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Reconfiguring Maya Urbanism at the Transition to the Postclassic: Reimagining Teotihuacan at Chichen Itza

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In this paper, we address how materiality informs us of the kinds of strategies employed and decisions made in particular historical circumstances of extreme duress. In particular, we focus on how some Maya of the collapse period utilized their collective memory and imagination of the great Classic period city of Teotihuacan to recreate their social, economic, political, and ideological realities to confront the social and environmental challenges of the Classic period Maya collapse at Chichen Itza. We propose that there is a way of explaining the central Mexican 'flavor' of material and visual culture at Chichen Itza by way of envisioning the Maya as active agents in the adoption of ideas crystalized at Teotihuacan centuries earlier. This model centers around changes in the conception of the paradisiacal realm of Flower World undertaken at this Early Classic central Mexican city, most likely as it was in the midst of becoming the large state it is well known for. Flower World is a place of origin and ancestors, closely tied to the sun and concepts of heat and brilliance. The concept of Flower World is quite ancient and extends well back into the Preclassic period. However, a fundamental change in the conception of Flower World occurred towards the beginning of the Early Classic period at Teotihuacan, when this paradisiacal realm became merged with the emerging warrior cult established at this central Mexican city. We suggest that this war cult at Teotihuacan was the origin of the one eventually inherited by the Aztec nearly a millennium later. It centered around the concept that warriors who died in battle, ostensibly in service of the state, would go to a solar realm as beautiful fiery birds and butterflies who sipped the nectar of flowers. The rulers at Chichen Itza adopted this model, leading to important similarities in monumental spaces between this site and earlier Teotihuacan, in particular between the Great Terrace and the Ciudadela respectively.

En este capítulo hablamos de cómo el mundo material puede informarnos de los tipos de estrategias usadas y la toma de decisiones en circunstancias históricas particulares bajo muchas estrés. En particular, enfocamos en el hecho de cómo algunos mayas del periodo de colapso utilizaron su memoria colectiva e imaginación de la ciudad de Teotihuacan para recrear sus realidades sociales, económicos, políticos e ideológicos para enfrentar los desafíos del colapso en Chichén Itzá. Proponemos que hay una manera de explicar el 'sabor' del centro de México de la cultura material y visual en Chichén Itzá a través de ver los mayas como agentes activos en el proceso de adoptar la ideas que formaban en Teotihuacan siglos atrás. Este modelo se centra en los cambios en las ideas de en Mundo Florido, un lugar de paraíso, en Teotihuacan mismo cuando estaba convirtiendo en un estado. El Mundo Florido es un lugar de orígenes y ancestros muy ligado al sol y conceptos de calor y brillantez. En concepto del Mundo Florido es muy antiguo y extiende hacia el periodo Preclásico. Sin embargo, un cambio fundamental pasó en el Mundo Florido a los principios del Clásico Temprano en Teotihuacan cuando este paraíso fue mezclado con ideas de un culto de guerreros que fue desarrollado en esa ciudad en esta época. Argumentamos que este culto es el que fue heredado por los aztecas casi un milenio después. Se centró en la idea de que los guerreros que murieron en batalla, en el servicio del estado, irían a un reino solar convertidos en pájaros y mariposas que tomaron el néctar de las flores. Los gobernantes de Chichén Itzá adoptaron este modelo, que significaba similitudes en arquitectura publica entre los dos sitios, en particular entre la Gran Nivelación de Chichén Itzá y la Ciudadela de Teotihuacan.

Studying past human cognition from a material perspective is challenging (Stanton, 2004; Mithen, 1996). On the one hand, using the kinds of biological proxies for cognition available to researchers is problematic. While the emergence of the more complex behaviors (e.g., art, writing, technology) in human evolution is one of the fundamental questions in anthropology, understanding how brains evolved over time has been limited to simple morphological characteristics such as cranial capacity and general form. These are very crude data that do not approximate the incredible complexities of neural networks that are difficult to study even when researchers have access to living brains. Given the lack of correlation between brain size and intelligence, we must be careful how we use these data to discuss broad patterns of cognitive changes in the deep past.

