

The Initial Series Group At Chichen Itza, Yucatan

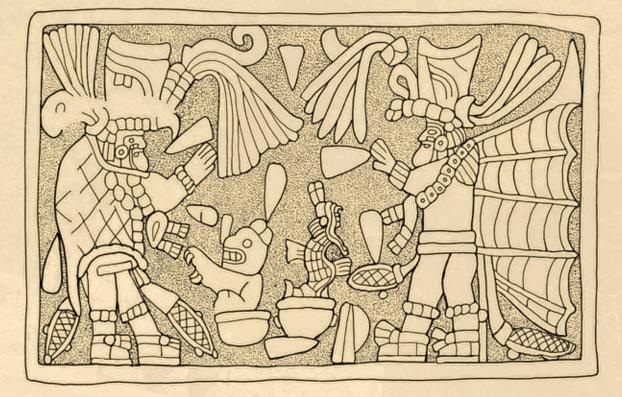
Archaeological Investigations and Iconographic Interpretations

Dedicated to Peter Schmidt





Precolumbia Mesoweb Press San Francisco



The Initial Series Group At Chichen Itza, Yucatan

Archaeological Investigations and Iconographic Interpretations

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Taube et al.

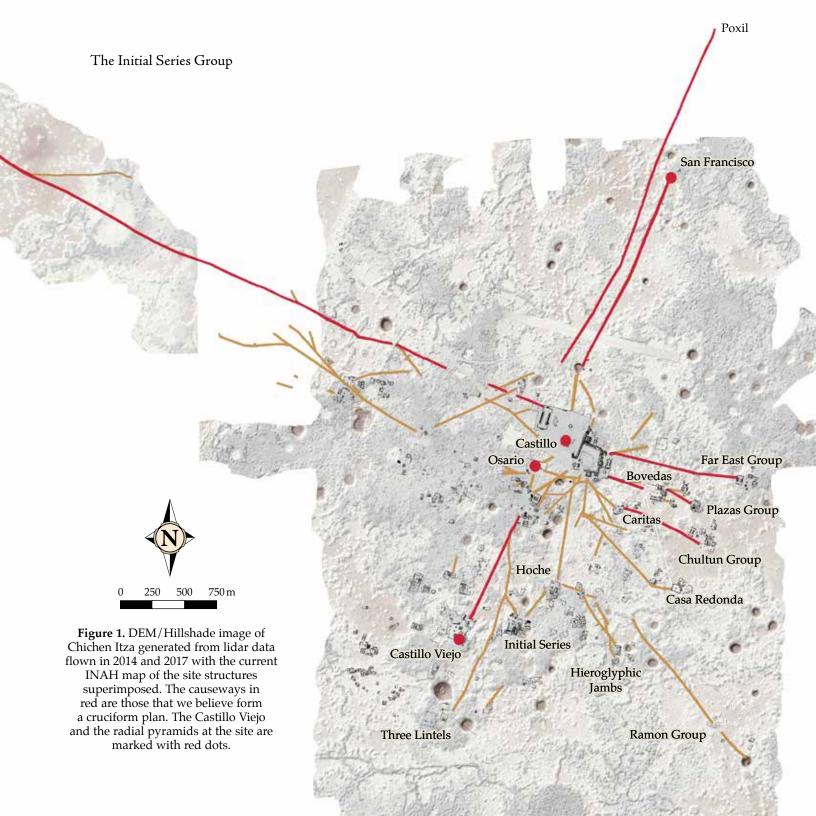
Cumtun

Introduction

Not only is Chichen Itza one of the greatest sites of ancient Mesoamerica, but it arguably contains the largest corpus of monumental sculpture known for any Maya site. Yet rather than appearing on freestanding sculpture such as stelae, this remarkable body of art is primarily applied to the surfaces of buildings, such as balustrades, sculpted columns, and especially bas-relief panels. For many years we have been aware of elaborate relief scenes from the Great Terrace of "New Chichen," including the Ball Court and the attendant North Temple, the Lower Temple of the Jaguars, the Tzompantli, and the Temple of the Warriors, with its magnificent friezes of reclining human figures accompanied by fierce animals clutching human hearts. However, archaeological investigations directed by Peter Schmidt (2003, 2007; Schmidt and González de la Mata 2007) have documented equally exceptional bas-relief programs to the south in the area known as "Old Chichen," the most noteworthy being the Osario and still farther south, the Initial Series Group, the focus of this study (Figure 1).

Chichen Itza and Its Hinterland

The city of Chichen Itza is an extensive agglomeration of architectural complexes, of which many of the medium and large groups are located on elevated platforms and have their own walls (Schmidt 1981). It covers an area of roughly 30 km² and is organized by a system of causeways all connecting to the Great Terrace (Cobos and Winemiller 2001). These causeways tend to link major architectural groups, often located by cenotes and *rejolladas*, or sinkholes (Osorio León 2004:13-14), and they may have provided "dry" passage during the rainy season (Lincoln 1990; Pérez Ruíz 2004). While the complexity of the causeway system gives it a rather haphazard or dendritic appearance (especially considering the narrower, only slightly elevated examples), we argue that it groups together in a



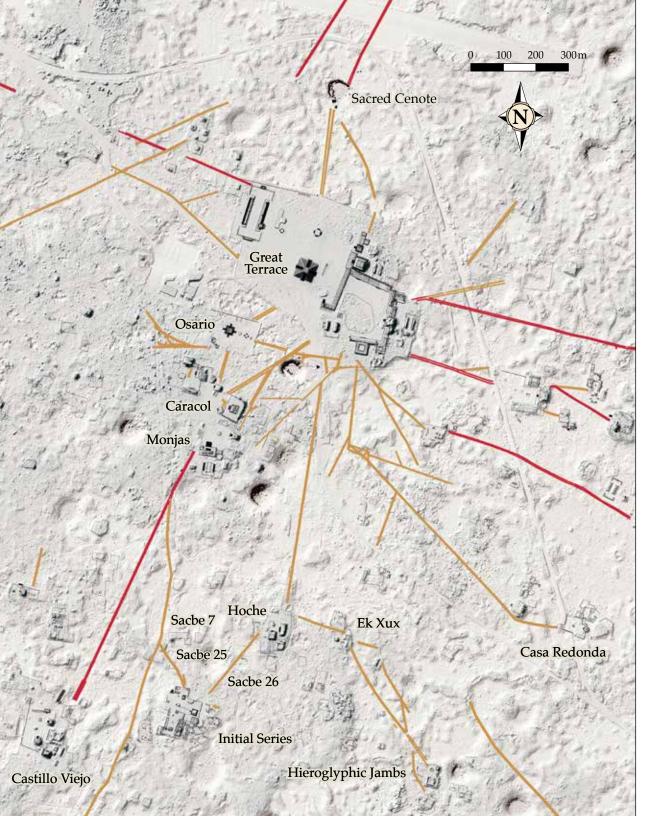


Figure 2. DEM/ Hillshade image of the area from the Sacred Cenote to the Initial Series Group generated from lidar data flown in 2014 with the current INAH map of the site structures superimposed. cruciform pattern similar to community planning known from the contact and historic periods (Coe 1965; Stanton et al. n.d.); approximately 100 causeways have now been identified, some with stairways to cross uneven terrain, others with small altars along their course. The center of the plan is the Great Terrace, from which the western road leading to Cumtun departs. This road continues past Cumtun towards the site of Xuku to a yet-unknown distance and is the only viable candidate for an intersite causeway at Chichen Itza (González de la Mata et al. 2006), an interesting fact given that several sites even farther west, including X'togil and Kantunil, have substantial amounts of Sotuta Complex ceramic materials.

Of note, Kantunil is connected to Izamal by another causeway, most likely constructed between 100 BC and AD 400 given the dates of other causeways in the Izamal region (Maldonado Cárdenas 1979), which still could have been in use centuries later during the time of Chichen Itza. Together these data suggest that a series of roads may have interlinked several important communities between Izamal and Chichen Itza, two cities that have important connections in the ethnohistoric record (see Roys 1933). Returning to the site plan of Chichen Itza, several eastern groups, including the Far East Group, the Chultun Group, the Bovedas Group, the Plazas Group, and the Caritas Group, are roughly opposite the road to Cumtun and similarly oriented, counterbalancing the east-west axis with their corresponding causeways (Figures 1 and 2). The north axis begins as the causeway connecting the Great Terrace to the Sacred Cenote and continues in the form of two parallel causeways leading to the Poxil and San Francisco groups. Following the line of these northern causeways to the south, we can observe that the southern end of the axis runs through the Osario, past the Caracol and Monjas complexes straight to the Southwest Group, home of the second largest plaza at Chichen Itza and the "Old Castillo." Of note the only clear radial structures (Castillo, Osario, and San Francisco) are along or near this north-south axis, as is the Old Castillo. It is this southern area of the site where the Initial Series Group is located, a mere 250 m east of the Southwest Group (Figures 3–5).

The Initial Series Group

One of the most elaborate architectural complexes at Chichen Itza, the Initial Series Group is named after a carved lintel bearing an Initial Series date clearly read as 10.2.9.1.9, corresponding to AD 878 (Grube and Krochock 2007:222; Schmidt 2007:179). Although this inscription could well have important implications for the dating of the Initial Series complex, it was not found in its original context but was rather encountered as a reset stone in the south wall when the group was first explored. In addition, it was discovered in Structure 5C4 (dubbed Temple of the Initial Series), adjacent to but not part of the main complex of the Initial Series Group, termed the Phalli Complex by Schmidt (2007:186),

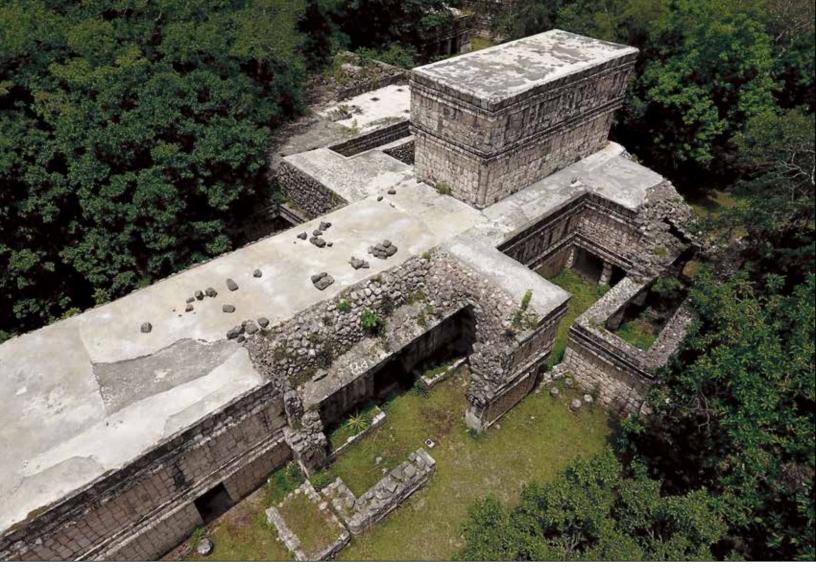


Figure 3. Aerial photo of the House of the Phalli looking roughly southwest (photograph by Dominque Meyer).

containing both the House of the Phalli and House of the Shells (see also Ruppert 1952a:120-121). The latter structure was called the Temple of the Snails by Ruppert (1952a:120-121), but we will adopt the original name given to it by Vaillant in 1926 (see Ruppert 1952a:157-162), as the facade contains marine shells instead of snails. For the sake of brevity, we will often refer to the Initial Series Group as the "Initial Series," with the label reserved for the Group as distinct from the Initial Series monument or the Long Count system of dating. Structure 5C4 specifically will be referred to as the Temple of the

Initial Series.

Although squarely placed in the southern area of the city commonly referred to as "Old Chichen," it is unlikely that the sculptural programs from the Initial Series are in any significant way earlier than those from structures in "New Chichen," chronological distinction а invented by Edward Thompson (1932:219-229) and perpetuated by numerous scholars over the course of the twentieth century (e.g., Morley 1946; Thompson 1954; see also Pool Cab 2016:48). In fact, a pair of sculpted Atlantean columns from the House of the Shells in the Phalli Complex of the Initial Series wear turquoise-petalled back mirrors, or tezcacuitlapilli, such as are found with Toltec-related figures from New Chichen as well as Tula (see Schmidt 2003:Figs. 37, 38; for discussion of Toltec-style mirrors, see Taube 1992a, 1994b, 2012). In addition, the recently reconstructed relief panels from the Initial Series share many thematic and stylistic traits with facades from the Osario temple, which bears a Short Count date corresponding to AD 998 (Lincoln 1986:161; Love and Reddick 2017). To put it another

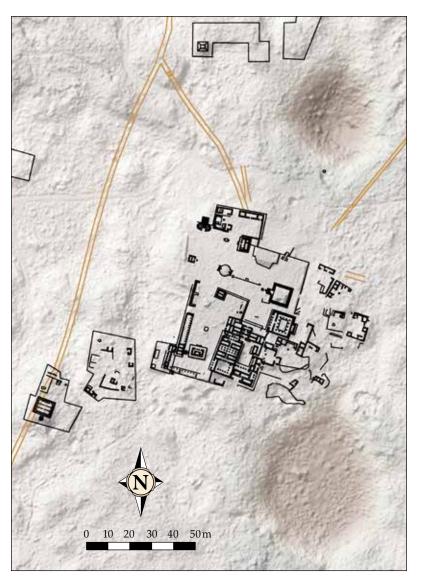


Figure 4. DEM/Hillshade image of the area around the Initial Series Group generated from lidar data flown in 2014 with the current INAH map of the site structures superimposed. Note the two sinkholes.

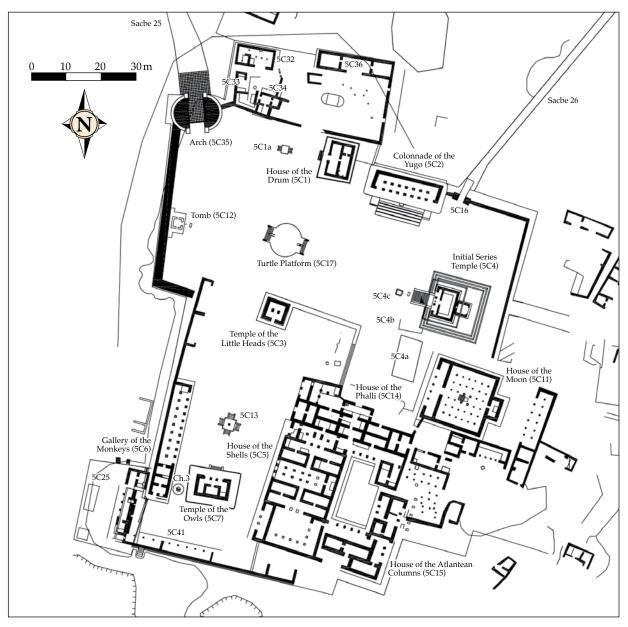


Figure 5. Plan map of the Initial Series Group.

way, although the iconography of the Initial Series exhibits many Late Classic Maya traditions, it reflects a very different and dynamic time during which Central Mexican traits were celebrated and adopted and, in addition, aspects of Maya culture were incorporated into Central Mexico to the west at Tula. Even deities were included, such as the wind god known as Ehecatl-Quetzalcoatl and an ancestral form of the sun god, Tonatiuh—beings that continued to be worshipped among the contact-period Aztec.

Ceramics and Chronology in the Initial Series Group

Of pivotal importance for understanding the building and sculptural programs of the Initial Series is chronology, both in terms of sites in Yucatan but also more distant centers, including both Tula and the Cotzumalhuapa region of south coastal Guatemala. Ceramic data also support the interpretation that the sculptural programs of "Old" and "New" Chichen belong to the same general period, as does previously published work on architecture and settlement patterns that we will not cover here (Braswell and Peniche May 2012; Cobos 2003, 2016; Lincoln 1986, 1990; see also Pérez de Heredia 2010, 2012; Ringle 2017; Vaillant 1927, 1961; Volta and Braswell 2014; Volta et al. 2018). The ceramic data from the Initial Series are particularly germane to our current understanding of the ceramic chronology, as it has some of the best contexts for Yabnal complex (Cehpech) deposits yet reported for Chichen Itza (Osorio León and Pérez de Heredia 2001; Pérez de Heredia 2010, 2012), and this group is where some of the pioneering ceramic work was conducted during the days of the Carnegie project (Vaillant 1927). Data from the Initial Series demonstrate that there is a pre–Sotuta slateware component to the chronology of the site and suggest, just like in other areas of the city, that in the words of Braswell and Peniche May (2012:230), "it is clear that virtually all visible structures were built during a time when Sotuta pottery was dominant." We wholly agree with this observation and draw attention to its implications: that there is no clear ceramic evidence to indicate any significant chronological difference between "Old" and "New" Chichen, a fact that undermines some of the original conclusions by the Carnegie archaeologists. Yet despite this realization, the ceramic chronology of Chichen Itza continues to be much debated, and there is still little consensus among scholars as to the placement of the site in regional temporal frameworks. Much of the discussion has centered on the relationship of the Sotuta Complex with other slateware complexes across the northern lowlands and even at Chichen Itza itself, although there are other chronological points of contention as well. Curiously, the first mention of slate wares is by George Vaillant, who appears to have named the ware during his work at the Initial Series (Morley 1926:271; Vaillant 1927, 1961).

While it is still poorly understood, human activity in the environs of Chichen Itza dates well back into the Preclassic period (Brainerd 1958:63; Pérez de Heredia 2010), a finding that should not be sur-

prising given the natural resources (in the form of cenotes and sinkholes) in the area and the presence of a substantial Preclassic occupation just to the south at Yaxuna (16 km away from the Castillo; Stanton 2017; Stanton and Collins 2017) as well as significant materials at the site of Popola (12 km to the south; Johnson 2012; Magnoni et al. 2014) and Balankanché to the east (Andrews 1965). However, there is no evidence to suggest that any of the remains dating prior to the Late Classic period (at the very least) have anything to do with the urban center that we are familiar with. They could be interpreted as structures that had long been in ruins when the urban center was founded.

As mentioned above, recent work on the slateware complexes at Chichen Itza suggests that "Old" and "New" Chichen are relatively contemporaneous. That said, there is clearly the Yabnal slateware ceramic complex before Sotuta, although we are skeptical of the presence of more than one pre-Sotuta slateware complex at the site as proposed by Pérez de Heredia (2010). The issue of how to chronologically order slateware in the northern lowlands was first addressed by George Vaillant (1927, 1961; see also Rands 1962), who acknowledged the lack of stratigraphic contexts at Chichen Itza through the work of the Carnegie project.

Potsherds and vessels in abundance have been excavated from the ruins of Chichen, particularly from the Cenote of Sacrifice, from the Temple of the Warriors, from a temple associated with the Group of the Thousand Columns, and from the group called falsely Old Chichen Itza. Yet certain grave difficulties in the occurrence of material beset the utilization of this pottery in the formation of a time sequence. (Vaillant 1961:355-356)

Vaillant (1961:364-365) also noted the critical importance of correlating building programs with ceramic sequences documented through stratified excavations at Chichen Itza:

It is most unfortunate that colossal gaps in the recorded knowledge of the cultural and time aspects of the Toltec and Totonac cultures prevent us from abducting data to clarify the succession of ceramic types at Chichen. Not until the temple architecture is worked out historically and really not until rubbish beds which contain stratificatory series, are investigated, shall we have any tangible evidence of the sequence of pottery styles at Chichen Itza.

Vaillant appears to have divided the northern slateware-bearing sequence into two general phases, primarily based on an earlier one that lacked fine orange and plumbate ware (Mexican Contact, corresponding to Brainerd's [1958:1] Fluorescent period) and the other that subsequently included them (Mexican Occupation, corresponding to Brainerd's [1958:1] first sub-stage of the Mexican period). Thus despite his reservations concerning the stratigraphy, temporal divisions of ceramic complexes, although not necessarily the slatewares themselves, can be traced back to Vaillant.

Continuing with the analysis of the Carnegie project ceramics, it was George Brainerd (1958) who, beginning in 1939, more clearly laid out the division of these two temporal groups, which have become

known as the Cehpech and Sotuta spheres (see Andrews and Robles Castellanos 1985; Smith 1971). Following the Carnegie Institution archaeologists who envisioned an architectural and iconographic division between an earlier Maya occupation and a later period of Toltec influence at Chichen Itza (e.g., Thompson 1970; Tozzer 1957), Brainerd divided the regional slatewares between earlier Pure Fluorescent (Cehpech) and later Mexican (the first sub-stage of the Modified Fluorescent or Sotuta) periods (the names for the complexes/spheres were established by Smith [1971]); in particular Brainerd (1958:63) cited stratigraphic evidence at the Caracol for Fluorescent materials at Chichen Itza.

Starting with ceramic research by Joseph Ball (1979), there has been much discussion over the various possible degrees of overlap in the attributes of Cehpech and Sotuta material, directly impacting our understanding of their chronological placement in the Northern Lowlands (see also Andrews et al. 2003; Braswell and Peniche May 2012:230-231; Chung 2009; Cobos 2016; Lincoln 1986; Pérez de Heredia 2010). Recent work suggests that Sotuta ceramics are simply the local Chichen Itza complex of a broader Cehpech ceramic system (Stanton and Bey n.d.; see also Cobos 2016). Yet it is clear that while the Sotuta Complex at Chichen Itza should be viewed as specific to this region, there are pre–Sotuta Complex–looking slateware materials in stratigraphically earlier deposits in a few areas of the site (Chung 2009; Osorio León 2006; Pérez de Heredia 2010, 2012), a situation similar to other sites in the local region. For example, stratigraphic data from Yaxuna (Stanton and Magnoni 2016; Suhler et al. 1998) indicate that certain attributes—such as a red fabric, molcajete forms, and a semi-translucent slip—all appear long after slateware technology first shows up at the site and postdate deposits that have Yabnal-like ceramics. In short, slatewares substantially change over time at numerous sites in the Northern Lowlands, and some important attributes *traditionally* used to identify Sotuta material appear to be rather late in the sequence, both at Chichen Itza and other sites (Figure 6).

Further complicating matters, work by the Proyecto de Interacción Política del Centro de Yucatán at both Ikil and Yaxuna indicates that firing temperature had a significant impact on both the slip and fabric color of ceramics from the Helep Complex (the ceramic complex corresponding to Sotuta at Yaxuna). In some cases we have been able to document the semi-translucent slip and red fabric very typical of Sotuta ceramics on one side of a vessel and on the other side a very buff color that approximates tones more commonly found on "Cehpech"-looking ceramics from the earlier Tsolik Complex (which we equate with Pérez de Heredia's Yabnal Complex at Chichen Itza). This realization makes us question how we utilize certain attributes to understand our ceramic materials, but in general we are comfortable stating that attributes such as semi-translucent slips and red fabrics cluster in the latest stratigraphic slateware-bearing levels at sites like Yaxuna, indicating for us that there is a change in slateware material significant enough to warrant a renaming in ceramic complex designations (e.g., Yabnal to Sotuta at Chichen Itza or Tsolik to Helep at Yaxuna).

At Chichen Itza specifically, Eduardo Pérez de Heredia (2010:95) has created several ceramic complexes that include slatewares, provisionally placing Yabnal (Motul) Complex at AD 600–800/830,

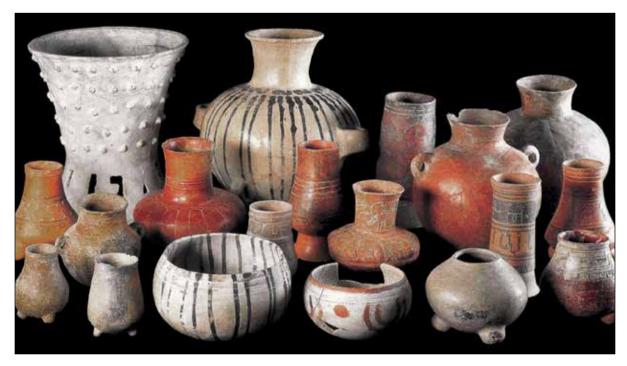


Figure 6. These whole vessels from the Initial Series Group give a sense of the Sotuta Complex at the site.

clearly indicating that early Yabnal contexts were not recovered in any of the excavations. At nearby Yaxuna, where we have a substantial number of radiocarbon dates to temporally situate the sequence, the Yulum Complex is currently placed at AD 550–700/730 (Stanton and Magnoni 2016; called Yaxuna III by Suhler et al. 1998 and corresponding to a Middle Classic component), but we suspect that it might actually begin earlier. At Yaxuna, Yulum has slatewares, but only in its later facet and is primarily characterized by non-slateware groups such as Chuburna, Maxcanu, Arena, Saxche, and Batres; it also has substantial numbers of types such as Hunabchen and Katil, some of the same types that Cobos and his colleagues (2016) report for their Motul Complex gleaned from the excavations of the Great Terrace at Chichen Itza. At Chichen, the Yabnal contexts described by Pérez de Heredia appear to lack the major types such as those from the Katil, Hunabchen, Dzitya, and Kinich groups. These data lead us to believe that Yabnal deposits at Chichen Itza date closer to AD 700–800/830, a period of time at Yaxuna (Tsolik Complex, AD 700/730–850/900) characterized by the introduction of Puuc architectural traits and the presence of slateware ceramics sharing many attributes (e.g., forms and decoration) with the material

reported by Pérez de Heredia (2010, 2012) for Yabnal. This range of dates in some ways coincides with Pérez de Heredia's observation that "early" Yabnal is not present in the Chichen collections, as it may suggest a date closer to AD 700 rather than AD 600 for the materials he reports.

Regardless of its exact dating, Pérez de Heredia (2010:95) reports Yabnal material from three large platforms at Chichen Itza: the terrace of the Initial Series, the plaza of the Castillo (where some of the light and sound equipment was installed on the Great Terrace), and the Three Lintels terrace. Yabnal ceramics have also been found beneath the ballcourt of the Casa Colorada and in the Sacred Cenote (Góngora Cetina 2011; Pérez de Heredia 2010, 2012; Schmidt et al. 2017). In the Initial Series, they have been located beneath both the Temple of the Phalli and the Great Archway, and in association with an early substructure of the Temple of the Initial Series (dubbed the Temple of the Stuccos [see Pérez de Heredia 2010]). In none of the cases where Yabnal ceramics have been found are the contexts well understood, and in most cases they occur in earlier platforms with little stone sculpture. At best we can say that at this time Chichen Itza was a significantly smaller site, although with some substantial platforms in both the areas of "Old" and "New" Chichen. This noted, these early contexts do not date or pertain to the sculptural programs under discussion and do not figure in the outdated discussion of "Old" and "New" Chichen as they are not on the surface.

In his sequence, Pérez de Heredia (2010; see also Cobos 2016; Ringle 2017) follows Yabnal with the Huuntun Complex, which he dates to AD 800/830–920/950. He identifies Huuntun by the presence of "Puuc Slate ware" but acknowledges that it remains not very well defined. In the Initial Series, the platform beneath the House of the Phalli was raised during this period, although Pérez de Heredia identifies ceramics in the construction fill with the previous Yabnal Complex, a situation he compares to ceramics recovered in the roof comb of the Red House in the 1960s, which are also Yabnal (although these materials could well have come from an older deposit). Similarly, the latest ceramics in the Three Lintels platform are also Yabnal, although Pérez de Heredia indicates a Huuntun-phase construction. A total of 58 Huuntun sherds were recovered in two pits at the Akab Dzib, the majority from a pit into the interior roof of the building and also mixed with Sotuta materials. Cehpech ceramics are also reported from below the 4D6 Terrace, and a handful of sherds came from an excavation in front of the east facade of the Castillo.

Returning to the Initial Series, Pérez de Heredia also reports a Huuntun midden context at the base of the Initial Series Yabnal-phase platform; three sherds of Huuntun (representing only 0.2% of the material from this context) in the fill of the Temple of the Sacrificial Stone, the second phase of the Temple of the Initial Series to be described below; Huuntun sherds in the fill of a possible substructure of the colonnade building, Str. 5C2; and a burial with three potential Huuntun vessels under Altar 5C1a (materials from two other infant burials associated with this altar were assigned to Yabnal, but are argued to have been deposited during Huuntun times [Pérez de Heredia 2010:170]). While it is difficult to assess the material from the deep midden contexts without reanalysis, the burial vessels have forms

common in the Helep Complex (AD 850/900–1100) established at the sites of Yaxuna and Ikil (Stanton and Magnoni 2016). Helep corresponds to the Sotuta Complex at Chichen Itza, and as mentioned above it has been documented at both Yaxuna and Ikil that Cehpech-looking surface treatments occur during Sotuta times at these sites, being more a product of firing temperature than anything else. Other possible Huuntun materials mentioned by Pérez de Heredia come from the Carnegie excavations and were not examined firsthand, or derive from mixed contexts such as the chultun at the Three Lintels structure and the Sacred Cenote. At present, we feel that there is still no compelling evidence for a separate Huuntun Complex (Cobos 2016; Ringle 2017) or any sort of hiatus in construction, although future research may uncover more stratigraphic contexts from which Pérez de Heredia's proposal can be substantiated.

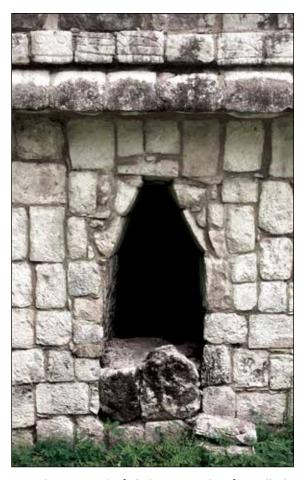
Proposing an alternate chronology for Chichen Itza that includes material from the Initial Series, Chung (2009) divides the ceramics into five periods. Period I is represented by material that predates slatewares (principally the Sierra, Xanaba, and Aguila groups). Period II is dominated by Tintin and Black slates. Described as having a modal affinity with the later Dzitas Slate, Chung (2009:99-100, 217-220, 223) argues that Tintin is contemporaneous with Muna Slate and provides a range of AD 750–970 (roughly corresponding to the Early Sotuta Complex of Cobos [2001, 2004; Cobos et al. 2016]) for its manufacture (although her earliest thermoluminescence date for Tintin is AD 787). Chung's Period III (AD 950–1150; note that the periods proposed by Chung overlap) is dominated by early Dzitas Slate (as well as Teabo Red and Yokat Striated), the typical slateware at Chichen Itza defined by Smith (1971). Period IV (AD 1050–1260) is characterized by Dzitas Slate as well as Dzibiac Red, and Period IV-1 (AD 1250–1350) is a mix of Dzitas Slate, Peto Cream, and Mama Red. Finally, Period V corresponds to the Late Postclassic Tases Complex (see Smith 1971). While one of the most important contributions of Chung's work is that it envisions a situation where local slatewares evolve at the site, she also notes that the majority of the contexts date to one single period, Period IV. Her ceramic data strongly suggest that the architectural and iconographic elements historically used to separate "New Chichen" from "Old Chichen" are from the same general period of time. While further stratigraphic work will likely resolve some of the inconsistencies in the ceramic chronology, for the moment we adopt Pérez de Heredia's Yabnal Complex that includes some "non-Puuc" looking slatewares (although suggesting that the range of dates may be slightly later than he proposes) and we follow Chung that there is no "Cehpech" phase; thus, the local slatewares evolved in a local "Sotuta" tradition.

The ceramics indicate that the architecture and its elaborate sculptural programs at both "Old" and "New" Chichen date to the single phase widely known as Sotuta. According to Schmidt (2007:186), the primary ceramic complex associated with the House of the Phalli and adjoining structures in the Initial Series is indeed Sotuta, identified with the Terminal Classic and Early Postclassic apogee of the site, which, in lieu of further stratigraphic work with the ceramics and a program of absolute dating, we would suggest dates roughly AD 800/850 to 1100/1200. Similarly Pérez de Heredia [2010:182] dates

the complex to AD 920/950-1150/1200), which best corresponds to the Mesoamerican period known as the Early Postclassic (AD 900-1250). While we do acknowledge that the ninth century AD is technically in the Terminal Classic period, we believe that Chichen Itza is fundamentally an Early Postclassic site, not just in terms of absolute years, given that much of the occupation appears to be post-AD 900, but considering the fact that this city embodied the fundamental social, political, economic, and ideological transformations which engendered the Postclassic Mesoamerican world (ceramics are not the only thing to consider when assessing chronology). Chichen Itza was a very different place than the Classic world from which it emerged. Returning to the point, we wish to stress that it is generally understood that Sotuta constitutes the main ceramic complex at the site, including the Great Terrace where much of the sculptural programs for "New Chichen" are located. This is not to say that the ceramic sequence at the Initial Series ends with Sotuta. On the contrary, there is plentiful evidence of a post-Sotuta presence. But, while some sculptural material was subsequently moved during the Late Postclassic (ca. AD 1250-1521), no new sculptural programs date to these post-Sotuta times, in direct contrast to the florescence of Mayapan at this time.

Floor and collapse contexts at the Initial Series Group—much like the majority of systematically **Figure 7.** Makeshift door created in the wall of the north facade of the House of the Phalli after its initial abandonment.

documented monumental contexts at Chichen Itza—are associated with the Hocaba Complex, dominated by Peto Cream ware. During the time that Peto Cream was in use, the Initial Series was reworked and reoccupied following its general abandonment. It must have been in ruins by the time Peto Cream became popular, as the people who reoccupied the Initial Series punched holes through walls to create crude doorways into semi-collapsed and otherwise inaccessible chambers with standing vaults (Figure 7; Osorio León 2004:39). Peto Cream only occurs in post-construction contexts. Late Postclassic Tases



material has also been found at the complex, but only as offerings. It appears that while people lived at the Initial Series during Hocaba times, they only periodically visited the complex during the Tases phase. In other words, all of the remarkable sculptural programs at the group are solidly associated with the Sotuta Complex corresponding to the Early Postclassic apogee of Chichen Itza.

History of Research in the Initial Series Group

The first work conducted in the Initial Series was by Sylvanus G. Morley, through funding granted by the Carnegie Institution of Washington as well as a permit from the Mexican government in 1913, with fieldwork at the site finally beginning in earnest in 1923 (Weeks and Matarredona Desantes 2015:2). Nonetheless, Morley (cited in Weeks and Matarredona Desantes 2015:34; see also Ruppert 1952b:158) reports that he investigated the group prior to the hiatus caused by World War I and the Mexican Revolution:

Some 60 m south of the Temple of the Little Heads is the Temple of the Owl, (Str. 5C7) so named because of the horned owls which decorate the square columns and jambs of the triple doorway in its front or north side. The writer partially excavated this small temple in 1913 and found a human statue (head and torso only) with arms clasped over the breast; this was tenoned into a hole at the base of the right (west) column of the pair of columns dividing the triple doorway.

Clearly enough, Morley is describing one of two piers portraying anthropomorphic cacao trees at the entrance of the Temple of the Owls (see Martin 2006; von Winning 1985).

In 1926, George Vaillant performed the first comprehensive archaeological investigation in the Initial Series, including the Temple of the Owls and the House of the Phalli (see Ruppert 1952b). Although Vaillant named this the House of the Shells, Karl Ruppert (1952a:121) subsequently renamed it with the rather unfortunate moniker Temple of the Snails. Since in fact there is no indication that it is a temple, and, as mentioned earlier, the building is decorated with carved marine shells, we will use Vaillant's original nomenclature and refer to it as the House of the Shells, in contrast to Schmidt (2007:186) in his important discussion of the Initial Series Group.

At the time of Vaillant's initial fieldwork, the sculptural programs of the Initial Series were poorly understood, but this changed radically thanks to a major archaeological project directed from 1998 to 2002 by Peter Schmidt under the auspices of the Instituto Nacional de Antropología e Historia, or INAH (Schmidt 2003, 2007; Schmidt et al. 2018). This field research involved painstaking reconstructions of elaborate friezes fitted from individual cut blocks, thereby creating a rich corpus of previously unstudied iconographic imagery, the central focus of this study.



Figure 8. In situ facade stones in the excavation.



Figure 9. Section of a facade reconstructed prior to reintegration (photograph by José Osorio León).

The excavation was conducted on a 2 x 2 m grid following natural and cultural stratigraphy. In terms of the documentation and reconstruction of the facades, photos and drawings were taken as each layer of stone collapse was removed. In some cases, the facade stones were found to have fallen in such a way as to preserve their spatial articulations (Figure 8). In other cases, the stones were found disarticulated near the areas from which they had fallen. After documentation and removal, the facade stones were compared and arranged until the designs appeared to match together (Figure 9). The stones were then reintegrated into the facades and drawn.

