

Author's Introduction

The publishers have asked me to provide some background on the works in this collection. In response to my question as to how much background to provide, they said why not start at the beginning.

As a child, strange and ancient things enthralled me, such as rocks, fossils, hand-blown old bottles, or early varieties of barbed wire from nineteenth-century California. About age five I realized that I was going to die, and I thought this a pretty crappy deal. However, after a week or so of mulling, I was happy to acknowledge that dinosaurs are indeed dead but remain as lovely fossils and doing just fine in the long run. During my earliest years, my father was a chemistry professor at the University of Chicago and we lived on Dorchester Street, just a few blocks from campus. At about age three I was fascinated by the wonderful, ancient objects on display at the Oriental Institute, and I held this interest when we moved out west later the same year to Portola Valley, California. In the early 1960s, there was a major exhibition in San Francisco entitled "Treasures of Tutankhamun," displaying some of the most spectacular objects found in King Tut's tomb. About halfway through the exhibit I became agitated to such a degree that my mother took me outside to understand why I was crying, and I burst out with "They already found it all!" Thankfully, soon after our excursion to the Tutankhamun exhibition, my British aunt Marie Pepper stayed with us after a stint of volunteer work for the Red Cross in Yucatan. During her time in the Bay Area, she kindly gave me her guidebooks of major Maya sites in Mexico, including Palenque, Uxmal, and Tulum, to read while we were lying on the beach at San Gregorio. That was really it for me concerning future endeavors, and thus at about five I wanted to devote my life to the study

of the ancient and contemporary cultures of Mesoamerica.

Although my central focus of research concerns this cultural zone, I also have a deep interest in native traditions of the American Southwest. This may have come about because my mother Mary was a member of the Manhattan Project near Los Alamos, New Mexico, during World War II. Partly because of the time that my mother spent there, my maternal grandmother, Alice Wesche, moved to Santa Fe after retiring as a graphic illustrator for Sears in Chicago. While in Santa Fe, she worked as an illustrator for *El Palacio*, a quarterly journal of the Museum of New Mexico. My grandmother participated in other projects, including ethnographic fieldwork with the anthropologist Benjamin Colby in the Nebaj region of Guatemala. Although her primary role was as an illustrator, she also published a piece concerning Ixil Maya New Year ceremonies in *El Palacio* (Wesche 1967). After working for the journal for many years, my grandmother moved to the Amerind Foundation near Dragoon, Arizona, where she served as the primary artist and illustrator for the Casas Grandes Project. I spent several summers at the Amerind Foundation and met project director Charles Di Peso many times. I recall that his house had a pool at the back nestled into a granite outcrop and that he had macaws, not surprising considering the importance of these birds not only at Casas Grandes (now commonly referred to as Paquime) but among Puebloan peoples to this day. Unlike many other Southwestern researchers, Di Peso embraced the concept of direct and sustained contact between Paquime and the peoples of ancient Mesoamerica.

Alice Wesche was a very skilled illustrator—especially with line drawings—and while visiting her in Santa Fe in 1976, she taught me nuances with using pens, such as putting a heavier and bolder line for forms appearing further in the background to give a perception of depth, a technique I use in my published illustrations, especially for bas-relief sculpture. As it happens, virtually all of the images in my publications are my own line drawings, and I find that it is extremely important in iconographic and epigraphic research to draw the images firsthand, as this is by far the best way to focus and engage with very complex imagery, much like actually reading a newspaper page versus simply glancing at it. For that reason, it is no coincidence that the preeminent Maya epigraphers create their own glyph drawings of meticulous caliber, as is also true for their images of Maya iconography. In my view, this not only demonstrates technical virtuosity but also respect for the exquisite cultural material at hand.

Along with my mother Mary, my aunt Marie, and my grandmother Alice, my father was also very supportive of my interest in archaeology. Henry (or Heinrich) Taube was born in Neudorf, Saskatchewan, where his parents were hard-working farmers who escaped from the Ukraine during the Russian Revolution. According to one account of my father's history, his parents were virtually illiterate and went with a group of ethnically German Lutherans from the eastern European steppes to the similar but surely safer prairies of central Canada (Stevenson 1986:75). They spoke a form of Plattdeutsch, or "Low German," in which our family name is Doova, which refers to both pigeons and doves (I prefer the dove, thank you). When my father went to school in Saskatchewan, it was important that the kids declare that their background was High German, hence our current patronym of Taube rather than Doova. As kids, my brother Rick and I spent a summer with uncle Albert in Saskatchewan, and I still miss the fresh eggs (Figure 1).

Rather than wanting to be a farmer, my father devoted his efforts to schooling, with his best option being to secure a bachelor's degree in English at the University of Saskatchewan so that he could become a minister. However, he was immediately concerned that the line



Figure 1. Karl and Albert Taube at the farm in southern Saskatchewan, circa 1963 (photo: Marie Pepper).

for majoring in English was too long. Another student kindly pointed out that the line for chemistry was much shorter, and my father made the wise choice to sign up for this instead. He went on to receive the Nobel in 1983 for his research in inorganic chemistry and catalytics (Ford 2005). Serendipity happens all the time with academic research, such as reading a good piece or reencountering a well-known artifact at just the right time for another source of understanding. These sublime moments of lucky insight and direction are something to acknowledge, be grateful for, and enjoy.

During my undergraduate years, I attended two universities, the first being Stanford in the area where I was raised. While there, I had the good fortune to study with Professor James Fox, an expert linguist with a deep understanding of Maya languages and hieroglyphic writing. Although I learned a great deal from Professor Fox, I eventually realized that it would be good for me to find a campus farther from home. While attending UC Berkeley, I took several courses concerning the ancient Maya with professor John Graham, who for some years had been focusing on the remarkable early stone monuments of the Guatemalan piedmont, including sculptures from Takalik Abaj and La Democracia. For one class we had the good fortune to hear Robert Heizer discussing his field experiences excavating at La Venta in 1955, where crew members were occasionally locked up in the community jail, although we never heard why. A very special academic mentor of mine at UC Berkeley was the late professor Alan Dundes, a preeminent expert in folklore studies. He encouraged me to pursue folklore through an archaeological perspective, and due to the richness of ancient Mesoamerican art and writing as well as contemporary Mesoamerican ritual and belief, this has proved to be an excellent approach, beginning in my undergraduate years and continuing to the present.

While attending Stanford in the mid 1970s, I came across an impressive volume entitled *The Maya Scribe and His World*, by Michael D. Coe (1973). His profound insights into Maya iconography were truly inspirational. Before this, my closest access to experts exploring the exuberant iconography was J. Eric S. Thompson, a great scholar, though sadly he mistook the

cranial fire or smoke of K'awiil for vegetal growth and also suggested the translation "Iguana House" for the name of Itzamnaaj, associating the wizened deity with a wide range of unrelated reptilian imagery (Thompson 1970b:214-218, 226). When I first opened *Maya Scribe* in 1976, I realized that Mike Coe had "eyes" and presented whole new vistas in approaching this ancient and very alien complex, especially the dark and menacing underworld. In 1980, I was fortunate to begin graduate school at Yale University under Mike's tutelage. Although Professor Mary Miller was still a graduate student when I first came to Yale, she also was an excellent mentor during my years there and always provided sound advice, beginning with the first time I met her, in front of my new graduate student dormitory. As it happened, two other graduate students who came to Yale in 1980, Stephen Houston and Louise Burkhart, pursue very productive careers in their respective fields in Mesoamerican studies. Steve and I became the best of friends and colleagues, as can be readily seen in the many works that we have coauthored over the years.

When we arrived at Yale in 1980, there were a number of academic suppositions that we needed to acknowledge. One of these, championed by the Yale art historian George Kubler, was that there was little continuity of meaning in ancient Mesoamerican art. Instead, what we faced were "disjunctions" between the obvious continuity of images and their meanings, which theoretically might have changed in profound ways. In addition, in contrast to the more holistic approach of Eric Thompson, contemporary Mesoamerican religion and belief were of little or no use for studying the ancient cultures of Mexico. According to Kubler (1961:14) documenting and studying the beliefs and practices of contemporaneous Maya peoples to interpret the more ancient past was only performing an "autopsy," and he further noted that such research would be just a "prolonged dissection of the corpse of a civilization." As it happens, Mike followed Thompson in acknowledging that Colonial and contemporary Mesoamerican culture is critically important in interpreting the more ancient past, including not only the Classic period but even the Formative times of the Olmec. For example, he pointed out that the odd, lumpy anklets seen on Tlatilco figurines are virtually identical to the cocoon leg pieces worn by contemporary Yaqui deer dancers (Coe 1965b:26), and as of yet I am not aware of a better interpretation. Another widely held belief we faced in the early 1980s is that unlike the rest of Mesoamerica or the ancient world, the Classic Maya had no concept of gods. This was championed by the great artist and epigrapher Tatiana Proskouriakoff (1965), who saw no deities or mythology in ancient Maya art (see also Marcus 1978).

In response to both the assertions of little cultural continuity and the lack of deities among the ancient Maya, I published *The Major Gods of Ancient Yucatan* (Taube 1992b), in which I traced back as far as I could the gods of the Late Postclassic codices to their Classic and even Late Preclassic origins. With the subsequent discovery of the mural chamber at Pinturas Sub-1A at San Bartolo, Guatemala, it is obvious that as with the rest of the ancient world, there was a rich body of Maya mythology concerning gods at a very early date (see Saturno et al. 2005; Taube et al. 2010).

In the 1980s there were a number of technological advancements that greatly benefited Maya epigraphic and iconographic studies. One basic tool was the Xerox machine, which allowed texts and images to be readily shared by personal contact or mail. Although photocopiers had already been around for some time, an especially important advancement was the ability to reduce or enlarge images, which allowed them to be easily drawn to the scale needed. Although this might seem minor today, there was virtually no other means to



Figure 2. The author at his rented house in San Juan de Dios, Quintana Roo, 1984 (photo: Luis Nevaer).

do this before digital scanning, and perhaps for this reason quality line drawings of texts and images did not start to be common in ancient Maya research until the 1980s. A very important source of data disseminated through xeroxing at this time was the collection of unpublished field drawings of Classic Maya monuments created and compiled by the late Ian Graham at the Peabody Museum at Harvard University. Along with the volumes of the *Corpus of Maya Hieroglyphic Inscriptions* published by the Peabody, Ian's field drawings remain an invaluable source of information to this day concerning Classic Maya writing and iconography.

Another important advance at this time was the development of rollout photography championed by Justin Kerr, a process that allowed Classic Maya cylinder vases to be photographed as a single image. I first met Justin and his wife Barbara at their home and studio in Manhattan in the early 1980s, and they were both extremely hospitable and generous with their rollout photographs. I returned that first day to New Haven with a good many glossy prints that I still own today. The first major corpus of Classic Maya vases photographed by Justin were the "Codex Style" ceramics, which being largely black on white were also readily photocopied. A major body of Justin's photographs of Codex Style ceramics appeared in *The Maya Book of the Dead* (Robicsek and Hales 1981). Published in the second year that I was at Yale, this collection of Late Classic Maya material profoundly influenced my research and the direction of my studies. Without a doubt, I would not have been able to muster the visual and epigraph evidence to identify the Classic Maya maize god in my 1985 paper (Chapter 1 of this volume) without this book and Justin's photographs.

During my time at Yale, I engaged in anthropological fieldwork in 1983 and 1984 in the remote community of San Juan de Dios in northern Quintana Roo, where I gradually became conversant in spoken Yukatek (Figure 2). Living in a rural Yukatek community for about

a year surrounded by tall forest wilds, or *ka'anal k'áax*, was a unique experience that I am most grateful for. About twice a month I made brief visits to Mérida, where I often enjoyed the kind hospitality of both Joann Andrews and Edward Kurjack, including even a stay at Joann's house where I dealt with hepatitis, and yet another time with a staph infection from a *comoyote* grub that died and decayed in my shoulder, leaving a dime-sized hole for a couple of months. Thanks in part to the kind support of Joann and Ed, I pursued almost a year of fruitful field observation with Yukatek Mayan speakers—a true experience of a lifetime.

Although I had hopes of recording a litany of folk tales and myths in a remote Yukatek-speaking community, I quickly found that it really doesn't work that way. It would be much like a foreigner to the United States asking a local about the narrative meaning in stories of the founding of New York or San Francisco. Probably not going to happen. Instead, comments about the world of spirits came out casually in daily conversation. Thus during one of my first days in the community, some of the local boys mentioned that on September 15 every year, giant feathered serpents, the *noh kaan*, emerge from the sacred lakes of Coba to create havoc where they fly. I thought "riiight, you betcha..." The same afternoon I asked their father about this tall tale, and he responded by asking whether we had the same problem in the United States. Independent ethnographic fieldwork by Harriet de Jong (1999:156-158) roughly ten years later describes in detail this serpent belief in Quintana Roo:

This animal is a huge snake. At a certain time of year it burrows into the ground, wings and feathers start to grow from its body and it becomes the Feathered Serpent, *Kukulcan*. On the fifteenth of September, it takes to the air and starts heading for the sea.

In her research, de Jong puts this into the broader perspective of the *helep* or "change" of wild animals, who transform into other species if the flying serpent's shadow should fall over them on September 15 and 16. According to de Jong, this causes local people a great deal of worry and fear, with many preferring to remain at home during this time. Although de Jong does not mention Coba as a source of such serpents, when I went there I was repeatedly asked if I was concerned about them, as they are regarded as a matter of great reverence in northern Quintana Roo. When I did go there with a San Juan family in 1984, there were burnt candles at the base of an ancient stela that they told me were dedicated to the god of the hunt (Figure 3). They also casually pointed out that Spanish moss hanging from nearby trees was called *utzo'otzel cháak* or the "hair of Chahk," which immediately brought to my mind the thick manes of bound hair seen in Classic images of the god of rain and lightning.

In another situation in San Juan, I was hiking on an old trail a good deal north of the town and came across an ancient site with well-preserved foundations of house walls and dry-stone border walls, or *koot* in Yukatek, along with a cave with pure and sweet water. On returning to town, I mentioned that there was a cave spring nearby, and there was much interest, especially on the part of a local *evangelico*. This neighbor of mine would regularly blast Christian-related music through a loudspeaker on what would be otherwise a quiet and peaceful night (or relatively so, because in remote rural villages there is no "white noise" and one continually hears dogs barking, roosters crowing, pigs squealing, and the random howler monkey). At one point I went to the evangelical's house to mention that his inspirational music was being played at 3:00 AM and was not conducive to sleep, and his gentle and completely affable response was to offer me a relaxing cup of coffee and Christian comics to read. At any rate, he expressed great interest in seeing the cave and so I took him there. Once

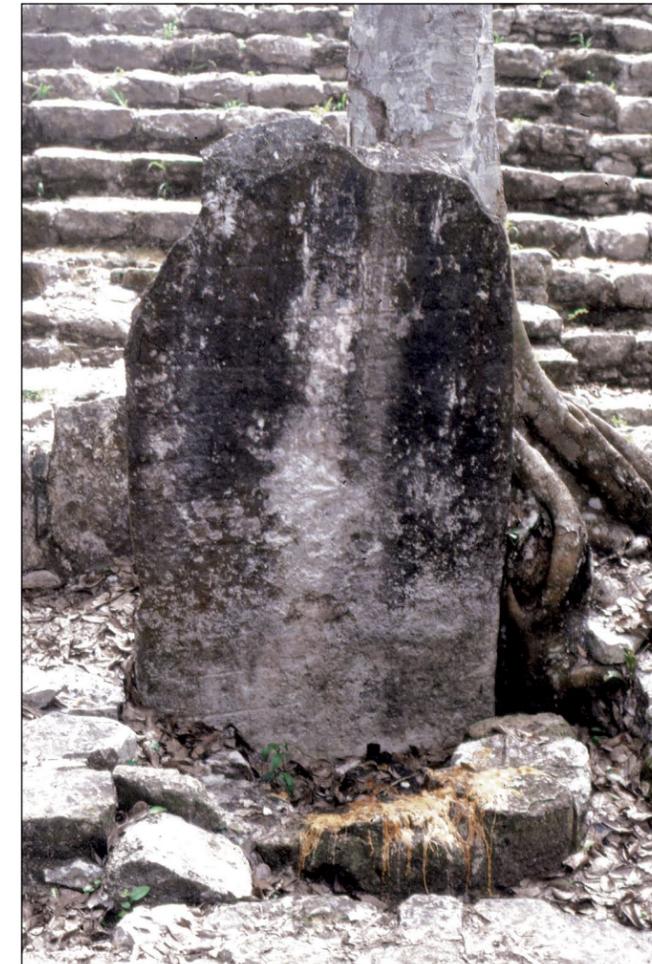


Figure 3. Stela with candle offerings for the god of the hunt at Coba, Quintana Roo, 1984 (photo: Karl Taube).

we descended by climbing down roots through the cave opening, he immediately started bathing with soap in the dark pool, despite the fact that its muddy bottom of decaying sticks, roots, leaves, and sharp rocks made it hardly inviting for a dip. It only occurred to me years later that he was probably polluting the water to make it unsuitable for Maya ritualists to use as *suhuy ha'* or "virgin water," central for the *ch'a' cháak* rainmaking ceremony and attendant offerings.

As far as I am aware, this ancient settlement north of San Juan de Dios has yet to be documented archaeologically, but thanks to casual conversations with locals during my year in San Juan, I did learn of sites that are now relatively well known. During my early stay in San Juan in 1983, there was a road crew putting down *sascab*, which is a form of degraded limestone used to create *caminos blancos* or "white roads" in rural areas in place of asphalt. A good many men on this crew were from San Juan and mentioned to me that near where they were quarrying there were ancient ruins. The road crew kindly took me out there and



Figure 4. The author at Naranjal, Quintana Roo, 1992.

showed me a most impressive Early Classic stepped vault at the town of Naranjal, which became the focus of an archaeological project directed by my colleague Scott Fedick and myself in 1993 (Figure 4) (see Fedick and Taube 1995). One afternoon, a woodcutter from north of K'antunilk'in visited the family that I ate with in San Juan and told us of ancient paintings (*úuchben tz'íib*) north of his town in the Yalahau savanna region. After visiting this area soon after, I realized that one structure had murals strikingly similar to those known for sites on the east coast of Quintana Roo, including Tulum and Tancah. In 1988, Tomás Gallareta Negrón and I engaged in an archaeological project documenting the two Late Postclassic plaza groups with murals from this region of the Yalahau area (Gallareta Negrón and Taube 2005). In addition, a number of people in San Juan originally from Yalcoba mentioned a cave north of Valladolid known as Dzibih Actun or Dzibih Chen, and although at that point I didn't get the chance to go there, I mentioned the place to Andrea Stone and she took it upon herself to follow up on this vague tip and actually visit the cave in 1986 (see Stone 1995a:74-86). Soon after, we returned there together, and while looking at the cave paintings I saw that some of the motifs featured the day name Ajaw atop swimming turtles, a theme that directly related to my research concerning turtles and the K'atun cycle published in my early study "A Prehispanic Maya Katun Wheel" (Taube 1988a) (Chapter 2 of this volume).

Aside from community daily life hanging around my rented place, the town's well, and the one local store, I spent many days following old paths through the forest. The locals considered this a pretty bad idea, as I could well meet *alux* forest spirits who would lead me astray and cause me to get lost and go crazy in the jungle. With local Maya walking such trails, I often went in front and when I chose the wrong path they would gently chide me with a nervous chuckle and *sa'atech?* or "Are you lost?" I also learned a good deal

about potentially harmful plants, such as *chéechem*, that although producing itching blisters like poison oak or sumac can be readily remedied by the sap of *chakah*, a softwood tree often referred to as *gumbo limbo* in the English-speaking Caribbean. My 1989 paper "A Classic Maya Entomological Observation" (Taube 1989a) (Chapter 6) concerns the bull-thorn acacia, or *subin* in Yukatek. It is based on too many painful attempts at cutting through this plant with a host of fire ants in the very sharp and hollow paired thorns—and angry wasps suddenly at face level as they emerge from their nests. Dating to roughly the seventh century AD, the Tepeu 1 vessel in Naranjo style discussed in the article is a very graphic depiction of this plant, including not only the spines but also a wasp nest at the top.

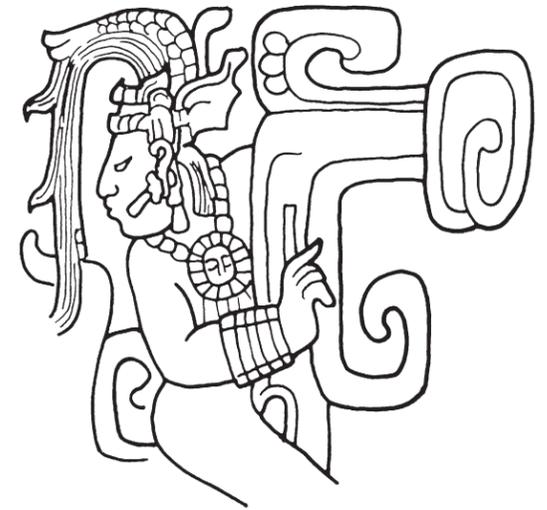


Figure 5. The Tonsured Maize God, Quirigua Stela H (drawing by author from Taube 1992b:Fig. 19c).

Arising out of my field work and academic studies was research that I first presented at the Fifth Palenque Round Table and published in the conference proceedings as "The Classic Maya Maize God: A Reappraisal" (Taube 1985) (Chapter 1). At the time, I considered this a reappraisal as many Maya specialists then regarded the maize deity as being entirely passé, partly through overdevelopment in Maya studies, including the popular volume *The Ancient Maya* by Sylvanus Griswold Morley, who gave this deity the odd and unfortunate name of Yum K'ax, meaning "Lord of the Forest," a concept antithetical to the deity's actual association with the carefully cultivated maize milpa, or *kool* in Yukatek. In this early paper, I noted that two forms of the maize god were present among the Classic Maya, one with a maize ear and foliation growing from the top of the head and the other having the entire cranium modified to resemble an ear of corn. The latter typically had the upper central portion of the brow shaved, creating two zones of hair, the top of the head alluding to the maize silk and the lower portion the embracing husk. Because of the shaved brow, I termed this being the Tonsured Maize God (Figure 5). In this work, I identified his nominal glyph, which typically has a number one before the face. Years later, David Stuart (2005:182) deciphered the name as Ixim, a widespread term for maize grain in Mayan languages (see also Zender 2014). When I was living at San Juan de Dios in the early 1980s, I was eating with a family while an infant idly played with maize grains on the floor. His mother gently but firmly told him *mun ba'axa yeteh Santo Iximi'*, meaning "Don't play with the spirit of corn."

In the late 1980s, after my Maya maize god study was published, the Red Temple at Cacaxtla was discovered, revealing remarkable murals flanking a broad stairway (see Brittenham 2015:145-182). The east wall mural features the Maya merchant deity facing a growing cacao tree and a maize plant with each ear of maize as the head of the Tonsured Maya God, even with maize grains above the horizontal band of hair (Figure 6a). Slightly later came a bowl from a royal burial at Calakmul featuring an incised image of the same head of the Tonsured Maize God atop a maize stalk, again identifying him as the god of corn



Figure 6. Portrayals of the maize god as an ear of corn in Late Classic Mesoamerica: (a) maize god as ear of corn, Cacaxtla (drawing by author from Taube 1992b:Fig. 19e); (b) maize deity emerging from growing maize plant appearing on Calakmul bowl (drawing by author after Carrasco Vargas 2000:19); (c–d) maize god heads with growing maize, detail of carved jade plaque from Nebaj (drawings by author after Smith and Kidder 1951:Fig. 59b).

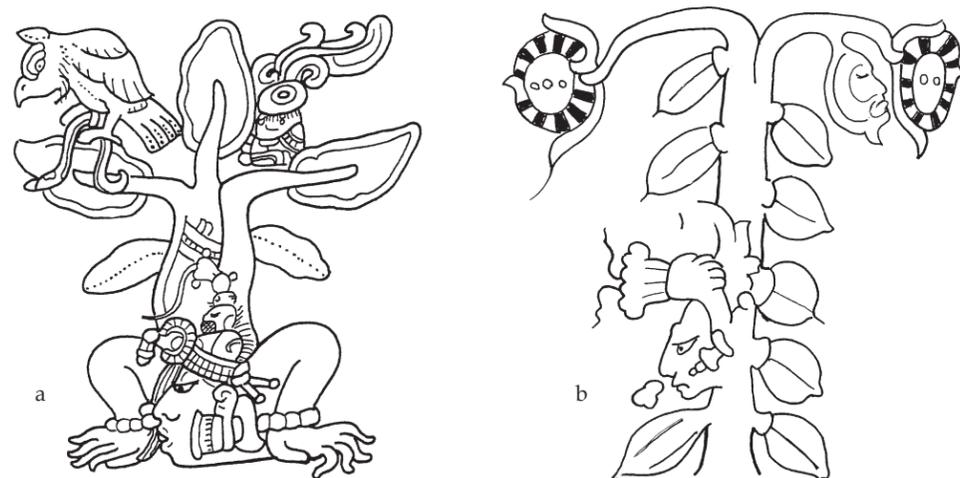


Figure 7. The Classic Maya maize god as a verdant tree: (a) Early Classic Maya portrayal of the maize deity as a cacao tree (drawing by author from Taube 2005b:Fig. 2f); (b) Late Classic depiction of the maize god on the trunk of a cacao tree (drawing by author from Taube 1985:Fig. 4c).

and sustenance (Figure 6b). This depiction is very similar to a pair of maize deities appearing on a massive jadeite plaque excavated at Nebaj, a site that also has many jadeite pendants of this deity (Figure 6c–d).

Whereas the foliated aspect of the maize deity alludes to green, growing corn, the Tonsured Maize God embodies the mature cob with its fertile seed. It is this form of the maize god that dominates Classic Maya iconography and myth (see Freidel et al. 1993), and in “The Classic Maya Maize God” I noted that he is an early version of Hun Hunahpu of the sixteenth-century K’ichean *Popol Vuh*, the father of the Hero Twins, who is decapitated in the underworld. Thus he appears frequently with the Hero Twins in Late Classic vessel scenes featuring him traveling through the watery underworld (Taube 1985; Quenon and Le Fort 1997). A remarkable vessel portrays his head growing from the trunk of a cacao tree, much like the *Popol Vuh* episode where the severed head of Hun Hunahpu is placed in a tree and

becomes a gourd (Figure 7b). In addition, an elaborately incised Early Classic vessel now known as the “Berlin Vase” features a stylized head with maize foliation in a cacao tree personified by the maize god, again a probable reference to the maize god’s severed head (Figure 7a). Subsequent research has established a firm link between the maize god and cacao, surely in part because of the form of cacao pods, which resemble ears of corn (see Miller and Martin 2004; Martin 2006). In fact, the common Spanish term for a cacao pod is *mazorca*, which is the same as that for an ear of maize.