On the other hand, we must also be careful using material culture data that show us what humans were capable cognitively in the past (see Gibson, 1996; Renfrew, 1996; Zubrow, 1994). For example, while the presence of complex art at Upper Paleolithic sites shows that the people who lived at places like Altamira, Spain, and Nawarla Gabarnmung, Australia were certainly cognitively capable of creating such art, the absence of art in other places might be due to a host of other reasons that have nothing to do with cognition at all; ranging from formation processes and conditions of preservation to the simple fact that some other people may not have consciously chosen to create such art. Donald's (1993; see also Kuhn and Sarther, 2000; Thomas, 2000, pp. 148-149; van der Leeuw, 1994) discussion of 'latent cognitive capacity' suggests that we should not consider the relationship between material culture and cognition to be one-to-one. As Delbrück (1986) notes, if cognitive universals exist they must entail how the brain

works rather than in what it achieves.

In this paper, we do not attempt to think about cognition from this kind of material approach, but to address how materiality informs us of the kinds of strategies employed and decisions made in particular historical circumstances of extreme duress. In particular, we focus on how some Maya of the collapse period utilized their collective memory and imagination of the great Classic period city of Teotihuacan to recreate their social, economic, political, and ideological realities to confront the social and environmental challenges of the Classic period Maya collapse at Chichen Itza. While the various populations that migrated 'out of Eurasia' certainly had their mental packages to understand the world when they arrived to the Americas (and these packages had a great impact on later cultural developments such as shamanism and the concept of animal spirit soul companions [Houston and Stuart, 1989]), the social context of the Maya collapse was a specific historic period that, like all others, needs to be understood on its own terms as a temporal and regional space subject to the particularities of the intersectional relationships that existed then and there.

A Brief Outline of a Teotihuacan Version of Flower World at Chichen Itza

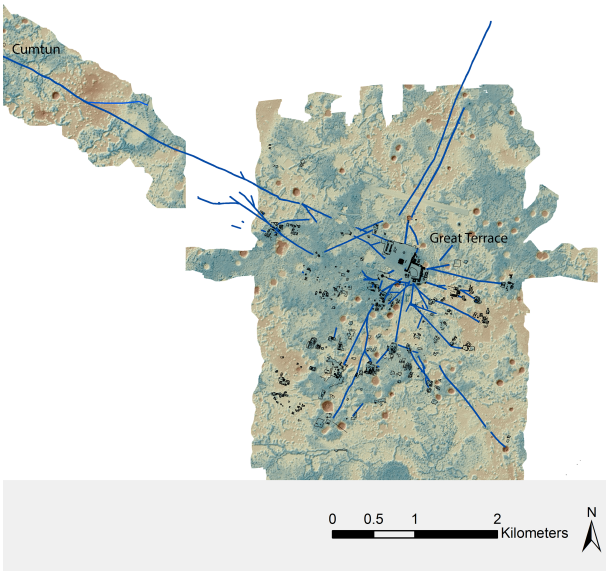
Given the space constraints, we will only offer a brief outline of our argument here. A more thorough treatment of the topic is currently being worked through for publication elsewhere (Stanton et al., n.d.a, n.d.b). Chichen Itza has been an enigma for researchers since the first research was conducted there by the Carnegie Institute of Washington archaeologists in the early part of the twentieth century (Morley, 1926). In particular, the central Mexican style architecture and iconography has caused a good degree of consternation. Once proposed to be due to a Toltec invasion (e.g., Thompson, 1941; Tozzer, 1957), Maya archaeologists working in Yucatan have now rejected the invasion hypothesis (Taube et al, 2020). New dating efforts have placed the founding of Chichen Itza as an urban center during the tail end of the Classic (Braswell and Peniche May, 2012; Cobos, 2016; Taube et al., 2020), but an adequate alternative model to the Toltec invasion has yet to be advanced.

