Ancient Mesoamerica, 2 (1991), 93–105

THE TEMPLE OF QUETZALCOATL AT TEOTIHUACAN

Its Possible Ideological Significance

Alfredo López Austin,[a] Leonardo López Luján,[b] and Saburo Sugiyama[c]

[a]Instituto de Investigaciones Antropológicas, and Facultad de Filosofía y Letras, Universidad Nacional Autónoma de México
[b]Proyecto Templo Mayor/Subdirección de Estudios Arqueológicos, Instituto Nacional de Antropología e Historia, México
[c]Department of Anthropology, Arizona State University, Tempe, AZ 85287-2402, USA, and Proyecto Templo de Quetzalcóatl, Teotihuacan, México

Abstract

In this article the significance of Teotihuacan's most sumptuous monument is studied: the Temple of Quetzalcoatl. Based on iconographic studies, together with the results of recent archaeological excavations, it is possible to deduce that the building was dedicated to the myth of the origin of time and calendric succession. The sculptures on its facades represent the Feathered Serpent at the moment of the creation. The Feathered Serpent bears the complex headdress of Cipactli, symbol of time, on his body. The archaeological materials discovered coincide with iconographic data and with this interpretation. Other monuments in Mesoamerica are also apparently consecrated in honor of this same myth and portray similar symbolism.

Sometime about A.D. 150, a pyramid was built at Teotihuacan, characterized by a sculptural splendor that was unsurpassed during the following centuries of the city's life. The structure has a rectangular base with seven superimposed tiers (Cabrera and Sugiyama 1982:167) and a stairway on the western facade. It was covered on all four sides by stone reliefs. Balustrades, *taludes*, and *tableros* are adorned with bas-reliefs of multicolored feathered serpents that appear to slither along the surface among seashells. An alternating series of large sculptures is set within the *tableros* and balustrades among the undulating ophidian bodies: a serpent's head, emerging from the petals of a flower, alternates with a large-fanged creature with two rings in its forehead (Figure 1).

The identification of the serpents' heads presents no particular difficulty. They correspond to the bodies of the serpents in bas-relief and clearly represent a deity whose iconographic morphology persisted up until the arrival of the Spaniards. At the time of the Spanish Conquest, the figure is known as Quetzalcoatl, the Feathered Serpent, god of the dawn and the wind, and as the Morning Star. The other sculpture, in contrast, gives rise to differing interpretations. Several authors have argued that it is the head of Tlaloc, Yohualcoatl, Itzpapalotl, Cipactli, the Deity with a Knot in his Headdress, or Xiuhcoatl (Sugiyama 1989b:68).

Recent archaeological excavations at the Temple of Quetzalcoatl (INAH 1980–1982, INAH 1983–1984, INAH 1986, and INAH/Brandeis University 1988–1989) have uncovered important evidence that permits us to reevaluate the significance of this monumental structure (Cabrera and Sugiyama 1982; Cabrera et al. 1989; Cabrera, Cowgill, and Sugiyama 1990; Sugiyama 1985, 1989a, 1989b, 1991). A recent study of the iconography and the functions of the Temple of Quetzalcoatl led Sugiyama (1989b, 1991) to three central conclusions: (1) the sculpture interpreted as the head of the rain god or as the deity with a knot in his headdress is not an individual's head but, instead, represents a complex headdress; (2) the serpent bears this object on his body; and (3) the temple was dedicated only to the Feathered Serpent, and not to a sacred duality. Sugiyama based his conclusions on a comparison of the sculptures with examples from Teotihuacan mural painting, where clear representations of plumed serpents bearing a characteristic headdress are depicted (Figure 2) (Miller 1973:100–102, 112). Independently, Karl Taube also identified the second of the series of sculptures as headdresses (Sugiyama 1989b:73).

In this article, we attempt to carry Sugiyama's original proposals (1989b) still further toward an understanding of the symbolic meanings involved in the iconography of the Temple of Quetzalcoatl. The method followed in the development of this interpretation is based upon four assumptions: (1) Mesoamerican religion was characterized by historical unity in both thought and action; (2) in spite of profound transformations through time, it possessed a nucleus strongly resistant to change, which gave it a unitary character; (3) this unitary character produced a considerable variety of verbal and visual expressions, common to the different Mesoamerican traditions throughout a broad territory; and (4) these expressions were characterized by a wealth of plasticity, manifest in the abundance of different *tropes* (López Austin 1990:Chs. 2 and 10). With respect to the final supposition, we extend the linguistic concept of *trope* to include areas of semiotics which are not

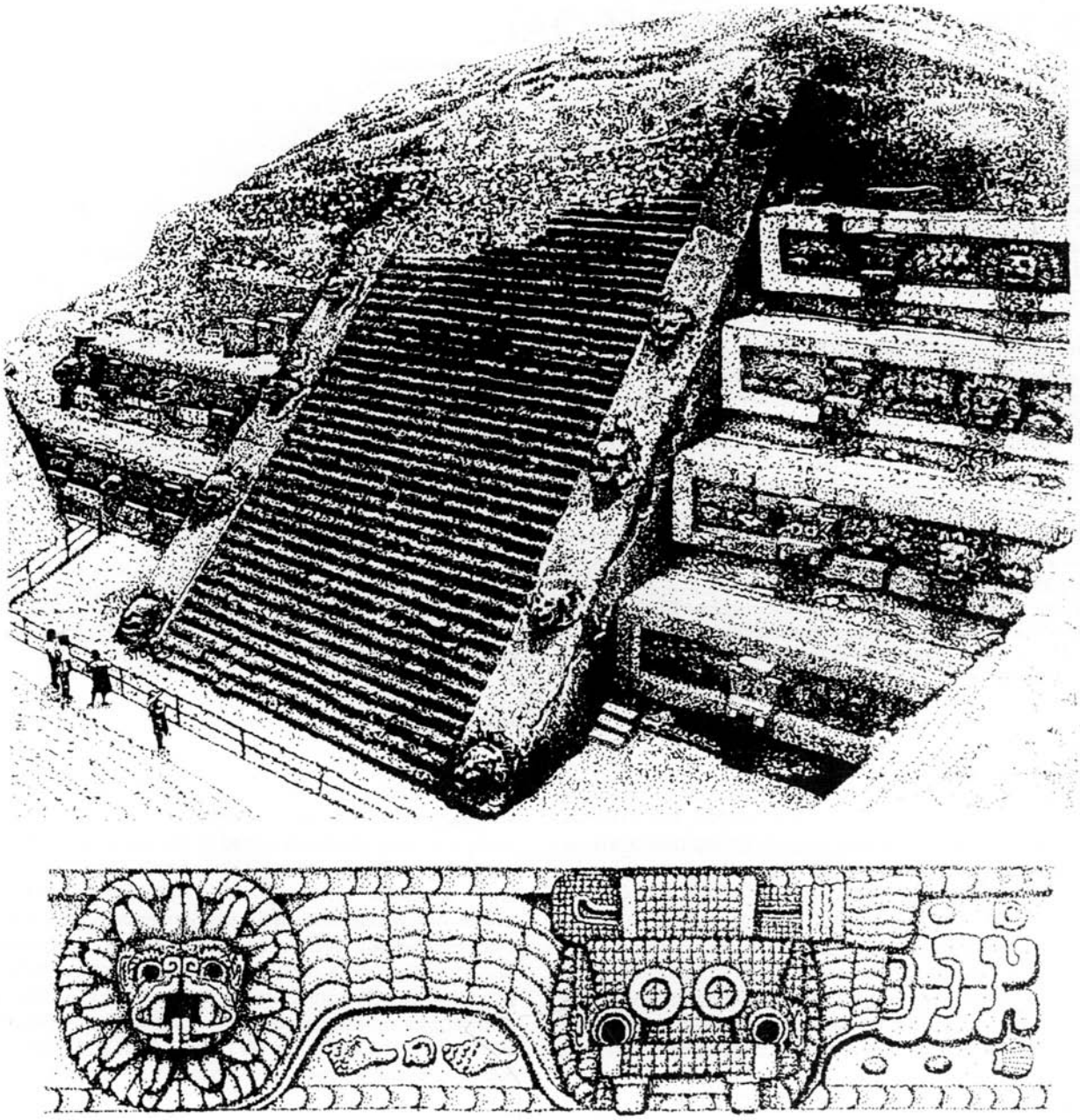

Figure 1. Temple of Quetzalcoatl and detail of the sculptures.

strictly verbal, but in which equivalent phenomena occur. Furthermore, we assume a juncture between linguistic equivalences and those of visual expression.

