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Glossary

Atole Boiled maize dough in water, often combined with other additives to make a ceremonial drink.

Calendars The Mayans and the Mixe–Zoqueans both employed two main calendars, a sacred almanac of 260 days—composed of a number cycle from 1–13 running concurrently with a 20-day name cycle—and an agricultural calendar composed of eighteen 20-day months plus 5 nameless days for a total of 365 days.

Cycad A member of a small and ancient plant family going back at least 200 million years, which has several unique features and that looks rather like a tree fern.

Hearth of Creation A Quiché Maya constellation in Orion that is currently believed to go back to Classic Maya times as a three stoned hearth with a central “fire” and to represent the celestial hearth from which the universe was created.

Homxik A dwarf maize deity of the Sierra Popoluca, hatched from an egg and subject of a cycle of myths in which he undergoes a series of trials, eventually vanquishing Hurricane and making him promise to supply water for the maize crop.

Maize tassel As used here it is the spike or tassel in the flowering stage of maize development.

Maya glyphs The individual components of the Maya script are called glyphs, and these individually or in combination comprise generally squared blocks with rounded corners, usually read left to right two at a time from column tops to bottoms. Glyphs generally represent an individual syllable or a word, or both.

Mayan language family A family of some 30 distinct and separate languages, the Cholan branch of which is primarily implicated in developing the Classic Maya Script that was employed by members of the Yucatecan branch during Post-Classic and early Colonial times.

Mesoamerica The geographic area as employed here that includes Guatemala, Belize, and Mexico as far north as approximately where a line joining the Panuco River delta with that of the Lerma-Santiago River.

Mixe–Zoquean language family A family that includes approximately 12 separate and distinct languages located immediately adjacent to and on both sides of the Isthmus of Tehuantepec in Mexico.

Popol Vuh The sacred book of the Quiché Maya, originally written down in the sixteenth century and recounting the origins, traditions, and history of the Quiché people, it is analogous to the western Bible.

Pozole Maize dough that can be added to water, creating a nutritious and delicious drink something like thick milk.

Sipakna A “crocodilian” antagonist of the “hero twins” who is destroyed by them in the first half of the Quiché Maya sacred book, the Popol Vuh.

Thipaak The Huastec culture hero who first cultivated maize is referred to also as the ehatal (soul) of maize, the tz’itzin (spirit) of maize, and the ichich (heart, embryo) of maize.

Time depth The number of years since currently related languages were the same language, having diversified over time because of inexorable language change that affects all languages.

Tzeltal A Mayan language of highland Chiapas, having some 300,000 speakers at the turn of the second millennium.
From Preclassic times to the present, indigenous people of southeastern Mesoamerica told stories of maize, recited prayers for maize, and spoke directly to the maize. They depicted it in images, stylized it in glyphs, and created words to speak of its many forms, parts, and stages, as well as its transformation from sown seed to food prepared and eaten. The words, glyphs, images, and narratives concerning maize, which are found in the many Mayan and Mixe–Zoquean languages, create a complex picture of a staple that ordered the daily lives of those who subsisted on it. Several linguistic, iconographic, and narrative components of this picture are isolated here to reveal something of the effect of maize cultivation on the cultivators, of the symbolic continuities through time, and of the rich linguistic reflections of maize in their lives. Lexical relationships, creation stories, the iconography of power, food preparation, and some symbolic relations between maize and certain other plants are considered in this attempt to give a coherent smaller and necessarily partial view of the much larger picture of maize in discourse, symbolism and iconography of Mesoamericans.

INTRODUCTION

Anyone observing maize planting societies in Mesoamerica will notice the importance of maize to the people who plant it. It figures into every aspect of their lives, from the widespread tradition that humans were created from maize to the fact that they spend a large part of their waking time speaking of maize and the seasons, weather, and the plants and animals that affect its growth. One may even suspect that maize in one form or another colors almost every waking thought of those whose ancestors domesticated it and whose lives depend on its continued availability. One ethnographer has suggested that among the Yucatec Maya a man’s identity is defined by his milpa (cornfield) and that the focus of all male and most female conversation is the man’s identity defined by his milpa [30].

This is no less true for the Mixe–Zoqueans and the Mayans of Southeastern Mesoamerica than for any other indigenous people of Mexico, Guatemala, or Belize, and the intent here is to present a small part of the linguistic and iconographic evidence supporting this contention by means of the following eight overlapping rubrics pertaining to symbolic thought and activity: 1) vocabulary, 2) narratives, 3) sayings, 4) rituals, 5) numbers, 6) glyphs, 7) images, 8) calendar. A ninth category treats some plants relating to maize, as evidenced through words and images.

In accord with a conception of southeastern Mesoamerica comprising Guatemala, Belize, and Mexico east of the Isthmus of Tehuantepec and including the region occupied by Mixe speakers just west of the Isthmus, societies treated here are members of the Mayan and Mixe–Zoquean linguistic families. With a time depth of at least 4000 years, the Mayan family today includes 29 different Mayan languages spoken in numerous communities in Mexico, Guatemala, and Belize, and a 30th has become extinct since conquest. In Mexico most Mayan communities are in Chiapas, Quintana Roo, Campeche, Tabasco, and Yucatán, but Huastec Maya speakers, separated by 400 miles from the rest of the Maya, live far to the north in San Luis Potosí and northern Veracruz. Ancestors of at least one branch of the Maya family tree, the Cholans, created Classic Maya civilization (Figures 42-1 and 42-2) [22].

Approximately 12 Mixe–Zoquean languages can be distinguished, one of which disappeared after conquest. They are found mostly in western Chiapas, southwestern Oaxaca, and southeastern Veracruz (see Figure 42-1). Zoqueans are primarily on the Chiapas side of the Isthmus of Tehuantepec and at the northern end of it (Sierra Popoluca), whereas Mixeans are mostly on the Oaxaca side of the Isthmus. The Olmecs were probably Mixe–Zoquean speakers, which coincides well with the approximately 3500 year time depth ascribed to the language family [10].

Regardless of whether Mayan and Mixe–Zoquean languages are ultimately recognized as related genetically, contact and borrowing occurred among and between members of these families; in spoken vocabulary and in script [6, 10–12, 63]. The Olmec civilization, presumably Mixe–Zoqueans, from Teopantecuanitlan, Guerrero, eastwards to La Venta, Tabasco, in the Olmec heartland, flourished from around 1200 BC to about 400 BC. They may have had a glyphic script, but we have little direct evidence of it, unless they were responsible for a script attributed to Zapotes at Monte Albán that began around 500 BC or a somewhat later script found at Kamilaljuyu, Guatemala, or both. Between approximately 300 BC and AD 200 Mixe–Zoquean speakers used a script around the Isthmus of Tehuantepec, recently discovered and partly deciphered, called the Isthmian script [21].