As it turns out, the Tonsured Maize God is essentially the culture hero of Classic Maya mythology and appears as the epitome of royal grace and beauty for both male and female elites; in fact, in subsequent years there has been a great deal of fruitful research concerning gender ambiguity in relation to the Maya maize deity (see Stone 1991; Bassie-Sweet 2000; Joyce 2001; Miller and Martin 2004:97). It is becoming increasingly clear that he is a dominant figure in Classic Maya creation episodes, as is discussed in *Maya Cosmos* (Freidel et al. 1993) and other studies (Quenon and Le Fort 1997; Miller and Martin 2004:56–62). Despite his prominence in Classic Maya art and myth, the Tonsured Maize God largely fell from view during the Terminal Classic Maya collapse, and the common Late Postclassic codical form is the Foliated Maize God appearing in the Dresden, Paris, and Madrid codices. In fact, this may constitute a deep conceptual change brought about by the collapse in the ninth century AD as regards the maize deity so closely related to Maya elite identity and physical appearance. In other words, although the Maya maize god of fertile grain has roots in the Classic period and even before, he abruptly disappears with the advent of the Early Postclassic in the Maya area following the collapse, just as Long Count monuments were no longer erected with the exception of the “Short Count” texts in Postclassic Yucatan. For a good many years, archaeologists have created lists concerning some of the striking phenomena concerning the Maya collapse, such as the rapid depopulation of the Central Maya lowlands and a cessation of major monumental architecture and Long Count monuments. Given our more nuanced understanding of Classic Maya belief, I would suggest that the sudden disappearance of the Tonsured Maize God is also a major element to acknowledge and consider for further research. A tenoned stone sculpture from Mayapan portrays a very rare Late Postclassic version of the Tonsured Maize God with the tabular erect form of cranial modification widely seen with the Classic Maya elite (Figure 8). So far as I am aware, there is only one other portrayal of this deity at Mayapan, in this case atop the back of a turtle (Figure 9c).

One of the most striking scenes of the Classic-period Tonsured Maize God is his emergence from a cleft turtle carapace (Figure 9b) (Taube 1985:174–175). Recent excavations

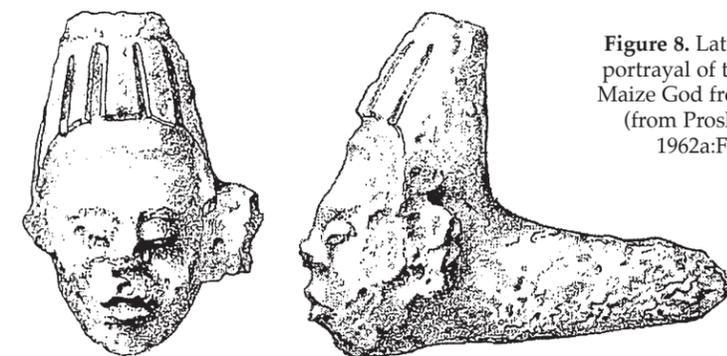


Figure 8. Late Postclassic portrayal of the Tonsured Maize God from Mayapan (from Proskouriakoff 1962a:Fig. 8g).

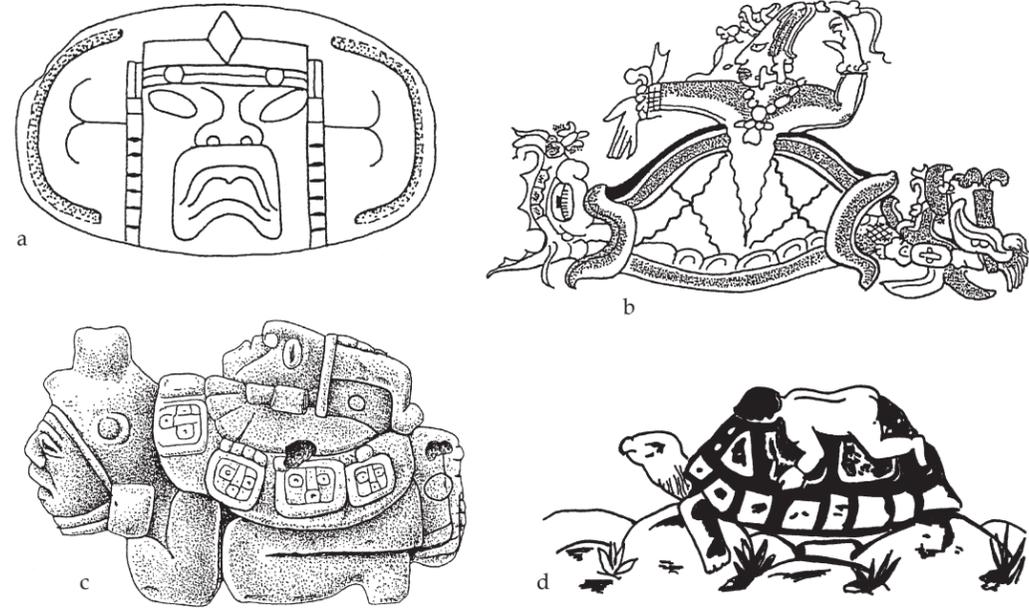


Figure 9. Portrayals of the maize deity atop turtles in ancient Mesoamerica: (a) Middle Formative Olmec plaque portraying maize deity atop turtle carapace (drawing by author from Taube 1996:Fig. 22d); (b) Late Classic Maya depiction of maize god emerging from turtle shell (drawing by author from Taube 1993a:66); (c) head of maize god atop turtle, Late Postclassic Mayapan (drawing by author from photograph courtesy of Clifford Brown); (d) illustration of contemporary Tepehua myth of infant maize god atop turtle (drawing by author from Taube and Saturno 2008:Fig. 13b).

directed by William Saturno at San Bartolo, Guatemala, have revealed a much earlier, Late Preclassic version of this episode, here with the dancing maize god within a turtle denoting the earth flanked by two enthroned deities, one being Chahk, the god of rain and lightning, and the other the god of terrestrial water (Taube et al. 2010:77-80). An even more ancient version is a Middle Formative Olmec serpentine pectoral with the head of the infant Olmec maize god atop a turtle carapace (Figure 9a). Dating from roughly the sixth century BC, this constitutes one of the earliest mythic episodes known for the New World. At the other end of the temporal scale is a small stone sculpture discovered in a cave at Late Postclassic Mayapan during a project directed by Clifford Brown in 1994. The carving portrays the elongated head of the Tonsured Maize God atop a turtle, suggesting a continuity of at least 2000 years (Figure 9c). Although wearing a jade collar, the god's eyes are shut, suggesting that he has been decapitated. Myths featuring a turtle supporting a corn deity continue to the present among the Tepehua, Popoluca, and other peoples of Veracruz, making a span from roughly the sixth century BC to the present day (Figure 9d).

In "The Classic Maya Maize God," I noted that the turtle represents the sustaining earth from which the corn god sprouts and grows, and several years later I presented a more detailed argument that the turtle does indeed constitute the earth in "A Prehispanic Maya Katun Wheel" (Taube 1988a; see also Taube 2013) (Chapter 2). Among contemporary and ancient Maya, there are a number of metaphors to describe the earth's surface. One model is the four-sided maize field, with the corners oriented to the intercardinal points and the sides representing east, north, west, and south framing the middle place. Clearly

this relates directly to humanly constructed space, including tables, houses, and temples as well as the milpa (see Taube 2013). In addition, there is the basic concept of the earth crocodile floating on the primordial sea, with its limbs pointing again to the intercardinal points. However, the ancient Maya had yet another metaphor, the domed back of a turtle also swimming atop the sea. Unlike the four-sided world or the extended limbs of an earth monster, the circular and domed model of the turtle best reflects the concept of centrality, much like a circular dartboard versus one that is square.

It was following my initial work on the maize god and the earth turtle that I came across a remarkable turtle sculpture published by Tatiana Proskouriakoff in her discussion of stone carvings from the Late Postclassic site of Mayapan. Perhaps because this was the last major enterprise in Maya archaeology engaged in by the Carnegie Institution of Washington, Proskouriakoff apparently had little interest in gleaning any meaning from Mayapan art and stone carving, as is reflected also in her 1955 paper entitled "The Death of a Civilization" in which she states in relation to Chen Mul effigy censers:

From the censor images we get a clear impression of the credulous, inartistic and militant nature of this age, which contrasts sharply with the scope and serenity of earlier Maya traditions. (Proskouriakoff 1955:86)

Despite Proskouriakoff's oddly negative view of the contact-period Maya of Yucatan, it is now clear that one of the finest screenfold books of ancient Mesoamerica, the *Codex Dresden*, dates to this very time, based on clear Late Postclassic Aztec conventions in the manuscript, including the sign for turquoise and elements pertaining to the wind god, Ehecatl-Quetzacoatl (Taube and Bade 1991). In her discussion of Mayapan sculpture, Proskouriakoff (1955:130, 1962b:331, Figs. 1-2) misidentifies old male deities in turtle shells as portrayals of Itzamnaaj or God D, despite the fact that Paul Schellhas (1904) classified such anthropomorphic turtle figures under the specific label of God N rather than God D (see also Taube 1992b:92-99).

For the Late Postclassic sculpture from Mayapan, Proskouriakoff briefly describes one turtle carving with thirteen Ajaw signs on the carapace rim. This immediately reminded me of the well-known "Short Count" of Postclassic Yucatan featuring thirteen Ajaw dates of every K'atun ending of twenty 360-day periods (or Tuns), equivalent roughly to 256 years. In other words, this simple monument constitutes a "Katun Wheel," as first mentioned and illustrated by Diego de Landa in the mid-sixteenth century. It is important to note that turtle carapaces typically have thirteen scutes, much like the thirteen K'atuns of the Short Count. A sculpture from the House of the Turtles at Uxmal has precisely the same number of thirteen scutes on its back (Figure 10). In the case of the small turtle sculptures at Mayapan, including the example rimmed with thirteen Ajaw glyphs, many were found within the rear recessed areas of elite domiciles, or "palaces," suggesting extremely private bloodletting events.

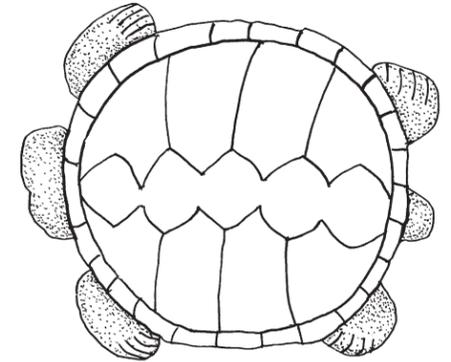


Figure 10. Turtle sculpture with thirteen scutes from the cornice of the House of the Turtles, Uxmal (drawing by author).

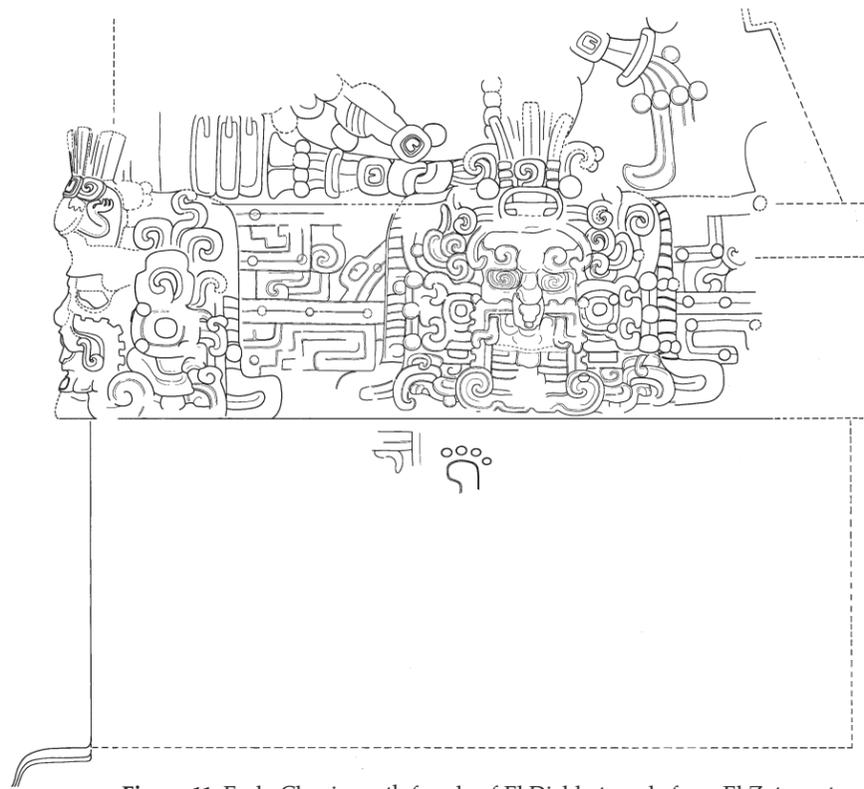


Figure 11. Early Classic north facade of El Diablo temple from El Zotz; note bamboo scaffolding and footprint on lower frieze (drawing by Mary Clarke).

Like the small turtle altar with thirteen Ajaw signs, others at Mayapan often have a central pit atop the carapace. One example contained bloodletting lancets, indicating that the central cavity provided sustenance to the earth from precious human blood. However, this could also relate to concepts of conjuring and emergence, such as the maize god rising out of the turtle earth. A series of reliefs from the House of the Phalli in the Initial Series Group at Chichen Itza features not only penis perforation by aged God N figures but also the emergence of plumed serpents from offering bowls (see Schmidt 2007:Fig. 17). These scenes clearly pertain to the concept of the “Vision Serpent” discussed by Schele and Miller (1986:175-208) for Classic Maya bloodletting scenes. Although it is impossible to determine whether the Maya elites who engaged in penitential bloodletting were actually *seeing* serpents, an early seventeenth-century account by Ruiz de Alarcón concerning Nahuatl rituals in highland Guerrero states that bloodletting did indeed produce visions: “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). Page 19 of the *Codex Madrid* features an elaborate scene of five gods engaged in penis perforation around a turtle image, quite clearly the same sort of turtle altar known for Mayapan and other sites of the northern Maya lowlands. Their pierced phalli are strung together by a single cord that also has a solar *k’in* sign attached to it, and it could well be that this scene illustrates the road of the sun and the dawning brought about through the release and offering of penitential blood.

Aside from the turtle altars from northern Yucatan, an excellent example was discovered

at Yaxha close to the contemporary town of Flores, Guatemala. This Late Postclassic monument displays the central orifice and has a great deal of original paint still adhering to the limestone surface (see Finamore and Houston 2010:158-159). Although the top of the carapace is divided into a series of elaborate triangles and dots, the limbs bear an undulating “net” of lines rendered in crisscross fashion with dots in the center of each quadrangle. This same “net” motif appears on Classic-period water lily pads and turtles, a basic metaphor for the earth floating atop the sustaining waters of the sea (see Miller and Taube 1993:184). As I recently noted (Taube 2010a), this Classic Maya motif can be seen on a toponymic sign from Cacaxtla and becomes widespread in Late Postclassic and early Colonial documents of highland Mexico. Remarkably, the “netted earth” motif seems to have continued in early nineteenth-century New Mexico in the religious paintings attributed to the *santero* painter Molleno (see Boyd 1974:364). How this striking convention may have been introduced into New Mexico remains unknown, although it could well have been brought by the Tlaxcaltecs who, as Spanish-sponsored mercenaries and colonists, began arriving in the American Southwest during the mid-sixteenth century (Simmons 1964).

In contrast to the small Mayapan sculpture, there are also Late Classic turtle altars of truly monumental scale, including Itsimte Altar 1. For this massive carving, the carapace was marked with prominent Kaban curls, the Kaban sign being a basic way to designate the earth, as can be seen on the sides of K’inich Janaab Pakal’s sarcophagus at Palenque (see Stone and Zender 2011:136-137). The central surface of the monument displays a prominent day name cartouche, almost surely referring to the twentieth day name Ajaw, meaning king or lord. Machaquila Altar A is yet another example, and although eroded the center probably portrays the local ruler as a personification of Ajaw (for rulers as embodiments of Ajaw, see Stuart 1996). At the end of the “Katun Wheel” study, I call attention to a rather obscure passage from Fray Andrés de Avendaño concerning the K’atun cycle:

These ages are thirteen in number; each has its separate idol and its priest, with a separate prophecy of its events. These thirteen ages are divided into thirteen parts which divide this kingdom of Yucathan and each age, with its idol, priest and prophesy, rules in one of these thirteen parts of the land, according as they have divided it. (Means 1917:141)

In this regard, it is important to note that the K’atun pages in the *Codex Paris* feature the coronation of each K’atun lord receiving a jeweled headdress ornament while seated on a raised throne, a scene notably similar to the “niche stela” accession scaffold scenes at Late Classic Piedras Negras (see Taube 1988b). However there are still earlier examples from the Late Preclassic West Wall mural at San Bartolo, in which the maize god and a possible historic figure receive forms of the Jester God jewel on either side of the earth turtle (Taube et al. 2010). For San Bartolo, the two enthroned figures bracket and face into the central quatrefoil turtle marked with fine diagonal lines denoting stone, much as if the central turtle is a carved stone altar directly pertaining to the two accession events.

Recent excavations of the Diablo temple at El Zotz in the northwestern Peten of Guatemala have revealed an extraordinary series of stucco facades dating to the Early Classic period (see Taube and Houston 2015). The basal portion of the north facade features diagonal bamboo scaffolding as well as a central hanging sheet of paper or cloth bearing a prominent human footprint, providing an important link between the Late Preclassic scenes at San Bartolo and the Late Classic scaffold accession stelae at Piedras Negras (Figure 11).

In relation to enthronement and coronation, the Late Preclassic Mound Group B at Izapa,

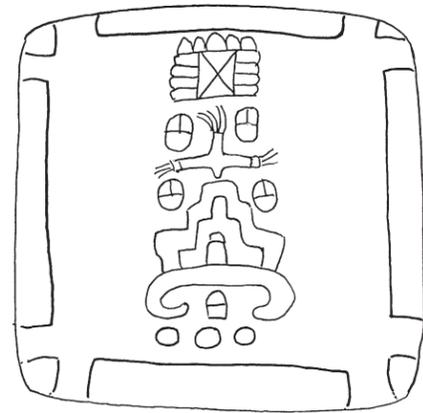


Figure 12. Olmec greenstone plaque portraying cosmological themes of directional symbolism in relation to world tree atop mountain (drawing by author after Guthrie 1995:Fig. 191).

temple, which is unique in terms of known Classic Maya architectural arrangements. A cache under the central stela featured three large jadeite cobbles, clearly related to the concept of the three cosmic hearthstones denoting the cosmic center or *axis mundi* (Taube 1998c:441). The emblem glyph of Ceibal is a royal title stating that its kings are lords of the three-hearthstone place. Recent excavations by Takeshi Inomata and Daniela Triadan have uncovered an impressive series of Middle Formative Olmec-style celt caches, many of them oriented to the four directions and center. In addition, one contemporaneous cache dating to roughly 600 BC featured a group of three large limestone spheres arranged in a triangle, surely alluding to the hearthstones (see Inomata and Triadan 2015:86, Fig. 32). This immediately recalls an Olmec-style greenstone plaque in the Dallas Museum of Art featuring a stepped mountain and world tree with four directional elements at its corners, clearly a form of the Olmec bar and four dot motif with the stepped form and tree constituting the central vertical bar (Figure 12). At the base there are three spheres that for some years have been identified as the three cosmic hearthstones, a program notably similar to the Mound B Group at Izapa (see Lowe et al. 1982:Fig. 9.1). The very recent find at Ceibal demonstrates that the concept of the three-stone hearth is indeed of great antiquity in ancient Mesoamerica.

A Late Classic panel text concerning the 4 Ajaw 8 Kumk'u event refers to a turtle, and although the three hearthstones are not mentioned, they are present in a good many other contexts (Freidel et al. 1993:65-66; Taube 1998c). Page 71a of the *Codex Madrid* features a turtle with the three hearthstones centered on its back. Although this has been identified as the constellation Orion, a simpler interpretation is that the scene portrays rain falling from a darkened sky upon the earth turtle sustaining the three hearthstones. The aforementioned account by Andrés de Avendaño describing specific communities of the thirteen K'atuns also recalls Altar de los Reyes in southern Campeche, a site named after Altar 3, a monument originally bearing the emblem glyphs of thirteen major Classic-period polities, including Tikal, Palenque, and Calakmul (see Grube 2003). A short text on the upper surface of this small, round altar refers to *k'uhul kab* or "sacred earth" followed by another glyphic compound prefixed by the number thirteen, clearly a reference to the royal titles of major sites on

Chiapas, features a stone throne backed by Stela 8, depicting the earth turtle with a quatrefoil body containing an enthroned figure, probably referring to the very throne behind which the stela is placed. Adjacent to and framing the throne are three stone spheres atop cylindrical columns, clearly relating to the three hearthstones in traditional Maya houses, the same stones mentioned for the creation date 4 Ajaw 8 Kumk'u, or August 13, 3114 BC (see Freidel et al. 1993:65-71; Taube 1998c:433-446). In terms of the common Maya metaphor of the world as a house, these hearthstones denote the pivotal *axis mundi*. One of the most developed architectural programs devoted to directions and centrality in the Classic Maya region is Structure A-3 at Ceibal, which features a radial pyramid with four stairways, each side having a stela and altar at its base. In addition, a fifth stela stands in the central floor of the radial

the altar side. Much like the Avendaño account, this Late Classic altar pertains to the rulers of particular polities, although there is no specific reference to K'atun celebrations.

Calendrics and cosmology are also reflected in my study entitled "Itzam Cab Ain: Caimans, Cosmology, and Calendrics in Postclassic Yucatan" (Taube 1989b) (Chapter 3), which discusses the earth crocodile in relation to cosmic calendrical events. In the aforementioned K'atun cycle of roughly 264 years, the final K'atun ends on 13 Ajaw, with the next day being 1 Imix, a day name equating to Cipactli or crocodile in highland Mexico, the first day in the twenty-day series. In addition, 1 Imix or Cipactli marks the beginning of the 260-day calendrical cycle related to creation and legendary beings in many Mesoamerican texts and monuments. As with the "Katun Wheel" paper discussing calendrical cycles and Ajaw period endings on the back of the earth turtle, this study examines them atop crocodiles, including a fascinating Late Postclassic mural from Coba, Quintana Roo, which although heavily damaged, features the series of day names in correct order beginning with Ben and then proceeding to Ix, Men, Kib, and Kaban. In more recent research, I have explored the relationship of the primordial flood crocodile with the beginning and end of the last Bak'tun cycle that began on August 13, 3114 BC and recently ended on December 21, 2012 (Taube 2010c, 2012a). For two ceramic vessels explicitly denoting the beginning of the past cycle in 3114 BC, gods convene in a dark room with the flood crocodile resting atop a temple devoted to God L, the aforementioned merchant deity.

Another topic that I explored during graduate studies led to the paper "Ritual Humor in Classic Maya Religion" (Taube 1989c) (Chapter 4). This was in large part inspired by Victoria Bricker's (1973, 1981) important work with annual festivals among the Tzotzil of highland Chiapas, a theme also addressed by Evon Vogt (1976) in his extensive research concerning the Tzotzil community of Zinacantan. During the Festival of San Sebastian, ritual clowns dressed as forest beings call attention to social misdeeds during the past year by publicly announcing them, calling to mind the ritual clowning among Puebloan peoples of the American Southwest, which often pointedly addresses inappropriate behavior by specific members of the community (see Wright 1994). In contrast to most known Classic Maya monuments portraying rulers, images of ancient clowns appear on smaller and more private objects, such as painted vases and figurines, where they are often smoking, drinking, and cavorting with alcoholic enemas. But one noteworthy exception in scale is the monumental kneeling figures on the south side of Temple 11 at Copan, who shake rattles and have serpents in their mouths and around their waists as a form of snake dance. A few years after this study was published, I happened to come across a contemporary wooden mask in the local market in Chichicastenango, Guatemala, that features an aged simian-appearing face biting a snake, remarkably similar to the pair of Late Classic monkey clowns at Copan. The same day, I eagerly took the mask to one of the two still-extant *morerias* in town, that is, the shops that rent traditional dance costumes for community festivals. I thought that this would be the perfect opportunity to ask the K'iche'-speaking owner the name of this being. He thought about it for a while and then told me "*chipasi*." As I started writing this down, however, I realized that he was simply saying "chimpanzee." Not particularly helpful. That noted, the mask does relate to contemporary highland Maya snake dances that I cite in this study.

In the same work, I suggest that festivities concerning ritual clowning may have been held at particular calendric events, such as during the Yukatek New Year ceremonies marking the end of the past year and the beginning of the present one. In the *Dresden* New Year pages, there are the four opossum god bearers, and these shambling beings could well be

ritual clowns, as opossum clowns do appear in Late Classic Maya art, including in vessel scenes and figurines. Among both the ancient and contemporary Maya, ritual clowns usually appear as anthropomorphized creatures of the wild, such as monkeys and jaguars as well as opossums. In state level societies, including the Classic Maya, ancient Mesopotamia, and Egypt as well as medieval Japan, animals behaving as people are often seen as humorous, as it brings into question human mores and what is considered to be acceptable human behavior versus quite the opposite (Taube and Taube 2009). What is striking for Mesoamerica is that ritual clowns are frequently old, which might not only allude to their primordial state but also directly question the authority of more elderly, established members of society.

