the primary figure at Los Sapos. This lends some support to the notion that the Palenque Triad Progenitor may have had a reptilian form and may have been gendered female. Although Goddess O and Ix Chel are considered grandmother deities associated with birth and midwifery in Classic Maya ideology, this evidence suggests that there was a deity or an attribute of a deity with similar associations that took a reptilian form. This is indeed true of aged deities known from different periods and regions of Mesoamerica. Tlaltecuhtli, in particular, is an aged earth deity depicted with masked joints and reptilian traits whose body was used to create the earth and sky and thus embodied creation and destruction. The Los Sapos evidence illustrates that the Classic Maya also made a similar association between a reptilian earth deity and an aged grandmother deity, suggesting that the there is an antiquity to these related concepts in Mesoamerica.

Ritual closure

Los Sapos was both physical setting and mythological place, both a sweat bath and a monumental representation of a reptilian earth deity and "sky cave." The structure continued to be used in its Early Classic–period form for approximately two hundred to three hundred years. Around 562–651 CE, following the transition to the Late Classic period, a human adult skeleton was interred within the sweat bath's doorway around which an adjoining cist tomb was constructed (fig. 11). The osteological analysis of this individual completed by Elizabeth Hannigan indicates that the remains were burned along the ventral side of the body

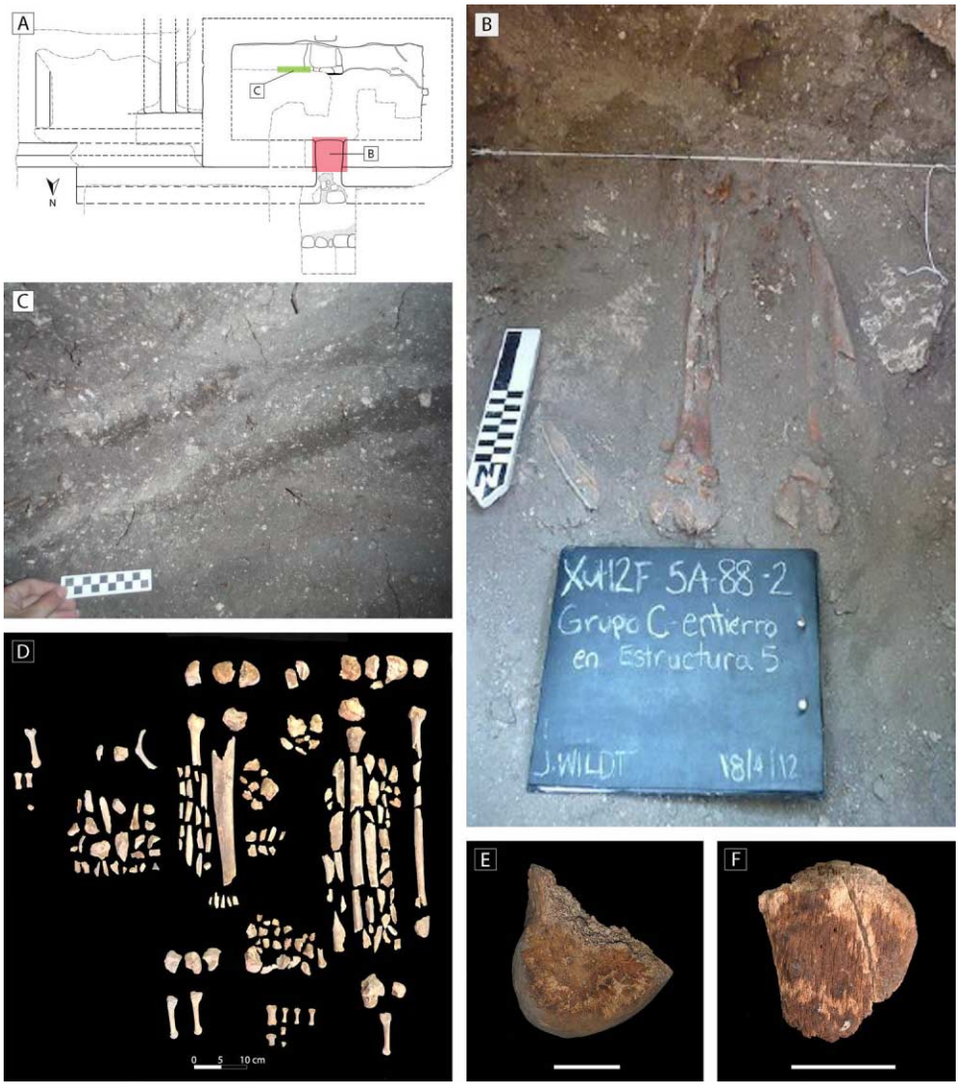

Figure 11. First depositional event at Los Sapos. *A*, Schematic of the sweat bath with the locations of figures annotated. Illustration by Mary Clarke, 2014. *B*, Burned bones in situ with the fill context surrounding the remains. Photo: Jennifer Wildt, 2012. *C*, Flow patterns visible in the structure's interior fill. Photo: Mary Clarke, 2014. *D*, Recovered skeletal elements. Photo: David Del Cid, 2019. *E*, Evidence of burning on distal left femur. Photo: Elizabeth Hannigan, 2019. *F*, Evidence of burning on unsided patella. Photo: Elizabeth Hannigan, 2019; all images courtesy of the Proyecto Regional Arqueológico San Bartolo-Xultun.

(Clarke et al. 2021, 79–82). After this interment, the entire structure was filled in with basket loads of sediment, which appear as thin ribbons with distinct colors. Rather than breaking the structure to ritually release its animating force (Stross 1998), the residents of Xultun flooded both tomb and structure with earth. Although the sex and exact age of the individual buried in the doorway could not be determined, this context is suggestive of a ritual related to later myths tied to the fiery deaths of ferocious aged grandmother deities (Chinchilla Mazariegos 2017, 2018).

Throughout its various permutations, the myth portrays one figure as an evil grandmother who is killed by a child hero or heroes to create the conditions for life on earth, much like the crocodilian figure from Maya mythology discussed above. Her death is often caused by fire and takes place inside or in the doorway of a sweat bath (Barón Larios 1994, 155; Bartolomé 1984,

