Hasso von Winning

The "Binding of the Years" and the "New Fire" in Teotihuacan

Las evidencias iconográficas del presente trabajo demuestran que la "atadura de los años", acompañada en el ritual azteca por una ceremonia del Fuego Nuevo, tiene su origen en la época clásica temprana de Teotihuacán, donde el ciclo completado fue representado ideográficamente por signos compuestos de atados de leña, cordones torcidos y nudos. Estos corresponden a las esculturas aztecas del <u>xiuhmolpilli</u> que son réplicas en piedra de atados de leña, representando un ciclo de 52 años.

Al completarse un ciclo se celebraban dos ceremonias separadas, cada una en lugar diferente: el <u>xiuhmolpilli</u> fue enterrado solemnemente en el Recinto Sagrado de Tenochtitlán y una fiesta de renovación general, precedida por el acto de taladrar el Fuego Nuevo en la cumbre de un cerro, iniciaba el nuevo período de 52 años. El que el ciclo completado era enterrado figurativamente sólo consta de muestras arqueológicas. Obviamente, durante el siglo XV y a comienzos del siglo XVI el <u>xiuhmolpilli</u>, en realidad un método de origen teotihuacano para Ilevar la cuenta de los años pasados, era únicamente asunto de los sacerdotes, mientras que el acto de taladrar el Fuego Nuevo para un comienzo exitoso de un nuevo ciclo concernía a todos.

La duración de un período representado por los atados de leña de Teotihuacán se desconoce; puede haber sido menos de 52 años. Tampoco se conocen las ceremonias relacionadas con la sepultura o la quema del atado.



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El más antiguo indicio del acto de taladrar el Fuego Nuevo en el México central es una talla de roca en Xochicalco, probablemente posterior a la caída de Teotihuacán. Una evidencia posible de la distribución que seguía inmediatamente a la ceremonia de un Fuego Nuevo, consiste en un friso del siglo VI ó VII con relieve en estilo teotihuacano, encontrado al sur de Veracruz.

INTRODUCTION

In Teotihuacan iconography occur at least eight graphic forms or signs which are related to the fire god complex and which I attempted to define and interpret (von Winning 1977). Among these signs are various forms of firewood bundles, some of them with flames. These bundles represent not only the paraphernalia of the fire god cult but they have calendric significance as well. A bundle of sticks symbolized an accumulation of years, each one represented by a rod, and these were tied together after a certain time period. The concept is well documented for the Late Postclassic period of central highland Mexico and I propose to trace the origin of the "binding of the years" back to Early Classic Teotihuacan.

It was customary among the Aztecs to embody the completed 52-year cycle by a firewood bundle carved in stone (<u>xiuhmolpilli</u>) and it is reasonable to assume that the custom was taken over from earlier cultures. Since the written sources of the 16th and 17th century yield no information on the origin and antiquity of the <u>xiuhmolpilli</u>, iconographic evidence will be presented that links representations of firewood bundles to the concept of completed year periods. However, it must be noted that in pre-Aztec cultures the "binding of the years" took place not only at the end of 52-year cycles, but probably also after periods of shorter duration, the length of which remains to be determined.

I. THE NEW FIRE CEREMONY CELEBRATED BY THE AZTECS

The commemoration of the New Fire ceremony at the conclusion of a 52-year cycle was a major ceremony under the patronage of Xiuhtecutli ("Turquoise Lord", "Lord of the Year"). On this occasion all the fires in the temples and domestic hearths were extinguished and a new fire was kindled in the darkness of the night on the Huixachtecatl (Cerro de la Estrella, a hill near Culhuacan), and distributed to all parts of the realm. The successful drilling of this new fire allayed the fear of the people that the world would be destroyed and reassured them that the sun would continue to rise in the coming 52-year period. It was a feast of renewal, not only of household goods and personal attire but also of the temple buildings which were enlarged; therefore it concerned all segments of the population. A full account of the ceremonies was recorded by Sahagún (Florentine Codex, Bk. 7, ch. 9-12 [Anderson and Dibble 1953:25-32]), Torquemada (1975, II:292-295) and others.