How maize was consumed as a basic staple by the ancient Maya is explored in "The Maize Tamale in Classic Maya Diet, Epigraphy, and Art" (Taube 1989d) (Chapter 5). In most of rural Mesoamerica today, a favorite food is the maize tortilla typically prepared on a *comal* griddle of metal, but in Prehispanic times these cooking surfaces were ceramic, and the known archaeological record challenges the concept of tortillas as the dietary base of the ancient Maya. As they are today, Prehispanic ceramic *comales* were fashioned from coarse, heavily tempered clay, and with their broad and very shallow shield-like form they would be an obvious find in any ceramic analysis. Although I published my paper many years ago, the general lack of actual *comal* sherds in archaeological reports and representations of tortillas in artwork still holds true. Among contemporary highland Guatemalan K'iche' today, a far more popular maize food is *paches*, steamed tamales wrapped in leaves. In addition, contemporary Yukatek Maya create large tamales for certain ceremonies, such as the *ch'a' cháak* rain rituals during the summer canicula (see Love 1989). Such ritual tamales express concepts of the cosmos, including at times a central cross that is filled with *sikil*, a savory paste of ground-up squash seed (Figure 13). While there are virtually no Classic Maya representations of tortillas, there are abundant scenes of large tamales in ceramic bowls. In Late Classic Maya art, they often have a drippy darker substance on the upper portion, and quite possibly this denotes a *sikil* paste if not something sweeter, such as honey. The Classic Maya glyph for eating is a tamale sign inside a mouth, much as drinking is denoted by the sign for liquid also in a mouth; together they denote food and drink, or feasting (see Houston et al. 2006:Fig. 3.5). In addition, Early Classic mural fragments in Maya style from the Tetitla compound at Teotihuacan also feature couplets of drink and tamales (see Taube 2017a).

Appearing frequently in Late Classic vessel scenes, tamales also occur in Preclassic Maya art. Thus the North Wall mural in Pinturas Sub-1A at San Bartolo features a young woman holding a basket filled with tamales, with the maize deity holding a water gourd, once again the basic pairing of food and drink (see Saturno et al. 2005). Along with displaying chevron markings recalling woven basketry, the base is gently rounded, a feature more typical of baskets than ceramics. In this regard, the mold of an actual basket base impressed in *bajo* mud was discovered in the fill of the Ixim superstructure at Pinturas, roughly coeval with the mural chamber below (Figure 14).

Aside from matters maize, I have long been fascinated by the great city of Teotihuacan located in the northeastern portion of the Valley of Mexico, which I first visited with my parents when I was about age 5. That fascination led eventually to my 1992 paper "The Temple of Quetzalcoatl and the Cult of Sacred War at Teotihuacan" (Taube 1992c) (Chapter 7). In contrast to the Classic Maya with their strong influence from the earlier Olmec, Teotihuacan basically emerged ex nihilo in the Basin of Mexico during the first century BC. In terms of New World civilizations, Teotihuacan resembles in this regard the Moche culture of north coastal Peru,

which exhibits little influence from previous local cultures, such as Gallinazo. By the third century AD, Teotihuacan had fully flowered, and one of the most striking constructions at this early date is the Temple of Quetzalcoatl, also known by Teotihuacan specialists as the Feathered Serpent Pyramid (see Sugiyama 2005). Due to the placement of an adjoining structure on its western side in the mid-fifth century AD, the original sculptural program dating to a couple of centuries earlier remained largely intact. The west side of the Temple of Quetzalcoatl bears a remarkable scene of plumed serpents swimming in a primordial sea marked with mollusk shells. As with Xochicalco and the later Toltec and Aztec, the serpents are rattlesnakes with quetzal plumes covering their entire bodies. This is in direct contrast to the Classic Maya, who depicted the plumed serpent without a rattlesnake tail and simply a feathered crest on the head, much like that of the male quetzal (see Taube 2003b, 2010a).

Along with the undulating plumed serpent swimming in water on the sloping *taluds* of the original Temple of Quetzalcoatl, the *tableros* portray plumed serpents emerging from what appear to be massive blossoms (Taube 2004b). However, along with the serpent heads, there is another alternating image that for many years has been misidentified as Tlaloc, based largely on the pair of rings on the brow evocative of the "goggles" around Tlaloc's eyes. However, there are clear serpent eyes directly below that have a similar back curl to those found with the feathered serpent heads. In terms of the "goggles," rings made of shell were an important element of warrior dress at Teotihuacan (Taube 2000c). Not only would these protect much of the upper head, but they



Figure 13. Preparation of *noh waah* tamales during Yukatek *ch'a' cháak* rain ceremony, 1985 (photo: Karl Taube).



Figure 14. Mold of the base of a Late Preclassic Maya basket from the Ixim Temple, San Bartolo (photo: Karl Taube).

would be quite intimidating, with the face of the warrior largely masked by this shell armor. Similar shell goggles can also be seen in the battle mural at Cacaxtla, with the victorious Olmeca-Xicalanca wearing them on their brows, in direct contrast to the defeated Maya (see Brittenham 2015:Figs. 165, 167, 168). The alternating images on the Temple of Quetzalcoatl are helmet masks.

For these helmet masks on the Temple of Quetzalcoatl, the head has a broad muzzle quite unlike the generally anthropomorphic face of the rain god. In addition, it is covered by a mosaic surface that I have compared to shell mosaic helmets known for Teotihuacan as well as Classic Maya portrayals, such as at Piedras Negras and Tikal. A clear example excavated at the highland Maya site of Nebaj, Guatemala, has shark teeth along with the shell platelet armor. In addition, another shell platelet helmet was found in the probable tomb of K'inich Yax K'uk' Mo' in the Hunal structure at Copan, Honduras (see Bell et al. 2004:133). Among the Classic Maya, this creature is clearly a serpent, with one of the most vivid and developed scenes appearing on Lintel 2 of Temple I at Tikal, and in view of its militaristic role as a helmet, I termed this being the "War Serpent." Subsequent research determined that it was named Waxaklajuun Ubaah Kaan, or "Eighteen its Images Snake," including on the same lintel at Tikal (Freidel et al. 1993:308-312). It is probably no coincidence that reconstructions of the west side of the Temple of Quetzalcoatl have eighteen heads of this being on both sides of the central stairway. Oddly, however, there is little indication that this creature was a snake at Teotihuacan, and it appears to have feline rather than serpent attributes (see Taube 2000c, 2012b). Given the importance of butterfly imagery at Teotihuacan, it is conceivable that the "War Serpent" might have been based on the concept of a caterpillar (see Taube 2011, 2012b). In this regard, it is important to note that butterflies and caterpillars are entirely absent from Classic Maya art unless they pertain to the artistic canons of Teotihuacan.

Among the most striking artifacts known for Teotihuacan are iron pyrite mosaic mirrors, typically glued to a backing of slate or sandstone. These are explored in "The Iconography of Mirrors at Teotihuacan" (1992a) (Chapter 8). Although the original brilliant shining faces are usually oxidized to a dull sulfurous surface, they are remarkable examples of lapidary work, with the pyrite mosaics fitted perfectly onto the stone backing. The means by which these mirrors were fashioned has been examined recently by replicative lapidary work, and although the research is preliminary, the effort to cut, grind, and polish even a single pyrite tessera is clearly enormous (see Gallaga M. 2016). Using modern lapidary equipment, I recently fashioned one from a so-called "sun dollar," a thin pyrite disk found naturally in slate beds in the vicinity of Sparta, Illinois. In sunlight, the mirror reflects a blinding light, and it is readily possible to see one's face in its surface.

At Teotihuacan pyrite mirrors were an important component of military costume to be commonly worn on the small of the back, much like miniature shields to protect the kidneys. In the Temple of Quetzalcoatl excavations of mass burials, many of the individuals had these placed on their backs, and the two portrayals of Yax Nuun Ahiin on the sides of Stela 31 at Tikal feature both the front and back sides of a pyrite mirror worn on the lower back. As with circular glass mirrors among the contemporary Huichol of Jalisco, pyrite mirrors had a broad number of related meanings at Teotihuacan, including flowers, faces, cave-like portals, and surely the gleaming sun, although as yet no explicit solar sign has been identified at the site (see also Kindl 2016; Taube 2016).

Pyrite back mirrors continued to the Early Postclassic, with massive examples portrayed on the famed Atlantean columns at Tula. These feature four turquoise Xiuhcoatl serpents

on the rim, and actual examples of such mirrors are known from Chichen Itza in Yucatan and Paquime in northern Chihuahua as well as Tula (see Taube 2012c). In the case of the Toltec-style mirrors, much of the mosaic surface is turquoise, a material entirely absent from Early Classic Teotihuacan. By the Late Postclassic period of the Aztec and Mixtec of Oaxaca, pyrite mirrors appear to have been replaced by disks entirely covered by turquoise and shell mosaic, with some of the surviving examples displaying quite complex scenes (Taube 2016).

One of the most iconographically complex portable objects of the Aztec is the subject of "The Bilimek Pulque Vessel: Starlore, Calendrics, and Cosmology of Late Postclassic Central Mexico" (Taube 1993b) (Chapter 9). The entire surface of this stone vase pertains to alcohol, a prominent component of Aztec ritual behavior identified not only with festivities but also attendant danger and chaos. I note that the dominant image appears to be a three-dimensional representation of the day name Malinalli, the date 1 Malinalli being the thirteen-day *trecena* of the 260-day calendar dedicated to Mayahuel, the goddess of maguey from which the alcoholic beverage of pulque derives. In addition, the fleshless lower jaw probably alludes to alcohol as something rotting and fermented, as can be seen for the Classic Maya portrayals of their more ancient god of drink.

In a later groundbreaking study, Nikolai Grube (2004) identified the Maya god of alcohol and drunkenness, glyphically referred to as Akan, a name documented for early Colonial Yucatan. Following the Schellhas system of deity classification, Günter Zimmerman (1956:162-63) labeled him God A', in other words an aspect of the codical death deity, God A. Indeed, this is an unwholesome and deathly being who frequently appears with the Ak'bal sign for darkness on his brow, a horizontal human femur in his hair, the *cimi* death sign on his cheek, and a fleshless mandible as his jaw. In addition, he smokes excessively and cuts off his own head with an axe. Who wouldn't want to buy a six pack of that? There are probably a number of reasons why the god of drunkenness and alcohol appears to be such an unpleasant and morbid being. For one, excessive inebriation causes one to pass out, and the Yukatek term for fainting is *sak kiimil* or "false death." In addition, drunkenness embraces the realm of the ancestors, as is solidly documented for the Tzotzil Maya of highland Chiapas, where inebriation is identified with dreams, *wahy* spirit beings, and the numinous realm of the dead. Robert Laughlin (1976:3) graphically describes the importance of dreaming among contemporary Maya of Zinacantan:

Dogs dream, and cats dream. Horses dream, and even pigs, say the Zinacantecs. No one knows why; but there is no question in the mind of a Zinacantec why men dream. They dream to live a full life. They dream to save their lives.

A number of Late Classic Maya vessel palace scenes feature rulers holding drinks while staring into mirrors, clearly participating in moments of self-reflection and visionary experience (see Blainey 2016; Taube 2016).

Apart from the spiritual realm in which the liminal state of inebriation connects to gods, spirits, and ancestors is the consideration that alcohol is a beverage created by fermentation and decay. An Early Classic vessel lid portrays the Maya Akan with a bony mandible and an eyeball hanging from a femur in his hair (Figure 15a). In addition, he is smoking a cigar and a large tobacco leaf descends from the back of his headdress, an element also found with a still-earlier, Late Preclassic version at San Bartolo. Recent excavations in the Pinturas Sub-1A structure at San Bartolo revealed this deity in the East Wall mural program. In this case, he also has the femur ending with a bloody eyeball, and as with the Early Classic example he

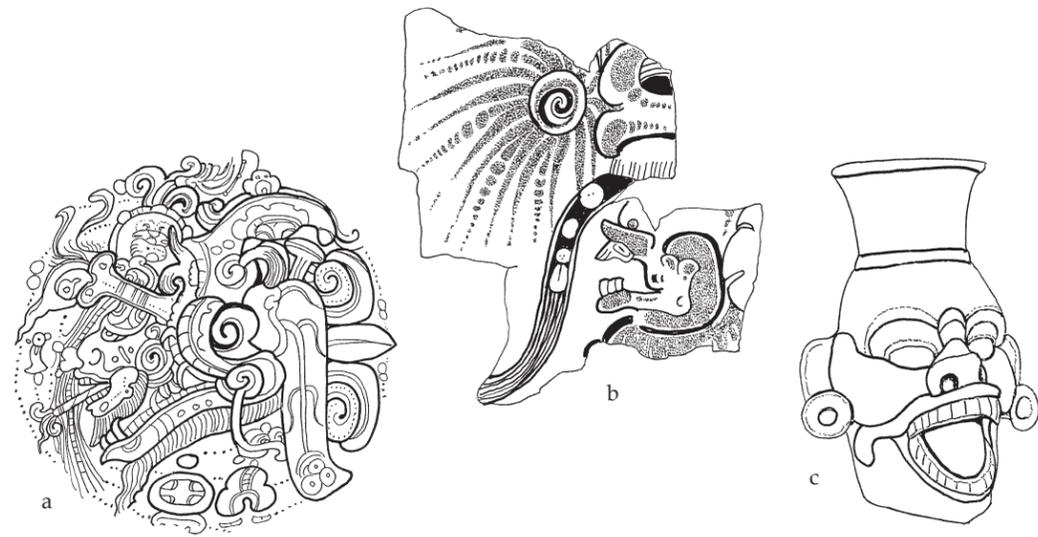


Figure 15. Early Maya portrayals of Akan, the ancient Maya deity of drink and inebriation: (a) lid of Early Classic cache vessel with Akan emerging out of open serpent mouth, note tobacco leaf hanging behind brow of serpent; (b) Late Preclassic portrayal of Akan from East Wall mural at San Bartolo with edge of tobacco leaf behind cheek; (c) Late Preclassic ceramic vessel from Izapa with probable version of Akan (drawings by author).

has a large forelock of hair hanging in front of his face (Figure 15b). For the East Wall figure, the forelock as well as the profile, cheek, and upper lip are essentially identical to images of the maize god from the North and West Walls of Pinturas Sub-1A. A text from Lintel 3 of Temple IV at Tikal features the glyphic name of Akan in a compound with the head of the maize god and a vertical celt (see Grube 2004:Fig. 15a). The lintel scene portrays a massive palanquin and platform with two central images of Akan on the stairway as well as maize gods emerging from the eyes of four Witz mountain heads, again merging the identity of these two beings (see Jones and Satterthwaite 1982:Fig. 74). Given that one of the more popular alcoholic beverages among ancient and contemporary peoples of the New World is *chicha* or maize beer, Akan could well embody the dead, rotten, and fermented maize god as an alcoholic beverage. A remarkable ceramic vessel from Late Preclassic Izapa portrays a human head with a fleshless mandible, and as in the case of the Aztec Bilimek Vessel, this vessel was probably intended to contain alcohol and may have been a form of Akan (Figure 15c). As in the case of the Bilimek vase, he displays a bony mandible. However, here his mouth is wide open—quite probably a graphic depiction from over two millennia ago of a god in gleeful drunken laughter. This is also the case with Akan from Pinturas Sub-1A at San Bartolo, this figure being the only one in the mural program with a broadly open mouth.

A Late Classic text appearing on Copan Altar U mentions Akan in relation to the drinking of pulque, or *chih*, with the glyph for pulque being a skull with stalks of maguey, the plant which provides pulque's fermented foamy sap (see Grube 2004:Fig. 7). Clearly fermentation and inebriation pertained to concepts of death and decay among the ancient Maya. In the case of the Aztec Bilimek vase, pulque is very much related to rottenness and death. In one of the most remarkable portrayals of alcohol known for the ancient New World, the back side of the stone vessel features a skeletal goddess with jaguar paws squirting two streams

of pulque from her breasts into a tripod pulque vessel placed at her feet, clearly denoting this fearsome being as the immediate source of the beverage, perhaps somewhat akin to our modern alcohol labels and advertisements urging us to “drink responsibly,” but here on a far more cosmic level. For the Bilimek Vessel scene, the tripod pulque vase has more liquid—perhaps pulque but also perhaps blood—coursing between the goddess's legs and then turning sharply upward to the sides of her waist. At this upper crest, the fluid appears on both sides with heads of *Xiuhcoatl* fire serpents carrying burning bundles of the 52-year Aztec calendar round in their maws. The combination of the liquid with the burning wood bundles and the *Xiuhcoatl* serpents denotes the Aztec concept of war, or *atl tlachinolli*.

For the Aztec Bilimek Vessel, one of the salient motifs is a cosmic battle between forces of the diurnal sun and primordial darkness.

Directly above the elaborate head of the day name Malinalli on the vessel front are paired images of the wind god Ehecatl and a pulque god menacing a partly darkened sun with stones and sticks, the Aztec *disfrasismo* for castigation, or *in tetl in cuahuilitl* in Nahuatl. In this regard, it is important to note that such forms of punishment with sticks and stones was very commonly meted out to drunkards and adulterers in ancient Mesoamerica. Moreover, when one looks at the other side of the vessel it is clear that there is a much larger contingent of deities joining in the central solar battle. Thus along with Ehecatl and the pulque god, there are two other pulque gods wielding stones and sticks. All three pulque deities appear to have maguey stalks sprouting from the tops of their heads, much as if they are embodiments of the living plant. This is also true for a fragmentary Aztec monument from Tepozteco, a pyramid dedicated to this very pulque deity on a ridge overlooking Tepoztlan (Figure 16). Other gods join the battle on the Bilimek vase: *Xiuhtecuhtli* wielding a *Xiuhcoatl* fire serpent, *Tlahuizcalpantecuhtli* with his spearthrower, and a diminutive diving couple also armed for war. Aside from the obvious pulque deities, the series of gods closely resembles four-directional year-bearer pages in the *Codex Borgia* (pages 49–52), which feature the four year bearers of the 52-year cycle beginning with *Acatl* (Reed) for the east, *Tecpatl* (Flint) for the north, *Calli* (House) for the west, and *Tochtli* (Rabbit) for the south. In addition, the middle right side of each directional page features a pair of small diving deities—beings virtually identical to the small pair below the *Xiuhtecuhtli* on the Bilimek Vessel.

The *Codex Borgia* year-bearer pages feature four supporting gods holding the night sky of the day name before the dawn of the new day, with page 49 being *Tlahuizcalpantecuhtli*, page 50 *Xiuhtecuhtli*, page 51 Ehecatl, and page 52 the god of death, *Mictlantecuhtli*. As noted by Thompson (1934) there were four sky bearers in Central Mexican thought who could descend as *tzitzimimeh* or star beings of darkness at critical junctures of astronomical or calendrical events, such as a solar eclipse or the drilling of new fire every 52 years at the

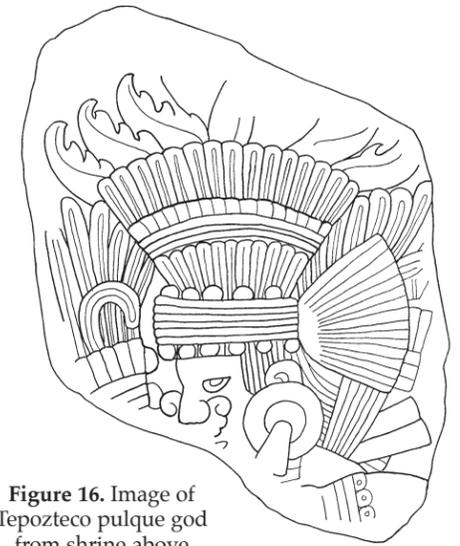


Figure 16. Image of Tepozteco pulque god from shrine above Tepoztlan (drawing by author after original line drawing by Ángel González López).

completion of a calendar round. As I noted in the Bilimek paper, it is very striking that the first three of these very gods in the *Codex Borgia* are depicted on the vase, along with the small diving figures pair. In this regard, I noted that the great death goddess creating pulque might well be a female equivalent of Mictlantecuhtli appearing on page 52 of the *Codex Borgia* with the year bearer Rabbit, rabbits being closely identified with pulque and drunkenness in Aztec thought (see Nicholson 1991).

In ancient Mesoamerica, one of the most intense interactions between the Basin of Mexico and the lowland Maya was during the Early Postclassic, that is, shortly after the fall of the great Classic Maya centers, including Copan, Palenque, Tikal, and Calakmul. For years, however, Maya archaeologists have acknowledged that at the same time to the north Chichen Itza exploded in terms of population, public monuments, and sculpture. The influence of Central Mexico at the end of the Classic Maya era is especially developed at Chichen Itza. Here quetzal-plumed rattlesnakes serving as flanking balustrades and columns are common, despite the fact that neither architectural device is known for earlier Teotihuacan, much less any Classic Maya site. Even more striking is that while quetzal-plumed rattlesnakes are prevalent in Central Mexican art since Early Classic Teotihuacan, they are virtually absent from Classic Maya art and architecture. In addition, certain ceramics of the Chichen Itza Sotuta complex, including Tohil plumbate ware and X Fine Orange, are virtually absent in Yucatan out of the immediate sphere of Chichen Itza but are found at Tula in Central Mexico. In my study “The Iconography of Toltec Period Chichen Itza” (Taube 1994b) (Chapter 10), I also point out that metal—especially copper and gold—is relatively common at Chichen Itza but notably rare at slightly earlier Late Classic Maya sites of the central and southern Lowlands. In fact, it is widely recognized that metal does not become widespread in Mesoamerica until the Early Postclassic period, in other words during the apogee of Chichen Itza and Tula. This also holds true for turquoise. While absent from Classic Maya centers, it occurs in some abundance at the two sites and commonly appears in the iconography as body ornaments, especially butterfly pectorals and large back mirrors (Taube 2012c). It is noteworthy that despite the fact that my study was published over twenty years ago, both turquoise and metal remain virtually undocumented at Classic Maya sites of the central and southern lowlands (for recent discussions of turquoise in Mesoamerica and the American Southwest, see King et al. 2012).

Although there was strong and sustained contact between Tula and Chichen Itza during the Early Postclassic, the nature of this exchange remains poorly understood. A major reason is that many archaeologists working in Yucatan consider Toltec influence at Chichen Itza to be negligible. This may well derive from an earlier simplistic view that there was a “Toltec Empire” that controlled Chichen Itza through military might. I doubt that there are many Mayanists or Toltec scholars who hold to this view today. Instead, the political and cultural relationships were surely more interesting and complex. In my own view, Chichen Itza reflects a major alliance between Tula and local Maya groups, and the remarkable art and architecture is a public celebration on a truly vast scale that was not replicated at other sites at this time in the northern Maya lowlands or even Tula. However, it is also clear that the development of Toltec imagery began in the Late Classic period in highland Mexico, that is, well before the Early Postclassic contact between Tula and Chichen Itza (Jordan 2016). In addition, the cultural exchange between the two sites was very much a two-way street, and a number of gods known for Postclassic Central Mexico may have derived from the Maya. In this and later studies I note that the Aztec sun god Tonatiuh may have come from

Early Postclassic concepts of a sun god from Chichen Itza, a being who wore the Jester God of Maya rulership and sat on a jaguar throne, another Maya trait. More recently, excavations in the Initial Series Group at Chichen Itza revealed remarkable facades of a duck-billed deity that is clearly an ancestor of Ehecatl-Quetzalcoatl (Figure 17). Rather than a being native to Central Mexico, the duck-billed wind god is of far greater antiquity in eastern Mesoamerica and appears in the art of the Classic and Late Preclassic Maya—including San Bartolo—as well as the Olmec, going back to a ceramic find dating to roughly 1200 BC in the Soconusco region of southern Chiapas (Figure 18) (Taube et al. 2014).

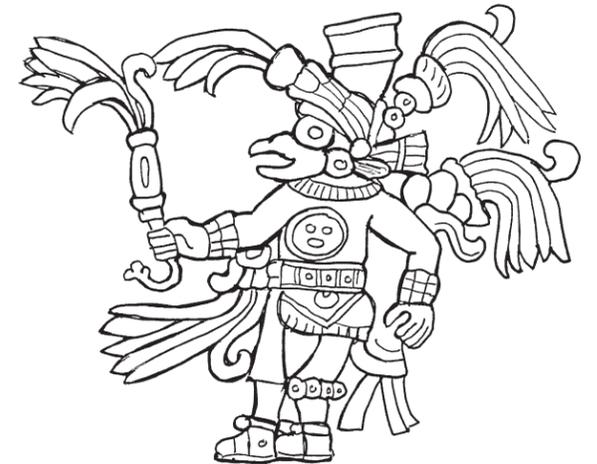


Figure 17. Early Postclassic Ehecatl dancing with rattle, Initial Series Group, Chichen Itza (drawing by author after Schmidt 2002:3:Fig. 31).

Recent excavations at Tula uncovered a carved panel of a diving bird with each wing bordered by a profile serpent head, a clear indication of avian deities in Late Preclassic and Classic Maya iconography, including aforementioned examples of Ehecatl from the Initial Series Group at Chichen Itza. Unfortunately, the tenoned head of the bird sculpture is missing, making it difficult to identify the specific nature of this Maya avian at distant Tula (Figure 19).

During the same year that the Chichen Itza study came out, I also published a piece concerning a remarkable four-sided Late Classic Maya vase, “The Birth Vase: Natal Imagery in Ancient Maya Myth and Ritual” (Taube 1994a). When the first images of this vessel were discussed, it was described as a “ceramic codex” due to the fact that the sides correspond quite closely to the dimensions of a codex page, especially the *Codex Dresden*. However, rather than a four-page codex, the vessel actually depicts a four-sided house, a basic metaphor for the world in ancient and contemporary Maya thought (see Taube 2013). Rim wear indicates that it originally had a lid, which would constitute the roof of a miniature house, as is the case with four-sided cache vessels from Guaytan and Quirigua, Guatemala. For the example from Guaytan, the doorway is carefully rendered while the one from Quirigua has a horizontal woven band denoting the thatched edge of the roof (see Stromsvik 1941). In terms of Maya houses, among the most symbolically charged rituals continuing to the present are those concerning birth, which in many cases today involves hanging a cord or hammock from the rafters to support the standing pregnant woman, who is commonly assisted by a *partera* or midwife who stands behind her and gently pressures the infant from the womb. Side 1 of the Birth Vase provides an explicit version of this birth event still performed on a daily basis among the contemporary Maya. In the scene, a young woman holds a pair of cords in the form of serpents in her upraised hands with an old woman embracing her from behind. Although corresponding to contemporary Maya birthing practices, this is clearly on the supernatural level of the gods, much like the birth of the triad of deities at Palenque. That noted, at Palenque there are only textual references to birth, which makes this image on the “Birth

Vase" even more remarkable.