Aside from his 2003 field report submitted to INAH, Schmidt (2007) also describes the Initial Series friezes in a study summarizing his major, relatively recent field research at Chichen Itza, including ad-

ditional work at the Osario. In addition, Peter Schmidt's posthumous and co-authored paper concerning the Temple of the Owls was recently published in *Estudios de Cultura Maya* and not only describes and interprets the sculpture programs of this structure, but also its date of construction (Schmidt et al. 2018). Independent of the INAH field project at Chichen Itza, Martha Ilia Nájera Coronado (2012, 2016) also discusses the Initial Series facades in some detail, including previously unpublished images from Schmidt's 2003 field report. In these studies, Nájera Coronado focuses on representations of cacao and its attendant symbolism in the Initial Series, including the Gallery of the Monkeys facades. It is no exaggeration to state that this area of Chichen Itza has the most elaborate sculptural programs devoted to cacao known for ancient Mesoamerica, and the likely reason for this will be discussed below (for cacao in ancient Mesoamerica, see Coe and Coe 1996; McNeil 2006).

Aside from her research concerning cacao, Nájera Coronado (2015) also discusses a salient avian being in the Initial Series Group, an anthropomorphic duck-billed deity that she ably argues is an Early Postclassic form of Ehecatl. There is a good deal of validity to this argument, as has also been pointed out by others working with the Initial Series facades (Schmidt 2007; Schmidt et al. 2018; Taube 2018a; Taube et al. 2014). In addition, thanks in part to an original insight shared by David Stuart (personal communication 1994), it is becoming increasingly clear that the origins of the duck-billed wind god of the Aztec, Ehecatl-Quetzalcoatl, or the Mixtec 9 Wind, derive from far earlier cultures of southeastern Mesoamerica, including the Classic and Late Preclassic Maya, the Olmec, and even the Early Formative Mokaya culture of the Soconusco of southern Chiapas (Taube 2018a; Taube et al. 2010).

Architecture and Iconography

The Initial Series, which has been postulated as the residence of one of the ruling families at Chichen Itza (González de la Mata et al. 2010), is located approximately 800 m south of the Monjas, accessible from this more northern area by Sacbe 7 (which continues from the Monjas to the Temple of the Three Lintels) and then Sacbe 25. Sacbe 26 also connects the group with the Ho Che Platform, which in turn connects to the Great Terrace by Sacbe 12. This kind of loop that the Initial Series is a part of (where a person could leave the Great Terrace on one causeway and return on another) is quite rare at the site; in most other cases people would have had to return the way they came or leave the causeway system entirely.

Roughly 150 m north-south by 125 m east-west, the ambient platform (also known as a terrace) of the Initial Series is irregular and surrounded by domestic structures and platforms, as well as various *sascaberas* and two substantial sinkholes (Osorio León 2004:38). There are seven formal entrances to the platform. The primary entrance is the Arch (Str. 5C35, El Portón), which connects to Sacbe 25 (Figure



Figure 10. The Arch (Str. 5C35, El Portón) connects to Sacbe 25 and is the primary entrance into the Initial Series Group (photograph by Dominque Meyer).

10). This impressive construction was first investigated by the Carnegie Institution of Washington, with research completed by the INAH project during the early 2000s. Directly to the east of the Arch is a series of small structures on a platform abutted to the wall of the terrace (González de la Mata 2008). Excavations by J. Eric Thompson in the chultun associated with these structures recovered a burial containing a large amount of ceramic material. It was on these materials that Vaillant (1927) based much of his original ceramic sequence. Sculptural elements found in the collapse of the Arch, including large teeth indicate that the archway was a representation of a large monster mouth from which Sacbe 25 connected via a ramp. Elements that appear to be *grecas* may have served as the monster's eyes, and other carved blocks with feathers and small circles were also recovered in the collapse.

In Chenes and Río Bec architecture as well as at Ek' Balam and the east side of the Monjas at Chichen Itza, such maws constitute the open mouths of Witz heads, in other words zoomorphic mountains, and it is conceivable that when one passed through the arch, one was penetrating symbolically



Figure 11. Figure of a monkey found in the collapse surrounding the entryway arch to the Initial Series Group (photographs by Travis Stanton).

into a mountain, widely considered to be a dangerous place but also a source of wealth and abundance in ancient and contemporary Mesoamerica. With its oval plan, sloping sides, and mountain maw doorway, the Initial Series Arch recalls the great Adivino pyramid at Uxmal, which on the west side has a zoomorphic Witz doorway near its summit.

In the entry archway, a small kneeling sculpture was discovered, with the left knee raised and the right down, a basic pose of respect and humility among both the ancient and contemporary highland Maya (Figure 11; see Taube 2003b). Although wearing some sort of skirt or apron, it also exhibits a prominent tail, making it more than likely that it is not human but rather a monkey. Moreover, a heavy cord can also be discerned around the neck, especially on the back side where the tail is also depicted. More than likely, this rope indicates that the monkey figure is an abject captive, a theme that as we will note relates to the elaborate facades of the Gallery of the Monkeys, directly to the right when one passes through the arch into the Initial Series Group plaza.

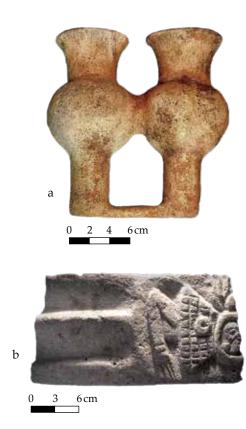
In addition, a major formal entrance also marks the area where Sacbe 26 connects to the Initial Series platform, although not nearly as elaborate as where the Sacbe 25 arch connects. A major *rejollada* or sinkhole is immediately accessible where Sacbe 26 initially leads from the Initial Series Group north to the Great Platform. A staircase off the southeast portion of the Initial Series platform (Access No. 5) leads to a southern, shallower *rejollada*.

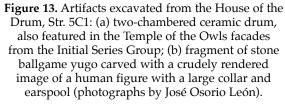


Figure 12. Portrayals of severed heads in Mesoamerican art: (a) graffito from substructure floor ramp of the Arch representing a severed head; (b) severed head from stucco facade at Tonina (after Yadeun 1993:115); (c) sixteenth-century example of a severed head from murals at Ixmiquilpan, Hidalgo (after Wright Carr 2005:38) (drawings by Karl Taube).

Graffiti from a substructure floor ramp of the Arch has been interpreted as a *patolli* board with an associated head in profile (Euan Canul et al. 2005). While *patolli* boards do exist at Chichen Itza, they have only been positively identified in patio-gallery structures, in particular Str. 2D6 (next to the Temple of the Big Tables [Fernández Souza et al. 2016:197]) and one on a bench at the Mercado (Ruppert 1943), possibly indicating a link between this architectural form and divinatory or gambling practices. However, upon further scrutiny of the incision, it is clear that the graffito simply represents a severed head (Figure 12a). The neckline is jagged and the tongue extends from the mouth of the deceased, a convention that can be seen in Classic Maya imagery as well as the sixteenth-century murals from Ixmiquilpan, Hidalgo (Figure 12b–c). Rather than a *patolli* board the lines above the head represent the headdress of the individual. Given that the graffito occurs on a substructure floor, it does not postdate the collapse of the city, meaning that people passing through the main entrance to the complex would have walked over this striking image of sacrifice, which as we shall see was an important theme of the Initial Series, especially in this northern sector of the platform.

Beginning in the northeastern portion of the platform (where the Arch connecting to Sacbe 25 is located) and moving roughly clockwise, we can see that the platform has numerous buildings. Str. 5C1 is the House of the Drum (Casa del Tambor), a building with a perishable roof named for a slateware ceramic double drum found on the floor against the back wall (Figure 13a). In front of this structure is an altar (5C1a) where several of the burials mentioned previously were located. No monumental iconographic programs are associated with either of these constructions, or with the domestic area to





the immediate north (5C32, 5C33, 5C34, and 5C36).

Str. 5C2, the Colonnade of the Yugo (Columnata del Yugo), has two lines of broad rectangular columns to support a perishable roof. Atop the platform, the floor has an enigmatic circle of stones that appear to have been covered with stucco. A fragment of a stone *yugo* carved with a crudely rendered image of a human figure with a large collar and earspool came from this feature (Figure 13b; see Schmidt 2003:Fig. 8). Although widely known for Classic-period Veracruz as well as the highlands and piedmont of southern Guatemala, this is the only yugo presently known at the site (for examples of yugos from Guatemala, see Shook and Marquis 1996).

Continuing with the east side of the platform, there is the Temple of the Initial Series (5C4), the structure that called early attention to the complex. George Vaillant excavated this building in 1926 (Ruppert 1952b), concentrating on consolidating the top part of the temple that was partially disturbed by early investigations by Edward Thompson (Willard 1926:180). Vaillant also excavated a large pit to bedrock in front of the east facade. Through our current work we have identified four construction phases. The earliest (Phase I) was documented in the area of Vaillant's pit, where we found a substructure at the level of the first phase of the plaza. Dubbed the House of the Stuccos, the limited area exposed had several well-stuccoed interior rooms

connected by narrow doorways. The upper sections of the exterior facades must have been covered in a rich program of modeled and painted stucco, as many fragments were recovered including images of zoomorphs, humans, and human skulls (Figure 15). In addition, tenoned stone roof elements, to be discussed subsequently, and columns were also recovered (Figure 20a).

Paint recipes from the stuccos approximate those found at nearby Ek' Balam, leading Vázquez de Ágredos (2010; Vázquez de Ágredos et al. 2014) to argue that painters from Ek' Balam moved to

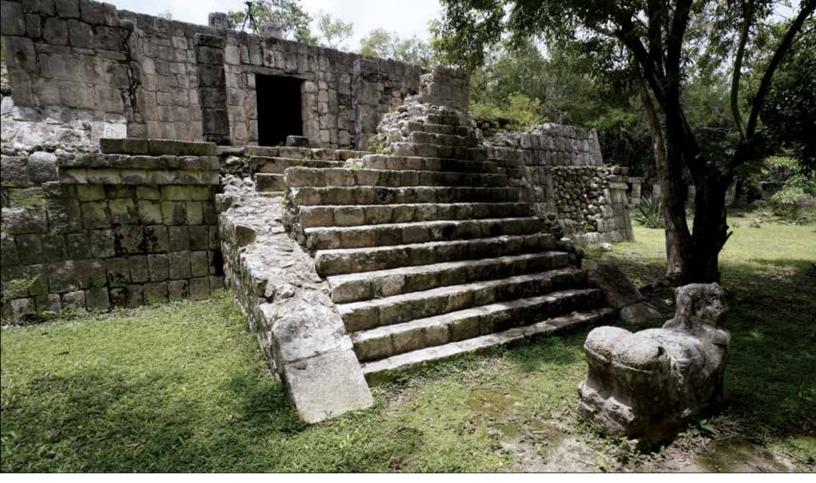
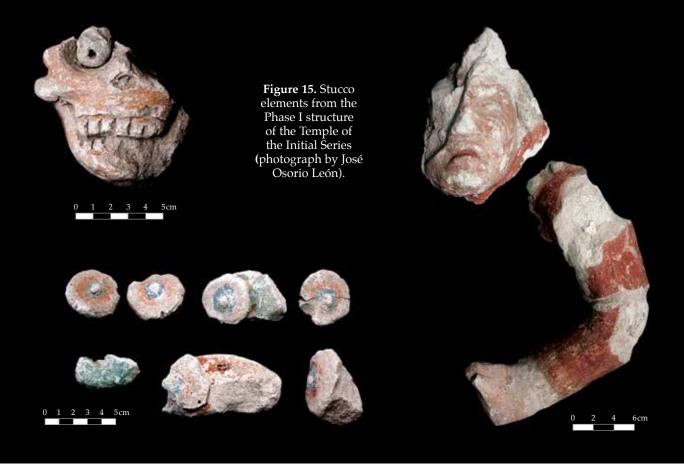


Figure 14. The Initial Series Temple; note the Chac Mool and the sacrificial stone in front of the doorway (photograph by Dominque Meyer).

Chichen Itza during the Terminal Classic, and the similar modeling techniques also support this idea. The ceramics associated with the fill and floor of the House of the Stuccos are from the Yabnal Complex, although it should be noted that Late Preclassic Tihosuco Complex material was also recovered, suggesting a much earlier occupation of this area as well (Osorio León 2004:170-172; Pérez de Heredia 2012:390-392).

Phase II of the Temple of the Initial Series is dubbed the Temple of the Sacrificial Stone for the trapezoidal sacrificial stone on its summit (in front of the doorway to the upper temple; Figure 14). However, rather than dating to the Early Postclassic apogee of the site, this altar could be Late Postclassic and closely corresponds in form to the basalt sacrificial stone from the summit platform on the southern Huitzilopochtli side of the early Phase II of the Aztec Templo Mayor (see López Portillo et al. 1981:149); the issue is that the Temple of the Initial Series altar was found in clear association with the Sotuta-period



Phase II of the structure. In addition, a similar trapezoidal altar was found at Structure Q-141 at Late Postclassic Mayapan. According to Proskouriakoff (1962:Fig. 10w, legend), this was a "typical sacrificial altar," and in addition Proskouriakoff (ibid.:111) notes that it was probably from the "upper terrace" of the building, in other words, much like the placement of the Templo Mayor altar. Similar Late Postclassic quadrangular sacrificial stones are known for the summit platforms of the Castillo at Tulum as well as the final Late Postclassic temple atop the Nohoch Mul at Coba. At Chichen Itza, another trapezoidal altar can be seen today slightly south of the central stairway of the Temple of the Warriors. It is noteworthy that the Temple of the Warriors, Dance Platform, and the Temple of the Jaguars form a strong east-west axis pertaining to sacrifice and war, and as will be seen this is also the case on a smaller scale for the northern portion of the Initial Series. The trapezoidal sacrificial stones from the Temple of the Warriors and the Temple of the Initial Series suggest that in both locales the east-west axis pertained to human heart sacrifice during the Late Postclassic period following the general abandonment of Chichen Itza.

Several of the construction stones for Phase II of the Temple of the Initial Series appear to have

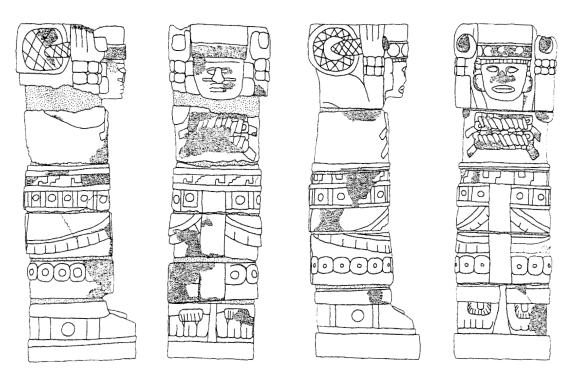


Figure 16. Drawings of "Toltec style" figures wearing pairs of mat pectorals and grasping dance fans in both hands, from atop the Temple of the Initial Series (from Schmidt 2003).

been recycled from prior buildings and are decorated with fretwork, portions of probable Witz masks including an eye and earspool elements, and part of a probable four-lobed Venus or star sign (Figure 20a; see Osorio León 2004:Fig. 12). Similar stones were found in association with Structures 5C14, 5C17, and 5C35, suggesting an earlier building program that was completely dismantled and reused in various Initial Series constructions at this time during the Sotuta phase.

In the Temple of the Initial Series, the Temple of the Atlantean Columns (Phase III) was a major construction project that substantially raised and expanded the building during Sotuta times. Named for the two Atlanteans on the upper temple doorway, only the foundation of the upper temple remained in situ. There is substantial evidence that the upper temple was dismantled during the final occupation of the group, corresponding to the Temple of the Lintel. Wearing two mat pectorals and grasping fans in both hands, the Atlantean figures do not appear to be warriors, and they lack the butterfly pectorals and back mirrors commonly seen with "Toltec style" warriors, such as the famed Atlantean columns from Structure B at Tula (Figures 16 and 17). Indeed, at Chichen Itza and in Late Classic Maya art, fans



Figure 17. Photogrammetric image of "Toltec style" figures wearing pairs of mat pectorals and grasping dance fans in both hands, from atop the Temple of the Initial Series (created by Dominque Meyer and Danylo Drohobytsky).

commonly denote dance and performance and are often held by ritual clowns (Taube 1989a, 1994b). For these columns, jade discs encircle the lower legs and also appear on the sides of the sandals as well as with their finely woven belts, having forms of the step-fret motif. One figure also wears a jade disc headband, with both also wearing jade bracelets. The jades and elaborate costume suggest that they are indeed engaged in public performance, recalling the richly costumed kings in dance on Classic Maya monuments, although in this case in a strikingly impersonal format with no glyphic mention of those involved.

The Initial Series excavations also uncovered long-nosed Witz masks on the four Phase III corners of the building, and as in the case of many Witz heads on structures at Chichen Itza and the Puuc region, both heads exhale pairs of breath scrolls and have floral headbands, identifying them as Flower Mountain (Figure 18; see Taube 2004b). In keeping with many Witz heads from the Northern Lowlands, they have crossed bands on the brow, an element constituting part of the Kawak sign signifying stone in the Late Postclassic codices. As with many Witz masks at Chichen Itza as well as the Puuc region, the Temple of the Initial Series earspools are virtually square with a central

hole that originally held a symbolic breath element, usually a long projecting jade bead assemblage (for Maya jade earspools and breath, see Taube 2005b).

In addition to the Witz masks originally at its four corners, the Phase III temple also has a pair of intertwined serpent bodies with remnants of red paint (Figure 19). Oddly, the snake bodies are headless, and it is conceivable that they were part of flanking stairway balustrades, much like the intertwined serpent balustrades from the Osario at Chichen Itza with separate projecting heads at both ends (see Headrick 2018; Schmidt 2007). However, given that the serpent bodies are only slightly more than two meters long, they clearly could not have extended along the entire stairway length of the temple.

Fragments of large bas-reliefs over a meter across representing Venus or star symbols found in

the collapse were probably also part of the temple facade (Figure 20b; see Osorio León 2004:Fig. 23; Schmidt 2007). These star signs are of the same form as the fragments aforementioned found in the Phase II temple as well as several others reset in other structures, such as the benches of the adjacent House of the Phalli. Finding these earlier pieces in the collapse of the Temple of the Atlantean Columns (Phase III) may indicate that they were also taken from this structure to be reset in later construction throughout the Initial Series. If indeed signs of Venus as Morning Star, it is fitting that these tenoned roof elements, or almenas, would project into the sky when one faces east towards the temple, the direction of the dawning sun and the morning star. In addition, they are carved with open areas, allowing the symbolic light of the morning star to penetrate through them into the Initial Series plaza. Among the Aztec and other Late Postclassic peoples of highland Mexico, the Morning Star was known



Figure 18. Witz head from the Phase III construction of the Temple of the Initial Series (photograph by Karl Taube).

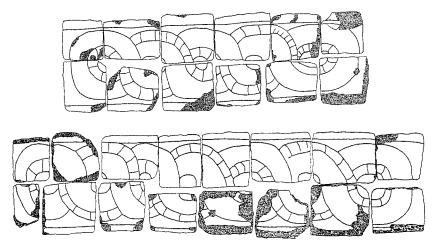


Figure 19. Two pairs of intertwined serpent bodies with remnants of red paint from the Phase III Temple (from Schmidt 2003).

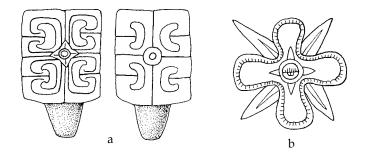
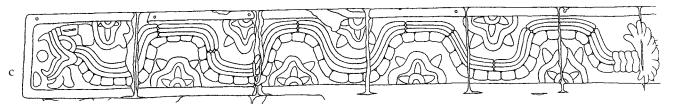


Figure 20. Star signs from the Initial Series Group and the Mercado Structure at Chichen Itza: (a) four-pointed stars from the Phase III construction of the Temple of the Initial Series (drawings by Karl Taube); (b) four-lobed star with the upper lid carefully delineated with vertical lines, probably to indicate eyelashes (drawing by Karl Taube); (c) halved versions of star signs appearing on bodies of plumed serpents from the Mercado Structure at Chichen Itza (from Tozzer 1957:Fig. 126).



as Tlahuizcalpantecuhtli, or "Lord of the Dawn," a fierce skeletal being related to the souls of warriors and warfare (see Mathiowetz et al. 2015).

The bas-relief Phase III star devices display a flower-like, four-lobed form containing a central half-open eye, with the upper lid carefully delineated with vertical lines, probably to indicate eyelashes (Figure 20b). Its overall form recalls the Classic Maya "Lamat" sign denoting a star, a cross-like element that can even be traced to the Formative Olmec (Garton and Taube 2017; Taube 2018a: Fig. 23c). Although absent in the Maya codices, the half-open eye is a basic star symbol in Late Postclassic Central Mexico, including the Borgia Group, where it commonly denotes the starry night sky. Four-pointed elements project in cross-like fashion from the eye with still larger ones projecting diagonally from the corners of the encircling four-lobed element. The larger devices closely resemble hafted spear or dart points, which could relate to a well-known attribute of Venus at heliacal rising as Morning Star following the eight day period of inferior conjunction. In the Maya Codex Dresden as well as the Cospi, Vaticanus B, and Borgia codices of highland Mexico, Venus at heliacal rising following inferior conjunction shoots darts from a spearthrower, an interpretation first proposed by Eduard Seler (1904), based on an account from the Anales de Cuauhtitlan (see Bierhorst 1985:36). In his discussion of the Venus pages appearing in the Borgia Group, Seler (1904:384) notes that the term for a ray of light, or *miotl*, is essentially the same as that for a dart point, mitl. For the Temple of the Initial Series, the four-lobed forms with projecting elements in the inner corners closely resemble the syllabic sign *mi* in Classic Maya writing, and in this regard the entire sign perhaps alludes to the Nahuatl term *miotl*. Not only would this be significant for identifying this element as a Venus sign, but it may also indicate that a form of Nahuatl was present at Chichen Itza along with the obvious Toltec influence.

Halved versions of the same star sign also appear on the bodies of plumed serpents from the Mercado structure at Chichen Itza (Figure 20c). As will be noted, the plumed serpent has a very close relation to Venus in Mesoamerica, including the *Anales de Cuauhtitlan* account of Quetzalcoatl departing Tollan to return to the east as the Morning Star. In terms of the east-west axis of the Initial Series group, the Temple of the Initial Series is solidly oriented to the ecliptic, the path followed by the sun, moon, and the planets, including Venus. Located at the easternmost side of the Initial Series, the Phase III Temple portrayed massive signs of Venus as Morning Star. Mention has been made of the fragmentary stone *almena*—surely one of a series—probably from the earliest phase of the temple, which depicts a central, four-pointed star element on one side with a simplified circular version on the other (Figure 20a). The sculpture is pierced through with four U-shaped elements, and if placed on the roof of this eastern temple the rays of the dawning sun as well as symbolically those of the Morning Star would shine through these open portions of the *almenas*.

At Chichen Itza, the four-lobed Venus sign is not limited to the Temple of the Initial Series and the Mercado plumed serpents, but appears in a variety of other contexts. In a study entitled "Star Warriors at Chichen Itza," Virginia Miller (1989) called attention to almost thirty halved forms of these elements from a structure in Group E, southeast of the Mercado. These tenoned sculptures feature human faces framed by the star device, which Miller interprets as a likely Venus sign, which she refers to as the "eye and ray" element. According to Miller (1989:291), "[i]t is at Chichen Itza... that the strongest confirmation is found that the eye and ray motif specifically represents Venus." Miller (1989:299) suggests that these sculptures portray heroic warriors who became Venus or stars of the night sky:

They could, of course, simply personify Venus or the stars, but like other Star warriors at the site, they are almost certainly human actors transformed into myth.

Aside from these examples, she also calls attention to many other examples of the probable Venus sign at Chichen Itza, including two star-skirted figures from the banquette throne in the Northwest Collonade (Figure 21a). In this case, they are backed with explicit feathered serpents, surely relating to the aforementioned *Anales de Cuauhtitlan* account of Quetzalcoatl returning to the east as the Morning Star, or Tlahuizcalpantecuhtli. In her discussion of "star-skirted warriors," Miller (1989:297) calls attention to very similar examples from Tula, Hidalgo, these being two flying figures from the Palacio Quemado and an individual from one of the pilasters atop Structure B. In addition, the Toltecstyle rock painting from Ixtapantongo, State of Mexico, depicts a warrior backed by a quetzal-plumed serpent with halved Venus signs on its body, much like the reliefs from the Mercado at Chichen Itza (Figure 21b). It is more than likely that this being is the Morning Star, and in addition the surviving lower portion of his head is white, suggesting a skull and by extension the skeletal aspect of Venus

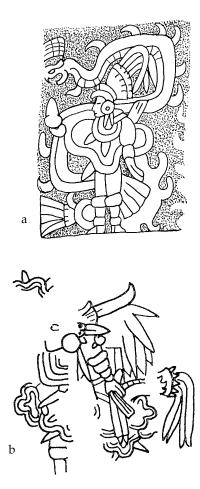


Figure 21. Star-skirted warrior in Toltec-style iconography: (a) starskirted figure from the banquette throne in the Northwest Colonnade (after Morris et al. 1931:Pl. 124); (b) warrior backed by a quetzal-plumed serpent with halved Venus signs on its body, Ixtapantongo, State of Mexico (from Taube 1992b:Fig. 74d) (drawings by Karl Taube).

known as Tlahuizcalpantecuhtli.

In terms of the four-lobed Venus sign at Chichen Itza, a mural fragment from the Temple of the Warriors portrays it in polychrome on a black background, suggesting the night sky (Figure 22a). In the mural, the undulating four-lobed band in the interior is yellow and resembles the Postclassic highland Mexican motif for cut, fatty flesh, which is also shown as a yellow undulating band (for the cut flesh motif in Late Postclassic Central Mexico, see Taube 2009b). A polychrome mural from the Northwest Colonnade features two warriors having the star skirt with this same undulating four-lobed border rendered in yellow (Morris et al. 1931:Pl. 166). The most striking and developed portrayal of this cut flesh motif appears in the well-known emergence scene from the *Historia Tolteca-Chichimeca* showing the Chicomoztoc as a seven-lobed, floral-like cave, lined with the same yellow, undulating rim.

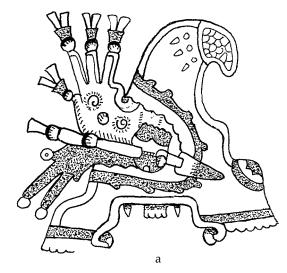
In contrast to the undulating band, the radiating points of the star or Venus sign at Chichen Itza are red, a color commonly used for flint in the Maya region. In the mural fragment, the white interior of the star element has an odd pattern resembling maize grain, as is also found with a star-skirted warrior figure from another fragment from the same temple, including one who also displays the same white pattern on his face (Figure 22c). Rather than being maize grain, we suspect that this motif alludes to cold ice and frost. In the Venus Pages of the Codex Cospi, Tlahuizcalpantecuhtli as Morning Star shoots a mountain with its peak capped with white ice or snow displaying precisely the same device (Figure 23a). In addition, the same manuscript in the tonalpohualli pages consistently portrays the eighth Lord of the Night, Tepeyollotl, as a mountain peak with the same ice symbol (Figure 23b). In the early colonial Aztec Primeros Memoriales, hail (*tecuitl*) is shown as a circular white mass with the same overlapping circles (Figure 23c). The concept of coldness and ice is entirely consistent with the Aztec mythic episode in the Leyenda *de los Soles* when Venus engaged in battle with the newly born sun deity, Tonatiuh, who transformed the Morning Star into the god

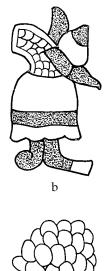


Figure 22. Probable depictions of ice or frost in mural paintings from the Temple of the Warriors at Chichen Itza: (a) star sign from the Temple of the Warriors depicting ice or frost (after Morris et al. 1931:Fig. 158e); (b) mural fragment depicting warrior with star sign containing ice or frost (after Morris et al. 1931:Fig. 160a); (c) star-skirted warrior displaying ice or frost motif on his face (after Morris et al. 1931:Fig. 167d) (drawings by Karl Taube).









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Figure 23. Portrayals of ice and hail in highland Mexico: (a) mountaintop capped with ice, Codex *Cospi*, p. 10; (b) the eighth Lord of the Night, Tepevollotl, as a mountain peak with the same ice symbol, Codex Cospi, p. 7; (c) hail (*teçuitl*) depicted as a circular white mass with overlapping circles similar to Codex Cospi and Chichen Itza examples, early colonial Aztec Primeros Memoriales, p. 67 (drawings by Karl Taube).

of cold as well as stone:

Meanwhile the sun is shooting at Tlahuizcalpantecuhtli, and he succeeds in hitting him because his arrows are like shafts of flame. And then the nine layers covered up his face. This Tlahuizcalpantecuhtli is the frost. (Bierhorst 1992:149)

Of course as regards the daily passage of the sun this makes perfect sense in terms of the dawn being the most extreme time of cold following the night. Aside from the Temple of the Warriors mural fragment, there are other images of warriors at Chichen Itza displaying the same "star skirt" across the waist with the motif for ice or frost in the center (Figure 22b).

While the Initial Series lintel from which the temple takes its name is currently atop the Atlantean figures, it was originally found in the south wall of the temple out of its original context, but was subsequently reset by Edward Thompson on top of the figures during his early explorations of the complex. Peter Schmidt thought that it may have come from the House of the Phalli in Prehispanic times, and we also do not believe this lintel originates from this phase of the Initial Series Temple, as it does not fit well on top of the figures. We are confident, however, that the Chac Mool sculpture in front of the temple dates to Phase III (Figure 14) and probably was originally on the upper part of the building in front of the main doorway, as in the case of the Temple of the Warriors. It is highly significant that it is part of a pair at the group, the other being to the west on the opposite side of the plaza in front of Str. 5C12, a formal tomb containing the remains of four crania, two mandibles, and a sizable amount of cremated material. All of the identifiable remains appear to be from males. The only material culture found within the tomb consisted of 7,506 blue-painted stucco beads that were found among the remains (González de la Mata et al. 2014:1041).

The so-called Chac Mool sculptures of Postclassic Mesoamerica, including Chichen Itza, Tula, and the early Tlaloc temple of the Aztec Templo Mayor were altars for heart sacrifice. Indeed, a number of scholars have presented compelling evidence for this in highland Mexico, including an explicit account by Fernando Alvarado Tezozómoc (1980:515-516) mentioning the use of a Chac Mool for heart extraction in AD 1487 at the Templo Mayor (for discussions of Chac Mool sculptures as sacrificial altars see Graulich 1993; López Austin and López Luján 2001; López Luján and Urcid 2002). In addition, Early Postclassic Chac Mool sculptures at Tula and Chichen Itza display elements explicitly referring to human sacrifice, including a basalt example from Tula having a large sacrificial knife in its left arm band (see de la Fuente et al. 1988:Illus. 31). At Chichen Itza, another example from the Temple of Chac Mool (a building within the foundations of the Temple of the Warriors) has a trophy head, indicating its relation to sacrifice and war (see Morris et al. 1931:Pl. 15c-d).

For the Initial Series, the orientation of the two Chac Mool altars at the farthest east and west sides is indeed striking, especially in terms of the turtle dance platform on the very same axis. Clearly enough, these two sculptures may have pertained to the offering of human hearts to the sun god, who

is portrayed at Chichen Itza with *cuauhxicalli* vessels filled with sacrificial hearts (Taube 1994b:229, Fig. 24). According to Aztec accounts, the origin of heart sacrifice began at Teotihuacan following the fiery immolation of the humble Nanahuatzin to emerge transformed as Tonatiuh hungry for blood (Taube 2000b). For the newly born sun to move and follow its path, all the gods at Teotihuacan sacrificed themselves, and with its Chac Mool altars to the far east and west sides, the northern section of the Initial Series Group may concern a still-earlier architectonic expression of human heart offerings for the passage of the sun from east to west during the Early Postclassic.

We suggest that the tomb, the turtle platform (5C17, see more below), and the Temple of the Initial Series formed part of a solar-oriented complex spanning the east and west axis of the northern section of the terrace focused on offerings to nourish the sun, with both penitential bloodletting, perhaps on a daily basis, and—possibly on a calendrically timed and more spectacular level—the sacrifice of human hearts. Not only do the two Chac Mool sculptures face each other across the east and west stairways of the turtle platform, but the entire east and west axis concerns the warrior cult at Chichen Itza, best known from several structures on the Great Terrace, including the Temple of the Warriors and the Upper Temple of the Jaguars. In fact, the lower portion of the remaining column from the Temple of the Initial Series portrays on all four sides the same basal program of a creature appearing in all of the pilasters from the Temple of the Warriors, another structure facing due west (Figure 24). According

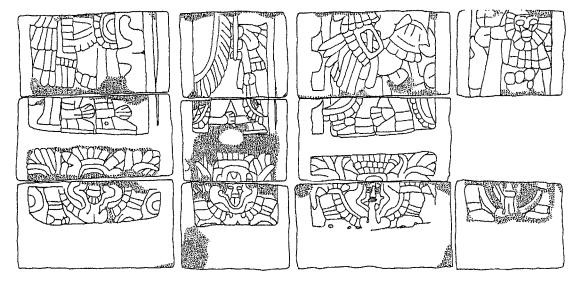
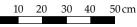


Figure 24. Temple of the Initial Series pilaster portraying on all four sides a creature also appearing in the lower registers of the pilasters from the Temple of the Warriors (drawing by Karl Taube).



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to Taube (1992c, 2011, 2012) this being constitutes an Early Postclassic version of the War Serpent of Classic Mesoamerica that then becomes the Xiuhcoatl of Late Postclassic Central Mexico. In our opinion, the Temple of the Initial Series and this pilaster are diminutive but deliberate evocations of the great Temple of the Warriors to the north, and the entire program of this northern end of the Initial Series concerns sacrifice related to the daily passage of the sun from east to west.

In the Initial Series, the western Chac Mool is in front of the tomb, the contents of which included the cremated remains of several individuals, cremation being an important transformative process for the bodies of dead warriors at Teotihuacan as well as contact-period Aztec society (for cremation and warrior souls at Teotihuacan, see Taube 2000b). Of special note, cremation constitutes an essential aspect of the Aztec mythic episode of Quetzalcoatl departing Tollan to journey to a distant realm in the east. For the *Anales de Cuauhtitlan* account of the death and resurrection of Quetzalcoatl, he cremates himself upon reaching the furthest eastern shore to then return as the Morning Star:

And they say as he burned, his ashes arose. And what appeared and what they saw were all the precious birds, rising into the sky. They saw roseate spoonbills, cotingas, trogons, herons, green parrots, scarlet macaws, white-fronted parrots, and all the other precious birds.

And as soon as his ashes had been consumed, they saw the heart of a quetzal rising upward. And so they knew he had gone to the sky, had entered the sky. (Bierhorst 1992:36)

As we will discuss in further detail below, the west face of the House of the Shells in the Initial Series group is filled with precious birds pertaining to an eastern solar paradise, and as in the case of the Temple of the Initial Series, this is viewed by facing east.

Following the immolation of Quetzalcoatl, the *Anales de Cuauhtitlan* episode continues with what is the most detailed account of the Morning Star known for contact-period Mesoamerica. According to this source, Quetzalcoatl was reborn from the ashes as Tlahuizcalpantecuhtli, Lord of the Dawn:

The old people said that he was changed into the star that appears at dawn. Therefore they say it came forth when Quetzalcoatl died, and they called him Lord of the Dawn. (Bierhorst 1992:36)

The text then continues to state that Quetzalcoatl returned as this fierce Venus god eight days later, clearly referring to the inferior conjunction of Venus:

So it was after eight days that the morning star came out, which they said was Quetzalcoatl. It was then that he became lord, they said. (Bierhorst 1992:36)

According to Seler, Tlahuizcalpantecuhtli was the god of war and of the souls of slain or sacrificed warriors who rose in the east with the sun:

...Tlahuizcalpantecuhtli symbolizes warriors and the death of the warrior. For the soul of the warrior sacrificed or fallen in battle or killed on the march, the soul of the *tonatiuh iixco yauh*, rises to the eastern heaven, to the region of the morning star. There those blessed ones greet the rising sun and lead it, singing and dancing, to the zenith... (Seler 1963:2:195, translated from the Spanish)

In other words, the immolation of Quetzalcoatl and his transformation into the Morning Star also concerns the symbolic rebirth of the mortal souls of deceased human warriors who follow the path of the sun as it emerges from the east.

