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By

Carl Douglas Callaway

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The Maya Cross at Palenque: A Reappraisal

by

Carl Douglas Callaway, B.A.

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**Approved by
Supervising Committee:**

David Stuart

Barbara MacLeod

Dedication

To My Father Harold Daniel Callaway and Mother Carol Elaine Callaway, and to
my beloved friends and colleagues whose generosity
and support is the foundation on which this work rests. Truly, with friends all things are
possible

Epigraph

“This tablet of the cross has given rise to more learned speculations than perhaps any
others found at Palenque.”

—John Lloyd Stephens, *Incidents of Travel in
Central America, Chiapas, and Yucatan* (1841).

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12.19.13.04.14. 9 Ix 7 Wo

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Abstract

The Maya Cross at Palenque: A Reappraisal

The following work reevaluates one of the most famous images in Classic Maya art, the Maya cross from Palenque, Mexico (250–900 A.D.). The study offers new findings that revise past ideas about the cross' material identity, mythical origins and proper name. Prior scholars conceived the cross to be a mythical tree, inhabiting the *axis-mundi* of the world and carried the title of “Wakah-Chan” or “Raised-Up Sky.” The new evidence argues that the Maya identified the cross as a tangible object, a jade tree that originated in the east and was named the “(JADE/CELT) ‘UH TE’” or the “Jade Jewel Tree.”

Central to the new argument is a jade and shell cache excavated from Palenque's North Group Temple V consisting of 107 fragments. This extraordinary find remained an obscure footnote in the site's archaeological record for the last fifty years, until Dr. David Stuart identified the cache fragments as forming a mosaic of the Maya cross. The puzzle-like pieces form a stylized jade tree complete with a giant bird in its upper branches, a draped doubled-headed serpent across its lower arms, and a grimacing “monster” mask at its base. Following Stuart's identification, I reassemble the bits of jade and shell into a recognizable image for in-depth comparison with other cross/tree forms from the Classic Period.

The analysis begins with a brief description of the cross images as they exist at Palenque, and presents a general overview of the research literature on the subject. It then surveys the cross iconography. Afterward, it reexamines the hieroglyphic corpus at Palenque. Finally, it revisits and revises the Schele and Freidel model for the Maya cross. The final analysis fits the Temple V mosaic into the larger corpus of Palenque art and history.

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List of Abbreviations

The following abbreviations will be used throughout this work:

TC	Temple of the Cross
TFC	Temple of the Foliated Cross
TS	Temple of the Sun
TI	Temple of the Inscriptions
TI lid	Temple of the Inscriptions Sarcophagus Lid
Kerr Vessel	K
PSS	Primary Standard Sequence
T	Thompson Catalogue Number

Foreword

The following work reevaluates one of the most famous images in Classic Maya art, the figure known as the Maya cross. At the Classic Maya site of Palenque (250-900 A.D.), the cross is prominently displayed as a central motif on the sarcophagus lid from K'inich Janab Pakal's tomb and on the inner sanctuary panel of K'inich Kan Bahlam II's Temple of the Cross. The author will attempt to synthesize new information about these amazing images and apply these findings to new interpretations concerning identity, locality and proper name.

From the moment of rediscovery, the cross image gave rise to many speculations. Early on, the image was labeled a "cross" or a "tree" without full comprehension of its essential nature. Such loaded terminology carried with it an avalanche of biased presuppositions that serve even today to cloud its true identity. The opposite is also true. Looking beyond simple labels, modern scholars identified the tree as the "*Wakah-Chan*," declaring that it represented not only a metaphorical tree standing at the center of the cosmos, but a celestial map of the Milky Way, a starry crocodile, a celestial canoe, a road to the underworld and even the ruler himself (Schele and Freidel 1990:239–259, Schele, Freidel and Parker 1993:69-100). While all these works have greatly contributed to our knowledge of the cross, they are now somewhat dated and in need of revision. The main purpose of the present study is to attain a greater understanding of the cross in the light of new discoveries and ideas.

Chapter 1 of the study will offer a brief description the cross images as they exist at Palenque. This first chapter will also present a general overview of the research literature, starting with the rediscovery and interpretation by John L. Stephens in 1840 and ending with the assessments of the 1990s by Linda Schele and David Freidel.

Chapter 2 presents a survey of the cross iconography. It will illustrate how the cross image varies throughout Maya art of the Classic Period. It will systematically compare the cross with over thirty like images. The examination of the cross motif will employ Erwin Panofsky's three-step approach to the study of art (Panofsky 1962:3-17). The first step is a thorough and objective description of the design motif. The second step involves collecting for analysis a large sampling of the motif just described. The present study draws from examples originating on works of sculpted stone, jade, shell and painted pottery. By assembling a large sample, one then attempts to identify the resulting patterns and variations of the motif. With these patterns identified, one gains important insights about how artists codified designs. Panofsky's third step involves iconographic interpretation and the attempt to discern the motif's thematic meaning in the hopes to arrive at a fuller understanding of the subject. Finally, to aid with the comparative analysis, I will seek help from Herbert Spinden's seminal study of Maya art by noting the simplifications, elaborations, eliminations and substitutions of the cross' various attributes (Spinden 1975:31-46).

With the iconography assessed, Chapter 3 will reexamine the hieroglyphic corpus at Palenque. A passage from the Temple of the Inscriptions Middle Panel testifies to events surrounding the 11th *K'atun* (652 A.D.). In addition, the text names the cross by its revered title and subsequently the stone from which it was made. Cache deposits of jade found at Palenque and Rio Azul will prove vital in supporting this new reading of the title.

The final Chapter 4 will revisit, analyze and revise the Schele and Freidel model of the Maya cross as was first proposed in their book *The Forest of Kings* (1990) and later elaborated in *Maya Cosmos* (1993). Specifically, it will analyze the key assumptions that led to their conclusions concerning the cross' material identity, location, and proper name. Following the re-examination of the Schele and Freidel model, a revised interpretation will be offered based on new evidence advanced in the current work.

Appendix A and B are of special importance. Appendix A examines in detail the two hieroglyphic signs Maya scribes used as labels on the cross. One of these signs stands for “tree” or “wood” while the other signifies “jade.” Appendix B offers a detailed assessment of the Temple V North Group Cache at Palenque. This cache, consisting of an actual jade cross, provides valuable insights into the cross' material origins and the ancient Mayas' perceptions of it as a jade object

In sum, this study will re-analyze the Maya cross in the light of new data and findings in hopes of understanding fully its true name, geographic location and

material identity. The examination will view the cross more in terms of a man-made object rather than a symbolic product of myth. In doing so, I hope to understand on a deeper level why Palenque royalty placed the cross at center-stage during their sacred rites of accession and death.

Chapter 1

Description and Literature Review

Chapter 1 offers a general overview of the Palenque cross. It will first give a brief description of the crosses found at Palenque, and then present a literary review of previous scholarly inquiry into the subject. The review begins with the earliest assessment by John Lloyd Stephens in the 1840s and ends with the analysis by Linda Schele and David Freidel from the 1990s. The review will focus on those researchers who first had key insights into the Maya cross. Since the majority of early insights and discussions consisted of a few sentences to several paragraphs, their studies can be quoted directly. The more lengthy arguments will be paraphrased.