A number of themes on the Birth Vase clearly allude to a cosmic realm rather than the birth of mortals and historic Maya figures. For one, the youthful goddess is standing atop a mountain which exhales two serpents from the corners of its mouth. Whereas one serpent is a clear version of the Bearded Dragon so well known in Maya studies, the other is a jaguar serpent. Here as well as in subsequent studies I have noted that in Classic Mesoamerica the Bearded Dragon was identified with the diurnal east and the feline serpent with darkness and

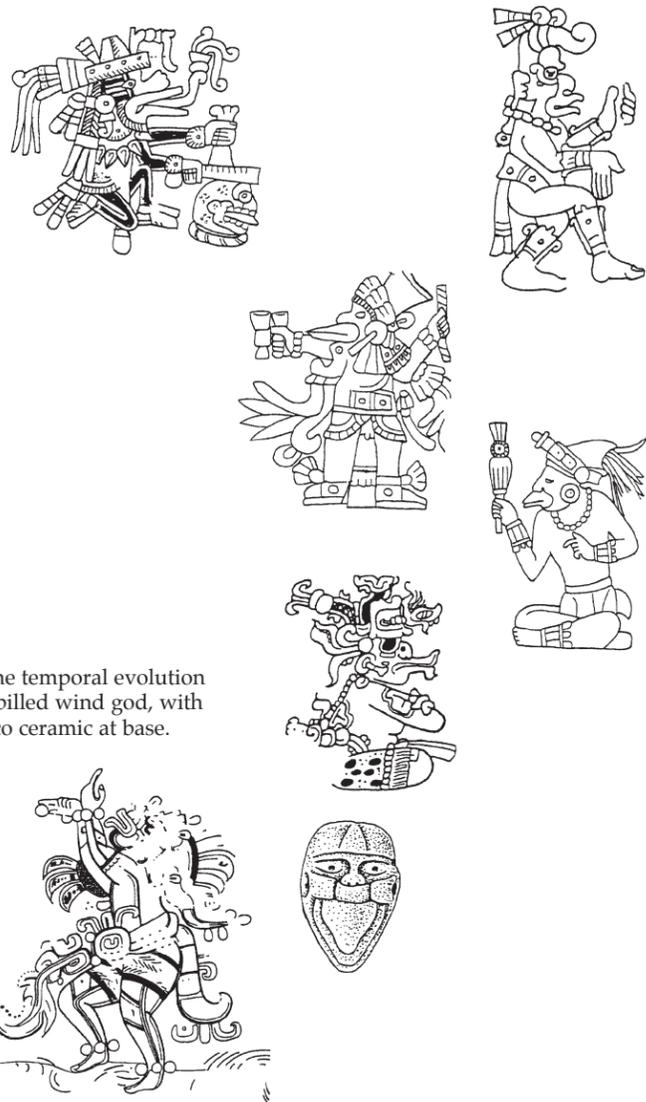
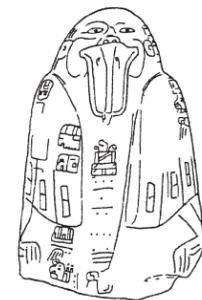


Figure 18. The temporal evolution of the duck-billed wind god, with Soconusco ceramic at base.



the west. Although I cite examples of jaguar serpents for the Classic Maya and roughly contemporaneous Cacaxtla, this convention continues to contact-period Aztec monumental sculpture. A finely carved Aztec sculpture from the Uhde collection in the Ethnological Museum of Berlin features a coiled serpent with jaguar pelage and a prominent smoking mirror on its head, clearly identifying it as an aspect of Tezcatlipoca, the archenemy of the plumed serpent Quetzalcoatl (Figure 20). Although it is impossible to determine at this point, this figure could well have been paired with

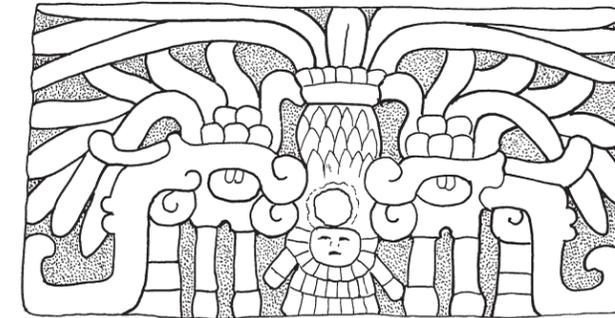


Figure 19. Early Postclassic avian figure with Maya-style serpent wings, Tula (drawing by author after Getino Granados 2007:58).

a coiled feathered serpent, which is a very a common motif in Aztec art. As of yet, this is the only example of a jaguar serpent sculpture known for the Aztec.

Corresponding to the sacred mountain and cosmic serpents, the aged woman behind the youthful maiden is clearly Goddess O in the Schellhas system of deity classification. As I mention in this and other publications, she is the goddess of curers and midwives (see also Taube 2010a:153-155). Among the contact-period Yucatek she was known as Ix Chel and was referred to as the "goddess of making children"—not as a fecund maiden but rather a post-menopausal woman who delivers the infant. Not surprisingly, there are numerous depictions of this goddess on the vase, with three examples alone on one side. However, there were probably four rather than three in ancient Maya thought, as a scene from the North Temple of the Great Ballcourt at Chichen Itza depicts four standing examples as evidenced by their advanced years and cross-boned skirts, as also worn by the same goddesses on the Birth Vase (see Wren and Schmidt 1991:Fig. 9.7). The same textile design appears in the early Colonial *Codex Tudela* from Central Mexico in a scene portraying an aged woman with such a textile in her outstretched arms and the accompanying gloss of *vieja hechicera* or "old witch." Clearly Goddess O was as much a sorceress as a midwife and curer (see Taube 2010a:Fig. 6c).

On the four-sided Birth Vase, the opposite side concerns not birth but sacrifice, with an upper scene featuring a maiden—almost surely the same woman giving birth—facing an aged deity commonly referred to as God N, who holds a bowl containing flint and obsidian blades. The same sacrificial bowl appears in the scene below with three other God N figures. In this case the central scene features a censer containing what appears to be a human heart. As I note in the Birth Vase

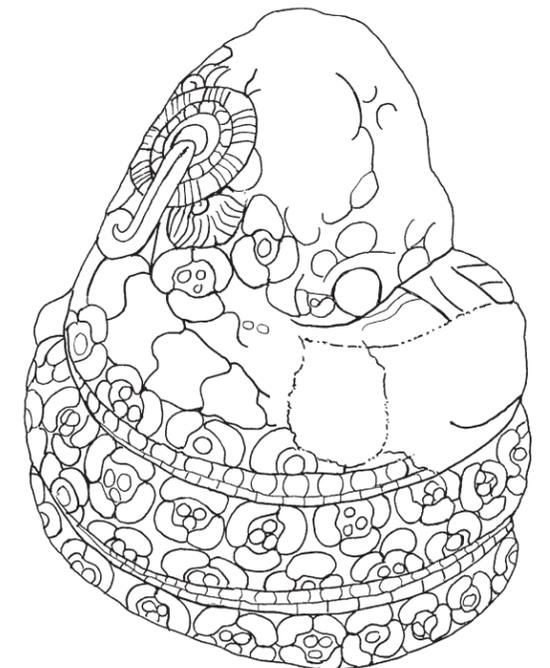


Figure 20. Aztec portrayal of jaguar serpent with smoking mirror of Tezcatlipoca (drawing by author after Solís 1992:66).

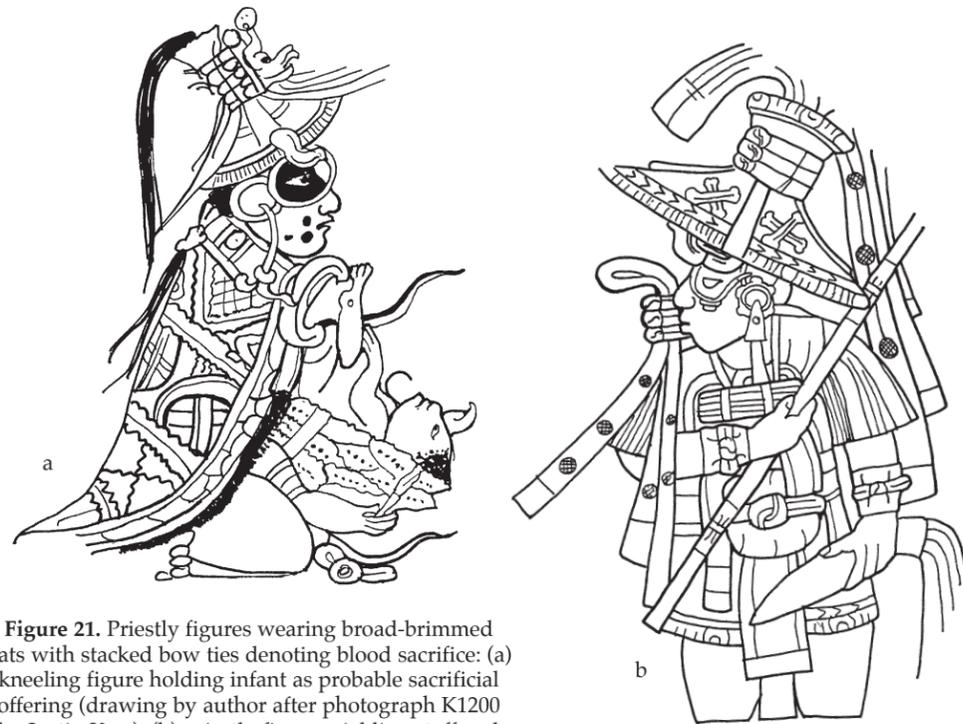


Figure 21. Priestly figures wearing broad-brimmed hats with stacked bow ties denoting blood sacrifice: (a) kneeling figure holding infant as probable sacrificial offering (drawing by author after photograph K1200 by Justin Kerr); (b) priestly figure wielding staff and sacrificial knife, note crossed bones on hat, Tikal Altar 5 (drawing by author).

paper, this scene may relate to the *Popol Vuh* episode when Xquik substitutes copal in place of her heart to placate the gods of death. I relate this to contemporary Maya curing traditions of *k'ee* offerings, in which something is offered to malevolent spiritual forces in place of the intended victim. This sort of curing readily overlaps with curses and witchcraft, which must have been of great significance to the Classic Maya. Recent work by David Stuart (in press) notes the importance of *wahy* spirits in Classic Maya rituals of sorcery, with specific *wahy* associated with particular nobles and royal courts. A number of Codex Style vessel scenes feature a figure with an elaborate cape and broad-brimmed hat presenting an infant to an enthroned lord, and rather than a celebration of birth these scenes probably concern infants as sacrificial *k'ee* offerings (Figure 21a). In fact, the Diablo tomb at El Zotz, Guatemala, featured a number of infants placed in bowls, which Andrew Scherer (2015:145) has interpreted as *k'ee* sacrifices for the spiritual well-being of the deceased king. Tikal Altar 5 features male figures with sacrificial weapons in a scene concerning exhumation and “cutting” of a noble woman’s bones. One of the figures wears the same broad-brimmed hat, in this case marked with crossed bones (Figure 21b). Just as crossed-bone skirts may denote women sorcerers and curers, the large hat may refer to sorcerers pertaining to the “dark arts” of witchcraft or *brujería*. Sorcery and witchcraft, such as *k'ee* offerings, were surely major components of Classic Maya religion, but until recently there has been relatively little interest in this aspect of ancient Mesoamerican religion (see Coltman and Pohl in press).

Aside from Classic Maya iconography, a major interest of mine has been Olmec religion. Over the years, there has been great debate as to whether the Olmec constituted a “Mother



Figure 22. Olmec figure with avian headdress within feather-rimmed niche, La Venta Altar 4 (drawing by author).

Culture” in Mesoamerica. The importance of Olmec influence can be overstated, especially if extended to political hegemony over highland Mexican cultures. However, there are aspects of Olmec religion that profoundly influenced contemporaneous peoples of Mesoamerica, especially regarding agricultural abundance and items of wealth, including jade and quetzal plumes. Certain items of Olmec wealth are known through buried caches of jade and serpentine, such as at La Venta and contemporary sites in the Maya region, including San Isidro in highland Chiapas and Cival and Ceibal in the Peten of Guatemala (see Drucker 1952; Drucker et al. 1959; Lowe 1981; Estrada-Belli 2006; Inomata and Triadan 2015). These buried offerings may partly account for the widespread concept that the major religious orientation of the Olmec was the earth and underworld rather than the sky, despite the fact that when Classic Maya caches are discovered they are rarely if ever considered by archaeologists as offerings to an “earth cult.” Similarly, although Olmec niche thrones at San Lorenzo and later La Venta have been interpreted as Olmec rulers emerging out of earthly caves, this is hardly secure, as there is abundant documentation of sky portals in ancient Mesoamerica, including sun gods emerging from solar disks (see Taube 2015). In the case of La Venta Altar 5, the emerging figure wears a bird headdress with flame-like feathers at his shoulders and back (Figure 22). Rather than portraying a cave, the feathered ring surrounding this being could well denote a floral, solar disk.

In “The Rainmakers: The Olmec and their Contribution to Mesoamerican Belief and Ritual” (Taube 1995), I address two distinct Olmec themes pertaining to the sky, the first being celestial symbolism and imagery and the other rain, a life-giving force falling from the sky. Just as with the later Classic Maya, the Olmec had skybands, at times segmented, with each section containing a related celestial motif. Although not mentioned in my “Rainmakers” study, there are also Olmec versions of star and sun signs going back to the Early Formative period of San Lorenzo. An Early Formative effigy vessel attributed to Las Bocas, Puebla, features a hunchback youth with a circular bowl on his side containing a four-lobed element closely resembling the later Maya *k'in* sun sign, which David Joralemon (1971:Motif 41, Fig. 135) has previously documented in Olmec iconography. This solar motif is superimposed over a four-pointed star sign, also found with the Olmec and the later Maya (Figure 23) (see Garton and Taube 2017). The celestial significance of both motifs is confirmed by the youth’s belt, which is a segmented skyband, resembling examples known for the Early Formative Olmec of San Lorenzo and even continuing to the early Colonial period in

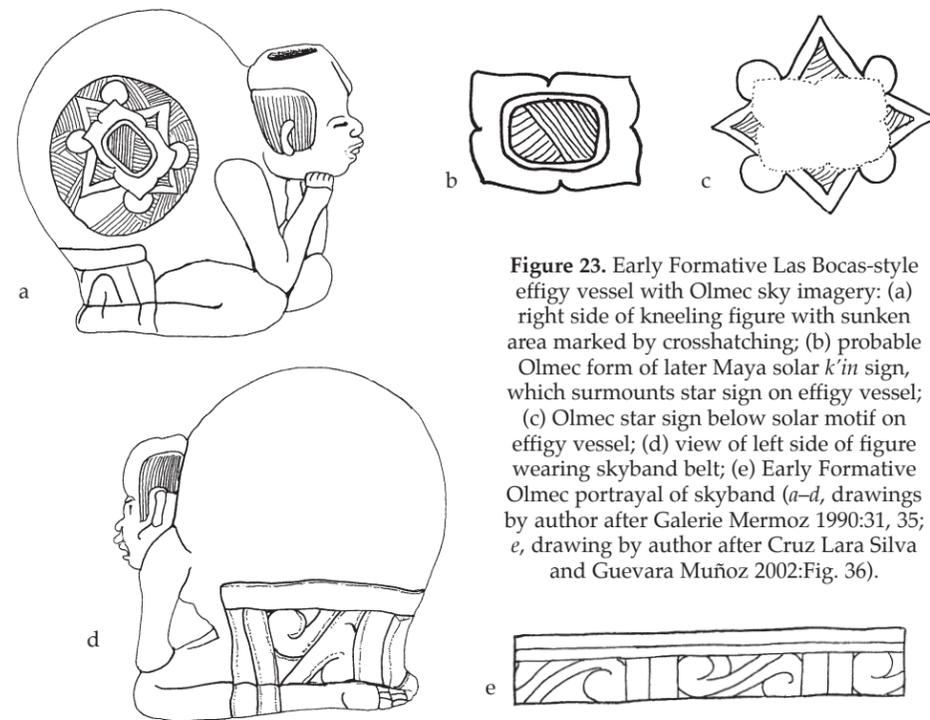


Figure 23. Early Formative Las Bocas-style effigy vessel with Olmec sky imagery: (a) right side of kneeling figure with sunken area marked by crosshatching; (b) probable Olmec form of later Maya solar *k'in* sign, which surmounts star sign on effigy vessel; (c) Olmec star sign below solar motif on effigy vessel; (d) view of left side of figure wearing skyband belt; (e) Early Formative Olmec portrayal of skyband (*a-d*, drawings by author after Galerie Mermoz 1990:31, 35; *e*, drawing by author after Cruz Lara Silva and Guevara Muñoz 2002:Fig. 36).

Central Mexico (see Houston et al. 2006:Fig. 4.20). The significance of this remarkable vessel remains unknown, but given the explicit sun and star and the skyband element, the figure may constitute the embodiment of the sky as a celestial deity. In Mesoamerican thought, the sky is often considered an inverted bowl (see Taube 2010c:213-214), and in this regard the ceramic figure is much like an anthropomorphized sky bowl containing the signs for stars and the sun as well as a skyband belt—in other words, this being may constitute an early Olmec “sky god.” Clearly enough, by the time of San Lorenzo there were already complex concepts and images concerning the sky.

Along with discussing skybands in the “Rainmakers” paper, I also defined a creature I termed the Avian Serpent, a celestial snake-like being with a feather crest, much like the aforementioned crested serpents of the Classic Maya, and a probable early form of Quetzalcoatl. A mural from Juxtlahuaca features a plumed serpent with a quetzal head (see Grove 1970), and Monument 19 from La Venta also depicts a serpent with a feather crest and bird beak. In the case of Juxtlahuaca, the serpent is placed opposite another painting featuring a jaguar, perhaps as a very early denotation of the dualistic contrast between these two beings as appears much later in the Structure A murals at Cacaxtla and in Aztec art as well. It should be noted that not all crested saurian heads are necessarily Avian Serpents, and the ceramic figure from Atlihuahuan, Morelos, wears a starry pelt of what appears to be a crocodile with a head of what could be regarded as the Avian Serpent (see Joralemon 1971:Fig. 90). There are also stone portrayals of crocodilians with the same crested head (see Guthrie 1995:208). In other words, without an accompanying body, it remains difficult to determine whether a crested head is a serpent or a crocodile. However, it is also conceivable that the crested head on crocodilians is intended to evoke the Avian Serpent and denote such crocodilians

as all-encompassing beings of both earth and sky.

The second portion of the “Rainmakers” paper concerns the Olmec rain god, following the original insights provided by Miguel Covarrubias. His famous chart of the evolution of Mesoamerican rain gods, including Cocijó of the Zapotec, Tlaloc in Central Mexico, and the Maya Chahk is spot on, although he confused the Classic Maya form of Chahk with Witz heads, that is, zoomorphic mountains. In the “Rainmakers” study, I discuss and identify Classic Maya Chahks, building in part on an original glyphic decipherment by David Stuart based on the so-called Codex Style “Cosmic Plate” (see Schele and Miller 1986:49, n. 55). In addition, I illustrate Late Preclassic examples of the Maya rain deity, thereby providing a temporal link between the Classic Maya and the far-earlier Formative Olmec. Izapa Stela 1 is an especially important monument for the identification of the Late Preclassic Maya rain god. The scene is dominated by a powerful image of Chahk fishing and raising a net containing a fish, with another atop a creel slung over his back. A number of carved bones from Tikal Burial 116 also depict Chahk fishing, and a recently published Early Classic vessel portrays Chahk fishing with a net bound to a long pole (see Taube 2010c:Figs. 12-13). In Maya thought, fishing—the act of raising fish out of water—is a symbolic rain-making act. Thus streams of water fall from the net and creel on Izapa Stela 1. In addition, clouds and Chahk heads can also be discerned in the falling water, with two more in the basal band of water in which Chahk fishes. The rain god also wears another Chahk head on his brow, and for all of these examples, including the principal Chahk, the cranium is spiral. The two heads appearing in streams of falling water merge into cloud scrolls, much as if the head of Chahk is actually a rain cloud. Similar Chahk heads with cloud scrolls can also be seen at Kaminaljuyu, and I subsequently noticed another example, in this case inverted on Takalik Abaj Stela 3 (Taube 2009a:29). A recently excavated Late Preclassic stucco facade relief from El Mirador, Guatemala, depicts a series of Chahk heads as downwardly facing, personified S-shaped clouds, much like the S-shaped clouds known for Middle Formative Olmec-style art from Chalcatzingo, as well as the Late Postclassic Maya *Codex Dresden*. However, the Late Preclassic Chahk can also appear without the cloud scroll cranium, with an excellent example appearing in the West Wall mural at San Bartolo (see Taube et al. 2010).

Although not included in Covarrubias’s original chart, an Olmec serpentine statuette in the American Museum of Natural History in New York provides an important link between the Olmec and the Maya and Zapotec rain gods (Figure 24). Unquestionably Olmec, the figure’s bulging cranium also spirals, much like Late Preclassic examples of the Maya rain deity. In addition, his cheeks are marked with an upturned horizontal band with two vertical bands below, a facial trait found with early examples of the Zapotec rain god Cocijó. As for

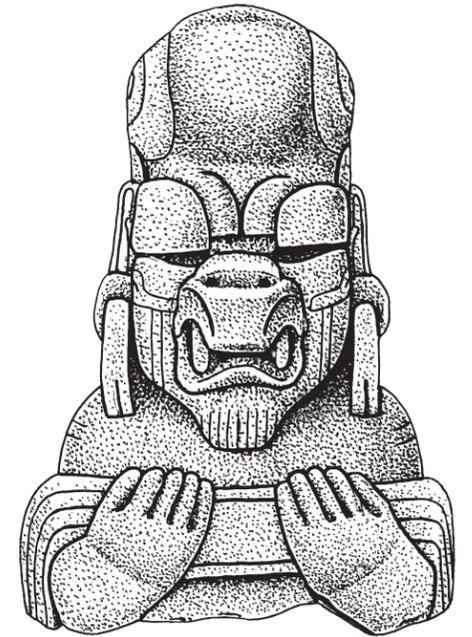


Figure 24. Middle Formative serpentine statuette portraying the Olmec rain god, American Museum of Natural History, New York (drawing by author).

the Olmec rain god, he typically has a snarling, fanged maw, a deeply furrowed brow, and slit or comma-shaped eyes that turn sharply downward at the outer corners. Although the earliest example supplied by Covarrubias dates to the Middle Formative, this being can be readily traced to the Early Formative, with examples including San Lorenzo Monument 10 as well as contemporaneous ceramic figurines, in many cases ballplayers (see Taube 2009a). In light of these observations, I presented a revised version of Covarrubias's evolutionary chart in *Olmec Art at Dumbarton Oaks* (Taube 2004c:Fig. 14), with the major change being the evolution of the Maya Chahk from the Late Preclassic period.

Following my interest in the Maya maize deity and Olmec iconography, in 1996 I published "The Olmec Maize God: The Face of Corn in Formative Mesoamerica." The Olmec maize god can be usually identified by maize motifs sprouting from his cleft cranium. Although this being was first identified by Michael Coe (1968:111) and David Joralemon (1971:159-166) decades before, there were few subsequent publications discussing Olmec maize symbolism, the one noteworthy exception being a study by Virginia Fields (1991), who compared Olmec maize imagery to a version of the Maya Jester God headband jewel of Classic Maya kingship. This work has been a very useful means to identify early maize gods of the Olmec and Maya (see Taube and Saturno 2008). Subsequent research has established that there are actually at least three distinct Jester Gods in the Classic, a foliated bird head and a piscine form as well as the corn god's decapitated head, which can be either a simple trident form or personified as the Maya maize deity with a triple-pointed cranium (see Stuart 2012; Taube and Ishihara 2012:Fig. 81). Aside from the cranial maize elements, the Olmec maize god typically has an extended upper lip and eyes that slant centrally downwards to the nose. The face of this deity often appears on jade and serpentine celts, identifying these green axes as ears of corn. On a number of incised celts, the maize god is flanked by four elements at the corners, forming the bar and four dots motif of the intercardinal points and world center, a cosmogram with the maize god in the middle as the pivotal *axis mundi*. At times, the four corner elements are celts, recalling the elaborate celt caches of the Middle Formative Olmec, as found at La Venta, Cival, and Ceibal. In my view, the cleft element appearing on the head of the maize god and at times on incised depictions of celts refers to the enveloping bracts or husk of a maize ear. At times there is no projecting element in the cleft, and I consider this a reference to green, growing corn with the ear not yet developed. In addition, there appears to be a specific aspect of the Olmec maize god as green corn who often appears with a sharply back-turned cranium resembling a modern "hammer claw," a convention probably referring to the pliant, bending nature of growing maize (Taube 2004c:94-99). In this regard, it is also noteworthy that Olmec maize leaves often end with a simple cleft, again alluding to green, growing maize.

In the "Olmec Maize God" study, I note that a central component of Olmec religion is wealth and agricultural abundance, which is personified by the Olmec maize god. Central components to this "cult of corn" were greenstone celts and feathered maize ear fetishes—ears of corn bundled with a surrounding "husk" of feathers. Quite frequently, the maize ear projects out of the top of the feathered bundle, explicitly identifying it as corn. Moreover, serpentine portrayals of the object are simply tipped with the head of the maize god with the ear of corn projecting from his cranium. An especially massive, fragmentary jade example is in the collection of the Peabody Museum at Harvard University. Corresponding to the upper portion of a maize ear fetish, the central lower part bears the eroded face of the Olmec maize god, including a maize ear in the cleft cranium (see Taube 2004c:Fig. 13).

