THE CREATION AND ORDERING OF THE MIXTEC WORLD: AN ANALYSIS OF TEN RITUALS IN THE CODEX VENDOBONENSIS MEXICANUS I

INTRODUCTION

The Codex Vendobonensis Mexicanus I is among the relatively small group of pre-hispanic and early Colonial pictorical manuscript that have survived to the present from the Mixtec-speaking region of the southern of Mexico. The skillfully painted obverse of this codex, the subject of this paper, is unique among these documents because it primarily depicts the activities of supernaturals and mythological beings rather than accounts of historical personages. Indeed, most researchers agree that the observe of the Codex Vendobonensis is a pre-hispanic, Mixtec depiction of the creation and ordering of the universe.

Pages 32, 31 and the final twenty two pages[1] of the Vendobonensis obverse present ten rituals which are similar in structure and content. These rituals have been interpreted as prerequisites to the ordering of landforms and places in the Mixtec World (Furst 1978: 309; Troike 1978: 555 and Nowotny 1948: 194). However the specific iconography of these rituals remains enigmatic.

In the following structural and comparative analysis of this group of ten "ordering" rituals, particular attention will be paid to their common elements, and to all of the elements in the first ritual which appears to serve as a prototype for the remaining nine. The intent here is to derive some broad but meaningful interpretations of these rituals by carefully analyzing the internal syntax of their shared iconography. The emergent symbolism will then be compared with certain artifactual, ethnohistoric, and linguistic data from Mixtec and other Mesoamerican sources.

Ideally, such comparisons would be made with purely Mixtec ethnohistories and artifacts. Unfortunately, data of this nature are scant and contain little in the way of myth or ritual that is directly relevant to the iconography at the focus of this paper. Thus, comparative interpretations will be treated with caution and some trepidation. However, because of this lack of directly relevant ethnohistoric data, we simply cannot afford to

[1] At some points during the Codex' history in Europe, the 52 pages were erroneously numbered from left to right with Arabic numerals. The observe is correctly read from right to left, that is from page 52 to page 1.

ignore the value of comparisons between the iconography on the Vendobonensis obverse and certain ideas and beliefs that were virtually pan-Mesoamerican.

The General Context of Ten "Ordering" Rituals within the Vendobonensis obverse.

Before beginning a formal analysis of these ten "ordering" rituals, their general context within the Vendobonensis obverse will be summarized. The following summary is derived, for the most part, from Furst's doctoral dissertation (Furst 1978, et al.) which is the most extensive commentary to date on the Vendobonensis obverse. Williams and Albright (personal communications 1992) who have spent considerable time and effort studying the corpus of Mixtec codices also provided certain details. The codex begins in the heavens (depicted by a sky band) before the creation of time and space (Fig. 1). The first four pages depicted various activities and ritual objects associated with two unnamed aged 'celestial couples', other supernaturals and eight males later involved in the birth of Mixtec gods and nobles from the great tree at Apoala.[2] The second page appears to introduce the concept of time, symbolized by a jeweled intertwined 'A-O' year-bearer sign with a single dot.

By the fourth page an unnamed couple generates a large flint knife that in turn gives birth to the divine Mixtec culture hero 9 Wind. Page 48 depicts various guises of 9 Wind including that of shaman. 9 Wind is then depicted naked in a heavenly place and granted his various insignias by two old males from the opening page of the codex. Thus attired, 9 Wind descends from the heavens, consults with various gods and then lifts the sky and water bands to reveal the Mixtec earth (still in generalized form) (Fig. 2). Page 47 portrays basic landforms including a hill, arable land, a river and turbulent water. Immediately following, on pages 46 to 38, pictorial toponyms depict numerous specific sites, most of which also involve landforms.

Immediately following this list of toponyms a conference occurs between 9 Wind and eight of the offspring of Lady 1 Deer and 1 Deer. In this conference, 4 Rain and 7 Eagle are designated to attend the birth of fifty-one human nobles and gods from the

[2] The site of Apoala exist today as a small but important village in the Mixtec speaking region. Reyes (1976:36) notes that the name of the site in Mixtec is "yuta tnoho" which means river where the lords came from.

sacred carved tree at Apoala (Fig. 3). After the listing of the nobles and gods, some of whom are mythical antecedents to actual lineages depicted in other Mixtec codices (Albright and Williams 1992), 9 Wind presents offerings at Apoala to Lady 1 Eagle, the goddess of rivers. A consultation then occurs between 4 Serpent and 7 Serpent and twenty-two of the most important Mixtec Gods and Goddesses. Furst (1978, 311), notes that,

> "...these deities may have been assembled to witness the organization of the steambaths by 9 Wind on 32b-31b. The steambaths, in turn, must be put into proper working order, because a steambath is required for the next main event - the mutual ear-piercing by 9 Wind and 2 Dog, the latter of which, in this manuscript, functions as the primordial shaman-priest."

At this point, just before the ordering of the steambaths[3], the first of the ten "ordering" ceremonies occurs. This ceremony contains the least number of elements that are common to the remaining nine and will be discussed in detail later in this paper.

The Internal Structure of the Ten Ordering Rituals

The author or authors of the Vendobonensis obverse paid careful attention to present the elements of the ten "ordering" rituals in a highly structured manner. For example, Furst (1978:203-231) notes that the gods presented in "ordering" rituals two through six (2 Dog, 4 Motion, 7 Flower, Lady 1 Eagle and Lady 9 Grass) appear in the exact same order as on page 33 which immediately precedes the first of the ten rituals.[4] The males appear again on page 30 and the females on page 28. Though in this appearance they are separated, their sequence is maintained. Furthermore, the attendants of the major deities in these rituals occur in the same order in which they first appear in

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[3] The exact symbolism of steambaths among the Mixtees is not clearly understood; however, the context suggests that they fulfilled a "crucial ritual function" (Furst 1978: 311).

[4] For reasons not explained in her dissertation, Furst (1978:et all) does not include the first of the ten "ordering" rituals on pages 33-32 in her discussions of the remaining nine.

the manuscript - which is none other than the order of their birth from the sacred tree at Apoala (Furst 1978:230).

Even the most variable elements in the ten ceremonies occur in ordered groups. These include from one to four groups of ritual objects which immediately follow the deity or deities to which the rituals are dedicated (with the exception of the first). As well, in rituals two through eight (pages 22-12), a bird sacrifice occurs immediately after the presentations of these groups of ritual objects. Because of the variations within these portions of the ten "ordering" rituals, as well as the sheer numbers of ritual objects involved, these portions of the rituals are omitted from the final analysis. It is hoped that by focusing on the elements held in common to all ten rituals that some broader-based interpretations will emerge that can be applied to all of them.

As mentioned above, the elements contained in the first of the ten "ordering" rituals (Fig. 5) are common to the remaining nine. Though the rituals differ significantly from one-another, their shared elements occur in a rigid, unvarying order and always at the end of each of each ceremony (Chart 1). Again, because the following elements from the first "ordering" ritual are the only common denominators within the ten rituals, they will be the primary focus of this analysis. These elements are, in order of appearance:

Element 1: A beginning date for the ceremony
Element 2: Two unnamed males wearing loincloths and stretching a cord
Element 3: A rectangular stone (possibly a throne or altar) with human feet
Element 4: Half a talud-tablero style platform on a stylized rock
Element 5: Half a stepped pyramid on a stylized rock
Element 6; A complete stepped pyramid
Element 7: A male tying a rope around a rectangular object
Element 8: Four buildings containing, respectively, a bird, an eye, a bowl of blood and what are probably two bleeding cacao pods
Elenent 9: A second date, always different from the first
Element 10: A fire drilling ceremony (indicated by only a fire drilling stick laid atop a fire drilling hearth in Ritual 10)

Variations Within the Common Elements

Within the elements common to all ten of the "ordering" rituals some subtle and interesting variations occur. The most obvious of these variations can be noted by contrasting some of the common elements within the first of the ten rituals to its counterparts in the remaining nine. This portion of the analysis was facilitated by the creation of Chart 1. All the common elements were extracted and placed one atop the other in ten rows reading left to right in the order of their appearance in the codex. These variations within the common elements will be examined below, also by order of their appearance.