Description and Context

Two crosses at Palenque are prominently displayed on the TC inner tablet and the TI sarcophagus lid (fig. 1.1 and 1.2). The two monuments were fairly contemporaneous. Palenque sculptors carved the TI lid for K'inich Janab Pakal's burial tomb, which was completed upon his death circa 683 A.D. The TC inner tablet was completed and dedicated four years later for K'inich Kan Bahlam's accession, circa 692 A.D.¹

¹ Kan Bahlam's accession occurred on 9.12.11.12.10 8 Ok 3 K'ayab (January 7th, 684 AD). According to the *Alfarda* tablets found outside the TC, the temple dedication took place on 9.12.19.14.12 5 Eb 5 K'ayab or January 10th 692 AD.

The crosses share many common attributes and are nearly identical (Schele 1974:41–71). For instance, both have a rigid, upright stance with three arms radiating outward at ninety-degree angles. At least two ends of each arm support cup-like or tri-lobed receptacles from which emanate “square-nosed serpents.” Both are bisected in the center by two lines, running vertically and horizontally while meeting at the center and each carries **TE’** and “mirror/jade” signs on its trunk (see Appendix A for an in-depth discussion of the **TE’** and “mirror/jade” signs). Surmounting the two crosses is a giant bird commonly referred to as the Principal Bird Deity (Bardawil 1974:195). Both crosses are draped with a double-headed “jeweled” serpent. Finally, standing at the base of the cross (or directly under it) is a giant skeletal head with a bowl atop its head that is infixed with a **K’IN** or sun glyph. The bowl also carries three distinct elements: a central stingray spine, a large shell, and a floral motif with crossed bands. The bowl, its contents and the skeletal head on which it rests has been known as the Quadripartite God (Greene Robertson 1974).

Evidence of three additional crosses occur at Palenque. Two partial cross-like motifs are represented on Piers C and D, House D of the Palace (Kubler 1969:37–46; Green 1974:84–85). On Pier C the standing figure cradles in his left arm the bowl with a **K’IN** infix carrying the tripartite elements (fig 1.3). Rising up from the bowl is not a full cross, but instead a branch with three square-nosed serpents. The **K’IN** bowl and serpents directly match similar elements on the TC and TI lid. Overall, it represents a pared-down version of the cross. Another square-nosed serpent is

located on Pier D of House D in the headdress of the standing female figure on the right, who wears a jade skirt and carries a **K'IN** bowl holding tripartite elements on her back (fig. 1.4). A third known cross comes from a cache deposit from Temple V, North Group (fig. 1.5) (Ruz Lhuillier 1958:185-240). David Stuart insightfully deduced (pers. comm. 2005) that this extraordinary cache reassembles into a jade and shell mosaic of a cross complete with **K'IN** bowl, “mirror/jade” signs, draped serpent, and Principal Bird Deity. Appendix B of this work describes this cache and its jade mosaic in detail. Finally, the Foliated Cross from Palenque’s TFC is not included in this survey since it does not share at least three attributes from the cross assemblage on the TC or the TI lid.²

Literature Review: Interpretations of the Maya Cross

The images of the Maya cross found at Palenque are some of the most famous objects in Maya Art. As early as 1841, John L. Stephens remarked that the Temple of the Cross “has given rise to more learned speculations than perhaps any others at Palenque” (Stephens 1969:347). Perhaps because of their novel and enigmatic character, discussions of these crosses have been largely descriptive, accompanied by an occasional light discourse into their symbolic meaning. It wasn’t until the early 1970s that scholars attempted a detailed assessment of the cross and its many features.

² These seven attributes are outlined at the beginning of Chapter 2.

Stephens' rediscovery of the cross on the TC and subsequent publication of Fredrick Catherwood's fine drawings of the Cross Group's inner tablets triggered much speculation as to the origins of the ancient Maya. The strong similarity of the Maya cross with the Christian cross was readily apparent. Yet Stephens, well traveled and personally familiar with the ancient monuments of Egypt and the Middle East, was careful not to jump to any foregone conclusions. Instead, he offered a careful description of what he saw, relating the images to the ceremonial complex in which it was found:

The principal subject of this tablet is the cross. It is surmounted by a strange bird, and loaded with indescribable ornaments. The two figures are evidently those of important personages. They are well drawn, and in symmetry of proportion are perhaps equal to many that are carved on the walls of the ruined temples in Egypt. Their costume is in a style different from any heretofore given, and the folds would seem to indicate that they were of a soft and pliable texture, like cotton. Both are looking toward the cross, and one seems in the act of making an offering, perhaps of a child: all speculations on the subject are of course entitled to little regard, but perhaps it would not be wrong to ascribe to these personages a sacerdotal character. The hieroglyphs doubtless explain all... This tablet of the cross has given rise to more learned speculations than perhaps any others at Palenque. Dupaix and his commentators, assuming for the building a very remote antiquity, or at least, a

period long antecedent to the Christian era, account for the appearance of the cross by the argument that it was known and had symbolical meaning among ancient nations long before it was established as an emblem of the Christian faith...There is reason to believe that this particular building was intended as a temple, and that the enclosed inner chamber was an *adoratorio*, or oratory, or altar. What the rites and ceremonies of worship may have been, no one can undertake to say (Stephens 1969:346–347).

As early as 1868, Daniel G. Brinton was the first to publish that the cross on the Palenque TC was in fact a stylized tree (Brinton 1868:95). He observed that the cross was related to similar images of cardinal trees depicted in ancient Mexican manuscripts:

Frequently, therefore, in the codices and carvings from Mexico and Central America we find the tree of life, in the form of a cross, symbolizing the four cardinal points and their associations, connected with these symbols of the serpent and the bird; as in the celebrated cross of Palenque, which is surmounted by the quetzal bird and perhaps rests on a serpent mask (Brinton 1896:141).

Later in 1889, A.P. Maudslay came to Palenque to accurately photograph and draw the Palenque artifacts and temples. Although Maudslay records the ground plan,

architecture, stuccos and hieroglyphs of Palenque's main temples he offers little or no interpretation of the iconography of the TC. He does point out, however, that the central design on the TC (the quadripartite bowl at the base of the tree) occurs as part of a headdress at Copan and Menché Tinamit (now known as Yaxchilan) (Maudslay 1974:Vol. I:51, Vol. IV:37). Maudslay went as far as to illustrate on plate 92 of his *Biologia Centrali-Americana* that the ends of each branch of the cross form bearded serpents, which Nuttall later described as "bead or seed-like ornaments and appendages" closely approximating flowers (Nuttall, 1900:236).

Zelia Nuttall, the renowned scholar who rediscovered and published the Zapotecan manuscript now known as the *Codex Nuttall*, also published a short analysis of the famed Palenque Cross image. She also came to a similar conclusion, drawing in part on Brinton's previous work. She writes:

Dr. Brinton has already shown that the well-known symbol on the famous 'Tablet of the Cross' is not a cross, but a conventional symbol for 'tree'.

Collectively, the evidence set forth in the preceding pages identifies the image . . . as a symbolical representation of the Tree of Life of the Eldest Sons--chiefs or nobility of a tribe, whose totemic bird was the quetzal (Nuttall 1900:671–673).

Nuttall also mentioned that the Palenque crosses “resemble those on the *Mexican Féjervary* chart inasmuch as, in each case, the tree is surmounted by a bird and is flanked by two human figures” (ibid.)

At nearly the same time, Edward Seler (1901–1902), in his commentary on the Aztec *Codex Fejerváry* –Mayer, arrived at a similar conclusion, as did Nuttall and Brinton. Eduard Seler also correlated the cross images at Palenque with similar depictions of cardinal trees found in ancient Aztec manuscripts. In his brilliant commentary on the Aztec Codex, he includes a short discourse on Palenque’s TC and TFC inner tablets. Here are a few of his keen observations from that study:

Now yet another parallelism is called up by the tree symbolizing the four, or, say five quarters of the heavens, with the birds rocking on their summits, as they are displayed in these concordant representations of the codex Borgia group of manuscripts . . . And then we are of course reminded of the two famous so-called crosses on the Palenque altar-pieces, and this all the more since a bird of such rich plumage is poised on the top of these crosses . . .