The completed year cycle was symbolically represented by stone sculptures (<u>xiuhmolpilli</u>) which show a bundle of sticks tied at the ends with ropes and these sculptures were buried since the year cycle had died. Several such sculptures were discoverd inside an altar decorated with skulls and crossed bones in the Sacred Precinct of Tenochtitlan during Batres' excavations at Calle de las Escalerillas, in 1900. One <u>xiuhmolpilli</u> bears the sign 2 <u>acatl</u> in relief to indicate that the ceremony took place in a year ending on a day 2 <u>acatl</u>. These particular sculptures were probably buried A.D. 1455 in the ceremony that preceded the last one of 1507 (Nicholson 1971:117). Because of their round shape Seler (1902-1915, 2:874-879) erroneously assumed that these stone bundles represent tolicpalli, the stone seats used in festivities.

Codex Borbonicus 34 gives a pictorial account of the New Fire rituals, indicating the place (mountain glyph with fire drill) and date (2 <u>acatl</u>) and the arrival of the new fire at the temple where it is nurtured by four priests. The ritual disposal of the cycle is shown on page 36. It includes the skull altar and the bundle of sticks, wrapped in paper (Fig. 1,m), which was burned. The bundle is decorated with mortuary symbols because the cycle is dead (Fig. 1,m) (Caso 1967:129-140; Nowotny 1974:22-23). Generally, the calendric sections of pictorial manuscripts indicate the New Fire with a picture of a fire drill (<u>mamalhuaztli</u>) attached to the date 2 <u>acatl</u>; an exception being Codex Aubin and the "Teocalli de la Guerra Sagrada" monument where the drill is substituted by a knotted rope (Fig. 2,g).

It follows that the New Fire ceremony consisted of two separate events, the drilling of the new fire and the burial of the stone-carved firewood bundle, each taking place at a different location. These bundles are distinct from the "sacred bundles" (<u>tlaquimilolli</u>) in the temples, which contained a wooden box with fire drills and other cult objects wrapped in cloth.

It is quite certain that the <u>xiuhmolpilli</u> sculptures represent firewood in the shape of rods of even length. Seler called them reed bundles (Binsenbündel) and Caso, correspondingly, hazde cañas, perhaps in view of the accompanying calendar sign<u>acatl</u> which is usually translated Rohr or caña (Seler 1902-1915, 2:874-879; Caso 1967:130). The use of reeds or wooden rods as a counting device seems practical. Presumably, a calendar priest set aside a rod at the end of each year and tied them together after a certain number had accumulated. At the approach of a New Fire ceremony such a bundle was replicated in stone; the latter was buried, the former burned. Etymologically it cannot be determined whether wooden rods or reeds were used (<u>xiuhmolpilli</u>=tying of the years, atadura, manojo de años).

II. EARLIER NEW FIRE CEREMONIES

The calendaric sections of Codex Mendoza indicate the last four New Fire celebrations before the Conquest (A.D. 1351, 1403, 1455, 1507). These were preceded, in turn, by other cycle celebrations which is indicated by a relief carved on the back of a serpent head, discovered in Mexico City in 1944. It

shows the numeral 8 in the bar-and-dot system (which preceded the single dot recording method) beneath a 2 <u>acatl</u> year glyph with flames. Caso (1967:15) interpreted the carving to signify that eight ceremonies had taken place (A.D. 1143 through 1507, spanning 416 years) since the departure of the Aztecs from Aztlán in A.D. 1116. This sculpture differs from the "official" Aztec style by its deep relief and the use of the bar-and-dot numeration which was no longer customary in the 15th and early 16th centuries. It represents a survival of an epigonal Xochicalcoid sculptural style in the Valley of Mexico for which Nicholson (1971:120-122) cited other examples.

Also Codex Azcatitlan (pl. 5) records early fire ceremonies beginning between A.D. 1171 and 1178. The circumstance that even during their migration the Mexica carried out these rituals stresses their importance and suggests that they were adopted from earlier cultures.

Although no <u>xiuhmolpilli</u> sculptures were discovered at Tenayuca, the reliefs on the stairs of the pyramid, which is a monument dedicated to the solar cult, include representations of the year sign and of bundles (Fig. 2, b, c). Caso (1935: 305-307) called them glyphs and interpreted the latter as "parece un haz o bulto atado" without further comment.