11; Cicco and Horcasitas 1962; Dyk 1959, 14–15; Hooft and Cerda Zepeda 2003, 53; Olguín 1993, 124; Oropeza Escobar 2007, 220; Prechtel 1990; Redfield 1945, 253–54; Segre 1990, 174; Shaw 1971, 239), although there is one documented instance where she is killed in the center of a field prepared for planting (Blanco Rosas 2006, 72; Elson 1947, 202; Foster 1945, 192; Fought 1989, 464; Hull 2009, 134; Münch Galindo 1992, 289; Pérez Martínez 1996, 46). Notably, all but one version of these creation myths from Mesoamerica involve an evil grandmother killed by the hero or heroes, often by fire; the exception is the *Popol Vuh* (Chinchilla Mazariegos 2018). In this account, the grandmother does not die, and instead of defeating her, the hero twins must defeat various other deities, including the crocodile Sipac/Zipacna, to create the conditions for life on earth (Vail and Hernández 2013).

The ritual reenactment of this myth is documented for the Mexica (Foster 1945, 195; Ichon 1973, 86–91; Girard 1962, 266–67; Sahagún 1950–82, 1:15). For example, during the feast of Tititl, the fiery death of the aged deity named Cihuacoatl was reenacted (Graulich 1999). This goddess is also known as Toci, "our grandmother," and Temazcalteci, "grandmother of the sweat bath" (Nicholson 1971, 420–22). This goddess is related to a group of ferocious Nahua goddesses, including Teteoinan, Itzpapalotl, and Tlazoltéotl, that are depicted with reptilian traits and associated with childbirth, the earth, and the sweat bath. For instance, Tlazoltéotl is depicted above the doorway of a sweat bath in the sixteenth-century Nahua Codex Magliabechiano (Nuttall 1903, fol. 77r). In the ethnohistoric and ethnographic literature, these grandmother deities are often presented with propitiatory offerings and prayers because they are believed to consume human life as often as they provide the sustenance for it, much like the earth (Matos Moctezuma 1997; Nicholson 1971, 420).

The location and treatment of the human remains recovered in the doorway of Los Sapos echo the death of the grandmother deity. They were burned, as the grandmother is in the myth, but also buried in earth as if being planted. Significantly, only a partial skeleton was recovered. Xultuneros reentered the structure during the Late to Terminal Classic period, at which point they removed most of the adult remains and added an offering that included a juvenile human, three to four toads, four iguanas, four rail birds, complete pottery, and repurposed refuse items (pottery sherds, figurine fragments, broken stone tools, lithic debitage, etc.; fig. 12). This second depositional event was a propitiatory offering to the primary figure, akin to the *k'ex* offerings associated with the Birth Vase (Clarke et al. 2021, 84–89). The first depositional event may be evidence of the ritual reenactment of an early version of a myth related to the defeat of an amphibian/reptilian grandmother deity, one that envelops the sweat bath. The second event was a detailed, complex propitiatory offering to this entombed deity at a time when Xultuneros and many other Terminal Classic city dwellers were struggling to sustain life from the surrounding earth.