Space limitations prohibit a detailed consideration in this article of the reasoning behind these assumptions. An in-depth treatment can be found in López Austin (1990:25–42, 147–170). But it is convenient to summarize briefly some of the concepts basic to our formulation. The area that we call Mesoamerica was a historical reality reflecting the coexistence over millennia of societies at different levels of cultural development related through diverse ties. The product of this unity was a long, common history of complex relationships. The societies thus integrated created a cultural tradition with vigorous local manifestations in different epochs and regions, but with a common foundation sufficiently transcendental to allow for permanent relations among Mesoamerican groups throughout the centuries.

The joint creation of this cultural tradition is especially noticeable in the sphere of religion. Iconographic representations display similarities that leave no doubt that there must have been intense and constant interaction. Specialists have emphasized similarities among cultural traits and institutions. To cite just one example, which we will emphasize further on, we re-

https://doi.org/10.1017/S0956536100000419 Published online by Cambridge University Press

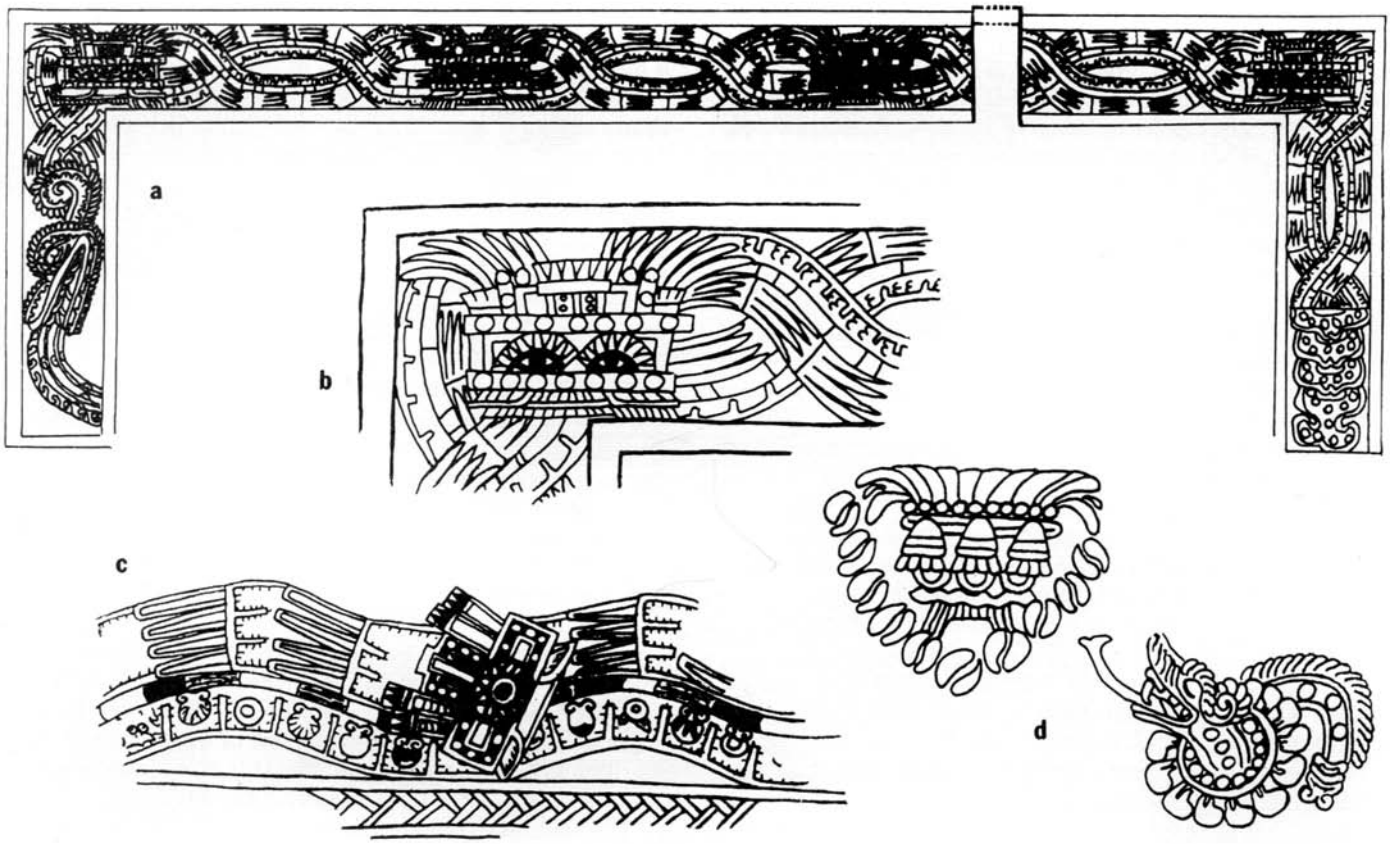

Figure 2. Feathered serpents bearing a complex headdress and serpent with necklace of flower petals opposite a headdress: (a) Teotihuacan mural (Miller 1973:100–101); (b) Detail (Miller 1973:102); (c) Teotihuacan mural (Miller 1973:112; Séjourné 1966b:45); (d) Opposite motives on a Teotihuacan Thin Orange ceramic vessel (von Winning 1987:I:72, Fig. 8b).

call Caso's (1928:45–46) and Thompson's (1978:145, 252) observations concerning the symbolic link among turquoise, time, and rain in Mesoamerica. With respect to the Mexica, Thompson stated:

> It is interesting to note that *xiuitl*, the Mexican name for the year, also meant turquoise and, by extension, rain, both because its color, which is that of the Tlalocs, and because both turquoise and rain were precious things. (1978:145)

As Langley (1986:151–152) pointed out, if Caso and Thompson are correct, this is an example of continuity in symbolism over more than 2,000 years.

Certain cultural expressions are noteworthy for their extension and permanence, including the iconography associated with the gods, rituals, the calendar, the ties between religious beliefs and politics or between astronomical phenomena, and the erection of temples. All of these are corroborated by archaeological data. They are clearly too important to be explained as the simple borrowing of cultural practices or artistic manifestations. Their roots may be traced more effectively within a framework in which the Mesoamerican religious tradition is conceived of as a system and not as a mere aggregate of common traits. Furthermore, in this system, internal sociocultural pressures operate dialectically so that religion functioned as one of the most important spheres of Mesoamerican interaction. The product of these processes was a firm structural nucleus of religion, characterized by its slow transformation and by the possibility of its being utilized and adapted by the inhabitants of Mesoamerica under different conditions and degrees of social and political complexity.

The nucleus seems to be centered in the conceptions of cosmic order and its mechanisms. It would be useful to specify the characteristics of this nucleus through progressive research efforts by specialists. At the same time, nuclear concepts should be used as a heuristic point of departure, thus freeing closed religious and iconographic interpretations, and placing them instead on a broader plane of spatial and temporal congruence, appropriate to the study of long-term historical processes. In effect, Mesoamerican religion is a system. The integration of the foundations of the great religions and of their iconographic expressions are long-term events. This view does not imply forcing interpretations into preconceived frameworks, but rather orienting them toward results that always remain open to corroboration, refutation, or modification.

Moreover, archaeological data, recently recovered from a burial complex associated with the construction of the Quetzalcoatl Pyramid, seem to support the approach adopted here. Our interpretation has led us to hypothesize that the temple was dedicated to the Feathered Serpent as the creator of calendric divisions, that is, to structured time.

https://doi.org/10.1017/S0956536100000419 Published online by Cambridge University Press

THE FEATHERED SERPENT BEARING A HEADDRESS

The significance of "burden." A symbolic relation existed in Mesoamerica among the concepts of burden, time, and political power. The essence of beings in the world of men was conceived of as an internal, invisible burden. To the extent that documentary sources allow interpretation, this essence was a substance that came forth from the world of the gods. A combination of at least three types of essences existed in each being: that of his class, that of his individuality, and that which came to him in the form of a *divine-temporal-destiny* force, proceeding from the world of the gods and irradiated by the sun onto the terrestrial surface (López Austin 1975, 1990:178). In other words, the *burden* was the totality of the essence, an idea that still exists among the peninsular Maya (Villa Rojas 1978:307). In addition, the highland Maya associate this concept with that of periodic service (*cargo*) of local officials (Bricker 1966). The complex significance of the symbol derives from ancient conceptions: the ancient Maya believed that the divisions of time were sacred burdens carried in relays by divine bearers (Thompson 1978:59, 69). These were represented by the same glyph, recorded by Thompson (1962:225–226) as number 601, indicating burden, office, charge, or prophecy. The ancient Nahua also shared this idea. They considered the Sun as the great bearer which daily fulfilled its obligations (Sahagún 1979:Book III, fol. 1r; Book VII, fol. 2v). This interpretation is in agreement with the symbolic ties discussed by Caso and Thompson, since the symbols of turquoise, time, and of rain also appear linked to political power. In accordance with this idea, Noguez (1975) emphasized the importance of the turquoise headdress as a symbol of the power of the *huei tlatoani*, the highest office during the Postclassic in the Central Highlands of Mexico. To summarize, the *divine-temporal-destiny force* should be conceived of as the burden carried, or borne by a deity.