Along with the *Anales de Cuauhtitlan*, Book 3 of the *Florentine Codex* provides a very detailed account of the travails of Quetzalcoatl at Tula and his subsequent journey to the red land (Tlapallan) to the east. It is important to note that in Book 3 the legendary place of Tollan, or "place of rushes," which Sahagún in other passages relates to such great centers as Teotihuacan and Cholula, is not mentioned, but instead he specifically refers to Tula, Hidalgo, the very site with its oft-cited cultural relations to Chichen Itza. Moreover, the spots that Quetzalcoatl journeys to after leaving Tula correspond to actual place names known on the road to the watery regions of the Basin of Mexico such as Tlalnepantla. When questioned about his journey east after departing Tula, Quetzalcoatl states "I am called; the sun calleth me" (Sahagún 1950-1982:Book 3:35). An important and abridged version of this episode appears in Sahagún's introductory prologue to Book 8, which oddly has no mention of this mythic event. In the Spanish prologue, Sahagún explicitly mentions that Quetzalcoatl was called by the sun to journey to the east:

The city [Tollan] was destroyed and this king put to flight. They say that he travelled to the east, that he went to the city of the sun called Tlapallan, and that he was summoned by the sun. (Sahagún 1950-1982, Introductory Volume, pp. 69-70)

This short account suggests that Tonatiuh summoned Quetzalcoatl east to his "city of the sun" for a particular task, and as the Morning Star it could only be that of serving as the vanguard on the road of the dawning sun. This city of the sun is also mentioned in Chimalpain's account of Quetzalcoatl's journey eastward:

[I]n the direction of the sunrise he went to look; there he went, through the city of the sun, to the place named Tlapallan... (Chimalpain 1991:157, translated from the Spanish)

Since the earliest iconography portraying the plumed serpent with the sun deity in Mesoamerica occurs at the great center of Chichen Itza to the far east of Tula, this could well be the legendary city of the sun.

Not only are there many Central Mexican accounts of Quetzalcoatl leaving Tula or Tollan in his journey to the east, but for Yucatan Diego de Landa also provides a Yukatek Maya version of this very

same episode—K'uk'ulkan simply being the Maya term for the quetzal-feathered serpent:

It is believed among the Indians that with the Itzas who occupied Chichen Itza, there reigned a great lord, named Kukulcan, and that the principal building [the Castillo], which is called Kukulcan, shows this to be true. They say that he arrived from the west; but they differ among themselves as to whether he arrived before or after the Itzas or with them. (Tozzer 1941:20-23, bracketed gloss added)

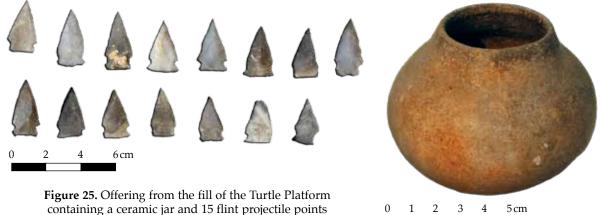
The obvious relationship between the Central Mexican accounts and that of Landa was succinctly addressed soon after by Juan Antonio de Torquemada: "The men of Yucatan venerated and reverenced this god Quetzalcoatl and they called him Kukulcan, and they said he had come there from the parts towards the west" (translation in Tozzer 1941:Note 126).

In our view, these early accounts from both Central Mexican sources and Landa for Yucatan have profound meaning concerning the relation of Tula to Chichen Itza, including the pairing of a plumed serpent figure—surely the Morning Star—with an early form of Tonatiuh in a solar disk, including scenes on carved wooden lintels from the Castillo as well as the Upper Temple of the Jaguars, where the plumed serpent being presents floral *cuauhxicalli* bowls filled with human hearts for the sun deity, who delicately drinks the blood with an outstretched spearthrower (Taube 2009b:103, Fig. 15a). The same pairing of the sun god with Quetzalcoatl also appears in the magnificent frieze from the Lower Temple of the Jaguars, as well as a mural from the Upper Temple of the same structure located due west of the Temple of the Warriors. As has been noted, the first pairing of a plumed serpent being with a solar god occurs at Chichen Itza, although it should be noted that it is also present in much less elaborate form in the aforementioned rock painting at Ixtapantongo in Central Mexico. In several publications, Taube (1992b, 1994b, 2015) has noted that the Central Mexican sun god, Tonatiuh, directly derives from this Early Postclassic sun deity at Chichen Itza, a deified version of a Classic Maya king sitting on a jaguar throne of traditional Maya kingship and wearing the so-called "Jester God" jade brow ornament commonly worn by Maya rulers, with examples of these very same jewels found in the Sacred Cenote. In terms of the early colonial accounts, this could well be the very same legendary solar god summoning Quetzalcoatl to the "city of the sun," in other words, Chichen Itza. In terms of orientation, Tula and Chichen Itza are on extremely similar latitudes, that of Chichen Itza being only slightly north of Tula.

In the Initial Series, we believe that the large turtle platform on the same axis as the Temple of the Initial Series concerns celebratory acts of penis perforation, probably in association with veneration rituals tied to warrior souls fed through bloodletting and heart sacrifice. Many of the areas of the plaza that have been explored between the tomb (Str. 5C12) and the Temple of the Initial Series have extended burials with offerings, and it is important to note that formal burials at Chichen Itza are extremely rare, with this mortuary context being unique at the site. While the systematic analysis of the burials remains to be completed, it is possible that the northern section of the Initial Series was a

necropolis for warriors and other high status individuals with an eastern Venus temple and a more central area of body disposal and curation by the turtle platform. A possible dedicatory burial was recovered within a hexagonal crypt in a substructure that appears to be an earlier version of the turtle. In addition to a necklace of stucco beads painted blue possibly in imitation of turquoise, this interment was accompanied by 15 chert projectile points, perhaps referencing the darts associated with warriors and/or bloodletting (Figure 25; see González de la Mata et al. 2014 for a more extensive description of these contexts).

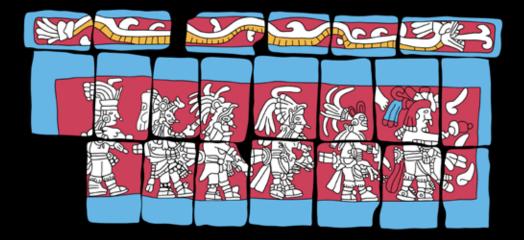
Returning to the Temple of the Initial Series, Phase IV is poorly defined, as it did not have substantial modifications and has been subject to centuries of surface and near-surface formation processes, including Edward Thompson's undocumented clearing of the building. The Temple of the Lintel, a small Late Postclassic structure built on the collapse of the Temple of the Atlantean Columns, is the primary construction from this Late Postclassic phase (Schmidt 2007). The construction materials were recycled from previous Initial Series structures, including sections of pilasters decorated with warriors from the Temple of the Phalli, and it is likely that the rest of the Temple of the Initial Series, including the staircase, was in ruins at the time it was built. The small platform, Str. 5C4c, to the west of the Temple of the Initial Series also has reused stones from the Temple of the Phalli and most likely also dates to Phase IV. Modelled Chen Mul–style censers were recovered in association with the Temple of the Lintel, indicating that it was a place of pilgrimage and ritual well after the collapse of the city. As has been noted, the trapezoidal sacrificial stone probably also dates to this late phase, indicating that human heart sacrifice continued to be performed here during the Late Postclassic period. As in the case of offerings to the Sacred Cenote well into the sixteenth century, this is almost surely an intentional continuity of earlier traditions of human sacrifice in the Initial Series.



(photographs by José Osorio León).

Close to the southwest corner of the Temple of the Initial Series, an elaborate frieze of three panels bordered by blue bands was discovered, a sculptural program that probably constituted a banquette throne, quite similar to the more elaborate well-known example in the Northwest Colonnade located on the west side of the Temple of the Warriors near its southwest corner (Figure 26). Both the Initial Series Group relief and the principal frieze on the west side of the Northwest Colonnade dias feature processions of warrior figures convening on a central offering bowl (see Morris et al. 1931:Pls. 124-125). The vessel contains probable hearts with penetrating darts, almost surely an early form of the Aztec cuauhxicalli vessel for offering human hearts to the sun (see Taube 2009b). In both cases, undulating feathered serpents occupy the upper registers of the scenes, a theme also present for banquette thrones at Tula (see Taube 2002). Although the two Chichen Itza scenes are strikingly similar, the Initial Series example has eight figures to the left of the *cuauhxicalli* and nine to the right, whereas the Temple of the Warriors is entirely symmetrical with eight figures on both sides. In addition, the Initial Series scene is more overtly militaristic, with all figures wielding spearthrowers and darts and most wearing the turquoise *tezcacuitlapilli* back mirror known for Toltec warriors, including the famed Atlantean columns from Tula. The two central figures flanking the sacrificial bowl in the Initial Series scenes gesture with spearthrowers towards the offering vessel, a trope concerning the symbolic drinking of the nourishing blood through their weapons (Taube 2009b:103, Fig. 14, 2015:120-122, Figs. 5.19-5.20). For the Northwest Colonnade scene, the narrow register directly above the *cuauhxicalli* bowl portrays a pair of warriors emerging from the maws of plumed serpents, one holding a dart and the other a spearthrower, clearly the same theme of weapons as instruments for consuming blood (Morris et al. 1931:Pls. 124-125). In the case of the corresponding register with the Initial Series bench, a pair of feathered serpents flank a *cuauhxicalli* bowl with hearts and darts, quite like the larger example immediately below. It is important to note that as in the case of the Initial Series Temple, a prismatic sacrificial stone for heart sacrifice lies directly in front of the dias on the southwest corner of the Temple of the Warriors (see Morris et al. 1931:Pl. 9). Whether this altar corresponds to the Early Postclassic apogee of Chichen Itza or is a Late Postclassic feature, it is clear that at both the Temple of the Warriors and the Initial Series Temple, there was a major focus on heart sacrifice oriented to the east and west passage of the sun.

Two central figures in both the Initial Series Group and Northwest Colonnade scenes are backed by feathered serpents, but on close inspection it can be seen that they are not identical creatures. For the Initial Series, the serpent on the right has blades on its body rather than plumes. This clearly intentional distinction also occurs with a pair of Aztec copies of Early Postclassic Fine Orange vases excavated at the Templo Mayor (see Matos Moctezuma 1998:Pl. 14). Whereas one vessel depicts Tezcatlipoca backed by a plumed serpent, the other has a serpent with blades on its body, a convention also appearing on the famed Aztec portrayal of Quetzalcoatl on the Cerro de Malinche overlooking Tula. In contrast to the other flanking warrior figures on the Initial Series dias, the central individuals backed by the plumed



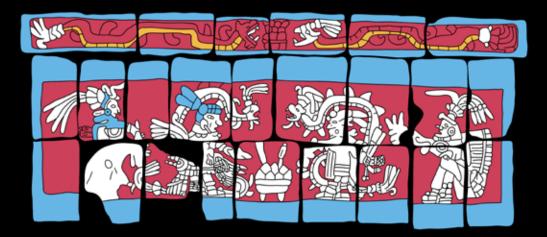
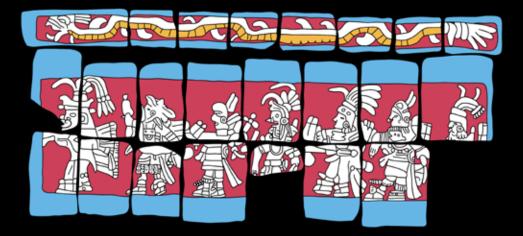


Figure 26. Banquette throne excavated near southwest corner of the Temple of the Initial Series (color reconstruction by Travis Stanton after Schmidt 2003:Fig. 16).



serpents also carry a netted bag or pouch in their left hand, with their right wielding a spearthrower. This same convention can be seen for the figures of the great Atlantean columns at Tula, who grasp spearthrowers in the right hand and the bag along with a curving club and darts in the left (see de la Fuente et al. 1988:Fig. 19).

Although its original architectural context remains obscure, the banquette throne discovered south of the Initial Series Temple provides yet another parallel to the major east-west axis found at the site center, that is, the Temple of the Warriors facing westward towards the Temple of the Jaguars. In comparison, the Initial Series Temple with its Chac Mool sculpture can be seen to align with another Chac Mool on the opposing western side of the group. Although comparatively diminutive in scale, the Initial Series Temple replicates in many ways the Temple of the Warriors, including the elaborately carved bench platform at its southwestern corner and the central theme of heart sacrifice represented by the Chac Mool sculptures and prismatic sacrificial altars.

Just to the south of the Temple of the Initial Series is the House of the Moon, Structure 5C11, named from the discovery of a remarkable monument depicting a rabbit seated in a lunar crescent (Figure 27). Directly in front of the rabbit is a shallow bowl, quite possibly of cut gourd. Its form suggests a drinking vessel, and it could well concern imbibing the alcoholic beverage pulque, which among the Aztec was closely identified with rabbits (see Nicholson 1991). In addition, the Aztec pulque god Patecatl wears a shell lunar nose piece, which also commonly appears on pulque jars in Late Postclassic and



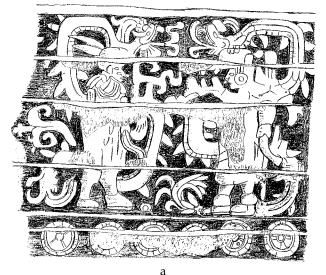
Figure 27. Lunar rabbit discovered in the House of the Moon (photograph by José Osorio León).

early colonial Central Mexican codices (Nicholson 1991). The rabbit's seated pose with its extended forelimb recalls Late Classic Maya palace scenes, including a well-known vase depicting the rain god Chahk gesturing to four God N figures and their consorts imbibing intoxicating enemas from ollas surely containing an alcoholic beverage (see K530 at Mayavase.com). As in the case of the lunar rabbit from the House of the Moon, a vessel also occurs directly below Chahk's outstretched arm. Although the form most closely resembles Late Classic Maya cacao vases, the broader context of the scene suggests that it could well be for alcohol. Another Late Classic Maya vase depicts Itzamnaaj seated on a throne backed by the Moon Goddess holding a rabbit with two prominent jars of alcohol below, and Itzamnaaj has his arm extended like the House of the Moon rabbit (see K3462). The two throne supports flanking the vessels

are marked by pairs of "Etz'nab signs," such as commonly appear on rabbit ears in Classic Maya iconography. Itzamnaaj's hand gesture, with the thumb and forefinger touching to form a circle, constitutes the logographic sign *chih*, meaning "pulque." This is surely not fortuitous. One of the most developed sculptural and architectural programs devoted to drunkenness among the ancient Maya occurs at the Puuc site of Rancho San Diego, located north of Uxmal, with one panel depicting a male exhibiting this very same hand position (Barrera and Taube 1987:Fig. 3; Taube 1998a). In addition, the *chih* sign appears on a number of alcoholic *ollas* in Late Classic Maya art (e.g., Barrera and Taube 1987:Fig. 2).

Thus along with the solar and probable Venus iconography on this eastern side of the Initial Series Group is the symbolism of the moon, which also follows the ecliptic of major celestial bodies from east to west. Once again, this sculpture indicates that a major theme in the main northern plaza of the Initial Series Group is the passage of celestial bodies from east to west, and in fact in view of the rabbit moon sculpture and probable Venus signs this appears to be even more developed and explicit than one sees on the Great Terrace to the north.

A typical architectural form found at Chichen Itza (Ruppert 1950), the House of the Moon is a patio-gallery with a large, originally vaulted north-south chamber. Four cylindrical columns line its front entrance, with the central two having carved images of warriors armed with spearthrowers, darts, and curved clubs (Figure 28). They are backed by feathered rattlesnakes emitting prominent, flame-like breath



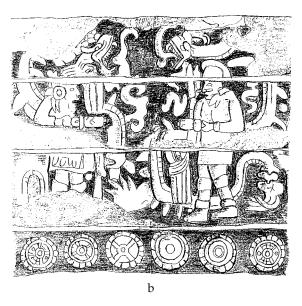


Figure 28. Rollout views of central round columns at entrance to the House of the Moon (from Schmidt 2003:Figs. 18-19).

scrolls, quite like the great feathered serpent prominently backing the masked Quetzalcoatl figure in the central scene of the Lower Temple of the Jaguars. In the background of the column scenes, there are swirling flames and floral motifs, probably referring to the floral paradise of the sun, found also with the dancing jaguars in the upper structure of the adjacent House of the Phalli to be subsequently discussed (Figure 39). These swirling elements of blossoms and fire also appear with the figures on the Northwest Colonnade dias, probably identifying them as ancestral beings in the solar flower paradise (see Morris et al. 1931:Pls. 124-129). In the Initial Series Group, the lower portion of these columns are rimmed by a band of six turquoise and pyrite mosaic mirrors, such as are found worn by Toltec-style warriors at Chichen Itza and Tula, including the warrior figures from the adjacent dias. The meaning of this striking lower register of precious mirrors remains obscure, although it could well relate to a toponymic expression. In a groundbreaking study, Stuart and Houston (1994) note that the lowest registers of many Classic Maya monuments refer to specific places, in many cases mentioned in the accompanying glyphic texts. That noted, it is difficult to see what a precious turquoise mirror place would refer to, unless a reference to the shining sun, a theme that has been extensively discussed by Taube (1992a, 1994b, 2000b, 2012). Much like the Temple of the Initial Series, there is ample evidence of modifications after the building had collapsed during the Late Postclassic. In the case of the House of the Moon patio-gallery, there was an effort to block the entrances and restrict access to the interior space during the Late Postclassic.

The excavations directed by Schmidt (2007:192-193) determined that one construction in the Initial Series Group, Str. 5C17, was a massive, circular turtle platform having a sculpted head, feet, and tail (Figure 29). Facing east, it wears an elaborate jade beaded collar, probably to denote it as a "precious" jeweled turtle (Figure 30). As will be mentioned subsequently, items of great value such as polished jades, elaborately crafted dance regalia, and cacao are major themes in the Initial Series. Schmidt (2007:193) notes that this platform could well relate to Classic Maya scenes of the maize god emerging from the earth turtle, a theme that now can be traced back at least as early as the Late Preclassic West Wall mural at San Bartolo if not even the Middle Formative Olmec (Taube 2009a; Taube and Saturno 2008; Taube et al. 2010). However, aside from the reborn maize god, turtles and turtle altar sculptures concern bloodletting in the northern Maya lowlands. At Mayapan and other Late Postclassic Maya sites, there are small stone turtle altars, sculptures that also appear in the *Codex Madrid* with explicit scenes of penitential bloodletting, including an example on page 19b (Figure 31; see Taube 1988, 2018b). Strengthening the association between turtles and bloodletting, the shrine of Structure Q-244b at Mayapan—where a stone turtle sculpture was recovered by the Carnegie project—also contained two flint nodules, three flint chips, and an obsidian blade (Smith and Ruppert 1956:500). Either as worked blades or sharp flakes, flint and obsidian served as basic bloodletting lancets (Taube 1988:192). A remarkable Late Postclassic cache from Santa Rita, Belize, contained four God N figurines engaged in penis perforation while standing atop turtles (see Chase and Chase 1998:322-323; Finamore and



Figure 29. The Turtle Platform (Str. 5C17) at the Initial Series Group (photograph by Dominque Meyer).



Figure 30. Close-up of head of turtle showing elaborate jade beaded collar (photograph by Karl Taube).

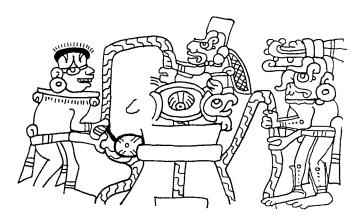


Figure 31. Gods engaged in bloodletting with central turtle, note solar *k'in* sign on rope, *Codex Madrid*, p. 19b (drawing by Karl Taube).

Houston 2010:142-143). Given the explicit bloodletting friezes on the adjacent House of the Phalli to be discussed subsequently, it is more than likely that the turtle platform was where participants engaged in celebratory acts of penis perforation. In fact, the aforementioned cache in the fill of the substructure of the turtle platform contained 15 chert points and could well reflect this function (see González de la Mata et al. 2014).

For the elaborate *Codex Madrid* scene, four gods stand around the turtle marked with the sign Yax, signifying "green" or "first," as well as red spots, probably referring to droplets of blood (Figure 31). The gods are bound by a cord pulled through their pierced penises emerging from a turtle at the base of the entire scene. An explicit solar K'in sign lies against the penitential cord directly in front of the turtle's face, quite possibly designating this bloody rope as the sacrificial "road of the sun." Along with the eastern-facing turtle platform in the Initial Series Group, the *Madrid* scene may well portray bloodletting for the daily passage of the sun. A Late Postclassic Huastec pectoral also portrays penis perforation, here with the penitent figure standing atop a fish, quite possibly a reference to the eastern sea (see Taube 2015:Fig. 29). Directly above is the Huastec sun deity, which according to Taube (2015) derives from the sun god of Early Postclassic Chichen Itza. A pair of plumed serpents below flank the solar disk as vehicles for the sun god, who holds a spearthrower to his mouth to drink blood, a basic sun deity theme appearing at Chichen Itza and Tula as well as among the contact-period Aztec.

Among the Aztec, it is well documented that for the date Nahui Ollin, or 4 Motion—the calendrical name of the sun god Tonatiuh—penitential bloodletting was widely performed in honor of the sun (Durán 1971:191; Sahagún 1950-1982:Book 2:216-217). Sahagún (ibid.:216) mentions that at noon, corresponding to the sun at zenith, all engaged in bloodletting, including even infants:

And when the feast day of the day count arrived, at noon shell trumpets were sounded; straws were drawn through the flesh. And they cut the ear [lobes] of small children lying in the cradles. And everyone drew blood.

These solar rites of bloodletting were not limited to the date Nahui Ollin, as Durán (1971:191) notes that "[t]his sacrifice was not only performed on this feast day." In fact, Sahagún (1950-1982:Book 2:204) states that penitential bloodletting constituted a basic offering to the sun in Aztec ritual:

The nourishing was thus done. When the ear [lobes] were cut, they spattered the blood upward or they sprinkled it into the fire. Thus, it was said, they nourished the fire and the sun.

As has been noted, there is strong evidence of similar penitential bloodletting for the sun in earlier Classic Maya dance, including at Late Classic Bonampak and Copan.

In terms of sheer mass and the elaborate sculptural programs, the dominating complex in the

Initial Series Group is the House of the Phalli (5C14), so named by George Vaillant due to the many massive sculpted penises projecting from the upper walls of many of the chambers. This elaborate structure is part of a larger complex of galleries and internal plazas that includes the House of the Shells (5C5) and the House of the Atlantean Columns (5C15). The ceramics associated with the House of the Phalli are primarily Sotuta, although Hocaba material from a reoccupation when the Initial Series was in ruins was also found in association with the floors and collapse.

The strange architectural placement of these massive phalli in this structure is unique and otherwise unknown at Chichen Itza or Mesoamerica as a whole. Although we have no immediate explanation for these rooms, the phalli surely relate to the exterior facades of the building, which feature more than sixteeen elaborate panels primarily featuring the aged deity God N engaged in penis perforation, often with a background of floating or falling blades (Figures 32 and 33; see González de la Mata et al. 2010. 2011, 2012; Osorio León 2004:52; Schmidt 2007:Fig. 27a-b). Given

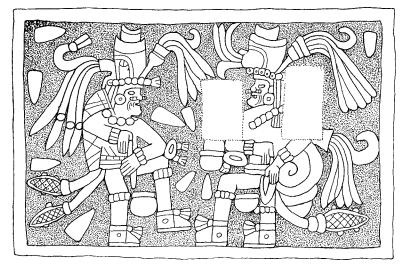


Figure 32. God N engaged in penis perforation on the facade from the House of the Phalli with a background of floating or falling blades (drawing by Karl Taube after photograph by Karl Taube).

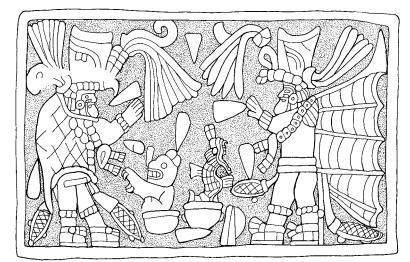


Figure 33. Bloodletting scene from the House of the Phalli with God N figures and creatures rising from offering bowls (drawing by Karl Taube after photograph by Karl Taube).



Figure 34. Turtle from cornice below bloodletting scenes from the lower House of the Phalli (photograph by José Osorio León).

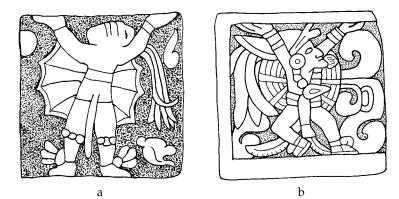


Figure 35. Portrayals from Chichen Itza of God N as spider with prominent web: (a) God N as world bearer with spider web, detail from feathered serpent column from the Temple of the Warriors (drawing by Karl Taube after photograph by Karl Taube); (b) dancing God N with spider web (after Seler 1902-

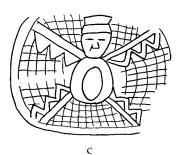
1923:5:Fig. 173) (drawings by Karl Taube).

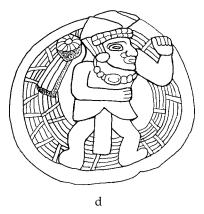
the prominent penises in the chambers below, perhaps these blades refer to the House of the Phalli as the place of penitential sacrifice or a "House of Knives," which would readily relate to the fifteen blades buried in the adjacent turtle platform.

In terms of the House of the Phalli, it is highly significant that the long cornice immediately below the many God N bloodletting scenes has well-carved turtles, surely a toponymic reference to the adjacent turtle platform as a place of sacrifice (Figure 34). In other words, this lower register corresponds to the pattern well-documented by David Stuart and Stephen Houston (1994) in their discussion of toponyms in ancient Maya writing and art. That is, basal themes in ancient Maya scenes commonly refer to particular places, and in the case of the House of the Phalli the series of turtles in a line obviously relates to the great turtle platform at the center of the main plaza as a place of penitential bloodletting. As we have previously noted, this probably was a place of painful acts of penis perforation, perhaps in large part to ensure the daily passage of the sun from east to west. Of course the Late Postclassic cache from Santa Rita features four God N figures engaged in penis perforation atop turtles. For the House of the Phalli, the turtle sculptures under the elaborate scenes of the God N deities engaged in bloodletting and the conjuring of spirit beings through offering bowls strongly suggest that this whole complex of bloodletting relates to the nearby turtle platform dominating the center of the Initial Series Group plaza.

In the House of the Phalli friezes, God N adopts a variety of forms, including his well-known turtle aspect, which appears in many scenes at Chichen Itza as well as in Classic Maya iconography (for a recent discussion of God N, see Martin 2015). However, although little discussed, God N can also be a spider with a prominent web, including many examples at Chichen Itza (Figure 35). Although at Chichen Itza the web usually appears *en face* as a circular element behind the god, panels from the House of the Phalli depict it in profile, almost as wings (Figure 33). Aside from Chichen Itza, the spider God N also appears at Uxmal as well as on a crudely carved monument from Popola, just to the south of Chichen (Figure 36c–d). The God N spider motif is not limited to the northern Maya lowlands, and







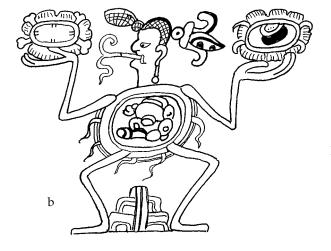


Figure 36. God N spider figures: (a) Late Preclassic silhouette sculpture from Kaminaljuyu depicting an aged man atop a spider web (after Parsons 1986:Fig. 151); (b) God N spider from a vessel from the vicinity of Naranjo (after Robicsek and Hales 1981); (c) God N spider from Popola, just to the south of Chichen Itza (after Magnoni et al. 2014:Fig. 17.25); (d) God N as spider, Nunnery Quadrangle, Uxmal (after photograph courtesy of Jeffrey Kowalski) (drawings by Karl Taube). also occurs on a seventh-century Tepeu 1 vessel from the vicinity of Naranjo (Figure 36b). In addition, a Late Preclassic silhouette sculpture from Kaminaljuyu depicts an aged man atop a spider web, possibly an exceptionally early form of God N (Figure 36a).

In some scenes, God N has one foot raised in dance, despite the painful nature of his sacrificial act (Figure 32). For the Guaymi of Panama, men danced while joined by a single cord passed through their phalli, with their wives caching the falling blood in gourds (Tozzer 1941:114). According to Nájera Coronado (2012:148), these House of the Phalli scenes may portray ritual blood offerings for cacao increase, which would be consistent with the abundant portrayals of this valued commodity in the Initial Series. In terms of the ancient Maya, however, bloodletting was also done as an offering to the sun. Room 3 at Bonampak portrays an elaborate dance in honor of the sun god featuring penis perforation with large fan-like elements at the loins (see Miller and Brittenham 2013:138-139). This same solar war dance can also be seen on Stairway Block 2 of Structure 10L-16 at Copan, where the founder of the Copan dynasty, K'inich Yax K'uk' Mo', dances as the solar deity with the same bloodletting assemblage placed on his loins (see Taube 2004d:288-290).

In a number of the House of the Phalli scenes, rimmed ceramic bowls (a common slateware form) appear below the figures' legs, clearly to receive the sacrificial blood (Figure 33). For some of them, creatures rise out of the sacrificial bowls, with one frieze displaying a plumed serpent as well as a jaguar (Figure 33; see also González de la Mata et al. 2010; Schmidt 2007:Fig. 27). Far from benevolent, these beings seem to be quite aggressive and adversarial, with the feline raising its clawed limb as if to attack the conjurer and the rearing serpent with a wide-open mouth preparing to embed its fangs. Quite possibly this scene denotes the power and danger of conjuring powerful and unruly spirit beings. For another relief, there is a third and central vessel, and although the original stone block immediately above is now missing, there was probably another emerging creature (Figure 32).

Of course these scenes immediately recall the "Vision Serpent" motif discussed by Linda Schele and Mary Miller (1986) in their major exhibition catalog *Blood of Kings*. In this work they call attention to Late Classic Maya lintels at Yaxchilan portraying supernatural serpents rising out of sacrificial offering bowls in explicit bloodletting scenes. Human visages appear in their widely open maws, presumably beings conjured through the sacrificial event. According to Schele and Miller, the serpents and attendant figures constitute "visions" experienced by the penitent celebrants. In other words, these monumental scenes depict historic individuals actually "seeing" spirit entities rising from the sacrificial offering. Although there has been considerable debate as to whether bloodletting can create visionary experiences, this is supported by an early seventeenth-century account by Ruiz de Alarcón for the Nahua of Guerrero. Alarcón relates that in acts of penitential bloodletting on remote hills, individuals received visions or messages in trance: "They say that some fainted or fell asleep, and in this ecstasy they either heard, or fancied that they heard, words which their idol spoke to them..." (Coe and Whittaker 1982:81).

In the case of the House of the Phalli scenes, the "Vision Serpents" are clearly the plumed serpent

widely known at Spanish contact as Quetzalcoatl for Central Mexico and K'uk'ulkan for the Yukatek Maya. In contrast to the Yaxchilan examples, they rise midway out of the blood-offering basins, as if at the moment of conjuring. Unlike the slightly earlier Late Classic bloodletting scenes at Yaxchilan, the Initial Series serpents are not vehicles for other beings and have nothing in their maws or on their bodies. This is also the case for a remarkable Late Postclassic example appearing in a mural from Rancho Ina, Quintana Roo (Figure 37b). The scene features a crested plumed serpent emerging from an offering bowl apparently containing tamales, and as in the case of the earlier Initial Series examples the serpent is truncated, with only the head emerging. In terms of the striking east-west orientation of the northern portion of the Initial Series platform, it is possible that such feathered serpents are being conjured through blood offerings as the symbolic "road of the sun," a widespread convention in Late Postclassic Mesoamerica, including for the Huastec and Aztec (Taube 2015). This concept of the plumed serpent as a solar road continues among the Zinacanteco Tzotzil of highland Chiapas, where it is believed that a great feathered serpent as Venus serves as the celestial vehicle of the sun: "At dawn the sun rises in the east preceded

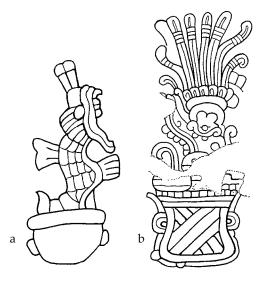


Figure 37. Postclassic portrayals of plumed serpents rising from offering bowls: (a) detail of House of the Phalli panel depicting plumed serpent emerging from bowl in bloodletting scene (see Figure 33); (b) Late Postclassic example of plumed serpent rising out of vessel, detail of mural from Rancho Ina, Quintana Roo (after Martos López 2001:Pl. 11) (drawings by Karl Taube).

by Venus, the Morning Star, a large plumed serpent called *Mukta ch'on*" (Vogt 1969:89). Of course this contemporary Tzotzil account pertains directly to the previously cited highland Mexican sources concerning Quetzalcoatl being summoned to the east by the sun, as well as warrior souls following the sun on its eastern dawn appearance. One of the clearest Late Postclassic examples of the solar road is found on the famous Aztec Stuttgart Statuette which depicts Tlahuizcalpantecuhtli "Lord of Dawn" as a skeletal Toltec warrior (Coltman 2007, 2009). On his back is a large plumed serpent carrying a solar disk with Tonatiuh, the sun god, in the center, an example strikingly similar to a carved bone from Tomb 7 from Monte Alban (Taube 2015:Fig. 5.6b). Among the most dramatic mural fragments from the Temple of the Warriors is a scene of human heart sacrifice, with the victim on a sacrificial stone. Directly below his body and continuing upwards to the upper part of the scene is a green Quetzalcoatl serpent, clearly denoting this being as the symbolic sacrificial "road" for the slain captive to follow the sun's path (see Morris et al. 1931).

The highest portion of the Initial Series—the second-story structure atop the House of the Phalli bears elaborate friezes on all four sides (González de la Mata et al. 2013). The east and west sides each feature three richly dressed, dancing felines (Figures 38 and 39a). Along with large earspools, necklaces, and other likely jade jewelry, they also have long quetzal feathers on their arms and tails. The "wings" are formed of large jade beads with pendant quetzal plumes, clearly alluding to the preciousness of these celebrant beings. In addition, the curious ear-like emanation behind the head could well allude to the feather crest of the male quetzal. Their plumage also indicates that they are indeed avian felines with wings and feathered tails. The jaguars hover above the ground line as if in flight, and dance was closely related to concepts of soaring birds among the ancient Maya (Taube 2009a). Flame volutes also surround them, a rather unusual motif in the rich iconographic corpus of Chichen Itza. However, these elements also appear with representations of the sun god from the upper registers of the Temple of the



Figure 38. 3D photogrammetric image of the upper House of the Phalli and portrayal of solar paradise at Chichen Itza (created by Dominque Meyer and Danylo Drohobytsky).



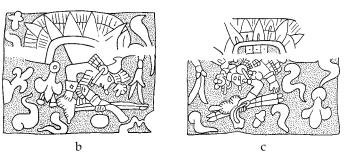


Figure 39. Dancing feline from the upper House of the Phalli and portrayals of the solar paradise at Chichen Itza: (a) richly adorned and dancing feline from the second-story structure atop the House of the Phalli; (b–c) portrayals of the sun god from the upper registers of the Temple of the Warriors pilasters accompanied by a rain of floating flowers and jewels (after Morris et al. 1931:Pl. 118) (drawings by Karl Taube).

Warriors pilasters, here accompanied by floating flowers and precious jewels (Figure 39b–c). Given that the central figure in these many Temple of the Warriors scenes is the sun deity, they clearly denote the solar paradise, which we know for the Aztec was filled with flowers and shining, precious things, a complex that can readily be traced to both Teotihuacan and the Classic Maya (see Headrick 2007; Taube 2004b, 2005a, 2006; for Aztec conceptions of this paradise, see Burkhart 1992). It is more than likely that the richly dressed felines on the upper structure of the House of the Phalli are also dancing in this solar realm.