Element 1: The date for each ritual is unique (Furst 1978: 229). Furst notes that these dates probably have divinatory meanings. As far as can be determined, no dates occur at the end of a 52-year cycle and only one date could occur at the end of a solar year, that is 5 House 13 Wind (Furst 1978: 231).

Element 2: The first of these variations concerns the two males who are always depicted holding a taut cord between them and gesturing at one another. These gestures have two fonns: either they are pointing at one-another; or one points at the other who in turn points upward. Only in this first ritual are these two males portrayed as virtually identical twins. Also unique to this first element is that both males are wearing what appears to be a short red and blue cape with five balls at the fringe. In the remaining nine ceremonies they appear only in loin-cloths. Furthermore, only in the first depiction are the two males presented without body paint. In the remaining nine rituals, these two males are twins in dress, form and size but they are portrayed with variously opposing color schemes. For example, in the second ritual one male is painted red while the other is brown; in the third ritual, one is light brown with dark brown hands wearing a white loin-cloth and the other is dark brown with light brown hands and wares a red loin-cloth; and so on - the pattern varies in each case. However, the color combinations can always be seen to be oppositions of red and brown or red and white. The red male is depicted on the left side in ritual 2 and on the left in ritual 3, shifting sides with each ritual throughout the sequence (see Chart 1).

Element 3: The stone rectangles with human feet vary only moderately in both size and proportion. But their feet always point to the left except in rituals four and ten where they point to the right.

Element 4: The talud tablero style platforms on stylized rocks are all similar in design and proportion and vary for the most part in relative size.

Element 5: The halved stepped pyramids on stylized rocks are portrayed with between four to eight stops in no apparent pattern. The color of each step alternates between red and brown except on the first four, which are painted with diagonal swaths of red and brown. In rituals one, two and ten, the steps are facing to the right and in the remaining rituals they are facing to the left.

Element 6: The stepped pyramids vary from between five to nine steps, again in no apparent order. Each pyramid has alternately red and brown steps.

Element 7: The male tying a rope around the approximate center of a rectangular box or block is portrayed in red and brown body paint except in the second ritual where he is painted black with white feet and hands and with a black circle around his eye. One other trait which differentiates the rituals is the number of times the rope is tied around the block; in the first ritual the rope is wrapped only once around the rectangle while in the remaining nine rituals it is wrapped around twice.

Element 8: This set of elements consists of four talud-tablero style structures, containing an eye, a bird, a bowl of blood and two bleeding cacao pods respectively. Here again, the elements in the first ritual vary noticeably from those in the remaining nine. The structures in rituals two through ten all portray elaborately decorated roof elements. These decorations include various step-fret patterns, L-shaped elements, diagonal bands, circles, checkers, squares, thatched patterns, and stepped patterns, some of which are displayed as roof corobs. The roof elements in the first ritual, on the other hand, are blank with the exception of the first structure where the eye has been placed in the roof and does not occur inside the structure as it does in the remaining nine rituals. The second structure in the first ritual contains another variation; the bird is in the structure (as in the other rituals) but is lying on its back. In the remaining rituals, the bird is right-side-up.

Element 9: For a discussion on dates, see section above on Element 1.

Element 10: In the first "ordering ritual" 9 Wind performs the fire drilling. In the eight which follow, it is performed by attendants. In the tenth and last ritual, this rite is indicated only by the presence of a fire drilling stick atop a fire drilling hearth. (Furst 1978: 231).

In addition to Elements 1 through 10 discussed above, three elements are common to rituals two through ten but do not occur in the first. These elements are: 1) a cradleboards[5] which immediately follows the initial date; 2) a deity or deities to which the ritual is dedicated; and 3) an intertwined A-0 year bearer sign with a single dot (minus the year bearer) which immediately precedes the two males holding a taut cord. In addition, there is one element which is common to all but the last ritual. Immediately after the fire drilling, apparently on the same date, the ceremony of the "three plants bound together in white paper" is performed. This ceremony is conducted by 9 Wind in the first ritual and by attendants in the following eight.

Interpreting the Variation in the Ordering Rituals

Most of the minor variations noted above simply elude interpretation. For example, no apparent pattern can be detected in which way the feet Point in the stone rectangles, or in the varied number and order of colored steps in the stepped pyramids. But not all of the variations noted are necessarily meaningful. Some of them are almost certainly due to stylistic idiosyncracies of the artist who drew and painted the codex.

However, various elements in the first "ordering" ritual do appear to differ significantly from the remaining nine which are relatively homogeneous. The first rituales general contextual relationship to the remaining nine also sets it apart. The first ritual occurs several pages before the "birth" of the sun and the remaining nine occur, in an uninterrupted sequence, immediately afterwards. Thus, a potentially fruitful point of departure, to at least partially interpret these rituals, is to contrast the variations between

[5] Arana and Swadesh (1965:85) indícate that the Mixtec word for cradle, dzoco, may mean "well" or "source" related to a river or spring. Furst (1978:229-230) suggests that the cradle board may be a symbol for "beginning" when represented before a rite.

the first ritual and the remaining nine with regard to their particular context vis-a-vis the birth of the sun. Two points of variation will be discussed in detail.

'A-0' Year Sign

In all but the first ritual, the intertwined 'A-O' year sign with a single dot (minus the year bearer) is depicted in direct association with the two males holding the cord (Element 2). The only other occurrence of this symbol in the codex is on the second page (page 50). Here it is jewelled and immediately precedes the first date in the codex (Fig 6). Furst (1978:67) is unable to explain the meaning of this symbol. However, because of its syntactical relationship to the first date in the codex, this jewelled 'A-O' sign may simply indicate the emergence of mythical time. (The earth has not yet been born.)

With this speculation in mind, note that the unadorned versions occur only in direct proximity to Element 2 (the two males holding the cord) in the "ordering" ceremonies which immediately follow the birth of the sun (Fig 8). Judging from these contextual relationships, it is possible that these unadorned versions represent the ordering of earthly time relative to the passage of the sun.

Eye Symbolism

Another example of an obvious variation unique to the first ritual concerns the placement of the eye in the first structure in Element 8. It is depicted in the roof of the structure rather than within it (see Chart 1). The human eye is commonly used to depict a star in the Mixtec codices (Furst 1978:13).[6] On page 23 of the codex, the page which depicts the birth of the sun (Fig. 4), three of the sun discs are shown half-covered with stars, which may indicate the newly created phases of night and day (Furst 1978:215-217). Considering these contextual relationships, it is possible that the star in Ritual One is not in its house (e.g. in its proper place) because the phases of day and night have not yet been created.