Also monuments outside the Valley of Mexico are believed to commemorate the completion of the 52-year cycle. Lizardi Ramos (1971:121-141) reached this conclusion in his interpretation of four serpent heads in Valle de Bravo and one at Iztapan del Oro (State of Mexico). He noted stylistic resemblances in the Valle de Bravo serpents with the sculptural style of Xochicalco.

No <u>xiuhmolpilli</u> have been reported from Tula, as far as I could ascertain, which may be due to the fact that Toltec sculptural art was oriented toward secular aspects with less emphasis on religion and calendrics.

A Maya-Toltec relief panel (Mausoleum III, Chichén Itzá) is an example that a bundle of wood does not necessarily relate to a 52-year period but that it signifies the "binding of the years" as such, without implying their precise number. Seler (1902-1915, 1:693-694, Abb. 15; 1902-1915, 5:367) interpreted the bundle as a <u>xiuhmolpilli</u> and the entire inscription as an expression of 8x52 years equal to 260 revolutions of Venus of 584 days. Certainly, an equation is indicated but Seler's explanation is unconvincing because the numerals 260 and 584 are not given explicitly nor implicitly. An alternative reading is possible if the rectangular bar, decorated with two ties, is taken for the numeral 5. Then 8 year bundles of 365 days (specified as solar years by the trapezeray year sign) equal 5 synodic revolutions of Venus (of 584 days = 2920 days). The Venus symbol is tied with a loop to the vertical bar and therefore characterized as a "Venus year"; the tie is comparable to the "looped cord" year sign (Nicholson 1966) (Fig. 2,d).

A strong case for a New Fire ceremony recorded at Xochicalco has been made by Sáenz (1967) who discovered a rock carving in relief that shows a horizontal firewood bundle with a vertical stick (for drilling) flanked by flames (Fig. 2, a). To the left of the flames is a double concentric circle which Sáenz believed to indicate that it is the first New Fire ceremony. The year is indicated as 1 tochtli, day 2 coatl. Several sources mention that famine and other calamities repeatedly occurred in 1 tochtli years so that the people held these years in bad omen and therefore the ceremony was shifted to 2 acatl (Anderson and Dibble 1953:23). It is debatable whether the double circle on the rock carving actually was intended to mark the first New Fire. To assign an ordinal number at the beginning of an anticipated sequence of rituals at 52-year intervals is a concept that has no parallel in Mesoamerican ideology. If it was indeed the first celebration at Xochicalco, records of successively numbered events are to be expected at the site but these have so far not been encountered. Aside from this observation, there is no doubt that the Xochicalco carving indicates the date of completion of a period at which time a New Fire was drilled. Sáenz followed Orozco y Berra in tentatively assigning the rock carving to A.D. 675.

Inviewof the (Middle Classic ?) evidence at Xochicalco, which was strongly influenced by Teotihuacan, noticeable among others in the three stelae, the likelihood for an origin of the New Fire ceremony at Teotihuacan can now be considered. Since the ceremony is determined by the calendar, it must first be shown that the Mesoamerican calendar was in use also in Teotihuacan.

III. ORIGIN OF THE NEW FIRE CEREMONY AT TEOTIHUACAN?

The basic principle of the pan-Mesoamerican calendar is the interlocking progression of two separate day counts, the <u>tonalpohualli</u>, or 260-day count, and the <u>xihuitl</u>, or 365-day solar year. Caso's (1967:143-153) attempt to prove the existence of the <u>tonalpohualli</u> at Teotihuacan has not found general acceptance because the day signs do not resemble those of the Late Post-classic system of central highland Mexico and not all of the 20 day-signs can be accounted for (cf. Prem 1971:125-126).

For the <u>xihuitl</u> count, the evidence at Teotihuacan is even more tenuous; it consists of an unidentified sign with the numeral 14 (Lizardi Ramos 1955).

Yet, it seems inconceivable that Teotihuacan did not use the <u>tonalpohualli</u> when it functioned in societies with whom Teotihuacan was in close contact. In particular, Teotihuacan was a major religious and political center which substantially exerted its ideological, commercial and military influence over a large part of Mesoamerica between the third and seventh centuries.