Even observers little familiar with the forms of these monuments cannot fail at once to recognize this [the cross] as a tree (Seler 1901–1902:16–17).

Seler went on to say that the triad of temples of the Cross Group and the central image of each inner tablet are perhaps tied to specific cardinal directions, with the TFC corresponding to east, the TC to north, and the TS to west. In addition to

these deductions, Seler comments on other features of the TC image, such as the “monster head” located at its base:

This monster’s head is drawn like a skull, with fleshless, boney lower jaw, and bears on its forehead a hieroglyph which is remarkably like that of the element kin, ‘Sun,’ and may no doubt be confidently identified with it. Above rises a triple group of elements, which in this connection occur not unfrequently with the figures and in the hieroglyphs of the monuments above the face of the Sun God . For the rest, the whole of this monster’s head with the kin–sign on its brow, and above it the triple group of elements, is also to be seen in quite a similar manner on the stela J at Copan. Here it forms the helmet–mask of the god who is figured on the front side of this stele. Kinch Ahau, the Sun God, also indicates the Northern quarter of the heavens both in the Dresden manuscript and in the uayeyab feasts described by Landa (Seler 1901–1902:19).

In 1914, Thomas A. Joyce made the observation that the Maya cross seems to parallel those found in the *Cordex Borgia* and that the elements at the base of the tree were most likely related to earth/mountain gods:

In the relief at Palenque known as the cross, the conventional tree (for such it is in reality) springs from the head with the combined death–and–sun symbols. In this case the part is taken for the whole; the head represents the

earth-monster, and the whole scene is in exact parallel to the Borgia Codex, in which the trees of the world-directions are shown rooted in the body of the monstrous earth goddess. The Vaticanus B Codex is an even closer parallel, since the trees representing the quarters are there depicted as springing from a cipactli head, and it will be remembered that the Mexicans believed the earth to have been created from a monstrous cipactli (Joyce 1914:235).

By the 1950s, Maya ethnographer Raphael Girard began interpreting the Palenque crosses as trees through his field work with the Chortí of Honduras. Girard was one of the first ethnographers to recognize that elements of modern Chortí ritual showed strong parallels with Classic Maya imagery. He noted that the present day foliage-covered crosses inside the sacred houses of the Chortís were reflective of the Palenque images. When referencing the central images on Palenque's TC and TFC, he states:

Like the present-day Chorti cross covered with green leaves, this is an interesting representation of the Tree of Life and basically takes the form of a maize plant or of a cruciform tree covered with maize leaves. The symbolism of this figure is kept alive among the Chortís who equate the foliated cross with a tree or maize plant (Girard 1995:284).

The discovery of Pakal's tomb and carved sarcophagus lid in the summer of 1952 at Palenque ignited a whole new fascination with the cross image. César Lizardi-Ramos was one of the first to reexamine the cross motif, judging it to reflect a maize plant like that which is found on the TFC. Ramos states:

La escena, como ya se ha dicho, representa el sacrificio de un personaje, acaso a los dioses del maíz, del agua y de la tierra, según lo infiero por las volutes de hojas de maíz y las flores. . . El llamado Motivo Cruciforme de la Lápida recién descubierta no es más que una planta de maíz estilizada, semejante a las que vemos en el Templo de la Cruz Enramada.

Alberto Ruz Lhuillier, the discover of Pakal's tomb, also adopted the idea of the cruciform motif on the TI sarcophagus lid as a variation of a corn plant seen on the TFC. He writes:

The cruciform motif upon which the man fixes his gaze so feverously is the young corn which with the help of man and the elements rises out of the earth to serve once more as food for humanity. To the Maya, the idea of resurrection of man himself and the frame of astronomical signs around the scene symbolizing the eternal skies would give cosmic significance to the perpetual cycle of birth, life, death, and rebirth of beings on the earth. (Ruz Lhuillier 1970:118).

In the next years, the idea of a corn plant takes hold with many scholars. Beatriz De la Fuente (1965:136) echoes these similar ideas in her book *La Esultura de Palenque*:

Las cruces: signo convencional de la planta del maíz, o símbolo cósmico de la vida, que en la mentalidad maya tenía significación análoga y cuyo esquema ha sido tema de meditación inagotable, da presencia con formas vegetales y serpientes y multitude de pequenos motives simbólicos secundarios, al concepto de la vida en una dimension no humana.

Heavily impacting the decade of 1950s Maya research was the newly translated *Popol Vuh* by Adrián Recinos (1950). The book recalls the death and rebirth of the Maize God Jun–Junajpú and how shortly after his death his decapitated head was placed among the branches of a calabash tree by the lords of Xibalba. The story explains how later, his twin sons overthrew those lords of Xibalba and resurrected their father (Recinos 1950:118 and 163). The ideas of death, burial, rebirth, maize and the imagery on Pakal's sarcophagus lid and the Maize God story seemed in perfect accord with one another.

In 1967, Eric Thompson, on a commentary describing Merle Greene's rubbing of the TI sarcophagus lid (Green 1967:plate 16), returned to the opinions of Brinton and Joyce while elaborating further on the concepts of human sacrifice and rebirth:

The central motif of the lid is a world-directional tree, as on Plate 12 [the inner sanctuary panel of the TFC] with the same mythical bird perched on top, but the branches terminate in grotesque celestial snakes. A Double-headed snake with heads of gods in its open jaws is twined about the branches. The tree rises from, or behind, the loins of the personage who reclines awkwardly on the head of the earth monster. World-directional trees in Mexican pictorial art likewise rise from bodies in the same awkward postures, but they are gods and seem to have been sacrificed. In the Dresden Codex, a Maya hieroglyphic book, a tree similarly rises from the body of a sacrificed person. The scene is therefore ritualistic and may have no reference to the buried chief. Equally possible, the dead chief, after his apotheosis, may be depicted in the role of supporter of the sacred tree. Perhaps he was sacrificed in accordance with the ritual of Fraser's *The Golden Bough* (ibid).

Here, Thompson offers yet another intriguing possibility that the cross is actually growing out of the dead ruler in the form of a tree which acts in part as a symbol for death and rebirth.

In the late 1960s, Kubler, in a discussion on Maya iconography, integrates the viewpoints of Lizardi Ramos and Eric Thompson:

The crypt contains three figural scenes relating to dynastic funerals, placed on the sarcophagus lid, on its side walls, and on the walls of the crypt. The Lid

has a sky-sign border on the long sides. Within are skeletal jaws like those of an earth monster. Within the jaws is a long-nosed head, surmounted by a triadic sign upon which a youth reclines. Behind him rises a corn plant. On its crosspiece hangs a serpentine ceremonial bar, and a mythical bird perches atop the plant. The corn-plant symbolism, which repeats that of the Temple of the Cross, may stand as a metaphor or allegory for renewal in death, whereby the grown corn and the dead ruler are equated as temporal expressions promising spiritual continuity despite death of the body (Kubler 1969:27).