We propose that there is a way of explaining the central Mexican 'flavor' of material and visual culture at Chichen Itza by way of envisioning the Maya as active agents in the adoption of ideas crystalized at Teotihuacan centuries earlier. This model centers around changes in the conception of the paradisiacal realm of Flower World undertaken at this Early Classic central Mexican city, most likely as it was in the midst of becoming the large state it is well known for. First identified by Jane Hill (1992), Flower World is a place of origin and ancestors, closely tied to the sun and concepts of heat and brilliance. The concept of Flower World is quite ancient and extends well back into the Preclassic period (Taube, 2004, 2005, 2006, 2010, 2020). However, a fundamental change in the conception of Flower World occurred towards the beginning of the Early Classic period at Teotihuacan, when this paradisiacal realm became merged with the emerging warrior cult established at this central Mexican city (Taube, 1992, 2004). We suggest that this war cult at Teotihuacan was the origin of the one eventually inherited by the Aztec nearly a millennium later. It centered around the concept that warriors who died in battle, ostensibly in service of the state, would go to a solar realm as beautiful fiery birds and butterflies who sipped the nectar of flowers (Headrick, 2003; Hill, 1992; Taube, 2004, 2006, 2020).

We argue that for the Aztecs, placing the warrior in a central position in rituals for cosmic wellbeing, celebrating their work as companions of the sun in its daily journey and whose hearts engendered solar movement in sacrificial rites, functioned to do several things to make the Aztec

Figure 21.1.

DEM/Hillshade image of Chichen Itza generated from lidar data flown in 2014 and 2017 with the current INAH-map of the site structures superimposed.



state successful. First, along with the increased level of social mobility allowed for successful warriors, elevating the role of the warrior in state ideology aided in to "buy" into the state structure by a critical segment of society. Second, as argued by Headrick (2003), the promise of paradise served to motivate warriors to put their lives at risk, adding a paradisiacal afterlife to the tangible gains in life afforded warriors by the state. Along with Headrick, we see the origin of this system at Teotihuacan, with Early Postclassic sites such as Chichen Itza and Tula bridging the temporal gap between the Aztec system and its Early Classic ancestor (Stanton et al., n.d.a, n.d.b). Thus, for us, understanding the Central Mexican 'influence' at Chichen Itza is much less about understanding Tula (although we do believe that there were profound links between these two cities), but more about how Chichen Itza, Tula, and contemporary communities such as El Tajín, Cacaxtla, Teotenango, Xochicalco, and Las Higueras reinvented the ideas concerning sun worship and the warrior cult at Teotihuacan, ideas that would eventually be further reworked at Tenochtitlan (see Taube, 2015).

The question is why the Maya at the turn to the Postclassic period would eschew the political and ideological structures that had been in place for centuries. We believe that the answer to this question lies in the dynamics of the collapse period. Regardless of the causes of the collapse (see Aimers, 2007; Webster, 2002), the end of the Classic period was a time of great social and political turmoil. We suggest that this prolonged crisis in Maya society opened up the door for new models to be considered, and that some Maya in the northern lowlands embraced the Teotihuacan model of political, social, economic organization as a legendary example of how to create wealth and power that both supported quite substantial inequalities and some degree of social mobility that allowed critical actors essential to the success of the state to thrive. In short, the collapse period opened up the door for change, and some Maya, much like some later European societies did with Rome and its perceived institutions, looked to the past to reimagine and recreate the structures and success at they envisioned at the ancient city of Teotihuacan.

Flower World at Chichen Itza

So how did Chichen Itza attempt to re-envision Teotihuacan? Here we focus on certain critical aspects, in particular the evidence for the adoption of solar worship in the built landscape. Although much has been made of the feathered serpent at Chichen Itza (López Austin and López Luján, 1999, 2000; Ringle and Bey, 2009; Ringle et al., 1998), we believe that the central element of the ideological narrative in the state art at Chichen Itza surrounds the sun and its daily journey. The feathered serpent is a critical part

of the narrative, but ultimately it is the sun which is central.