Florescence of Classic Maya culture, accompanied by an elaborate hieroglyphic script, began around AD 300 and...
ended around AD 900 with the collapse of lowland Maya civilization that had been brewing for a hundred years. Although Olmec, Isthmian, and Maya civilizations were not contemporaneous, they were neighbors, and we can see Mixe–Zoquean contributions to Maya culture in the calendar and the script as well as in words spoken by Maya today [22, 40, 41, 44]. For example, the Maya script has a glyph depicting the earth, with a sound value of na, which is unlike any Maya word for “earth,” but rather close to Mixe–Zoquean words for earth (nax or nas), and because the Isthmian script has a glyph formally and structurally similar to the Maya glyph for earth, borrowing from the earlier by the later script must be inferred [44, pp. 48–51, 45]. Maya borrowing of Mixe–Zoquean words occurred as well, exemplified by the Kekchían subgroup of Mayan languages having borrowed the word po (and poh) for “moon” from a Mixean language. Proto-Mayan *ik’ (moon) is different from Proto-Mixe–Zoquean *poy’a (moon) [23, p. 135, 61, p. 438].

It is worth remembering that the Maya borrowed from the Mixe–Zoqueans, both in word and script, as we turn our attention toward words related to maize. Because much more has been written on Mayans than on Mixe–Zoqueans, attention to these families here may seem somewhat lopsided, a situation that will hopefully change with the passage of time before too many more words will have been lost forever.
FIGURE 42-2  Map of Guatemala with approximate locations of Mayans. (Courtesy Summer Institute Linguistics, www.ethnologue.com)
domain. Beginning with the basic word for maize, reconstructed Proto-Mixe–Zoquean *iksi (maize [kernels]), which comes from Proto-Mixe–Zoquean *iks (to shell corn), and may be derived from Proto-Mixean *ik (to toast), only slightly resembles Proto-Mayan *ixi’m (maize [kernels]) [23, 61]. As with Mixe–Zoquean, the Mayan word for corn kernels appears to come from the verb for “to shell corn,” Proto-Mayan *ix and comparing this with Proto-Mixean *ik yields a more notable resemblance [23]. Subtracting the verb from *ixi’m (maize kernels) leaves i’m, which is similar to Huastec Maya eem (maize plant), implying the possibility of a Proto-Mayan *i’m (maize plant). The word ixim in many of today’s Mayan languages means “maize, maize kernels.” To demonstrate the importance of maize, these reconstructions have limited value. More instructive is the fact that Zinacantan Tzotzil Maya has at least 42 names for different kinds of indigenous maize [4].

Proto-Mixe–Zoquean mo:k (maize [generally], maize ear [specifically]) is comparable in meaning if not form to Proto-Mayan *i’im (maize ear) [23]. Notably, Yucatec Maya retains nal (maize ear), whereas Tzeltal Maya nal (semen, seed) illustrates informative semantic change, as does Chol k’al (deity of abundance of plants and animals). Also of note, Huastec Maya may have borrowed way (maize ear, mazorca de maiz) and a plausible donor might be reflected in Proto-Mixe–Zoquean eway (to grind [maize]) [61]. While the mazorca (maize plant, mazorca de maiz) provides the kernels for grinding, the elote (roasting ear) is freshly picked and not yet dried. Proto-Mixe–Zoquean *yaw-mok (elote) is derived from the word for mazorca, whereas Proto-Mayan *ajn (elote) is basic.

Maya words for “cornfield, milpa” were recruited from various sources, as seen in Chol chol (milpa), related to Tzeltal chol (to clear off) or to Tzotzil chob (to form rows or lines). Jacaltec aval (cornfield), by contrast, comes from “to plant seeds,” and Tzeltal k’al likely came from k’al (clear a way, make an opening) (although one Tzeltal consultant suggested it came from Tzeltal k’ahk’al (sun, hot) recalling Chontal Maya k’intun (plowed cornfield) from the word for sun). Tzotzil chob (formerly chab) (planted cornfield) is cognate with Yucatec kab (earth, land, pueblo) and Yucatec kol (milpa, to clear land) is cognate with Chol chol (cornfield), suggesting the latter’s derivation from a word for “clearing land” rather than “forming rows.”

Proto-Mixe–Zoquean *kama (milpa) (cornfield), unlike the Mayan situation, was delivered with meaning intact to most of the daughter languages. A borrowed reflection may be found in Ixil Maya ko’m (cornfield) [61].

So many concepts involve maize, its planting, growth stages, harvesting, storage, preparation, and consumption, that most cannot even be enumerated here, let alone saying more about their expression in Mayan or Mixe–Zoquean languages, a fact that is itself informative. Named concepts involving maize are truly staggering in number. Therefore, I propose to address growth stages, briefly mention selected reconstructed words and their meanings, and then introduce interesting notes on the maize deity.

Maize Growth Stages

Named stages in the growth of maize are rarely encountered in the ethnographic literature. Notable exceptions are for Tzeltal Maya, Huastec Maya, Mochó Maya, and Tzutujil Maya [1, 2, 9, 29]. The following 13 stages were given by Tzeltal consultants (Table 42-1). The theme of maize growth has significance to the calendar.

Among the stages of maize, the term for maize tassel (flor de milpa) is given as tz’utoh in Tzeltal. Stability in this word is attested by the Proto-Mayan reconstruction *tz’utuj [23]. The Proto-Mixe–Zoquean term for maize tassel is *mok-pihy compounded from words for maize and flower [61]. The husk or doblador that protects the maize ear from intruders is reconstructed as *jomoch’ for Proto-Cholan [23]. Significantly, Proto-Cholan represents the subgroup of Mayan languages most closely related to the language of the Classic Maya. Several eastern Mayan languages call the husk jo’q and in Tzeltal it is hohoch. For similar reasons of variation the maize husk can not be reconstructed for Proto-Mixe–Zoquean, valuable as this item is for Mesoamericans; but in Proto-Oaxaca Mixean, it is *ahktz [61]. Once stripped of its kernels, the corn cob or olo’te remains. This is reconstructed for Proto-Mayan as *b’aqal and is based on the word for “bone” [23]. Proto-Mixe–Zoquean *hípak (corn cob) is similarly based on the word for “bone.” Interchange of human body part terms with maize part nomenclature is particularly notable for Mayan languages, and this is another indication of the close connection between people and maize in Maya thought.

Huastecs recognize at least 12 named stages of maize development and tie the plant’s development to the aging of the “spirit of the maize,” seen as a little boy who grows up as the maize does, suggesting an equivalence between humans and maize that will be explored later [1, pp. 354–361]. Like the Tzeltal, Huastecs (or Teenek), also make a large number of named food items with maize, and they are particularly well known for making a large meat filled tamale called a bolim for special occasions, and an even larger tamale called a saka’wil that feeds many and may take two people to carry it.