By the time of Kubler's study, few new advances or suggestions had been made concerning the Maya cross and its various attributes. Aside from oblique references to the plant world and the corn god, its true function and relevance to Classic Maya ritual remained largely speculative. Maya epigraphy was still in its infancy, so the hieroglyphs remained mute on the subject. Scholars still had made little progress in understanding why the cross took a central role in elite rituals during life and death. No one had yet attempted to truly analyze and break down its component parts, understand its various themes, and relay these findings to a greater whole of Maya art and research.

Palenque's Mesa Redonda proceedings from the early 1970s proved to be a new dawn for Maya studies. The meetings inspired a whole new inquiry into the art, iconography, writing and history of this Classic Maya site. It was here that Linda

Schele attempted the first in-depth assessment of the cross (Schele 1974:41–71 and 1976:9–34). Her lengthy and complex analysis drew from a variety of source materials including Maya epigraphy, linguistics, archaeology, art, and modern ethnography. She verified that the crosses on the TI sarcophagus lid and the TC were one and the same by charting the many iconographic correspondences between both. With the aid of new decipherments and calendrical dates, she proved that the TC cross took center stage during the accession ritual of *Kan Bahlam II*, the son and heir of the great Pakal. Using Thompson’s decipherments of the **KAN (K’AN)** symbol for the color yellow, she associated the **KAN** cross motifs found at the base of the TFC and elsewhere with symbols of preciousness, water and jade (1974:24)³. Furthermore, using ethnographic data from Eric Thompson’s work *Maya History and Religion* (1970), she discreetly asserted that a continuity existed between Classic Maya art and modern Maya ritual and that ethnography could be used to explain the art. For instance, Thompson wrote and Schele quoted:

Countering this severely geometric structure, a giant ceiba tree, the sacred tree of the Maya, the yaxche, ‘first’ or ‘green’ tree, stands in the exact center of the earth. Its roots penetrate the underworld; its trunk and branches pierce the various layers of the skies. Some Maya groups hold that by its roots their ancestors ascended into the world, and by its trunk and branches the dead climb to the highest sky (Thompson, 1970:195).

³ Schele would later associate these ideas and symbols of “preciousness” with the so called “mirror” signs at the base of the TC.

Schele purported that the “cross motifs of the TI lid and the TC seem to be exact images of the central tree described by Thompson” and that the cross did indeed represent a Ceiba tree that stood at the center of the cosmos (Schele 1974:17). She further advanced the concept that the ethnographic data and ancient iconography showed that the entire cross composition represented three fixed levels of the cosmos including sky, earth and underworld, with the cross inhabiting the earthly, middle world.

Furthermore Schele tentatively identified the face of the supernatural emblazoned at the base of the cross on the TI lid as either God C or the Sun God, who she said is also found in the form of a bejeweled element such as the necklace around the cross of the TFC (ibid:22).

On these last two points, Schele summed up her main findings stating the following:

The Temple of the Cross and the sarcophagus lid present an iconographic program characterized by a tri-level vertical model of the cosmos– the celestial, middle world and underworld. This model of the cosmos is transversed by the quadripartite god, which I believe is conceptually the cyclic sun (in terms of daily and yearly solar cycles) . . . (Schele 1978:41).

So with this interpretation, the cross represents both the middle world and a celestial pathway or point by which the sun travels.

In *The Blood of Kings*, Linda Schele and Mary Miller offered revised interpretations based on a variety of new and old data (Schele and Miller, 1986). They confirmed once again that the cross did represent a ceiba tree that stood at the *axis mundi* of the world, while adding many new details about its component parts. About the TC tablet they reconfirmed previous ideas of centrality and cosmic pathway, stating:

Chan–Bahlum and his dead father face each other across the World Tree whose central position in this composition reiterates that is the central axis of the world. At the base of the tree is the Quadripartite Sun Monster frozen partly above and partly below the ground as it enters the Underworld in its daily journey through the cosmos (ibid, 114).

On the TI lid the authors hold to a similar view that the main icon is an arboreal image, but they go into greater detail in describing the tree's three-tiered composition and in assessing the symbolic meaning behind each component--including interwoven and complex ideas of centrality, death, spiritual resurrection, blood, sacredness and sacrifice:

The lower half of the main image is a split representation of the gaping maw of the Underworld. Joined at the chin, two huge skeletal dragons form a U–

shaped container representing the entrance to Xibalba. Their snouts curve inward, as if they are about to close over the falling body of Pacal. From the center of the cave rises the axis mundi, the World Tree at the center of the universe. A Celestial Bird, the symbol of the heavenly realm, sits atop the tree.

The World Tree is specially marked as a sacred being; *te'*, or “wood,” signs tell us it is a wooden tree. *Nen*, or “mirror,” signs mark it as a thing of brilliance and power. A huge image of God C, the symbol of blood and sacredness, is inscribed on the base of the trunk; it is partially overlapped by Pacal’s body. The ends of the branches are shallow bowls with the reflection marks of a mirror on their sides. Outlined by beads of blood, they are the bloodletting bowls of sacrifice. The square-nosed dragons that emerge from these bowls have jade cylinders and beads lining their mouths, marking them as especially sacred. These bejeweled dragons are deliberately contrasted to the skeletal dragons below them. One represents the heavens, the highest and most sacred of the three levels of the Maya cosmos. The other represents the world of death, into which Pacal is falling.

The square-nosed serpents symbolize flowing blood. In other contexts, they emerge from stingray spines or replace them in the forehead emblem of the Quadripartite Monster. They often appear with other symbols of blood—[with] shells, bone beads and yax, chac, kan or “zero” signs attached to them.

Both the God C on the trunk of the World Tree and these Square-Nosed Dragons are symbols with double meaning. The word for sap--in particular rubber and copal, a resin incense still prized by the May--simply means “blood of the tree” in many Mayan languages. This use of blood symbols is, then, a play on words. On a deeper level, the sap of the tree is the medium through which the gods and the souls of the dead can pass. These blood symbols declare that the blood of sacrifice is to the world of kings and gods as the sap is to the tree (ibid.:284–285).

With later publications of the early and mid-1990s, Linda Schele and David Freidel would continually build on the core ideas that the Palenque cross is a mythological tree that stood at the center of the world and acted as a path through which souls could pass. In their work *The Forest of Kings* (1990), the authors emphasized that not only was the cross a tree, but it simultaneously represented a corn plant, a road to the underworld and the ruler himself. In addition, they proposed new evidence for the name of the cross as the “*Wakah Chan*.” (Schele and Freidel, 1990:239–259). In *Maya Cosmos*, they advanced a “stellar” claim that connects the cross to the stars of the nighttime sky. Marshaling evidence from all facets of Maya art--writing, epigraphy, ethnography, archaeology, astronomy and history--the authors proposed that the Palenque cross further represented the Milky Way. They asserted that according to its position along the ecliptic during different parts of the

year, the Milky Way can inhabit the form of a celestial cross, a crocodile or a canoe that carries the dead as well as deities like the Maize God into the underworld (Freidel, Schele and Parker 1993:69–100).

Conclusions

The iconic image of the cross has been shared by cultures the world over throughout the ages. The image takes on symbolic significance when it implies something beyond its obvious and immediate meaning. (Jung 1964:20) Precisely what it symbolized for the Classic Maya has been the subject of much scholarly debate. Researchers past and present who have sought to unravel the enigma of the Palenque cross have found it to contain multiple levels of meaning. All have in some way attempted to relate the cross back to a native perspective based on evidence found in indigenous sources. Although opinions vary widely as to its true identity, purpose and symbolism, scholars do agree on some general characteristics. The cross is a stylized tree that most likely is related to one of five trees the Maya thought inhabited the five principle directions of their sacred landscape, and it is a bejeweled plant adorned with emblems of wealth and sacred power. They also agree that a cross-like tree, with its accompanying bird and draped serpent, was not unique to the Maya but was a sacred image shared by many neighboring cultures. In the pages that follow, these ideas, both old and new, will be tested and reexamined in the light of new discoveries and data.