The significance of the headdress. Complex headdresses are abundant motifs in Teotihuacan art. They may have been associated with political power, in Teotihuacan as well as in other Mesoamerican cultures (Millon 1973, 1988; Schele and Miller 1986:112, 114; Sugiyama 1991). Not only do they cover the heads of important personages, but they also occur as independent elements, both in mural paintings and in ceramic appliqués and on seals (Figure 3a–b,f,i–l). Their frequency in political, mythical and ritual contexts, the variety of their features and, at the same time, the repetition of these elements allow us to suppose that they are identified with divine personages or their earthly representatives in power, and that on occasion they are symbolic substitutes for the deities themselves (see Langley 1986:107–124; Millon 1973, 1988; Pasztory 1976:121). This might explain the occurrence of headdresses with hands (Figure 3b).

In many cases, divine headdresses also played a role in Mesoamerican symbolism as indicators of the calendrical attributes of the gods. For example, in Plate 27 of the *Códice Borgia*, four rain gods appear with helmets corresponding to each of the signs of the days of the month (Figure 4a–b), described by Seler, who compares them with their equivalents in the *Códice Vaticano* (Seler 1963:II:258–261). The headdress may be a synthetic symbol of the identity deity-time, because the deity acts as a temporal force. In some representations, the god is totally transformed into a calendrical sign. In Plate 38 of the *Códice Borgia*, Tlaloc is depicted not only with a headdress, but also covered with the skin of an earth monster, in which costume he is meant to represent the first day of the calendar (Figure 4c).

The use of the headdress with calendrical significance is clearer when it is depicted together with the figure known as the "year sign" (Caso 1967:178–182), also referred to as *miotli* (Seler 1963:I:258), *meyotli* (Heyden 1979:63), or *trapeze-ray* (TR) (Langley 1986:148). The calendrical significance of the so-called year sign has been amply demonstrated, although some authors associate it *only* with political power in some contexts (Langley 1986:148–153). We do not believe that such a dichotomy existed, but rather that there was a significant turquoise-time-rain-headdress-power complex.

From the Central Highlands of Mexico to the Maya region, and from the Middle Classic through the Late Postclassic periods, the year sign was used as a headdress in iconographic representations (Langley 1986:148) (Figure 3a,c–l). But the identification goes still further. The year sign *is* a headdress. In effect, an iconographic derivation has been established, tracing the formation of the year sign from the headdress. This derivation originated among the Olmecs and the Zapotecs (Caso 1928:45–46, 1967:178; Edmonson 1988:16; Winter 1989:50–51) (Figure 5a–c). According to Langley, at Teotihuacan the year sign is the most frequent component of the Feathered Headdress symbol (FHS). Furthermore, a direct visual and conceptual relation can be seen between this and one of the variants of the year sign (TR B) (Langley 1986:114, 117). Compare the signs TR, TR A, and TR B from Langley (1986:293–295).

This leads us to suppose that in some cases the Teotihuacan headdresses should be considered as specific calendar signs which can depict the year sign, the day sign (Figure 3b,f,i–j), and even the day number (Figure 3k–l).

The reason for portraying Quetzalcoatl bearing a headdress. Quetzalcoatl is a deity with multiple attributes. In a recent attempt to reduce his functions to a common denominator, López Austin (1990:321–339) identified him as the great initiator of the worldly things of men, and the extractor of secrets and wealth from the world of the gods. In particular, he is characterized as the creator of the calendric divisions and the extractor of the *divine-temporal-destiny force*, and as the source of the four trees from which these forces periodically surge forth in a helix to the world of men.

Given this significance, the complex of the Temple of Quetzalcoatl may be summarized as follows: Quetzalcoatl, the extractor of destinies, bears upon his body a calendar sign. But it is not necessarily his own calendar sign, since elsewhere the feathered serpent is depicted as bearing a headdress with elements clearly distinct from those of the Pyramid of Quetzalcoatl (Figure 2c).

The master of the headdress of the Temple of Quetzalcoatl. The headdress that Quetzalcoatl carries has the following characteristics. It is a monstrous figure, with large fangs but no lower jaw. The surface is textured with quadrangular elements: two rings appear on the forehead and a knot (a knotted band) on the top. The two rings appear on diverse Teotihuacan figures, but cannot as yet be identified in association with any specific personage (Figure 6). Nevertheless, knots clearly have calendrical significance in Teotihuacan iconography (Langley 1986:165–166). The quadrangular texturing as well as the knot

Figure 3. Complex headdress in Mesoamerican iconography: (a) Teotihuacan vessel (von Winning 1987:II:28, Fig. 1d); (b) Teotihuacan mural (detail) (Miller 1973:150); (c) Mixtec gold ornament (detail) (Caso 1969:84); (d) Stela of Horcones, Chiapas (von Winning 1987:II:38, Fig. 4); (e) Stela 2, Xochicalco (detail) (Museo Nacional de Antropología); (f) Teotihuacan mural (detail) (von Winning 1987:I:170, Fig. 7a); (g) Mexica harvest goddess (Museo Nacional de Antropología); (h) Zapotec relief of Monte Albán (von Winning 1987:II:14, Fig. 5g); (i) Teotihuacan mural (detail) (von Winning 1987:I:96, Fig. 3b); (j) Teotihuacan vessel (von Winning 1987:II:38, Fig. 2); (k) Teotihuacan carved seashell (von Winning 1987:II:28, Fig. 1a); (l) Glyph of Lápida de Texmilincan, Guerrero (Caso 1967:161).

https://doi.org/10.1017/S0956536100000419 Published online by Cambridge University Press

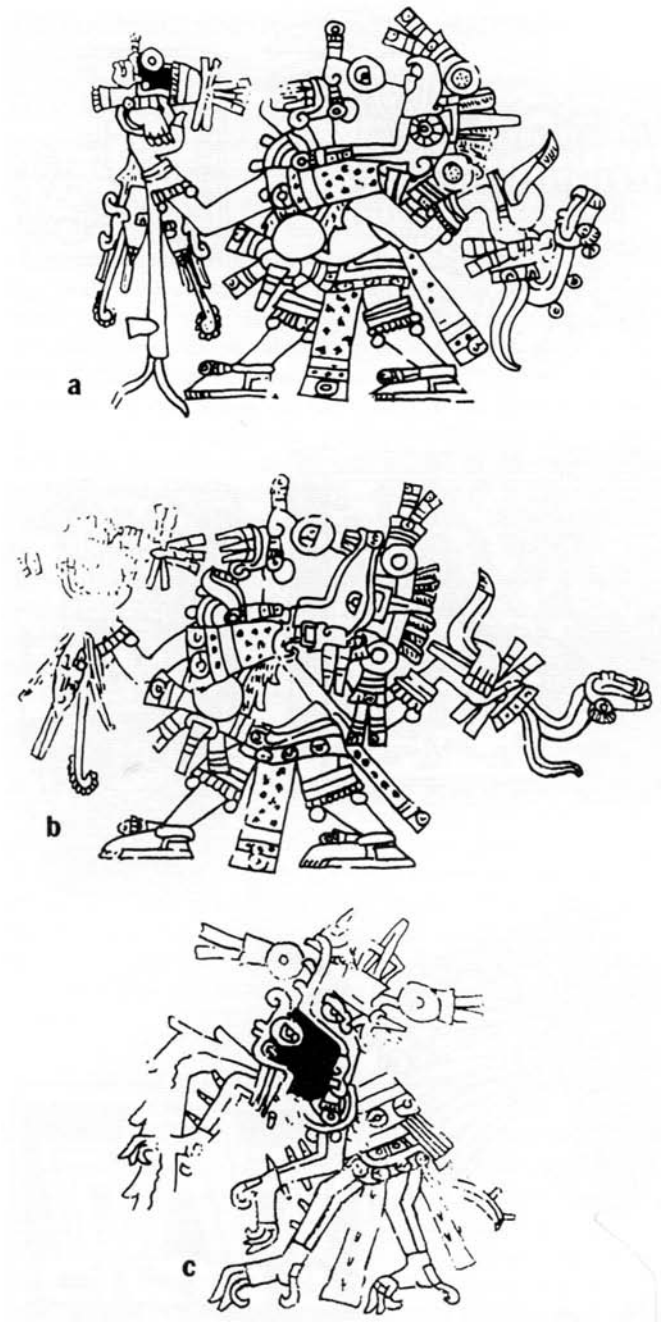

Figure 4. Calendric helmets: (a–b) Rain gods wearing helmets with signs of the days and "year sign" (*Códice Borgia* 1963:27); (c) Rain god transformed into Cipactli (*Códice Borgia* 1963:38).