Food Preparation

Foods are prepared from maize at different stages of development, and remarkably, Tenejapa Tzeltal speakers prepare at least 32 named food dishes from maize and bean products alone. Representative maize dishes include boiled hi (immature maize ear [taking one ear early enlarges the one remaining]) and ahan (roasting ear, elote) roasted with
the husk intact. Mature ixim kernels boiled with lime are occasionally eaten as hominy, and called paynil, but usually ground on a metate. Thrice ground maize known as matz’ is placed in water and stirred, making a cold maize gruel also known as matz’, or made into tortillas by flattening a ball of matz’ to be heated on a samet (griddle) and then called wah (tortilla), this same word being used also for “food in general.” Tortillas are usually eaten with beans, chiles, and salt. Ground maize dough, in addition to being used to make tortillas or matz’ (cold maize gruel), locally known in Spanish as pozole, can be fashioned into several types of tamales, called patz’, which are then steamed in an urn. A drink, commonly consumed on festal occasions is made of boiled corn dough, water, and brown sugar and named ul, the glyphic spelling of which has been found on vessels, once filled with ul in Classic Maya tombs.

Proto-Mayan *q’oor has been reconstructed for “maize dough, masa,” but this term was not passed consistently to the daughter languages [23]. “Maize dough” has been reconstructed for Proto-Mixean as *hïtzi and for Proto-Zoquean as *kï’ti [61]. Maize dough in cold water makes a maize drink that is reconstructed for Proto-Mayan as *maatz’, but the daughter languages have several different words for it; for example, Yucatec Maya *k’oyem (from Proto-Mayan *q’oor [masa]), Chol sa’, Choltí sipak, Chuj pichi’, and Ixil jul. In many Mixe–Zoquean languages the term for pozole stems from the Proto-Mixe–Zoquean words noted earlier for maize dough.

Maize dough boiled in water with other additives makes a ceremonial maize drink known in local Spanish as atole, and the Proto-Mayan word referencing this drink is *uul [23]. Chamula Tzotzil ul references both “maize gruel” and “semen” in “men’s speech” [16, p. 229]. Atole has many varieties, some sweetened, some soured, and the varieties have more names than there are additives. Ground parched maize is generally known as pinole in local Spanish; in Proto-Mayan it is *k’aj [23]. It becomes a tasty drink with the same name when stirred in water. Proto-Mixean and Proto-Zoquean branches diverge with names for pinole, the former reconstructed as *mo:hk-way (literally “ground maize”) and the latter as *po’re [61].

After maize has been harvested and shelled, the kernels are boiled with lime (calcium carbonate), softening the kernels and creating soft wet hominy known in Spanish as nixtamal. Mayan languages have various names for this hominy, including some from the Proto-Mayan word for maize dough. Huastec has an especially interesting name for it, pitzi’, which means both “hominy” and a “species of bird.” It is said that the pitzi’ bird was once a woman too lazy to make her husband tortillas, so she served him the more easily prepared hominy (pitzi’) instead. Because of her laziness she was transformed into the lazy bird [1, p. 89]. Huastec must have borrowed the word for hominy from a Mixe–Zoquean language, for nixtamal (hominy) reconstructs to Proto-Mixe–Zoquean *pitzi [61].
Ritual Names and Maize Deities

In the figurative and formal vocabulary of prayers and other ritual speech, many plants and animals have special names. Not surprisingly, in these discourse forms maize has special terms as well; Yucatec Maya Grasya (young maize plant) uses a word derived from Spanish gracia (grace, favor, charm), whereas Santo grasya means “maize ear.” Chenalhó Tzotzil employs Anhel similarly, although this word can also mean “earthlord, mountain, lightning, or wild tobacco” (Nicotiana rustica or N. glauca). Quiché ritual speech uses Qusan (corn, literally “our mother”) or Mariya (corn, literally “Mary” referencing the Virgin Mary), and Cakchiquel uses Jolooma (dried maize kernels, literally “little skulls”). Chamula Tzotzil Maya use the ritual term Xohobal “radiance, sun’s halo” referencing maize foods. Chenalhó Tzotzil Maya employs Ob “maize (when addressed)” for ritual occasions, and Zipanant Tzotzil Maya ritual speech includes both Xohobal (radiance), and Xohobal rios (corn; sunbeam [literally analyzed “needle of God”]). It is notable that the ritual terminology not infrequently comes from Spanish.

Freidel, Schele, and Parker [15] identify the Classic Maya maize god as the “First Father” whose glyphic name was Hun Nal Ye, which they gloss as “One Maize Revealed” [p. 55]. J. Eric Thompson identifies from the Yucatec Maya Chilam Balam of Chumayel, a name for maize, Ah Mun, suggesting it be a name of the Yucatec maize deity of the colonial period and interpreting the root mun as reference to an unripe crop or youth [36, p. 48]. Although Lacandón Maya uses mu’un näl to mean “young maize,” the terms munach (slave) and Quiché mun (captive) in closely related Yucatec suggest additional dimensions of meaning that could inform our interpretation.

Contemporary Lacandón Maya identify a maize deity, lord of the milpa, whom they call Ak’inchob (dios del maiz [literally “cross-eyed sun lord”]) [7, p. 131, 26, p. 62] and whose wife is Ixchel, the goddess of pregnancy and childbirth. The Mochó Maya are also said to identify a maize deity, Ham-iil paach-iií, the meaning of whose name can be inferred from ham (aperture, crack, opening) and paach (home in the middle of the milpa, twinned ear of maize).

Chortí Maya identify Ih p’en as the (spirit of maize) or (soul of maize), another name for whom is Ah k’anan (he of the yellow maize) according to Charles Wisdom [62]. Ih p’en also names the (earth deity and protector of milpas, houses, and property) [62]. As the spirit of maize he is the male consort of the spirit of beans, Ik’ k’anan, “female of the yellow maize” by Wisdom’s [62] analysis. Lacking a Maya root p’en, one can note simply that Mixe p-en (to plant, sow) is appropriate in meaning, and suggests possible contact in the past (Mixe–Zoquean languages lack glottalization). Chortí Ah yum nar names the “four pellets of copal placed in the four corners within the storehouse to protect the maize (literally “lord of maize”), whereas u mein e nar (spirit of maize) comes from mein (spirit [of plant or animal], shadow). Whereas Chortí has no words from which to analyze matulin (a guardian spirit of the maize storehouse), it is noteworthy that Tzeltal Maya matul is a medicinal hallucinogen of the genus Datura. Although primarily male for the Chortí and Huastec Maya, the maize spirit is seen as female by Tzeltal and Tzotzil Maya speakers. The data are too scant at this point to draw conclusions about gender concepts in this regard.

The Tzeltal X’ob (spirit of maize), appears as a tiny young maiden often and is seen “to have a bloody nose.” It is significant that Míta Zapotec xob means “maize,” specified in colonial Zapotec with the spelling [xobba] as “maize kernels.” The Tzeltal word, because there are few traces in Mayan languages, could have historical connections with the Zapotec term [22]. Tzotzil X’ob (soul of maize [and beans]), is the maiden daughter of Anhel (the earthlord), and wife of Yusunprun. She once took an ear of maize from each corner of his milpa, and it miraculously multiplied, recalling images of the Olmec maize deity–ruler surrounded by an ear of maize in each corner of the image (see Figure 42-4b) [52, p. 46]. Nevertheless he was an abusive husband and slapped her more than once, which explains the blood seen on her nose [17, p. 40; 218; 291]. Blood associated with the soul of maize, who, though married is seen as a virgin, reminds one of “Blood Woman” in the sacred Quiché Maya book, the Popol Vuh. Daughter of one of the lords of the Underworld (xibalba) and still a virgin, she is impregnated by saliva from a skull on a forbidden tree and subsequently forced to flee the Underworld. Arriving in this world she picks a maize ear from the milpa of her brothers-in-law and makes it miraculously multiply, convincing their mother that she is indeed their daughter-in-law. The evidence suggests Blood Woman to be the “soul of maize,” a point heretofore unrecognized.