Chapter 2

Comparative Analysis of Cross Iconography

This chapter offers a comparative analysis of the Palenque cross and its main attributes. It compares the cross with similar images in the Maya corpus found on pottery, stone and shell. The analysis is by no means exhaustive, but serves to acquaint how the cross image varied under the hands of different artists and media during the Classic Period.

Main Iconographic Features of the Maya Cross

The cross images on the TC and TI lid share seven attributes that are almost identical (fig. 2.1 and 2.2) (Schele, 1974:9–31). First and foremost, the body of each cross possesses a stiff, almost angular posture with three arms jutting outward from the center at ninety degree angles. Six more attributes add to the cross assemblage. From top to bottom, these characteristics are: 1) a bird of rich plumage perched at the top of the cross, stands in profile displaying serpent-tipped wings, a jawless beak with a twisted cord hanging from its mouth, and a large, beaded necklace about the neck; 2) square-nosed serpent heads emanating from the tips of the cross's arms; 3) a draped, double-headed bejeweled serpent with gaping jaws; 4) a bowl with an infixed **K'IN** sign holding three distinct objects; 5) beneath the bowl sits a huge monster skull with fleshless lower jaw and giant ear spools, and finally, 6) both images share borders composed of celestial sky bands, and contain background elements consisting of floating jewels, flowers and hieroglyphs.

Fortunately for the investigator, similar crosses--sharing three or more of the above attributes--appear frequently in the iconographic record. These crosses commonly occur on painted pottery vessels (fig. 2.3). The painted images differ in one primary aspect: rather than a stiff geometric figure of a cross, the paintings overwhelmingly depict the cross as a tree, complete with curving limbs, sprouting fruit pods and leaves.

Evaluation of Cross Features: Method and Analysis

A systematic examination of cross images begins by employing Erwin Panofsky's approach to the study of art motifs, which includes three steps: description, analysis and interpretation (Panofsky 1962:3–17). The first step is a thorough and objective description of the motif under examination. The second step involves collecting and analyzing a large sample of the motif just described (the present study draws from over thirty examples originating on works of sculpted stone, jade, shell and painted pottery). After assembling the sample, one then attempts to identify the resulting patterns and variations of the motif. At the same time, one compares and contrasts parallel and opposing attributes in order to recognize how designs evolve and change. Panofsky's third step involves interpretation and the definition of the motif's theme. This last step is by far the most hazardous since motifs have a tendency to change form and meaning through time. To limit the threat of disjunction (historical breaks in a motif's meaning) and subsequent

misinterpretation (see Kubler 1961), the current examination will narrow the scope of its analysis to images from the Classic Period only. It should be mentioned that a multitude of similar cross forms exist within Pre–Classic and Post–Classic Maya art, and among later, neighboring cultures.⁴

Additional guidelines will be adopted from Herbert Spinden’s systematic study on Maya art. These guidelines will aid significantly in the comparative analysis in step two, and will help describe the variation found between subjects (Spinden 1975:39–46). Spinden explained that with decorative art there are definite processes at work within the depiction and modification of any given figure over time (ibid:38). These processes are: 1) Simplification, 2) Elaboration, 3) Elimination, and 4) Substitution. All work together or apart to help modify a given subject.⁵ Of course, these four distinctions are only useful if the subjects under discussion are deemed equivalent. The current study judges crosses to be equivalent when they share three or

⁴ For depictions of trees among neighboring cultures see the Techinantitla Murals at Teotihuacán (Berrin and Pasztory 1993:202), Codex Nuttall, pages 51 and 76 (Nuttall 1975:51 and 76), the Codex Vindobonensis, page 37 (Adelhoffer 1963:37), Codex Borgia, page 53 (Nowotny 1976:53) and Codex Fejervary-Mayer, page 1 (Burland 1971:1).

⁵ Here is how Spinden defined each of these four processes at work:

Simplification: “All the details [of a subject] are represented economically in few lines, and there is a splendid harmony of parts that defies analysis. Of course the simplification could be carried further by omitting the extraneous features. Indeed, a sort of factoring out could be carried on till the irreducible characteristic was reached (Spinden 1975:40).”

Elaboration: “This process amplifies rather than reduces and by means of adventitious ornament renders the original form more complex” (ibid:41).

Elimination: “Elimination of one feature after another of natural motive till only one or two survive is a common phenomenon the world over in decorative art” (ibid:45).

Substitution: Substitution of “new and striking details for old and commonplace ones—even at the cost of the first meaning of the design—is one of the simplest and most natural ways by which the imagination can reconstruct and revivify worn-out subjects. The creative effort is much less in making a parody than an original production. For the parody preserves, in greater and lesser degree, the fundamental composition upon which much of the esthetic interest of the original depends” (ibid.; 46).

more common attributes (such as bird, draped serpent and bowl) with the images from Palenque.

Even with such careful limits and precautions set in place, one will always run the risk of an improper identification. Yet the benefits gained by comparison of the various motifs and the subsequent identification of key features far outweigh the risks involved.

The analysis of cross attributes will begin with a basic description of a particular feature based solely on the Palenque examples and will then proceed to note (if applicable) its simplification, elaboration, elimination, and substitution found in other examples. After the analysis, a discussion will follow that attempts to identify the major theme or themes underlying each attribute. Special emphasis will be given to the main body of the cross which is the primary focus of the current study.

The Cross Body

Description

The bodies of the crosses on the TC and the TI lid are nearly identical forms (fig. 2.4). Each has a rigid upright stance with squared arms radiating outward from the center. Both are bisected by two lines, running vertically and horizontally, meeting at the center. The bodies carry several markings. **TE'** 'wood' and "jade" signs appear on the trunk (see Appendix A for a complete discussion and analysis of these two signs). In addition, the cross on the TI lid carries the head variant of the

jade sign along with an oval shell-like motif just above the back of the eye. Finally, at the tips of each cross are square-nosed serpents emerging from cup-like receptacles.

Simplification

In its most simplified form, the body of the cross was depicted as a portrait of a tree with two spreading branches. A basic rendering is found on the Rio Hondo Bowl (fig. 2.5). The tree has a bird in its upper branches, a clear oval jade sign infixed into its trunk and a bowl sitting beside it. Two curved, intertwined branches stand--not with ridged arms jutting stiffly outward, but these rather flow and bend like other organic fluid forms from the arboreal world. The branches terminate in two heart-shaped blossoms or leaves. A single leaf emanating out of a **K'IN** bowl also can imply the presence of the tree (fig. 2.6) (Hellmuth 1987:74, fig. 96 and 92, fig. 125).

A tree need not even have a cross shape or bifurcated branches. Rather, trees with single or multiple vertical stalks shooting skyward were also rendered (fig 2.7). It is clear that the Maya drew trees with the same variability of forms one sees in nature--as a young sprout with a single elongated stem or as an aged plant with a thick, bulging trunk and umbrella-shaped canopy.