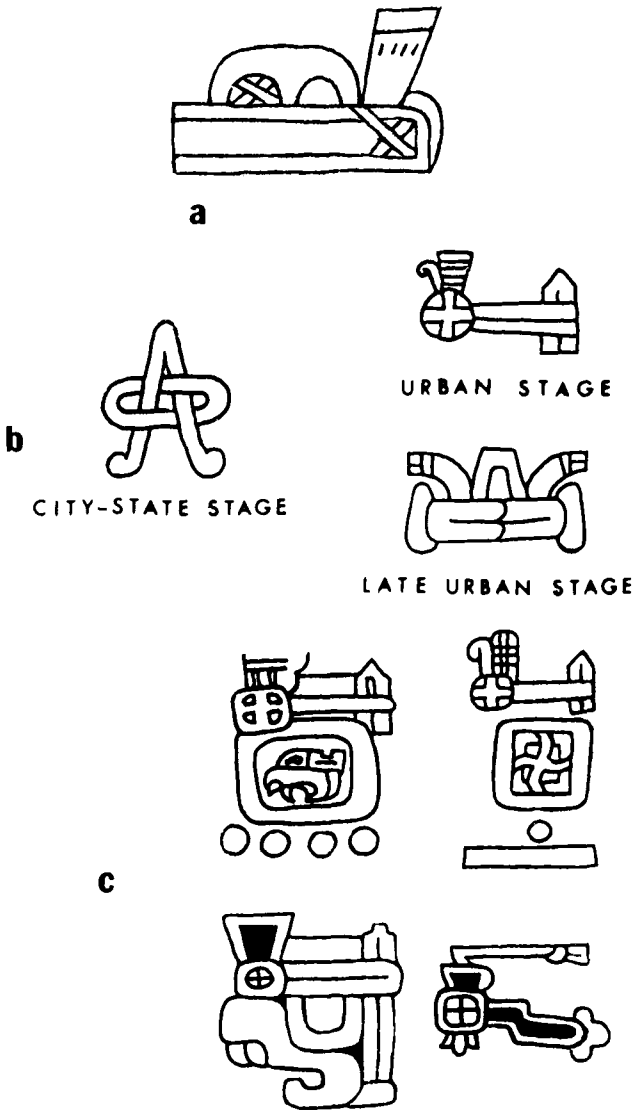

Figure 5. Year sign as a headdress: (a) Olmec (Edmonson 1988:16); (b) Development of Zapotec year sign, after Winter (1989:50); (c) Zapotec year signs as headdresses (Caso 1967:178).

identify the headdress with the symbolic complex known as the *manta complex* (MC) (Langley 1986:139–140, 153–171), frequently associated with a symbol that also has calendrical significance: the "reptile-eye" sign (Figure 7). There is little agreement among specialists as to the meaning of the "reptile-eye." This sign has been identified with *cipactli* of the Nahua and *imix* of the Maya (von Winning 1961), on one hand, and with *ehecatl* of the Nahua and *ik* of the Maya (Caso 1967:158–163, 164–165, 168–169) on the other.

To whom does the headdress belong? There are three possible answers: (1) Quetzalcoatl bears his own headdress; (2) he bears the headdress of the day *cipactli*, indicating the day *cipactli;* (3) he bears the headdress of the day *cipactli* as an abstract symbol of time.

These three alternative explanations are all plausible. Although Sugiyama (1988, 1989b, 1991) morphologically classified the headdress in the general categories of "serpent" in the past, all of us now favor the third, largely because the iconography of the Temple of Quetzalcoatl makes sense in an explanation applying Postclassic ethnohistorical data of the Mesoamerican cosmology and Cipactli. Moreover, the explanation seems to be supported by the results of recent archaeological research at the Temple of Quetzalcoatl. According to this interpretation, the characteristics of the headdress correspond to the mythical being of great antiquity in Mesoamerica, called Cipactli by the

https://doi.org/10.1017/S0956536100000419 Published online by Cambridge University Press

Figure 6. Teotihuacan figurines with two rings in the forehead (Séjourné 1966a:32, 37, 142).

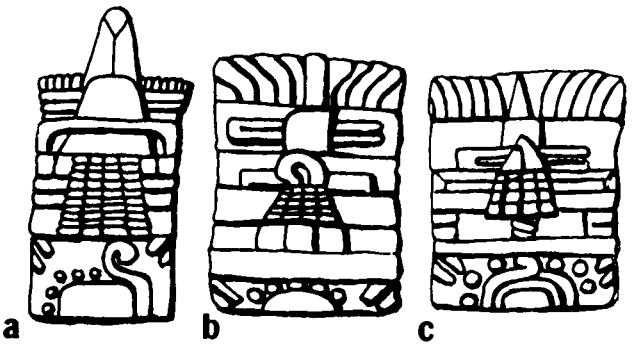

Figure 7. The "reptile-eye" glyph with quadrangular pieces and knots: (a) (Caso 1967:159); (b) (Séjourné 1984:45); (c) (von Winning 1987: II:78, Fig. 1g).

Nahua. Our opinion also coincides with that expressed by Drucker (1974:13).

An explanation for the portrayal of Quetzalcoatl carrying Cipactli's headdress. Although we can only refer to the mythical beliefs recorded for the Late Postclassic period, these are in accordance with ancient iconography. Cipactli is the original monster, feminine and aquatic, which according to Nahuatl myths was divided into two to form heaven and earth (*Historia de los mexicanos por sus pinturas* 1965:25–26; *Historia de México* 1965:105, 108). Most of the time she appears as a crocodilian beast, although on occasion she takes the form of a sawfish or a snake. The quadrangular elements of the headdress in question correspond to the dorsal epidermic plates of the reptile. As a calendar sign, *cipactli* represents the first of the 20 days which comprise a "month." When it appears in combination with the number one, it refers to the first day of the *tonalpohualli* or divinatory cycle of 260 days. A frequent characteristic of the calendar sign is the absence of the mandible (Figure 8), a trait that may be related to the original separation of the monster into two halves. Speaking about the first sign of the twenty that were used by the Classic Maya, Thompson (1978:72) identified Imix as the earth monster.

The Imix monster, therefore, is the earth dragon, the exact counterpart of Cipactli, even, at times, to the absence of the lower jaw. He symbolizes the earth and the abundance it brings forth.

One of the ways in which the day *imix* was represented among the Maya was in the form of a monster with no mandible (Figure 8d). Furthermore, among the Zapotec, the name of the first sign was "crocodile" (Seler 1904:38–39).

If the headdress of the Temple of Quetzalcoatl belongs to Cipactli, it may allude concretely to the destiny *cipactli* as well as to time-destiny in the abstract. The calendar sign of *cipactli*—as with *imix*—carries with it a strong sense of *beginning*, and the body of the deity Cipactli itself *is* time. The most plausible explanation is that Quetzalcoatl is represented as the bearer of time-destiny.

Once again we find support in writings referring to mythical beliefs of the Mesoamerican people during the Postclassic period. Cipactli was cut by two gods transformed into serpents, which formed heaven and earth with the two halves, placing columns between them, thus creating the open space that would be occupied by man. This space was formed by four levels: the four lower heavens. The columns acted as passageways flowing from Cipactli's body—from heaven and from the infraworld to the surface of the earth—to form time in the world of men in a calendric sequence (López Austin 1975, 1988:I:52–72). As such, omnipresent uncalendarized time remained above and below, in the two separate parts of the body of Cipactli. All possibilities of existence, all forms of time, were located in heaven and in the infraworld: above, in nine levels, "the nine which are above us" (*chicnauhtopa*) (Ruiz de Alarcón 1953:63) or "the nine folds of heaven" (*Códice Ramírez* 1944:94); and below, in the "nine worlds of the dead" (*chicnauhmictlan*) (Ruiz de Alarcón 1953:63). For this reason, shamans could refer to themselves and to their mystical transport as "travelers to the underworld and to heaven" (*niani Mictlan, niani Topan*) (Ruiz de Alarcón 1953:163). In order to find any possible reality in the "zone of omnipresent time" they traversed the 18 levels of Cipactli's body. There were 18 levels as in the 18 "months" or periods of 20 days in the year (López Austin 1990:78–79). Consequently, Cipactli's body carried the totality of time that was to be transported to the world of men in a calendric order.