The problem lies in the paucity of dates recorded on murals and stone monuments which provide the main source for the study of early writing systems elsewhere. Evidence at Teotihuacan is restricted to isolated signs with numerical coefficients on shell trumpets, pottery and a few artifacts. Dates recorded on stone are known only from outside the metropolitan area. Teotihuacan's predilection and emphasis on symbolic expression in mural painting and on pottery may have obviated the carving of calendric inscriptions on monuments. Pictorial manuscripts of the period are non-existent.

At any rate, the close relationship with contemporaneous cultures to the south must have confronted the Teotihuacanos with hieroglyphic writing at Monte Albán and in the Maya area. A colony of Oaxacan residents at Teotihuacan (the so-called Oaxaca Barrio [Millon 1973, 1:41-42]) who continued to practice their native mortuary customs and beliefs between the fourth or early fifth century and the seventh century speak for close ties with Monte Albán. Likewise, long-distance trade, Teotihuacan settlements on the west coast of Guatemala (Tiquisate/Escuintla region), and a "Teotihuacan embassy" at Tikal brought Teotihuacanos in contact with intellectual achievements of the Maya.

The question of the existence of the <u>tonalpohualli</u> at Teotihuacan cannot be solved solely on reliance of scant epigraphic materials but must be approached from iconographic symbolism which, frequently, has been relegated as being mainly decorative in character. The priesthood at Teotihuacan was not interested in recording historical events with their calendaric dates but in portrayingritual aspects of various cults by means of ideographic imagery. The recurrent graphic forms on murals and pottery convey a message the translation of which into verbal form poses problems because it is not known with certainty what language was spoken in Teotihuacan (probably Nahuatl?) and no comparison with contemporaneous or somewhat later written texts is possible. There is, however, iconographic evidence that strongly suggests the ritualistic burning of firewood bundles at the completion of year cycles.

IV. INDICATIONS OF THE "BINDING OF THE YEARS" IN TEOTIHUACAN CULTURE

A. Monuments from the Sun Pyramid

The following sculptures were excavated from the debris on the west side of the Sun Pyramid by Leopoldo Batres (1906) who believed that they represent <u>xiuhmolpilli</u> because they are wrapped firewood bundles and display the knotted cord element and flames:

1. A much damaged prismatic stone block, 140 cm high, composed of two apparently symmetric sections, shows a wrapping (of paper ?) like the wood bundle in Codex Borbonicus 36 (Fig. 1, m) from which stripes of paper project diagonally (Fig. 4, a). Flames indicate that the bundle was burned. There is no record of what happened specifically with the wooden <u>xiuhmolpilli</u> of the Aztecs, whether they were buried with their replicas of stone or whether they were ceremoniously burned. The latter seems more likely and indirect evidence from Codex Borbonicus also suggests burning (1).

2. Two relief slabs (110x104x10 cm) which also represent flaming wooden bundles with a S-shaped knot element (Batres 1906, fig. 22, 23; drawing in Seler 1902-1915, 5:430, Abb. 18 erroneously labels it a four-sided relief, it is partially reconstructed) (Fig. 2, j). 3. The relief decoration on two large stone censers also display the wrappings and the S-shaped knot (Batres 1906, fig. 21; Seler 1902–1915, 5:429, Abb. 17, a, b) (Fig. 2, h, i).

B. Firewood bundles with twisted cord and knot on Teotihuacan pottery

Cord motifs, similar to those of the Batres' monuments, occur on molded plaques attached to a large thick-walled vessel (diameter 30 cm), probably an incense burner (Fig. 4, b; another fragment, from the same vessel, also depicts two identical appliqués, not illustrated here). It is significant that in the lower half of the appliqué the loop of the cord is placed directly over the Comband-bar sign which is an abstraction of the firewood bundle (von Winning 1977: 15). In the upper half the Comb-and-bar bundle lies beneath a longitudinal design which occurs frequently on molded plaques (Fig. 1,n, o; 2, e upper part) and which in Fig. 4, b is a cursive rendering of the trapeze-ray year symbol. It is flanked by diagonal lines which represent the folded paper wrapping of the wood bundle, as on the Batres <u>xiuhmolpilli</u> stone (Fig. 4,a; 1,p; 2,j). The association of the twisted cord (for binding) and the Comb-and-bar (Bundle) sign confirms the identification of the latter as a firewood bundle, an interpretation advanced elsewhere (von Winning 1977: 17 ff.).