Commentary

Other obvious variations occur in the first of the nine rituals. For example, in Element 8, structure two, the bird is up-side-down and the roofs of all four of the

[6] In the Mixtec language the word for eye is tenuu which sounds nearly the same as tenoo, their word for star. This is particularly so because the Mixtec language is tonal and meanings of words often change depending upon the pitch at which they are pronounced. Thus the use of an eye to represent a star is probably a pun (Furst 1978:13).

structures are unadorned (with the exception of the eye in the roof of the first). (See Chart 1.) Why these variations occur remains unclear.

In general contextual and syntactic terms this first ritual was obviously designed to stand out. Attesting to the relative importance of this ritual is the fact that none other than the mythical cultural hero, 9 Wind, performs the fire drilling and the “three plants bound together in white paper” ceremonies at the end of the ritual. Attendants perform these rites in the remaining “ordering” rituals.

These points, along with the fact that the first ritual occurs before the birth of the sun, may indicate that the ritual was intended as a mythic progenitor or prototype ot the remaining nine.

The purpose ot the first ritual seems to be ordering of the mutual ear piercing by 9 Wind and 2 Dog. This first “ordering” ritual appears to set the example for the remaining nine which prepare the way for the ordering of earthly landforms, places and possibly the motions of the sun as well.

Cross-Cultural and Ethnohistoric Parallels to the Principle Symbolism

In the broadest contextual sense, it is logical to assume, as other researchers have noted, that the ten "ordering" rituals discussed above, were considered prerequisite to the general ordering of landforms and man-made places by whatever Mixtec group created and used the Vendobonensis obverse (Furst 1978: 229; Nowotny 1948: 194). The recurring elements in these rituals occur in strict order. The first and last two of the rituals are composed almost entirely by the ten recurring elements (Figs. 5, 7 and 8) . Thus, it is logical to assuine that these recurring elements symbolize the most crucial and necessary actions prerequisite to the creation of both ritual and actual space.

The common elements themselves, again viewed in a broad contextual manner, can be described as two males holding a taut cord preceding a series of architectural elements followed by a fire drilling ceremony. Thus considered, a three part question logically emerges: what does the stretching of a cord, depictions of architecture, and fire drilling have to do with the ordering of landforms and places?

In an attempt to answer this question, I will begin by observing that evidence exists which suggests that the cord in question is in fact a measuring cord. In a sixteenth

century Spanish - Mixtec dictionary (Alvarado 1593) one of the translations given for the term "to measure" is "Yochihi cuhua yoho di." Yoho in Mixtec means cord and the term "yochihi cuhua yoho di" can be roughly translated to mean "to stretch a cord"[7].

Moreover, it can be shown, that at least to the Maya and to the Aztecs, the measuring cord was considered to be much more than a simple measuring device. Landa, in his sixteenth century Relacions de las Cosas de Yucatán describes two rituals in which a stretched cord plays a prominent role. In the first (Tozzer 1941:104) Landa translates the name of the ceremony literally as "to be born anew". It served primarily to mark the transition of adolescents into adulthood. The ceremony took place in a newly swept courtyard and was presided over by a "priest" or shaman and four elders who, after three days of fasting, were designated as 'Chacs'[8]. Then, quoting Landa,

> "...they placed four stools in the corners of the court, on which the four Chacs sat down with a long cord held from one to the other, so that the children remained shut up in the middle or inside the cord; after which all the fathers of the children who had fasted, passing over the cord had to enter inside the circuit. Afterwards or before they placed in the middle another little stool on which the priest sat down with a brazier and with a little ground maize and their incense.[9] Then the boys and girls came in order, and the priest put into their hands a little ground maize and incense, and they threw it into the brazier, and this they all did. And these censings being over, they took the brazier in which they made them, and the cord with which the Chacs had surrounded them, and they poured a little wine into a vessel, and gave the whole to an indian to be carried out of the town,

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[7] We also know that the measuring cord was used in the layout of architecture, at least by the Aztecs; a measuring cord is included in a list of Aztec construction tools by Guerra (1969:43).

[8] Tozzer (1966:104) notes that four Chacs holding a cord may be depicted on page 19 of the Codex Tro-Cortesianus. He also notes that Lothrop (1936:28) illustrates a carved vase found at Zacualpa which depicts four seated figures, each holding a piece of twisted rope.

[9] Note that the four Chacs and the priest form a quincunx. A quincunx is also created in the following two rituals described.

enjoining upon him that he should not drink nor look behind him as he came back..."

The second relevant ceremony described by Landa (Tozzer 1941:151-152), the new year ceremony, was considered a very solemn occasion and began with considerable fasting. Next, all utilitarian objects such as platos, vessels, old clothes and even "the stuffs with which they wrapped their idols were thrown out and renewed". Then, again quoting Landa,

"All having come together with the presents of food and drinks, which they had brought, and also a great quantity of wine, which they had made, the priest purified the temple, seating himself in the middle of the court, clothed like a pontiff. The chacs seated themselves at the four corners, and stretched from one to the other a new cord, within which were to enter all those who had fasted, in order to drive out the evil spirit as I have said in Chapter XCVI (he is referring here to the ceremony described above). Once having expelled the spirit, all began to pray with great devotion and the Chacs kindled a new fire, and lighted the brazier for in the feasts in which all joined in common, they burned incense to the idol with new fire and the priest began to through this incense into it...and this was their new year and a service very acceptable to their idols."

Another sixteenth century chronicler, Fray Diego Duran (Hayden and Horcasitus ed. 1977:162-163), notes a similar use of the measuring cord in an Aztec ceremony dedicated to the god Tlalac. In this ceremony five trees, one large and four small, are carried to a court in front of a temple dedicated to the god Tlalac. The large tree is called Tota which means Our Father. The following is Duran's description of this portion of the ritual:

“Once the great tree and the four small ones had been set up in the form of a square with Tota in the center, from each of the small trees emerged a twisted

straw rope, attached to the large one in the center. From the small trees, therefore, emerged four ropes and all four were tied to the central tree called Tota."

Unfortunately, neither Landa nor Duran describes the ceremony that occurs at the end of the fifty two year Calendar Round cycle. Tozzer (1941:151), however, notes that among the Aztec a "renovation", similar to that described by Landa above, did take place at this time. He further speculates that the same would be true for the Maya. He then quotes Vaillant (1938:552), as writing,

"One such rite involved the destruction of old household furniture and equipment in order to make new utensils when the new cycle began. A second ceremonial observance, after kindling the new fire, was to embellish their temples".

Perhaps the most telling use of the measuring cord, with regards to this discussion, is described in the opening chapter of the Popol Vuh. Often described as the Quiche Maya bible, the Popol Vuh includes a Maya description of creation. The following is a quote from its opening passages,

"And here we shall take up the demonstration, revelation, and account of how things were put into shadow and brought to light by the Maker, the Modeler, named Bearer, Begetter...It takes a long performance and account to complete the emergence of all the sky-earth: the fourfold siding, fourfold cornering, measuring, fourfold staking, halving the cord, stretching the cord in the sky, on the earth, the four sides, the four corners, as it is said by the Maker, the Modeler, mother-father of life..." (translated by Tedlock 1985:71-72)

Remnant knowledge of these ceremonies may still exist today among indigenous cultures in Mesoamerica[10]. For example, Dr. Brian Stross (1992, personal

[10] Three researchers from The University of Texas at Austin, Timothy Albright, Logan Wagner and myself, have scheduled a field expedition to the northern Yucatán for the coming spring, a primary foci of which is to record various uses of the measuring cord by modern Maya.

communication) recently observed an interesting use of a measuring cord in the Northern Maya Lowlands. A cord was used to layout the dimensions of a grave as well as to measure the exact placement of grave-goods. Then the cord was rolled into a ball and placed "like a seed" into the center of the fill-dirt when the burial was re-covered.