In the same work, I trace the Olmec maize god to later corn deities of Mesoamerica, including Late Preclassic and Early Classic Gulf Coast peoples as well as the Zapotec and Classic Maya, much like Covarrubias did for the Olmec rain god. Like Covarrubias, I provide a chart tracing the evolution of these beings. However, it is noteworthy that the chart covers solely southeastern Mesoamerica, with Central Mexico not included. This is because the Early Classic maize deity of Teotihuacan derived squarely from the Maya maize god and not the Olmec. In other words, the Early Classic Teotihuacan "face of corn" was wholly Maya, including even the Maya-style modified cranium (Taube 2017a). More than likely this Teotihuacan being was the source of later maize gods of Late Classic and Postclassic highland Mexico, including the Aztec Cinteotl. In terms of the maize gods of the Red Temple at Cacaxtla, they are probably representations not only of the Maya maize god but the corn deity of Cacaxtla as well. In other words, just as in the case of Teotihuacan, the maize deity at Cacaxtla was an ethnically Maya being. It is noteworthy that in the abundant imagery of both Cacaxtla and Xochicalco, there are no clear examples of other maize deities, in contrast to the abundant corpus of Maya-style maize god figurines at Teotihuacan.

Given the strong cultural link between the Olmec and the neighboring Maya, the Late Preclassic period is critically important to document early Maya images of the corn deity. However, at the time that the "Olmec Maize God" was written, there were very few examples known. This limited corpus changed radically with the discovery of the murals in Pinturas Sub-1A at San Bartolo, with no less than six examples of the Maya maize god in the mural chamber (Saturno et al. 2005; Taube and Saturno 2008; Taube et al. 2010). In addition, other images of the Late Preclassic Maya corn god were subsequently discovered at Cival, also located in the northeastern Peten of Guatemala (see Estrada-Belli 2011:Figs. 5.22-5.24). Both the San Bartolo and Cival examples closely resemble the Olmec maize god, including the strongly protruding upper lip and slanted eyes. A still-earlier version of the Maya maize god was discovered in the Pinturas group at San Bartolo as a fragment from the structure known as Xbalanque, dating to the fourth century BC, that is, only slightly more than a hundred years after the Olmec demise, making this virtually the "missing link" in the evolution of the maize god from the Olmec to the early Maya (Taube and Saturno 2008). The facial features of this being are virtually identical to the examples of the Maya maize gods from Pinturas Sub-1A, which are also strongly Olmec in appearance. Thanks to the recent discoveries at San Bartolo, Cival, and other sites, the transition from the Olmec maize god to the Classic Maya deity is virtually seamless.

Mention has been made of ancient jade caches oriented to four directions at many Maya sites, typically buried on the central axis of temple foundations. In "The Jade Hearth: Centrality, Rulership, and the Classic Maya Temple" (Taube 1998c), I focus on the symbolism of Maya temples, including concepts of the temple as a cosmogram embodying the world directions and cosmic center, and the temple as a house not only in the sense of being a domicile for deities but also a model of the world (see also Taube 2013). Widely known for contemporary Maya peoples, the cosmic house model is also documented for the Jiquaque in the Montaña de Flor region of central Honduras. For the Jiquaque, there are four house beams (*horcones*)—two in the east and two in the west—that support the world much like pillars holding up a roof (Chapman 1978:105). In addition, following original insights by Linda Schele (see Freidel et al. 1993), I call attention to the symbolic importance of the three-stone hearth in Maya epigraphy, art, and architecture, including the three jade boulders cached under the central stela of Structure A-3 at Ceibal. As has been mentioned, a set of three

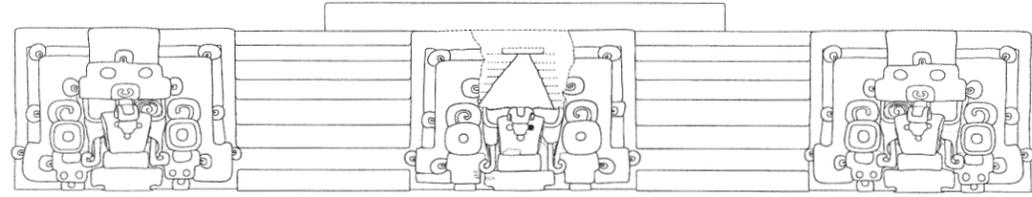


Figure 25. Early Classic platform at El Zotz with three avian Jester Gods sprouting foliation (drawing by Mary Clarke and Timothy Linden, courtesy of Thomas Garrison).

stone spheres was recently discovered in a Middle Formative cache at the same site. One particular jaguar *wahy* spirit is known to be of the three-hearthstone place, and one depiction of this being in the act of swimming shows his pelage marked with a pattern of four corner markings and three smaller spots in the middle, a clear portrayal of the cosmogram of four intercardinal points and the central three hearthstones (see Taube 2013). In a number of epigraphic examples, rising fire or smoke indicates that the three forms are indeed hearthstones. Moreover, the West Wall mural at Late Preclassic San Bartolo features braziers with burning offerings atop hearthstones (see Taube et al. 2010).

Along with serving as domiciles for the gods, temples were closely related to censers and fire offerings, with both urns and temple facades sharing much of the same iconographic format and imagery. As I note in “The Classic Maya Temple: Centrality, Cosmology, and Sacred Geography in Ancient Mesoamerica” (Taube 2013), there are four-sided cache vessels that clearly evoke the concept of a miniature house or temple. One form of the jade Jester God, the foliated avian head, often appears in groups of three, with the rulers wearing this assemblage serving as the pivotal *axis mundi* (see “The Jade Hearth,” Taube 1998c). In addition, this series of three deity heads also appears on monumental architecture. Aside from a painted tomb at Río Azul and major stucco sculpture at Altun Ha discussed in the “Jade Hearth” study, recent excavations by Thomas Garrison at El Zotz have uncovered an impressive Early Classic program in stucco sculpture of the same three forms of the Jester God extending across an entire platform (Figure 25).

“The Turquoise Hearth: Fire, Self-Sacrifice, and the Central Mexican Cult of War” (Taube 2000c) concerns a very different topic, this being the symbolism of fire and warfare in ancient Central Mexico and in particular the Early Classic site of Teotihuacan. The title derives from an early Colonial account in the *Florentine Codex* describing the self-sacrifice of Nanahuatzin and Tecuciztecatl in a fiery pit at Teotihuacan and their transformation into the sun and moon. In this passage, the place of sacrifice is referred to as the *xiuhtetzacualco*, or “turquoise enclosure,” a site also mentioned in connection with the Late Postclassic god of fire Xiuhtecuhtli (“turquoise lord”) as the world navel or center. Although virtually absent at Teotihuacan, turquoise symbolism was prominent in Central Mexican thought, as in the concept of the Xiuhcoatl—the meteoric turquoise fire serpent (see also Taube 2012c). Although it may seem strange to relate turquoise to fire, the blue color constitutes the heart of the flame. Despite the lack of turquoise at Teotihuacan, a great deal of related Late Postclassic fire and military symbolism can be found at this Early Classic site. Thus the ancestor of the Postclassic Xiuhcoatl fire serpent is the Teotihuacan being that I termed the War Serpent in my “Temple of Quetzalcoatl” paper (Taube 1992c). Oddly, although this being explicitly appears as a snake in Late Classic Maya iconography and is glyphically labeled “Eighteen Its Images Serpent,” it lacks a serpent body but still has a head resembling the Maya examples

(see also Taube 2011, 2012c). As has been noted, the Teotihuacan “War Serpent” appears to be more in the nature of a supernatural caterpillar, that is, a pupate being before its metamorphosis into a butterfly. In fact, Late Classic Maya depictions of the War Serpent incorporate butterfly attributes, including pairs of long, protruding nasal elements resembling antennae and, more importantly, a crenellated edging found with Classic and Postclassic portrayals of butterflies. At Teotihuacan, the War Serpent also has butterfly attributes, especially the large “feathered” eyes that are commonly found with this insect at Teotihuacan.

In Nahuatl, *xihuitl* means not only turquoise but also comet or meteor. In this regard, it is noteworthy that in Mesoamerican thought, caterpillars are widely identified with meteors and meteorites, including among the sixteenth-century Aztec and contemporary Nahua, Otomi, and Maya speakers, including Tojolabal and Mopan (see also Taube 2012c:130). During the Postclassic period, the Xiuhcoatl commonly appears with stars on its snout or body, as seen on an Early Postclassic wooden example from the Cenote of Sacrifice at Chichen Itza (Taube 2012c:Fig. 11b). The weapon of the Aztec tutelary god Huitzilopochtli, the Xiuhcoatl was a spearthrower that shot meteors as its flaming darts, and the *Codex Borbonicus* portrays Huitzilopochtli wielding a blue Xiuhcoatl spearthrower lined with stars, while Teotihuacan-style renderings of spearthrowers are marked with similar round forms, almost surely stars as well. Serpent spearthrowers are also known for the Classic period, including a War Serpent example from Bonampak and a Codex Style bowl illustrated in “The Turquoise Hearth.”

The Nahuatl *xihuitl* also signifies both “herb” and “year,” and quite often the Xiuhcoatl has a plant bundle at the end of its tail, while similar vegetal bundles appear with Classic Maya portrayals of the War Serpent as well as fire offerings, frequently bound with a knot identical to the Postclassic Mixtec year sign. For the massive back mirrors portrayed on the Atlantean columns at Tula, the bodies of the Xiuhcoatl serpents appear to be formed of the same material, also ending with small, spherical elements—quite probably flowers. In the “Turquoise Hearth” study, I note that this same motif also appears with Tlaloc priests wearing a year sign headdress in the *Codex Borbonicus*, and I suggest that the plant is *yauhtli* or sweet-scented marigold (*Tagetes lucida*). After this study was published, excavations at the Templo Mayor uncovered Offering 102, which contained a remarkably preserved Tlaloc priest costume which according to Leonardo López Luján (personal communication 2010) featured actual bundles of *yauhtli* (for Offering 102, see Gallandro Paradí 2011). In the “Turquoise Hearth,” I illustrate an elaborately painted bowl featuring the same bundled plant motif with both the central War Serpent and Tlaloc heads on the rim, quite possibly a much earlier Late Classic reference to the same plant.

Clearly enough, peoples of ancient Mesoamerica were fully aware of the striking metamorphosis from caterpillar to moribund chrysalis to fully reborn butterfly, and as with the later Aztec, there is abundant evidence of the relationship of butterflies to warriors at Teotihuacan (Taube 2000c; Headrick 2007). The intervening period between Teotihuacan and the Aztec is the early Postclassic era of the Toltec. For the great Atlantean columns at Tula, in addition to the pupate Xiuhcoatl serpents on the rims of the back mirrors, the prominent breast pieces were turquoise mosaic plaques representing stylized butterflies (see Taube 2012c:126). Moreover there are monumental portrayals of butterflies at both Tula and contemporaneous Chichen Itza. At Chichen Itza such insects can also have feathers, indicating that they are supernatural beings, and Aztec warrior souls were described as both precious birds and butterflies.

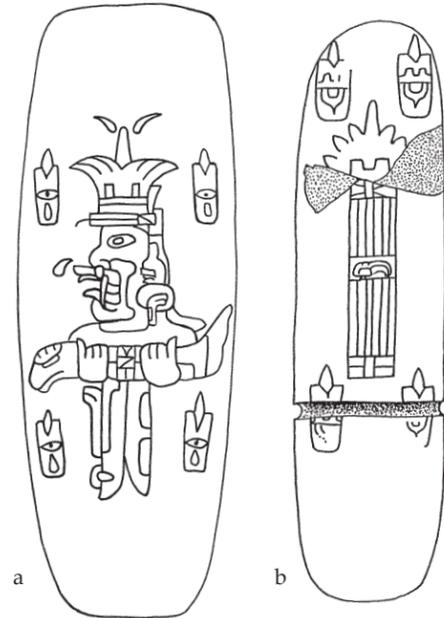


Figure 26. Olmec celts portraying maize images as the central bar of the bar and four dots motif: (a) jadeite celt attributed to Río Pesquero with Olmec maize god in center as the central element of the bar and four dots motif (drawing by author from Taube 2000a:Fig. 4b); (b) serpentine celt with maize ear fetish in center, Los Angeles County Museum of Art (drawing by author from Taube and Saturno 2008:Fig. 7d).

As a final discussion in the “Turquoise Hearth” study, I offer a new analysis of the great Calendar Stone, among the most preeminent monuments known for the Aztec. I note that the format is quite similar to the Toltec turquoise back mirror, but in this instance there are only two Xiuhtli caterpillars on the rim, not four. In addition, I suggest that the central image is of the present sun Tonatiuh as Nahui Ollin emerging from the turquoise enclosure mythically attributed to Teotihuacan, and here as a newly reborn butterfly rising from the fiery hearth.

In “The Olmec Maize God” (Taube 1996), I provide preliminary observations concerning the nature and appearance of this deity, along with his relation to such sacred and precious objects as greenstone celts and feathered maize fetishes. In a subsequent study, “Lightning Celts and Corn Fetishes: The Formative Olmec and the Development of Maize Symbolism in Mesoamerica and the American Southwest” (Taube 2000a), I am less concerned with identifying the Olmec maize god and concentrate instead on his historic significance in the development of maize ritual and symbolism in Mesoamerica and the American Southwest. Far more than simply an important staple, maize embodied basic concepts concerning the nature

of the cosmos, social identity, and human values. In this paper, I note that greenstone Olmec celts were an important component of a wealth economy strongly centered on maize, with these precious items embodying corn. In addition, as with later Mesoamerican peoples celts were probably also compared to lightning and by extension the four directions and intercardinal points, since beings of rain and lightning of both Mesoamerica and the American Southwest are associated with world directions. In this study, I focus on the Olmec and other cultures as well, these being the ancient and contemporary Maya, Late Postclassic Central Mexico, and Puebloan peoples of the American Southwest, especially the Hopi. I note the close relationship of celts to maize not only for the Olmec, but also the Classic Maya and the Aztec, as can be seen in the *Codex Borbonicus* portrayals of Chicomecoatl, the maize god. In Mesoamerica, maize was also closely related to the precious plumes of the quetzal bird from Olmec times to the contact-period Aztec. For the Southwest I discuss two ritual items that bear striking resemblance to the celts and maize ear fetishes of the Olmec—the feathered maize ear *tiponi* and the hornblende celts known as *chamahiya*, which rather than being functional tools have deep symbolic meaning in Hopi ritual and symbolize maize, world directions, and lightning. I argue that both the *tiponi* and *chamahiya* are historically related to the far more ancient celts and maize ear fetishes of the Olmec; during the Formative period when maize became widespread in Mesoamerica and the Southwest, they were part of a

basic symbolic complex pertaining to corn. In other words, far more than a basic staple, corn was imbued with complex ritual and belief by at least the Middle Formative period.

A good many years after this work was published, I came across a then-unpublished incised Olmec celt at the Los Angeles County Museum of Art (Figure 26b). As discussed in “Lightning Celts and Corn Fetishes” and elsewhere, a number of incised Olmec celts feature the Olmec maize god in the center of a quadripartite arrangement as an elaboration of the “bar and four dots” motif (Figure 26a). For the LACMA piece, a maize fetish substitutes for the maize deity, making it plain that these fetishes embody the Olmec spirit of corn, much like the *tiponi* of the American Southwest. In addition, there are serpentine carvings of maize ear fetishes that explicitly portray the head of the maize god with an ear of corn projecting from his cranium (see Taube 2000a:297).

In “The Breath of Life: The Symbolism of Wind in Mesoamerica and the American Southwest” (Taube 2001b), I again examine traditions shared between Mesoamerica and the American Southwest, in this case focusing on concepts pertaining to breath and wind. Rather than the negative winds that bring disease or powerful and destructive gales, the positive and life-giving aspects of wind, such as the breath spirit and cloud-carrying breezes, are the focus of this study. Much of this relates to the Flower World complex first defined by Jane Hill (1992) for Uto-Aztecan peoples of Mesoamerica and the American Southwest including the Aztec and Hopi. A great deal of this floral symbolism is conveyed by song, as can be seen for the *Cantares mexicanos* of Central Mexico (Bierhorst 1985), Yaqui deer songs (Evers and Molina 1987), and the *katsina* songs of the Hopi (Sekaquaptewa et al. 2015). The following Hopi *katsina* song recorded in 1903 exemplifies some of the major themes of Flower World, including blossoms, bright colors, and flying supernatural beings, as well as growth and abundance:

The yellow butterfly maidens and the blue/green butterfly maidens, they will be fluttering along here in the flowery expanse of mariposa lilies and blue asters. The butterfly maidens of various colors will be fluttering colorfully along the flowery expanse of watermelon plants. The butterfly maidens of various colors will be fluttering colorfully along the flowery expanse of muskmelon plants. (Sekaquaptewa et al. 2015:68)

Along with blossoms, Flower World encompasses such concepts as the sun, colorful and shining objects, music, and an afterlife paradise of ancestral spirit beings.

As with my previous study of maize in relation to celts and feathered maize fetishes, I begin “The Breath of Life” with the Olmec and one of the most ambitious portrayals of wind known in ancient Mesoamerica, Monument 1 at Chalcatzingo. In this case, a zoomorphic cave in profile exhales symmetrical breath volutes amidst a background of rain clouds and a field of growing corn, vividly portraying the exhalation of moist clouds into the sky. This theme clearly relates to the fact that Monument 1 is below the main runoff channel on the mountain, with cupules to collect water directly under the relief (see Schaafsma and Taube 2006:Fig. 3b). Although depicted in profile, the Chalcatzingo cave is a quatrefoil, as can be readily seen in a face-on rendering (Figure 27a). In addition, a Late Postclassic Aztec relief from Huitzucó features a zoomorphic mountain cave exhaling a pair of blossoms from the corners of its mouth, with similar flowers in a portrayal of the ancestral mountain Culhuacan immediately below (Figure 27c). As for Chalcatzingo, the three known examples of the zoomorphic cave have blossoming plants at the sides of the face, surely relating to the widespread concept of Flower Mountain in Mesoamerica and the American Southwest. In

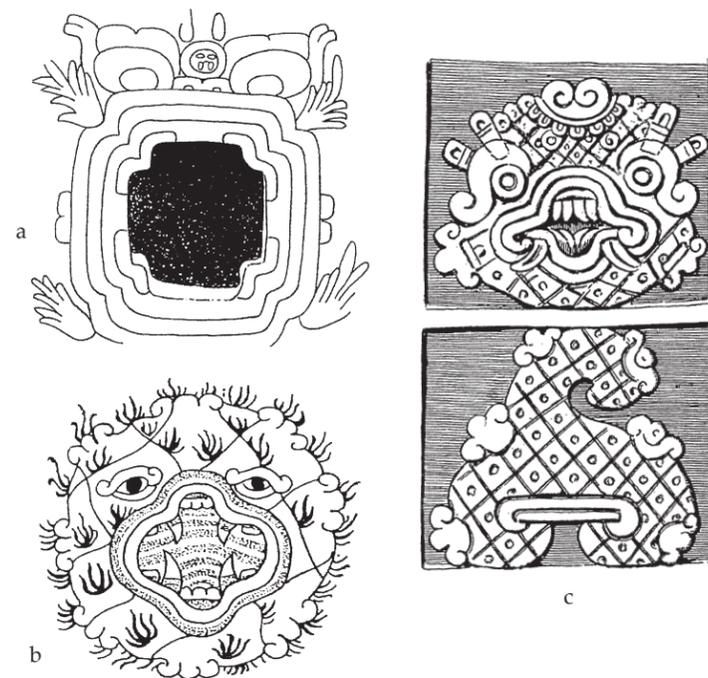


Figure 27. Ancient Mesoamerican portrayals of zoomorphic mountains with quatrefoil cave maws: (a) Middle Formative Olmec-style portrayal of zoomorphic mountain with cave maw, Chalcatzingo (drawing by author from Taube 2010:Fig. 5.5b); (b) Early Colonial portrayal of mountain with fanged cave maw, *Codex Kingsborough* (drawing by author from Taube 2010:Fig. 5.5a); (c) Late Postclassic Aztec monument from Huitzuco portraying zoomorphic mountain cave and the ancestral mountain of Culhuacan (from Seler 1902-1923:2:757).

addition, the early Colonial *Codex Kingsborough* depicts the community of Tepetlaoztoc, a zoomorphic hill displaying a quatrefoil maw first known in Middle Formative Olmec-style art from Chalcatzingo (Figure 27b).

Close to Monument 1 at Chalcatzingo, there are two other petroglyphs portraying the earth crocodile exhaling bifurcated breath scrolls with rain clouds, explicit portrayals of the earth breathing rain into the sky. In the study, I call attention to a similar scene from Tecaltzinco, Puebla, on a boulder relief adjacent to a pond at the base of a hill, recalling the Olmec site of El Manatí, a pool immediately below a hill with a constant spring of fresh water. There is another crocodilian relief at Ticoman, Puebla, also next to a pond, and in this case the creature appears to simply exhale a bifurcated, beaded stream of water, a theme that also appears with an Olmec maize deity Jester God on the Middle Formative Shook Panel from Guatemala (Figure 28). Clearly enough, concepts of wind, breath, and rainmaking were already highly developed by at least Middle Formative times in ancient Mesoamerica.

For the Olmec, flowers can also emit a symmetrical pair of outcurling elements, in this case alluding to the aroma or “breath” of the flower, a Mesoamerican theme also found with blossoms continuing to the sixteenth century. In “The Breath of Life” study, I first identify an anthropomorphic Maya wind god, who appears epigraphically as the day name Wind or Ik’, as the personified form of the number three, and as the patron of the Maya month Mak. In glyphic form, he typically appears with a prominent blossom on his brow emitting breath scrolls of aroma and with a wind sign either on his cheek or rendered as his earspool in profile (Figure 29). In many respects he seems to be closely related to or even an aspect of the maize god. Thus for one Early Classic example, his upper head ends in a tight curl, a well-known trait of the Maya maize god during the Early Classic (Figure 29a). In addition, a sculpted stucco glyph from Palenque portrays him with the *nal* maize sign atop his brow (Figure 29b). As of yet, the overlapping meanings of the two deities remain little studied, but

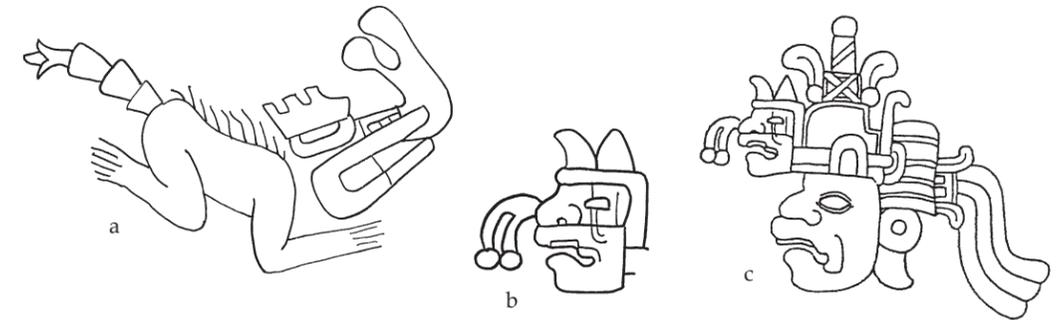


Figure 28. Portrayals of beaded breath elements in Middle Formative Olmec-style art: (a) crocodilian with bifurcated breath motif emerging from snout, petroglyph from Ticoman, Morelos (drawing by author after Córdoba Tello 2008:Fig. 4); (b-c) maize deity “Jester God” brow piece with pendant bifurcated breath element, details of “Shook Panel” (drawing by author from Taube and Saturno 2008:Fig. 3b).

it could well be that as a sustaining embodiment of life and well-being the maize god and his symbolic complex overlaps with the personification of vital breath. Since the focus of the volume in which “The Breath of Life” was published primarily concerned contacts and exchange between highland Mexico and the Greater Southwest, it was not possible to include a more detailed account relating the Maya wind god to flowers, music, and the breath soul, but the general outlines are clear. Despite the great distance between the Maya region and the Southwest as well as striking differences in artistic style, many aspects of the ancient Maya complex pertaining to breath, wind, and flowers are remarkably similar to Puebloan belief and ritual (see Taube 2010b).

In Late Postclassic Central Mexico, there were two distinct deities pertaining to wind, one being Quetzalcoatl, a rattlesnake with quetzal plumes covering its body, and the other Ehecatl, a duck-billed deity. It is noteworthy that although early contact-period texts describe them as aspects of the same being, they only partially overlap in Prehispanic imagery. Thus, there are virtually no depictions of a plumed rattlesnake with the head of Ehecatl. In Central Mexico, Quetzalcoatl can be readily traced to the third century AD with the Temple of Quetzalcoatl at Teotihuacan, but Ehecatl does not appear widely in the region until the Late Postclassic period, with no known examples in Epiclassic Xochicalco, Cacaxtla, or Early Postclassic Tula. Rather than deriving from Central Mexico, Ehecatl originated in southeastern Mesoamerica, with versions commonly appearing in Classic Maya scenes as well as Late Preclassic art, such as the Tuxtla Statuette. This duck-billed being is also found in Formative Olmec art and even on a pre-Olmec Early Formative Mokaya vessel, dating to roughly the fourteenth century BC.

Among the Classic Maya, the anthropomorphic wind god is also the god of music, and in Central Mexico Ehecatl was also closely identified with music and musical instruments. In the “Breath of Life,” I note that pages 35 to 38 of the *Codex Borgia* concern the origin of

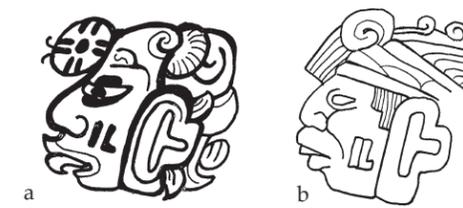
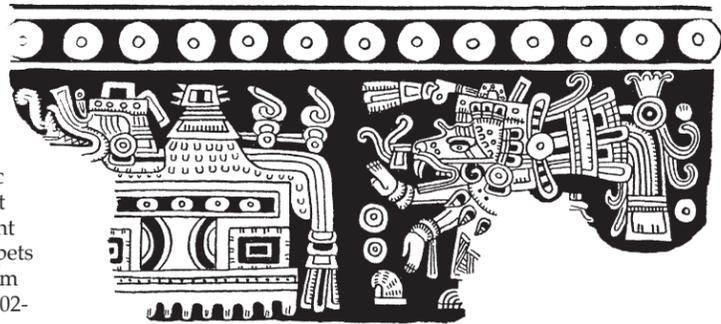


Figure 29. Classic Maya glyphic portrayals of the wind god: (a) Early Classic wind god displaying cranium of Maya maize deity, detail of painted vessel (drawing by author after photograph courtesy of Stephen Houston); (b) Late Classic stucco glyph of wind deity, Palenque (drawing by author after Miller and Martin 2004:Pl. 116).