C. The firewood bundle in association with the numeral 7

Noteworthy are combinations of the numeral 7 in the bar-and-dot system with firewood bundles, particularly since numerals occur seldom in Teotihuacan.

1. VII above a cartouche which contains the trapeze-ray year sign and the Comb-and-bar (=firewood bundle) above an abbreviated reptile's eye glyph (RE glyph); incised on a bowl from Teotihuacan (Fig. 4,c).

2. VII below the RE glyph in a cartouche, with a flaming wood bundle on top; on the Teotihuacan-style Stela 1, Piedra Labrada (Fig. 4,d).

Also in Xochicalco occur signs of Teotihuacan derivation with the numeral VII:

3. VII below the container with a variant of the RE glyph which incorporates the Comb-and-bar (= firewood bundle) sign; on Stela 1, front, Xochicalco (Fig. 4, e).

4. VII with the RE glyph which contains the Comb-and-bar (= firewood bundle); Lápida de los 4 glifos (Sáenz 1962, pl. 9) (Fig. 4,f).

VII with Glifo A (= knot element, "binding") see part D.; Piedra del año
<u>tochtli</u> (Sáenz 1968, fig. 1) (Fig. 5,g).

The meaning of these combinations is not clear. The number 7 is associated with the surface of the earth situated, in the vertical cosmic scheme, between the 13 heavens and the 9 layers of the underworld. For the present, it can be stated that VII has a special relationship, probably calendaric, to signs that contain firewood bundles or knot elements and which therefore indicate the binding of the years.

D. The flaming firewood bundle associated with Caso's Glifo A

A magnificent Teotihuacan (Xolalpan phase) slab, carved in low relief, shows a sumptuously attired personage holding in each hand a flaming bundle of wood. His role as a celebrant, probably in a New Fire ritual, is indicated by a heraldic arrangement above the reptilian jaws of his headdress. It contains two hands holding identical flaming bundles flanked (below) by Glyph A (Fig. 24, a) (2).

Significant is the occurrence of two cartouches with Glyph A, a <u>tonalpohualli</u> sign of Zapotec origin (Caso 1967:172-173). The main element of the glyph is a knot, or tied cord, in the center. This glyph occurs in greater elaboration with numeral at Xochicalco, on the Piedra de Chalco, and at Chichén Itzá (Fig. 5,d-g). It also occurs in Teotihuacan moldmade plaques surrounded by a feather ring (i.e. as a cartouche), but without numeral (Fig. 5,b,c). Caso demonstrated that Glifo A cannot correspond to <u>ollin</u> and suggested a possible equivalence with <u>malinalli</u>. In this assumption he may be correct because the Nahuatl term is various translated as "grass", or "torcido, escoba, escobilla, cordel torcido, hierba torcida" (Caso 1967:12). Since the main element is a knot, the ideograph may well indicate a twisted rope, hence the symbol for tying the years.

The significance of the relief sculpture can be summarized as follows:

A high ranking individual, peering from a serpent and wearing a frontally displayed feather headdress, holds two flaming wood bundles which are not ordinary torches. Their ritual importance is stressed by their recurrence in the headdress together with a Zapotec day sign of the pan-Mesoamerican calendar (Glyph A). Since this day sign of the <u>tonalpohualli</u> lacks numerical coefficients, it does not indicate a date but expresses the function of "binding" since the main element is a knot. Furthermore, both glyphs are connected by a rope. Bundles of wood, rope, and knot element express the concept of "binding the years". Their ritualistic significance is underscored on this relief slab by being displayed frontally, while the person is shown entirely in profile. Frontality in Teotihuacan art characterizes deities and subjects of greater importance than those shown in profile. The flames attached to the wood bundles indicate, in this context, a ritual or sacred fire and, possibly, that a New Fire had been drilled from which the bundles were ignited on the occasion of a completed cycle. In my discussion of the Comb-and-bar sign and its similarity with the Maya fire glyph T 563, I suggested that since T 563 occurs in inscriptions dealing with a cycle of 819 (9x7x13) days, the Teotihuacan firewood bundle signs may also connote shorter cycles than the 52-year period. Prem discovered recently evidence that cycles of approximately 5 years (65x28 days = 1820 d = 4.9836 years) are recorded in inscriptions at Xochicalco and they are also recorded in Cod. Peresianus and Dresden (Prem 1974).