We will now consider some cultural comparison concerning the depictions of architecture in the Vendobonensis obverse as symbols relative to the creation and ordering of landforms. In the recent books, The Blood of Kings (Schele and Miller 1986:104,113,122-123, 269) and A Forest of Kings (Schele and Freidel 1990:70-72,107,121,239), numerous interpretations of Maya pyramids, plazas and temples are presented as having "replicated in symbolic form the sacred landscape generated by the gods at creation." (Schele and Miller 1990:71) Based on solid iconographic, linguistic, and epigraphic evidence, the authors identify various temples and pyramids as "sacred mountains", their doorways portrayed as the mouths or entrances to caves which were considered by the Maya to be important portals to the Otherworld. Groups of temples are identified as mountain ranges:

> "...towering over the forest of tree-stones (stelae) in the plazas below. The architecture of ritual space thus replicated the features of the sacred geography-the forest, the mountain, and the cave" (Schele and Freidel 1990:72).

Iconography portraying astronomical events as well as archaeo-astronomical data embellish the above interpretations (Schele and Freidel 1990: 114). Thus, various architectural schemas can now be interpreted as cosmograms built to monumental scale.

Schele and Freidel (1990:106) and Reilly (1985: 87) trace the roots of these symbolic representations to the Olmec who were creating raised "artificial mountains" a thousand years before the Maya. Schele, and some of her students (1992, class lectures), have identified similar monumental cosmograms depicted at various sites across Mesoamerica. These include the Citadel complex at Teotihuacan, architectural arrangements at El Tajin, the Aztec capital of Tenochititlan as well the site of Monte Alban, the residents of the latter being contemporary neighbors of the Mixtec.

Conclusions

Tacitly, the above structural analysis, ethnohistoric and ethnographic descriptions of the uses of the measuring cord, and the interpretations of the symbolic significance of architectural schema elucídate three themes.

First, the measuring cord was repeatedly used to create sacred space in the ethnohistoric examples. In the Popol Vuh, it was used by the "Maker and the Modeler" to "complete the emergence of the sky-earth". In the Vendobonensis obverse, the use of the measuring cord occurs no less than ten times, in the most often repeated sequence in this codex which depicts creation.

Second, four of the ceremonies from the ethnohistoric accounts and all of the examples from the Vendobonensis obverse involving the measuring cord were also associated with architecture. In the ethnohistoric accounts, these associations include: performance in courts in front of temples (creating a quincunx or sacred space in front of or near the temple); purification of temples; or refurbishing of temples. Of these, three were immediately followed by a fire drilling and/or the ritual use of fire. Thus, even the sequence of the primary symbols of the "ordering ritual" (measuring cord, architecture, then fire drilling) is suggested in the some of the ethnohistoric examples.

The fact that the use of the measuring cord to define ritual space continued through the contact period and even into the present time in some áreas suggests that this action is a key ritual act in Mesoamerican cultures. In particular, the creation of the quincunx in the ethnohistoric accounts described above may serve as a ritual depiction of a cosmogram without the use of architecture but emphasizing “the four corners and the four edges" (Tedlock 1985: 72) and the center of the universe.

Third, comparing the interpretations of architecture as symbolic landforms with the context of the architectural elements in the "ordering" rituals strongly suggests a meaningful connection between the two. If, in the Popol Vuh, the creator uses a measuring cord to order the heavens and the earth, and if architecture serves as symbolic representations of sacred landforms (cosmograms), then the use of a measuring cord in association with architecture constitutes an act by humans which reenacts or reinforces mythic creation.

In the ten "ordering rituals" of the Vendobonensis obverse, it is proposed that the two males are using a measuring cord to actually lay out sacred architecture. Assuming that the architecture serves as a cosmogram for sacred landforms, the males would then be partaking in a symbolic or perhaps even actual act of creation of the natural world (i.e., the lienzo depictions of landforms following the "ordering" rituals). Moreover, the subsequent fire drilling ceremony may in effect sanctify or give life to their creation, in a manner demonstrated initially by 9 Wind. This symbolic act of creation would in fact be repeated and reinforced each time that ceremonial architecture or a quincunx was laid out with a measuring cord.