As we have seen, the sign *cipactli* was considered first not only in the 20-day cycle, but also in the calendar of destinies. In the words of Sahagún (1956:I:317):

> The first character is called *cipactli*, which means sawfish, which is a fish that lives in the sea; and it is the beginning of all of the characters, that make up and count each day until they make a cycle of two-hundred sixty days, and the day count begins by giving thirteen days (numbers) to each character, which is called year of the characters.

https://doi.org/10.1017/S0956536100000419 Published online by Cambridge University Press

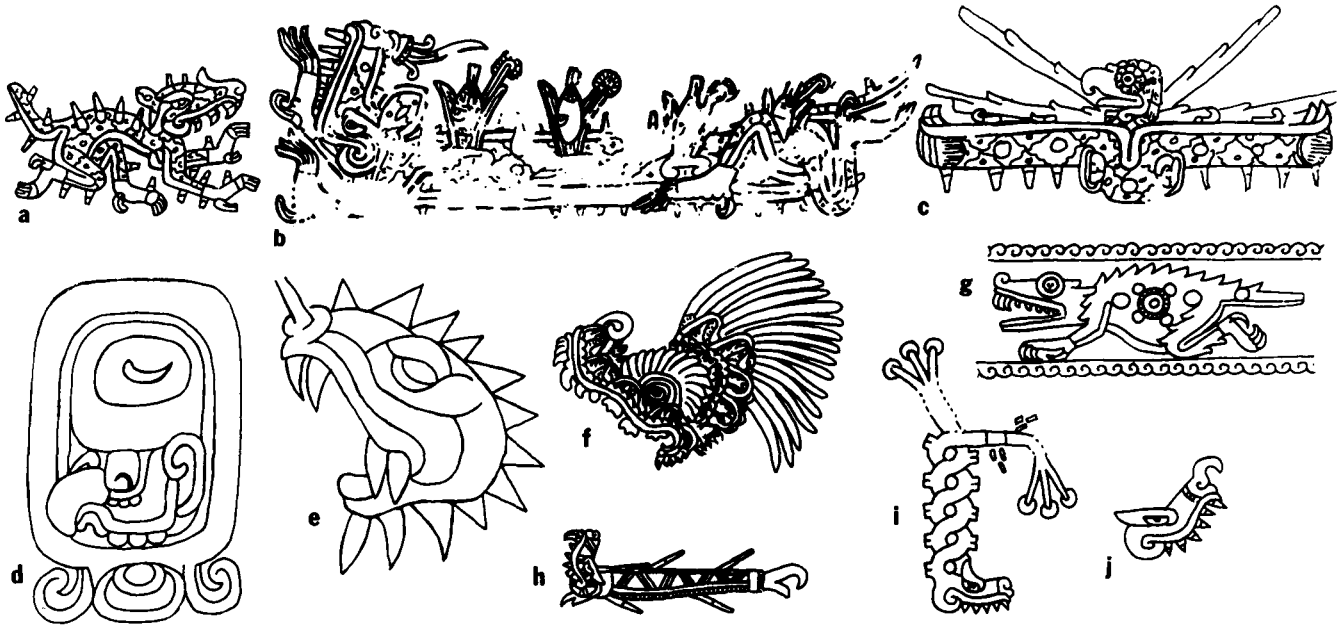

Figure 8. Cipactli: (a–c) Tlaxcala-Puebla tradition (*Códice Borgia* 1963:21, 27 and 71); (d) *Imix* day Maya glyph (Thompson 1978:Fig. 6); (e) Mexica glyph (*Códice Borbónico* 1963:21); (f) Teotihuacan headdress (Miller 1973:101); (g–j) Mixtec tradition (*Códice Laud* 1964:23; *Códice Fejérváry-Mayer* 1967:42, 28, 21).

Its significance is related to the concept of origin (see López Luján and Morelos 1991), "beginning of the days of Sun or of light" (Orozco y Berra 1960:II:17), earth, abundance, *ceiba*, and maize (Thompson 1978:70–73). Cipactli is the leader of all destinies. Following a clearly described hierarchical order set forth in Book IV of Sahagún (1956:I:317–378), *cipactli*, as the first of the signs, represents the others. Possibly this would explain the appearance in the *Códice Laud* (1964:23) of the monster Cipactli below a representation of the god Tlaloc surrounded by the 20 signs.

In a well-known origin myth, the invention of the calendar is attributed to a personage named Cipactonal ("the mistress of destiny *cipactli*"). Fray Gerónimo de Mendieta (1945:I:106) related the myth as follows:

> And the old indians related the beginning and foundation which this calendar had telling a silly fiction as are the others, which they believe about their gods. They say that since their gods had seen man created in the world, and without a book from which to guide them, being in the land of Cuernavaca, in a cave two persons, husband and wife, from among the gods, called by name he, Oxomoco, and she, Cipactonal, consulted each other about this. And the old woman thought it well to take the advice of her grandson Quetzalcoatl . . . who agreed with their purpose. Thinking well of his wish, and the cause just and reasonable: such that the three argued over who would place the first day name or sign of the calendar. Finally, out of respect for the old woman, they agreed to act on what was said. She went forth looking for what to place at the beginning of said calendar, bumped into a thing called Cipactli, which they paint in the manner of a serpent, and they say goes in the water, and she related her intention to it, begging it to be willing to be placed as the first letter or sign of said calendar: and agreeing to it, they painted it and named it *ce cipactli*, which means "one serpent." The husband of the old woman put two canes [*sic pro* two wind], and the grandson three houses & c., and in this way they went on placing up to thirteen signs on each page, in honor of the said authors and of other gods which the indians had in the middle of each page, painted and well established in this book of the calendar, which contained thirteen pages and on each page thirteen signs, which were also used to count the days, weeks, months and years. . . .

Another version of the same myth appears in *Historia de los mexicanos por sus pinturas* (1965:25) and the act of creation of the calendar is represented in the *Códice Borbónico* (1979:21; Paso y Troncoso 1979:92–93).

To summarize, the most plausible interpretation is that Quetzalcoatl, the extractor-bearer of the divine forces of time, is represented in the act of transporting time-destiny in the abstract to the surface of the earth.

The global significance of the Temple of Quetzalcoatl. If the sculptures refer to the relationship *bearer/burden*, we can consider the Temple of Quetzalcoatl to be dedicated to time; it was the place where the primordial moment in which Quetzalcoatl, the creator of the calendric divisions, makes time emerge in the world of men, as well as where the divine daily acts of succession of time destinies were venerated. If, on the contrary, Quetzalcoatl were to bear the sign of *ehecatl*, the temple would be dedicated to the god in his role of lord of the wind.

Other testimonials of the bearer/burden relationship. It is logical to consider that if the union of Quetzalcoatl and Cipactli had such profound cosmological significance, other clear exam-

https://doi.org/10.1017/S0956536100000419 Published online by Cambridge University Press