Elaboration

Maya artists elaborated the cross in any number of ways, mostly through ornamentation of the body and arms with glyphic signs and stylized fruits, leaves and blossoms. The crosses at Palenque manifest large square-nosed serpents at the tips of their arms rather than foliage or fruit. The serpents emanate out of cuplike or tri-

lobed receptacles. The cups on the TI lid are also infixed with oval jade signs and are beaded with a series of dots around the border suggesting that they are in fact flowers (Schele and Matthews 1998:113). The cross' body on the TI lid is further ornamented with many **TE'** and jade signs. Over six jade signs inhabit the TI lid cross, one of which is the head variant for jade (see Appendix A). The four **TE'** signs carved are the "line-and-dot cluster" of essential markings derived directly from the normal variant of the **TE'** hieroglyph. Both signs serve to cue the viewer as to the cross's two material qualities--one of wood and the other of jade.

Vases K4546 and K1226 have especially fine examples of naturalistic looking trees with leaves and fruit pods (see fig. 2.3a-b). The pods themselves are marked with oval jade signs while the center of the tree trunks are marked again with the **TE'** "line-and-dot cluster."

In addition, the swollen trunks of the trees manifest yet another version of the **TE'** sign. Painters emblazoned the tree trunks with the grotesque head variant of the **TE'** glyph (fig. 2.8). The head is quite ghoulish looking with its giant crossed eyes, Roman nose, a disembodied jaguar paw over the ear, and root-like tentacles hanging out of its jawless mouth. This **TE'** head may at times carry a circular knot hole (often in the form of a quatrefoil) on its forehead. Kerr Vessel 4013 displays a deer-eared serpent emerging out of the knot hole (fig. 2.9). On the forehead can also appear a pair of crossed bands or an oval shaped jade sign. All these examples show that the

head variant and the normal variant of the **TE'** sign can appear simultaneously on the same tree.

In addition to the various leaves, blossoms and infixed signs, the body and arms of the tree can morph into a multitude of zoomorphic creatures, as it does on the Cosmic Plate (fig. 2.10) (Schele and Miller 1986:310–312) (fig. 2.10). In the center of the plate, is a portrait of Chaak–Xib'–Chaak (a god with strong ties to the east), holding his axe and standing waist–deep in water. A fantastic forked tree sprouts from the top of Chaak's head. At the base of the trunk is the same profile portrait of the jade head as seen on the TI lid. The tree branches morph into several zoomorphic heads. The left branch curves into three heads with the largest being that of saurian–like creature. The right branch sprouts into two more abstract faces. Here, the top head has a pair of crossed bands in his forehead and curling above the back of its skull is a heart–shaped leaf.

Substitution

The body of a caiman will sometimes substitute for the trunk of the tree (fig. 2.11a–b). Caiman examples are found on the Early Classic Delataille Tripod bowl and on Kerr Vessel 1607 where the tree sprouts from the upturned haunches of the animal (Hellmuth 1988:164 and Taube 1989).

Moreover, a tree emanating directly out of the a human corpse or sacrificed person is a popular image on many other vases, as on Kerr Vessels K501, K631, K998 and K6547 (fig. 2.12a–c). Kerr Vessel 6547 displays perhaps the finest

example of a sprouting human figure (fig. 2.13a). As Taube points out (2004:70–83), one of three trees on K6547 is the Maize God sprouting as a cacao tree directly over the corpse of a dead human who lies beneath in a watery grave.⁶ Like the Palenque cross, the tree is complete with a prominent **TE'** symbol infixed into its trunk and the serpent, bird, and the T1017 head variant of the jade sign in its upper branches. Classic stone monuments record similar imagery. An orchard of ancestors sprouting as fruit trees around the edge of the TI sarcophagus lid offers one such case (fig. 2.13b) (Ruz 1958:102; Thompson and Greene 1967; Schele and Matthews 1998:121). Taube (1994:672) also relates that sprouting trees and sacrifice are two overlapping images found on the accession monuments of Piedras Negras, as on Stelae 11 and 14 (fig. 2.14a–b).

Incense burners with the head variant of the **TE'** sign will substitute entirely for the tree itself. Although difficult at first to recognize, the substitution of burner for tree is clearly represented on Kerr Vessel K1377 (fig. 2.15a). Here, a burner with bowl atop it sits directly in the split belly of a slain human. The base of the burner is marked by the **TE'** head variant, identified clearly by its missing lower jaw and jaguar paw above the ear. The tree trunk acts as a wooden stand to hold the offering bowl. The Principal Bird Deity flying directly above the sacrificed victim verifies that the scene below is echoing the cross assemblage.

⁶ This conflation of cacao with maize iconography occurs on several Maya drinking cups due to the fact that chocolate and maize gruel were combined to produce a frothy beverage quite popular with the Maya elite. The inscribed contents on many of these cups reads “ixim-te’el kakaw for “maize–tree–like cacao” (Miller and Martin 2004:78).

One can argue that on K1377 the **TE'** head is simply substituting for the wooden bowl itself. Yet actual clay burners exist in the archaeological record that carry treelike spikes or nodules that are an exact match for thorns on the trunks of young Ceiba trees (fig. 2.15b) (Freidel, Schele and Parker 1993). Clay burners with vertical rows of these nodules along the sides are found abundantly at Copan (see K5476c). In a detailed study of the Birth Vase, Taube (1994:668–669) discusses several of these spiked censers or bowls with **K'IN** infixes. The spiked burners themselves are personified beings bearing grotesque faces with long snouts and gaping mouths (fig. 2.15c–d). In all these examples of spiked censers one recognizes that the Maya artists collapsed portraits of tree and incense burners/bowl into a single form.

Finally, the loin aprons which kings wear around their waists carry several cross ornaments. The T1017 supernatural head bordered by square-nosed serpents commonly hangs below the waist and between the legs, like that on Dos Pilas Stela 1 (fig. 2:16a) (Schele and Miller 1986:77). On Copan Stela C the loincloth apron edges are composed of square-nosed serpents whose tips end in leaflike forms (fig. 2.16b–c). Instead of the T1017 face, the serpents frame a crocodile head, no doubt reflecting a caiman–tree connection (Schele and Matthews 1998:143).

Elimination

The main body of the tree could be completely eliminated, leaving only traces of blossoms or foliage. The cross cradled in the arm of a standing figure on House D,

Pier C exemplifies such a reduction wherein all that is left of the tree are three square-nosed serpents (see fig. 1.4). On the inner rim of the Cosmic Plate (K1609) the image located off the back end of the Cosmic Monster is reduced even further, showing but one square-nosed serpent (fig. 2.17). Artists completely eliminated the upper tree body and branches, leaving only the tree trunk. In such cases, the trunk is recognized solely by the **TE'** head as seen on Kerr Vessels K0998, K4336 and K8233 (fig. 2.18a-c). Yet more often than not, Maya artists cued the viewer that the portrait was indeed a tree by adding a bit of leafy foliage atop the **TE'** head.

There are instances when all traces of the tree were completely eliminated. A good example of this is found on the back of Stela H, Copan where as *Waxaklajun Ub'aah K'awiil's* Maize God back rack, the bird stands atop the **K'IN** bowl and monster head. A clear elimination of the tree is depicted on Kerr Vessel K3801 where lack of space prevented the artist from depicting the entire tree (fig. 2.19). What the artist does show is the Principal Bird Deity standing above a bell-shaped blossom and the bowl. In this case, the blossom is meant to represent the entire tree. Another example of elimination occurs on the Blom Plate and on vessel K3032 (fig. 2.20). The scene on the Blom Plate is analogous to Kerr Vases K4546 and K1226 where one or both of the Hero Twins are taking aim at the bird with their blowguns. The bird sits atop the tree with wings outstretched. Completely absent from the Blom Plate are the tree itself, the snake, and the **K'IN** bowl. The bird does stand over an animated waterlily, a key emblem of an underworld watery locale and often found vertically in

line and directly under the base of the tree (see the Cosmic Plate K1609 for such an alignment). The bird and lily represent the zenith and nadir realms of the tree.