For the aforementioned account from Diego Durán concerning the Aztec ceremonies performed during the day Nahui Ollin—the calendric name of the current sun of Tonatiuh—he notes that after the rites of bloodletting, nobles and the elite Eagle and Jaguar orders dedicated to the sun danced in fine array in honor of Tonatiuh:

At this dance these noblemen displayed many finely worked jewels, feathers and necklaces, all very splendid and magnificent, especially the knights of this order who had brought out the insignia and weapons of their patron the Sun on their shields and featherwork. (Durán 1971:192)

It is probably no coincidence that in their orientation these Initial Series friezes face the eastern and western rays of the sun as it daily traverses the sky (for a recent discussion of warriors dancing in paradise at Chichen Itza, see Headrick 2018).

The north and south sides of the upper structure of the House of the Phalli bear a strikingly

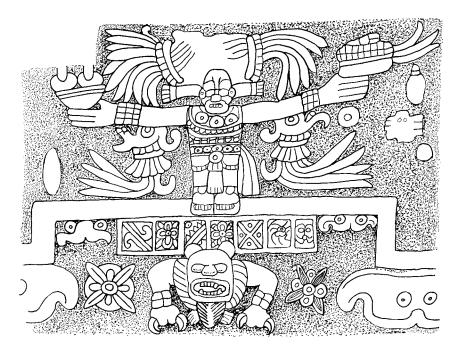


Figure 40. Central image of K'awiil standing atop jaguar throne; detail of north facade from the upper House of the Phalli (drawing by Karl Taube).

different but also related format, in this case a central individual standing atop a jaguar throne and flanked by a pair of inwardly facing figures (Figure 40; see Schmidt 2007:Fig. 28). A series of large star signs occupy the lower border below, and rather than alluding to Venus or the night sky they probably denote the scenes as celestial, which is also the case with the skybands forming the upper surface of the jaguar thrones. With his blunt, upturned snout, the head of the central being atop the jaguar throne can be identified as K'awiil and in this regard closely

Taube et al.

resembles the painted capstone from the nearby Temple of the Owls, which also portrays K'awiil holding a bowl of jade beads and earspools in his outstretched arms (Figure 66). In addition, K'awiil figures with similar bowls appear on the facade of the Osario temple superstructure, and in this case there is a deep hole carved in the cranium, surely to hold the torch or other cranial elements known for Classicperiod examples of this being (Figure 41). On close inspection, it can be seen that the K'awiil from the Temple of the Owls capstone has a flaring element projecting from his upper brow, corresponding to the jade flares, celts, and torches commonly found with Late Classic portrayals of this god (Figure 66). In all three contexts at Chichen Itza—the upper House of the Phalli scenes, the Temple of the Owls capstone, and the Osario reliefs—falling precious elements including jade jewels and cacao pods surround K'awiil. As will be noted, although articles of intrinsic value, these elements also have a basic meaning of rain, the fundamental source of abundance and wealth. Themes of rain and preciousness directly pertain to a basic meaning of K'awiil as a provider of abundance and wealth, and according to Thompson (1970:289) the name K'awiil signifies "surplus of our daily bread." Thus in Yukatek Maya, *k'aa* signifies surplus and abundance, and *wil* sustenance (*aliento*) (Barrera Vásquez 1980:359, 922).

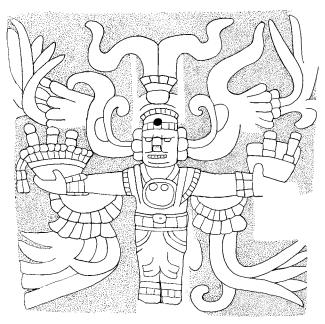


Figure 41. Image of K'awiil from the Osario pyramid with bowls containing jade jewelry (drawing by Karl Taube).

As has been noted, the Osario radial platform and superstructure reliefs share many traits with iconographic programs from the Initial Series Group, including the presence of K'awiil. Not only is he on the superstructure friezes, but he also appears on the many facades flanking the four Osario stairways with falling cacao pods and other precious elements (Figure 42). Based on the upturned snout, Nájera Coronado (2012:146) tentatively identifies this being as Itzamnaaj K'awiil, and although we generally agree with this interpretation, this being is probably just K'awiil in avian form, and more specifically a precious quetzal with a prominent feather crest. Painted capstones 7 and 34 at Ek' Balam depict K'awiil as a bird, and in Terminal and Postclassic art of the northern Maya lowlands he commonly appears with wings and in flight (see Grube et al. 2003:Figs. 17, 36; Taube 1992b:Fig. 34). A Late Postclassic stela from

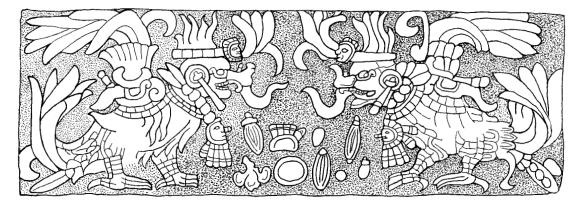


Figure 42. Examples of K'awiil in avian form as a precious quetzal bedecked in jade adornment, including masked diadems as well as elaborate necklaces, Osario pyramid, Chichen Itza; note probable quetzal plume breath emanating from forehead masks (drawing by Karl Taube).

Tayasal (Flores), Guatemala, portrays a winged K'awiil figure diving with a pair of male quetzals (see Taube 1992b:Fig. 34d). This K'awiil holds an offering in his outstretched hand, clearly the "abundance" brought by this descending god.

In a detailed study concerning the symbolism of cacao among the Classic Maya, Simon Martin (2006:173) notes its close relationship to K'awiil, including a painted capstone scene from the Chenes region of northern Campeche where he holds a huge, outpouring sack of cacao seeds, clearly related to the meaning of this god's name in terms of surplus and abundance (see Martin 2006:Fig. 8.3). Martin (2006:173) notes that another capstone from Dzibilnocac portrays K'awiil with an accompanying text that "mentions an *ox wi'il* 'abundance of food' and lists bread, water and cacao." In the case of the quetzal K'awiils from the Osario platform facades, they are richly bedecked in jade adornment, including masked diadems as well as elaborate necklaces featuring massive human head pendants, possibly of jade or gold (Figure 42). In addition, the birds have an element extending stiffly from the tail, clearly a version of the common ancient Maya convention of having a central ear of corn in the tail of the Principal Bird Deity (see Taube and Saturno 2008:Figs. 10d-e, 11; Taube et al. 2010:Fig. 25). However, it is by no means clear that these are cacao pods or maize ears, and although similar in outline, they do not match the falling cacao pods in the Osario or Initial Series Group scenes.

On the upper building of the House of the Phalli, the flanking figures on the north and south facades are avian beings dancing and singing while playing music with drums and rattles, quite possibly the same tunes for the wildly dancing jaguars on the east and west sides of the same structure (Figure 43; see Nájera Coronado 2012: Fig. 10b; Schmidt 2003: Figs. 31-32). In a number of recent presentations and publications, it has been noted that this avian deity is probably an Early Postclassic form of Ehecatl, the Aztec duck-billed god of wind (Nájera Coronado 2015; Schmidt et al. 2018; Taube 2016a; Taube et al. 2014; see also Taube 2018a). Rather than deriving from Central Mexico, this being originates in southeastern Mesoamerica, including the Maya area. Thus David Stuart (personal communication 1993) noted that Step X from Hieroglyphic Stairway 2 at Yaxchilan features a ballplayer wearing a duck mask, with the accompanying text referencing *ik' k'uh* or "wind god" (see Taube 2004c:172-173; Taube et al. 2010). For many years it has been known that Ceibal (formerly Seibal) has monuments displaying "Mexican" gods, including the deity of rain and lightning, Tlaloc. In addition, this site is well known for Fine Orange pottery related to ceramics of the southern Gulf Coast as well as the dynamic period pertaining to the Late Classic Maya Collapse (Sabloff 1973). Aside from Tlaloc, Ceibal stelae also depict what has been generally identified as a form of Ehecatl, the duck-billed wind god. However, far from being an example of Central Mexican influence, these figures are actually a Maya wind deity. For Ceibal Stela 3, the duck-billed wind god wears a folded cloth headdress while holding a rattle, an image strikingly similar to the dancing duck-billed deities on the north and south sides of the upper structure from the House of the Phalli (Figure 44d). Uxmal Stela 16 portrays Lord Chahk dressed as the god of rain and lightning accompanied by a pair of small duck-billed wind gods, quite probably bringers of

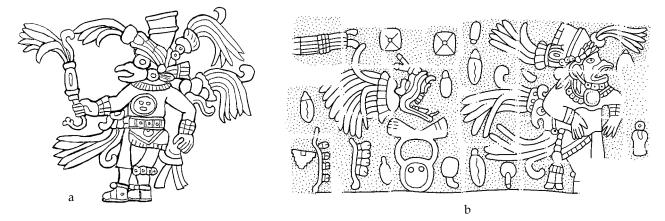


Figure 43. Portrayals of the avian duck-billed wind god from the upper building of the House of the Phalli: (a) duck wind god with rattle (drawing by Karl Taube); (b) duck wind god striking drum and probably singing (drawing by Stephen Houston).

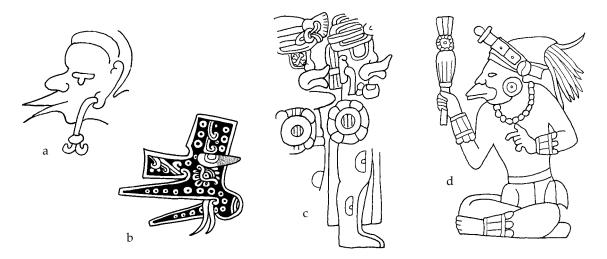


Figure 44. Duck-billed wind gods in ancient Mesoamerica: (a) detail of Late Classic vase with duck wind god having eye with Ik' sign denoting wind (after photograph courtesy of Jeremy Coltman); (b) Late Postclassic wind god Ehecatl-Quetzalcoatl, *Codex Borgia*, p. 73; (c) pair of duck wind gods, Uxmal Stela 14; (d) duck-billed wind deity playing music, Ceibal Stela 3 (drawings by Karl Taube).

rain (Figure 44c). A Late Classic Maya vase portrays aged God N figures with two duck wind deities bearing features striking similar to the Late Postclassic Ehecatl-Quetzalcoatl (Figure 44a).

Along with being a relatively common entity at Chichen Itza and among the Classic Maya, the duck-billed wind god can be traced to the Late Preclassic West Wall mural at San Bartolo as well as the Tuxtla Statuette and still-earlier Middle Formative Olmec (see Taube 2004c:169-173, 2018a; Taube et al. 2010:Fig. 32). In addition, a fragmentary ceramic Locona-phase tecomate from the south coast of Chiapas features the same being dating to roughly the fifteenth century BC, making this the oldest and most long-lived god of ancient Mesoamerica (Taube et al. 2010:Fig. 32e). It is important to mention that duck-billed supernatural beings are unknown in highland Mexican imagery for the Classic period, including Early Classic Teotihuacan as well as Late Classic Xochicalco and Cacaxtla. This begs the question of when this deity was introduced into highland Mexico, and it is more than likely that it was during the Early Postclassic apogee of Chichen Itza. A limestone head of Ehecatl-Quetzalcoatl was excavated from Q163a at Mayapan (Milbrath and Peraza Lope 2003:28, Fig. 2). This Late Postclassic Ehecatl wears a bound headdress strikingly similar to the Ehecatl figures from the Osario and the Initial Series Group at Chichen (Figure 45c). This in fact is the priestly "miter" mentioned in the early colonial Relación de Valladolid and commonly worn by Itzamnaaj or God D in Late Postclassic Maya art, including the *Codex Madrid* scene of him and other deities with the earth turtle (Figure 31; Taube 1992b:34-35). This "miter" is also worn by the duck-billed wind god on Stela 3 at Ceibal, to be discussed below (Figure 44d). In addition, in the context of the bloodletting scenes of the God N figures on the lower House of the Phalli, their headdresses also resemble this same basic form, possibly denoting them as penitent priests (Figures 32 and 33). It could well be that the origin of the priestly "miter" of Postclassic Yucatan derives from the bound headdress of the Classic-period God N.

In a paper published in 2004, Taube identified an essential form of the Classic Maya wind deity, a handsome youthful male who serves as the personified form of the day name Ik', or "wind" (Taube 2004b; see also Taube 2001:109, Fig. 85). One of his diagnostic markers is a headband with a large flower in the center, linking him to the "Flower World" complex known for Mesoamerica and the American Southwest (Hill 1992; Taube 2004b). In Classic Maya texts, he serves as the Initial Series introductory glyph for the month Mak as well as the personified form of the numeral three. In these very specific glyphic contexts where every element conveys a nuance of meaning, he plays instruments or sings, indicating that in addition to being the wind deity, he is indeed the god of music, along with flowers an essential component of the Flower World complex (Taube 2004b).

The comely and fully human wind deity is distinct from the rather grotesque and often aged Late Classic duck-billed wind god in our currently known glyphic corpus. However, the Maya duck deity is also a musician, as can be readily seen in the Initial Series Group at Chichen Itza, including the upper building of the House of the Phalli currently under discussion, as well as the Temple of the Owls from the same Initial Series Group. Stela 3 from Ceibal portrays him shaking a floral rattle before a



Figure 45. Monumental portrayals of the duck wind god in Postclassic Yucatan: (a) head of the duck-billed wind god at Chichen Itza with floral headband of Classic Maya god of wind and music (from Gallenkamp and Johnson 1985:No.

165); (b) Huastec sculpture in the Sala del Golfo in the Museo Nacional de Antropología in Mexico City depicting Ehecatl wearing this same headband with a central flower (photograph courtesy of Jack Martin); (c) stone head of Ehecatl from Mayapan with "miter" headdress associated with priests (photograph courtesy of Carlos Peraza Lope).





drum (Figure 44d; for entire scene, see Graham 1996:17). A recently discovered Late Classic tomb from Nimli Punit, Belize, contained a remarkable jade plaque in the form of the Ik' wind sign along with a vessel bearing the face of the duck wind god, quite probably a ceramic drum (see Prager and Braswell 2016:268, Fig. 5b). An Early Classic incised vase from Tikal depicts this avian deity with a widely open beak as if singing amidst a background of falling rain (see Culbert 1993:Fig. 31a; Taube et al. 2010:Fig. 34a-b). This duck god is accompanied by a pair of birds with elaborate song scrolls, and the vessel scene clearly constitutes an only slightly later version of the Late Preclassic West Wall mural at San Bartolo depicting the duck wind god dancing and singing with flying birds below a sky filled with roiling rain clouds (Taube et al. 2010). Just as the entirely human form of the Classic Maya wind deity is the god of music, this is the case for the duck-billed being as well. Although the youthful and wholly human aspect of the wind god and the ugly and often aged duck-billed deity clearly overlap in Classic Maya iconography, they also inhabit their own symbolic domains. In Memory of Bones (Houston et al. 2006) it was suggested that the duck-billed being more specifically pertains to the wind deity as a rain bringer, which would be entirely consistent with Ehecatl in Late Postclassic Central Mexico (see Houston et al. 2006:151). On the other hand, the comely aspect of the wind god may well pertain to more subtle and esoteric themes, such as nobility, flowers, and concepts of the breath soul and the paradisal afterlife. That noted, at Chichen Itza the two beings do in fact overlap in attributes and contexts.

Aside from the dancing duck gods from the upper building of the House of the Phalli, frontal portrayals of this duck deity also playing music appear on the Osario Temple, again with floating jewels and cacao pods (Headrick 2018; Schmidt 2007:Fig. 6; Taube 2004b:Fig. 14d). In this case the figures wear a prominent flower in the center of their tall "miter" headdress, an important trait noted for the Classic Maya human form of the wind deity. A number of other stone sculptures from Chichen Itza portray the duck deity wearing the floral headband, including one from the Northeast Colonnade (Figure 45a). In addition, a stone sculpture in the Sala del Golfo in the Museo Nacional de Antropología in Mexico City depicts this avian being wearing the same headband with a central flower (Figure 45b). The style of this monument, including the treatment of the earspools, suggests that it is Postclassic Huastec. Aside from Chichen Itza and this probable Huastec example, the central panels of the South Ball Court at El Tajin also depict a duck-billed wind god wearing the floral headband known for the human Classic Maya god of wind (Taube 2018a). However, it is noteworthy that as of yet this floral headdress is not known for Classic Maya depictions of the duck wind deity, only the human wind god serving as the patron of the month Mak, the personified form of the number 3, and the day name Ik', meaning wind.

As with Early Postclassic Chichen Itza, the Classic Maya, and Late Preclassic San Bartolo, the duck-billed deity was a being of music in Late Postclassic highland Mexico. For the Aztec, Ehecatl was a god of music, as can be seen by Diego Durán's description of his temple in Tenochtitlan that contained a massive drum:

This drum was so big that its hoarse sound was heard throughout the city. Having heard it, the city was plunged into such silence that one would have thought in uninhabited. The markets were dismantled, the people went home. Everything remained in such quiet and peace that it was a wondrous thing. The signal for withdrawal was like the ringing of the curfew bell in cities so that people will retire. Thus when the Indians heard the sound of the drum, they said, "Let us retire, for Yecatl has sounded!" (Durán 1971:186)

Along with mentioning Ehecatl as the sounding voice of the drum, this account suggests that the round temple of the Aztec wind god might have been symbolically conceived of as a supernaturally large *huehuetl* drum.

In terms of the Aztec wind temple and the Chichen Itza facades, it is noteworthy that in Late Postclassic Central Mexico, Ehecatl is a major figure pertaining to the mythic origins of music. In his Historia Eclesiástica Indiana, Mendieta (1980:80) provides an Aztec account of the origins of music in which Tezcatlipoca directs the wind—that is Ehecatl—to travel to the House of the Sun and bring back music for humanity. Another closely related myth in the Histoire du Mechique again mentions Tezcatlipoca sending a devotee to the House of the Sun to acquire singers and musical instruments (Garibay Kintana 1979:111-112). In a number of publications, Taube (2001, 2004a) has noted that versions of this episode graphically appear on pages 35 to 38 of the Codex Borgia where Tezcatlipoca and Ehecatl collect a bundle from a deity whom Taube identifies as a nocturnal aspect of the sun god, a being bearing the circular eye markings known for the Aztec deity Tonatiuh. On page 36, a spiral band of music erupts from a central red zoomorphic flute, an instrument that is also being played by the god of music, Xochipilli. On the following page 37 (see Taube 2001:Fig. 101) the music emerging out of the flute and bundle contains birds, butterflies, flowers, and specific articles of dance and music, including dance staffs, drums, flutes, and probable rattles (Figure 46). The elements in this spiral column constitute an excellent encapsulation of the "Flower World" first described by Jane Hill (1992) for Uto-Aztecan speaking peoples of Mesoamerica and the Greater Southwest, a complex pertaining to concepts of music, flowers, and a solar paradise. On page 38 this stream of items of music and dance terminates in a massive head of Ehecatl as both vehicle and embodiment. Of course this makes perfect sense, as music and audible sound are carried through air and wind.

For the north and south friezes from the upper structure of the House of the Phalli, K'awiil and the flanking duck wind gods appear in an elaborate backdrop of floating or falling objects (Figure 43b). Schmidt (2007:183) describes each of these panels as a "nineteen-meter-long catalogue-like register showing all kinds of precious ornaments and power symbols as well as precious fruits like cacao." Not only do these floating items recall the stream of music in the *Codex Borgia* but also Classic Maya scenes with floating or falling flowers and precious jewels, frequently in the context of music or fragrant incense, in other words an ancient Maya form of the Flower World complex discussed by Jane Hill (see Taube 2004b:Fig. 7).

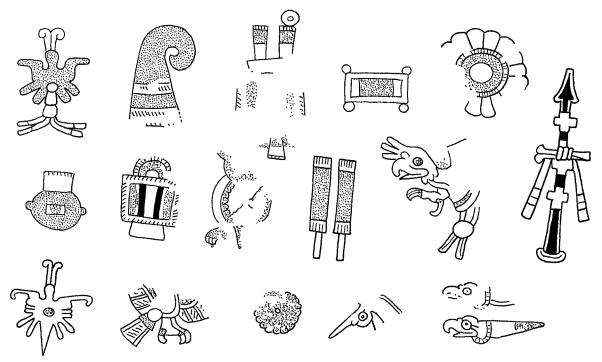


Figure 46. Music emerging out of the bundle and flute of Xochipilli containing birds, butterflies, flowers, and specific articles of dance and music, including dance staffs, drums, flutes, and probable rattles, *Codex Borgia*, p. 37 (drawings by Karl Taube).

In his "Flower Mountain" study, Taube (2004b) compares the Classic Maya falling motifs to the "rain of flowers" trope appearing in the sixteenth-century Nahuatl *Cantares Mexicanos*:

A flower incense, flaming all around, spreads sky aroma, filled with sunshot mist as I, the singer, in this gentle rain of flowers sing before the Ever Present, the Ever Near. (Bierhorst 1985:141)

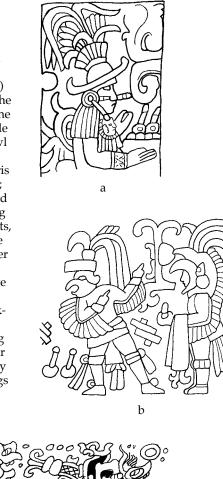
However, these cascading elements could be taken more literally as graphic depictions of rain, as is probably also the case for similar motifs from the Early Classic Burial 48 murals at Tikal, the sarcophagus lid of K'inich Janahb Pakal, and the Cross Group panel scenes of K'inich Kan Bahlam at Palenque. One Late Classic vase portrays a group of musicians playing amidst falling rain, along with an attendant making a fire offering within a brazier, perhaps to create smoke and by extension clouds of rain (see K3247 at Mayavase.com). These same falling precious elements appear in the North Temple

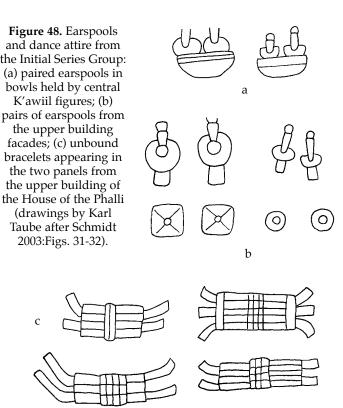
of the Great Ball Court at Chichen Itza, where two figures in bird costume dance amidst a rain of falling elements, including a pair of earspools, again linking this motif at Chichen Itza to music and dance (Figure 47b). In addition, a Late Classic Maya vase has two duck-billed wind gods seated amidst falling rain, and here as well as with the House of the Phalli facades rain would be entirely appropriate with the aquatic duck wind deity (Figure 47c). This also holds true for the aforementioned Early Classic incised vase from Tikal, which portrays this being in falling rain along with singing birds (see Taube et al. 2010). This theme can be traced still earlier to the Late Preclassic murals at San Bartolo, Guatemala. The West Wall mural features the duck-billed wind god singing and dancing with happily chirping birds below a skyband with dark, roiling rain clouds, clearly indicating the coming of rain (Taube et al. 2010:46-50). The deity appears with the 260-day calendar date of 3 Wind, a day entirely appropriate for this being (Taube et al. 2010).

The falling items in the upper House of the Phalli friezes are clearly articles of dance, including jade and turquoise ornaments, metal pectorals, bells, and elaborate headdresses, including some portraying the head of the plumed serpent. In the context of these friezes, such headdresses and

Figure 47. Earspool pairings and the "rain of flowers": (a) woman from one of the sculpted piers from the Northwest Colonnade holding offering bowl containing a set of earspools (after Morris et al. 1931:2:Pl. 122); (b) two figures in bird dress dancing among rain of falling elements, North Temple of the Great Ball Court (after Wren and Schmidt 1991:Fig. 9.8); (c) Late Classic Maya vase portraying two duckbilled wind gods seated among falling rain and jewels (after photograph K1485 by Justin Kerr) (drawings by Karl Taube).

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ornaments are not simply items of regal regalia but constitute precious items of dance costume, as can be seen with all the other floating objects in the reliefs. For example, some of the elements are collars with metal bells, presumably of copper, as can also be seen in roughly contemporaneous sculpture from the Cotzumalhuapa region of southern Guatemala (see Chinchilla Mazariegos 2011:Fig. 4.5).

The upper building facades feature various forms of earspools, and it is noteworthy that they consistently appear together in pairs (Figure 48b). Dual earspools can also be seen in the bowls held by the central K'awiil figures in these two facades (Figure 48a). This is also the case for the aforementioned North Temple scene from the Great Ballcourt at Chichen Itza, where the precious rain includes a pair of earspools (Figure 47b). One of the sculpted piers

from the Northwest Colonnade features four skirted women holding offering bowls, with one containing a clear set of earspools (Figure 47a). Obviously, jade earspools were fashioned as a pair cut from a large, single block of precious stone, as they would have to match while flanking one's face, making their value even more notable. This clearly relates to concepts of wealth and preciousness, as a single, unmatched earspool is much like having only one finely tailored shoe.

Another item appearing in the two panels from the upper building from the House of the Phalli appears as a segmented band with cordage at both ends (Figure 48c). Although otherwise unknown in ancient Mesoamerican art, these devices are loose, unbound bracelets, as can be seen for actual *Spondylus* shell bead bracelets bound with cordage recently discovered in a late offering in the Moche Huaca de la Luna structure in northern Peru (see Uceda Castillo et al. 2016:223). At present, these are the only known depictions of unbound beaded bracelets in Maya art, although there are graphic depictions of them being worn in Late Classic Usumacinta art as well as a scene in Room 1 at Bonampak of a ruler having one being tied to his wrist (see Miller and Brittenham 2013:Fig. 111).

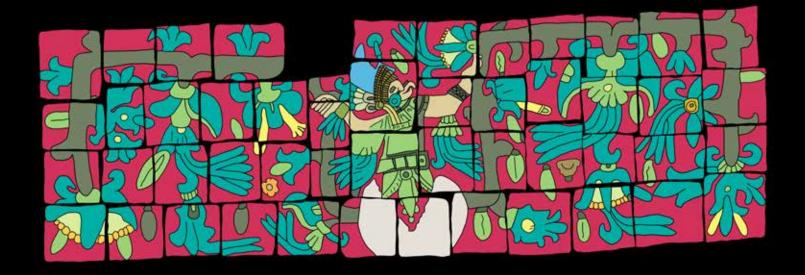


Figure 49. Detail of frieze from northernmost portion of the House of the Shells (color reconstruction by Travis Stanton after Schmidt 2003:Fig. 35).

To summarize, the north and south facades of the building of the House of the Phalli depict the god of abundance and wealth, K'awiil, flanked by pairs of the dancing duck-billed wind god as a deity of music surrounded by a rain of precious articles of dance and wealth. Moreover, as in the case of the scenes in the *Codex Borgia* portraying a stream of articles of music and dance carried and embodied by the duck-billed Ehecatl, these two facades could well refer to the mythic origins of music brought and created by the avian wind god.

The House of the Shells

On the west side of the Phalli Complex, the friezes from the House of the Shells (Str. 5C5) to the west portray another major mythic event, in this case the birth of the duck-billed wind god rendered in brilliant polychrome on a background of red (see Nájera Coronado 2012:Fig. 11; Schmidt 2003:Figs. 35-36). The northernmost portion of this massive west facade occurs in a recess near the northern corner of the lower House of the Phalli and features the wind god emerging out of a cleft white spherical form in a background of flowering vines, a theme expanded upon greatly on the primary facade of the western side of the Phalli, Structure 5C5, the House of the Shells (Figures 49–51). This smaller frieze provides tight encapsulation of the larger House of the Shells sculptural program, including details of

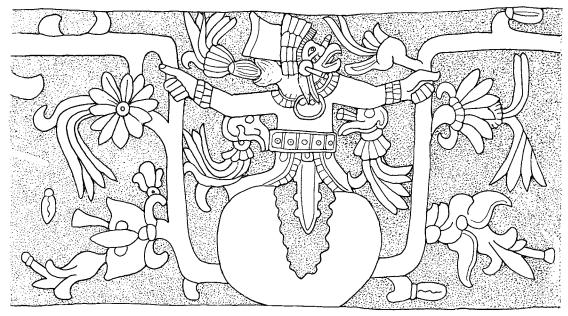


Figure 50. Duck-billed wind god emerging from cleft egg, detail of frieze from northernmost portion of the House of the Shells (drawing by Karl Taube after Schmidt 2003:Fig. 35).

the brown floral vines that are depicted as living providers of preciousness. Thus the blossoms exude cacao pods, sprays of quetzal plumes, and jade jewels. In addition, cacao fruits and what might well be stylized, trefoil ears of corn grow directly from the vine stalks, with cacao, flowers, and jade elements falling or floating in the red background.

Roughly 25 meters in length, the main portion of the House of the Shells frieze features scenes of the duck wind god being born from an egg, along with a distinct, frontally facing figure directly above the central doorway, whose phallus penetrates the cleft of another egg (Figure 51). It is unfortunate that the central portion portraying the head of this being is missing and was probably looted in antiquity, but it was almost surely K'awiil, as the embodiment of potent, fertilizing lightning. For Early Classic Tikal, one of the preeminent kings was Siyaj Chan K'awiil, meaning "Born of Sky K'awiil" (see Stuart 2000), and this entity appears on the north and west sides of the upper House of the Phalli as well as on the painted capstone from the nearby Temple of the Owls. This is strongly indicated by the diminutive wings on his arms, which are found with portrayals of K'awiil in the Initial Series Group. Although the early form of Ehecatl also has such wings, his headdress is entirely distinct from the central figure of this facade. As has been noted, K'awiil also appears on the upper House of the Phalli structure, the Osario, and the Temple of the Owls painted capstone (Figures 40–42).

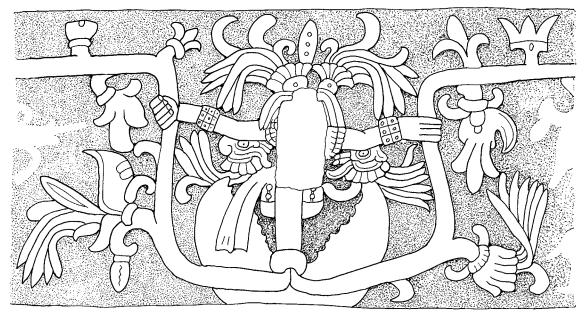


Figure 51. K'awiil penetrating cleft egg above central doorway; note foliage emerging from tip of phallus forming background for entire western facade (drawing by Karl Taube).

A pair of elaborate, flowering vines emerges from the downwardly penetrating phallus of this being as apparent semen and forms the elaborate vegetal background for this entire western facade. On close inspection, it can be seen that in the better-preserved portions equally spaced diagonal bands transect the two brown stalks, indicating that in fact the pair of foliated elements are twisted vines rather than solid trees (Figures 49–51). In addition, this twisted vine motif could well relate to the human umbilicus, and it will be noted that the principal theme on the House of the Shells is the mythic impregnation of the duck wind god from cosmic eggs. Moreover, these twisted vines recall the *kuxa'an su'um* or "living rope" of contemporary Maya lore, which Arthur Miller (1982:92-95) suggested is a blood-filled umbilicus, comparing this concept to twisted cords in ancient Maya art, including an elaborate celestial scene on page 22 of the *Codex Paris*. In his study of the Late Classic Maya "Birth Vase," Taube (1994a) also discussed celestial twisted cords or ropes, although in this case in the form of a pair of serpents rather than flowering vines.

Aside from the House of the Shells frieze, other elaborate scenes of the twisted floral vine appear in Late Postclassic murals from Tulum, squarely on the eastern edge of the Yucatan Peninsula. The west side of the interior chamber of Tulum Structure 16 features twisted serpent cords emerging out of an aquatic pool, a scene that Taube (2010) interprets as a depiction of the emergence of the ancestors out of the underworld as well as pertaining to the dawning sun being born out of the immediately adjacent Caribbean sea (see Miller 1982:Pl. 37). In addition, the upper portion of the central column of this interior chamber features a somewhat effaced figure who with his sharply bent right elbow could be engaged in penis perforation (Miller 1982:Pls. 37, 40). Although unfortunately this possible interpretation will remain conjectural due to the damaged portions of the mural, what is clear is that he wears the headdress of K'awiil, immediately recalling the central phallic figure atop the central doorway of the House of the Shells.

The House of the Shells derives its name from the many carved univalves running in two rows below the western frieze, the lower row as simple univalves boldly painted in red oriented vertically and the upper row being marine conchs with living creatures having heads and forelimbs. Although obviously not a natural trait of mollusks, this is a well-known motif in Central Mexico, beginning with Teotihuacan where they oddly resemble coyotes with long snouts and pointed ears. In highland Mexico this striking tradition of limbed mollusks continues in the Late Classic murals of Cacaxtla as well the early colonial *Florentine Codex* (see Taube 2010;Fig. 2). The relation of these mollusks to the elaborate friezes above remains obscure, although the vertical ones recall the belts of oliva shell tinklers worn by Classic Maya kings in dance costume, as well as the univalve necklace of the Late Postclassic Ehecatl-Quetzalcoatl of Central Mexico. As has been mentioned for the turtle cornice below the God N figures engaged in bloodletting on the House of the Phalli, these two registers of shells may well have a toponymic reference, and this could well be the nearby eastern Caribbean Sea, the place of the dawning sun. As has been mentioned, the vertical shells are painted bright red and the entire background is also this color, the directional color of east which one faces while viewing the frieze.

Clearly enough, the white spherical objects are central to the meaning of the House of the Shells program. According to Peter Schmidt (2007:187) they may portray *jicama*, or *kup* in Maya, and thus possibly refer to the Kupul lineage. In contrast, Nájera Coronado (2012:149) suggests that they are massive seeds, an interpretation indeed consistent with the elaborate flowering branches and the broader theme of abundance and wealth. Rather than *jicama* tubers or seeds, however, it is more than likely that these white spherical objects are cracked-open eggs, which of course would make sense in terms of the avian wind god rising out of them (Taube et al. 2014). In other words, these facades portray the mythic event of the duck-billed wind god being born out of a cleft egg, and indeed the edges are ragged and irregular, much like a broken egg (Figures 49–51). Page 83b of the *Codex Madrid* portrays a death god emerging from a cleft egg having similarly rough edges, with the accompanying text explicitly referring to birth, or *siyaj* (Figure 52b; Praeger 2018:6). The Mixtec *Codex Vindobonensis* portrays the birth of the Mixtec wind god, 9 Wind, out of a flint blade rather than an egg. However, the knife also has a cleft with ragged edges, again to denote birth (Figure 52c). In Classic Maya writing and art the V-shaped cleft denotes birth, or *siyaj*, as can be seen for Late Classic Maya scenes of the maize god emerging out of the earth turtle as well as the name glyph of the Early Classic Tikal king

The Initial Series Group

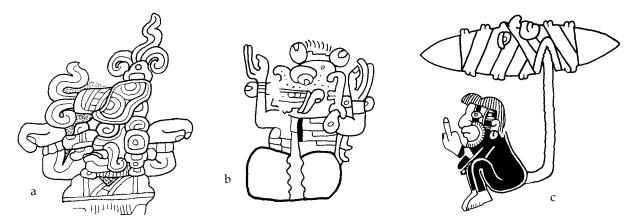


Figure 52. Birth and emergence scenes in Mesoamerican art: (a) Early Classic Maya K'awiil emerging from cleft sky, detail of Tikal Stela 31 (after Jones and Satterthwaite 1982:Fig. 51); (b) death god emerging from a cleft egg with ragged edge and accompanying text referring to birth, *Codex Madrid*, p. 83b; (c) birth of 9 Wind out of a flint blade, note cleft with ragged edges meant to denote birth, *Codex Vindobonensis*, p. 49 (drawings by Karl Taube).

Siyaj Chan K'awiil, which will be subsequently discussed in more detail (Figure 52a). In terms of the probable K'awiil above the central doorway, it is quite possible that he is impregnating the egg with his phallus and by extension engendering the mythic conception of the duck-billed wind gods emerging out of giant cleft eggs.