FIGURE 1

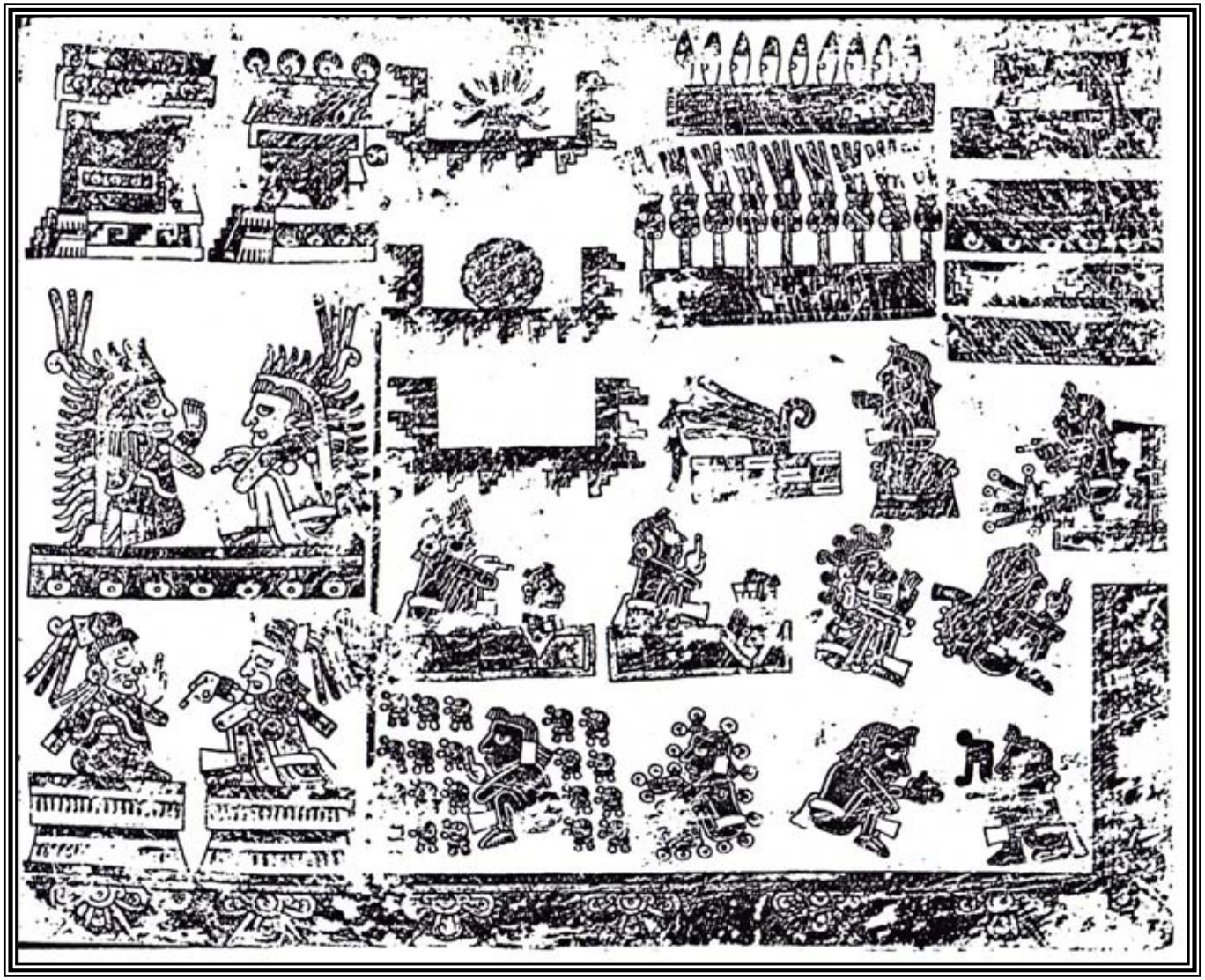


FIGURE 2

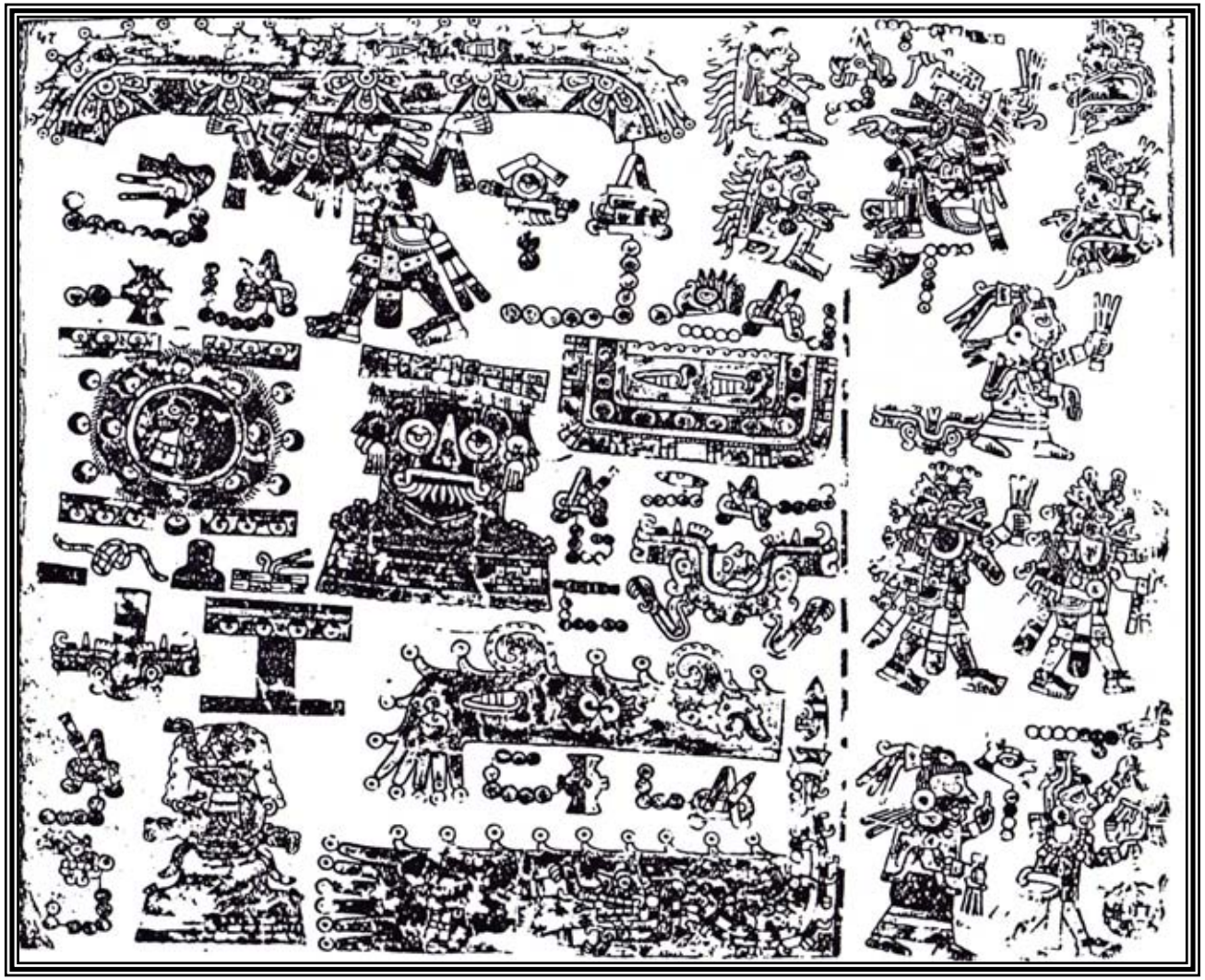


FIGURE 3

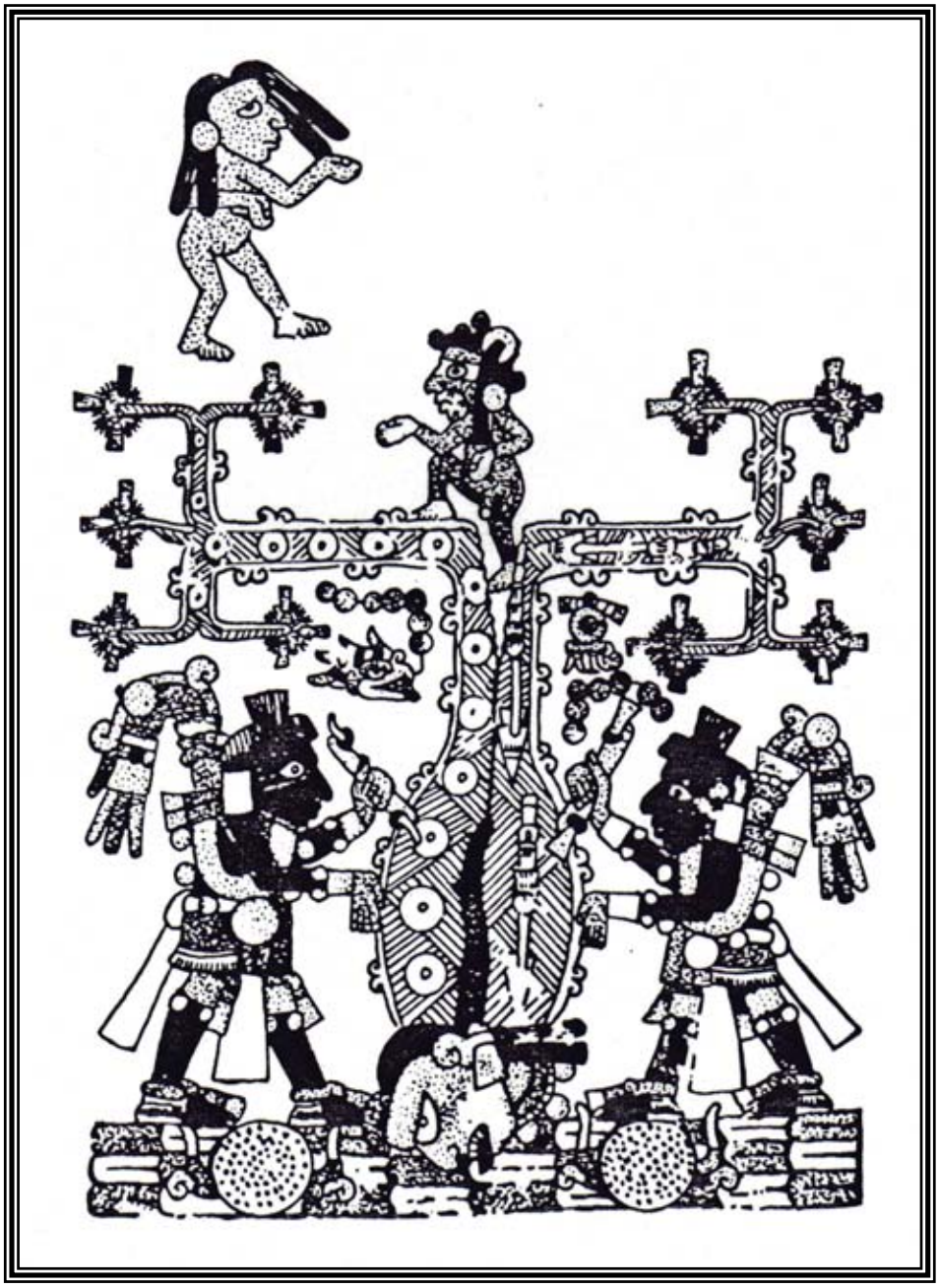


FIGURE 4