Discussion

It is clear from equivalent portraits on pottery that the cross images at Palenque were meant to be viewed in part as trees. Hieroglyphic markings for wood on the main stem of the cross identify the image as a tree or as having been made from wood. The jade symbols infixed on the body indicate that Palenque crosses are not only plantlike but that they derive from jade.

The stiff, angular posture of the Palenque crosses are unique and do not correlate to any other equivalent Maya forms from the Classic Period.⁷ Their ridged, geometric stance and the fact they are covered with jade markings may well allude to the manner in which they were originally constructed--that is, if the cross is treated not as a mythical representation but instead as an image of a man-made object. The unique stance may indicate that the body was fashioned from stone, particularly as a jade mosaic in which jade tesserae were cut into small rectangular blocks and fit around a cylindrical mold of wood or clay. Cylindrical vessels of cut jade attached to wooden molds do exist in the archaeological record; examples are those found from Tikal Temple 73 Burial 196 and Temple 1 Burial 116 (see Appendix B, fig. B.8). These jade cups reveal the absolute mastery of Maya lapidary craftsmen. Their ability

⁷ It needs to be mentioned, however, that two geometric crosses with circular blossoms at the ends were found painted on two polychrome vases (see Coe 1989:176 and Houston, Stuart and Taube 1992:507). Both stand erect in offering bowls. These representations are not included in the current survey since they do not possess additional attributes (like a draped serpent or bird).

to cut and fit a series of polished jade plaques around a curved wooden surface, as well as to carve and assemble minute, three-dimensional jade portraits is truly remarkable.

Many scholars claimed early on that the Palenque cross was perhaps a portrait of a ceiba tree (De la Fuente 1964:135–139; Ruz Luillier 1963 103–122; and Thompson and Greene 1967:16). Scholars were well aware of other descriptions of mythical ceiba trees found in Post–Conquest manuscripts from Yucatan--the Books of Chilam Balam. These books describe the ceiba as one of five trees that the gods erected during the creation of the world. The Book of Chilam Balam of Chumayel provides a detailed written account of the world-ordering that followed on the heels of a previous destruction. It states that at the start of the current creation, the gods called Bacabs assigned a specific color, ceiba tree and bird to each cardinal station.⁸

⁸ The following is a description of world trees set up at creation from The Chilam Balam of Chumayel:

Then the sky would fall, it would fall down upon the earth, when the four gods, the four

Bacabs, were set up, who brought about the destruction of the world. Then, after the destruction of the world was completed, they placed <a tree> to set up in its order the yellow cock oriole.

Then the white tree of abundance was set up. A pillar of the sky was set up, a sign of the

destruction of the world; that was the white tree of abundance in the north.

Then the black tree of abundance was set up < in the west> for the black–breasted piʼooy

to sit upon.

Then the yellow tree of abundance was set up < in the south>, as a symbol of the destruction of the world, for the yellow–breasted piʼooy to sit upon, for the yellow cock

oriole to sit upon, the yellow timid mut.

Then the green tree of abundance was set up in the center <of the world> as a record of

the destruction of the world. (translation by Roys, 1967:98–99).

The description of a tree with a bird in its upper branches is an emblem that matches crosses at Palenque and trees on Classic Maya pottery. But did the Maya intend to depict an actual ceiba tree? A closer look at the tree features point to such a possibility.

The ancient Maya were keen observers of the natural world, and it is quite possible that they incorporated many of the ceiba tree's striking features directly into the iconography. For instance, the shape of the tree trunk, blossoms and fruit as depicted in many sculptures and paintings share striking one-to-one visual correlations with similar parts of real ceiba trees. Linda Schele was the first to use a biological analogy; she pointed out how natural ceiba blossoms are remarkably similar to the "square-nosed serpents" located at the tips of the Palenque cross, and that they are perhaps personified stamens of ceiba blossoms (1992:154 and Freidel et al. 1993:396). She stated: "The flowers are white, five-petaled, with multiple stamens and a long, angled pistil. Moreover, the pollen sac at the end of the stamen has exactly the shape of the square-nosed serpent, and these open to emit pollen columns like jade beads" (1992:54). Figure 2.20 shows how the pollen sac and pistils arch backward into a square-nosed shape. It is intriguing to think that Maya artists may have conceptually personified the stamen of the ceiba flower as a square-nosed serpent.

Schele's biological analogy can be extended even further to encompass additional matching traits found especially on painted trees displaying fruit pods and

swollen trunks marked with jade signs. But first, a brief botanical description of the ceiba tree's unique features is helpful in determining what parts were copied by the artist from nature. Botanist Woodward (2005:1) provides the following description:

The genus *Ceiba* consists of 10 species of large tropical trees in the family *Malvaceae* . . . ceiba trees are typically emergent, meaning their large umbrella-shaped canopies emerge above the forest canopy; they are thus among the tallest trees in the tropical forest reaching as high as 60m. Their thick columnar trunks often have large buttresses. Young trunks and branches are armed with thick conical spines, and are often green due to photosynthetic pigments. The leaves are alternate and pinnately compound, with 5–8 entire-margined leaflets. The radially symmetrical flowers can be rather small and inconspicuous (e.g., ~3 cm in *Ceiba pentandra*) to large (>12 cm) and showy. They are usually white or pinkish-white and leathery. The flowers have 5 stamens fused into a tube at the base. *Ceiba* fruits are large ellipsoid capsules up to 20 cm long, with 5 woody valves that split open to reveal abundant fluff, or kapok, in which the many small black-brown seeds are embedded."

(underlined sentences emphasized by the author).

Maya artists depicted the giant canopies of the ceiba as two or more giant branches arching wide over the earth like an "umbrella" (fig. 2.22). Being the tallest trees in the forest their topmost branches almost touch the sky, inhabiting the avian realms of birds. It seems only fitting that the Maya placed the Principal Bird Deity in

their upper branches. As Woodward described, the thick columnar trunks of the tree swell to retain water for the dry months ahead. Swollen, bulging trunks are a consistent feature in the tree iconography (see fig. 2.8). Perhaps the most striking shared characteristic depicted are the giant seed pods of fruit that hang from the branches. The Maya drew them as they exist in nature, adding jade signs to the outside of the ellipsoid pods (fig. 2.23a–c). Finally, the young trunks and branches of the ceiba are tinted a brilliant aqua green due to photosynthetic pigments; the skin of the tree is actually turning sunlight into nutrients. The almost polished green sheen of the young ceiba bark shares a striking similarity to the color and glossy surface of a polished jade stone (fig. 2.24). It is doubtful that the Maya would have overlooked these characteristics shared with jade, and this may be an additional reason why the trunk of the tree shows the animated face of the jade god. Therefore, due to so many matching traits, it seems that Maya artists did indeed intend to represent a ceiba tree in many of their depictions of crosses and trees.

The Bird

Description

Sitting atop the Palenque cross is a bird with rich plumage known as the Principal Bird Deity (fig. 2.25) (Bardawil 1974:195). Three of its most distinguishing features are the large necklace it sports around the neck, **YAX** diadem atop the head, a knotted cord hanging from its jawless mouth, and serpent heads attached to its wingtips. A complete description of this creature, its attributes and its hundreds of

manifestations is too large a subject for the current study. However, it will be said that the creature is found widely throughout Maya art, positioning itself prominently atop doorways and temple facades and serving as the central motif in many star bands.