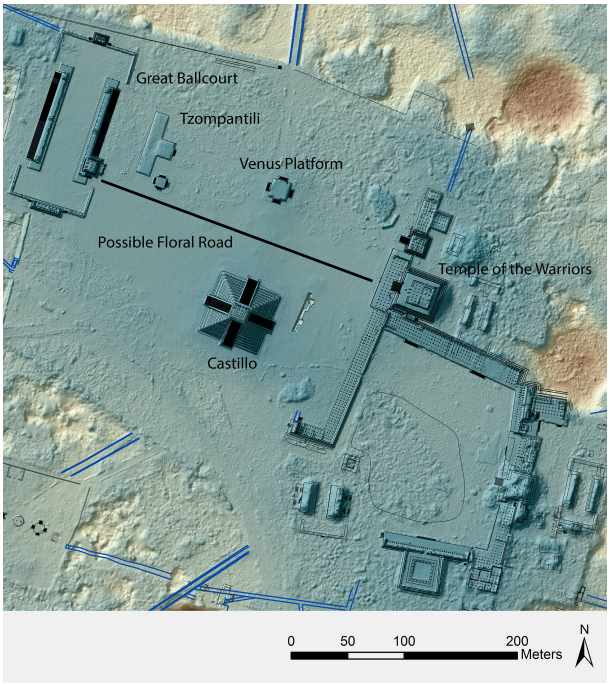
Despite the chronological legacy of 'Old' versus 'New' Chichen, the Great Terrace is undoubtedly the ideological center of the city (Stanton et al., n.d.b; Taube et al., 2020). The causeway system not only converges on the Great Terrace (Figure 21.1), but it appears to do so using foundational principles of dividing the city into four wards, as was described for the city in the Chilam Balam de Chumayel (Roys, 1933) and which can be found in other cities such as Tenochtitlan, Izamal, and Mayapan (Brown, 1999; Matos Moctezuma, 1988; Roys, 1957). Further, de Anda and his colleagues (2019) make a cogent argument that the Castillo was the focal point for a quadripartite cosmogram with four cenotes (Sacred Cenote, Cenote Xtoloc, Cenote Holtun, and Cenote Xkanjuyum) delimiting the four quarters.

Just as important as the Castillo and its relationship to the Sacred Cenote is via Sacbe 1, or possibly even more important, is the east-west axis of the Great Terrace, consisting of the Temple of the Warriors and the Great Ballcourt among other important, but smaller structures (Figure 21.2). We argue that this axis commemorates the sun's journey through the sky, accompanied by the souls of sacred warriors whose work and sacrifice engendered its daily cycle. Further, this narrative was more broadly immersed in the context of Flower World and we suggest that this axis reflects an attempt by the people of Chichen Itza to reimagine the Ciudadela at Teotihuacan.

As noted by Šprajc and Sánchez Nava (2013:48; Sánchez Nava and Šprajc, 2015, pp. 130-136; see also Galindo Trejo et al., 2001; Milbrath ,1988, 1999, pp. 68; Ringle, 2009, pp. 16, 19), the line of sight of the centerline of the Temple of the Warriors to the staircase leading up to the Upper Temple of the Jaguars has a solar association; with sunset alignments falling on May 13th and August 1st (two dates separated by 4 periods of 20 days). This

Figure 21.2.

DEM/Hillshade image of the Great Terrace of Chichen Itza generated from lidar data flown in 2014 and 2017 with the current INAH-map of the site structures superimposed. Note the alignment of the Temple of the warriors to the stairway of the Upper Temple of the Jaguars on the south side of the Great Ballcourt.



alignment is marked by a narrow flagstone walkway that leads away from the Atlantean throne on the Temple of the Warriors, straight towards the staircase leading up to the Upper Temple of the Jaguars, where it is also clearly visible (Figure 21.3). While this walkway does not continue across the plaza today, the Great Terrace has been heavily disturbed, especially in historic times then the highway ran past the Castillo.

Interestingly, the serpents at the Temple of the Warriors descend, while those on the balustrades on the Upper Temple of the Jaguars ascend. This arrangement may indicate that the walkway itself was the Feathered Serpent as the road of the sun, which was a widespread convention

Figure 21.3.