This slab, then, records the completion of a cycle, but not its duration, and it also conveys that the lighting of a sacred fire was associated with a period ending.

In my opinion, there can be no doubt that this monument was carved by a a highly skilled artist who was thoroughly familiar with Teotihuacan iconography. The scrollwork at the base shows less expertise and was probably executed by another craftsman. According to the provenience given, which cannot be verified, the slab is not from Teotihuacan proper (for reasons given above, a Cholula origin seems more likely). Admittedly, the conclusions may therefore apply only to sites under Teotihuacan influence.

SUMMARY

Iconographic evidence has been presented to show that the "binding of the years", which in Aztec ritual was accompanied by the New Fire ceremony, had its origin in Early Classic Teotihuacan where the completed cycle was represented ideographically by compound signs of firewood bundles, twisted cords and knot elements. These correspond to the Aztec <u>xiuhmolpilli</u> sculp-tures which are replicas in stone of bundles of wooden sticks representing a 52-year cycle.

At the completion of the cycle two separate rituals took place, each one at a different location. The <u>xiuhmolpilli</u> was ceremoniously buried in the Sacred Precint of Tenochtitlan and a feast of general renewal, preceded by the drilling of the New Fire on a hilltop, initiated the new 52-year period. That the completed cycle was buried in effigy is only accounted for archaeologically; the written sources do not mention the <u>xiuhmolpilli</u> sculptures nor the corresponding rituals. Obviously, by the 15th and early 16th centuries the <u>xiuhmolpilli</u> bundle of wood, in reality a countingdevice for elipsed years of Teotihuacan origin, concerned only the priests whereas the New Fire drilling for a successful initiation of a new cycle concerned everybody.

The length of the period represented by the Teotihuacan firewood bundles is not known; it may have been shorter than 52 years. Nor are the ceremonies involving the burial or burning of the bundle known.

The earliest record of the drilling of a New Fire in central Mexico is a rock carving at Xochicalco, probably dating after the fall of Teotihuacan. Possible evidence of the distribution which immediately followed the drilling of a New Fire, is a 6th or 7th century relief panel in Teotihuacan style from southern Veracruz.

NOTES

- Cf. the burning wood bundles in Codex Laud and the burning bundle on a temple platform with the date 1 <u>miguiztli</u> in Cod. Fejérváry 5.
- (2) The 105 cm tall celebrant stands on a 30 cm high platform which is decorated with Tajinoid interlaced scrolls in an irregular pattern. The slab is incomplete; details on each side suggest that it had been sawed off from a larger panel. Conceivably, this slab is part of a composition in which two individuals face a central image, comparable to the scene on the Teopancazco mural of Teotihuacan (Gamio 1922, pl. 34). The monument was reportedly found near Soyoltepec (also spelled Sayaltepec or Sayultepec in maps of Veracruz) which is west of Lake Catemaco in southern Veracruz. It is described as a sarcophagus lid which is highly improbable (Bolz-Augenstein 1970:72, pl. 20; Bolz 1975, pl. 70). Large slabs standing on flat altar stones at Cholula, in a patio adjacent to the Great Pyramid, and associated with Teotihuacan III pottery, are also decorated with Tajinoid scrolls (Marguina 1968:12-19).