* * *

The Mesoamerican sweat bath is a structure that has long been used for birth and obstetrics, while simultaneously being entangled in myth and embodied by symbolic persons and places. The Classic Maya drew strong parallels between the generative actions of sweat baths, caves, and wombs. As such, sweat baths were and continue to be understood as the literal source of all creation: aged grandmother and reptilian earth deities. These deified figures and their associated local creation myths vary slightly across Mesoamerica from one recording to the next; however, there are some consistent elements, such as their pernicious personalities, their need to be satiated with offerings, their embodiment of the earth, and their control over birth and fertility. These figures are represented on the facades or outer structures of sweat baths as well as in other monumental contexts where their depictions emphasize their generative and ferocious nature—and sometimes even their necessary defeat. Ix Chel, an aged goddess of the Postclassic period, is, for example, employed as a caryatid in the outer sanctuary of a symbolic sweat bath shrine at San Miguel, Cozumel, and is depicted in codices as one who provides rain to sustain life and as a participant in the cataclysmic flood events that destroy the current population. Although she is present in all contexts, there are clear divisions drawn in the Postclassic period between her and the cosmic earth crocodile; it is the crocodile, not the aged goddess, that is defeated.

In Late and Postclassic Maya mythology, the defeat of Itzam Kab Ayin—the manifestation of the earth and night sky who threatens to flood the earth—is essential to world renewal, as its body and blood may be used to re-create the earth and sky. This conception is similar to the Central Mexican deity Tlaltecuhtli. Tlaltecuhtli has ideological parallels to Classic Maya reptilian earth monsters but also iconographic similarities to the Classic Maya aged deities Ix Chel and Goddess O, particularly their skull-and-crossbones skirt, bare chest, clawed hands and feet, and frontally posed bodies. I argue that the reptilian manifestations of the earth/sky in Maya mythology were