Tzotzil Oh, a ritual term addressing maize in Chenalhó Tzotzil, would be X’ob if referential and is thus clearly related to the Tzotzil and Tzeltal X’ob (soul [or spirit] of maize). Less obvious is a relationship to Chol Maya x’ob (Hamelia patens, coralillo, scarlet bush), which is a plant that grows up to 9 feet tall (like maize), has long green leaves emerging in three from red nodes on the stalk, and long bright red flowers, recalling the Tzeltal and Tzotzil maize spirit’s bloody nose. The plant has several medicinal properties and is referred to by Mopan Maya speakers as the “guardian (of the forest)” X-k’anan, and by Yucatec Maya as X-k’anan, derived from a root for “yellow” [5, 35].

NARRATIVES

Although words when explained or put in context certainly lead to stories, narratives are themselves stories, and
stories are sometimes seen as the basis for culture as well as a primary means of cultural continuity. A few interpreted snippets from narratives will suffice to illustrate some of the importance of maize to Mayans and Mixe–Zoqueans. For the Mayan languages, the illustrations will come primarily from the Popol Vuh, an early colonial period Quiché written narrative, from the Chilam Balam of Chumayel, a nineteenth-century Yucatec manuscript with passages copied from early colonial texts and from narratives collected by anthropologists in the twentieth century from various Mayan languages. All Mixe–Zoquean narrative material derives from twentieth-century collections by anthropologists and other visitors to indigenous communities.

The Popol Vuh was an oral narrative, probably written down in the middle of the sixteenth century, by a Quiché Maya speaker, recounting the origins, traditions, and history of the Quiché Maya people. According to this tradition, following the unsuccessful creation of humans first from mud, and then wood, in the third creation the first eight ancestors (four men and four women) were formed of yellow and white maize dough, by Xmukane, grandmother of the “hero twins” (themselves strongly identified with maize), who had been told about a mountain filled with maize, discovered by the fox, coyote, crow, and parrot. To keep humans from being too wise, the gods blew mist in their eyes, recalling the Huastec Maya creation narrative specifying maize pollen as the material blown into their eyes [1, p. 62]. The Cakchiquel neighbors of the Quiché record humans as created by the gods from maize dough mixed with the blood of the tapir and the serpent. Notably, “Great White Tapir” was one of Xmukan’s epithets in the Popol Vuh.

Before the creation of humans, the Popol Vuh recounts adventures of the “hero twins.” These twins are Hun-Aj-Pu, whose name is given as “One blowgunner” by Dennis Tedlock and X-Balan-Ke “Little Jaguar Deer” or “Little Jaguar Sun” (meaning “moon” according to Tedlock) [54]. They ultimately sacrifice themselves in a fire and rise into the heavens becoming the sun and the moon. Because nal is “maize ear” in the Cholan language of the glyphs, and aj is “fresh maize ear” in Quiché, I suspect that Hun-Nal-Ye, the Classic Maya maize deity, is the counterpart of the Quiché Popol Vuh’s Hun-Aj-Pu, name for one of the hero twins, which—with an extra hun (one) prefixed—is also the name of their father. A number of scholars have proposed on other grounds that the hero twins are dual aspects of a maize deity or that they represent maize itself [54]. The twins’ adventures in the upper and underworlds can be read both as a creation myth narrative and as an allegory of the cosmic cycle with a focus on the adventures of maize as it faces many trials underground before sprouting above ground. The hero twins appear to represent anthropomorphic maize and perhaps a single twin ear of maize. When they leave their grandmother to visit the underworld, for example, they each “plant” an ear in the center of the house, telling her that when the maize dries up it will be a sign of their death [54, p. 42]. She cries when the maize ears dry out, signaling the death of her grandsons, and rejoices when later the ears sprout, meaning that they have returned to life.

More obscure references to maize reside in the Popol Vuh as well. One, I believe, revolves around Sipakna, a crocodilian being—son of luciferian Seven Macaw who probably represents the sun of the previous era. The name Sipakna shares much with Aztec Sipakli (first day of the 20 day month cycle, meaning crocodile and/or shark). Before leaving for the underworld, the hero twins set out to kill Sipakna who had himself just finished killing “the 400 boys” identified by Tedlock as the gods of alcoholic drinks [54, p. 36]. Earlier Sipakna had feigned death when the 400 boys tried to crush him with a huge log pole after having tricked him into digging a deep hole, as if he were maize being planted [cf. 54, p. 265]. Sipakna had hidden in a side pocket at the bottom, and when they planted the pole in the hole, he then had ants bring his hair and fingernails to the surface. The 400 boys saw these as tokens of his death and celebrated for 3 days by getting drunk on what I interpret as the maize fingernails and hair of Sipakna, based on an analogy with the Aztec maize deity Sinoteotl. Grandson of the Aztec counterpart to the Popol Vuh’s Xmukane, Sinoteotl was buried in a cavern in a mountain so that his body parts could emerge as plant foods to later feed humanity. His nails, for example, became a long variety of maize. Once the 400 boys were drunk, Sipakna crushed their house with them inside. Later they ascended to the skies, becoming the Pleiades, a constellation whose appearance alerts many peoples, including Mayans, to planting and harvesting activities.

Identification of Sipakna with some aspect of a maize deity is suggested by more than his name’s similarity to the Aztec day name meaning “crocodile” and goes beyond the earlier interpretation of a Popol Vuh story in maize planting allegorical terms. Thipaak is a culture hero of Huastec Maya tradition who saved the people from having to sacrifice their children and who first cultivated maize and stored it in the huge pillar supporting the sky, long before it was made available to humans [1, p. 62, 90]. Long ago a bird drew attention to maize kernels being brought by leaf cutter ants from the depths of the pillar supporting the sky, T’ithuch, currently the name of a 9000 foot peak in the Huastec region. The eastern rain deity opened up the pillar with a blast of lightning, making maize available to the people [1].