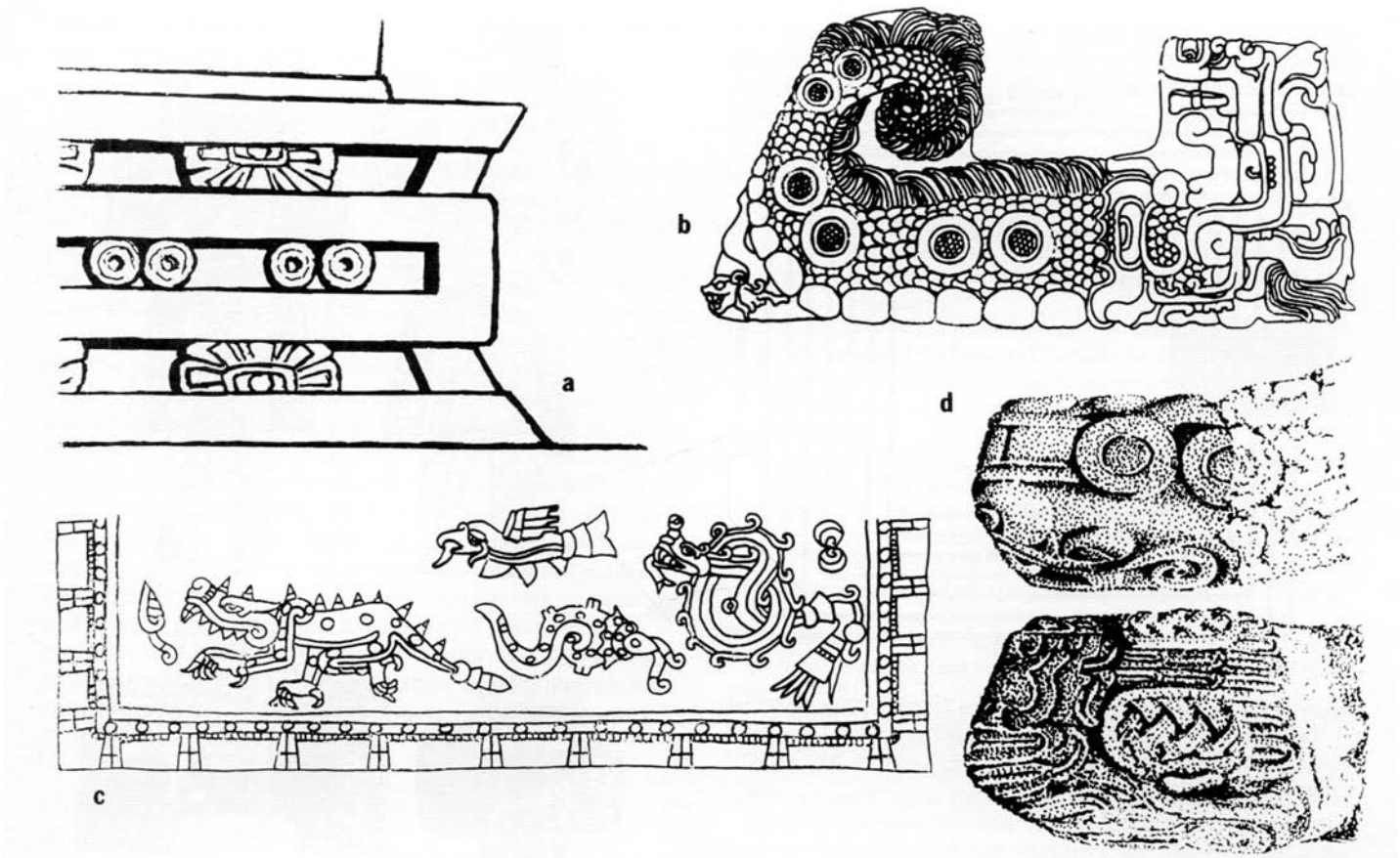

Figure 9. Relation between Quetzalcoatl and Cipactli: (a) Building 5-D-43 at Tikal (Gendrop 1982:99); (b) Altar O at Copan (Maudslay 1889–1902:I, Plate 85a); (c) *Codex Nuttall* (1975:75); (d) Serpents of the Templo Mayor of Tenochtitlan.

ples of the relationship between both deities would appear in Mesoamerican religious iconography in a very broad temporal and spatial range.

In this case two semantic groups exist: one is very well known, including elements such as the figure of the feathered serpent and the symbol for Venus since Quetzalcoatl is identified with the planet. The second is associated with the crocodilian body and the absence of a lower jaw. But we see that a pair of rings should be included as well. We can point out at least four examples with considerable spatial and temporal range, in which the elements of both groups clearly or presumably occur together in pairs. One of them is the Mixtec representation of Cipactli and the Feathered Serpent swimming together in marine waters, depicted in the *Códice Nuttall*. The other examples unite the symbols of Quetzalcoatl with the two rings which appear in the headdress of Cipactli on the Temple of Quetzalcoatl. The first of these is Building 5-D-43 at Tikal, built during the seventh century, and showing strong Teotihuacan influence. The Venus symbol characteristic of Quetzalcoatl appears on its *taludes* and cornices while pairs of rings occur on the *tableros*. The second example is the serpentine figure from Altar O at Copan: a feathered serpent is represented bearing three pairs of large rings on the back of its body. The third example is the serpents on the base of the Pyramid of Huitzilopochtli and Tlaloc of the Templo Mayor of Mexico–Tenochtitlan: the feathered serpent is clearly depicted on Huitzilopochtli's side, while its companion on Tlaloc's side has a pair of rings above its body (Figure 9).

RECENT ARCHAEOLOGICAL DISCOVERIES

Archaeological evidence recovered from recent excavations also supports our proposal to some extent. During the past decade, 113 complete human skeletons have been found in association with the Temple of Quetzalcoatl. Recent analyses (Sugiyama 1985, 1989a:88; Cabrera et al. 1989:75–76; Cabrera, Cowgill, and Sugiyama 1990) demonstrate that these burials took place at the beginning of the construction of the temple. The great majority of the remains correspond to males, between the ages of 13 and 55, many of whom were apparently placed in a seated position with their hands tied behind their back.

As the archaeological descriptions indicate (Cabrera et al. 1989; Sugiyama 1989a), rich offerings were associated with the human remains: in the thorax region, necklaces made of shell pieces carved in the form of human teeth, often joined to imitate maxillae, or real human and animal maxillae: in the sacrum region, slate disks were recovered; and numerous obsidian projectile points surrounded the bodies. These elements have been interpreted to indicate the remains of sacrificed warriors (Sugiyama 1985, 1989a:103).

The skeletons were located in rectangular pits excavated in the *tepetate* (indurated subsoil), covered with stones and earth.

https://doi.org/10.1017/S0956536100000419 Published online by Cambridge University Press

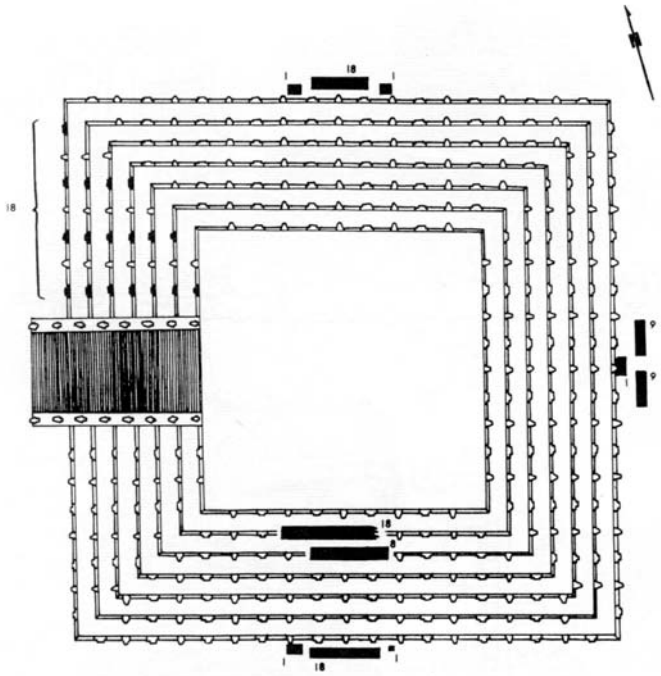

Figure 10. Hypothetical reconstruction of the Temple of Quetzalcoatl (after Sugiyama 1989a:87), showing the arrangement of the 18 sculpted headdresses of Cipactli on the structure, and the locations of burials around and underneath the structure.

The symmetry of the location of burial pits and the curious regularity in the number of individuals they contain has been noted (Cabrera et al. 1989; Sugiyama 1985, 1989a). Symmetry is a frequent component of Mesoamerican architecture and ritual, especially at Teotihuacan. The pits are parallel to the walls of the building. Outside of the south wall, a central group of 18 bodies in one long pit flanked by two individual burials was found. An identical group was found outside the north wall. On the east side of the pyramid, the burial subcomplex has a different configuration, more complicated to interpret. Two pairs of long burial pits, one pair with 9 individuals per pit and the other with 4 individuals per pit, are symmetrically arranged north and south of a long shallow excavated pit (see Cabrera, Sugiyama, and Cowgill, 1991, for the detailed description). Considered in their north–south subgroupings, then, the symbolic numbers expressed by skeletons would be 4, 9, and their total of 13, all significant numbers in the cosmological–calendric system. Tunneling into the pyramid, which was initiated in 1988, led to the discovery of two pits in the southern half of the structure: the one to the south contained eight bodies, and 18 individuals were found together in the pit to the north (Figure 10).

All of these discoveries can be related to the idea previously expressed. The repetition of the number 18 recalls not only the levels of the body of Cipactli, but also the number of periods of 20 days in the 365-day cycle. According to Sugiyama's reconstruction (1989a:87), the number of sculptures of Cipactli's headdress on the *tableros* at each side of the temple's stairway is also 18. Counting the bodies found in individual pits flanking the burials of 18 individuals, we have a total of 20, which could refer to the number of days in a "month." Below the southern half of the building the pits total 26 corpses. If we assume bilateral symmetry, we have the most important number in the Mesoamerican calendar: 52 (Figure 10).