Photos of the possible floral around between the Temple of the Warriors (right) and the Upper Temple of the Jaguars (left).

in Late Postclassic Mesoamerica, including the Huastec and Aztec (Taube, 2015). This idea 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 by Venus, the Morning Star, a large plumed serpent called Mukta ch'on (Vogt, 1969, pp. 89)." This contemporary Tzotzil account pertains directly to highland Mexican sources of Quetzalcoatl being summoned to the east by the sun as well as warrior souls following the sun on its eastern dawn appearance, and it is likely no coincidence that the line of sight between the Temple of the Warriors and Upper Temple of the Jaguars passes the Venus platform. A clear example of this solar road is found on the Aztec Stuttgart Statuette which depicts Tlahuizcalpantecuhtli "Lord of Dawn" as a skeletal Toltec warrior (Coltman 2009). On the back of Tlahuizcalpantecuhtli is a plumed serpent carrying a solar disk with Tonatiuh, the sun god, in the center. A carved bone from Tomb 7 from Monte Albán provides a strikingly similar example (Taube, 2015, fig. 5.6b) and several monuments from the Cotzumalhuapa region provide additional support (Chinchilla Mazariegos, 1998). Further, one of the mural fragments from the Temple of the Warriors depicts a scene of human heart sacrifice, with the victim on a sacrificial stone. Directly below his body and ascending to the upper part of the scene is a green Quetzalcoatl serpent, clearly denoting this being as the symbolic sacrificial "road" of the slain captive to follow the sun's path (see Morris et al., 1931).

The arrangement of architecture from the Temple of the Warriors, including the Venus, Tzompantli, and Eagle and Jaguar platforms is very similar to that of Tula Grande, and perhaps Tula Chico (Mastache and Cobean. 1989, p. 64, 2000, 2006; Matos Moctezuma, 1974). Importantly, it is also very much like the layout of the ceremonial precinct of Tenochtitlan with the Temple Mayor taking the place of the Temple of the Warriors. Besides being on the eastern side of the plazas, both of these structures have trapezoidal sacrificial stones that would have used to extract the hearts of warriors to engender the sun's movement at dawn, rising from the underworld; both structures also have reclining Chak Mool figures also used for human heart sacrifice. On the 1524 Nuremburg map of Tenochtitlan the sun is clearly shown in an important alignment rising between the two temples on the Templo Mayor (Mundy, 1998:18). Similarly,

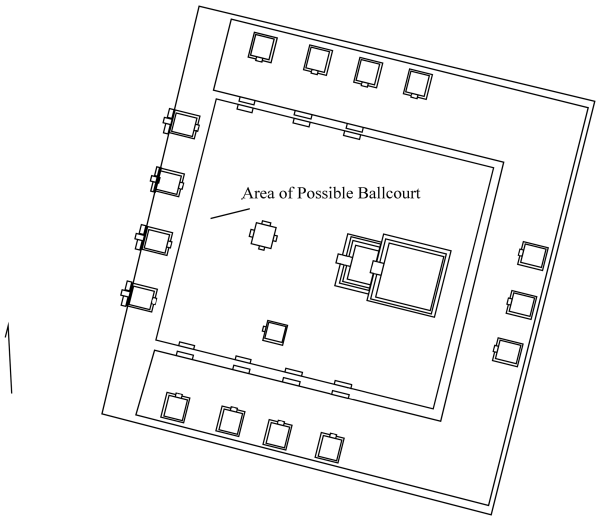
on the Codex Fejérváry-Mayer (Folio 1), the rising sun is found on the upper portion of the cosmic map; up being east in indigenous thought. This is the same position as the Templo Mayor and in the Fejérváry-Mayer the sun appears to be rising along the centerline of a temple.