Noting that Huastec th corresponds to s in other Mayan languages, and that -na of Sipakna and the -li of Aztec Sipakli are removable suffixes, permits recognizing Thipaak as related to Sipak, the root form of the Aztec day name meaning “crocodile.” Sipak is likely etymologically related to the term ceiba applied to the kapok tree (Ceiba pentandra). Referred to as the tree of breasts, the ceiba tree
is said to sustain babies who die in childbirth. Janis Alcorn [1] notes that *Thipaak*'s maize storehouse was close by *Tampaxal* (literally “place of Paxal”), a name similar to the maize mountain, or “sustenance mountain” of the Guatemalan narratives of the *Popol Vuh* and *Annals of Cachiquels*, which is named variously Paxal, Paxil, or Paxel [1]. Remarkable traditional memory is evidenced, or perhaps some later contact, as the Huastec left their Guatemala homeland more than 3000 years ago. Just as remarkable, a tz’ok bird impregnated *Thipaak*'s virgin mother (*a ta’tam* bird). This occurred when she went to the creek to wash the *nixtamal* made of the maize precursor *ohox* (*Brosimum alicastrum*) and the tz’ok whistled at her or defecated in her mouth, depending on who tells the story. The similarity to the *Popol Vuh* narrative involving Blood Woman and her virgin birthing of the hero twins is again striking.

*Thipaak* is called by Huastecs the *ehatal* (soul) of maize, the *tz’itziin* (spirit) of maize, and the *ichiich* (heart, embryo) of maize, a maize identification yet more certain in that local Nahuatl speakers refer to *Thipaak* as *Sintektli* [1, pp. 68, 204].

Hundreds of miles to the south, at the Mexico–Guatemala border, late Pre-Classic Stela 25 at Izapa depicts a large bird, perhaps representing Seven Macaw of the *Popol Vuh*. With no lower jaw, it holds a person’s detached arm, whereas a man below, lacking an arm, seems to represent a precursor to *Humahipu*. They face an upended crocodile whose tail is a leafy tree on which a smaller bird perches, inviting a conclusion that the crocodile represents *Sipakna*, while the bird perched on him, represents his brother *Kabrakan* (two legs), both being offspring of Seven Macaw. The similarity to the hero twins narrative of the *Popol Vuh* again puts the crocodile into a close relationship with maize.

In the Yucatec Maya *Chilam Balam of Chumayel*, the story of maize is couched in ritual language from which it is difficult to extract a complete outline, but it is clear that before heaven and earth there was a maize spirit, referred to as the “three cornered jade stone,” who remained within the maize, later emerging with long locks of hair. Apparently maize was hidden within a stone pillar in this rendition, but the story is obscure here [36, p. 107, 55, p. 351]. The three cornered stone refers to the maize ear, represented during the Maya Classic period as sometimes pointed pendant jadeite cells, occasionally alone, but typically in groups of three [52, p. 42]. Because the *Chilam Balam* refers to creation here, it is of note that the cosmic *hearth of creation*, the “First-Three-Stone-Place” identified by Freidel, Schele, and Parker [15, p. 69, 79] from Palenque inscriptions, consists of three stars forming an equilateral triangle hanging from Orion’s belt in the constellation seen as the giant Orion. This hearth of creation is identified as a Quiché hearth by contemporary Quiché speakers (Figure 42-3).

FIGURE 42-3 A photograph of the night sky taken in Ecuador showing Orion’s belt and the associated stars making up the “hearth of creation,” with labeled stars showing the hearth of creation and “child’s hammock” (Photo taken by Natalia Biani).

I suggest that the Classic Maya three stone hearth hanging from Orion’s belt as jade celt(s) used Alnilam, the central star of the belt, rather than Alnitak, because it is brighter, because it approximates a more equilateral triangle, and because Mixe neighbors of the Maya see Alnilam as an important star in their “hammock” constellation. If indeed this is the hearth of creation from which the maize deity emerged (see Figure 42-3), the three stars of Orion’s belt, which for the Maya was a constellation known as the Turtle, can be seen as a roasting ear of maize, being cooked on the hearth of the heavens [15, pp. 80–81]. From macrocosm to microcosm we can see the Maya place of creation in at least three arenas. In the heavens it is a triangle of stars equidistant from the Orion nebula M42. On earth in the middle of the house floor it is the three hearthstones with a central fire,
and on the body it is the sacrum with its appended coccyx [47]. In this latter connection, Chamula Tzotzil Maya tradition holds that maize came from a piece of the sun’s groin and included a part of his pubic hair, which is cornsilk. The moon gave beans (her necklace), and potatoes came from her breast milk [16, p. 40].

Most Mixe–Zoquean narratives differ considerably from Mayan ones, and although in Mixe lore twin brother and sister become the sun and the moon, twins do not appear in other narrative contexts [27, p. 218]. Elements of the Mixe narrative in which the twins become the sun and moon will be recognized by readers of the Popol Vuh. A maiden is impregnated by a bird suckling at her breast, and her twin children cause injury to another bird’s beak—not a macaw in this case, but a vulture. The twins, who are hunters, live with their grandmother. Leaving the house they overcome a series of obstacles and eventually become the sun and the moon. The details of the narrative, however, differ significantly from those in the Popol Vuh.

In the Zoquean branch, Sierra Popoluca tradition regards a dwarf with golden hair named Homxïk as the “spirit of maize,” patron of the milpa [37, 38]. Homxïk was hatched from an egg and claims to be “he who sprouts at the knee joints,” and “the one who is eaten.” From the beginning he announced his mission to feed humankind.

Homxïk was discovered while still an egg by an old man and woman who brought him home with them. He hatched in 7 days, and in 7 more he could walk and talk. When his adoptive parents tried to eat him, he had a bat cut his father’s throat; later his mother died by fire. Afterward, while drumming at the seashore, Homxïk was summoned to the land of Hurricane across the sea. After crossing the sea on the back of a tortoise he was put through a series of trials, much like those the Quiché Maya hero twins endured in the Maya underworld of Xibalba. One may note that the hurricane, like the dust devil and the whirlwind, is associated by Mesoamericans with the underworld, and that Zoque supupi (whirlwind) recalls Xibalba in form and sounds. Having passed the trials, Homxïk tricks the inhabitants of Hurricane’s land into dying in a hammock swung over the sea, which falls into it. Hurricane, the lone survivor, albeit with an injured leg, capitulates, promising from then on to water Homxïk’s head when he is dry [14]. One can imagine Homxïk as the maize deity being swung far out over the sea in that hammock to reach his own land after having defeated Hurricane.

Mixe tell of a celestial hammock, a constellation named Ungazaay-maza’ (Child’s Hammock), extending from Betelgeuse to Rigel, with Orion’s belt in the middle, that they petition for rain [25, p. 112]. The middle star of Orion’s belt, Alnilam, is a special star to Mixe descendants of the Olmecs and neighboring predecessors of the Classic Maya, and they call it Maz’a nii (Star of the Sea). The central part of the Child’s Hammock constellation, the three stars of Orion’s Belt would seem an excellent locus for heavenly creation, when we note that a cradle—the hammock of cooler climes—is a metaphor for “origin point” as in “the cradle of civilization,” and indeed an Olmec “cosmogram” on a celt appears to depict three circlets at the base, above which is a stepped mountain that is surmounted by a maize tree axis mundi under a symbol for the sky [52, p. 46]. The three circlets clearly are the foundation on which the rest is constructed (Figure 42-9b). In short, Mixe celestial interpretations fit nicely as macrocosmic setting and partial analog for the Sierra Popoluca maize narrative, and they also represent a plausible analogue to the Maya locus of creation, also in Orion, but with a slightly different focus, whether the three creation stones in a row seen by Olmecs in the heavens were Betelgeuse, Alnilam, and Rigel together, or Orion’s Belt itself.