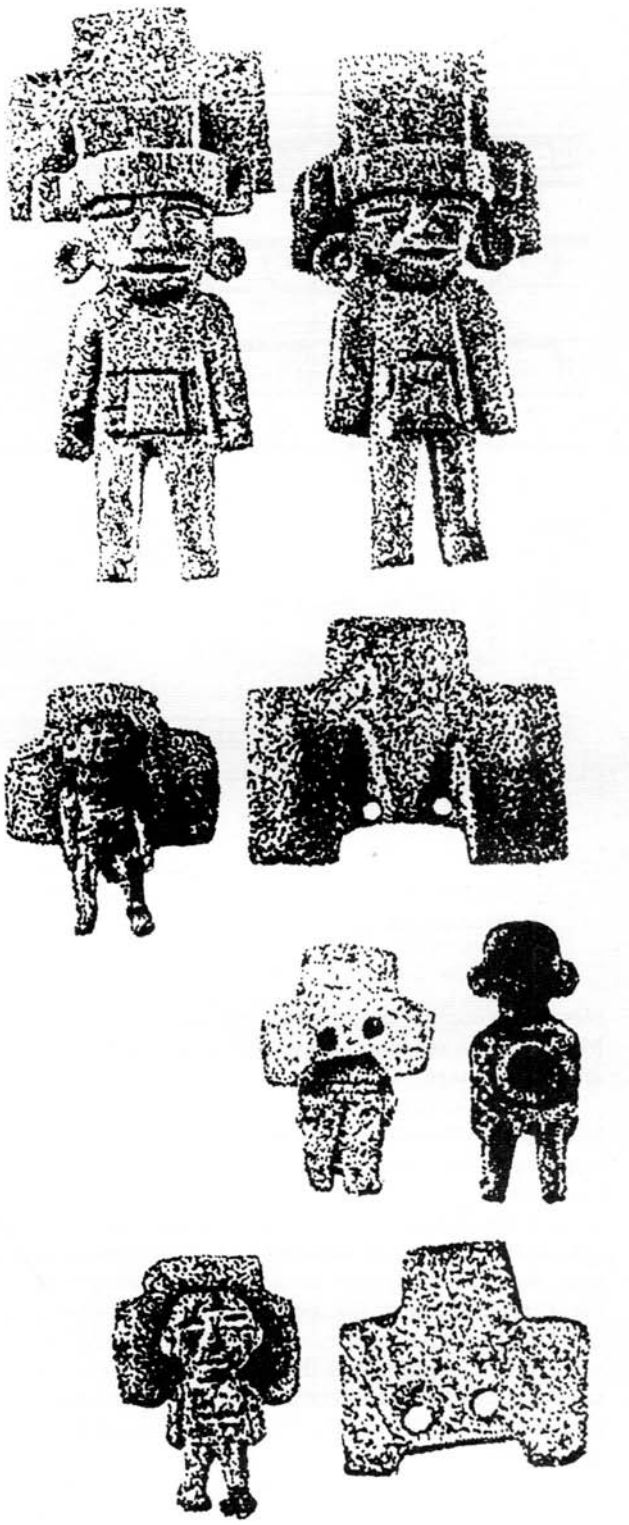

Figure 11. Figurines with detachable *resplandores* (Rubín de la Borbolla 1947:Figs. 15, 16, 18).

On the other hand, the necklaces of real or imitation maxillae, an otherwise unknown archaeological find in Mesoamerica,

https://doi.org/10.1017/S0956536100000419 Published online by Cambridge University Press

may be related to one of most important attributes associated with Cipactli: the maxilla without a mandible.

ARCHAEOLOGICAL DISCOVERIES IN 1939

Other indicative elements of our argument derive from information from earlier excavations. Alfonso Caso and José Pérez explored the Temple of Quetzalcoatl in 1939. They discovered two offerings pertaining to the building phase corresponding to the large sculptures (Sugiyama 1989a:100–101). In addition to other objects, four types of human figurines made of greenstone were uncovered, which possess a detachable element called a *resplandor* (aura) by Rubín de la Borbolla (1947:66). This *resplandor*, also made of greenstone in the shape of a parapet with two perforations, was fixed to the back or the back of the head of the figurine (Figure 11). This piece is *borne* by the figurine. Its silhouette is vaguely similar to a headdress. Perhaps the symbolism *bearer/burden* is present. In the more recent excavations at the Temple of Quetzalcoatl, additional examples of this figurine type were discovered in a clearly defined multiple burial context (Burial 14; see Cabrera, Sugiyama, and Cowgill, 1991) underneath the pyramid structure, which is obviously related to its construction. Similar figurines were uncovered from Tomb 29 at Monte Alban and in Tzintzuntzan, and the *resplandores* appear at diverse sites in Mesoamerica (Rubín de la Borbolla 1947:66).

OTHER MESOAMERICAN TEMPLES DEDICATED TO TIME

The myth of the origin and the nature of time was fundamental to Mesoamerican cosmovision. There is no doubt that throughout the centuries, Mesoamerican peoples were obsessed with the succession of time. The identification of temporal substance as divine substance is one of the most vigorous ideas in prehispanic thinking. The flow of calendric time through the four posts of the cosmos relates to the cruciform geometry as well as to the cosmic mechanism of the succession of influences. The obsession with time provided the ideological foundation for political power.

According to our proposal, the Teotihuacanos also shared these beliefs, and we are confident that our ideas will be progressively refined by future iconographic studies. The Teotihuacanos erected a sumptuous monument to time. There is nothing strange about the fact that such a practice was repeated in other regions and epochs. To mention a few examples:

1. The Temple of the Feathered Serpents, the most sumptuous at Xochicalco, depicts on its lower *taludes* representations of the Feathered Serpent together with individuals bearing rich headdresses associated with Cipactli and the calendar glyph 9 reptile-eye. Other reliefs on the building have been interpreted by many authors as calendric corrections.
2. The four sides of the so-called Calendar Temple of Tlatelolco depict a sequence of the days of the *tonalpohualli*. Recently, Salvador Guil'liem (1989) discovered a mural painting on the main facade in which Oxomoco and Cipactonal are protrayed in the act of creating the calendar.
3. An image of Ehecatl-Ozomatli, one of the forms of Quetzalcoatl, was discovered in one of the staircases of the so-called Temple of Quetzalcoatl located in the Pino Suárez *metro* station in Mexico City. Two calendar glyphs were carved on the balustrades: 2 Reed (year of the new fire) and 1 Eagle. Furthermore, inside the structure an offering was found contained in a box. All four walls of the inside were decorated with calendric glyphs portraying the four year bearers, whose numbers totaled 52: 13 House to the west, 13 Rabbit to the south, 13 Reed to the east, and 13 Flint to the north (Gussinyer 1970).
4. The number 365 is significantly associated with some of the most important Mesoamerican pyramids. For example, at the Temple of Kukulcan – the Feathered Serpent – at Chichen Itza, each of the four stairways has 91 steps. These steps and the one of the upper platform total 365 (Marquina 1964:849). Another example is that of El Tajin: archaeological research has reaffirmed that the Pyramid of the Niches contained 365 niches on its seven tiers before the addition of the stairway.

CONCLUSIONS

As we can see, several lines of reasoning support the argument that the Temple of Quetzalcoatl at Teotihuacan was a temple dedicated to the passage of time. It is hoped that new excavation materials will corroborate our proposal. We believe that this interpretation offers a basis upon which productively to reconsider Teotihuacan iconography and, more generally, the significance of other important Mesoamerican monuments.

SUMARIO

En este artículo se estudia el significado del monumento más suntuoso de Teotihuacan: el Templo de Quetzalcóatl. Con base en estudios iconográficos y con la información producto de recientes excavaciones arqueológicas, es posible deducir que el edificio estaba dedicado al mito del origen del tiempo y al decurso calendárico. Las esculturas de sus fachadas representan a la Serpiente Emplumada en el momento de la creación. La Serpiente Emplumada carga sobre su cuerpo el complejo tocado de Cipactli, símbolo del tiempo. Los materiales arqueológicos descubiertos coinciden con los datos iconográficos y con esta interpretación. Existen en Mesoamérica otros monumentos aparentemente consagrados a este mismo mito y con similar simbología.

REFERENCES

Bricker, V.R.
1966 El hombre, la carga y el camino: Antiguos conceptos mayas sobre tiempo y espacio, y el sistema zinacanteco de cargos. In *Los zinacantecos. Un pueblo tzotzil de los altos de Chiapas*, edited by E.Z. Vogt, pp. 355–370. Instituto Nacional Indigenista, Mexico.