Along with being a god of wealth and abundance, K'awiil also personifies lightning, and one Late Classic codex-style vessel portrays him merged with the god of rain and lightning, Chahk, with his serpent lighting foot cleaving open a structure denoted as the earth by means of explicit Kaban earth signs (Figure 53a). Once again the cleft has undulating broken edges, much like the eggs from the House of the Shells. Still another codex-style scene shows Chahk in a background of falling rain with his lightning axe breaking open a house containing the maize god, again with the jagged cleft (see K2068). This also holds true for the sarcophagus sides of K'inich Janahb Pakal at Palenque, where his ancestors emerge as trees out of the earth, again with Kaban signs and the V-shaped undulating line (Figure 53b). On the sarcophagus lid, Pakal is shown as the maize god but with the cranial torch of K'awiil, and perhaps in this context he is portrayed releasing his ancestors out of the cleft earth as growing fruit-bearing trees.

In the Late Preclassic West Wall mural at San Bartolo, the maize god appears emerging from the turtle earth, a theme also in Late Classic Maya ceramic scenes as well as a version from the Lower Temple of the Jaguars at Early Postclassic Chichen Itza (see Taube 1985, 1992a; Taube et al. 2010). However, a pier from the Northeast Collonade at Chichen Itza portrays K'awiil rising out of a vertically

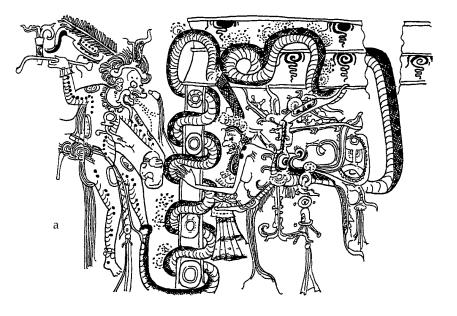
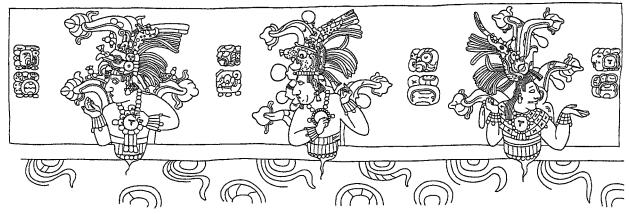


Figure 53. Examples of the undulating cleft earth motif in Late Classic Maya art: (a) Chahk with serpent foot of K'awiil cleaving open structure with Kaban earth signs (drawing by Karl Taube from Taube 1992b:Fig. 37e, after photo K2772 by Justin Kerr); (b) ancestors as fruit-laden trees emerging from the jagged earth cleft, from Pakal's sarcophagus, Palenque (drawing by and courtesy of Simon Martin, from Martin 2006:Fig. 8.6).



oriented turtle viewed from the underside and complete with limbs and a tail (Figure 54a). In addition, the deity holds a bowl containing what appear to be a pair of earspool assemblages, an offering held by K'awiil in vessels from both the upper House of the Phalli and the Temple of the Owls capstone from the Initial Series Group (Figure 66). On close inspection, it can be seen that below the turtle there is a central vertical element suggesting the trunk of a tree with outflaring roots, and the sides of the turtle are flanked by four devices strongly suggesting the outlines of cacao pods. In other words, K'awiil

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might be portrayed emerging out of a turtle cacao tree, combining the precious plant with a basic earth symbol. A quite similar turtle appears on page 72 of the Late Postclassic *Madrid Codex* (Figure 54b). In this case the creature is a sea turtle with a prominent beak and the eyeball and hair crest commonly found with Maya death gods, suggesting its earthly and underworld qualities. Six vegetal elements grow out of the sides of its carapace, and although possibly leaves they could also be cacao pods with the hachure denoting their rough and corrugated surface. A drum altar from Uxmal, possibly used for heart sacrifice, depicts an unusual version of the cleft earth turtle, in this case with God C rather than the maize god emerging from the cleft carapace (Figure 54c). Flanking this central scene, two K'awiil deities emerge from other creatures, quite probably portrayals of the earth crocodile, with this monument once again relating K'awiil to scenes of emergence from the earth. In Yucatan, the earth turtle also appears at the base of an elaborate scene carved on a round column placed before the Chenes-style zoomomorphic doorway of the Sak Xok Naah at Ek' Balam, in this case with K'waiil emerging from the rear opening of the carapace (Figure 55). The turtle is supported by a frontally facing skull, pos-



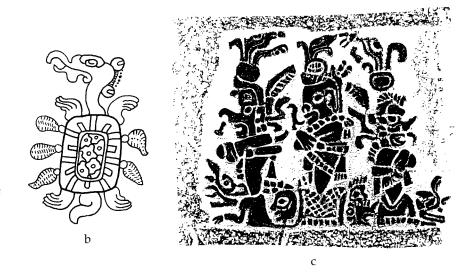


Figure 54. Turtle imagery and vegetal growth from ancient Yucatan: (a) K'awiil holding pair of jade earspools emerging from vertical turtle with probable cacao pods on sides, Northeast Colonnade, Chichen Itza (drawing by Karl Taube based on photographs courtesy of Nelda Marengo Camacho and from Ricketson 1927:15); (b) turtle with foliation on sides, *Madrid Codex*, p. 72b (drawing by Karl Taube); (c) God C emerging from carapace of earth turtle and flanked by two K'awiil figures, drum altar from Uxmal (illustration by Karl Taube based on rubbing by Merle Greene Robertson).

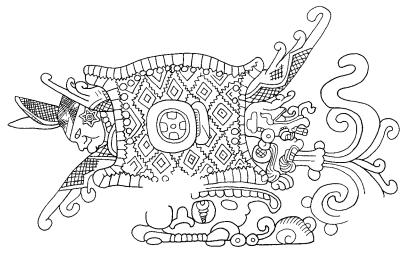


Figure 55. Detail of basal portion of column from Ek' Balam featuring God N and K'awiil in turtle (drawing by Karl Taube after drawing by Alfonso Lacadena in Taube 2015:Fig. 5.11c).

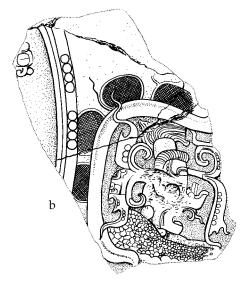
sibly an offering bowl or perhaps a form of a cleft mountain. In one of the most famous scenes of the Classic Maya maize god emerging from the earth turtle, a prominent skull appears on the cleft turtle carapace (see Taube 1993:77). The theme of K'awiil emerging from the posterior of the earth turtle is widespread among the Late Classic Maya of the Peten, including at Piedras Negras, Itzimte, and Machaquila (Figure 56).

For the House of the Shells, the bold composition dominating the scene is slightly askew, as

there is only one Ehecatl emerging from an egg south of the central figure and doorway, with two to the north, including the recessed scene near the northwest corner. If there were symbolically a program of four wind gods emerging from cleft eggs, the middle figure on the west frieze above the doorway would compositionally constitute the center. Together, the five eggs would create a quincunx, a basic Mesoamerican cosmogram readily traced to the Formative Olmec and present in Maya ceremonies to this day, including among the Ch'orti (see Girard 1962:Pls. 8-10, 27, 91-94, 174-176, 181; Taube 2000a, 2005b, 2007). In this suggested program, the central motif is K'awiil as a creator god penetrating and fertilizing an egg with his phallus, with the four avian wind gods then being born from eggs at the cardinal or intercardinal points. This composition is notably similar to the Late Preclassic birth scene from the North Wall mural at San Bartolo featuring five infants being born from a cleft gourd, four at the corners and the principal one in the center (see Saturno et al. 2005). The raised and extended arms of the central being at San Bartolo closely resemble the poses adopted by the avian figures in the cleft eggs on the House of the Shells friezes, where they grasp the flowering vines in their outstretched hands.

The suggested quadripartite theme of four duck wind gods emerging from eggs with a fifth egg in the center is replicated in the internal architecture of this very structure. Directly below the deity impregnating the suggested fifth and central egg there is the main portal, offering access to a central colonnaded hall inside the building. At the very middle of this hall, passages to the north and south offer access to four equally spaced, identical chambers oriented to the intercardinal points, an unusual and very striking architectural plan for Chichen Itza. In addition, the northern passage provides direct





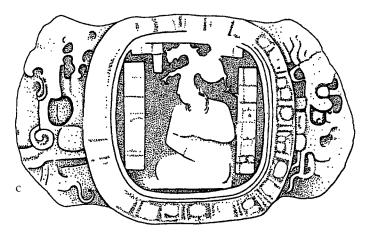
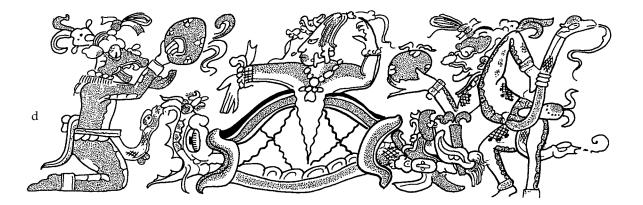


Figure 56. Late Classic Maya portrayals of the earth turtle with K'awiil emerging from the rear opening of the carapace: (a) petroglyph above cave grotto, Piedras Negras (from Taube 1988:Fig. 3b); (b) K'awiil emerging from turtle marked with Caban earth markings, Itzimte Altar 1 (from Taube 1988:Fig. 4b); (c) turtle with K'awiil at posterior of carapace (from Taube 1988:Fig. 5b); (d) Late Classic vessel scene of maize god emerging out of the cleft turtle earth with K'awiil at the rear end looking upwards (drawings by Karl Taube).



and central access through a broad interior stairway to the upper building of the House of the Phalli, which features the four dancing duck wind gods placed at the intercardinal points on the north and west facades, quite possibly related to their birth below on the House of the Shells frieze. In other words, the duck wind gods emerging from cracked eggs may relate to the House of the Shells as a structure of music and dance, and its broad entry supported by Atlantean columns provides direct access to the upper structure of the House of the Phalli, with its scenes of dancing jaguars and four duck gods playing music.

For the House of the Shells, flowering vines are backed with a red background of floating flowers and cacao, a clear version of the "rain of flowers" motif related to Classic Maya portrayals of paradise, that is, a version of the Flower World complex defined by Jane Hill (1992) and subsequently discussed by Taube (2004b, 2005a, 2006, 2020) for the Classic Maya, Teotihuacan, and Early Postclassic Chichen Itza. Most of the elements are cacao, although there are also examples of flowers with jade elements projecting from the corners of the blossoms. As in the case of the House of the Phalli friezes featuring the duck god, these falling elements should probably also be considered as portrayals of fertile rain, which would be consistent with the growing vines emerging from the central cleft egg. In terms of the growing vines, the open flowers also emit long jade jewels (Figure 57a–b).

In a study concerning Maya jade symbolism, Taube (2005b) notes that the tubular jade element denotes the symbolic breath projecting from the center of jade earspool assemblages. Many of the House of the Shells blossoms also emit sprays of quetzal plumes, arguably the most precious item in ancient Mesoamerica (Figure 57c–h). Given the ubiquity of quetzal plumes in Late Classic Maya art, it is readily possible to dismiss them as simple ornament. However, this is far from the case. As in the case of the jade jewels, they denote breath and in Late Classic Maya art frequently appear before faces in assemblages incorporating floral or jade elements (see Taube 2005b:Fig. 19g, 2010:Fig. 10b). As has been mentioned, the pair of earspools with quetzal plumes on the plumed serpents from the gold mask discovered at Chichen Itza signify breath and wind, the essential meaning of this deity. A Late Postclassic mural from Tulum features a crested plumed serpent breathing a prominent pair of quetzal plumes from its nostrils (Figure 59f). For the aforementioned K'awiil quetzals from the Osario pyramid, many wear jade mask diadems exhaling quetzal plumes directly from their faces (Figure 42). Similarly, a probable wind deity from the Late Postclassic murals at Santa Rita, Belize, wears a mask diadem also exhaling breath elements, although in this case they are simply flowers rather than jade or quetzal plumes (Figure 59e). Another deity from the same mural exhales breath in the form of a flower with undulating quetzal plumes. Along with preciousness, the jade and quetzal elements from the House of the Shells friezes also represent the symbolic "aroma" of the blossoms as well as the spiritual breath of life. The flowers on the House of the Shells vines often provide a "daisy chain" of precious elements, for instance beginning with a large blossom emitting quetzal plumes tipped by a cacao pod, or another open flower with quetzal plumes and then an additional flower with a pair of jade elements

(Figure 49). In one case a large flower seems to contain, along with jade, quetzal plumes, and cacao, a round yellow K'an element, the Maya sign for maize tamales, and there are probably others although less well preserved and apparent.

Along with jade elements and quetzal plumes, the House of the Shells friezes also bear many portrayals of cacao pods, with one scene featuring a hummingbird sucking a blossom while grasping a pod in its claws, much as if the floral nectar and cacao were one and the same (Figure 58a). Codex Madrid page 70 portrays a seated deity in a bower of cacao trees with a quetzal (Figure 58d). In addition, the Late Postclassic mural from Santa Rita portrays a quetzal carrying in its beak a cacao branch with two pods, clearly relating this precious bird to chocolate (Figure 58e). Aside from the House of the Shells, portrayals of flowering vines and precious birds were found in previous sculptural programs buried within the Temple of the Warriors. For the Temple of Chac Mool, the upper tail sections of the serpent columns portray God N skybearers surrounded by swirls of floating jewels, clearly to delineate the celestial realm (Figure 60a). In addition, deeply carved panels from the loose fill above the Temple of Chac Mool

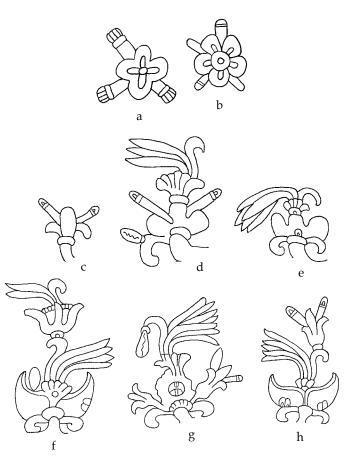
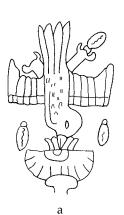


Figure 57. Jade jewel blossoms and quetzal plume elements on the House of the Shells friezes: (a–b) frontal portrayals of flowers with jade elements at corners of petals; (c–h) profile depictions of blossoms with quetzal plumes and jade elements (drawings by Karl Taube after Schmidt 2003:Fig. 36).

portray crested quetzals sipping the nectar from blossoming vines (Figure 60b–d). The floral vines on the House of the Shells friezes closely resemble another appearing on the roughly contemporaneous Bilbao Monument 21, which also bears jade jewelry, birds, and schematic human heads as probable cacao pods (see Chinchilla Mazariegos 2011:Fig. 4.26). A preeminent Precolumbian center of cacao production, the Cotzumalhuapa region from the southern piedmont of Guatemala has many monuments

Taube et al.



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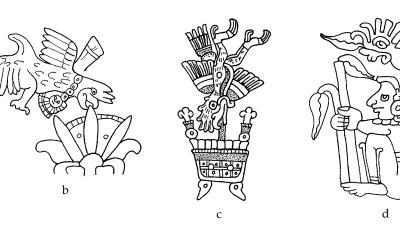


Figure 58. Postclassic Maya portrayals of birds with flowers and cacao: (a) hummingbird sucking a blossom while grasping a cacao pod in its claws, detail of House of the Shells frieze (after Schmidt 2003:Fig. 36); (b) quetzal wearing elaborate necklace and sucking nectar from the open blossom of a flower, House of the Shells west facade (after Schmidt 2003:Fig. 36); (c) quetzal sucking sacrificial blood as "nectar" from bowl, *Codex Borgia*, p. 3; (d) quetzal atop cacao plants, *Codex Madrid*, p. 70a; (e) quetzal carrying a cacao branch with two pods in its beak, Late Postclassic mural from Santa Rita, Belize (after Gann 1900:Pl. 29) (drawings by Karl Taube).

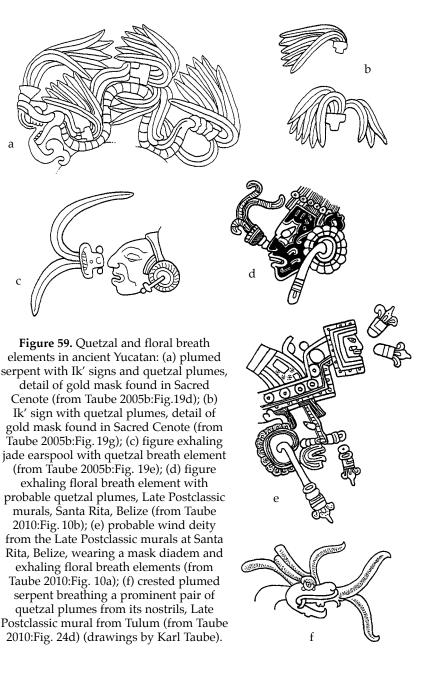
portraying cacao, and Chinchilla Mazariegos (2016) notes that it commonly appears in the context of human sacrifice. Rather than denoting death, cacao in this context denotes life in the form of vital human blood. Thus Chinchilla Mazariegos documents the close correlation between the beverage and sacrificial blood for not only Cotzumalhuapa-style art, but in the broader context of ancient and contemporary Mesoamerica. In a study of the iconography of Chichen Itza, Taube (1994b) discusses symbolic and stylistic elements shared between Chichen Itza and Cotzumalhuapan monumental art.

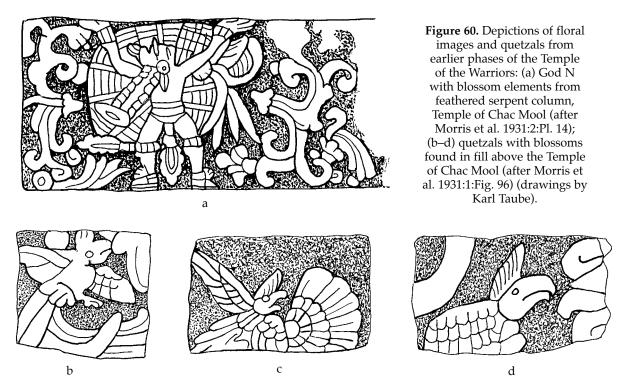
Aside from the hummingbird with the cacao pod, the House of the Shells west facade features other precious flying birds sucking nectar from open blossoms (Figure 58b). In terms of the general theme of preciousness and abundance, it is not surprising that most are quetzals, a creature obviously foreign to the hot and humid flatlands of Yucatan. In one case, the quetzal wears an elaborate jade collar, indicating that it is not simply a beautiful and rare bird but a supernatural being. This diving quetzal closely resembles scenes in the Late Postclassic Borgia Group, where quetzal birds descend to sip from floral offering bowls. For one example in the *Codex Borgia* the "nectar" of the bowl is a vertical red stream of blood, indicating that rather than an actual quetzal this is a supernatural being drinking sacrificial blood

(Figure 58c). As in the case of the House of the Shells birds, these creatures appearing in the Borgia Group are revenant warrior souls, not ordinary birds (see Taube 2010).

For the Temple of the Warriors at Chichen Itza, a structure clearly devoted to the ideology of war and sacrifice, there are the sculpted jambs flanking both the outer and inner chambers of the temple superstructure. Whereas the frontal western sides feature human figures, much like the piers supporting the doorways and the many sculpted piers from the Temple of the Warriors and Northwest Collonade below, the inner portions of the jambs that directly flank the passageways are undulating floral vines (see Morris et al. 1931:2:Pls. 39-40, 53-54). It is quite possible that these flowering plants denote a symbolic portal to the eastern paradise of the sun, and by passing through these doorways to enter the temple one is facing due east.

The relation of the House of the Shells birds to warrior souls is further corroborated by Jorge Enciso's 1953 publication





on Mexican *sellos*, or ceramic seals. Two that he attributes to Yucatan feature birds with long pliant tails, suggesting the quetzal, despite the fact that their long beaks more resemble hummingbirds (Figure 61a–b). For one example, the bird dives directly into the flower with another blossom behind its tail, directly recalling the west wall facade. In the same publication, Enciso also illustrates an image of both a butterfly and a quetzal wearing jade collars, again a reference to supernatural souls (Figure 61c).

The relation of birds to human souls is well documented for the Late Postclassic Aztec where the souls of heroic warriors went to the eastern solar paradise:

[T]he brave warriors, the eagle-ocelot warriors, those who died in war, went there to the house of the sun. And they lived there in the east, where the sun arose. (Sahagún 1950-1982:Book 6:162)

After four years, the warriors became birds and butterflies who lived in this celestial floral paradise sucking the sweet nectar of flowers:

They changed into precious birds—hummingbirds, orioles, yellow birds blackened around their eyes, chalky butterflies, feather down butterflies, gourd bowl butterflies, they sucked honey [from the

flowers] there where they dwelt. (Sahagún 1950-1982:Book 3:49)

The sixteenth-century murals from the Parroquia de Ixmiquilpan, Hidalgo, depict warriors armed with bladed clubs and shields fighting amidst and emerging from the blossoms of undulating flowering vines that are strikingly similar to the House of the Shells facade (see Wright Carr 2005). Many of the warriors are apparently singing, with floral scrolls emerging from their mouths. Although not overtly militaristic, roughly contemporaneous murals from the lower cloister at Malinalco depict elaborate scenes pertaining to early colonial concepts of the floral paradise and feature flowering vines and flying birds, also recalling the House of the Shells facades (see Peterson 1992). In addition, a cacao tree with spider monkeys is a prominent motif in the mural program:

Most of the floral and faunal imagery in the "paradise garden" of this cloister is native; it comes from the living experience and natural world of the indigenous artists... The cacao tree appears in a section of the murals as a central feature of the plants that constitute the garden of the Indian-Christian heaven, reflecting its status as a precious and sacred element in Aztec culture. Spider monkeys hang from its branches... (Aguilar-Moreno 2006:279)

Rather than being simply another fruit-bearing plant in the garden of paradise, this cacao tree closely relates to Prehispanic concepts of the Flower World afterlife going back as early as Teotihuacan.

In Central Mexico, the concept of an afterlife of precious birds, blossoms, and cacao can be readily traced back to Early Classic Teotihuacan, where warrior souls are butterflies inhabiting a paradise realm that Taube has identified as Flower Mountain (see Berlo 1983; Gaines 1980; Headrick 2007; Taube 2005a, 2006). In a short article describing a Teotihuacan stucco-painted tripod vessel featuring blow-





Figure 61. Birds and butterflies on ceramic *sellos* attributed to Chichen Itza: (a) composite hummingbird and quetzal sipping flower with another blossom on the quetzal-plumed tail (from Enciso 1953:90, II); (b) composite hummingbird and quetzal with probable song scroll (from Enciso 1953:90, I); (c) supernatural butterfly and quetzal wearing jade necklaces with crosssectioned conch motif above (from Enciso 1953:94, IV).

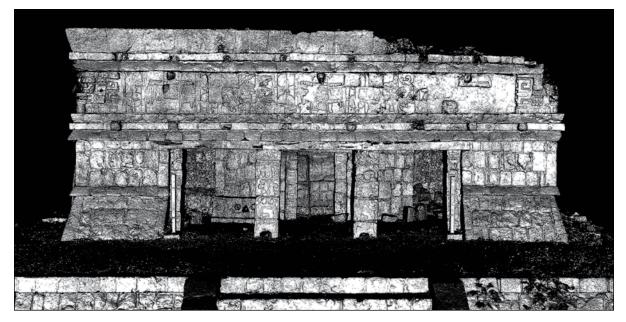


Figure 62. Photogrammetric image of the front of the Temple of the Owls (created by Dominque Meyer and Danylo Drohobytsky).

gunners hunting quetzal birds, Mary Gaines (1980:13) succinctly describes a likely Teotihuacan concept of paradise related to both quetzals and cacao as

a place where Teotihuacanos go after death, where cacao trees can grow in the mountains, and where quetzals can nest in the cacao. In that happy hunting ground there will be abundant rainfall, cacao bean money, and frothing cacao drinks for all Teotihuacanos forever.

Sigvald Linné (1942:Fig. 175) published a fragmentary Teotihuacan plano-relief vessel portraying a figure with a blowgun hunting quetzals along with a cacao tree, clearly a reference to the Maya region from which both quetzals and cacao were known to come. Taube (2005a, 2006) has suggested that for Early Classic Teotihuacan, the Maya region was the paradise realm to the east identified with jade, quetzals, and cacao as well as the rising sun, and more specifically the Escuintla region of south coastal Guatemala, a major area of cacao production and corresponding generally to the same locale of later Cotzumalhuapa culture. However, by the time of the Early Postclassic apogee of Tula and Chichen Itza, this place of paradise probably shifted northward to Yucatan, with the House of the Shells facades being a rich tableau of beauty and preciousness pertaining to this eastern paradise (for concepts of Chichen

Figure 63. Photogrammetric cuts of the Temple of the Owls (created by Dominque Meyer and Danylo Drohobytsky).

Itza and paradise, see Taube 2015b). Aside from this facade, other depictions of this floral realm appear at Chichen Itza, including an elaborate but little studied relief with exuberantly growing floral vines excavated adjacent to the Xtoloc Cenote (see Proskouriakoff 1950).

Near the southwest corner of the House of the Shells, there is a structure atop a small platform termed the Temple of the Owls (5C7; Figures 62 and 63), so named because of the many images of frontally facing owls on the cornice friezes and doorway of the building (see Schmidt 2003:Figs. 40-45, 2007:Fig. 33; Schmidt et al. 2018; von Winning 1985). A trench exploring the interior bench of the structure revealed Sotuta Complex material and a copper bell on the floor of the temple. However, it is clear that this bench is a late addition to the building as some of its construction stones come from the struc-





Figure 64. Stone box offering associated with the Temple of the Owls.

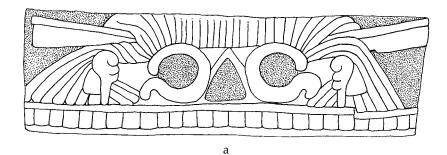
ture's very facades. Either this material was taken from an earlier context and placed in the structure, or the use of the Temple of the Owls was only during Sotuta times. Beneath the floor of the gallery (along the centerline) a burial was recovered, placed in a stone box with two ocarina fragments, fitting offerings given the link between music and Flower World (Figure 64). Two small well-shaped square and hollow stones that appear to have formed a single box were found beneath this burial. Red paint and two globular jade beads were found inside this small box, which was also associated with some unidentified bone.

A decidedly rare motif at Chichen Itza, the owls probably allude to a dark, chthonic realm, and a massive panel discovered within the structure further corroborates its netherworld qualities (Figure 65a). Possibly part of an altar in the innermost chamber, it features a stylized human skull, recalling portrayals of death heads in the roughly contemporaneous Cotzumalhuapa style from the southern piedmont of Guatemala (Figure 65c; see Chinchilla Mazariegos 2011:Fig 4.14). The skull has a pair of paper banners protruding from the sides of the head, strikingly similar to depictions of Aztec skeletal

deities, including Mictlantecuhtli, Tlaltecuhtli, and Ilamatecuhtli, as well as the fearsome *tzitzimime* star goddesses. In Late Postclassic Central Mexico, such paper banners denote the unfortunate status of captives, who frequently carry them in their arms while bound. While well known for Late Postclassic Central Mexico, the relation of paper banners to death and more specifically skulls can be traced to the Classic Maya. A fragmentary fine-paste tempered vessel from Dos Pilas, Guatemala, features a human skull with not only paper ear ornaments but also what was clearly a pair of paper banners at both sides of the head, much like the large panel from the Temple of the Owls (Figure 65b).

For the Temple of the Owls, the aforementioned capstone from this building features K'awiil emerging out of a U-shaped cave or sinkhole, clearly a pit to the netherworld (Figure 66). The Temple of the Owls friezes also bear paired images of the duck-billed wind god, and for two examples he holds a double-chambered ceramic drum, recalling scenes of this god playing music on the north and south friezes from the House of the Phalli (Figure 67). Similar ceramic drums are known for Late Classic Maya sites, including Aguateca in the Pasión region of Guatemala (see Inomata 2015:Fig. 208), and as mentioned previously such a drum was found in the Casa del Tambor in the Initial Series Group

Figure 65. Skull imagery in ancient Mesoamerican art: (a) large panel depicting a skull with paper elements in hair and through ears, discovered in the Temple of the Owls (after Schmidt 2003:Fig. 46); (b) fragmentary Terminal Classic vessel from Dos Pilas, Guatemala, portraying skull with paper banners (from Taube 1989b:Fig. 5.24); (c) monumental skull panel from Cotzumalhuapa region, El Baúl Sculpture 18 (after Thompson 1948:Fig. 9d) (drawings by Karl Taube).



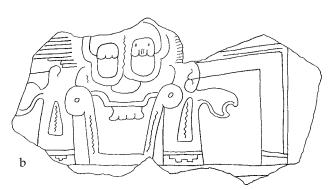






Figure 66. K'awiil emerging out of a U-shaped cave or sinkhole holding five earspools with four in his right hand and one in his left, along with four hanging and flanking cacao pods (drawing by and courtesy of Simon Martin, from Martin 2006:Fig. 8.14).

itself. In addition, the avian figures are accompanied by small floating or falling blossoms—the "rain of flowers" motif commonly identified with music in ancient Mesoamerica (Taube 2004b). The pairs of performing duck-billed wind gods are flanked on both sides by two massive jade earspools with protruding central bead elements denoting preciousness and wealth, a theme also found with the falling elements from the north and south friezes on the upper House of the Phalli and the blossoming vines from the House of the Shells.

The theme of abundance and wealth is also explicitly portrayed on the pair of square piers supporting the Temple of the Owls doorway (Schmidt 2003:Fgs. 40-42, 2007:Fig. 32). The lower portion of both had a protruding human figure with the head, shoulders, and arms carved as one piece set into a basal socket, with the trunk of the body forming a cacao tree on the flat vertical surface above (Figure 68). In composition, these piers are quite like earlier Maya portrayals of crocodilian world trees, with the head and forelimbs forming the lower portion (see Taube 2017:Figs. 1c, 3). In fact, in his excavations of the Osario Group at Chichen Itza, Schmidt (2007:Fig. 3) discovered reused sculpture panel fragments featuring crocodilian cacao trees, in one case with the leg and belly of a monkey as well. The contortionist "headstand" convention for the

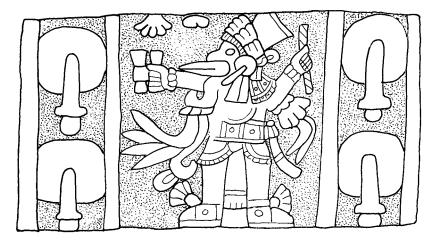


Figure 67. Duck-billed wind god holding a double-chambered ceramic drum from the Temple of the Owls; note pairs of jade earspools flanking him on both sides (drawing by Karl Taube after Schmidt 2003:Fig. 44).

world tree often also appears with the maize god, at times as the embodiment of cacao (see Martin 2006:Figs. 8.9a, 8.11; Taube 2017:Fig. 7a). Although the deities from the Temple of the Owls are not the maize god, they are clearly personified cacao trees. However, aside from cacao pods, the trunks also sprout flowers in the form of jade earspool assemblages, much as if the cacao fruit grows from these precious flowers. As in the case of other scenes in the Initial Series Group, cacao is squarely embedded into concepts of value and wealth.

Although the deities at the bases of the two cacao trees are now lost, Hasso von Winning (1985:Figs. 46-47, 49-51) provides archival photos of the west pier figure, who wears a thick collar of beads, almost surely jade. Although entirely human, his visage is oddly sharp and craggy and resembles portrayals of the Jaguar God of the Underworld, that is, the nocturnal sun god emerging from

the brows of Flower Mountain facades from the nearby Las Monjas structure at Chichen Itza (Taube 2019b). In addition, a likely image of the Maya solar deity also occurs at Uxmal, and as in the case of the Chichen Itza piers, he also has cheek scrolls flanking his mouth (Figure 69). The Uxmal and Temple of the Owls deities strongly recall the depiction of the Classic Maya sun god, or K'inich Ajaw, from the western mosaic facade of 1B-Sub 1 at Quirigua, who has similar sharply refined and perhaps even aged features (Sharer 1990:Fig. 59). In contrast to the comely Maya maize deity who appears as an embodiment of vigorous youth, the Maya sun god is shown as powerful but middle-aged, also being consistently

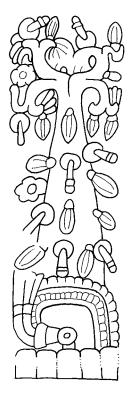


Figure 68. Tree decorated with cacao, jade earspools, and flowers on pier from the Temple of the Owls (drawing by Karl Taube after Schmidt 2003:Fig. 41).



Figure 69. Maya sun deity from Uxmal with similar facial features to individual at base of personified cacao tree from the Temple of the Owls (photograph by Travis Stanton).

portrayed as an aged bearded man in the Late Postclassic *Codex Madrid* (Taube 1992b:52). The Chichen Itza sun deity also wears a heavy jade collar with a mask as a central pectoral and two others on his shoulders, strikingly similar to the Uxmal sculpture. We suggest that for these two piers this being is the sun god emerging and rising as growing cacao from the dark, netherworld realm of this temple.

A Late Classic vessel probably from Belize depicts a growing and fruit-laden cacao tree with a youthful figure as its trunk, certainly not the Classic Maya maize deity (Figure 70). That noted, the sun god dominates the scene, displaying his shoulder cape, prominent curving nose, and as headdress a likely eagle with a sharply curved beak, quite unlike that of the Moan Owl known for God L. In a study of solar offering bowls in ancient and contemporary Mesoamerica, Taube (2009b) noted that the Classic Maya sun deity commonly appears with eagles with similar beaks. In addition, the rim text of the vessel includes the same eagle-head

reference to both a nest and the sky, and in Late Classic Maya iconography there are clear examples of sharply beaked eagles occupying the ends of skybands (see Taube 2009b:Fig. 16c-e).

Surely the best-known image from the Temple of the Owls is the aforementioned painted capstone, unfortunately destroyed in a fire soon after its discovery (Figure 66; Martin 2006:174-175; von Winning 1985). The capstone text bears the K'atun date 1 Ajaw, most probably referring to the twenty-year period



Figure 70. Courtly scene depicting Maya sun god wearing cape and eagle headdress sitting behind personified cacao tree (photograph K631 by Justin Kerr, Justin Kerr Maya Vase Archives, Dumbarton Oaks, Trustees for Harvard University, Washington, D.C.)

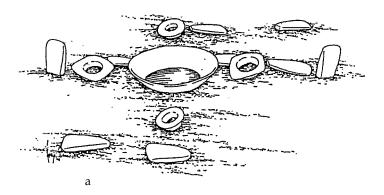
corresponding to AD 1125–1145 (see Schmidt et al. 2018:35, 42). In the scene a winged K'awiil emerges from a plumed serpent in a U-shaped form clearly related to the Late Classic Maya underworld maw, or "jaws of death," based on the fanged mouths of centipedes (Taube 2003a). He holds jade jewelry in his outstretched arms, with a large bowl containing jade beads and four earspools in his right hand, with a single, fifth earspool in his left. In contrast to the lower underworld portion of the capstone scene, the upper part is framed by a skyband marked with a double row of V-shaped rays commonly found with the solar disk encircling the youthful sun god at Chichen Itza, denoting the brilliant diurnal sky (see Schmidt et al. 2018:34; Taube 1992b, 1994b). In their recent study of the Temple of the Owls, Schmidt and his colleagues (2018:31) note that K'awiil embodies the concept of agricultural fertility and abundance, including cacao production. Along with K'awiil, the enclosure within the framing celestial and underworld motifs contains a rain of jade elements, recalling the sarcophagus lid of Pakal with the falling jewels and the centipede maw at the lower portion. This interior space created by the celestial and netherworld signs also contains four large cacao pods, and although at first sight they might also appear to be falling in space, they are not. Instead, they have stems firmly attached to the sky and underworld motifs to form a rectangle with the roughly equally spaced fruit at the four corners. With

the central K'awiil figure, this composition forms a quincunx strikingly similar to Middle Formative Olmec depictions of the maize deity as the middle element of the "bar and four dots" motif—the Olmec maize god serving as the pivotal axis mundi framed by four celtiform maize ears (Taube 1996, 2000a, 2005b). In this regard, the Temple of the Owls capstone probably depicts K'awiil as the embodiment of cacao framed by four cacao fruits at the intercardinal points.