SAYINGS, METAPHORS, AND BELIEFS

In addition to narratives relating events with reference to a chronological order, more pithy expressions of belief, instruction, and/or classification are frequently found in Mayan and Mixe–Zoquean discourse. These can be termed sayings, and they frequently employ metaphors and embody traditional beliefs, making them particularly useful to record and interpret. In the context of discourse, invocation of these sayings often has an educational objective, and many of them involve maize. Sayings and verbalized restrictions concern other foods as well, but not nearly so many as involve maize. A few are exemplified here, from various sources, mostly Mayan (see Table 42-2).

Rituals

Many Mayan and Mixe–Zoquean rituals involve maize, whether as offerings, as instruments of divination, or as the ritual’s objective. Rituals attending childbirth, planting, harvest, rain petitions, curing, new house construction, prayers for relatives, community renewals, death, and so on, are often called costumbre in Spanish. These rituals are invariably accompanied by formulaic discourse that we might label prayers, invocations, and incantations, and are frequently performed by specialists. Maize in the form of tortillas, tamales, or cornmeal is a frequent sacrificial offering on altars, in caves, on bodies of water, or at the foot of trailside crosses or shrines, for these are the places that can become portals to the other world where those to whom the petitions are made reside.

An interesting divinatory ritual symbolically equates blood and maize, a widespread equation in Mesoamerica, and one delivered in many forms. One seventeenth century
writer noted that Pokomam Maya during childbirth united the newborn with maize by severing its umbilical cord over a multicolored ear of maize with a new obsidian knife, accompanied by prayers for its well being. The bloodied kernels of the maize ear were sown in the child’s name, and that harvest was then sown, with the yield used to feed the child until old enough to plant his own milpa [55, p. 283]. Tzotzil Maya have a similar ritual, in which blood from the umbilicus is dripped on a maize ear, the kernels then being sown by the father in a little milpa called “the child’s blood.” The progress of this crop is said to predict the child’s future, and the harvest is shared by members of the family as a kind of communion to introduce the new family member [17].

The Zinacanteco Tzotzil Maya Fiesta of San Sebastian has a ritual in which a “jousting target” called the k’oltixyo (probably from Spanish colgadizo [pendant]) is an important component that on specified days of the fiesta is struck by specified ritual actors. Pointed at the top, sprouting multicolored ribbons from the bottom, about a foot long, having a red background decorated with yellow, black, and silver rings, the k’oltixyo greatly resembles a maize ear fetish, and indeed must have at one time been precisely that [50]. Today, some say it represents the heart of San Sebastian [59, pp. 207–211, cf. 52, p. 72]. Sporting a cross at the top, it has five nodes, and the internodes are color striated with three sections each. Here we have a ritual in which a onetime maize symbol is ritually speared, almost as if it were a deer.

Quiché Maya divination as practiced in the Popol Vuh involved both maize kernels and the seeds of the tz’ite’ (coral bean tree), Erythrina spp. and now in Chichicasten...
of deceased Chortí fast on maize for 8 days [62, pp. 289–301].

In the Classic Maya script each number from 1–20 has a bar and dot variant and a “head variant.” The head variants are heads with headdresses of the deities associated with those numbers. The normal variant of eight is a bar and three dots (Figure 42-7a). The head variant for eight is the young maize god’s head with a “maize curls” forehead ornament, and a maize ear or maize foliage, or both, in his headdress (Figure 42-7b). Additionally, each of the 20 named days is ruled by a deity that occasionally appears in the glyphs. The ruler of the day K’an is the maize deity, and K’an is the eighth day of the 20-day “month” when we start with Kaban (earth), which is ruled by the goddess of number one (Figure 42-7d) [56]. The word k’an in lowland Mayan languages means “yellow, ripe,” and the glyph for the day K’an depicts either a maize kernel as some infer, or a maize tamale as currently preferred [51]. Closer to the present, the Popol Vuh says that the first people were made from maize; four men and four women, totaling eight. Thompson adds that the connection between eight and maize is sealed on Copan Stela 1, where one finds a bar and three dots within a cartouche, surmounted by affix T86, which depicts a maize ear (Figure 42-7c) [54, p. 289].

The number five is the planting number for some Maya groups, like the Chortí and Tzeltal, both because they often make an effort to put around five (or at least four) kernels of seed corn into each hole made by the digging stick, and because ideally each hole is surrounded by five equidistant planting holes at about the length of the digging stick, which is used for the measurement [42]. As the planting number, five creates a quincunx pattern that would seem to represent a model of the cosmos and also a model of the altar on which offerings are made to the center and to the four corners (see Figure 42-4a). It is also a model of the altar on which offerings are often done with gourd bowls forming the quincunx. Karl Taube [52] has explicitly related the quincunx model to the Olmec “bar and four dots motif,” which consists of four maize ears around a central element (Figure 42-4b) [p. 46, Figure f]. I maintain that the number three, independently associated with bloodletting, is also closely associated with maize, perhaps in part because three dots over a bar make the number eight [43]. Three kernels are frequently depicted in Mayan, Isthmian, and Olmec maize ears [43, 45]. This is well illustrated by the shark tail composed of a twinned maize ear on Isthmian La Mojarra Stela 1 (Figure 42-5). Three jade celts representing maize ears are worn on waist or chest of Maya and Olmec rulers, and when only a single celt, it may have three holes in it. Whether through its equivalence with blood or independently, three has a relationship with maize.

The number two has a definite but not exclusive association with maize. Twin ears of maize have already been
Maize in Word and Image in Southeastern Mesoamerica

mentioned as auguring luck, fertility, and a bountiful harvest, for example, surely today and likely in times past. Double ears of maize are seen as a manifestation of the maize deity and the spirit of the maize kernel. Perla Petrich [29] notes that among the Mochó Maya of Chiapas, Mexico, when someone finds a double ear of maize in the milpa he cuts down the whole plant and brings it home. Placing it in the center of the patio, he surrounds it with the harvested maize and then places a candle at each of the four corners. Two more candles are burned in front of the mound of maize ears next to a brazier with smoking copal [p. 156]. Despite the ritual attending the finding of double maize ears, it must be said that any twinned fruit has similar implications of abundance and fertility, but maize is the most important food of all and is the subject of more sayings, more rituals, and more narratives.

Glyphs

A book could be written on maize represented in Maya hieroglyphic writing, and indeed should be. Here a few examples will be provided to supply the flavor of such an endeavor. The Classic Maya script has a glyph of the Maize Deity proper, generally identified as cognate with Hun Hunahpu, father of the hero twins of the previously mentioned Popol Vuh. We do not yet know how his name was pronounced in the Classic period, but we recognize him and know that his glyph is the head variant for 8. The head of his son Hun Ahaw is one glyphic variant of the 20th day name Ahaw (lord, master) (with a dot prefix and a large dot on the cheek), and the portrait head of his other son Yax Balam (with its yax (green) forehead ornament and spotted hairy cheek), serves as the head variant of the number nine. I suspect that the Classic cognate of Hun Hunahpu represents the mature roasting ear of maize (Tzeltal ajan [elote]), whereas his sons represent other stages of maize, Hun Ahaw being the immature ear (Tzeltal ji [jilote]) and Yax Balam being the older dried maize ear (Tzeltal ach ixim [new maize]) as indicated by his yax [new, green, fresh] forehead ornament (Figure 42-6).