Figure 30. Late Postclassic portrayal of Xolotl in front of wind temple with serpent Ehecatl carrying conch trumpets on back, detail of mural from Mitla, Oaxaca (from Seler 1902-1923:2:347).



music based on two early Colonial accounts describing a priest of Tezcatlipoca or the wind journeying to the house of the sun, which appears on *Borgia* page 35 with Tezcatlipoca taking a bundle from a deity who is quite probably Tlalchitonatiuh, "Sun Earth," a moribund aspect of the sun deity closely identified with the underworld. On the following page 36, this same bundle opens as a great spiral containing articles of music and dance—such as drums and flutes—as well as basic motifs of the Flower World complex, these being flowers, butterflies, and precious birds. On page 38, it can be seen that the entire spiral is personified by Ehecatl whose massive head terminates the stream of music. However, an especially important detail is page 37, where the god of music Xochipilli plays the flute and drum found atop the music bundle on page 36.

Along with the middle pages episode in the *Codex Borgia*, a Late Postclassic mural from the Zapotec site of Mitla also features the duck-billed wind god as the bringer of music (Figure 30). In the scene, the canine deity Xolotl stands before a wind temple, identifiable not only by the thatched conical roof but also by a prominent serpent with the head of Ehecatl. The serpent bears two conches on its body, almost surely conch trumpets, the instrument par excellence of Ehecatl-Quetzalcoatl. In one Aztec creation account, Quetzalcoatl bests the god of the underworld by sounding a conch, and in so doing is allowed to escape and create the current race of humans on the earth's surface. As in the *Borgia* middle pages, the Ehecatl-headed serpent in the Zapotec mural is probably portrayed as the bringer of music. The prominent presence of Xolotl at Mitla is also noteworthy, as he appears no less than four times in the origins of music seen on pages 35 to 38 of the *Borgia*, including with the bundle emitting music on page 36 and enthroned in the conical wind temple on page 47. Although not mentioned in the two known Aztec accounts concerning the mythic origins of music, Xolotl plays a major part in the version appearing in the *Borgia*.

According to Diego Durán (1971:134), the round temple of the wind god Ehecatl at the Aztec capital was in the form of a giant resounding 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 it 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 the people will retire. Thus, when the Indians heard the sound of the drum, they said, "Let us retire, for Yecatl has sounded."

It is quite likely that this structure featured one or more massive foot drums, which are known for ancient and contemporary ceremonial structures of the Greater Southwest,

including the *tukipa* temple of the contemporary Huichol as well as ancient kivas of the American Southwest (see Jáuregui 2008:94).

A Late Postclassic ceramic flute in the regional museum in Tapachula, Chiapas, features Ehecatl riding on the back of a flying bird (Figure 31). The distal bulbous end where the music would exit is marked by symmetrical scrolls, clearly denoting music in physical form. It is noteworthy that flying figures also appear on musical instruments as early as the Late Preclassic, with an especially striking example appearing on a Late Preclassic Zapotec bone flute from Yugué in coastal Oaxaca (Figure 32a). In this carving, a supernatural skeletal being flies along the surface of the flute and emits a prominent breath or music scroll containing a buccal-masked deity head that could well be a version of the duck-billed wind god of southeastern Mesoamerica. Along with the deity head, the Zapotec flute volute has a pair of stepped elements that closely resemble the Ik' sign for breath and wind known for the ancient Maya as early as the Late Preclassic period (Figure 32b). A Late Classic stela from the Puuc site of Huntichmul portrays a ruler with a breath scroll clearly marked with Ik' signs (Figure 32c). Although of slightly different form, it is

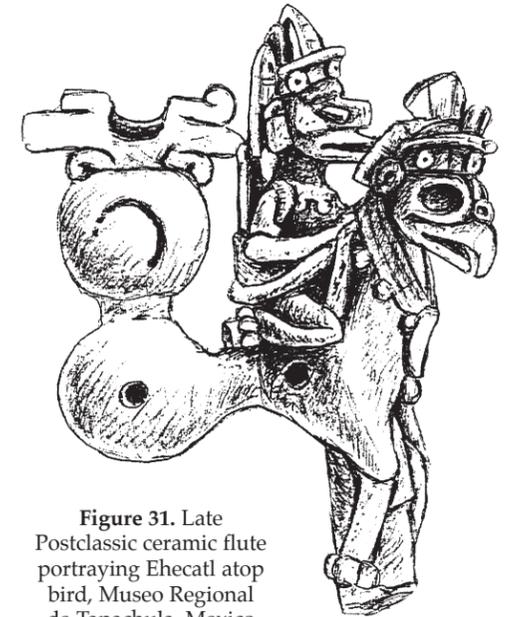


Figure 31. Late Postclassic ceramic flute portraying Ehecatl atop bird, Museo Regional de Tapachula, Mexico (drawing by author).

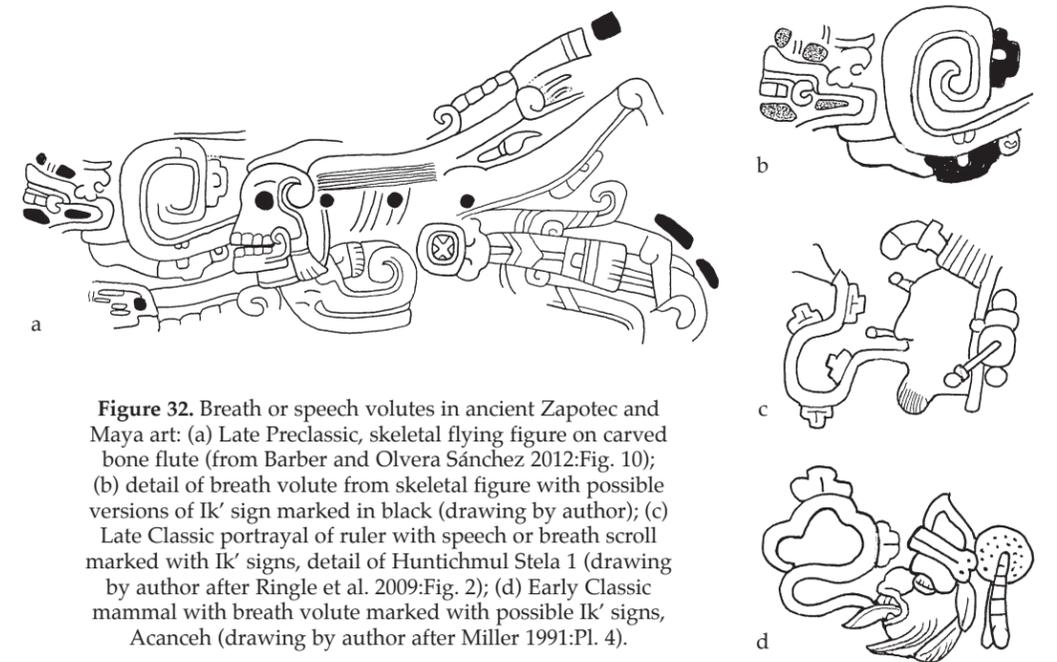


Figure 32. Breath or speech volutes in ancient Zapotec and Maya art: (a) Late Preclassic, skeletal flying figure on carved bone flute (from Barber and Olvera Sánchez 2012:Fig. 10); (b) detail of breath volute from skeletal figure with possible versions of Ik' sign marked in black (drawing by author); (c) Late Classic portrayal of ruler with speech or breath scroll marked with Ik' signs, detail of Huntichmul Stela 1 (drawing by author after Ringle et al. 2009:Fig. 2); (d) Early Classic mammal with breath volute marked with possible Ik' signs, Acanceh (drawing by author after Miller 1991:Pl. 4).

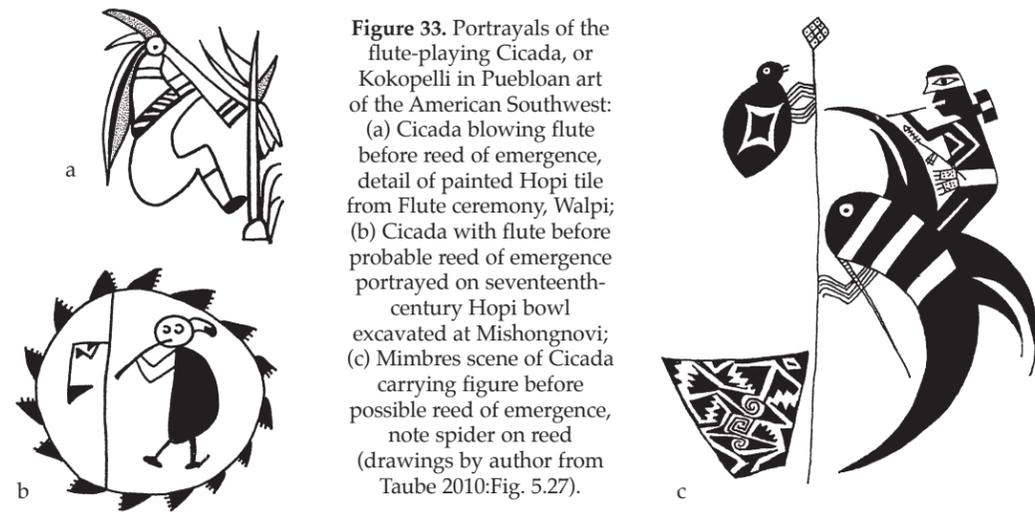


Figure 33. Portrayals of the flute-playing Cicada, or Kokopelli in Puebloan art of the American Southwest: (a) Cicada blowing flute before reed of emergence, detail of painted Hopi tile from Flute ceremony, Walpi; (b) Cicada with flute before probable reed of emergence portrayed on seventeenth-century Hopi bowl excavated at Mishongnovi; (c) Mimbres scene of Cicada carrying figure before possible reed of emergence, note spider on reed (drawings by author from Taube 2010:Fig. 5.27).

likely that the stepped elements appearing on speech volutes from Early Classic Acanceh are also Ik' elements (Figure 32d).

In terms of the American Southwest, breath also closely relates to the Flower World complex, including music, flowers, and ancestral souls, especially the *katsinam* rain spirits. Among the Hopi, breath or *hikusi* is often denoted by a short cotton cord tipped with a small, downy feather. It often appears in the mouths of masked *katsinam* as well as emerging from effigy flowers held by *katsinam* dancers, denoting the breath-like aroma of the blossom. In addition, similar breath cords emerge from the sacred Hopi floral flutes of the summer Flute and Antelope Societies, thereby merging the concepts of breath, music, and flowers. In these summer ceremonies, both the theme of emergence and the flute-blowing Cicada figure prominently. Of course, cicadas are natural “musicians” who create a buzzing, throbbing hum when they emerge from the earth to propagate. In addition, as noted by Malotki (2000), the cicada’s prominent proboscis does indeed resemble a flute. In his nineteenth-century account of the Hopi Flute Society rites at Walpi, Fewkes illustrates a pair of tiles depicting Cicada blowing a flute before a vertical reed rising out of Sichomo, or Flower Mound, as a scene of the emergence (Figure 33a). Among the Navajo, Cicada is a major figure in the emergence, and in creation accounts cited in this paper the reed of emergence clearly overlaps with the flute, including one account even describing a cotton cord conduit within the reed. Aside from the two cited tiles from Walpi, a seventeenth-century bowl excavated at Mishongnovi depicts Cicada playing a flute before a vertical element with a wind spiral, quite probably the reed of emergence (Figure 33b). Far earlier, a Mimbres bowl dating to roughly 1100 AD depicts Cicada next to another thin, vertical element, surely the reed of emergence (Figure 33c). The reed also supports a spider near the top, Spider Grandmother being a major figure in Southwestern emergence mythology. In addition, Spider Woman is the patroness of the Blue Flute Society at Oraibi (Parsons 1939:1:193). Directly adjacent to the reed is a flying cicada, in this case carrying a youth atop its shoulders. The young male holds what may be a flute or bone whistle before his face, and clearly this scene depicts Cicada and music at the reed of emergence. As I note in this study “the reed of emergence is a great flute, and its music is the breath wind of the ancestors.”



Figure 34. Late Classic Maya portrayal of maize god scribe with centipede tail (drawing by Simon Martin).

In “Maws of Heaven and Hell: The Symbolism of the Centipede and Serpent in Classic Maya Religion” (Taube 2003b), I discuss serpent and centipede symbolism in Classic Maya art and epigraphy. One of the stranger motifs in Classic Maya iconography is what appears to be a “skeletal snake” with a fleshless head and a segmented body resembling a column of vertebrae with bony ribs. Based on a Late Classic polychrome vessel, Nikolai Grube and Werner Nahm (1994) noted that the term for this repulsive creature is *chapat*, the Maya word for centipede. Not only is the centipede widespread in Classic Maya art, it can also be traced to the Early Formative Olmec. In addition, centipede imagery is also common in the Late Postclassic Borgia Group of highland Mexico. Given its proclivity to dark places, it is not surprising that the centipede is widely identified with death and the underworld. As noted in this study, the entrance to the underworld is commonly portrayed as a centipede maw in Classic Maya iconography, with one of the most noteworthy examples being the Sarcophagus Lid from the Temple of the Inscriptions at Palenque. The maw recalls the common Borgia Group motif of the widely open mouth of Cipactli, the earth crocodile, serving as a cosmic cave entrance, although the centipede maw seems to bear more sinister connotations of death and decay. The meaning remains obscure, but Classic Maya artists are closely identified with the centipede and can even appear in its maw. In addition, the monkey scribe patron of artists can have a centipede tail (Figure 34). A recently excavated Early Classic royal tomb at El Zotz, Guatemala, contained a finely carved effigy vessel of the monkey scribe with a centipede tail emerging out of the beak of a bird, quite possibly an owl (see Newman et al. 2015:Fig. 3.6).

In contrast to the centipede with its strong relationship to death and the underworld, Classic Maya serpents are symbols of life, connected to the diurnal sky, rebirth, and the symbolism of breath and wind. Partly based on my previous work in the “Breath of Life” paper, in “Maws of Heaven and Hell” I discuss some of the basic conventions of breath in Classic Maya art, an important but little discussed theme in Maya iconographic research. I note that in Early Classic Maya art, heads of serpents can serve as more elaborate versions of breath beads appearing in front of faces. As the embodiment of breath, such serpents are strikingly similar to the plumed serpent Quetzalcoatl, a Central Mexican god of breath and wind. In addition, Classic Maya serpents can appear emerging out of conch shells, the conch being a basic symbol of wind in Central Mexico that appears as the pectoral of the wind god Ehecatl-Quetzalcoatl (for conchs and serpents, see also Houston and Taube 2011). In

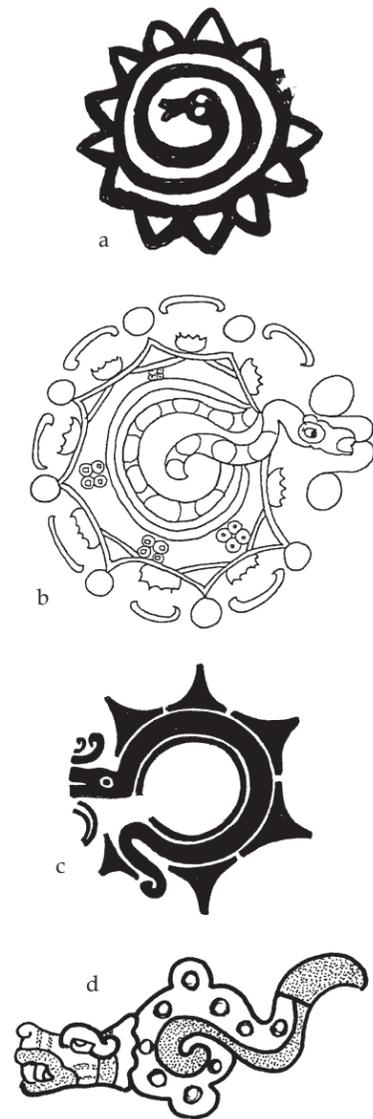


Figure 35. Portrayals of serpent and conch composites in ancient Mesoamerica: (a) Early Formative ceramic seal from Tlatilco depicting coiled serpent rimmed with spires of conch; (b) coiled serpent as conch, Tepeu 1 style bowl probably from Belize (from Houston and Taube 2011:Fig. 5e); (c) Classic-period Veracruz portrayal from painted bowl of serpent as cross-sectioned conch (from Houston and Taube 2011:Fig. 5f); (d) Late Postclassic serpent conflated with conch, *Vaticanus B* page 66 (drawings by author).

my “Breath of Life” paper, I mention examples of conch serpents, including one from Late Classic Veracruz that has the coiled body of the serpent rimmed with spikes to denote a conch (Figure 35c). This theme is of great antiquity and can be seen on an Early Formative ceramic seal excavated at Tlatilco in the Basin of Mexico (Figure 35a). It is also present among the Classic Maya and appears on a Tepeu 1 bowl from Belize (Figure 35b). In this case, the serpent exhales a bifurcated breath element, and the spiraling forms in front of the Veracruz example are surely breath as well (Figure 35c). The symbolic overlap between serpents and conchs continues in Late Postclassic Central Mexico, including an example from the *Vaticanus B* (Figure 35d). I suspect that along with being symbols of wind, conchs were inextricably linked to trumpets as a basic sign of music. When intact, these exotic coastal objects were almost invariably used as trumpets. The serpents appearing with conchs are not only wind but also the embodiment and vehicle of sound and music, much like the aforementioned Ehecatl serpents in the *Borgia* and the mural from Mitla.

In Classic Maya art, human faces with breath elements are typically rendered in profile, but when shown frontally they occur at the corners of the mouth. Although for human faces they are typically scrolls, they are far more elaborate for zoomorphic Witz heads, where they appear as a pair of breath serpents that extend out from the sides of the face and even pass through the flanking earspools. In other words, the Witz heads are portrayed as exhaling breath and wind, much like the Olmec-style, Middle Formative Monument 1 from Chalcatzingo. By far the most elaborate example of Witz heads exhaling breath serpents occurs on a recently excavated frieze at Holmul, with a pair of feathered serpents extending across almost the entire width of the cornice (Figure 36). Far from being mere ornamental embellishments, such serpents denote the dynamically vital and living aspect of sacred buildings, which is also true of zoomorphic temple doorways and flowers.

Beginning with the Carnegie Institution excavations of Mounds A and B at Kaminaljuyu in highland Guatemala, it has become increasingly evident that Teotihuacan was in strong and direct contact with the Early Classic Maya (see Kidder et al. 1946). This was further corroborated by the University of Pennsylvania excavations at Tikal, including the discovery of Stela

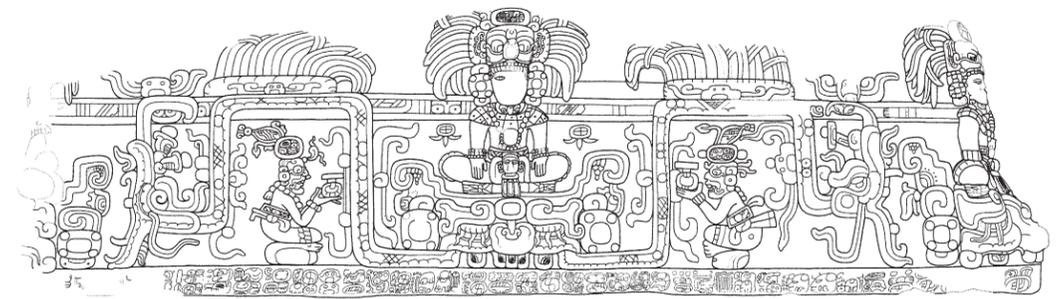


Figure 36. Late Classic Holmul frieze portraying serpents emerging as breath from mouth of zoomorphic Witz head (drawing by Alexandre Tokovinine, courtesy of Francisco Estrada-Belli).

31, which we now know concerns a Teotihuacan “entrada” to Tikal in AD 378 (Stuart 2000). However, although we currently have ample documentation of Teotihuacan influence in the Maya area, there has been little study of any Maya cultural presence at Teotihuacan. Thus Sigvald Linné (1934) excavated early Classic Maya sherds in his excavations in the Tlamimilolpa complex along with two-cylinder tripod vases with portrayals of Maya-style serpents in profile. The two vessels have been often used to illustrate Teotihuacan-style ceramics, despite the obvious fact that the serpent heads in profile are entirely Maya, with the lids topped by quetzal birds, creatures entirely foreign to Central Mexico. In fact, these vessels may well denote the quetzals “perching” atop the Maya realm marked by the serpent heads below. Subsequent research by Evelyn Rattray (1987, 1989) near Tlamimilolpa uncovered the Merchant’s Barrio, with Early Classic ceramics from both the Gulf Coast and the Maya Lowlands and round houses similar to domestic architecture from Central Veracruz and entirely unlike the apartment compounds of Teotihuacan.

In 1952, Agustín Villagra (1954) discovered a major corpus of mural fragments at the apartment compound of Tetitla, which he readily realized were in strong Maya style (Figure 37). These are discussed in my “Tetitla and the Maya Presence at Teotihuacan” (Taube 2003c). Although Villagra’s was a remarkably important discovery, Marta Foncerrada de Molina (1980) was one of the few scholars to subsequently discuss and illustrate some of the pieces. Based on her publication, I was able to note in my initial identification of the Classic Maya maize god that one fragment clearly showed this being (Taube 1985:Fig. 2a). Years later, I re-read her study, and I was struck that another mural fragment appeared to be a Maya text related to a then-recent decipherment of a glyphic clause naming specific deities (Houston and Stuart 1996, 1998; Taube 2003c). I realized that the fragment was a “reverse” text from what would have been the right side of the corridor as one enters. This is a convention known for Classic Maya structures, in which the texts from both sides of the chamber would face toward the viewer, with those on the right side opposite to the usual orientation (see Houston 1998:342).

Until recently, there have been less than fifty mural fragments of the Realistic Paintings available for study, but this has increased exponentially with the discovery in England of roughly one thousand watercolor renderings by Villagra (Staines Cicero and Helmke 2017). As it happens, many fragments portray the maize god, although it remains obscure at this point whether these scenes concern a local Teotihuacan version of this being, a Maya borrowing, or (more probably) both. That is, these scenes may well relate to both local and Maya conceptions of the maize deity. One of the more salient themes is the maize god fishing



Figure 37. Aerial view of Tetitla compound, Teotihuacan (photo: Karl Taube).

for marine shells, an event that obviously would be more fitting for the coastal Maya area than highland Mexico (Taube 2017a). Recent excavations at the Plaza of the Columns at Teotihuacan have uncovered other mural fragments in Maya style. The quality of execution seems to be finer than the Realistic Paintings, and they may well have been painted by courtly Maya artists (see Sugiyama et al. 2016).

Aside from the Realistic Paintings fragments from Tetitla, I also discussed Maya motifs appearing in the Teotihuacan ceramic record. In addition to Linné's 1934 publication of clearly Maya sherds from the Early Classic and two plano-relief vessels that show Maya-style serpent heads in profile, Eduard Seler (1902-1923:5:440, Fig. 36) many years earlier published a Teotihuacan ceramic *almena* of what basically amounts to a miniature rendering of an Early Classic Maya stucco facade featuring the face of a king (see also Michelet 2011:No. 308). Furthermore, the two vessels excavated by Linné at Tlamimilolpa are not Maya imports but locally made, and these are not the only examples. In "Tetitla and the Maya Presence at Teotihuacan," I identify a good many other locally made plano-relief vessels with Maya serpent heads in two other distinct styles. In addition, Maya-style molded serpent heads were also applied to ceramic censers, with one such mold in the personal collection of Hasso von Winning, who over the years collected many figurines and ceramic sherds at Teotihuacan (Figure 38) (see von Winning 1987). Clearly the Maya presence at Teotihuacan is a major topic of investigation and promises to be of increasing importance as other discoveries are made at the site.

In "Ancient and Contemporary Maya Conceptions about Field and Forest" (Taube 2003a), I discuss how the cultivated maize field is contrasted with the forest wilds in Maya thought. This is one of my more ethnographic studies and discusses contemporary Maya belief and conceptions concerning the forest—a source of valuable products but also a dangerous and threatening place. Unruly beings of drunkenness, disease, and chaos, the *wahy*



Figure 38. Ceramic mold of Maya-style serpent head in profile, formerly in collection of Hasso von Winning (drawing by author from photograph courtesy of Charles Kolb).

beings are spiritual embodiments of this strange, foreign place (for a recent discussion of *wahy* beings, see Stuart in press). As Andrea Stone (1995b) aptly noted, the symbolic realm of the forest overlaps considerably with that of caves, both being dangerous dark places with twisted paths and passages. In addition, both are logical places to engage in the "dark arts" of sorcery, which continues to be practiced in such locations to this day. In contrast, the four-sided maize field is fully open to receive the nourishing strength of the diurnal sun and provides broad vistas to repel potentially destructive forest creatures and spirits. On a symbolic level, it is also socially created human space and a basic metaphor for the created world, thematically related to tables, houses, and communities (see Taube 2013). In Yukatek, the term *toh* not only signifies "straight" but also relates to concepts of moral rectitude, with similar meanings in other Mayan languages. Laboriously cut out of the forest wilds with well-defined sides and corners, maize fields are quintessentially human spaces.