For the Aztec, the tzitzimime or death goddesses of darkness, the night, and underworld are found opposite the sun in the west, waiting, as Mundy (1998, pp. 22) puts it, "to devour the sun." This would place the tzitzimimel in the place of the ballcourt on Tenochtitlan, exactly where the Great Ballcourt is in the Great Terrace layout at Chichen Itza. The ballgame appears to be essential to this narrative of the sun, as the place of the setting sun (Cohodas, 1978, 1991). While the east is a linked to maleness and heat, the west appears to be associated with a female aspect, cold, water, and death (see Alcina Franch, 1997, 1999); the west being the place that the sun entered the underworld. At Chichen Itza female skeletal goddesses are also associated with the Lower Temple of the Jaguars, suggesting that this association predates the Aztec. Ballcourts were certainly associated with water and springs being entrances to the underworld, suggesting that this potential association with the sun setting into the underworld should be given more serious consideration (Taube, 2018). That the Great Ballcourt was indeed flooded is attested by the multiple large drains located around its edges and we would not be surprised if the entire Great Terrace was intentionally flooded on occasion with massive beams at its major entrances. Finally, the position of the Tzompantli and warrior imagery at Tenochtitlan (e.g., López Luján and González López, 2014) has strong parallels with Chichen Itza, indicating that at both cities, just like the placement of Xiuhtecuhtli as a Toltec warrior in the center of page 1 of the Fejérváry-Mayer, the warrior took center stage in the narrative of the sun's journey.

Fundamentally, we think that the archetype for this plan can be traced back to Teotihuacan, specifically to the Ciudadela. The Feathered Serpent Pyramid, located in the east is clearly associated with warfare and warriors, just as the Temple of the Warriors and the Templo Mayor. The sacrificial burial of warriors underneath the temple (Sugiyama, 1989), the presence of the War Serpent on the façade (Taube, 1992), and the location of production of theater censers associated with warriors and their transformation into butterflies emerging from fiery funeral bundles within the Ciudadela (see Múnera Bermudez, 1985; Taube, 2000) all attest to this association. Further, the link to solar movement comes from various sources. First, as Laporte (1992, pp. 327) noted, the Feathered Serpent Temple appears to form part of an E-Group complex, an architectural form associated with solar movement in the eastern lowlands of Mesoamerica (in particular the Maya area) as early as the Middle Preclassic period (Freidel et al., 2017). In Laporte's reading of the Ciudadela, the Feathered

Figure 21.4.

Line drawing of the Ciudadela at Teotihuacan (drawing by Travis W. Stanton).



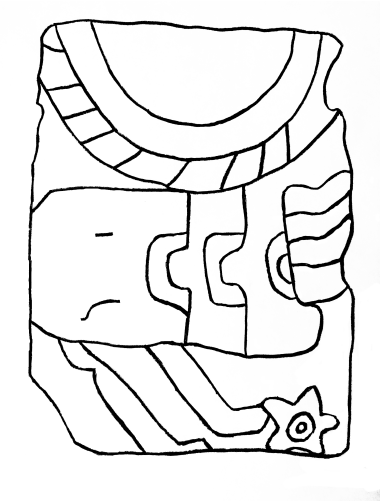
Serpent Temple takes the place of radial structure in the E-Group plan (Figure 21.4).To the east of this temple are three smaller temples in linear arrangement much like known Maya examples. Second, the Aztec remembered the Feathered Serpent Pyramid as associated with the sun, where it is depicted on the San Francisco Mazapan map of Teotihuacan (Arreola 1922). Dated to 1560, this map clearly shows the Feathered Serpent Pyramid with a "European-style sun disk, complete with rays and frontal face" (Boone, 2000, pp. 373). Arreola (1922, pp. 555; English translation by Boone, 2000, pp. 373) translated the associated Nahuatl text as "place of burials in honor of the sun" suggesting that Late Postclassic peoples may have not only known about the sacrificed warriors underneath the pyramid, but that they remembered this structure as a place associated with a celestial solar paradise where the souls of warriors who died in battle reside in the afterlife. Third, a monument found in a secondary context, but thought to be from the pre-temple of the Feathered Serpent Temple, has a sun disk carried on back of the plumed serpent as the Road of Flowers (Gazzola, 2017, pp. 44; Figure 21.5).