It will be recalled that on the Temple of the Owls capstone, K'awiil holds five jade earspool assemblages, four in his right hand and one in his left, which would create a quincunx offering of five earspools, four to the cardinal or intercardinal points and a fifth one at the center. A Middle Formative Olmec-style cache from San Isidro, Chiapas, featured four jade earspools placed at the cardinal points surrounding a central ceramic bowl, and an Early Classic cache from Copan contained six earspool blanks with four at the world directions and two in the center, possibly to denote zenith and nadir (Figure 71a–b; Taube 2005b). In terms of the Temple of the Owls, it will be recalled that the exterior friezes portray four massive earspool assemblages flanking a pair of duck-billed wind gods. It is surely no coincidence that by at least the Classic period the ancient Maya identified earspools with breath and wind, and in profile they resemble the Ik' sign denoting wind (Taube 2001:109, 2005b). With its upper framing solar skyband and lower U-shaped underworld "bowl," the Temple of the Owls capstone resembles a lip-to-lip cache vessel, in this case containing directional cacao pods and five earspool assemblages. In fact, an Early Classic ceramic cache vessel from the Escuintla region of southern Guatemala features four cacao pods on its sides and four earspools directly above on its lid (Figure 71c). Cache vessels sprouting cacao are fairly common at Late Classic Copan, where they often have four pods equally spaced on the sides as well as on the lid (Figure 71d; see McNeil et al. 2006: Figs. 11.8, 11.10; Stromsvik 1941:Figs. 15d, 17b, 20c).

The elaborately painted capstone of K'awiil is by no means unique to the Temple of the Owls at Chichen Itza, and vault capstones featuring this god are notably widespread in the Chenes and Puuc region, including at Dzibilnocac, Kiuic, Santa Rosa Xtampak, Xkichmook, and Xculoc, as well as looted examples (Mayer 1983:Figs. 17-20, 23-26, 36, 45-47, 50-53, 57-58). In our discussion of the adjacent House of the Shells, we discussed K'awill as a being of fertile and omnipotent lightning releasing agricultural abundance from the earth. In fact, it has been suggested that the interior vaults with capstones constitute the inside of the turtle earth carapace (Carrasco 2015; Hull and Carrasco 2004). In terms of our discussion of K'awiil as the bringer of abundance out of the dark underworld, the capstone from the Temple of the Owls features him rising from the centipede maw of the underworld up through the vault into the sun-rayed sky. Clearly enough, this would directly pertain to the sun gods at the brightly lit entrance richly dressed in jade collars as cacao trees bearing both its fruits and jade.

In Hull and Carrasco's original study of capstones, they mention the Mayan term *mak*, which signifies closure of an open passage. Thus for the traditional *holbom* beehives of the Yukatek Maya, the wooden plugs at the ends of the hollow logs are termed *mak*, and a common phrase of insult today is



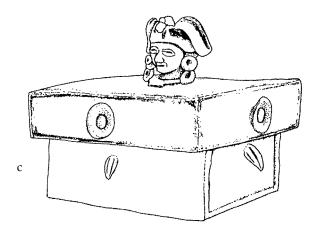
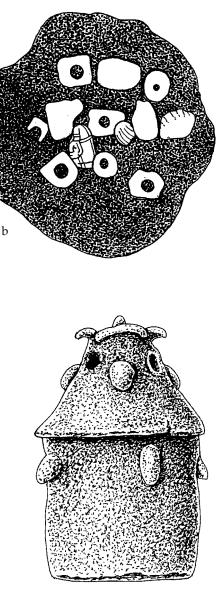
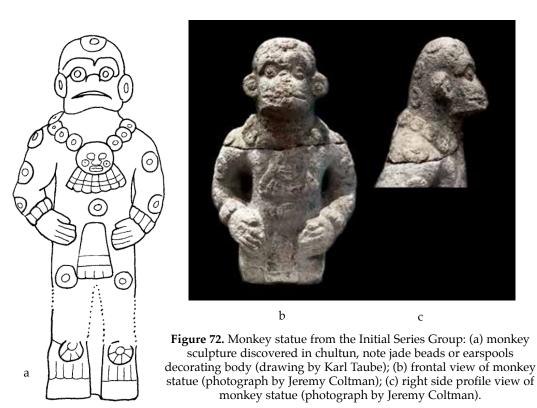


Figure 71. Cacao, earspools, and caches in Mesoamerican art: (a) Middle Formative Olmec-style cache from Mound 20, San Isidro, Chiapas, featuring four jade earspools placed at the cardinal points surrounding central ceramic bowl (drawing courtesy of the New World Archaeological Foundation); (b) Early Classic cache from Copan Structure 10L-26 containing six earspool blanks with four oriented to the world directions and two in the center, possibly to denote zenith and nadir (from Taube 2005b:Fig. 2a); (c) Early Classic ceramic cache vessel from the Escuintla region of southern Guatemala featuring four cacao pods on its sides and four earspools directly above on lid (from Taube 2013:Fig. 5.5); (d) cache vessel sprouting cacao with four pods equally spaced on sides and lid, Late Classic Copan (from Taube 2013:Fig. 5.4a).



d



mak a chi' or "shut your mouth." It is noteworthy that a number of Late Classic vault stones portray mats, including at Pomoch (Mayer 1983:Fig. 60). In a study devoted to Classic Maya temple architecture, Taube (1998b) notes that unlike the European Old World, doorways were covered with textiles and mats among the ancient Maya. In other words, the mat motif appearing in Chenes and Puuc vaults has nothing to do with concepts of "*pop*" as the mat of rulership but rather a closed doorway or portal, with the K'awiil figures that occupy the same place marking the opening with attendant abundance. Similarly, the many mat motifs on the columns of the Temple of the Owls possibly denote this unique and very dark chamber as a symbolically closed, cave-like place guarded by aggressive, frontally facing owls with open talons. As for the Pomoch capstone and the many mats from the Temple of the Owls, the mats probably do not indicate rooms of closure, but simply covered doorways to be opened with proper ritual.

Aligned against the western edge of the Initial Series Group platform, there is a long structure known as the Gallery of the Monkeys, so named by virtue of the lively friezes of dancing monkeys

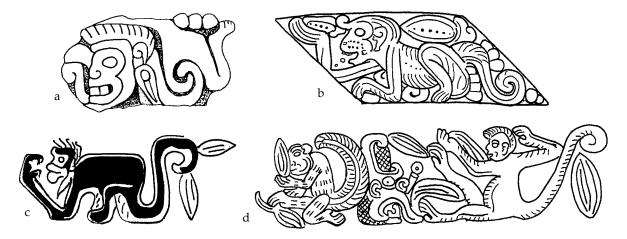


Figure 73. Monkeys and cacao in ancient Mesoamerican art: (a) spider monkey on ceramic seal from El Tajin in northern Veracruz, note round elements by monkey's posterior, most probably an indication of defecated cacao (after Arqueología Mexicana 2015:31) (drawing by Karl Taube); (b) Late Classic Maya incised vase for drinking cacao featuring spider monkeys with circular elements at their rear, quite probably excreted cacao seeds (drawing by Karl Taube); (c) spider monkey with cacao growing from tail, detail of Late Classic Maya vase (from Ogata et al. 2006:Fig. 3.10a); (d) spider monkey and squirrel with cacao pods along with likely Witz head denoting mountain wilderness (from Ogata et al. 2006:Fig. 3.10d).

and birds covering the cornice of the building (see Schmidt 2007:Fig. 36). Most of the structure was associated with Sotuta Complex ceramics, although a few sherds of the Hocaba Complex were also recovered along with post-collapse modifications of the building. Near the southern portion of this structure, a free-standing monkey sculpture was discovered within a chultun, quite possibly deposited there during the abandonment of the site at the end of the Early Postclassic (Figure 72). Painted blue and wearing earspools, bracelets, and an elaborate necklace, the monkey also has jade beads or earspools covering much of his body. With this abundant jade he could well be considered as a "precious" monkey, but it is also conceivable that like the jade flowers on the Temple of the Owls cacao trees, he might be more accurately considered to be a provider of wealth. Like the earspools on the trunks of the cacao trees, those on the monkey's body could also denote him as a source and provider of cacao. Aside from inhabiting arboreal spaces, monkeys were perhaps even considered to be their animate extensions in ancient Maya thought. Thus in the Popol Vuh the men of wood were transformed into monkeys, much as if they were living forms of wood and by extension trees. In addition, the half brothers of the Hero Twins, Hun Batz and Hun Chuen, became monkeys when they climbed a great tree. It is important to note that in Classic Maya vessel scenes, cacao pods can appear attached to monkeys, much as if growing from their bodies (Figure 73c-d). In this regard, the jade beads or



Figure 74. Ehecatl wearing monkey skin, Aztec sculpture discovered during excavations of Pino Suárez Metro station in Mexico City (photograph by and courtesy of Ángel González López).

earspools on the Initial Series Group monkey statue could be regarded as the budding source of growing cacao pods, much like the jade buds on the cacao tree.

Although this sculpture is clearly simian, the identification is more complex, as the mouth region and remaining edge of the cheek strongly suggest the broad beak of a duck, in other words Ehecatl (Figure 72). For the later Aztec there is a strong relation of Ehecatl to spider monkeys, including as the day name Ehecatl, or Wind, a glyph that commonly has a crest of hair resembling that of a spider monkey. In addition, there are Aztec sculptures explicitly depicting monkeys with the duck beak of Ehecatl, including one excavated at the Aztec round temple in the Pino Suárez Metro station in Mexico City, round structures being closely identified with the wind deity in Late Postclassic Central Mexico (Figure 74; see Gussinver 1969). According to the Aztec creation myth of the Five Suns, the Sun of Wind was destroyed by Tezcatlipoca, with its early race of humans transforming into monkeys, an episode graphically portrayed on folio V of the Vaticanus A codex.

Roughly twenty meters in length on the west side of the Initial Series Group, the Gallery of the Monkeys features facades otherwise unknown in Mesoamerica. The western, back side of the frieze is a richly dressed Maya noble wearing abundant jade jewelry as well as a quetzal-feathered headdress (Figure 75). The quetzal feathers are tipped with jade beads, a common convention in Classic Maya art, but in addition the upper feathers also appear to have ears of maize rendered in yellow. In the two reconstructed scenes the figure sits

atop a skyband, quite probably a celestial throne, a well-known theme in Classic Maya art (which probably appears on the north and south friezes from the upper structure of the Temple of the Phalli; see Figure 40). He apparently has long hair ornamented with beads, and at Chichen Itza this is a trait of the sun god appearing as a Maya king, and it is more than likely that these friezes portray this very

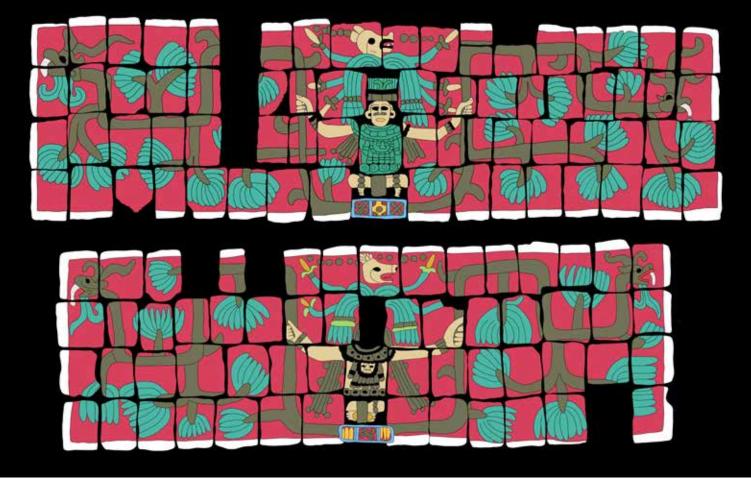


Figure 75. Friezes from west side of the Gallery of the Monkeys portraying richly dressed male seated atop skyband throne grasping foliated serpent branches or vines (color reconstructions by Travis Stanton after Schmidt 2003:Figs. 50-51).

deity enthroned in the sky on the western edge of the Initial Series. A mural from the Upper Temple of the Jaguars portrays him with long yellow hair strung with jade beads facing a Quetzalcoatl figure who emanates darts and flames, clearly a reference to the Morning Star (see Coggins and Shane 1984:Fig. 201). In both hands the Initial Series being holds stalks of a tree that emerges from the skyband throne, probably his means of celestial ascent. These branches terminate in bearded serpent heads with feather-like emanations rising from their brows, and in addition they also have an outcurving element behind their eyes, strongly suggestive of the plumed serpent. As has been mentioned before, the feathered serpent was the road or vehicle of the sun, and these branches are probably a rare, foliated variation on this theme. Both of the reconstructed friezes have a Central Mexican–style text quite distinct from



Figure 76. Tenoned monkeys from the west side of the Gallery of the Monkeys (photographs by José Osorio León).



Classic Maya writing, and feature a zoomorphic head as a probable day name with a long coefficient. Oddly, whereas one frieze apparently has the numeral 10, the other is 11. For Central Mexican day names, there are only a few possibilities for the accompanying glyph, and the most likely possibility would be Dog (Itzcuintli), although Deer (Mazatl) and Jaguar (Ocelotl) are other possible candidates.

The east side of the Gallery of the Monkeys, directly facing the House of the Shells and the plaza of the Initial Series Group, is entirely devoted to portrayals of spider monkeys. Thus the cornices both above and below the main frieze feature tenoned sculptures in the round of spider monkeys vigorously grasping their tails (Figure 76). Although this could readily concern the gamboling nature of monkeys, it could also pertain directly to the bas-relief friezes depicting these same creatures exuding excrement. In other words, the monkey cornice sculptures could well be lifting their tails in a natural act of defecation. As will be subsequently noted, a Late Classic vessel from the Tiquisate region of south coastal Guatemala depicts defecating monkeys also grasping their tails (Figure 82c–d).

The east side of the Gallery of the Monkeys also had an extremely long frieze, with only a small portion of the southern part of the building documented (Schmidt 2003:Figs. 52-53, 2007:Fig. 35; Schmidt and González de la Mata 2007). In contrast to relatively staid scenes from the House of the Phalli

Complex and the Temple of the Owls, this entire building featured anthropomorphized birds wildly dancing with defecating spider monkeys (Figures 77 and 78). Nájera Coronado (2012:162) rightly points out that the birds are crested woodpeckers, as can be seen by their pointed beaks and prominent crests, a rare creature in Classic Maya art. In the bird and monkey pairings from the Gallery of the Monkeys, both figures are highly animated and engage in dramatic gestures. The woodpeckers all have their arms oriented diagonally in a direct line, with one feathered arm extending upward and the other down. In ancient Mesoamerican dance, this is a basic means of denoting avian flight in a circling, spiral fashion, a convention that can be traced to the Olmec, including the avian mural figure from Oxtotitlan Cave (Taube 2009a). In contrast, the spider monkeys have their right arms upraised and bent sharply at a right angle with the left hanging low by their tails and rear ends. As regards their right arms, the monkeys' hands are all turned forwards, making the "gesture of woe" well known for Late Classic Maya iconography, including the canoe scenes of the maize god from Tikal Burial 116 as well as many depictions of hapless captives.

For ancient Mesoamerica as a whole, the only possible parallel to this massive and elaborate frieze is from

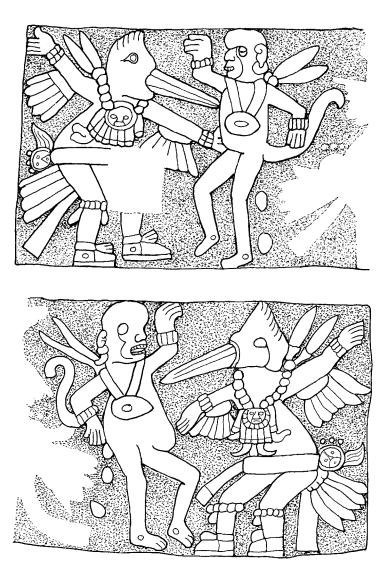
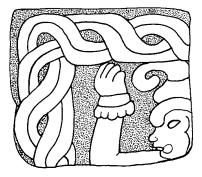


Figure 77. Woodpeckers dancing with defecating spider monkeys, Gallery of the Monkeys; note 3 Ajaw dates worn on backs of woodpeckers (drawings by Karl Taube).



Figure 78. Woodpeckers wearing back mirrors denoting the date 3 Ajaw and accompanied by the glyphic *ti* sign, meaning "at," probably referring to the K'atun ending of 3 Ajaw (photographs by Karl Taube).

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Figure 79. Monkey figure with uplifted arm, possibly denoting dance or perhaps "gesture of woe" (drawing by Karl Taube after Pollock 1980:Fig. 328a).

Structure 2A1 at the major Puuc site of Kabah. Here a collapsed superstructure bore a bas-relief facade with what Pollock (1980:166) described as "[m]any pieces from what seems to have been [a] sculptured panel with human figures, scrolls, and guilloche design." However, in his illustration of one of these panels the figure is clearly not human, but rather a spider monkey with his upraised arm gesticulating very similarly to the Gallery of the Monkeys facade (Figure 79). Despite the fact that Pollock reported on this sculptural program roughly 40 years ago, as of yet there has been no systematic analysis of the structure facades, and in light of the Gallery of the Monkeys frieze this could provide new avenues for approaching the relationship of spider monkeys to narrative mythic events of the Northern Lowlands, including perhaps even the mythic origins of cacao.

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For the Gallery of the Monkeys facade, the spider monkey bellies are absurdly distended, with the woodpeckers touching the heavily sagging lower portion while piercing their chests. The woodpecker's act of piercing the monkey—a being closely related to wood and trees—releases the seed excrement from the creature's stomach. In terms of the highly animate poses, it appears as if the woodpeckers caught the spider monkeys in the act of stealing and greedily consuming the precious cacao fruit and poked their chests, thereby shedding the seeds from their bloated bellies.

As noted by Nájera Coronado (2012:162), the woodpeckers are dressed as warriors, entirely fitting in terms of their apparent adversaries, abject monkeys defecating while in the Late Classic Maya pose of captives. In his study of ancient Cotzumalhuapan concepts of cacao in relation to human sacrifice, Chinchilla Mazariegos (2016:364) notes that among the contact-period Pipil of El Salvador, captives destined for sacrifice were richly adorned with jewels and precious feathers along with collars of cacao pods. In this regard, he calls attention to two Classic-period figurines depicting nude and bound individuals wearing cacao around their necks (Figure 80; Chinchilla Mazariegos 2016:364). It is quite possible that they are "monkey men," that is, versions of the defeated beings appearing on the Gallery of the



Figure 80. Two Classic-period figurines depicting nude and bound individuals wearing cacao around their necks, from south coastal Guatemala (photographs courtesy of Oswaldo Chinchilla Mazariegos).



Figure 81. *Olla* discovered in the lower House of the Phalli depicting a monkey with a crest and wearing a collar of cacao pods (photographs by José Osorio León).

Monkeys facades. Chinchilla Mazariegos (2016:364) notes that they have "crest-like protuberances on their heads," which is a diagnostic marker of spider monkeys in ancient Mesoamerican art. In fact, an *olla* discovered in the lower House of the Phalli features a monkey with such a crest wearing a collar of cacao pods (Figure 81). In addition, an elaborate Late Classic vessel lid from Tonina features a monkey wearing a similar collar with pendant pods along with cacao husk earpieces (see Miller and Martin 2004:Pl. 40).

As one item of their warrior gear, the woodpeckers wear versions of the back mirrors, or tezcacuitlapilli, commonly found with Toltec warriors and at still earlier Teotihuacan (Taube 1992a, 2012, 2016b). In this case, however, they are marked by a stylized facial element, clearly the sign Ajaw, the twentieth day in the names of the 260 day calendar. Of course the twentieth day name Ajaw also marks period endings in the Maya Long Count, which became the "Short Count" in the northern Maya lowlands Postclassic, with thirteen twenty-year K'atun periods named by Ajaw dates, making a roughly 256-year cycle. In a number of cases the number on the mirror back is clearly three, thereby denoting the date 3 Ajaw (Figure 78). As it happens, the woodpeckers' back mirrors are accompanied by the glyphic *ti* sign meaning "at" along with the numeral coefficient for the Ajaw date. In Maya calendrical statements, this "at" sign is commonly used to refer to a specific moment in time, including examples from Chichen Itza and nearby Ek' Balam (see Grube et al. 2003). At Chichen Itza an excellent example occurs on the so-called Water Trough Lintel featuring an abbreviated palace scene of an enthroned rabbit-headed figure before a probable cacao vase (Grube et al. 2003:74, Fig. 60). In this case the text plainly states ti 3 ajaw, or "at 3 Ajaw," the same Ajaw date worn as back devices by the woodpecker figures from the Initial Series Group. In terms of the roughly 256-year K'atun Cycle, there are two possibilities concerning the chronological range for Chichen Itza, which would be 10.2.0.0.0

3 Ajaw 3 Keh, corresponding to AD 869, or the much more likely option of 10.15.0.0.0 3 Ajaw 18 Pop at AD 1125, in other words the K'atun period from AD 1105 to 1125. In terms of the 3 Ajaw date carried by the avian figures, this probable K'atun ending date is of great importance as it may well refer to when the Gallery of the Monkeys was constructed.

Mention has been made of the 1 Ajaw date on the painted capstone from the adjacent Temple of the Owls. In the sequence of the thirteen K'atuns forming the "Short Count" of roughly 256 years, 1 Ajaw is immediately after 3 Ajaw. In addition, within a given K'atun it is by no means certain that it is twenty years apart from the succeeding one. In other words, the 3 Ajaw references in the Gallery of the Monkeys facade could be only a few years or even less before the dedicatory capstone in the Temple of the Owls. In the books of Chilam Balam, the K'atun 3 Ajaw is mentioned repeatedly, and in both the Chumayel and Tizimin for 3 Ajaw there is mention of *yal max*, which Munro Edmonson (1982:114, 1986:151) translated as "monkey children," *yal* signifying "child of mother" and *max* "spider monkey" in Yukatek. If this translation of a relatively opaque passage in both books is indeed correct, this would be a unique example of the colonial accounts of Chilam Balam corresponding to Prehispanic monumental programs, in this case the Gallery of the Monkeys dating to the Early Postclassic.

Although the dancing woodpeckers wear sandals and loincloths, as well as elaborate jade collars with a central mask pectoral, they lack the "serpent wings" known for the divine images of Ehecatl and K'awiil from the many Initial Series Group friezes. The spider monkeys are much more simply dressed and are essentially naked aside from wearing bracelets and a prominent shell limpet collar, an element worn by dancers at Chichen Itza and Late Postclassic Central Mexico, including ritual clowns (Seler 1902-1923:5:284-285; Taube 1994b:218, Fig. 6a-c). In addition, this same device in Late Postclassic art is commonly worn by spider monkeys, animals closely related to dance in Mesoamerican thought (see Nicholson and Quiñones Keber 1983:127). Rather than constituting divine beings, the Gallery of the Monkeys characters are best considered as festive actors and perhaps even buffoons celebrating a particular mythic episode concerning the origin of cacao. In his discussion of this rather bizarre sculptural program, Schmidt (2007:192) cites a myth for the Jiqaque of central Honduras in which spider monkeys (*micos*) devour various plant fruits and then defecate their seeds, thereby creating a whole range of fruit-bearing trees (see Chapman 1978:163). Although the cited myth describes many specific species of trees, cacao is not mentioned, possibly because this plant is no longer a major economic crop in the Jiqaque area.

Although Schmidt did not relate this critically important myth to the origin of cacao, this was subsequently noted by Nájera Coronado (2012) in a detailed study of the relation of spider monkeys to the natural distribution of cacao. Citing a number of previous studies, she notes that monkeys are natural bringers of cacao, as they eat the seeds for their surrounding pulp and then defecate the still-potent and viable seeds to the forest floor. According to Manuel Aguilar-Moreno (2006:280) "[m]onkeys

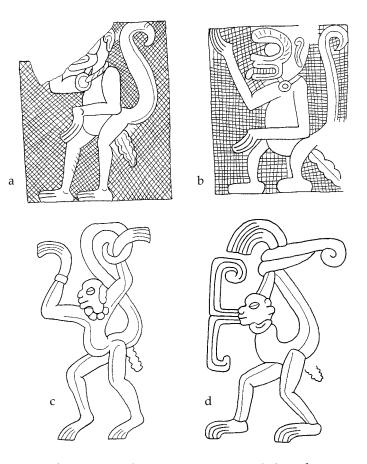


Figure 82. Monkeys excreting cacao pods from the Cotzumalhuapa region of southern Guatemala: (a–b) scenes from two vessels depicting monkeys defecating cacao pods (after Gómez González 2006:Figs. 26-27); (c–d) mold-made Tiquisate vessel from the same region portraying two other monkeys defecating chocolate pods while raising their tails (after photograph K2592 by Justin Kerr) (drawings by Karl Taube).

monkeys excreting explicit cacao pods, as is also the case for a mold-made vessel from the same region (Figure 82). The dimensions of these relatively tall, cylindrical vases strongly indicate that they were for drinking chocolate, much like the many Late Classic Maya polychrome vases glyphically labeled as drinking vessels for cacao (Stuart 2006). Another mold-made vessel from the same region portrays two

either consume the pulp with the seeds intact and distribute them through defecation or they chew off the pulp and discard the seeds. Thus, monkeys act as seed disseminators, keeping the natural cycle of the cacao tree viable." As it happens, the relation of monkeys to cacao can be traced to Early Horizon-period Peru. Dating to roughly the ninth century BC, a Tembladera effigy vessel from the Jequetepeque valley of northern Peru portrays a cacao tree inhabited by a monkey (Ogata et al. 2006). This same study notes many other portrayals of monkeys and cacao in ancient Mesoamerica, including the Classic Gulf Coast and coastal Oaxaca as well as the Maya area. In addition, Doris Stone (1972:192) illustrates a Classic-period figurine from Honduras portraying a monkey holding a cacao pod in both hands. In the accompanying legend, Stone (1972:192) notes that "cacao del *mico*, monkey's chocolate, was the term used for the best cacao during the colonial period." In the case of the Gallery of the Monkeys frieze, the simians are defecating seeds, which in their simple outlines cannot be readily identified as

cacao. However, two Late Classic incised vessels from the Cotzumalhuapa region of southern Guatemala depict

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Figure 83. Four *malacates* depicting dancing spider monkeys defecating coils of excrement (from Enciso 1971:1:46).

other monkeys defecating chocolate pods (Figure 82c–d). In this case, their tails are intertwined on their bodies, perhaps denoting the natural act of spider monkeys lifting their tails while defecating. In terms of the three Cotzumalhuapa vases, the consumed beverage was plainly labeled as "cacao del mico."

A Late Classic Maya incised vase—surely for drinking cacao—features spider monkeys with circular elements at their rear, quite probably excreted cacao seeds (Figure 73b; see Ogata et al. 2006). A notably similar portrayal of a spider monkey appears on a ceramic seal from El Tajin in northern Veracruz, a region well suited for growing cacao (Figure 73a). In this case the simian also has round elements by his posterior, most probably another indication of defecated cacao. In addition, Aztec *malacates*, or spindle whorls, depict monkeys with upraised arms, which is not only a pose adopted by spider monkeys while walking but also a gesture of ritual clowning in ancient Mesoamerica (see Enciso 1971:1:46, 47; for ritual clowning and monkeys, Taube 1989a). Four examples published by Enciso depict spider monkeys defecating a coil of excrement or *cuitlatl* in Nahuatl, a common motif appearing in the Late Postclassic *Codex Borgia* (Figure 83). Although it is by no means certain that these Aztec monkeys directly relate to cacao, they do recall the obviously humorous scenes from the House of the Monkeys.

As has been mentioned, the Initial Series Group contains an extraordinarily large corpus of imagery pertaining to cacao, including floating cacao pods, cacao growing from flowering vines and held by birds, cacao trees, and even monkeys defecating the seeds. In terms of the cacao plants and monkeys, the theme appears to pertain to cacao production rather than simply cacao as an emblem of wealth. In other words, as in the Cotzumalhuapa region, Chichen Itza may have been a major cacao-producing area. However, according to Nájera Coronado (2012:145) this is unlikely, due to the limited precipitation and lack of rich alluvial soils, aside from around cenotes and other humid regions. Although it is true that the generally shallow and rocky soils of Yucatan are not suited for cacao, there is one important natural environment in which it thrives, this being the soil-rich sinkholes known in the singular as *rejollada* in Spanish and *k'op* in Yukatek Maya. Rather than penetrating to the water table to form cenotes, *rejolladas* have deep and humid soils, and are notably common in Yucatan (Kepecs and Boucher 1996). Pioneering ethnobotanical research by Arturo Gómez-Pompa, José Salvador Flores, and Mario Aliphat Fernández (1990; see also Gómez-Pompa 1987; Pérez Romero 1998) in the vicinity of Valladolid, Yucatan, documented living stands of cacao still surviving in this environment since before the Spanish conquest. In addition, a number of colonial Yukatek documents explicitly refer to cacao orchards in *rejolladas* (Gómez-Pompa et al. 1990:250). That they were carefully recorded in colonial land documents indicates the economic importance of these sinkhole orchards. While the authors were preparing this study many years ago, Taube pointed out to them an explicit scene of cacao within a sinkhole, which they illustrate and discuss in the publication (Gómez-Pompa et al. 1990:253, 258, Fig. 5). This scene is the aforementioned painted capstone from the Temple of the Owls portraying K'awiil carrying jade jewels as he emerges from a sinkhole.

Although it has received virtually no scholarly attention, there are major sinkholes directly adjacent to the Initial Series Group, including one to the southeast and a larger and deeper one only several hundred meters from the northeast edge of the platform (see González de la Mata 2006; Schmidt 2003:Figs. 1-2). In addition, the rejollada known as "Abuelita" located roughly 700 m southeast of the Initial Series would be an excellent environment for cacao cultivation, due to its depth and abundant moisture. Until recently cacao was still growing in the massive sinkhole known as the Joya de Thompson, roughly 1.5 km east of the Castillo at Chichen Itza (Osorio León 2004:9). In terms of surface area, the sinkholes around the Initial Series Group are among the largest at the site, with these and nearby ones constituting a major possible center of cacao production at Chichen Itza. In other words, rather than simply an abstract portrayal of cacao and sinkholes, the painted capstone from the Temple of the Owls probably pertains directly to the major sinkholes immediately around the structure. In addition, aside from this capstone the entrance to the temple has piers portraying growing cacao trees—the only examples of this motif known in the rich corpus of Chichen Itza. Moreover, this temple not only portrays many examples of owls but also has a massive panel of a human skull in the interior, suggesting a dark, cave-like region, entirely appropriate for deep sinkhole environments. Located directly adjacent to the Gallery of the Monkeys, the Temple of the Owls may well have been dedicated to rituals pertaining to major sinkholes in its immediate proximity. Thanks to the painstaking work of Peter Schmidt and others before, we know a great deal about the elaborate architecture and sculptural programs of the Initial Series Group, but as of yet there has been no systematic investigation of the adjacent sinkholes, features that may well prove to be essential for understanding the themes of cacao, wealth, and abundance celebrated at their very rims.

Conclusions

In terms of its architectural and sculptural programs, the Initial Series Group at Chichen Itza offers an extremely important and rarified perception of concepts concerning the sun and Venus as well as dance and performance during the Early Postclassic period, the specific time that could well correspond to contact-period Aztec and Maya accounts of the eastward journey of Quetzalcoatl to meet the solar deity at the "city of the sun," quite possibly Chichen Itza. The Temple of the Initial Series in several of its phases bore massive portrayals of star signs, almost surely Venus, and with its Chac Mool altar, the turtle dance platform, and an opposing Chac Mool on the opposite side of this northern portion of the terrace, the temple creates a very clear east-west axis surely related to the celestial passage of the sun and Venus. Although there are currently no known examples of the Chichen Itza sun god in his solar disk in the Initial Series Group, it is more than likely that the friezes on the western side of the Gallery of the Monkeys portray this being enthroned in the sky with his finery of jade and quetzal plumes. In addition, the Initial Series has many elaborate scenes related to concepts of the solar paradise, including the upper structure from the House of the Phalli and the long, west cornice of the House of the Shells.

There is no other known part of this massive site that offers such a wealth of information concerning ritual performance, including the many panels from the House of the Phalli explicitly depicting the aged God N engaged in penis perforation. It is quite possible that the chambers within this structure with massive phalli projecting from the walls were for individuals before or after this painful act. It is noteworthy that as a final depositional offering in one of these chambers, a monkey effigy olla was placed directly under one of the stone phalli (Figure 81). The monkey wears a cacao pod necklace, suggesting an intentional link between the House of the Phalli and the nearby Gallery of the Monkeys (Taube et al. 2014). Along with solar worship and possibly ritual rainmaking, the bloodletting scenes from the House of the Phalli panels could also concern cacao production. As has been noted by Chinchilla-Mazariegos (2016) for the Cotzumalhuapa region, cacao was symbolically compared to blood. In addition, in view of the placement of the monkey vessel and the central impregnating figure on the west facade of the House of the Shells, cacao may also have been metaphorically linked to semen. In the Popol Vuh, the severed head of the maize god Hun Hunapuh impregnates Xquic by spitting into her palm. Although in this sixteenth-century episode Hun Hunapuh's head is in a gourd tree, a vase in the Museo Popol Vuh in Guatemala City indicates that for the Classic Maya the head of the maize god was in a cacao tree (Taube 1985).

Along with clear references to penis perforation and by extension symbolism pertaining to agri-

cultural fertility and possibly the generation of cacao, another major ritual theme of the Initial Series Group concerns dancers and musicians, including the duck-billed wind gods playing music both on the upper building of the Temple of the Phalli and the Temple of the Owls, a theme that can be readily traced to the Late Preclassic murals at San Bartolo, Guatemala. The upper building of the House of the Phalli displays figures on all four sides in joyous dance, with the celestial felines transforming into birds in a flaming background on the east and west facades. The north and south panels of this same structure feature the duck-billed wind god dancing amidst a rain of precious accoutrements of dance, including headdresses, bead bracelets, and jade earspools. Although this could be construed as a passive act of celebrating the coming of rain, this is probably not the case. While performing such dances, the participants are probably compelling the onset of the rain, much like the Hopi masked *katsinam* dancers of Arizona, who embody life-giving rain. In a recent publication concerning agricultural songs of the Cora and Hopi, Dorothy Washburn and Sophia Fast stress that ceremonies for rain in these cultures concern concerted effort.

Importantly, all of these ritual practices are considered to be *work* that must be done so that the rains will come. The Cora say, "If we do not work, it does not rain." That work does not simply refer to manual effort to care for their crops, but includes fasting, praying, dancing, and singing in performance to please the rain gods so that they will come. (Washburn and Fast 2018:85, emphasis in original)

With the painful acts of bloodletting, the Initial Series Group was clearly a place where dances were performed to bring the fertile and precious rain along with the daily rising of the sun.

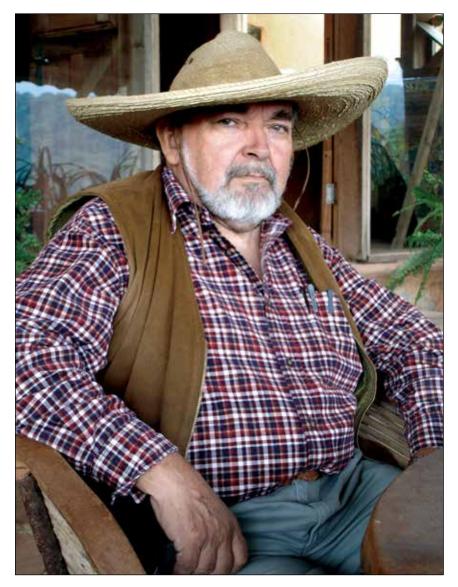
Farther to the southwest in the Initial Series Group, the Temple of the Owls features facades of the same duck wind deity and a unique and now lost capstone of K'awiil framed by the shining heavens above and a sinkhole or cenote below. In terms of this temple, a central theme is the fertility and abundance of cacao, as can be seen with the two sculpted doorway piers of growing cacao trees and this capstone of K'awiil with cacao pods at the four intercardinal points. In the dark and perhaps even sinister interior of the temple chamber is a massive stone slab of a human skull, probably as the frontal face of a central altar. The style of this carving is notably similar to renderings of human skulls from the roughly contemporaneous art of the Cotzumalhuapa region of the southern piedmont of Guatemala, a major zone of cacao production at this time. In fact, a well-carved jade discovered in the Sacred Cenote at Chichen Itza is surely an import from the Cotzumalhuapa region and depicts a male grasping a fruit-laden cacao tree growing out of an inverted crab, quite possibly a local earth symbol for Cotzumalhuapa (see Proskouriakoff 1974:Pl. 78b). Along with the skull panel, there are other aspects of the Initial Series Group that evoke that rich sculptural tradition of Cotzumalhuapa, including exuberantly growing floral vines with cacao as well as the Flower World complex of music and dance, as seen for example on Bilbao Monument 21 (see Chinchilla Mazariegos 2013, 2015, 2016). Although beyond the scope of the present study, a systematic comparison between the House of the

Shells floral friezes and the roughly contemporaneous Flower World iconography of Cotzumalhuapa promises to be a fruitful avenue of research indeed.