Taube [52] recognized several glyphs relating to maize, identifying a “corn curl” glyphic element as having the sound value of wa, and as depicting the maize tamale, noting that it could substitute for T130, for example, already known to represent wa. He also identified the corn curl on the head variants of God N, Pawatun, and on head variants of the numbers 6 and 8 as a phonetic indicator or complement (wa), pointing out its presence in glyph T86 (a maize ear,
see Figure 42-7), and in the glyph for the day K’an [52]. He identified the glyph for K’an, T506, as a tamale, and suggested a T574 “shell variant” of the word for “day” to have the sound value wa, a suggestion amplified in later work [48].

The ruler of Imix, first of the 20 named days, also rules the previously mentioned number five. Imix has no other meaning in Mayan languages, sounds like a reversed ixim (maize), and apparently glyphically depicts a water lily leaf, fittingly, for Yucatec ixim ha’ (water lily) is literally “maize (of the) water.” Imix symbolizes earth and abundance and is equivalent to the Aztec day Sipactli (crocodile) [40, 41]. Mam diviners see the day as favorable to maize, and a colonial Yucatec source gives maize dough (iximil wah) as this day’s “symbol.”

In yet other examples of maize in script, a glyph at Yaxchilan shows the maize deity’s head on a plate, his beheading constituting a major component of the creation narrative, and on the rim of some pottery buried with rulers, the ritual food ul (atole) is spelled out glyphically. The earlier examples illustrate maize as important in yet another Maya domain and much remains to be identified in the future. Our corpus of Olmec glyphs is insufficient to demonstrate anything about maize, but their probable descendants who used the Isthmian script also depicted maize, with more yet to be identified therein as well [21].
have been interpreted as maize stalks representing the *axis mundi* and its celestial representation, the cosmic tree visible at certain times in the heavens.

The image of the Classic Maya maize deity is discussed in depth by Taube [50], who identifies a youthful male with stylized maize atop his head depicted in Early Classic Maya art as a maize deity, developing in the Late Classic period into two different forms; one he calls the Tonsured Maize God representing ripe maize ears, and the other, he names the Foliated Maize God, representing tender growing maize. Contemporary Maya narratives sometimes help us to interpret images from the past, as for example the maize deity shown on Bonampak Stela 1, emerging from what must be “sustenance mountain” at creation. The Olmec maize and maize deity representations are well analyzed, if not yet fully, by several scholars (Figure 42-8) [19, 20, 31, 32, 49, 52].

**Images**

Many references to maize are known in images left us by the Olmecs and the Classic and Post-Classic Maya, and many more remain unidentified as such. Images identifiable as maize appear in the form of “world trees,” objects held or worn by presumed rulers, and deities, sometimes as contextualizing representations, and likely sometimes as generalized ornamentation.

In contemporary times we are more apt to find visual representations of maize in the form of maize itself, including in ritual enactments (maize ears, tortillas, kernels, cornmeal), or buried in the symbolism of objects associated with ritual, such as the jousting target mentioned earlier, likely once a maize fetish. The trailside crosses in Maya communities, too, often painted green, or adorned with pine boughs, have been interpreted as maize stalks representing the *axis mundi* and its celestial representation, the cosmic tree visible at certain times in the heavens.

The image of the Classic Maya maize deity is discussed in depth by Taube [50], who identifies a youthful male with stylized maize atop his head depicted in Early Classic Maya art as a maize deity, developing in the Late Classic period into two different forms; one he calls the Tonsured Maize God representing ripe maize ears, and the other, he names the Foliated Maize God, representing tender growing maize. Contemporary Maya narratives sometimes help us to interpret images from the past, as for example the maize deity shown on Bonampak Stela 1, emerging from what must be “sustenance mountain” at creation. The Olmec maize and maize deity representations are well analyzed, if not yet fully, by several scholars (Figure 42-8) [19, 20, 31, 32, 49, 52].

**FIGURE 42-6** The Creation Plate, K1892, showing the maize deity emerging from a crack in the Tortoise shell, flanked by Maya Classic period versions of the hero twins of the *Popol Vuh*. (From a color photograph © by Justin Kerr, K1892, reproduced with permission.)
FIGURE 42-7 Various Maya Hieroglyphs related to maize (drawings by Brian Stross) (a) Normal variant of eight, a bar and three circles (dots). (b) Head variant of eight and face of the ruler of number eight. (c) T86 a ‘maize’ affix in the glyphic script. a depiction of a maize ear. (d) Kaban 17th day of the almanac, ruled by the moon goddess who also rules number 1 and is a goddess of crop and human fertility. (e) K’an 4th day of the almanac, ruled by the maize deity who also rules the number eight. (f) Imix 1st day of the almanac, ruled by Pawatun, who also rules the number five. (g) Pawatun head variant, also known as God N, who may be an aged manifestation of a maize deity.

FIGURE 42-8 Bonampak Stela 1. Depiction of the Maya maize deity emerging from what has been called “sustenance mountain” where maize was stored. (Drawing by Linda Schele, © David Schele, courtesy Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org)
The maize plant and its ears are depicted in many places and in several ways in Maya images accompanying the glyphic script. Particularly notable is a maize plant as the central image on Palenque’s Tablet of the Foliated Cross, in which the ripe ears are personified in depiction as human heads (Figure 42-9). A notable Olmec image also depicting a maize plant is on the Dallas Plaque mentioned earlier.

I have identified in the ruler’s headdress on the Isthmian (Mixe–Zoquean) La Mojarra Stela 1, a shark with a tail simultaneously representing a twinned ear of maize [46]. Many other rulers are shown with representations of maize on their heads, on their chests, or in their hands, from most periods and most places in Mesoamerica, though not all have been so identified yet, and I have used these representations to illustrate some of the iconography of power in Mesoamerica [45–47]. One obvious illustration of this is from the early Maya Classic is on the Hauberg Stela, to be further analyzed later (Figure 42-10).

Calendar

The eighteen 20-day months plus 5 “nameless” days comprising the 365 day agricultural calendar still maintained by Chiapas Maya peoples has several months whose names reflect maize and maize cultivation. These named months vary widely from language to language within both...
FIGURE 42-10a  The Hauberg Stela, from Tikal dating to around AD 200. (Drawing by Linda Schele, © David Schele, courtesy Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org)
Whereas Table 42-3 suggests 13 named stages in the maize life cycle, I interpret the iconography of Classic period Maya monuments to yield 5 particularly important stages in the growth of the maize deity. These can be easily seen on the Hauberg Stela (see Figure 42-8), and have been interpreted by others as representing constellations of the zodiac [15].