Recently, Julie Gazzola (2017, pp. 43-44) has reported evidence for a large ballcourt on the western side of the Ciudadela, hidden beneath the last floor surface; which importantly floods during the rainy season, creating a primordial sea within the confines of the complex. If proven to be a ballcourt, this find would provide a very strong link to the plans at Chichen Itza, Tenochtitlan, and Tula. Of equal interest is the finding of a spectacular tunnel along the east-west axis of the Ciudadela (Gómez Chávez 2017). Leading from the direction of the possible ballcourt to its terminus in the center of the Pyramid of the Feathered Serpent, this tunnel represents the underworld, that in the words of Gómez Chávez (2017, pp. 48), "where, just as on earth, there were rivers, lake, mountains, and a celestial vault and night sun that crossed its winding path from sunset to sunrise." Among the Chorti, this idea of the night sun is still present in contemporary legend:

> The old people used to tell that the world here we live, they said that under the – world which we live on, farther down, they say that there is just water. And they say that under the – water, that there is another – place […] They say that when the sun sets here, and the night grows dark, they say that in that place […] there it is growing light, and things are becoming visible. And here it is dark. And they say that when the sun passes through that place, over the heads of those men, that it – is stronger – its heat." (Fought, 1972, pp. 371)

Figure 21.5.

Line drawing of a monument fragment.



Note.Line drawing of a monument fragment found in a secondary context, but thought to be from the pre-temple of the Feathered Serpent Temple at Teotihuacan. This fragment has a sun disk carried on back of the plumed serpent as the Road of Flowers (drawn by Travis W. Stanton from photo in Gazzola 2017:44).

While the excavations and analyses of the overwhelming amount of materials have still to be completed, much of the material culture appears to relate to the watery underworld (e.g., shell) and the sun (e.g., pyrite and slate mirrors) (Gómez Chávez, 2017, pp. 50; see also Taube [2000] for the solar associations of the disks). Impressively, part of the south antechamber was covered by a powder mix of pyrite, hematite, and magnetite that in torchlight would have made it look like the night sky (Gómez Chávez, 2017, pp. 51-52). We suggest that, if the possible ballcourt can be confirmed, the tunnel represents the road of the night sun after it entered the waters of the underworld at the ballcourt, similar to the arrangement at Chichen Itza. At the end of the tunnel there was a sumptuous offering surrounding several greenstone figures that leaned back to gaze at the spot the sun would rise out of the world, ascending to the top of the Feathered Serpent Pyramid to be born again through the sacrifice and work of warriors.

Final Thoughts

In this paper we suggest that the Maya of Chichen Itza attempted to reimagine Teotihuacan. This re-imagination was not just ideological, but we suggest elsewhere that it had strong economic and political implications that reflect the decisions of some Maya during the collapse period to abandon the king and court centric model of the collapse period (Stanton et al. n.d.a, n.d.b). However, the ideological model revolved around a Teotihuacano reworking of Flower World during the first centuries A.D., merging this paradise with the warrior cult, whereby the souls of fallen and sacrificed warriors engendered the sun's journey, carried by the feathered serpent along a celestial flower road. The sun then entered the watery underworld where the ballgame was played to continue its journey as the night sun back to the mountain of the eastern solar paradise. That the Maya were familiar with this foreign take on old ideas during the Classic period is clear. For example, at El Diablo, Guatemala, an Early Classic temple, aligned to a prominent cave to the east that the sun rises over at the summer solstice, contained a tomb with Teotihuacanoid ceramics, severed heads facing the direction of the rising sun, and iconographic depictions of the Jaguar God of the Underworld (Houston et al., 2015; Newman et al., 2015), thought to be the embodiment of the Maya night sun (Stuart, 1998, pp. 408) and prominent on several witz masks at Chichen Itza itself. The memory of Teotihuacan, its organization, its wealth, the way it restructured both the cosmos and human relationships among the Maya left a profound impact on generations centuries removed from the feats of the great Central Mexican metropolis. This memory was used to reimagine the great Tollan in ways that were very historically specific to Mesoamerica and Yucatan in particular during the transition to the Early Postclassic period. Yet clearly, this model worked for a time and Chichen Itza became a historically successful place that was even remembered by the Aztec (Taube et al., 2020).

Acknowledgements

We thank the Consejo de Arqueología of the Instituto Nacional de Antropología e Historia for granting the permits to conduct this research; all data are cultural patrimony of Mexico. This research was generously supported by the Instituto Nacional de Antropología e Historia, the Selz Foundation, and Jerry Murdock.

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