Next to the Temple of the Owls and at the western edge of the Initial Series platform is the Gallery of the Monkeys, a massive carved-stone facade which apparently portrays defecating monkeys being poked with the long beaks of hummingbirds. It is difficult not to think that humor was intended, despite this frieze being of truly monumental scale and created with a huge expenditure of human effort. Although scenes of ritual humor among the ancient Maya tend to be on relatively small and personal objects, this is not always the case, and the south side of Temple 11 at Copan features simian clowns with rattles apparently engaged in a form of snake dance, a type of ritual clowning present in the Guatemalan highlands to this day (Taube 1989a; for ancient Maya ritual humor, see also Taube and Taube 2009). In addition, ritual clowns including the "Fat God" character and rotund monkeys also appear on the piers of structures CA-7 and CA-8 in the Ah Canul Group at the Puuc site of Oxkintok (see Pollock 1980:Fig. 522; Valiente Cánovas 1989), indicating a place of public dance and performance including ritual humor (Taube 2019a). To bring up yet another example, the Puuc site of Rancho San Diego located north of Uxmal has a structure bearing well-carved stone panels of men engaged in excessive intoxication and probably homoerotic acts, along with the use of alcoholic enemas (Barrera and Taube 1987; Houston 2018:126-129; Taube 1998a). According to Houston this structure is at present the best candidate for a young men's house among the Classic Maya, a tradition documented for the contact-period Maya, including an account by the Dominican friar Bartolomé de las Casas, and clearly similar to the Aztec *tepochcalli* (Houston 2018:121-122). Furthermore, Houston (2018:224) suggests that [p]laces for young men may plausibly include the buildings associated with giant carvings of phalli," and although he is referring to the well-known *nochoch kep* monuments of the Puuc region, this could also pertain to the House of the Phalli in the Initial Series, with massive penises protruding from the interior chamber walls. As noted by Houston (2018:121),

Las Casas also referred to "circumcision" in young men's houses, which the boys performed on each other. This may refer to penile bloodletting, well-documented among ancient and historic Maya peoples.

Although the Gallery of the Monkeys frieze probably denotes a humorous and quite possibly mythic episode, it also pertains to spider monkeys defecating cacao seeds, a natural means by which cacao is propagated. With all of its very elaborate carvings pertaining to abundance and cacao, the Initial Series Group was a place of celebration and great wealth, quite possibly based on the local production of cacao in the immediately adjacent sinkholes of this southern region of the site.



Dr. Peter Schmidt (1940–2018)

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This work at the Initial Series Group has its origins in the project directed by Dr. Peter Schmidt (1940–2018), an archaeologist who performed research with INAH for decades and dedicated a large part of his life to the study of Chichen Itza. His work forms a great part of the present volume. Gracias, Don Peter!



Figure A-1. The Initial Series Temple: view from the south.



Appendix Photographs by Dominque Meyer



Figure A-2. Chac Mool in front of the Initial Series Temple: view from the west.



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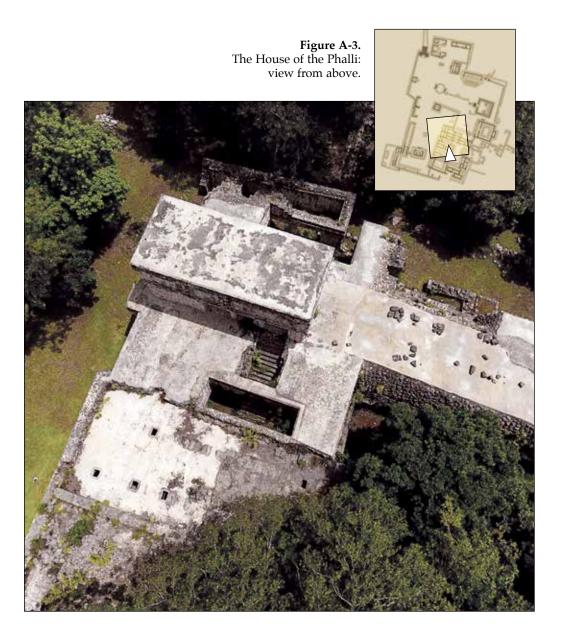
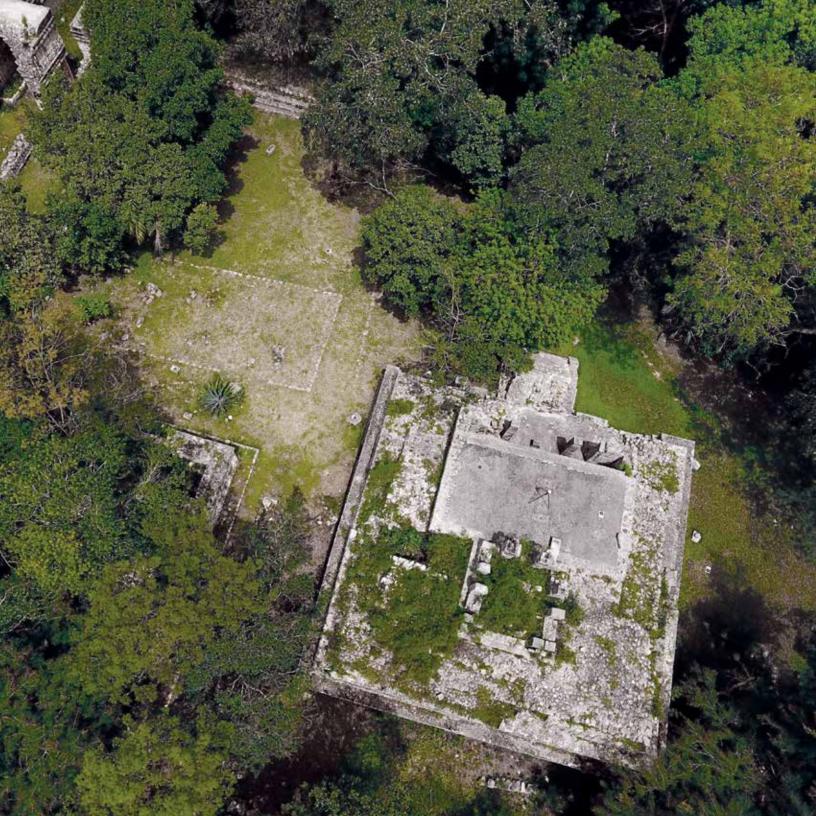


Figure A-4. The Initial Series Temple and the House of the Phalli: view from above.





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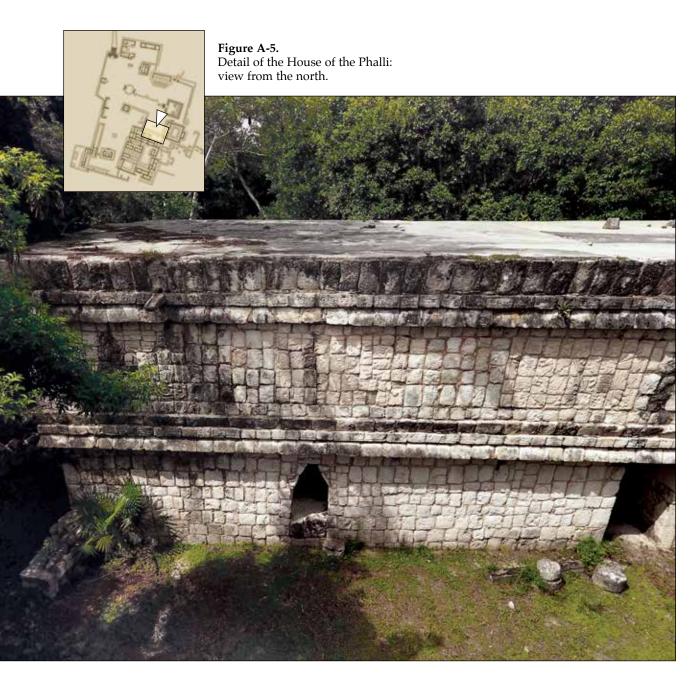








Figure A-6. The House of the Phalli: view from the north.





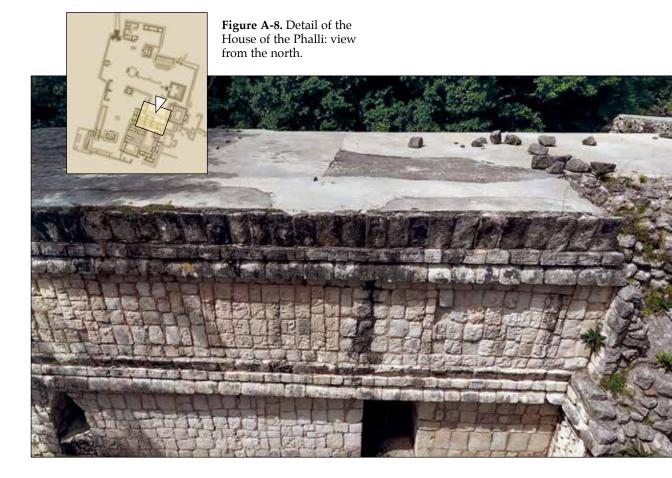




Figure A-7. The House of the Phalli and the House of the Shells: view from the northwest. 117

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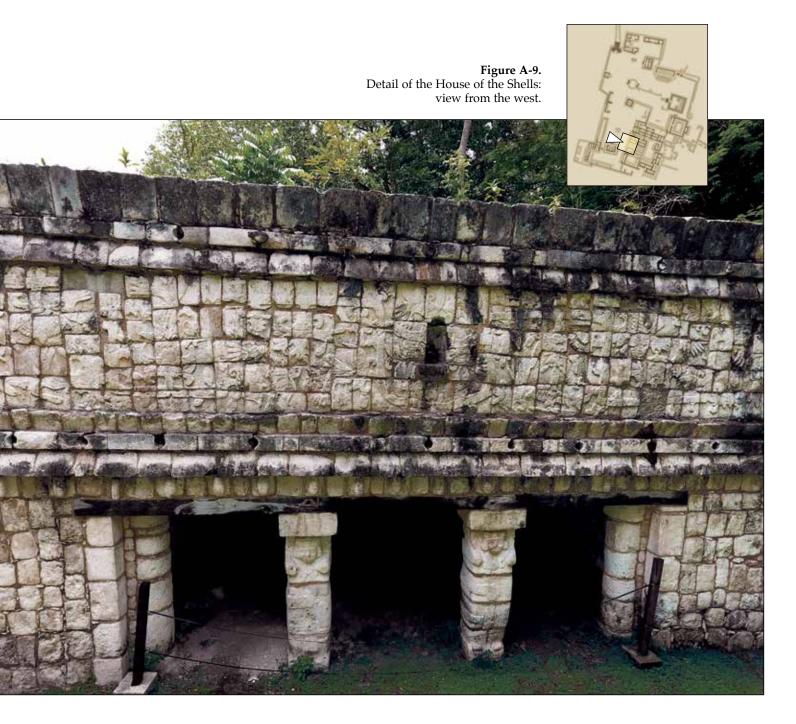




Figure A-10. The House of the Dancing Jaguars: view from the northeast.

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Figure A-11. The House of the Dancing Jaguars: view from the north.





Figure A-12. The House of the Dancing Jaguars: view from the southwest.



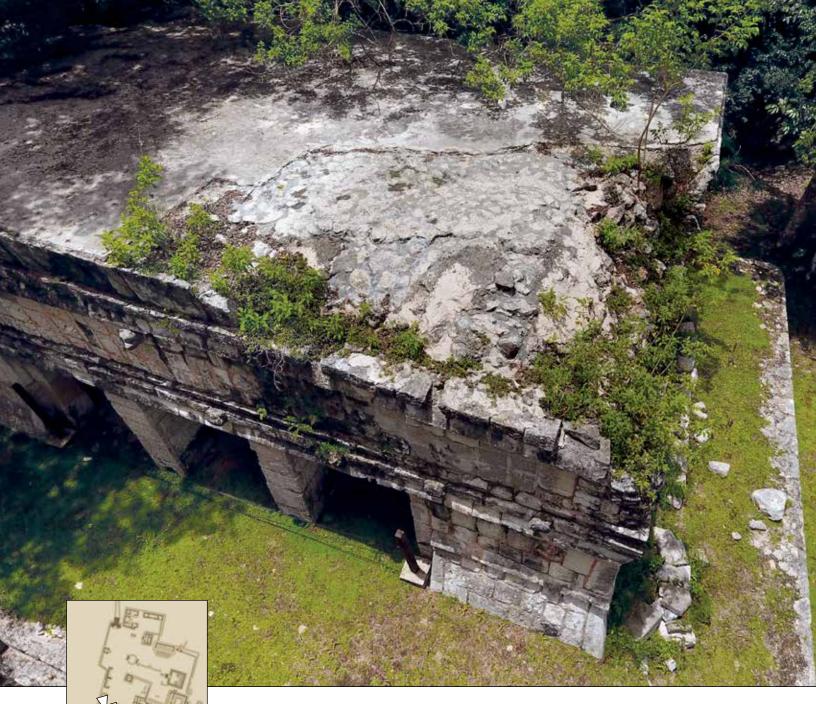


Figure A-13. The Temple of the Owls: view from the northwest.





Figure A-14. The House of the Moon columns: view from the southwest.

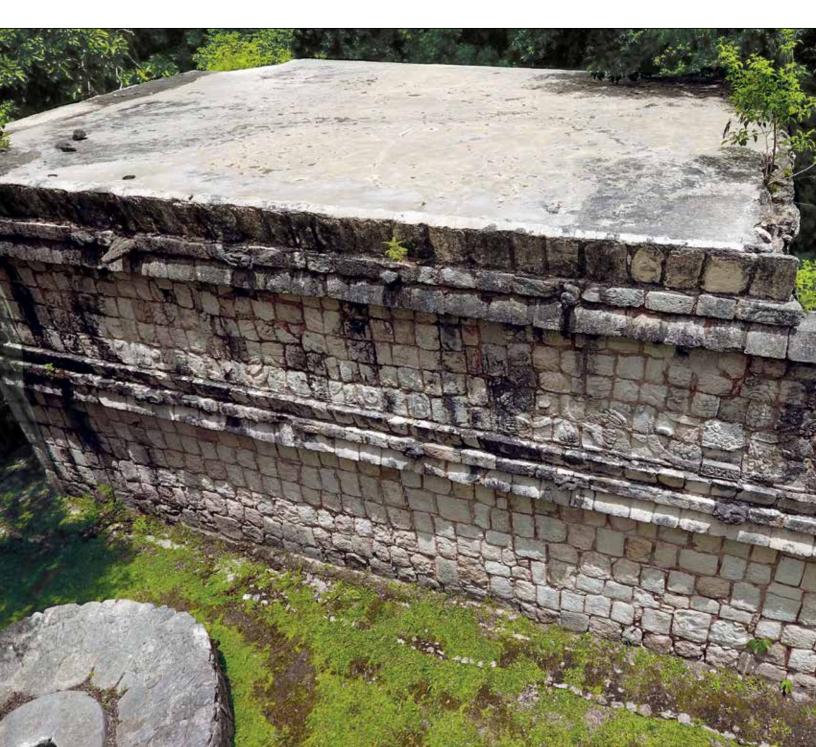




Figure A-15. Gallery of the Monkeys: view from the east.

References

Aguilar-Moreno, Miguel

2006 The Good and Evil of Chocolate in Colonial Mexico. In *Chocolate in Mesoamerica: A Cultural History of Cacao*, edited by Cameron L. McNeil, pp. 273-288. University Press of Florida, Gainesville.

Alvardo Tezozomoc, Fernando 1980 Crónica mexicana. Editores Porrúa, Mexico City.

Andrews, Anthony P., and Fernando Robles Castellanos

1985 Chichen Itza and Coba: An Itza-Maya Standoff in Early Postclassic Yucatan. In *The Lowland Maya Postclassic*, edited by Arlen F. Chase and Prudence M. Rice, pp. 62-72. University of Texas Press, Austin.

Andrews, Anthony P., E. Wyllys Andrews V, and Fernando Robles Castellanos 2003 The Northern Maya Collapse and Its Aftermath. *Ancient Mesoamerica* 14(1):151-156.

Andrews, E. Wyllys, IV

1970 Balankanche, Throne of the Tiger Priest. Publication 32. Middle American Research Institute, Tulane University, New Orleans.

Arqueología Mexicana 2015 Tajín, Veracruz. Guía visual. Edición Especial 60. Arqueología Mexicana, Mexico City.

Ball, Joseph W.

1979 Ceramics, Culture History, and the Puuc Tradition: Some Alternative Possibilities. In *The Puuc*, edited by Lawrence Mills, pp. 18-35. Scholarly Studies in the Liberal Arts 1. Central College, Pella, IA.

Barrera Rubio, Alfredo, and Karl Taube

1987 Los relieves de San Diego: nuevas perspectivas. *Boletín* 83:3-18. Escuela de Ciencias Antropológicas de la Universidad de Yucatán, Mérida.

Barrera Vásquez, Alfredo

1980 Diccionario maya Cordemex, maya-español, español-maya. Alfredo Barrera Vásquez, director; Juan Ramón Bastarrachea Manzano and William Brito Sansores, editors; Refugio Vermont Salas, David Dzul Góngora, and Domingo Dzul Poot, collaborators. Ediciones Cordemex, Mérida.

Berlo, Janet

1983 The Warrior and the Butterfly: Central Mexican Ideologies of Sacred Warfare and Teotihuacan Iconography. In *Text and Image in Pre-Columbian Art: Essays on the Interrelationship of the Visual and Verbal Arts,* edited by Janet Berlo, pp. 79-117. BAR International Series 180. British Archaeological Reports, Oxford.

Bierhorst, John

- 1985 Cantares Mexicanos: Songs of the Aztecs. Stanford University Press, Stanford.
- 1992 History and Mythology of the Aztecs: The Codex Chimalpopoca. University of Arizona Press, Tuscon.

Bolles, John

1977 Las Monjas: A Major Pre-Mexican Architectural Complex at Chichen Itza. University of Oklahoma Press, Norman.

Brainerd, George W.

1958 The Archaeological Ceramics of Yucatan. Anthropological Records 19. University of California, Berkeley.

Braswell, Geoffrey E., and Nancy Peniche May

2012 In the Shadow of the Pyramid: Excavations of the Great Platform of Chichen Itza. In *The Ancient Maya of Mexico: Reinterpreting the Past of the Northern Maya Lowlands,* edited by Geoffrey E. Braswell, pp. 229-263. Equinox Publishing, Bristol, CT.

Burkhart, Louise

1992 Flowery Heaven: The Aesthetic of Paradise in Nahuatl Devotional Literature. *Res: Anthropology and Aesthetics* 21:88-109.

Carrasco, Michael D.

2015 Epilogue: Portals, Turtles and Mythic Places. In *Maya Imagery, Architecture and Activity: Space and Spatial Analysis in Art History,* edited by Maline Werness-Rude and Kaylee R. Spencer, pp. 374-412. University of New Mexico Press, Albuquerque.

Chapman, Anne

1978 *Les Enfants de la Mort: Univers mythique des Indiens Tolupan (Jicaque)*. Mission Archéologique et Ethnologique Française au Mexique, Mexico City.

Chase, Diane Z., and Arlen F. Chase

1998 The Architectural Context of Caches, Burials, and Other Ritual Activities for the Classic Period Maya (as Reflected at Caracol, Belize). In *Function and Meaning in Classic Maya Architecture*, edited by Stephen D. Houston, pp. 299-332. Dumbarton Oaks, Washington, D.C.

Chimalpain Cuauhtlehuanitzin, Domingo Francisco de San Antón Muñón

1991 *Memorial breve acerca de la fundación de la ciudad de Culhuacan*. Víctor M. Castillo Farreras, trans. Universidad Nacional Autónoma de México, Mexico City.

Chung, Heajoo

2009 La cronología de Chichén Itzá. Korean Studies Information Co., Kyungido.

Chinchilla Mazariegos, Oswaldo

- 2011 The Flowering Glyphs: Animation in Cotzumalhuapa Writing. *In Their Way of Writing: Scripts, Signs and Pictographies in Pre-Columbian America*, edited by Elizabeth Hill Boone and Gary Urton, pp. 43-75. Dumbarton Oaks, Washington, D.C.
- 2013 The Flower World of Cotzumalhuapa. In *The Maya in a Mesoamerican Context: Comparative Approaches to Maya Studies*, edited by Jesper Nielsen and Christophe Helmke, pp. 79-92. Acta Mesoamericana 26. Verlag Anton Saurwein, Markt Schwaben.
- 2015 Sounds in Stone: Song, Music, and Dance on Monument 21 from Bilbao, Cotzumalhuapa, Guatemala. *The PARI Journal* 16(1):1-12.
- 2016 Human Sacrifice and Divine Nourishment in Mesoamerica: The Iconography of Cacao on the Pacific Coast of Guatemala. *Ancient Mesoamerica* 27(2):361-375.

Clancy, Flora, Charles Gallenkamp, and Regina Elise Johnson

1985 Treasures of the Ancient Maya. H. N. Abrams, New York.

Cobos, Rafael

- 2001 El centro de Yucatán: de área periférica a la integración de la comunidad urbana en Chichén Itzá. In *Reconstruyendo la ciudad maya: el urbanismo en las sociedades antiguas,* coordinated by Andrés Ciudad Ruiz, María Josefa Iglesias Ponce de León, and María del Carmen Martínez Martínez, pp. 253-276. Publicaciones 6. Sociedad Española de Estudios Mayas, Madrid.
- 2003 The Settlement Patterns of Chichén Itzá. Ph.D. dissertation, Department of Anthropology, Tulane University, New Orleans.
- 2004 Chichén Itzá: Settlement and Hegemony during the Terminal Classic Period. In *The Terminal Classic in the Maya Lowlands: Collapse, Transition, and Transformation,* edited by Arthur A. Demarest, Prudence M. Rice, and Don S. Rice, pp. 517-544. University Press of Colorado, Boulder.
- 2016 Chichén Itzá a finales del periodo Clásico: asentamiento y cronología de una ciudad. In *Arqueología en Chichén Itzá: nuevas explicaciones*, edited by Rafael Cobos, pp. 27-43. Universidad Autónoma de Yucatán, Mérida.

Cobos, Rafael, Mauricio Germon Roche, and Rodolfo Canto Carrillo

2016 La Gran Nivelación: historia constructiva. In *Arqueología en Chichén Itzá: nuevas explicaciones,* edited by Rafael Cobos, pp. 159-192. Universidad Autónoma de Yucatán, Mérida.

Cobos, Rafael, and Terance Winemiller

2001 The Late and Terminal Classic–Period Causeway Systems of Chichen Itza, Yucatan, Mexico. *Ancient Mesoamerica* 12(2):283-291.

Coe, Michael D.

1965 A Model of Ancient Community Structure in the Maya Lowlands. *Southwestern Journal of Anthropology* 21:97-114.

Coe, Michael D., Stephen D. Houston, Mary Miller, and Karl Taube

2016 The Fourth Maya Codex. In *Maya Archaeology 3*, edited by Charles Golden, Stephen Houston, and Joel Skidmore, pp. 116-167. Precolumbia Mesoweb Press, San Francisco.

Coe, Michael D., and Gordon Whittaker

1982 Aztec Sorcerers in Seventeenth Century Mexico: The Treatise on Superstitions by Hernando Ruiz de Alarcón. Publication 7. Institute for Mesoamerican Studies, State University of New York, Albany.

Coe, Sophie D., and Michael D. Coe

1996 *The True History of Chocolate*. Thames and Hudson, London.

Coggins, Clemency Chase, and Orrin C. Shane III

1984 Cenote of Sacrifice: Maya Treasures from the Sacred Well at Chichen Itza. University of Texas Press, Austin.

Coltman, Jeremy

2007 The Aztec Stuttgart Statuette: An Iconographic Analysis. Mexicon 29(3):70-77.

2009 Tlahuizcalpantecuhtli in the Stuttgart Statuette: A Reply to Ivan Sprajc. Mexicon 31(6):132-134.

Culbert, T. Patrick

1993 *The Ceramics of Tikal: Vessels from the Burials, Caches and Problematical Deposits.* Tikal Report 25, Part A. Monograph 81. University Museum, University of Pennsylvania, Philadelphia.

de la Fuente, Beatriz, Silvia Trejo, and Nelly Gutierrez Solana

1988 Escultura en piedra de Tula. Universidad Nacional Autónoma de México, Mexico City.

Durán, Diego

1971 *Book of the Gods and Rites and the Ancient Calendar*. Fernando Horcasitas and Doris Heyden, trans. University of Oklahoma Press, Norman.

Edmonson, Munro S.

1982 The Ancient Future of the Itza: The Book of Chilam Balam of Tizimin. University of Texas Press, Austin.
1986 Heaven Born Merida and its Destiny: The Book of Chilam Balam of Chumayel. University of Texas Press, Austin.

Enciso, Jorge

1953 Design Motifs of Ancient Mexico. Dover Publications, New York.

1971 Designs from Pre-Columbian Mexico. Dover Publications, New York.

Euan Canul, Gabriel, Ana M. Martín, and Pilar Asensio Ramos

2005 Graffiti en el Grupo de la Serie Inicial: La Estructura 5C35, Chichén Itzá, Yucatán, México. In XVIII Simposio de Investigaciones Arqueológicas en Guatemala, 2004, edited by Juan Pedro Laporte, Bárbara Arroyo, and Héctor E. Mejía, v. 2, pp. 889-899. Ministerio de Cultura y Deportes; Instituto de Antropología e Historia; Asociación Tikal; Foundation for the Advancement of Mesoamerican Studies, Guatemala City.

Fernández Souza, Lilia, Mario Zimmerman, L. Joaquín Venegas de la Torre, and Carlos M. Matos Llanes
 2016 Funciones y áreas de actividad en un patio-galería: la Estructura 2D6. In *Arqueología en Chichén Itzá: nuevas explicaciones*, edited by Rafael Cobos, pp. 193-209. Universidad Autónoma de Yucatán, Mérida.

Finamore, Daniel, and Stephen D. Houston

2010 Fiery Pool: The Maya and the Mythic Sea. Peabody Essex Museum, Salem.

Gaines, Mary E.

1980 A Pre-Columbian Ceremonial Vase from Teotihuacan. Bulletin n.s. 8(2):3-14. Museum of Fine Arts, Houston.

Gallenkamp, Charles, and Regina Elise Johnson

1985 Maya: Treasures of an Ancient Civilization. Harry N. Abrams, New York.

Gann, Thomas

1900 Mounds in Northern Honduras. Annual Report 19(2):655-692. Bureau of American Ethnology, Washington, D.C.

Garibay Kintana, Ángel María

1979 Teogonía e historia de los mexicanos. Tres opúculos del siglo XVI. Edition prepared by Ángel María Garibay Kintana. 3rd ed. Editorial Porrúa, Mexico City.

Garton, John, and Karl Taube

2017 An Olmec Style Statuette in the Worcester Art Museum. Mexicon 39(2):35-40.

Girard, Rafael

1962 Los mayas eternos. Antigua Librería Robredo, Mexico City.

Gómez González, Erika Magalí

2006 Estudio iconográfico de la cerámica Tiquisate Moldeada de la Costa Sur de Guatemala. Licenciada thesis, Escuela de Historia, Universidad de San Carlos de Guatemala, Guatemala City.

Gómez-Pompa, Arturo

1987 On Mexican Silviculture. Mexican Studies 3(11):1-17.

Gómez-Pompa, Arturo, José Salvador Flores, and Mario Aliphat Fernández 1990 The Sacred Cacao Groves of the Maya. *Latin American Antiquity* 1(3):247-257.

Góngora Cetina, Dulce A.

2011 La secuencia cerámica de la Estructura 3C9 (Casa Colorada) y 3C10 (Juego de Pelota Chico) del conjunto de la Casa Colorada en el sitio de Chichén Itzá en Yucatán. Licenciatura thesis, Facultad de Ciencias Antropológicas, Universidad Autónoma de Yucatán, Mérida.

González de la Mata, María Rocío

2006 Agua, agricultura y mitos: el caso de tres rejolladas de Chichén Itzá. In *XIX Simposio de Investigaciones Arqueológicas en Guatemala, 2005,* edited by Juan Pedro Laporte, Bárbara Arroyo, and Héctor E. Mejía, v. 1, pp. 279-289. Ministerio de Cultura y Deportes; Instituto de Antropología e Historia; Asociación Tikal; Fundación Arqueológica del Nuevo Mundo, Guatemala City.

González de la Mata, María Rocío, continued

2008 Actividades cotidianas en Chichen Itza: el conjunto alrededor del *Chultun* 1 del Grupo de Serie Inicial. In XXI Simposio de Investigaciones Arqueológicas en Guatemala, 2007, edited by Juan Pedro Laporte, Bárbara Arroyo, and Héctor E. Mejía, v. 2, pp. 651-658. Ministerio de Cultura y Deportes; Instituto de Antropología e Historia; Asociación Tikal; Fundación Arqueológica del Nuevo Mundo, Guatemala City.

González de la Mata, María Rocío, Francisco Pérez Ruiz, and José F. Osorio León

- 2006 Vida más allá de Cumtún: el Sacbé No. 3 de Chichén Itzá. In *Los Investigadores de la Cultura Maya* 14(2):419-429. Universidad Autónoma de Campeche, Campeche.
- 2010 Tradiciones en el tiempo: rasgos simbólicos tempranos presentes en Chichen Itza. In XXIII Simposio de Investigaciones Arqueológicas en Guatemala, 2009, edited by Bárbara Arroyo, Adriana Linares Palma, and Lorena Paiz Aragón, v. 1, pp. 283-295. Ministerio de Cultura y Deportes; Instituto de Antropología e Historia; Asociación Tikal, Guatemala City.
- 2011 Análisis comparativo de los pauahtunes de Chichén Itzá. In XXIV Simposio de Investigaciones Arqueológicas en Guatemala, 2010, edited by Bárbara Arroyo, Lorena Paiz Aragón, Adriana Linares Palma, and Ana Lucía Arroyave, v. 2, pp. 1181-1193. Ministerio de Cultura y Deportes; Instituto de Antropología e Historia; Asociación Tikal, Guatemala City.
- 2012 Alegorías en piedra: pauahtunes en las ceremonias de Chichén Itzá. In *XXV Simposio de Investigaciones Arqueológicas en Guatemala, 2011,* edited by Bárbara Arroyo, Lorena Paiz, and Héctor Mejía, v. 2, pp. 1111-1123. Ministerio de Cultura y Deportes; Instituto de Antropología e Historia; Asociación Tikal, Guatemala City.
- 2013 Reflejos de un universo mítico en la iconografía de Chichen Itza. In *XXVI Simposio de Investigaciones Arqueológicas en Guatemala, 2012,* edited by Bárbara Arroyo and Luis Méndez Salinas, v. 2, pp. 835-845. Ministerio de Cultura y Deportes; Instituto de Antropología e Historia; Asociación Tikal, Guatemala City.

González de la Mata, María Rocío, Francisco Pérez Ruiz, José Francisco J. Osorio León, and Peter J. Schmidt

2014 Exploración y consolidación en el Grupo de la Serie Inicial de Chichen Itza: la preservación de un patrimonio. In *XXVII Simposio de Investigaciones Arqueológicas en Guatemala, 2013,* edited by Bárbara Arroyo, Luis Méndez Salinas, and Andrea Rojas, v. 2, pp. 1037-1048. Ministerio de Cultura y Deportes; Instituto de Antropología e Historia; Asociación Tikal, Guatemala City.

Graham, Ian

1996 Corpus of Maya Hieroglyphic Inscriptions, Volume 7, Part 1: Seibal. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, MA.

Graulich, Michael

1993 Sacrificial Stones of the Aztecs. In *The Symbolism of the Plastic and Pictorial Representations of Ancient Mexico: A Symposium of the 46th International Congress of the Americanists, Amsterdam 1988,* edited by Jacqueline de Durand-Forest and Marc Eisinger, pp. 186-201. Bonner Amerikanistische Studien, Bonn.

Grube, Nikolai, and Ruth Krochock

2007 Reading Between the Lines: Hieroglyphic Texts from Chichén Itzá and Its Neighbors. In *Twin Tollans: Chichén Itzá, Tula, and the Epiclassic to Early Postclassic Mesoamerican World,* edited by Jeff Karl Kowalski and Cynthia Kristan-Graham, pp. 151-203. Dumbarton Oaks, Washington, D.C.

Grube, Nikolai, Alfonso Lacadena, and Simon Martin

2003 Chichen Itza and Ek Balam: Terminal Classic Inscriptions from Yucatan. In *Notebook for the XXVIIth Maya Hieroglyphic Forum at Texas, March, 2003,* pt. 2, pp. 1-84. Maya Workshop Foundation, Austin.

Gussinyer, J.

1969 Una escultura de Ehecatl-Ozomatli. *Boletín* 27:29-31. Instituto Nacional de Antropología e Historia, Mexico City.

Headrick, Annabeth

- 2007 The Teotihuacan Trinity: The Sociopolitical Structure of an Ancient Mesoamerican City. University of Texas Press, Austin.
- 2018 The Osario of Chichen Itza: Where Warriors Danced in Paradise. In *Landscapes of the Itza: Archaeology and Art History at Chichen Itza and Neighboring Sites*, edited by Linnea Wren, Cynthia Kristan-Graham, Travis Nygard, and Kaylee Spencer, pp. 198-225. University Press of Florida, Gainsville.

Hill, Jane H.

1992 The Flower World of Old Uto-Aztecan. Journal of Anthropological Research 48:117-144.

Houston, Stephen D.

2018 The Gifted Passage: Young Men in Classic Maya Art and Text. Yale University Press, New Haven.

Houston, Stephen D., David Stuart, and Karl Taube

2006 The Memory of Bones: Body, Being, and Experience among the Classic Maya. University of Texas Press, Austin.

Hull, Kerry M., and Michael D. Carrasco

2004 Mak-"Portal" Rituals Uncovered: An Approach to Interpreting Symbolic Architecture and the Creation of Sacred Space Among the Maya. In *Continuity and Change: Maya Religious Beliefs and Practices in Temporal Perspective*, edited by Daniel Graña Behrens, Nikolai Grube, Christian M. Prager, Frauke Sasche, Stephanie Teufel, and Elizabeth Wagner, pp. 134-140. Acta Mesoamericana 14. Verlag Anton Saurwein, Markt Schwaben.

Inomata, Takeshi

2015 Staging Maya Life: A Frozen Image. In *The Maya: Voices in Stone*, edited by Alejandra Martínez de Velasco Cortina and María Elena Vega Villalobos, pp. 310-319. Turner and Ámbar Diseño, Mexico City.

Johnson, Scott A. J.

2012 Late and Terminal Classic Power Shifts in Yucatan: The View from Popola. Ph.D. dissertation, Department of Anthropology, Tulane University, New Orleans.

Jones, Christopher, and Linton Satterthwaite

1982 *The Monuments and Inscriptions of Tikal: The Carved Monuments.* Tikal Report 33, Part A. Monograph 44. University Museum, University of Pennsylvania, Philadelphia.

Kepecs, Susan, and Sylviane Boucher

1996 The Pre-Hispanic Cultivation of Rejolladas and Stone-Lands: New Evidence from Northeast Yucatan. In *The Managed Mosaic: Ancient Maya Agriculture and Resource Use,* edited by Scott L. Fedick, pp. 69-91. University of Utah Press, Salt Lake City.