Cabrera, R., G. Cowgill, and S. Sugiyama
1990 El Proyecto Templo de Quetzalcóatl y la práctica a gran escala de sacrificio humano. In *La epoca clásica: Nuevos hallazgos, nuevas ideas*, edited by A. Cardós de Méndez. Museo Nacional de Antropología, Instituto Nacional de Antropología e Historia, Mexico.

https://doi.org/10.1017/S0956536100000419 Published online by Cambridge University Press

Cabrera, R., G. Cowgill, S. Sugiyama, and C. Serrano
1989 El Proyecto Templo de Quetzalcóatl. *Arqueología* 5:51–79.
Cabrera, R., and S. Sugiyama
1982 La reexploración y restauración del Templo Viejo de Quetzalcóatl. In *Memoria del Proyecto Arqueológico Teotihuacan 80–82*, edited by R. Cabrera, I. Rodríguez, and N. Morelos, pp. 163–184. Instituto Nacional de Antropología e Historia, Mexico.
Cabrera, R., S. Sugiyama, and G.L. Cowgill.
1991 The Templo de Quetzalcoatl Project at Teotihuacan: A Preliminary Report. *Ancient Mesoamerica* 2:77–92.
Caso, A.
1928 *Las estelas zapotecas*. Museo Nacional de Arqueología, Historia y Etnografía, Mexico.
1967 *Los calendarios prehispánicos*. Universidad Nacional Autónoma de México.
1969 *El tesoro de Monte Albán*. Instituto Nacional de Antropología e Historia, Mexico.
The Codex Nuttall
1975 Dover, New York.
Códice Borbónico
1979 Siglo Veintiuno, Mexico.
Códice Borgia
1963 Fondo de Cultura Económica, Mexico.
Códice Fejérváry-Mayer
1967 In *Antigüedades de México*, vol. 4, pp. 187–276. Secretaría de Hacienda y Crédito Público, Mexico.
Códice Laud
1964 In *Antigüedades de México*, vol. 5, pp. 315–409. Secretaría de Hacienda y Crédito Público, Mexico.
Códice Ramírez
1944 Leyenda, Mexico.
Drucker, R.D.
1974 *Renovating a Reconstruction: The Ciudadela at Teotihuacan, Mexico: Construction Sequence, Layout, and Possible Uses of the Structure*. Ph.D. dissertation, University of Rochester. University Microfilms, Ann Arbor.
Edmonson, M.S.
1988 *The Book of the Year. Middle American Calendrical Systems*. University of Utah Press, Salt Lake City.
Gendrop, P.
1982 *Arte prehispánico en Mesoamérica*. Trillas, Mexico.
Guil'liem, S.
1989 Descubrimiento de una pintura mural en Tlatelolco. *Antropológicas* 3:145–150.
Gussinyer, J.
1970 Un adoratorio dedicado a Tláloc. *Boletín INAH* 38:7–12.
Heyden, D.
1979 El "signo del año en Teotihuacán: Su supervivencia y el sentido sociopolítico del símbolo. In *Mesoamérica. Homenaje al Doctor Paul Kirchhoff*, edited by B. Dahlgren, pp. 61–86. Instituto Nacional de Antropología e Historia, Mexico.
Historia de los mexicanos por sus pinturas
1965 In *Teogonía e historia de los mexicanos. Tres opúsculos del siglo XVI*, edited by A.M. Garibay K., pp. 21–90. Porrúa, Mexico.
Historia de México (Histoire du Mechique)
1965 In *Teogonía e historia de los mexicanos. Tres opúsculos del siglo XVI*, edited by A.M. Garibay K., pp. 91–120. Porrúa, Mexico.
Langley, J.C.
1986 *Symbolic Notation of Teotihuacan. Elements of Writing in a Mesoamerican Culture of the Classic Period*. BAR International Series 313, Oxford.
López Austin, A.
1975 Algunas ideas acerca del tiempo mítico entre los antiguos nahuas. In *Historia, religión, escuelas. XIII Mesa Redonda*, edited by J. Litvak King and N. Castillo Tejero, pp. 189–208. Sociedad Mexicana de Antropología, Mexico.
1988 *The Human Body and Ideology. Concepts of the Ancient Nahuas*. University of Utah Press, Salt Lake City.
1990 *Los mitos del tlacuache. Caminos de la mitología mesoamericana*. Alianza Editorial Mexicana, Mexico.
López Luján, L., and N. Morelos
1991 Los petroglifos de Amecameca: Un monumento a la elección de Motecuhzoma Xocoyotzin. *Anales de Antropología*.
Marquina, Ignacio
1964 *Arquitectura prehispánica*. Instituto Nacional de Antropología e Historia, Mexico.
Maudslay, A.P.
1889–1902 *Biologia Centrali-Americana or Contributions of the Knowledge of the Fauna and Flora of Mexico and Central America. Archaeology*. R.H. Porter and Duilau, London.
Mendieta, G. de
1945 *Historia eclesiástica indiana*. Salvador Chávez Hayhoe, Mexico.
Miller, A.G.
1973 *The Mural Painting of Teotihuacan*. Dumbarton Oaks, Washington, DC.
Millon, C.
1973 Painting, Writing, and Polity in Teotihuacan, Mexico. *American Antiquity* 38:294–314.
1988 A Reexamination of the Teotihuacan Tassel Headdress Insignia. In *Feathered Serpents and Flowering Trees: Reconstructing the Murals of Teotihuacan*, edited by K. Berrin, pp. 114–134. Fine Arts Museums of San Francisco.
Noguez, X.
1975 La diadema de turquesa (xiuhuitzolli) y las alianzas de los señoríos prehispánicos. Acercamiento iconográfico. In *XIII Mesa Redonda*, edited by J. Litvak King and N. Castillo Tejero, pp. 83–94. Sociedad Mexicana de Antropología, Mexico.
Orozco y Berra, M.
1960 *Historia antigua y de la conquista de México*. Porrúa, Mexico.
Paso y Troncoso, F. del
1979 *Descripción, historia y exposición del Códice Borbónico*. Siglo Veintiuno, Mexico.
Pasztory, E.
1976 *The Murals of Tepantitla, Teotihuacan*. Garland Publishing, New York.
Rubín de la Borbolla, D.F.
1947 Teotihuacan: ofrendas de los templos de Quetzalcóatl. *Anales del Instituto Nacional de Antropología e Historia* 2:61–72.
Ruiz de Alarcón, H.
1953 *Tratado de las supersticiones y costumbres gentílicas que oy viuen entre los indios naturales de esta Nueva España*. In J. de la Serna et al., *Tratado de las idolatrías, supersticiones, dioses, ritos, hechicerías y otras costumbres gentílicas de las razas aborígenes de México*, vol. 2, pp. 17–130. Fuente Cultural, Mexico.
Sahagún, B. de
1956 *Historia general de las cosas de Nueva España*. Porrúa, Mexico.
1979 *Códice Florentino. Manuscrito 218–20 de la Colección Palatina de la Biblioteca Medicea Laurenziana*. Archivo General de la Nación, Mexico.
Schele, L. and M.E. Miller
1986 *The Blood of Kings. Dynasty and Ritual in Maya Art*. George Baziller, New York/Kimball Art Museum, Forth Worth.
Séjourné, L.
1966a *El lenguaje de las formas en Teotihuacan*. Mexico.
1966b *Arquitectura y pintura en Teotihuacan*. Siglo Veintiuno, Mexico.
1984 *Arqueología de Teotihuacan. La cerámica*. Fondo de Cultura Económica, Mexico.
Seler, E.
1904 The Mexican Chronology with Special Reference to the Zapotec Calendar. In *Mexican and Central American Antiquities, Calendar Systems, and History*, pp. 11–55, Smithsonian Institution, Bureau of American Ethnology, Bulletin 28. Washington, DC.
1963 *Comentarios al Códice Borgia*. Fondo de Cultura Económica, Mexico.
Sugiyama, S.
1985 Recientes descubrimientos de entierros y ofrendas dedicadas al Templo Viejo de Quetzalcóatl. To be published in *Memoria del Proyecto Arqueológico Teotihuacan 80–82*, vol. 2, edited by R. Cabrera, I. Rodríguez, and N. Morelos. Instituto Nacional de Antropología e Historia, Mexico.
1988 Los animales en la iconografía teotihuacana. *Revista Mexicana de Estudios Antropológicos* 34(1):13–52.
1989a Burials Dedicated to the Old Temple of Quetzalcoatl at Teotihuacan. *American Antiquity* 54(1):85–106.

1989b Iconographic Interpretation of the Temple of Quetzalcoatl at Teotihuacan. *Mexicon* 10(4):68–74.
1991 Rulership, Warfare, and Human Sacrifice at the Ciudadela, Teotihuacan: An Iconographic Study of Feathered Serpent Representations. In *Art, Ideology, and the City of Teotihuacan*, edited by Janet C. Berlo. Dumbarton Oaks, Washington, DC, in press.

Thompson, J.E.S.
1962 *A Catalog of Maya Hieroglyphs*. University of Oklahoma Press, Norman.
1978 *Maya Hieroglyphic Writing. An Introduction* (3d ed.). University of Oklahoma Press, Norman

Villa Rojas, A.
1978 *Los elegidos de Dios. Etnografía de los mayas de Quintana Roo*. Instituto Nacional Indigenista, Mexico.

von Winning, H.
1961 Teotihuacan Symbols: The Reptile's Eye Glyph. *Ethnos* 26(3): 121–166.
1987 *La iconografía de Teotihuacan. Los dioses y los signos*. Universidad Nacional Autónoma de México.

Winter, M.
1989 *Oaxaca. The Archaeological Record*. Minutiae Mexicana, Mexico.