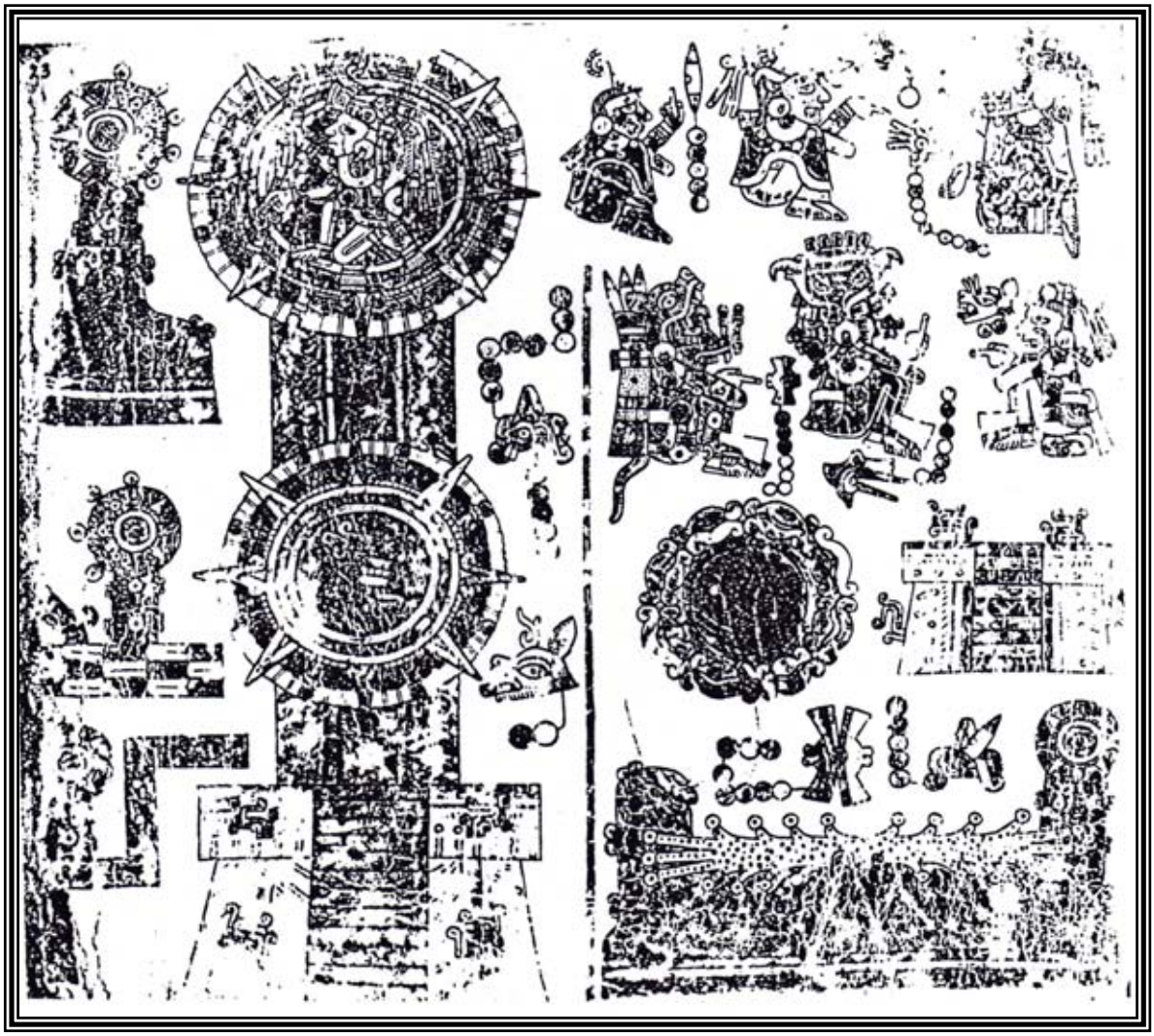


FIGURE 5

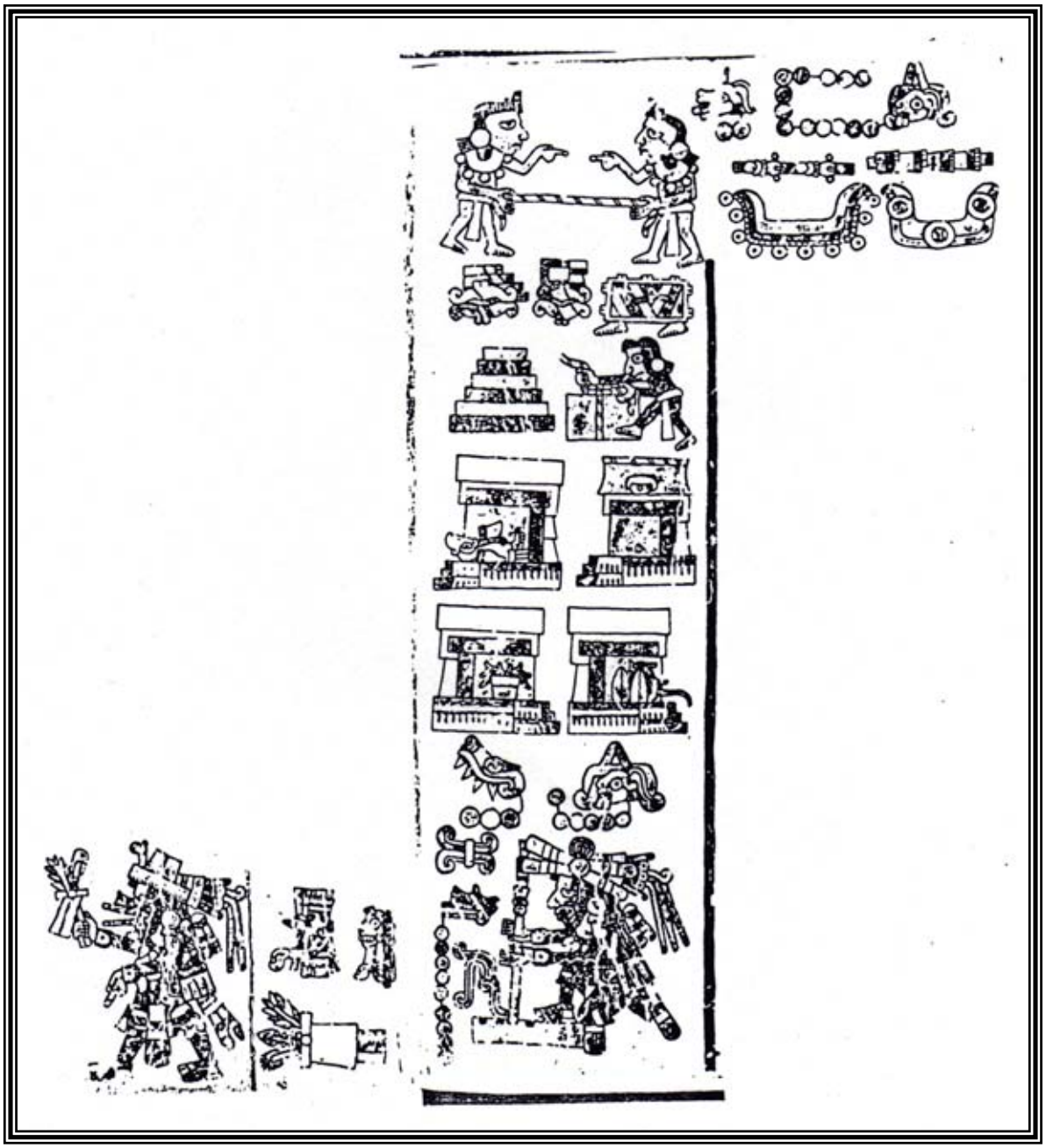


FIGURE 6

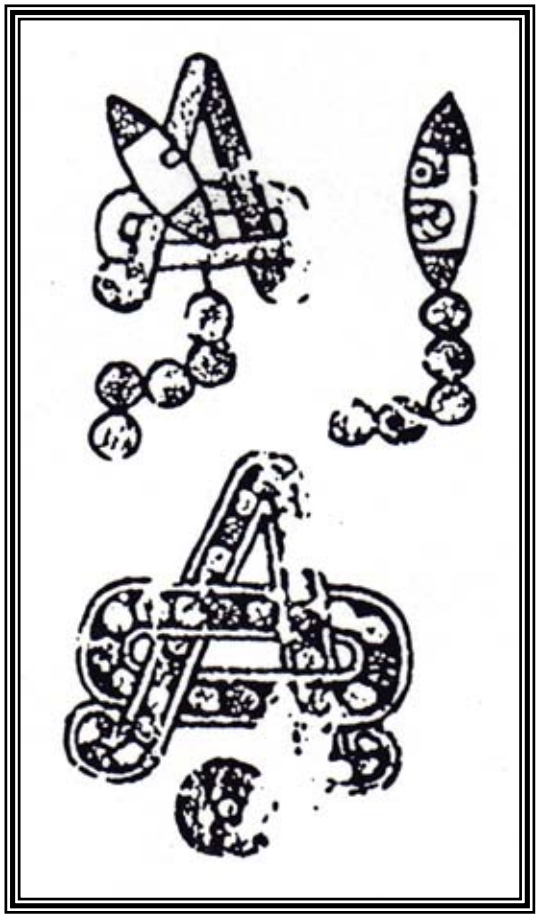


FIGURE 7

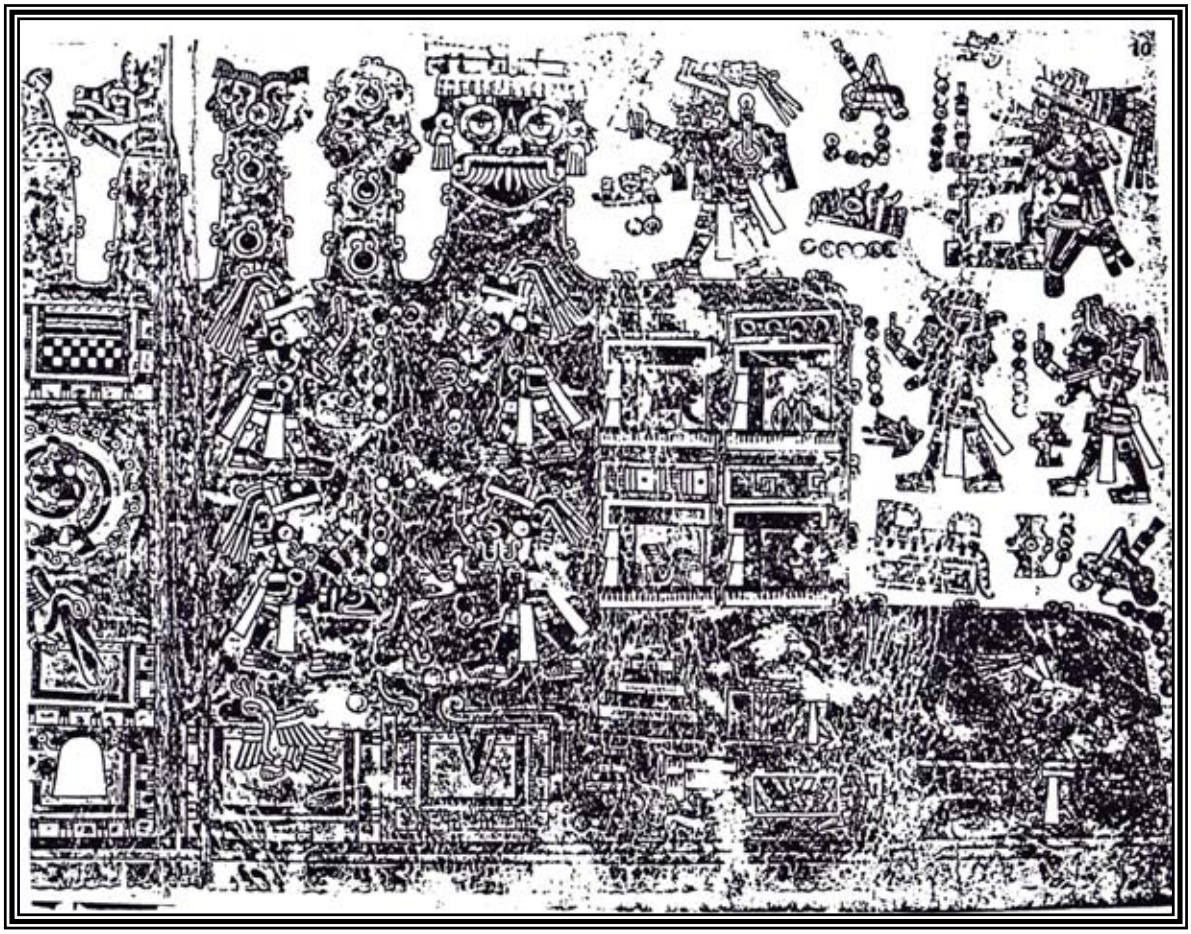