Kerr, Justin

1990 The Maya Vase Book: A Corpus of Rollout Photographs of Maya Vases, Volume 2. Kerr Associates, New York.

Lincoln, Charles

- 1986 The Chronology of Chichen Itza: A Review. In *Late Lowland Maya Civilization: Classic to Postclassic*, edited by Jeremy Sabloff and E. Wyllys Andrews V, pp. 141-196. University of New Mexico Press, Albuquerque.
- 1990 Ethnicity and Social Organization at Chichen Itza, Yucatan, Mexico. Ph.D. dissertation, Department of Anthropology, Harvard University, Cambridge.

Linné, Sigvald

1942 *Mexican Highland Cultures: Archaeological Researches at Teotihuacán, Calpulalpan, and Chalchicomula in* 1934–35. Publications n.s. 7. Ethnographical Museum of Sweden, Stockholm.

López Austin, Alfredo, and Leonardo López Luján

2001 El chacmool mexica. Caravelle, Cahiers du Monde Hispanique et Luso-brésilien 76-77:59-84. Toulouse.

López Luján, Leonardo, and Javier Urcid

2002 El chacmool de Míxquic y el sacrificio humano. Estudios de Cultura Nahuatl 33:25-43.

López Portillo, José, Miguel León-Portilla, and Eduardo Matos Moctezuma 1981 *El Templo Mayor*. Bancomer, Mexico City.

Love, Bruce, and Greg Reddick

2017 *Confirming the Date A.D. 998 for El Osario, Chichen Itza*. Research Contribution 2. Contributions to Maya Studies: https://brucelove.com/research/contribution_002/

Magnoni, Aline, Scott A. Johnson, and Travis W. Stanton

2014 En la sombra de Chichén Itzá: evaluando la iconografía de la región sureña de Chichén Itzá durante el Clásico Terminal. In *The Archaeology of Yucatán: New Directions and Data*, edited by Travis W. Stanton, pp. 297-314. BAR International Series. Archaeopress, Oxford.

Maldonado Cárdenas, Rubén

1979 Los sacbeob de Izamal-Aké y Uci-Cansahcab en el noroeste de Yucatán. *Antropología e Historia, Boletín del INAH, México* 3(27):23-29.

Martin, Simon

- 2006 Cacao in Ancient Maya Religion: First Fruit from the Maize Tree and other Tales from the Underworld. In *Chocolate in Mesoamerica: A Cultural History of Cacao,* edited by Cameron L. McNeil, pp. 154-183. University Press of Florida, Gainesville.
- 2015 The Old Man of the Maya Universe: A Unitary Dimension to Ancient Maya Religion. In *Maya Archaeology 3*, edited by Charles Golden, Stephen Houston, and Joel Skidmore, pp. 186-227. Precolumbia Mesoweb Press, San Francisco.

Martos López, Luis Alberto

2001 La pintura mural de Rancho Ina, Quintana Roo. In *La pintura mural prehispánica en México. Área maya. Estudios,* edited by Leticia Staines Cicero, 2(4):461-481. Instituto de Investigaciones Estéticas, Universidad Nacional Autónoma de México, Mexico City.

Mathiowetz, Michael, Polly Schaafsma, Jeremy Coltman, and Karl Taube

2015 The Darts of Dawn: The Tlahuizcalpantecuhtli Complex in the Iconography of Mesoamerica and the American Southwest. *Journal of the Southwest* 57(1):1-102.

Matos Moctezuma, Eduardo

1998 The Great Temple of the Aztecs: Treasures of Tenochtitlan. Thames and Hudson, London.

Mayer, Karl Herbert

1983 Gewölbedecksteine mit Dekor der Maya-Kultur. Archiv für Völkerkunde 37:1-62.

McNeil, Cameron, ed.

2006 Chocolate in Mesoamerica: A Cultural History of Cacao. University Press of Florida, Gainesville.

McNeil, Cameron L., W. Jeffrey Hurst, and Robert J. Sharer

2006 The Use and Representation of Cacao During the Classic Period at Copan, Honduras. In *Chocolate in Mesoamerica: A Cultural History of Cacao*, edited by Cameron L. McNeil, pp. 224-252. University Press of Florida, Gainesville.

Mendieta, Geronimo

1980 Historia eclesiastica indiana. Editorial Porrúa, Mexico City.

Milbrath, Susan, and Carlos Peraza Lope

2003 Revisiting Mayapan: Mexico's Last Maya Capital. Ancient Mesoamerica 14(1):1-46.

Miller, Mary, and Simon Martin

2004 Courtly Art of the Ancient Maya. Fine Arts Museums of San Francisco; Thames and Hudson, New York.

Miller, Mary, and Claudia Brittenham

2013 The Spectacle of the Late Maya Court: Reflections on the Murals of Bonampak. University of Texas Press, Austin.

Miller, Virginia

1989 Star Warriors at Chichen Itza. In *Word and Image in Maya Culture: Explorations in Language, Writing and Representation,* edited by William F. Hanks and Don S. Rice, pp. 287-305. University of Utah Press, Salt Lake City.

Miller, Arthur G.

1982 On the Edge of the Sea: Mural Painting at Tancah-Tulum, Quintana Roo, Mexico. Dumbarton Oaks, Washington, D.C.

Morley, Sylvanus G.

- 1926 Archaeology. Yearbook 25:259-286. Carnegie Institution of Washington, Washington, D.C.
- 1946 *The Ancient Maya*. Stanford University Press, Stanford.

Morris, Earl H., Jean Charlot, and Ann Axtell Morris

1931 *The Temple of the Warriors at Chichen Itzá, Yucatan.* 2 vols. Publication 406. Carnegie Institution of Washington, Washington, D.C.

Muñoz Cosme, Alfonso

1990 Laberintos, pirámides y palacios. Las fases arquitectonicas de la ciudad de Oxkintok. In *Oxkintok 3. Misión Arqueológica de España en México. Proyecto Oxkintok. Año 1989,* edited by Miguel Rivera, pp. 99-111. Ministerio de la Cultura, Madrid.

Nájera Coronado, Martha Ilia

- 2012 El mono y el cacao: la búsqueda de un mito a través de los relieves del grupo de la Serie Inicial de Chichén Itzá. Estudios de Cultural Maya 39:135-159.
- 2015 Dioses y seres del viento entre los antiguos mayas. Universidad Nacional Autónoma de México, Mexico City.
- 2016 El mono y el cacao: a la búsqueda de un mito. In *Kakaw, oro aromado: de las cortes mayas a las europeas,* coordinated by Mario Humberto Ruz, pp. 69-113. Gobierno del Estado de Tabasco; Universidad Nacional Autóma de México, Mexico City.

Nicholson, Henry B.

1991 The Octli Cult in Late Pre-Hispanic Central Mexico. In *To Change Place: Aztec Ceremonial Landscapes*, edited by Davíd Carrasco, pp. 158-187. University of Colorado, Niwot.

Nicholson, Henry B., with Eloise Quiñones Keber

1983 Art of Ancient Mexico: Treasures of Tenochtitlan. National Gallery of Art, Washington, D.C.

Ogata, Nisao, Arturo Gómez Pompa, and Karl Taube

2006 The Domestication and Distribution of *Theobroma cacao* L. in the Neotropics. In *Chocolate in Mesoamerica: A Cultural History of Cacao*, edited by Cameron L. McNeil, pp. 90-89. University Press of Florida, Gainesville.

Osorio León, José

- 2004 La Estructura 5C4 (Templo de la Serie Inicial): un edificio clave para la cronología en Chichen Itza. Licenciatura thesis, Facultad de Ciencias Antropológicas, Universidad Autónoma de Yucatán, Mérida.
- 2006 La presencia del Clásico Tardío en Chichen Itza (600-800/830 d.C). In XIX Simposio de Investigaciones Arqueológicas en Guatemala, 2005, edited by Juan Pedro Laporte, Bárbara Arroyo, and Héctor E. Mejía, v. 1, pp. 403-410. Ministerio de Cultura y Deportes; Instituto de Antropología e Historia; Asociación Tikal; Fundación Arqueológica del Nuevo Mundo, Guatemala City.

Osorio León, José, and Eduardo Pérez de Heredia

2001 La arquitectura y la cerámica del Clásico Tardío en Chichén Itzá: excavaciones en el edificio de la Serie Inicial. In *Los Investigadores de la Cultura Maya* 9:327-334. Universidad Autónoma de Campeche, Campeche.

Parsons, Lee Allen

1986 *The Origins of Maya Art: Monumental Stone Sculpture of Kaminaljuyu, Guatemala, and the Southern Pacific Coast.* Studies in Pre-Columbian Art and Archaeology 28. Dumbarton Oaks, Washington, D.C.

Pérez de Heredia Puente, Eduardo J.

- 2010 Ceramic Contexts and Chronology at Chichen Itza, Yucatan, Mexico. Ph.D. dissertation, Department of Archaeology and History, La Trobe University, Melbourne.
- 2012 The Yabnal-Motul Complex of the Late Classic Period at Chichen Itza. Ancient Mesoamerica 23(2):379-402.

Pérez Romero, José Alberto

1998 Algunas consideraciones sobre el cacao en el norte de la península de Yucatán. Licenciatura thesis, Facultad de Ciencias Antropológicas, Universidad Autónoma de Yucatán, Mérida.

Pérez Ruiz, Francisco

2004 Perspectivas y desarrollo de plano de Chichen Itza, desde el siglo XVI hasta el presente. In *XVII Simposio de Investigaciones Arqueológicas en Guatemala, 2003,* edited by Juan Pedro Laporte, Bárbara Arroyo, Héctor L. Escobedo, and Héctor E. Mejía, v. 2, pp. 1007-1013. Ministerio de Cultura y Deportes; Instituto de Antropología e Historia; Asociación Tikal, Guatemala City.

Peterson, Jeanette Favrot

1992 The Paradise Garden Murals of Malinalco: Utopia and Empire in Sixteenth Century Mexico. University of Texas Press, Austin.

Pollock, H. E. D.

1980 *The Puuc: An Architectural Survey of the Hill Country of Yucatan and Northern Campeche, Mexico.* Memoirs 19. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, MA.

Pool Cab, Marcos N.

2016 La cuestión étnica en Chichén Itzá e Isla Cerritos. In *Arqueología en Chichén Itzá: nuevas explicaciones*, edited by Rafael Cobos, pp. 44-69. Universidad Autónoma de Yucatán, Mérida.

Prager, Christian M.

2018 The Lexeme potz "To Wrap, Cover" in Classic Maya Hieroglyphic Texts. Mexicon 40(1):4-7.

Prager, Christian M., and Geoffrey E. Braswell

2016 Maya Politics and Ritual: An Important New Hieroglyphic Text on a Carved Jade from Belize. *Ancient Mesoamerica* 27(2):267-278.

Proskouriakoff, Tatiana

- 1950 A Study of Classic Maya Sculpture. Publication 593. Carnegie Institution of Washington, Washington, D.C.
- 1962 Civic and Religious Structures of Mayapan. In *Mayapan, Yucatan, Mexico*, by H. E. D. Pollock, Ralph L. Roys, T. Proskouriakoff, and A. Ledyard Smith, pp. 87-163. Publication 619. Carnegie Institution of Washington, Washington, D.C.
- 1974 Jades from the Cenote of Sacrifice, Chichen Itza, Yucatan. Memoirs 10(1). Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, MA.

Rands, Robert L.

1962 [Review of The Chronological Significance of Maya Ceramics by George C. Vaillant.] American Antiquity 28(2):255.

Ricketson, Edith

1927 Sixteen Carved Panels from Chichen Itza. Art and Archaeology 23:11-15.

Ringle, William M.

2017 Debating Chichen Itza. Ancient Mesoamerica 28(1):119-136.

Robicsek, Francis, and Donald M. Hales

1981 The Maya Book of the Dead: The Ceramic Codex. University of Virginia Art Museum, Charlottesville.

Roys, Ralph L.

1933 The Book of Chilam Balam of Chumayel. Publication 438. Carnegie Institution of Washington, Washington, D.C.

Ruppert, Karl

- 1943 The Mercado, Chichen Itza, Yucatan. Publication 546. Carnegie Institution of Washington, Washington, D.C.
- 1950 Gallery-Patio Type Structures at Chichen Itza. In *For the Dean: Essays in Honor of Byron Cummings,* edited by Erik K. Reed and Dale S. King, pp. 249-258. Hohokam Museums Association, Tucson.
- 1952a Chichen Itza: Architectural Notes and Plans. Publication 595. Carnegie Institution of Washington, Washington, D.C.
- 1952b Report of George C. Vaillant on the Excavations at Station No. 13 [1926]. In *Chichen Itza: Architectural Notes and Plans*, by Karl Ruppert, pp. 157-162. Publication 595. Carnegie Institution of Washington, Washington, D.C.

Sabloff, Jeremy A.

1973 Continuity and Disruption during Terminal Late Classic Times at Seibal: Ceramic and Other Evidence. In *The Classic Maya Collapse*, edited by T. Patrick Culbert, pp. 107-131. University of New Mexico Press, Albuquerque.

Sahagún, Fray Bernardino

1950-1982 *Florentine Codex: General History of the Things of New Spain.* Translated from the Aztec into English, with Notes and Illustrations by Arthur J. O. Anderson and Charles E. Dibble. 12 vols. Monographs of the School of American Research 14(1-13). School of American Research; University of Utah, Santa Fe.

Saturno, William, Karl Taube, and David Stuart

2005 *The Murals of San Bartolo, El Peten, Guatemala, Part 1: The North Wall.* Ancient America 7. Center for Ancient American Studies, Barnardsville.

Schele, Linda, and Mary Ellen Miller

1986 The Blood of Kings: Dynasty and Ritual in Maya Art. Kimbell Art Museum, Fort Worth.

Schmidt, Peter

- 1981 Chichén Itzá: apuntes para el estudio de patrones de asentamiento. In *Memoria del Congreso Interno 1979,* pp. 55-70. Centro Regional del Sureste; Instituto Nacional de Antropología e Historia, Mérida.
- 2003 Proyecto Chichen Itza. Informe de actividades, julio de 1999 a diciembre de 2002. 3 vols. Report submitted to the Instituto Nacional de Antropología e Historia, Mexico City.
- 2005 Nuevos hallazgos en Chichen Itza. Arqueología Mexicana 13(76):32-39.
- 2007 Birds, Ceramics, and Cacao: New Excavations at Chichén Itzá, Yucatan. In *Twin Tollans: Chichén Itzá, Tula, and the Epiclassic to Early Postclassic Mesoamerican World,* edited by Jeff Karl Kowalski and Cynthia Kristan-Graham, pp. 151-203. Dumbarton Oaks, Washington, D.C.

Schmidt, Peter J., Péter Biró, and Eduardo Pérez de Heredia

2018 El Templo de los Búhos de Chichén Itzá y su emplazamiento cronológico: una nueva propuesta. *Estudios de Cultura Maya* 52:11-49.

Schmidt, Peter J., and Rocío González de la Mata

2007 La Galería de los Monos, Estructura 5C6 de Chichen Itza. In *XX Simposio de Investigaciones Arqueológicas en Guatemala, 2006,* edited by Juan Pedro Laporte, Bárbara Arroyo, and Héctor E. Mejía, v. 1, pp. 477-488. Ministerio de Cultura y Deportes; Instituto de Antropología e Historia; Asociación Tikal; Fundación Arqueológica del Nuevo Mundo, Guatemala City.

Schmidt, Peter J., María Rocío González de la Mata, Francisco Pérez, and José Osorio León 2017 Chichén Itzá: poder y esplendor entre la guerra, el comercio y las flores. *Arqueología Mexicana* 14(45):45-52.

Schmidt, Peter, David Stuart, and Bruce Love

2008 Inscriptions and Iconography of Castillo Viejo, Chichen Itza. The PARI Journal 11(2):1-17.

Seler, Eduard E.

1902-1923 Gesammelte Abhandlungen zur Amerikanischen Sprach- und Altertumskunde. 5 vols. Asher; Behrend, Berlin.

- 1904 The Venus Period in the Borgian Codex Group. In *Mexican and Central American Antiquities, Calendar Systems, and History*, edited by Charles P. Bowditch, pp. 353-391. Bulletin 28. Bureau of American Ethnology, Smithsonian Institution, Washington, D.C.
- 1963 Comentarios al Códice Borgia. 2 vols. with facsimile. M. Fenk, trans. Fonda de Cultura Económica, Mexico City.

Sharer, Robert J.

1990 Quirigua: A Classic Maya Center and Its Sculptures. Carolina Academic Press, Durham.

Shook, Edwin M., and Elayne Marquis

1996 Secrets in Stone: Yokes, Hachas and Palmas from Southern Mesoamerica. American Philosophical Society, Philadelphia.

Smith, A. Ledyard, and Karl Ruppert

1956 Excavations in House Mounds at Mayapan IV. *Current Reports* 2(36):471-528. Carnegie Institution of Washington, Cambridge, MA.

Smith, Robert E.

1971 *The Pottery of Mayapan, Including Studies of Ceramic Material from Uxmal, Kabah, and Chichen Itza*. 2 Vols. Papers 66. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, MA.

Stanton, Travis W.

2017 The Founding of Yaxuná: Place and Trade in Preclassic Yucatan. In *Early Maya E-Groups, Solar Calendars, and the Role of Astronomy in the Rise of Lowland Maya Urbanism,* edited by David A. Freidel, Arlen F. Chase, Anne S. Dowd, and Jerry Murdock, pp. 450-479. University of Florida Press, Gainesville.

Stanton, Travis W., and George J. Bey III

n.d. The Rise and Fall of the New Émpire: A Reassessment of the Classic to Postclassic Transition in the Northern Maya Lowlands. Manuscript.

Stanton, Travis W., and Ryan H. Collins

2017 Los orígenes de los mayas del norte: investigaciones en el Grupo E de Yaxuná. Arqueología Mexicana 25(145):32-37.

Stanton, Travis W., and Aline Magnoni

2016 Proyecto de Interacción Política del Centro de Yucatán. Séptima temporada de campo. Technical report submitted to the Consejo de Arqueología del Instituto Nacional de Antropología e Historia, Mexico City.

Stanton, Travis W., Karl A. Taube, and Ryan H. Collins

n.d. Domesticating Time: Quadripartite Symbolism and Rituals of Foundation at Yaxuná. In *Telling Time: Myth, History, and Everyday Life in the Ancient Maya World,* edited by David A. Freidel, Arlen F. Chase, Anne S. Dowd, and Jerry Murdock. University of Florida Press, Gainesville.

Stone, Doris

1972 Pre-Columbian Man Finds Central America: The Archaeological Bridge. Peabody Museum Press, Cambridge, MA.

Strömsvik, Gustav

1941 Substela Caches and Stela Foundations at Copan and Quirigua. *Contributions to American Archaeology* 7(37):63-96. Publication 528. Carnegie Institution of Washington, Washington, D.C.

Stuart, David

- 2000 "The Arrival of Strangers": Teotihuacan and Tollan in Classic Maya History. In *Mesoamerica's Classic Heritage: From Teotihuacan to the Aztecs*, edited by Davíd Carrasco, Lindsay Jones, and Scott Sessions, pp. 465-513. University Press of Colorado, Boulder.
- 2006 The Language of Chocolate: References to Cacao on Classic Maya Drinking Vessels. In *Chocolate in Mesoamerica:* A Cultural History of Cacao, edited by Cameron L. McNeil, pp. 184-201. University Press of Florida, Gainesville.

Stuart, David, and Stephen Houston

1994 *Classic Maya Place Names.* Studies in Pre-Columbian Art and Archaeology 33. Dumbarton Oaks, Washington, D.C.

Suhler, Charles K., Traci Ardren, and Dave Johnstone

1998 The Chronology of Yaxuna: Evidence from Excavation and Ceramics. Ancient Mesoamerica 9(1):176-182.

Taube, Karl A.

- 1985 The Classic Maya Maize God: A Reappraisal. In *Fifth Palenque Round Table, 1983,* edited by Merle Greene Robertson, pp. 171-181. Pre-Columbian Art Research Institute, San Francisco.
- 1988 A Prehispanic Maya Katun Wheel. Journal of Anthropological Research 44(2):183-203.
- 1989a Ritual Humor in Classic Maya Religion. In *Word and Image in Maya Culture: Explorations in Language, Writing, and Representation,* edited by William F. Hanks and Don S. Rice, pp. 351-382. University of Utah Press, Salt Lake City.
- 1989b Un motivo de muerte clásico terminal de Dos Pilas, Guatemala. In *Proyecto Arqueológico Regional Petexbatun: informe preliminar #1, primera temporada,* edited by Arthur A. Demarest and Stephen D. Houston, pp. 120-128. Report submitted to the Instituto de Antropología e Historia de Guatemala.
- 1992a The Iconography of Mirrors at Teotihuacan. In *Art, Ideology, and the City of Teotihuacan,* edited by Janet C. Berlo, pp. 169-204. Dumbarton Oaks, Washington, D.C.
- 1992b The Major Gods of Yucatan: Schellhas Revisited. Studies in Pre-Columbian Art and Archaeology 32. Dumbarton Oaks, Washington, D.C.
- 1992c The Temple of Quetzalcoatl and the Cult of Sacred War at Teotihuacan. Res: Anthropology and Aesthetics 21:53-87.
- 1993 Aztec and Maya Myths. British Museum Press, London.

- 1994a The Birth Vase: Natal Imagery in Ancient Maya Myth and Ritual. In *The Maya Vase Book: A Corpus of Rollout Photographs of Maya Vases, Volume 4*, edited by Barbara Kerr and Justin Kerr, pp. 650-685. Kerr Associates, New York.
- 1994b The Iconography of Toltec Period Chichen Itza. In *Hidden among the Hills: Maya Archaeology of the Northwestern Yucatan Peninsula*, edited by Hanns J. Prem, pp. 212-246. Verlag von Flemming, Möckmühl.
- 1996 The Olmec Maize God: The Face of Corn in Formative Mesoamerica. *Res: Anthropology and Aesthetics* 29/30:39-81.
- 1998a Enemas rituales en Mesoamérica. Arqueología Mexicana 6(34):38-45.
- 1998b The Jade Hearth: Centrality, Rulership, and the Classic Maya Temple. In *Function and Meaning in Classic Maya Architecture*, edited by Stephen D. Houston, pp. 427-478. Dumbarton Oaks, Washington, D.C.
- 2000a Lightning Celts and Corn Fetishes: The Formative Olmec and the Development of Maize Symbolism in Mesoamerica and the American Southwest. In *Olmec Art and Archaeology in Mesoamerica,* edited by John E. Clark and Mary E. Pye, pp. 297-337. National Gallery of Art, Washington, D.C.
- 2000b The Turquoise Hearth: Fire, Self-Sacrifice, and the Central Mexican Cult of War. In *Mesoamerica's Classic Heritage: From Teotihuacan to the Aztecs*, edited by Davíd Carrasco, Lindsay Jones, and Scott Sessions, pp. 269-340. University Press of Colorado, Boulder.
- 2001 The Breath of Life: The Symbolism of Wind in Mesoamerica and the American Southwest. In *The Road to Aztlan: Art from a Mythic Homeland,* edited by Virginia M. Fields and Victor Zamudio-Taylor, pp. 102-123. Los Angeles County Museum of Art, Los Angeles.
- 2002 La serpiente emplumada de Teotihuacan. Arqueología Mexicana 9(53):36-41.
- 2003a Maws of Heaven and Hell: The Symbolism of the Centipede and Serpent in Classic Maya Religion. In *Antropología de la eternidad: la muerte en la cultura maya*, edited by Andrés Ciudad Ruiz, Mario Humberto Ruz Sosa, and María Josefa Iglesias Ponce de León, pp. 405-442. Sociedad Española de Estudios Mayas, Madrid.
- 2003b Tetitla and the Maya Presence at Teotihuacan. In *The Maya and Teotihuacan: Reinterpreting Early Classic Maya Interaction*, edited by Geoffrey E. Braswell, pp. 273-314. University of Texas Press, Austin.
- 2004a Aztec Religion: Creation, Sacrifice, and Renewal. In *The Aztec Empire*, pp. 168-177. Guggenheim Museum, New York.
- 2004b Flower Mountain: Concepts of Life, Beauty, and Paradise among the Classic Maya. *Res: Anthropology and Aesthetics* 45:69-98.
- 2004c Olmec Art at Dumbarton Oaks. Pre-Columbian Art at Dumbarton Oaks 2. Dumbarton Oaks, Washington, D.C.
- 2004d Structure 10L-16 and Its Early Classic Antecedents: Fire and the Evocation and Resurrection of K'inich Yax K'uk' Mo'. In *Understanding Early Classic Copan*, edited by Ellen E. Bell, Marcello A. Canuto, and Robert J. Sharer, pp. 265-295. University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia.
- 2005a Representaciones del paraíso en el arte cerámico del Clásico Temprano de Escuintla, Guatemala. In *Iconografía* y escritura teotihuacana en la costa sur de Guatemala y Chiapas, edited by Oswaldo Chinchilla and Bárbara Arroyo, U tz'ib, Serie Reportes 1(5):33-54. Asociación Tikal, Guatemala City.
- 2005b The Symbolism of Jade in Classic Maya Religion. Ancient Mesoamerica 16(1):23-50.
- 2006 Climbing Flower Mountain: Concepts of Resurrection and the Afterlife in Ancient Teotihuacan. In *Arqueología e historia del Centro de México. Homenaje a Eduardo Matos Moctezuma*, edited by Leonardo López Luján, Davíd Carrasco and Lordes Cué, pp. 153-170. Instituto Nacional de Antropología e Historia, Mexico City.
- 2007 La jadeíta y la cosmovisión de los Olmecas. Arqueología Mexicana 15(87):43-48.
- 2009a The Maya Maize God and the Mythic Origins of Dance. In *The Maya and their Sacred Narratives: Text and Context* of Maya Mythologies, edited by Genevieve Le Fort, Raphael Gardiol, Sebastian Matteo, and Christophe Helmke, pp. 41-52. Verlag Anton Saurwein, Markt Schwaben.
- 2009b The Womb of the World: The Cuauhxicalli and Other Offering Bowls of Ancient and Contemporary Mesoamerica. In *Maya Archaeology 1*, edited by Charles Golden, Stephen Houston, and Joel Skidmore, pp. 86-106. Precolumbia Mesoweb Press, San Francisco.

- Taube, Karl A., continued
- 2010 At Dawn's Edge: Tulúm, Santa Rita, and Floral Symbolism in the International Style of Late Postclassic Mesoamerica. In Astronomers, Scribes, and Priests: Intellectual Interchange between the Northern Maya Lowlands and Highland Mexico in the Late Postclassic Period, edited by Gabrielle Vail and Christine Hernández, pp. 145-191. Dumbarton Oaks, Washington, D.C.
- 2011 Teotihuacan and the Development of Writing in Early Classic Central Mexico. In *Their Way of Writing: Scripts, Signs, and Pictographies in Pre-Columbian America,* edited by Elizabeth H. Boone and Gary Urton, pp. 77-109. Dumbarton Oaks, Washington, D.C.
- 2012 The Symbolism of Turquoise in Postclassic Mexico. In *Turquoise in Mexico and North America: Science, Conservation, Culture and Collections*, edited by J. C. H. King, Max Carocci, Carolyn Cartwright, Colin McEwan, and Rebecca Stacy, pp. 117-134. British Museum, London.
- 2015 The Huastec Sun God: Portrayals of Solar Imagery, Sacrifice, and War in Postclassic Huastec Iconography. In *The Huasteca: Cultural History and Regional Exchange*, edited by Katherine A. Faust and Kim N. Richter, pp. 98-127. University of Oklahoma Press, Norman.
- 2016a El portador de la lluvia / The Bringer of Rain. Artes de México 121:16-21, 67-69.
- 2016b Through a Glass, Brightly: Recent Investigations Concerning Mirrors and Scrying in Ancient and Contemporary Mesoamerica. In *Manufactured Light: Mirrors in the Mesoamerican Realm*, edited by Emiliano Gallaga M. and Marc G. Blainey, pp. 285-314. University of Colorado Press, Niwot.
- 2017 Aquellos del este: representaciones de dioses y hombres mayas en las pinturas realistas de Tetitla, Teotihuacan. In *Las Pinturas Realistas de Tetitla, Teotihuacan: estudios a través de la obra de Agustín Villagra Caleti,* coordinated by Leticia Staines Cicero and Christophe Helmke, pp. 71-99. Secretaría de Cultura, Instituto Nacional de Antropología e Historia; Universidad Nacional Autónoma de México, Instituto de Investigaciones Estéticas, Mexico City.
- 2017 Pillars of the World: Cosmic Trees in Ancient Maya Thought. In *Del saber ha hecho su razón de ser... Homenaje a Alfredo López Austin*, edited by Eduardo Matos Moctezuma and Ángela Ochoa, pp. 269-302. Universidad Nacional Autónoma de México, Mexico City.
- 2018a Origines y simbolísmo de la deidad del viento en Mesoamerica. Arqueología Mexicana 25(152):34-39.
- 2018b The Ballgame, Boxing and Ritual Bloodsport in Ancient Mesoamerica. In *Ritual, Play and Belief in Evolution and Early Human Societies,* edited by Colin Renfrew, Iain Morley, and Michael Boyd, pp. 264-301. Cambridge University Press, Cambridge.
- 2019a Classic Maya Clowns: A Mesoamericanist Perspective. Paper presented at "Past Laughter: Humor in Ancient Mesoamerica," Kluge Center, Library of Congress, Washington, D.C.
- 2019b Hills of the Ancestors: Sacred Architecture and Solar Worship in the Northern Maya Lowlands. Paper presented at "When East Meets West: Chichen Itza, Tula, and Early Postclassic Mesoamerica," University of California, Riverside.
- 2020 In Search of Paradise: Religion and Cultural Exchange in Early Postclassic Mesoamerica. In A Forest of History: The Maya after the Emergence of Divine Kingship, edited by Travis W. Stanton and M. Kathryn Brown, pp. 154-186. University Press of Colorado, Louisville.

Taube, Karl, José Osorio León, and Rocío González de la Mata

2014 El yacimiento de Ehecatl y el origen mítico de la música: estudios iconográficos del grupo arquitectónico de la Serie Inicial de Chichén Itzá. Keynote address, Primera Mesa Redonda de Mayab, Festival Internacional de la Cultura Maya, Mérida.

Taube, Karl, and William Saturno

2008 Los murales de San Bartolo: desarrollo temprano del simbolismo y del mito del maíz en la antigua Mesoamérica. In *Olmeca. Balance y perspectivas. Memoria de la Primera Mesa Redonda,* edited by María Teresa Uriarte and Rebecca B. González Lauck, v. 1, pp. 287-318. Universidad Nacional Autónoma de México, Mexico City. Taube, Karl, William Saturno, David Stuart, and Heather Hurst.

2010 *The Murals of San Bartolo, El Petén, Guatemala, Part 2: The West Wall.* Ancient America 10. Center for Ancient American Studies, Barnardsville.

Taube, Karl, and Rhonda Taube

2009 The Beautiful, the Bad, and the Ugly. In *Mesoamerican Figurines: Small-Scale Indices of Large-Scale Social Phenomena*, edited by Christina T. Halperin, Katherine A. Faust, Rhonda Taube, and Aurore Giguet, pp. 236-258. University Press of Florida, Gainesville.

Thompson, Edward H.

1932 People of the Serpent. Houghton Mifflin Company, Boston.

Thompson, J. Eric S.

- 1937 A New Method of Deciphering Yucatecan Dates with Special Reference to Chichen Itza. *Contributions to American Archaeology* 4(22):177-197. Publication 483. Carnegie Institution of Washington, Washington, D.C.
- 1948 An Archaeological Reconnaissance of the Cotzumalhuapa Region, Escuintla, Guatemala. *Contributions to American Anthropology and History* 9(44):1-56. Carnegie Institution of Washington, Washington D.C.
- 1954 The Rise and Fall of Maya Civilization. University of Oklahoma Press, Norman.
- 1970 Maya History and Religion. University of Oklahoma Press, Norman.

Tozzer, Alfred M.

- 1941 *Landa's Relación de las Cosas de Yucatan: A Translation*. Edited with notes by Alfred M. Tozzer. Papers 18. Peabody Museum of American Archaeology and Ethnology, Harvard University, Cambridge, MA.
- 1957 Chichen Itza and its Cenote of Sacrifice: A Comparative Study of Contemporaneous Maya and Toltec. Memoirs of the Peabody Museum of Archaeology and Ethnology, Harvard University, vols. 11-12. Peabody Museum, Cambridge, MA.

Uceda Castillo, Santiago, Ricardo Morales Gamarra, and Elías Mujica Barreda

2016 Huaca de la Luna. Templos y dioses moches / Moche Temples and Gods. World Monuments Fund, New York.

Valiente Cánovas, Santiago

1989 El Palacio Ch'ich y El Palacio del Diablo (Estructuras CA-7 y CA-8). In Oxkintok 2. Misión Arqueológica de España en México. Proyecto Oxkintok. Año 1988, pp. 30-41. Ministerio de Cultura, Madrid.

Vaillant, George C.

- 1927 The Chronological Significance of Maya Ceramics. Ph.D. dissertation, Department of Anthropology, Harvard University, Cambridge.
- 1961 The Chronological Significance of Maya Ceramics. University of Wisconsin Press, Madison.

Yadeun, Juan

1993 Toniná. El Equilibrista, Mexico City.

Vázquez de Ágredos Pascual, María Luisa

2010 *La pintura mural maya: materiales y técnicas artísticas.* Universidad Autónoma de México; Centro Peninsular en Humanidades y Ciencias Sociales, Mérida.

Vázquez de Ágredos Pascual, María Luisa, Leticia Vargas de la Peña, Víctor R. Castillo Borges, and Peter Schmidt

2014 Desplazamiento de pintores de Ek' Balam a Chichén Itzá tras el reinado y Muerte de Úkit Kan Lek' Tok. In *The Archaeology of Yucatán: New Directions and Data,* edited by Travis W. Stanton, pp. 281-296. BAR International Series. Archaeopress, Oxford.

Vogt, Evon Z.

1969 Zinacantan: A Maya Community in the Highlands of Chiapas. Harvard University Press, Cambridge, MA.

Volta, Beniamino, and Geoffrey E. Braswell

2014 Alternative Narratives and Missing Data: Refining the Chronology of Chichen Itza. In *The Maya and Their Central Mexican Neighbors: Settlement Patterns, Architecture, Hieroglyphic Texts, and Ceramics,* edited by Geoffrey E. Braswell, pp. 356-402. Routledge, London.

Volta, Beniamino, Nancy Peniche May, and Geoffrey E. Braswell

2018 The Archaeology of Chichen Itza: Its History, What We Like to Argue About, and What We Think We Know. In *Landscapes of the Itza: Archaeology and Art History at Chichen Itza and Neighboring Sites*, edited by Linnea Wren, Cynthia Kristan-Graham, Travis Nygard, and Kaylee Spencer, pp. 28-64. University of Florida Press, Gainesville.

von Winning, Hasso

1985 *Two Maya Monuments in Yucatan: The Palace of the Stuccoes at Acanceh and the Temple of the Owls at Chichen Itza.* Frederick Webb Hodge Anniversary Publication Fund 12. Southwest Museum, Los Angeles.

Washburn, Dorothy, and Sophia Fast

2018 Ritual Songs of the Cora of West Mexico and the Hopi of the American Southwest: Shared Ideas Related to Maize Agriculture. *Journal of the Southwest* 60(1):74-81.

Weeks, John M., and Nuria Matarredona Desantes, eds.

2015 Chichén Itzá, Yucatán, México: Sylvanus G. Morley 1946. BAR International Series 2718. British Archaeological Reports, Oxford.

Willard, T.A.

1926 The City of the Sacred Well. The Century Co., New York.

Wren, Linnea H., and Peter Schmidt

1991 Elite Interaction during the Terminal Classic Period: New Evidence from Chichen Itza. In *Classic Maya Political History: Hieroglyphic and Archaeological Evidence*, edited by T. Patrick Culbert, pp. 199-225. Cambridge University Press, Cambridge.

Wright Carr, David Charles

2005 Zidada Hyadi: el venerado padre Sol en la Parroquia de Ixmiquilpan, Hidalgo. Arqueología Mexicana 13(73):38-45.