Although one of the most sensationalized aspects of Aztec religion is the institution of human sacrifice, there is relatively little public understanding of the motivations and beliefs concerning this practice. In "Aztec Religion: Creation, Sacrifice, and Renewal" (Taube 2004a), I note that among the Aztec, sacrifice was strongly rooted in creation mythology and cosmology. Much as the Maya create the ordered space of houses, communities, and fields through concerted effort, the Aztec believed that the present world originated through a creative act of sacrifice, this being the dismemberment of the primordial earth monster to create the heavens and earth, recalling the Itzam Kab Ahiin myth of the Yukatek Maya. A similar theme appears on page 1 of the *Codex Fejérváry-Mayer*, where the bloody, dismembered body of Tezcatlipoca is cast literally to the four corners of the world. Along with the calendar, this page also illustrates directional world trees, and the relationship of trees to sacrifice appears as early as the Maya Late Preclassic murals at San Bartolo, which feature youths letting blood before four cosmic trees (see Taube et al. 2010). In addition, on pages 49 to 53 of the Late Postclassic *Codex Borgia*, directional world trees grow out of the skeletal bodies of supine earth goddesses, denoting their sacrificed bodies as sources of fertility and sustenance (for a recent discussion of tree symbolism, see Taube 2017b). A Maya scene from the roughly contemporaneous *Codex Dresden* depicts an obviously sacrificed male with a tree growing from

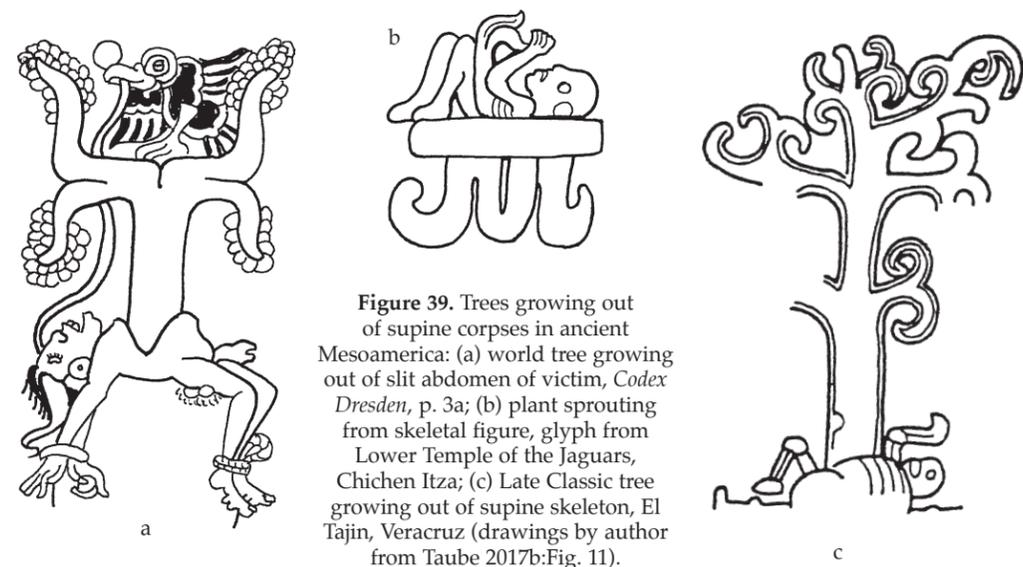


Figure 39. Trees growing out of supine corpses in ancient Mesoamerica: (a) world tree growing out of slit abdomen of victim, *Codex Dresden*, p. 3a; (b) plant sprouting from skeletal figure, glyph from Lower Temple of the Jaguars, Chichen Itza; (c) Late Classic tree growing out of supine skeleton, El Tajin, Veracruz (drawings by author from Taube 2017b:Fig. 11).

his widely slit-open abdomen (Figure 39a). At Late Postclassic Chichen Itza, a nominal glyph features a supine skeletal figure with vegetation sprouting out of its body, much as if it were a sprouting seed (Figure 39b). A still-earlier scene from Late Classic El Tajin depicts a supine skeleton with a great tree emerging from its torso, in a pose notably similar to the *Borgia* earth goddesses (Figure 39c). Not only do these cited examples concern the concept of the planting and nurturing of world trees, but also the creational act of foundation, whether it be cosmic directions, communities, or specific structures (for caching practices and symbolism see also Mock 1998; Taube 2010a).

The slaying of the primordial earth monster Cipactli is seen as a mythic battle resulting in a cosmogonic act of sacrifice. The myth of the five suns describes four previous worlds or creations previous to the present world of Nahui Ollin, the fifth sun, in terms of a cosmic battle between adversaries, Tezcatlipoca and Quetzalcoatl. The present sun was created through sacrifice, this being the self-immolation of a pair of competing deities to become the sun and moon at Teotihuacan. The theme of sacrifice does not stop there. In order for the newly born sun, Tonatiuh, to follow his path through the sky, the gods were sacrificed at Teotihuacan, with their hearts offered to the sun. In other words, heart sacrifice was a nourishing act, giving strength to the sun as well as other deities, and there are graphic Aztec portrayals of the sun drinking the blood of sacrificial victims, frequently through a dart or spearthrower as through a straw (Figure 40) (see Taube 2015). One of the important sacrificial vessels of the Aztec was the *cuāuhxicalli*, which figured prominently in the spring solar rites of Tlacaxipehualiztli. The several surviving stone examples of these bowls contain a central image of Nahui Ollin, the calendric name of Tonatiuh, who is to be nourished by sacrificial hearts and blood. It appears that such a vessel constituted the symbolic womb of the earth deity, Tlaltecuhli, as the birth conduit for the dawning sun. Similar symbolism is known for sacrificial vessels of the contemporary Huichol and Classic Maya (see also Taube 2009c). The Aztec *cuāuhxicalli* can be readily traced to Late Postclassic Toltec iconography of Tula and Chichen Itza, where it strongly resembles an open blossom (Figure 41). This allusion was surely intentional, with gods and revenant ancestors symbolically compared to birds and

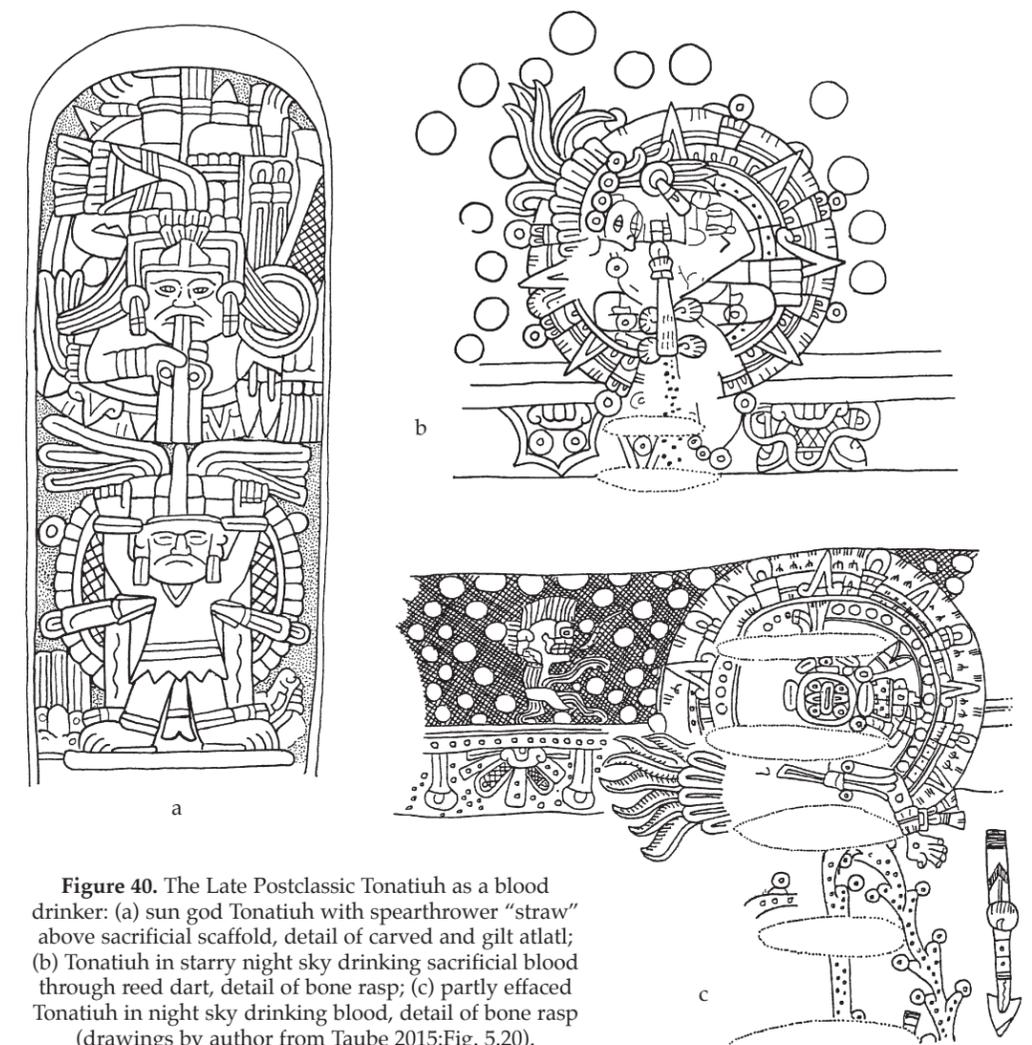


Figure 40. The Late Postclassic Tonatiuh as a blood drinker: (a) sun god Tonatiuh with spearthrower “straw” above sacrificial scaffold, detail of carved and gilt atlatl; (b) Tonatiuh in starry night sky drinking sacrificial blood through reed dart, detail of bone rasp; (c) partly effaced Tonatiuh in night sky drinking blood, detail of bone rasp (drawings by author from Taube 2015:Fig. 5.20).

butterflies sucking the life “nectar” of these sacrificial bowls (Taube 2009c, 2015).

Aside from blood offerings, music and dance were other means to communicate with the numinous realm of gods and ancestors. In my “Breath of Life” paper I note that pages 35 to 38 of the *Codex Borgia* concern an Aztec myth pertaining to the origins of music. This is further corroborated by the spiraling band of wind emerging from the flute bundle on page 36. In the stream, Quetzalcoatl is shown flying with eyes shut as if dead or in a trance, and I note that this is very similar to a figure appearing on an Aztec drum, including even the shell necklace. In addition, other drums also portray flying figures, including a wooden *teponāztli* discussed in the study, as well as others (see Saville 1925:Pl. 33b-c). Moreover, a number of Late Postclassic drums have bands of connected flowers encircling both ends, and in Mixtec carved bones these same “daisy chains” contain the heads of supernatural beings, again denoting a floral road of music and revenant ancestors (see Taube 2010a). In subsequent work, I note that in Early Classic Maya art, the maize god is often shown dancing with avian

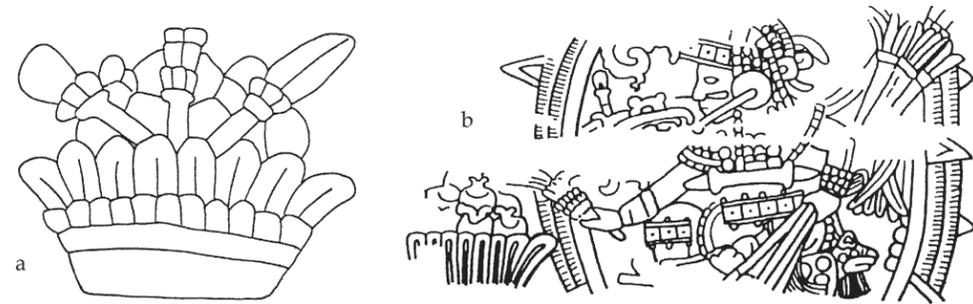


Figure 41. Early Postclassic *cuauhxicalli* at Tula and Chichen Itza: (a) *cuauhxicalli* bowl containing hearts and darts, panel from the Palacio Quemado, Tula; (b) sun god apparently touching *cuauhxicalli* containing human hearts with spearthrower, detail of wooden lintel from Upper Temple of the Jaguars, Chichen Itza (drawings by author from Taube 2015:Fig. 5.19b-c).

attributes, including wings and a feathered tail, much as if he were in symbolic flight (Taube 2009b). Still earlier, the West Wall mural at San Bartolo portrays the duck-billed wind deity singing and dancing to the accompaniment of flying and singing birds. Yet another example of this musical complex in early Mesoamerica is the aforementioned Zapotec flute with the skeletal flying and singing figure (Figure 32a).

In 1995, I was invited by Ricardo Agurcia Fasquelle and Barbara Fash to participate in the reconstruction of Temple 16 at Copan, which had a major effect on my life and academic career. Not only was I involved in the study of one of the site's most important structures, but this is where I met my future wife Rhonda in 1996. Temple 16 is the last of a series of six superimposed temples beginning with Hunal, which contains a royal tomb believed to be that of the founder of the Copan dynasty, K'inich Yax K'uk' Mo' (see Bell et al. 2004). This remarkable series of temple constructions is fittingly referred to as the Copan Axis since it constitutes the central, pivotal architecture of the Acropolis. The third temple construction known as Margarita bore massive stucco representations of the name of K'inich Yax K'uk' Mo' and in addition contained the probable tomb of his royal wife. Dating to the mid-sixth century, the best-preserved building in the sequence is Rosalila, a virtually intact temple covered in elaborate stucco friezes, including massive images of winged sun gods (see Agurcia Fasquelle 2004; Agurcia et al. 2016). The lower walls of the temple featured other supernatural birds, here again bearing the face of the sun deity. While examining these in 1995, I realized the significance of the fact that the sun god wears a quetzal headdress, the sun deity (K'inich) and the quetzal (*k'uk'*) being major components of the name of K'inich Yax K'uk' Mo'. I then looked for any trace of the macaw (or *mo'*) on these avian figures, and sure enough it is present as massive pairs of open macaw beaks on the wings.

During the 1995 season, our primary goal with the architectural sculpture of Temple 16 was to bring the structure's massive stairway sculptures into the new sculpture museum for reassembly and installation. One of the most striking sculptural programs on Temple 16 is Stairway Block 1 which has a series of massive human skulls, some of which were still on the stairway and others nearby on the plaza below. In view of their pierced foramens, they were assumed to have represented a *tzompantli*, a wall of human skulls known for the contact-period Aztec. However, there was a detail that was hard to account for, as two of the skulls were matched with a device consisting of a K'an cross and a globular, pearl-like element immediately below (Figure 42a). When we brought the entire corpus of skull blocks



a



b

Figure 42. The 1995 assembly of Stairway Block 1 of Temple 16, Copan: (a) skull sculpture stacked on site before assembly, note two blocks with oval K'an crosses (photo: Karl Taube); (b) skull Tlaloc mask as center of skull assembly of Stairway Block 1, Temple 16 (photo: Barbara Fash).



Figure 43. The 1995 fitting of the quetzal macaw headdress onto the head of K'inich Yax K'uk' Mo' as solar deity, Stairway Block 2 of Temple 16 (photo: Karl Taube).

into the museum we faced another immediate dilemma: there were simply not enough skulls to fill the known dimensions of Stairway Block 1. I asked Barbara Fash if there was anything to fill the vacant space, and she pointed out a massive Tlaloc skull (Figure 42b). As it turns out, the dimensions matched perfectly, and Barb soon noticed that the mysterious K'an cross and pendant balls were simply the earpieces of this great and fearsome mask. When we were assembling the facade, I casually mentioned to the museum workers that this was the Central Mexican god of rain and lightning, and literally within half an hour we experienced the most powerful lightning storm of the season.

In 1995, Barb and I also worked on the next sculptural facade above, Stairway Block 2, much of which she had reconstructed previously. This featured a massive rectangular feathered shield with skeletal centipede heads at the corners. In the center was a human figure of the sun deity, K'inich Ajaw. While moving the sculpture pieces looking for the upper part of his headdress, I found a reasonably good fit in terms

of proportions and then it dawned on me that it was a quetzal-macaw headdress having a quetzal crest and beaded macaw eyes; in other words, this solar figure was none other than K'inich Yax K'uk' Mo' (Figure 43). Rather than being simply the sun god, this was the founder apotheosized as a local aspect of this being, a theme appearing still earlier on the Early Classic facades of Rosalila and clearly related to his remains buried in the Hunal tomb. Simply put, the series of temples on the Copan Axis are a centuries-old sequence directly referring to the founder. In my mind, the closest parallel to this in ancient Mesoamerica is the great Templo Mayor of the Aztec, which from its earliest stage to Spanish contact in the sixteenth century entailed a dual temple structure devoted to Tlaloc and Huitzilopochtli (see Matos Moctezuma 1988).

In my paper on Temple 16 and the Copan Axis, "Structure 10L-16 and Its Early Classic Antecedents: Fire and the Evocation and Resurrection of K'inich Yax K'uk' Mo'" (Taube 2004d), I note that one of the salient themes is fire, a theme partly based on my earlier "Turquoise Hearth" paper, in which I discuss the transformative quality of fire in sacrificial and funerary ceremonies at Teotihuacan and in later Central Mexico. Thus in Aztec funerary ceremonies, the moribund mortuary bundle metamorphizes into a butterfly through the transformational agency of fire. In addition, as noted in "An Archaeology of the Senses:

Perception and Cultural Expression in Ancient Mesoamerica" (Houston and Taube 2000), aroma is closely related to the ethereal soul, a concept that can readily relate to fire offerings.

In terms of the Copan Axis, one of the most vivid portrayals of the importance of fire is the so-called "Dazzler" vessel from the Margarita royal tomb, which features an anthropomorphic temple with a fiery roof, quite probably a reference to the Hunal platform and its temple superstructure. In addition, the Rosalila temple has vertical slits flanking the sculptured stucco faces on three sides of the structure that not only served as windows but also virtual chimneys for fire offerings emanating from the interior, which bears a great deal of evidence of burning. The smoke emanating from the vents would have constituted the symbolic breath of K'inich Yax K'uk' Mo', making Rosalila a giant, architectonic censer. The aroma of the smoke would permeate Copan as the breath soul of the founder buried deep in the foundations below. As for Temple 16, at the base of its stairway Altar Q's central pivotal scene portrays K'inich Yax K'uk' Mo' sharing fire by means of a burning dart with the sixteenth Copan king, Yax Pasaj Chan Yopaat, who holds a torch bundle. The text above refers to a structure designated glyphically by a pair of crossed bundles, which I interpreted as bound faggots of firewood. Both David Stuart (2004) and I (Taube 2004d) identified this glyph as a specific reference to Temple 16 at Copan, and Stuart provided the reading of *wite' naah* for the sign. Subsequent research has further enhanced its significance in relation to fire, Temple 16, and Teotihuacan, including the very real possibility that the designation *Wite' Naah* also refers to a specific building at this great metropolis, perhaps the Temple of the Sun with its Adosada platform (Fash et al. 2009).

Along with the Maya maize god paper published in 1985, I consider "Flower Mountain: Concepts of Life, Beauty and Paradise Among the Classic Maya" (Taube 2004b) to be one of my more important works. It directly derives from past research beginning with the "Archaeology of the Senses" paper published with Steve Houston (Houston and Taube 2000), a study that we first agreed to work on over tapas in a plaza in Santiago de Compostela, Spain. For some reason, I immediately became focused on breath and speech, and how readily they become enmeshed with flowers, sweet aroma, music, and the breath soul, the last aspect encompassing all of these, although not a conventionally classified "sense" at all. Synesthesia became readily apparent, with floral flutes and trumpets emitting music as their sweet aroma. For the contact-period Maya, ceremonies pertaining to dying and deceased kings concerned such items as precious jade and aromatic flowers. The breath soul was captured through precious stones or anointing the corpse with sweet-smelling unguents, as in this account of the corpse of a Pokom Maya king: "They bathed it and purified it with decoctions of aromatic herbs and flowers" (Miles 1957:749). Although this strongly suggests the paradisaical Flower World complex defined by Jane Hill (1992), research pertaining to Classic Maya studies of the afterlife has been dominated by the dark and unwholesome realm of Xibalba, the "place of fright." In large part, this is probably due to Mike Coe's brilliant insights concerning death and the afterlife beginning with *The Maya Scribe and His World* (1973). However, since this monumental work, we have been slowly unpeeling the nuances of death imagery, including our understanding of the *wahy* spirits as malignant aspects of human souls and sorcery rather than denizens of the underworld.

In the "Flower Mountain" paper, I argue that in common with other Mesoamerican cultures, including the Aztec, the Classic Maya had very developed concepts of paradise, and in no way was the dark, unwholesome underworld the afterlife realm of Maya nobles—as if a soon-departing Maya king would say, "Thanks so much, now I am going down the

toilet." This is hardly a rousing legacy and contrary to what we are increasingly learning of royal ancestor worship and veneration. Classic Maya royal burials are affirmations of the riches and beauty of paradise, including the floating precious jewels painted on the wall of Burial 48 at Early Classic Tikal or on the Sarcophagus Lid of K'inich Janaab Pakal. Similarly, the Mixtec *Codex Bodley* depicts the mummy bundle of Lord 8 Deer in his tomb with three aromatic flowers on the wall. In addition, Mixtec art is filled with portrayals of flowers, birds, and butterflies, themes clearly pertaining to the afterlife realm of paradise.

For the Classic Maya, paradise was closely related to the sun deity, K'inich Ajaw, recalling the floral afterlife realm of Aztec nobles and heroic warriors who follow the path of the sun from dawn to its zenith at noon. Scenes from Palenque and Yaxchilan show noble ancestors in solar cartouches, and Maya rulers can appear as apotheosized aspects of the sun deity, including Yax Nuun Ahiin on Tikal Stela 31 and K'inich Yax K'uk' Mo' at Copan. However, ancestral Maya kings can also appear as the maize god, as in the case of Chak Tok Ich'aak at Tikal, Yax Pasaj Chan Yopaat at Copan, and K'inich Janaab Pakal at Palenque. Oddly enough, the greatest king of Ek Balam, Ukit Kan Lehk Took', appears apotheosized as an enthroned sun god on Ek Balam Stela 1 and also the maize god on his tomb capstone (see Grube et al. 2003:26, 36). The sun, maize god, and ancestral souls are all closely related to Flower Mountain, a symbol of the celestial paradise realm of gods and ancestors. This supernatural realm is usually portrayed as a zoomorphic Witz head marked with a prominent blossom on the brow, a place that appears not only on Maya vessels but also monumental architecture, including Chenes and Puuc structures. In the Chenes region, temples appear as personified Witz heads with their open maws denoting a cave while also serving as the doorway (see also Taube 2013). Although the brow region spanning the door is often destroyed, in a number of intact examples it has a prominent blossom. In addition, the temple from Ek Balam containing the tomb of Ukit Kan Lehk Took' features a series of flowers across the Witz facade, clearly identifying it as Flower Mountain (Coe and Houston 2015:194-195).

As I first noted in a presentation at the British Museum (Taube 2002a), portrayals of Flower Mountain are especially common in the Puuc region of Yucatan, where they commonly occur on the corners and main facades of buildings, marking such stone structures as "mountain houses." However, many researchers still prefer to see these heads as portrayals of Chahk, despite the fact that contemporaneous Puuc depictions of this being portray him with a short muzzle-like snout, quite like Classic Maya examples from the Central Maya lowlands but not at all like the masks seen on Puuc buildings, which far more resemble Classic Maya Witz heads—that is, mountains.

Almost ten years after my "Flower Mountain" paper was published, Bill Saturno excavated the North Wall mural at San Bartolo, featuring an elaborate scene of Flower Mountain dating to the first century BC (Saturno et al. 2005). The flowering mountain is covered with creatures of the wild and exhales a massive plumed serpent—immediately recalling the pairs of breath serpents seen on Early Classic Maya frontal depictions of zoomorphic mountains, such as the recently excavated facade at Holmul (Figure 36). The central figure in this scene is the Maya maize god, who commonly appears with Flower Mountain in Classic Maya art. The North Wall scene probably concerns a version of the aforementioned origin myth of Mesoamerica and the American Southwest in which people emerge out of the earth to populate the present world. In the case of the North Wall mural the maize god and his assistants are conveying food and water out of Flower Mountain. The San Bartolo mountain is inhabited by wild animals, including an iguana, a jaguar, snakes, and birds. The jaguar and

one of the snakes appear to be attacking and devouring the birds, behaving in stark contrast to the calm and methodical behavior of the human figures below.

For the contact-period peoples of Central Mexico, the place of emergence was known as Chicomoztoc, or "seven caves." According to a sixteenth-century account by Chimalpahin, this place teems with wild animals, strikingly similar to the far more ancient San Bartolo scene:

And the reason why this place is so frightful, there where it is named Chicomoztoc, is that there are not a few beasts that guard and inhabit this place, the jaguars, the serpents as well as many other varieties of little known beasts, well there are many that there guard the Chicomoztoc. (Chimalpain Cuauhtlehuanitzin 1991:27, 29, my translation)

Some of the most elaborate scenes pertaining to the emergence appear in the early Colonial, Central Mexican *Historia tolteca-chichimeca* (see Kirchhoff et al. 1976:Folios 5-r, 16-r). In the two scenes, the ancestral Chichimec emerge out of the seven-lobed cave of Chicomoztoc portrayed within the curving mountain of Culhuacan, signifying the "place of those who have ancestors." The two mountains are covered with flowering cacti and other blossoming plants of the Gran Chichimeca to denote Flower Mountain. The aforementioned monument from Huitzuco indicates that the allusion to flowers is clearly intentional (Figure 27c). Aside from the frontally facing mountain cave exhaling a pair of breath blossoms, the lower portion depicts the curving mountain of Culhuacan with six blossoms, clearly indicating it as Flower Mountain. As has been mentioned, the Middle Formative Chalcatzingo mountain cave is probably also an early version of Flower Mountain, with blossoming plants at the corners of the cave maw, more than likely an explicit reference to Cerro Chalcatzingo itself (Figure 27a).

As I mentioned in the beginning of this introduction, I have always been drawn to beautiful objects of the material world, including jade. Since high school in the San Francisco Bay Area, I have been taking regular trips to Big Sur, where I look for nephrite jade at Jade Cove and Willow Creek. While directing tours to Quirigua and Copan in the 1990s, I often traveled through the Middle Motagua Valley in areas that I knew were sources of jadeite, but I had no idea where they were or how the jade was being procured. My perspective changed radically during a time at Copan when David Stuart mentioned that he knew an associate at Harvard, Russell Seitz, who had actually been to an "Olmec blue" jade outcrop, or *yacimiento*, in the Sierra de la Minas, recently discovered by a local *jadero* or jade prospector after the devastating landslides and flooding of Hurricane Mitch in 1998. Soon after, I visited this source with Russell and Virginia Sisson, and it was readily apparent that its jadeite was entirely like pieces known to the ancient Olmec (see Seitz et al. 2001; Taube et al. 2004). In 2004, I initiated a project with my former student Zachary Hruby and Guatemalan archaeologist Luis Romero documenting jadeite sources and ancient workshops on the opposite side of the Motagua, in the Río El Tambor drainage system (Taube et al. 2011). As it turns out, this area was probably the major source of translucent Olmec-style jadeite in the Middle Motagua Valley, although the sites that we documented appear to be Classic lithic reduction areas for preparing celt preforms, with virtually no evidence of Olmec occupation (Figure 44).