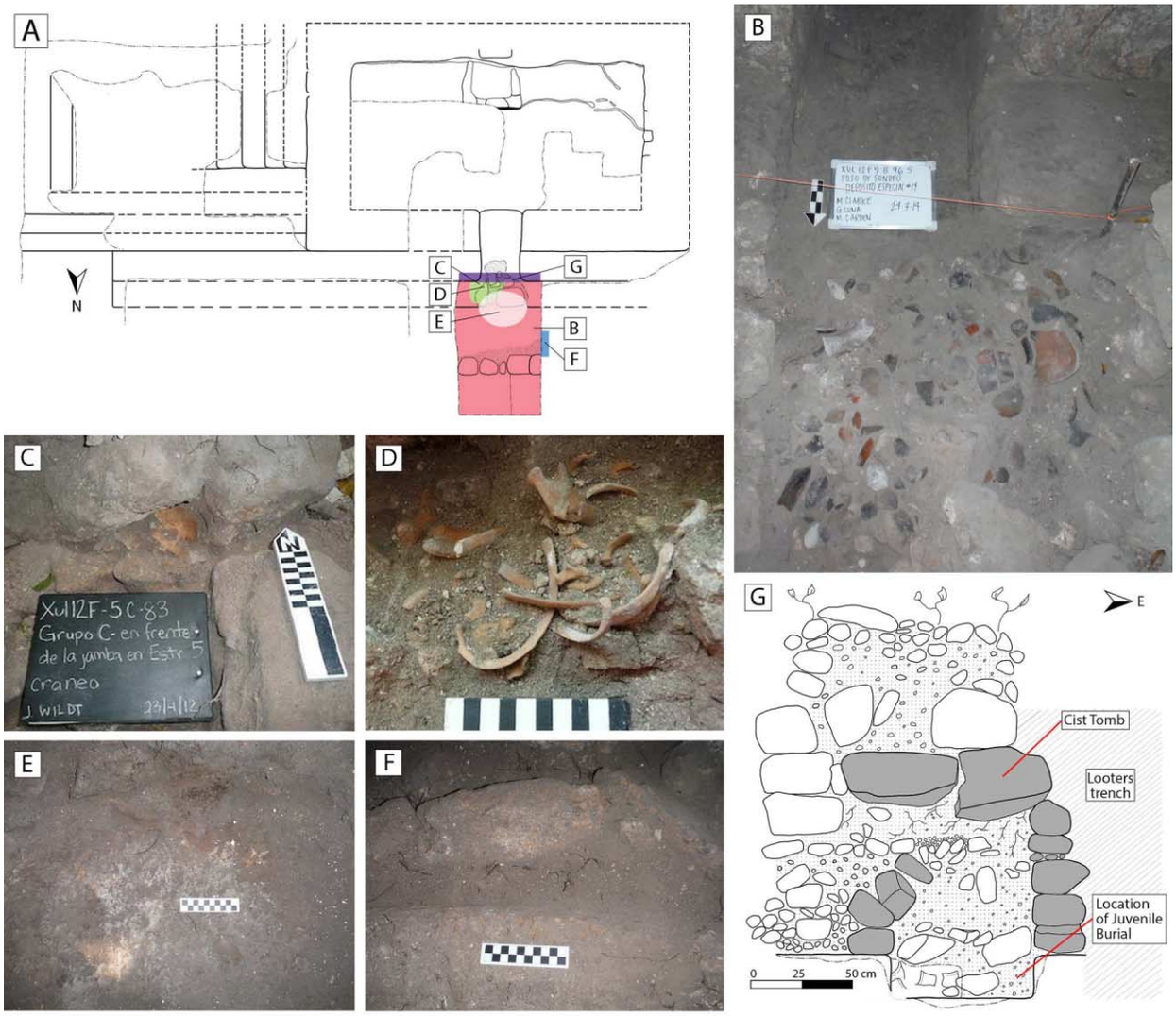

Figure 12. Second depositional event at Los Sapos. *A*, Schematic of the Los Sapos excavations. Illustration by Mary Clarke, 2014. *B*, Deposit in situ. Photo: Megan Carden, 2014. *C*, Cranium in situ. Photo: Jennifer Wildt, 2012. *D*, Postcranial skeleton in situ. Photo: Jennifer Wildt, 2012. *E*, Oxidation ring. Photo: Mary Clarke, 2014. *F*, Evidence of burning visible on construction stones in the western profile of the unit. Photo: Mary Clarke, 2014. *G*, Profile of the cist tomb after the 2012 excavations and before those of 2014. Illustration by Mary Clarke, 2014; all images courtesy of the Proyecto Regional Arqueológico San Bartolo-Xultun.

not limited to a masculine aspect and that they are conceptually linked to aged female deities, perhaps even possessing a nongendered or nonbinary gender identity (Ardren 2020). The data from the Xultun case study suggest not only that these concepts were linked but that there is an antiquity to and an evolutionary relationship within this group of aged grandmothers and reptilian earth deities from Mesoamerica, of which Los Sapos may be our earliest evidence at present. The deity referred to as the Yaxha Goddess or **IX-TZUTZ-?-SAK(IL)** provides additional support for this argument. She is represented as a defeated reptilian figure and defined as the sky-cave, which is strikingly similar to Tlaltecuhtli, who is ripped apart to become both the earth and the sky. Even the Hole-Backed Starry Deer Crocodile frequently shown with reference to wombs and female genitalia may in fact be a reference to a feminine aspect of this deity. These contexts, when viewed together, advance an interpretation that the sacrificed or defeated reptile in Classic Maya creation mythology was a deity associated

with aged grandmothers, the identity of which can be traced to the Early Classic **IX-TZUTZ-?-SAK(IL)**.

These new developments from Xultun echo the work of López Austin (1990), who suggests that, despite subtle variabilities in the characters and incidents found throughout Mesoamerican myths, there are consistent themes that compose a shared "Mesoamerican religious tradition" (see also Chinchilla Mazariegos 2018). López Austin argues that all Mesoamerican myths can be traced to a core complex of mythological beliefs and key iconographic symbols dating back to the Archaic period (~13,000 years ago; see also Lohse [2020] for a recent summary). The aged grandmother and reptilian earth deities from various points in Mesoamerican history are related to each other, as is evident in the ways in which their identities were visually communicated and the ideological associations of their myths. Yet there are also marked differences across space and time. Even in distinctly Maya contexts, there appear to be tropes that did not endure in the relatively short span of time between the Early and Late Classic periods, such as the use of amphibian/reptilian conflations (likely of toads and iguanas) to define their limbs. Although the figure at Los Sapos is the only extant example of this mode of expression in the Maya area, the later use of masked joints on related deities in Central Mexico similarly emphasizes the generative function of limb articulations. Although it is possible that this motif developed independently and spread from one region to the next, the chronological gap between these representations suggests the existence of a pervasive shared conception of the body across Mesoamerica, one that developed before the Classic period. The deities placed at the center of Mesoamerican creation myths clearly have much in common in their conception and representation. These commonalities are important for our understanding of the complex interactions within Mesoamerican society and likely indicate the temporal depth of a shared Mesoamerican worldview wherein a pernicious earth was made manifest by a reptilian deity who created, sustained, and threatened to destroy the living population and who was embodied by the sweat bath.

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