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ILLUSTRATIONS

- Fig. 1: <u>The signs of the Old Fire God complex in Teotihuacan</u> (Standard form)
 - a: Diamond sign.
 - b: Saw-tooth ray A sign.
 - c: Saw-tooth ray B sign.
 - d: Comb-and-bar sign (=firewood bundle F).
 - e: Serrated Comb-and-bar sign.
 - f: Firewood bundles.
 - g: Asterisks.
 - h: Flames.
 - i: Flaming firewood bundle.
 - j: Four-element group.
 - k: Caso's Glyph A (knot element).
 - 1: Twisted cord.
 - m: Firewood bundle, Codex Borbonicus 36.
 - n,o: Triangle over trapeze (year sign).
 - p: Paper streamers and folded wrapping for <u>xiuhmolpilli</u> (detail of figure 4, a).
- Fig. 2: <u>The "binding of the years"</u>
 - a: Rock carving, Xochicalco, supposedly indicating the first New Fire ceremony in 1 tochtli, day 2 coatl. From Sáenz 1967, fig. 1.
 - b,c: Bundles on stairs of substructure, Tenayuca Pyramid, from Caso 1935, pl. 3:16, 18.
 - d: Toltec wall panel, Mausoleum III, Chichén Itzá (Completion of cycle), from Seler 1902-1915, 5:367, Abb. 243.
 - e: Twisted cord with year sign. Molded appliqué, buff with traces of red, 7 cm h, Santiago Ahuizotla, coll. HvW.
 - f: Twisted cord below stacked firewood; left, tri-mountain sign. Molded appliqué, buff with traces of red, Santiago Ahuizotla, coll. HvW.

- g: Year 2<u>acatl</u> with knotted cordindicating completion of 52-year cycle, Codex Aubin 17.
- h,i: Twisted cord or knot element on front and back panels of stone incense burner, Sun Pyramid, Teotihuacan, from Seler 1902-1915, 5:429, Abb. 17, a, b.
 - j: One of two similar stone slabs with flaming bundles, related to Batres' <u>xiuhmolpilli</u> sculpture (Fig. 4,a), from Sun Pyramid, after Batres 1906:25, pl. 2.
- Fig. 3: Skull altar and <u>xiuhmolpilli</u> sculptures, from Caso 1967:135, fig. 6 and p. 139, fig. 11.
- Fig. 4: Firewood bundles
 - a: Batres' <u>xiuhmolpilli</u> monument, Sun Pyramid, Teotihuacan, from Gamio 1922: pl. 22, f.
 - b: Comb-and-bar sign (=Firewood bundle) and twisted cord (below), on molded plaques attached to large thick-walled vessel; 12,5 cm high, buff with traces of red, Santiago Ahuizotla, coll. HvW.
 - c: Cartouche with year sign above Comb-and-bar (=firewood bundle) sign, and numeral 7, incised on vessel, from Caso 1967:146, fig. 3.
 - d: Flaming bundle with Reptile's Eye glyph and numeral 7. Teotihuacan style Stela 1, Piedra Labrada, from Caso 1967:150, fig. 13.
 - e: Comb-and-bar (=firewood bundle) sign surrounding open mouth with teeth emblem; above: Comb-and-bar inside Reptile's Eye glyph over numeral 7; Stela 1:A, Xochicalco, from Sáenz 1964: pl. 2.
 - f: Reptile's Eye glyph (variant) with inset Comb-and-bar (=firewood bundle) and numeral 7; Lápida de los cuatro glifos, Xochicalco, from Sáenz 1962: pl. 9.

Fig. 5: Flaming wood bundles and Glyph A

- a: Celebrant with four flaming wood bundles and glyph A (twice) related to the "binding of the years" ceremony. Low relief panel in Teotihuacan style with Tajinoid scrollwork. From Bolz-Augenstein 1970: pl. 70.
- b,c: Molded plaques, Glyph A in cartouche of feather ring. Brown clay with red (b=5 cm long), Teotihuacan; coll. HvW.
 - d: Glyph A with numeral 5; one of four sides of a stone block from Chalco, after Seler 1902-1915, 2:161, Abb. 70,a.
- e,f: Glyph A with numeral 6, Xochicalco, after Caso 1967:172, fig. 8.
 - g: Glyph A with numeral 7, Piedra del año 3 <u>tochtli</u>, Xochicalco; after Sáenz 1968: fig. 1.



Fig.1



Fig.2



Fig. 3



Fig. 4





Fig. 5