Along with documenting jadeite sources in Guatemala, I am also interested in jade symbolism in ancient Mesoamerica. Although much of my earlier work focused on the Olmec, in 2005 I published "The Symbolism of Jade in Classic Maya Religion" (Taube 2005b), a study concerning Classic Maya jade symbolism, a topic that I also discuss in subsequent research



Figure 44. Río Motagua in background, with Río El Tambor, source of Olmec blue jade, in foreground (photo: Karl Taube).

(Taube 2012b; Taube and Ishihara 2012). Among the Classic Maya this precious stone was closely related to concepts of abundance and life, including its very close relationship to the maize god, a tradition that can be readily traced back to the Middle Formative Olmec. For both the Olmec and Classic Maya, jade and the maize god are closely related to concepts of centrality, and for the Classic Maya a relatively common jade motif is the maize god in a contortionist position to denote the world tree as the *axis mundi*. In addition, as I mentioned in my “Jade Hearth” study, the head of the Principal Bird Deity merges with the cosmic tree, as seen in the recent excavation of the massive Early Classic facade at El Zotz portraying three heads of the Foliated Jester God (Figure 25). In terms of jade carvings, the most impressive example is the jade head from Altun Ha, which remains the largest jade carving known for the Classic Maya.

Aside from being related to maize, centrality, and world trees, Classic Maya jade also symbolized breath, and in the case of the Maya wind god, a prominent Ik’ sign can appear on the cheek or as an earpool rendered in profile, clearly indicating jade’s significance as a sign of wind (Figure 29). In addition there are Ik’ sign pectorals, which are portrayed not only in Classic Maya art but also known archaeologically as jadeite artifacts. Along with examples found in the Sacred Cenote at Chichen Itza, a remarkable Ik’ sign pectoral was recently excavated at Nimli Punit, Belize (Prager and Braswell 2016). This jade is noteworthy in terms of its size and the lengthy inscription on its back, and for the fact that it is probably portrayed on Stelae 2 and 15 at the same site, indicating that important carved jades were publicly recognized in Classic Maya courts. This is also true for the piscine Jester God appearing on the

Oval Palace Tablet at Palenque in a scene portraying the accession of K’inich Janaab Pakal. A virtually identical jade was discovered in Pakal’s royal sarcophagus, almost surely the same jewel. In view of early Colonial documents of Central Mexico, this is hardly surprising, as the *Codex Kingsborough* carefully lists, illustrates, and labels specific gold jewelry, including jeweled crosses, taken by the Spanish in the town of Tepetlaoztoc.

In terms of Maya jade jewelry, I believe that the most symbolically charged aspect of personal adornment was earpools. The sheer effort of coring, drilling, and polishing these items is virtually unparalleled in Mesoamerican lapidary, with the one possible exception being the remarkable obsidian and rock crystal earpools from Postclassic Michoacan. However, as someone who has worked with all three materials, I can state that jadeite is by far the most exacting, being approximately 6.7 on the Mohs scale of hardness, versus volcanic glass at 6. During the Early Classic period, Maya kings proudly wore massive chains of earpools hanging as pendant assemblages or collars as signs of wealth, as measured not only in terms of the precious stone but also the sheer amount of human effort in carving it (e.g., Tikal Stelae 1, 2, 31). Although this striking exhibition of wealth largely disappeared in the Late Classic, one noteworthy exception is at Coba in Quintana Roo, where a massive jade collar appears on such a number of Late Classic stelae that one wonders if it is the same item of regalia.

In ancient Maya art, breath serpents often appear emerging from earpools. Although there may well be actual jadeite examples of such earpool serpents, they have yet to be documented in the archaeological record. A number of such serpent heads are impossibly long and are clearly symbolic in nature. The convention of earpools with projecting serpent heads continues in Late Postclassic Mexico as worn by Quetzalcoatl and Tlaloc, deities closely identified with wind and rain. An Aztec oversize greenstone earpool in the Frida Kahlo Museum in Mexico City depicts a plumed serpent emerging from the center of the disk, a convention also appearing in depictions of Quetzalcoatl (Taube 2005b:Fig. 19b, f). In the beginning of “The Symbolism of Jade in Classic Maya Religion” (Taube 2005b), I note that in Classic Maya art, prisoners are frequently shown with paper pulled through their ears, probably to denote their tenuous, fleeting, and even “valueless” status as war captives. However, the placement of earpools and other items through the ears is far more developed than this. Thus in Late Classic Maya art, individuals wearing trappings of Teotihuacan identity can have earpools with a curious hooked element projecting from the center (see Taube 2005b:Fig 11b-c, e). A recently excavated stone panel from Temple XIX at Palenque clearly demonstrates that this curving device is an obsidian sacrificial blade dripping blood, which provides a whole new perspective on humans and gods wearing such elements on the sides of the face as a sign of their basic identity (Figure 45a). In addition, at Teotihuacan, Tlaloc can have water falling from his earpools to indicate that he embodies rain (see Taube 2005b:Fig. 11a). The focus on ears and earpools to denote the inherent nature of beings continues in Late Postclassic Central Mexico. Thus while Ehecatl-Quetzalcoatl typically wears the central spire of conch as his earpiece, the death god Mictlantecuhtli usually has a severed hand, cut femur, or eyeball pulled through his ear. This dualistic contrast of life and death appears in very graphic form on pages 56 and 73 of the *Codex Borgia* where the two gods are portrayed back to back. Thus while the wind god wears the conch spire earpiece of breath and life, Mictlantecuhtli’s ear has a severed hand to denote death and sacrifice. Similarly, the Classic Maya death god can appear with extruded eyeballs strung through the ears, as seen in the elaborate stucco scene from Tonina (Figure 45c). For the Classic Maya, spider monkeys

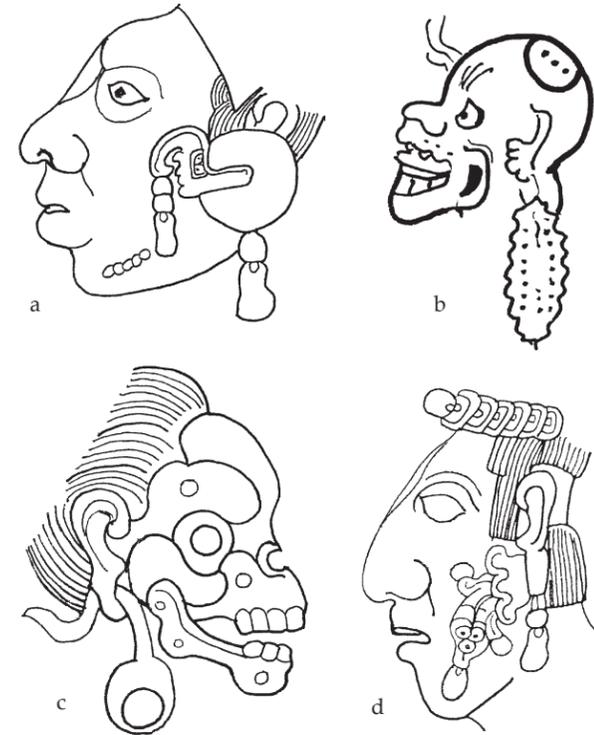


Figure 45. Earspool and related elements in Late Classic Maya iconography: (a) figure with dripping obsidian blade element projecting from earspool, detail of carved panel, Temple XIX, Palenque; (b) monkey with cacao pod earpiece, detail of Codex Style vase (after Coe 1982:58); (c) death god with eyeball strung through ear, detail of Tonina stucco facade; (d) K'inich Janaab Pakal with tobacco leaf in earspool, detail of Dumbarton Oaks Panel (drawings by author).

at the Museo Nacional de Antropología in Mexico City (Taube 2012b). During the same year, my former graduate student Reiko Ishihara-Brito and I co-authored a chapter concerning Maya jade craftsmanship and symbolism for the catalog *Maya Art at Dumbarton Oaks* (Taube and Ishihara-Brito 2012).

Along with the use of jadeite among the Classic Maya, I recently addressed the symbolism of turquoise, especially in terms of the Early Postclassic Toltec and later contact-period Aztec, in "The Symbolism of Turquoise in Postclassic Mexico" (Taube 2012c). For the Early Postclassic Toltec, there was essentially a "cult of turquoise," where it frequently appears in mosaic form on back mirrors, butterfly pectorals, and the pointed *xiuhuitzoll*i turquoise crown known for later Aztec royalty. It appears that the later Aztec closely related turquoise to the Toltec as a precious stone embodying ancient traditions of heroic warriors and nobility.

For the Toltec, the preeminent turquoise object seems to have been the back mirror formed of a central pyrite mosaic disk rimmed by a broad and elaborate turquoise mosaic band portraying four Xiuhcoatl fire serpents. On actual examples of such mosaics from Tula and Chichen Itza, the serpents have prominent forelimbs and in this regard resemble frontal depictions of the Classic-period War Serpent, which I have argued is the immediate

are often depicted with cacao pods hanging from their ears, indicating cacao as an essential part of their nature (Figure 45b). In the case of the Dumbarton Oaks Panel, K'inich Janaab Pakal has a tobacco leaf protruding from his earspool, the meaning of which remains obscure (Figure 45d).

Given the fact that earspools have intense significance in Maya art, what does the virtually ubiquitous projecting bar and bead element signify? Aside from "preciousness," it surely indicated more, including esteemed thought and speech. In addition, the jade bar and bead element may allude to concepts of value in relation to truth and permanence, much like medieval European concepts of gold. As will be recalled, Classic Maya captives have only paper in place of the jade finery worn by Maya kings who in their many stone monuments proclaim their lasting legacies.

In a study published in 2012, I contributed to a volume concerning Maya and Chinese jade that coincided with an exhibit of this material

antecedent to the Xiuhcoatl (Taube 1992c, 2000c, 2012c). For the Toltec-style turquoise mosaic examples, the serpents have a feather crest atop their heads (Figure 46c). However, rather than simply depicting a single crest in the center of the brow, it is more than likely that these allude to a pair of feather crests that would be above the eyes of the creature, much like roughly contemporaneous frontal portrayals of the War Serpent at Chichen Itza and Tula, as well as Classic-period forms of this being. Dating to roughly the ninth century AD, a stela from Cola de Palma in western coastal Oaxaca depicts a pair of War Serpents split by a third descending from a starry sky (Figure 46a–b). Although Javier Urcid (2011:134) suggests that the diving snake represents a comet, I would argue that it is actually a meteor, that is, a shooting star. Joined together, the two profile War Serpents constitute a frontal portrayal of the same creature, much like Early Postclassic depictions of this being with clawed forelimbs at Tula and Chichen Itza. In addition, with their upturned snouts, feathered crests, and forelimbs, the profile images are essentially identical to the Xiuhcoatl serpents on Early Postclassic back mirrors (Figure 46c).

In "The Symbolism of Turquoise," I revisit my previous argument in "The Turquoise Hearth" (Taube 2000c) that the turquoise fire serpent, or Xiuhcoatl, is based on the concept of a meteoric supernatural caterpillar. In the early Colonial *Codex Cozcatzin*, the Xiuhcoatl appears as a personal name glyph with the Nahuatl gloss *xihuitl temōc*, which can be translated as "(the) meteor descended" (Figure 47b). The body of this Xiuhcoatl is essentially identical to glyphic signs for caterpillars in the *Codex Mendoza* (Figure 47a). The Xiuhcoatl is the weapon par excellence of Huitzilopochtli, the tutelary god of the Aztec who slays Coyolxauhqui with his meteoric spearthrower. A fragmentary version of the circular Coyolxauhqui monument of the Templo Mayor (Coyolxauhqui 5) features a Xiuhcoatl serpent piercing the chest of the goddess (Figure 47d), clearly the mythic charter for the actual acts of heart sacrifice performed atop the Templo Mayor (Taube 1993a:50). In fact, I have recently noted that one of the most celebrated images of the Xiuhcoatl, a stone sculpture in the British Museum, depicts the serpent atop a prismatic sacrificial stone, quite like the actual example from the early Phase II

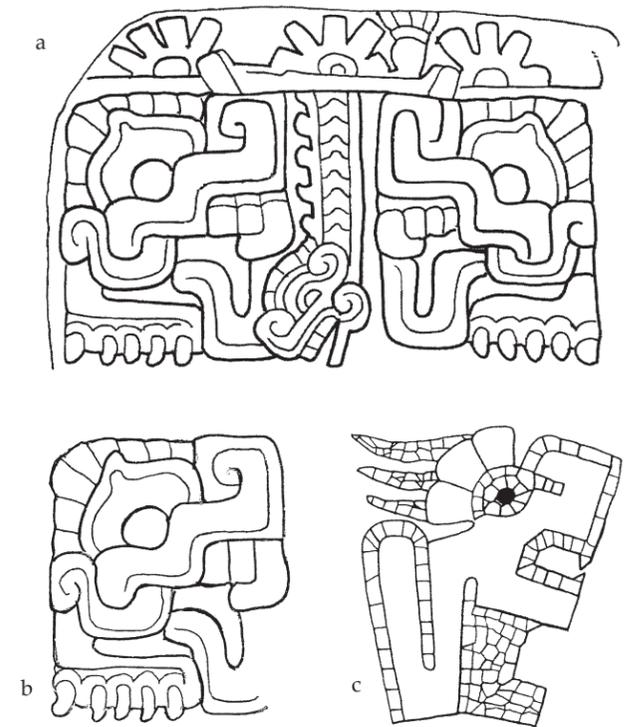


Figure 46. War Serpent imagery appearing on Late Classic Cola de Palma Stela 3: (a) upper portion of Cola de Palma Stela 3 portraying two War Serpent creatures in profile separated by descending meteoric War Serpent; (b) detail of War Serpent, Cola de Palma Stela 3; (c) detail of Xiuhcoatl appearing on Toltec-style turquoise *tezcacuitlapilli* back mirror (a–b, drawing by author after Urcid 2015:Fig. 6.15; c, drawing by Andrew Turner from Turner 2017:Fig. 7c).

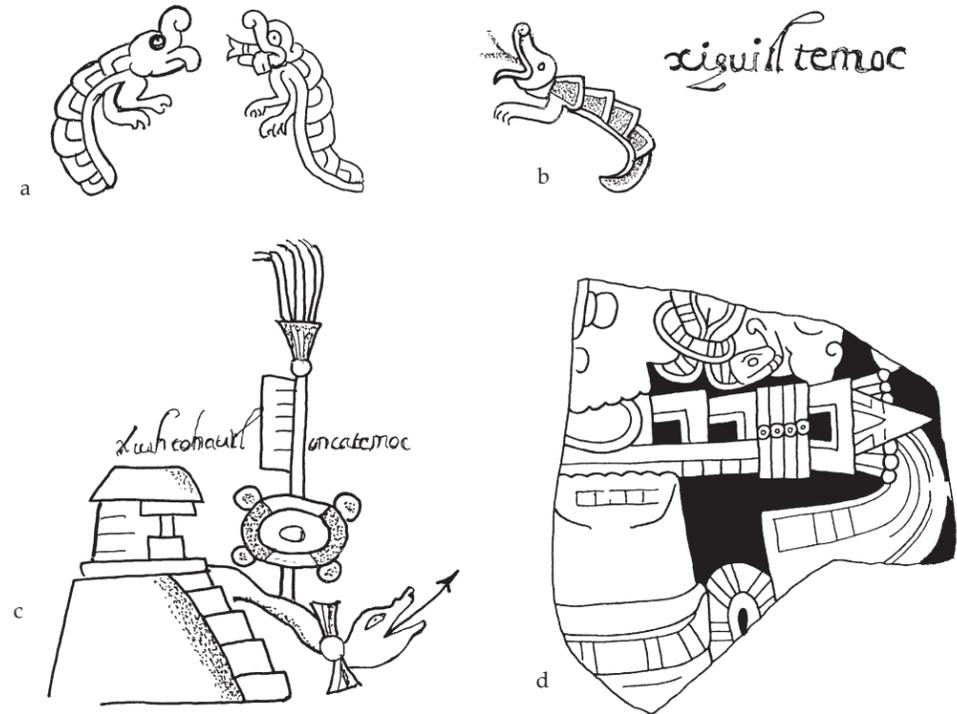


Figure 47. Caterpillars and the Aztec Xiuhtecuhtli: (a) glyphic signs for caterpillar, *Codex Mendoza*, pp. 65 recto, 10 verso; (b) glyphic sign of Xiuhtecuhtli with accompanying gloss *xiquiltemoc* (i.e., *xihuitl temōc*), or “(the) meteor descended,” *Codex Cozcatzin*, fol. 4 verso; (c) Xiuhtecuhtli descending temple stairway with accompanying gloss *xiuhcohuatl oncatemoc* (i.e., *xihcoātl oncā[n] temōc*), or “Xiuhtecuhtli descended there,” *Codex Azcatitlan*; (d) fragmentary Aztec monument portraying Xiuhtecuhtli penetrating chest of Coyolxauhqui (drawing by author from Taube 1983:50).

Huitzilopochtli temple of the Templo Mayor (Figure 48) (Taube 2017c). The British Museum monument depicts the Xiuhtecuhtli descending or diving down the sacrificial stone, much like a falling star. In a scene from the *Codex Azcatitlan* featuring Huitzilopochtli atop the Templo Mayor, there is a smaller platform with a descending Xiuhtecuhtli, with an accompanying text stating that the Xiuhtecuhtli “descended there” (Figure 47c). For the Aztec *veintena* month of Panquetzalli, a burning Xiuhtecuhtli effigy descended the Templo Mayor, reenacting the victory of Huitzilopochtli over Coyolxauhqui and his other siblings (see Sahagún 1950-1982:Book 2:147).

In other work I have explored human sacrifice and blood symbolism. A study of Mesoamerican sacrificial bowls, “The Womb of the World: The Cuauhxicalli and Other Offering Bowls in Ancient and Contemporary Mesoamerica” (Taube 2009c), concerns the Aztec *cuauhxicalli* vessels for human hearts, the ritual offering bowls of the contemporary Huichol and Cora, and those of the Classic Maya. In “The Huastec Sun God: Portrayals of Solar Imagery, Sacrifice, and War in Postclassic Huastec Iconography” (Taube 2015), I note that such bowls are intended to feed the gods, especially the sun, who is a preeminent consumer of sacrificial blood in Postclassic Central Mexican thought, a theme also present among the Postclassic Huastec. As in the case of the Aztec sun god Tonatiuh, the Huastec sun deity can appear sipping sacrificial blood with his spearthrower, a theme that can be readily traced



Figure 48. Aztec sculpture portraying Xiuhtecuhtli atop prismatic sacrificial stone, British Museum (photo: Karl Taube).

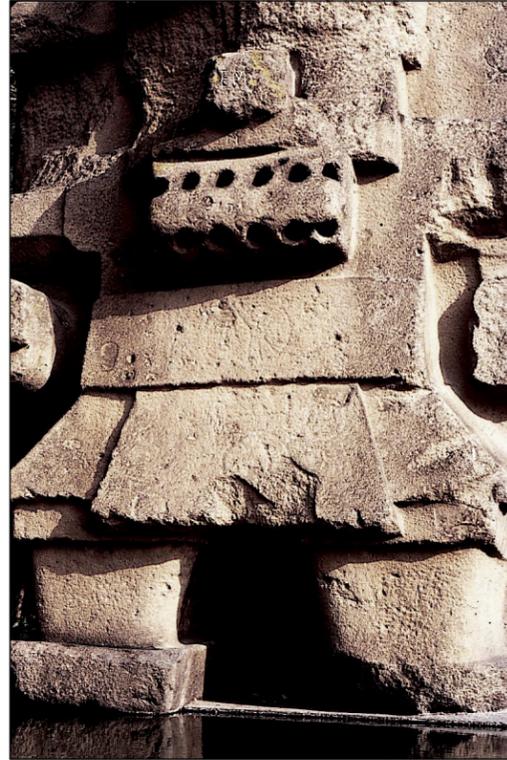


Figure 49. Vestigial text on center line of Teotihuacan monument (photo: Karl Taube).

concepts of souls and paradise in relation to Flower Mountain, which was very much present in Teotihuacan thought (see Taube 2005a, 2006). In addition, I have reexamined the presence of writing at Teotihuacan and on Teotihuacan-related monuments outside the Valley of Mexico in “Teotihuacan and the Development of Writing in Early Classic Central Mexico” (Taube 2011). In this study, I note that the largest Teotihuacan monument known, the unfinished sculpture at the entrance of the Museo Nacional de Antropología in Mexico City, bears a vestigial text in the center of the body, probably representing day names with a horizontal bar denoting the number 5 (Figure 49). More recently, I have been involved in a collaborative project concerning recently discovered watercolor renderings of the mural fragments from the Realistic Paintings of the Tetitla compound at Teotihuacan (Taube 2017a). I discuss the presence of the Maya maize god not only in the Realistic Paintings but Teotihuacan as a whole and note that one of the most common figurine types at the site depicts the maize deity, who is portrayed as ethnically Maya. At Teotihuacan the maize god can appear decapitated as well as fishing for marine shells, themes also present in Classic Maya portrayals of this being.

In my recent work, I continue to explore ancient Mesoamerican concepts of the soul and paradise, especially in relation to flowers. In a study published in Guatemala, I discuss the motif of Flower Mountain in Early Classic censers from the Escuintla region (Taube 2005a). A number of censer lids portray human butterfly figures in front of a hill ornamented with blossoms, clearly the souls of the dead in front of Flower Mountain. It is probably no coincidence that Escuintla is very close to the department of Suchitepequez, Guatemala. Derived

to Early Postclassic Chichen Itza, where the sun deity and the souls of warriors can be seen drinking blood from their weapons dipped into floral *cuāuhxicalli* vessels, much like butterflies and birds sucking the nectar of open flowers (Taube 2005a).

In a co-authored study with Marc Zender, we discuss boxing in ancient Mesoamerica and note that as with the rubber ballgame it had a ritual component concerning human sacrifice and blood (Taube and Zender 2009). However, rather than the act of decapitation common to the ballgame, sacrificial blood in this case pertains to that shed in ritual combat, with the blood corresponding to fertile rain. More recently, in “The Ballgame, Boxing and Ritual Bloodsport in Ancient Mesoamerica” (Taube 2018), I return to the topic of ritual boxing and blood symbolism and also consider ballcourts. The ritual flooding of these courts also relates to sacrificial blood, as these places were also arenas for decapitation and human sacrifice.

Teotihuacan remains a major area of interest for me, including Teotihuacan

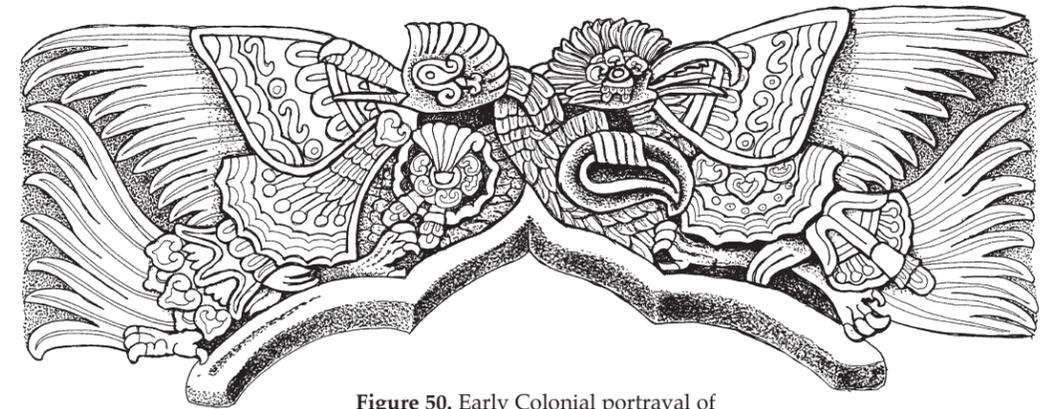


Figure 50. Early Colonial portrayal of water birds with butterfly wings and floral tails, arch in the Parroquia de San José, Tlaxcala (drawing by author).

from the Nahuatl term *Xochitepec*, meaning “Flower Mountain,” this place name is documented in the region since the contact-period sixteenth century (see Universidad Francisco Marroquín 2007:49, no. 30). Although Flower Mountain symbolism is well documented for the ancient Maya, the Early Classic ceramics of Escuintla have stronger affinities with more distant Teotihuacan. In another study I discuss Flower Mountain at Teotihuacan and note that the Temple of Quetzalcoatl was the preeminent “Flower Mountain” at the site, a concept probably relating to the many sacrificed individuals buried in the foundation of the structure, that is, heroic warriors who would reside in the floral paradise (Taube 2006). The presence of quetzal birds in Teotihuacan portrayals of Flower Mountain suggests that this paradise realm pertains to the east, the place of the dawning sun and the Maya area.

In a subsequent work, “At Dawn’s Edge: Tulúm, Santa Rita, and Floral Symbolism in the International Style of Late Postclassic Mesoamerica” (Taube 2010a), I discuss floral symbolism in Late Postclassic Mesoamerica, especially its relation to souls, paradise, and the eastern Maya region. In contact-period highland Mexico, this paradisaical realm of ancestors is frequently depicted on a small scale, including finely carved bones, painted vessels, and jewelry, with flowers, birds, and butterflies frequently portrayed. This fascination with flowers, birds, and butterflies continued into Colonial and contemporary art in Mesoamerica. An excellent sixteenth-century example occurs on a carved stone arch in the Parroquia de San José in the city of Tlaxcala (Figure 50). The carving portrays two entwined water birds with butterfly wings, a supernatural merging of two creatures closely identified with the Prehispanic Flower World, but here on a Colonial, Moorish-style arch. It is quite likely that these two birds refer to two of the four barrios of Tlaxcala, these being Tizatlan and Ocotelulco, which are rendered in the two extant copies of the *Lienzo de Tlaxcala* as a pair of aquatic birds with large beaks, resembling herons.

In terms of floral symbolism, broad vistas of research open out in Mesoamerican studies. I am confident that for many years to come, I will be studying Mesamerican concepts of the soul and paradise including their close relation to aesthetics, that is, the cult of life as the cult of beauty.