Four of these stages in the maize deity’s growth are the “climbers,” clinging to the serpent whose head looks down on the ruler from the sky above; two on each side of the ruler. The climber closest to the top has a seed in his headdress. The top climber on the right side has what appears to be a maize spike or an early ear developing. Below him the deity wears a skull face mask and a mature ear on his headdress on the bottom right, suggesting the Tzeltal stage named “dead head.” The ruler himself has the largest ear at the perfect stage of development. Schematically this appears to reproduce a more anthropomorphized refinement of an earlier representation on an Olmec celt (see Figure 42-4b). If we add up the four climbers, the three “fallers” on the blade of the knife, and the ruler with his roasting ear, we find that

Mayan and Mixe–Zoquean families today [2, 25, 27]. Less variable are the 20 day names of the 260-day sacred almanac still used by Guatemala Mayan peoples. These days each have meanings interpreted by diviners, and two of them, K’an and Imix are shown by lowland Colonial period documents to have been particularly favorable for maize. In the highlands as exemplified by the Quiché, the lowland day Lamat has a name Q’anil (yellow) that is interpreted like the near homophonous lowland day K’an [53, p. 114].

The 260-day cycle resulting from two concurrent cycles, permuting 13 numbers and 20 day names without repetition, has no obvious analog in celestial cycles, but this number is close to the nine months of human gestation, and also to the nine month growing period of mountain maize, as noted by Tedlock [53, p. 190]. I have maintained elsewhere that the names of the days likely indicate a deliberate connection to the life cycle of maize by attempting to connect the meanings of the first 13 day names in order, starting with the one ruled by the moon goddess, to named stages in the life cycle of maize at 20 day intervals [47, p. 29] (Table 42-3).
Table 42-3 Evidence that the 260-day calendar is based on the maize life cycle

<table>
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<tr>
<th>Day name</th>
<th>Meaning and comment</th>
<th>Name and meaning shared concepts</th>
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<tbody>
<tr>
<td>Kaban</td>
<td>“Earth,” is day 1 of the 260-day period, when one prepares the earth for the maize.</td>
<td>Earth</td>
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<tr>
<td>Ik’</td>
<td>“Wind, breath, spirit, life,” the sixth day name following Kaban, days 100–120 of the cycle, when the breath of life is in the maize; the spirit of maize has entered the kernel.</td>
<td>Spirit, life</td>
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<tr>
<td>Ak’bal</td>
<td>“Night” (“house”) in the Aztec almanac, the seventh day following Kaban, days 120–140 of the cycle, when the kernels are inside a house or husk, and just waking up. The developing ear is now called pak in Tzeltal as it faces down toward the “dark house of night” (i.e., the underworld). One can connect this with the Uk EK’ K’AN “seven-black-yellow” emblem that on occasion flanks the maize deity whose number eight follows.</td>
<td>Dark, house</td>
</tr>
<tr>
<td>K’an</td>
<td>“Yellow, ripe,” the eighth day name, days 140–160, when this stage is completed, the small edible ear, the jilote, is ready to be plucked for food.</td>
<td>Ripe</td>
</tr>
<tr>
<td>Chikchan</td>
<td>“Snake species.” ninth day name, day 160–180 of the cycle. The more mature jilote (Tzeltal me-ji “mother jilote”) in early days. Mixe POP xi’Ix is both “jilote” and “white viper,” equating a snake to a maize stage. By 180th day it becomes a roasting ear elote. The Bolon Mayel “nine twenty” emblem (better as Bolon K’Alel) flanks the young maize deity, and is ophiadian.</td>
<td>Snake</td>
</tr>
<tr>
<td>Kimi</td>
<td>“Death” the tenth named day following Kaban, Tzeltal lah (‘10) also means “finished, dead.” days 180–200 in the cycle. The silks have “died,” darkened and dried up. Maize growth stops with maturity of the fruit. The maize ear may be plucked from the plant (equivalent to being beheaded). Tzeltal cham hol (mature roasting ear) is literally “dead head.”</td>
<td>Death, completion</td>
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A selection of 6 day names reflecting concern with the stages of maize, as evidence the 260-day calendar may have origins in the life cycle of maize. Italized words indicate shared concepts between name meaning and comment A slight mismatch suggests that the maize stages assigned to the thirteen 20-day periods would likely have originated and developed in a lowland region where maturation would be somewhat sooner.

In Honduras near where Chortí Maya live, the giant cycad Dioon mejiae is called teucinte by the local inhabitants, and its seeds are ground and eaten [3]. The name is a Pipil Nahuatl term for the grass with edible seeds from which maize was domesticated. Similarly Huastecs of San Luis Potosí call the local Zamia species of cycad tzalaam thipaak (shade of Thipaak [who brought maize to humans]), or just thipaak. Huastecs have other interesting terms for these cycads, like tzakam way’ (little maize ear), or tzakam thipaak (little Thipaak), tz’en thipaak (sierra Thipaak), or ahaatik a eem (maize lord) [1]. Zamias are also called teocintle by more acculturated Huastecs [3]. Interestingly, these cycads, thought to be the “maize” of the ancestors, are allowed to grow alongside maize in the Huastec milpa because they are seen as maize “shepherds,” and when they produce their cones, which look rather like shucked maize ears, it portends a good maize harvest [1].

Sap from several different incense producing trees, called copal, is believed to be a protector of maize in storage. The name Ah Kohk Nar “guardian of maize” is given by Chortí Maya to four maize ears modeled in copal (Bursera bipinnata) and put in the granary, one in each corner, to watch over the newly harvested maize. Three have Spanish names, and the fourth is called Kumix (little one) [62, p. 403]. When beginning prayers for blessing their maize, the head of a Mam household beheads a chicken and puts it on a heap of copal to mix with the blood. Then a little of the bloodied incense is burned on a little fire lit in front of the maize seed...
Many more plants have associations with maize, both positive and negative, but this exemplifies the nature of some of those associations.

CONCLUSION

The linguistic and iconographic evidence for the importance of maize to the indigenous inhabitants of southeastern Mesoamerica and their predecessors is almost overwhelming. Everything points to what one might expect from a staple whose nourishing blessing is an absolute requisite for the lives of those who plant it: reverence and respect for the food and its deities, ubiquity of maize in ritual activities, keen observation of its morphology and growth, and great variety in how it is prepared, utilized, and named, including special terminology for ritual occasions. Much ordinary conversation deals directly with maize, its cultivation, harvest, and consumption, and one could hardly find any aspect of Mayan or Mixe–Zoquean life that does not relate at least indirectly to maize.

Through words, images, script, metaphor, and other conventional forms of symbolic representation, indigenous societies of Mesoamerica have through the centuries indicated their dependence on maize, their reverence for maize, and the full integration of maize into their intellectual and artistic lives. The selection of examples presented here would seem to bear this out with little room for doubt in the minds of the societies’ participants or of the observers. One observer says that Quiché Maya do not plant maize to live, but rather they live to plant maize [33]. Although this is a matter of perspective, it is a perspective shared by many regarding Mesoamerican subsistence maize farmers.

References Cited

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