FIGURE 8

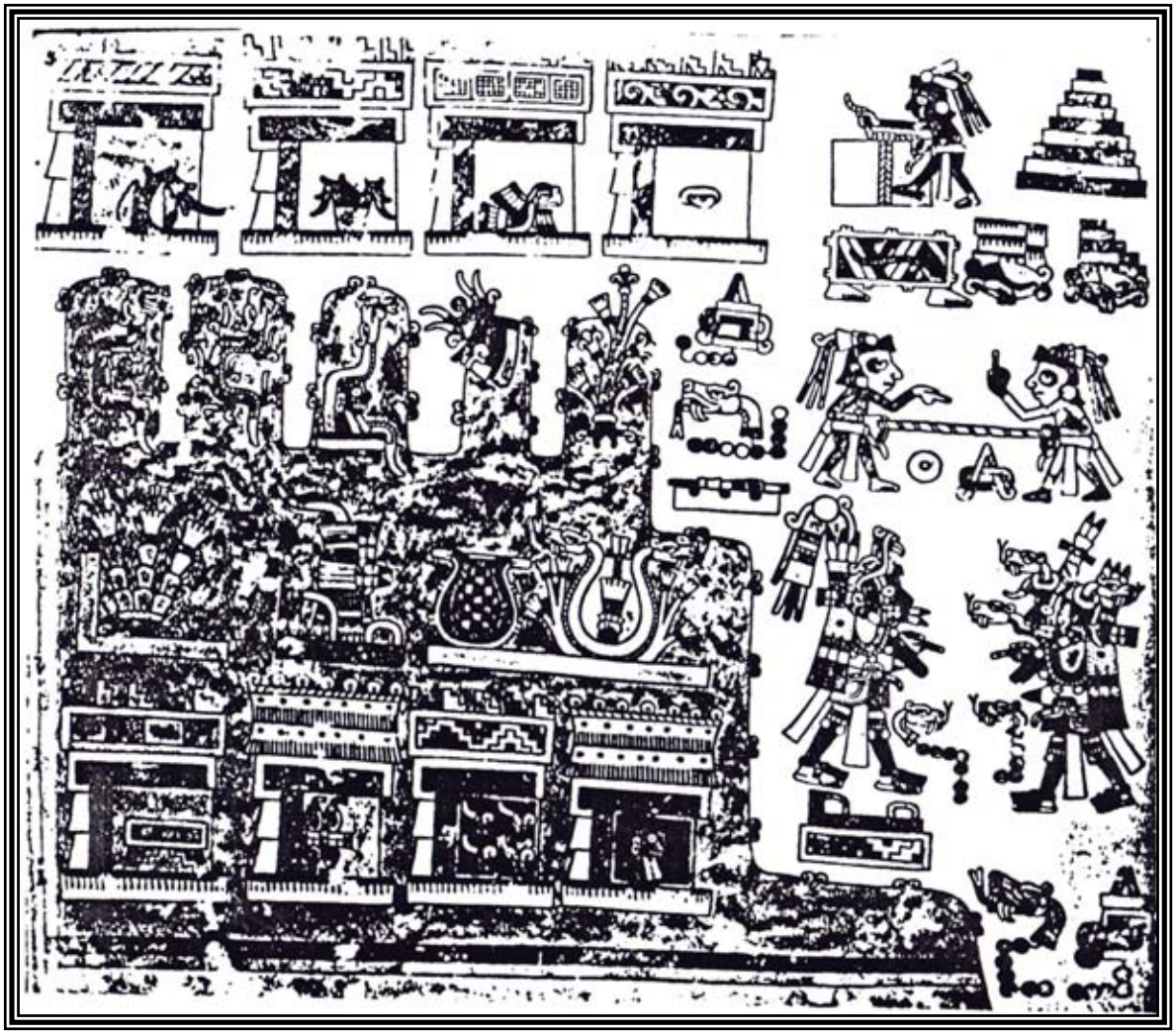
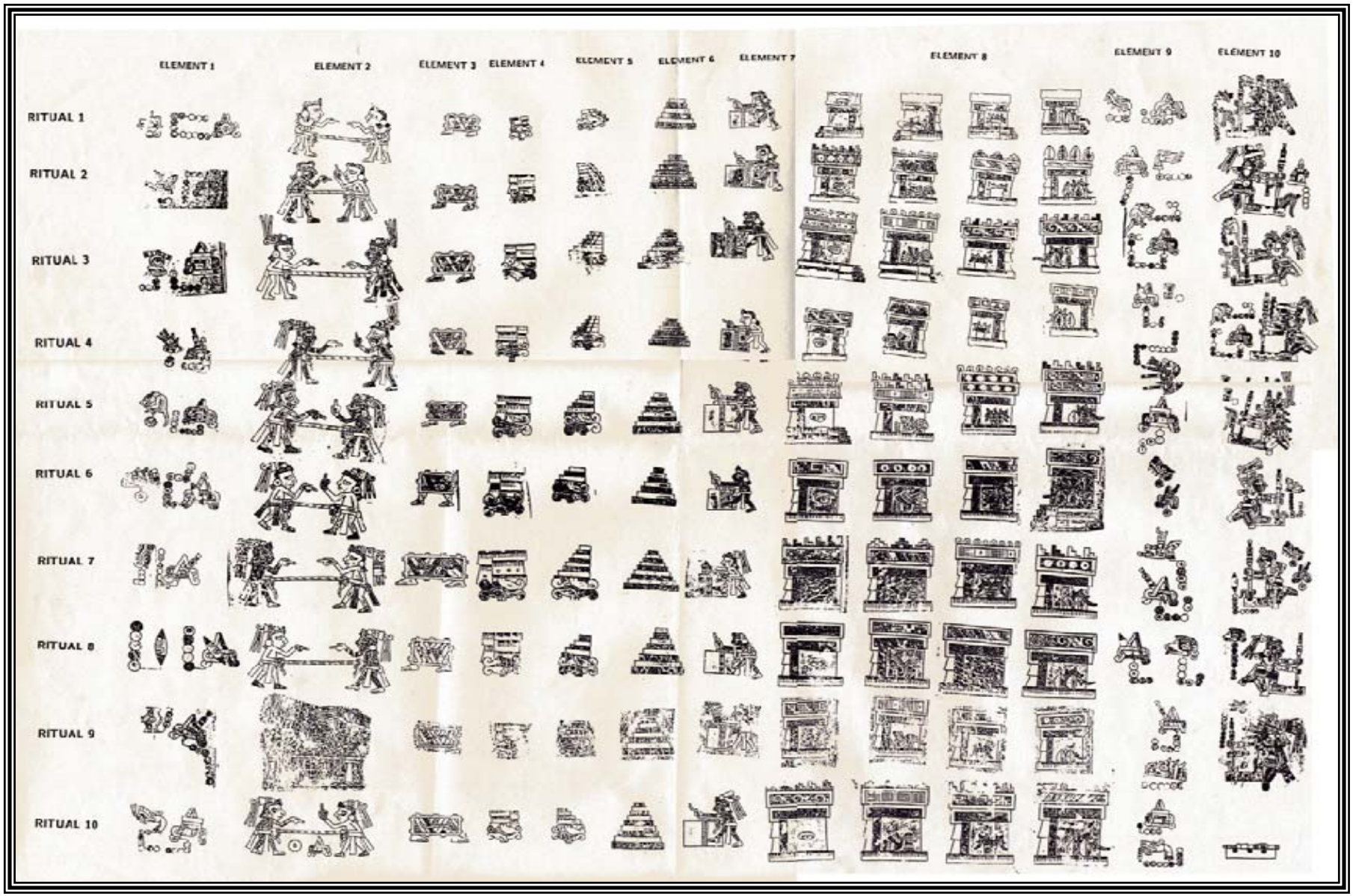


CHART 1


ELEMENT 1
ELEMENT 2
ELEMENT 3
ELEMENT 4
ELEMENT 5
ELEMENT 6
ELEMENT 7
ELEMENT 8
ELEMENT 9
ELEMENT 10
RITUAL 1
RITUAL 2
RITUAL 3
RITUAL 4
RITUAL 5
RITUAL 6
RITUAL 7
RITUAL 8
RITUAL 9
RITUAL 10

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