Simplification

Rarely is this bird found without heavily detailed dress and body work. One of its most economical depictions is on the Rio Hondo Bowl, where he is simply drawn with a few lines (see fig. 2.5). Yet the artist still found it necessary to add the beaded necklace around the neck cuing the viewer that this is in fact the bejeweled bird.

Elaboration

One of the most heavily decorated versions of the bird is in sculpted clay form on K3105 (fig. 2.26). This Early Classic double-cylinder vase shows the bird in three-dimensional detail. Every feature of dress and plumage is beautifully modeled, including the jeweled diadem of the headband, ear spools, necklace, knotted mouth cord and serpent heads along the wings. The ceramic sculpture also gives a unique view of the bird's backside. The backs of his outstretched wings show the **AK'BAL** and **K'IN** infixes, and between sits a shield-like emblem with a lunar-shaped infix.

Throughout the art, Maya artists portrayed the bird in various stances. On occasion, it takes a left or right profile, while at other times it is depicted with wings outstretched as if to take flight or land. The bird is also seen in mid-flight descending

into the tree. On K1226 he is shown upside-down as he swoops or tumbles downward after being shot by the blowgunner at the tree's base (see fig. 2.3a).

The Blom Plate--as well as the Delataille Tripod bowl--shows an especially interesting variation of the bird. The top of its head explodes with yet another bird head connected by a jeweled chain (see fig. 2.20). Still another variation represents the bird with the head seemingly decapitated from the body held on only by an extended jugular vein (see K5637 and K3007) (fig. 2.27a–b).

Elimination and Substitution

The bird is not exclusive to the tree and need not occupy the upper branches. Kerr Vessels K4013, K1345, K998 and K4013 attest to the absence of the bird. Also, other types of birds can inhabit the tree. Vessel K6994 shows what could be an owl atop the tree (fig. 2.28a) (Boot 2003). Vessel K555 clearly shows a water bird, possibly a white heron in the tree (fig. 2.26b).

Human actors as well as the god Itzamnaah assume the guise of the great bird. On K555 the Principal Bird Deity—here portrayed by a human actor with a bird head--has actually fallen from the tree and is being shot with a blowgun by one of the Hero Twins (fig. 2.29b) (Taube 1987:05). K2356 has a human actor dressed in full costume as the Principal Bird Deity (fig. 2.29a) (Hellmuth 1987:258). The actor has literally “gone out on a limb” to perform the part. Finally, Hellmuth illustrates a vase in which the Principal Bird Deity is actually transforming into the god Itzamnaah (fig. 2.29c) (Hellmuth 1987:268). In transformation, the god bears the same flower head

band, tri-lobed pendant around the neck, serpent wings on the elbows and richly plumed tail of the Principal Bird Deity.

Discussion

The true essence and identity of this bird has evoked much debate over the years. Zender (2005:8-9) sums up concisely the past and current debate on the subject, which I now reference. Scholars have claimed multiple identities. Some claim it is Seven Macaw of the Popol Vuh story (Robicsek and Hales 1982:56–57; Cortez 1986; Taube 1987:4-5; Freidel et al 1993:89–71). Others favor the bird as the avian form of God D (Hellmuth 1987:364-6; Taube 2003:471–2) or the avatar of God D (Zender 2005:13). A new monument from Tonina confirms the Itzamnaah connection (fig. 2.31). Monument p48 is a portrait of the Principal Bird Deity with the head of the aged Itzamnaah replacing the bird head (Simon Martin, pers. comm. 2004). The bird is again named as God D on the Blowgunner Pot (K1226) where it is described as “descending” from the sky (Zender 2005:8–9). Also, Zender (2005:9) mentions that the bird is explicitly depicted as a macaw at Copan and is named Chan Mo’ Nal, or “Four Macaw Maize.” Still others contend it is a bird of prey (Hellmuth 1987:364–5) and quite possibly a laughing falcon (Bassie 2002:31–34). All these variations and the subsequent confusion may be rooted in Bardawil’s (1976) original study of the Principal Bird Deity, where, as Karen Bassie (2002:24) explains, the author conflated two distinct birds (a macaw and a falcon) into one entity.

Whether it is a macaw or a falcon, the bird atop the Palenque cross has definite celestial associations. The **K'IN** and **AK'BAL** infixes on the backs of its wings reinforce its celestial connection. These two glyphs on other occasions mark opposite east/west horizons of a rising and setting sun. As markers on bird wings, they may highlight the bird's wingspan arch over the entire east/west horizon.

Indeed, the bird's wings mutate into elaborate Sky Bands as seen on Palenque's House E Stucco (fig. 2.30). The Sky Bands include the **AK'BAL** and **K'IN** glyphs along with many other celestial signs. The bands (and by inference the bird's wings) stretch from horizon to horizon, finally terminating in the front head and backside of the Cosmic Monster.

Lastly, the bird of the Palenque cross dons the same head diadem and necklace of the god Itzamnaah and is clearly shown in separate contexts transforming into the god. The similar jewelry and the transformation into God D suggest that the bird of the Palenque cross is in some way the companion or avatar of Itzamnah.

The Draped Double-Headed Serpent

Description

On both the TC and the TI lid the body of the draped serpent carries bejeweled markings (fig. 2.32). A combination of circular and "YAAX"-shaped beads form the serpent body on the TC tablet. The body is actually a jeweled chain.⁹ On the TI lid, the serpent body is segmented by cylinders and beaded studs. The

⁹ Kan Bahlam wears a similar chain hanging from his belt on the outer right sanctuary panels of the TC.

serpent heads on the TC and TI lid also differ. The serpent heads on the TC are jawless with knotted cords drooping out of their mouths; these are similar to the cords hanging from the jawless mouth of the Principal Bird Deity. On the TI lid, the heads have a full upper palate and jaw, out of which the K'awiil god and the Jester god emerge.

Simplification

With the exception of a double-headed snake on K8540 (fig. 2.34a), the images on pottery overwhelmingly represent a draped serpent with a single head. It is rendered quite naturalistically with its split tongue, scaly underbelly and diamond-shaped markings on its back (fig. 2.33). The absence of rattles may indicate that it is modeled after a type of constrictor. On the more naturalistic representations, the snake slithers about all levels of the tree as it intertwines its body around the trunk and branches.

Elaboration

The Palenque serpents with their bejeweled bodies comprise by far the most elaborate examples. The snake on the TI lid burps out of its jaws the Jester God on the right and K'awiil on the left. The pottery produces but one other example of a double-headed serpent clearly connected with a tree. Kerr Vessel 8540 shows a two-headed snake whose mid body is tied in a square knot around the tree. It has been noted that the double-headed serpent bar (also termed the 'Bicephalic Bar') held by Pre Classic and Classic kings is in fact the same serpent of the cross (fig. 2.34b)

(Schele and Freidel 1990:415). Classic rulers held this serpent bar in the crooks of their arms and against their chest during ceremonial rites. In such cases, the body of the snake could also take the form of a Star Band inscribed with portraits of celestial objects.

Elimination and Substitution

The serpent is one of the attributes frequently left out of the cross assemblage altogether; nor do elements seem to replace it when its gone. Different animals do sometimes inhabit the tree branches. For instance, K555 (see fig. 2.28b) shows a water bird while K1345 has a four-legged creature crawling around in its upper branches.

Discussion

The snake is a potent creature, being one of the few forest animals that can kill a man. So it is understandable why the Maya revered it. In its more naturalist forms where the snakes shows a tail, the absence of rattles may indicate it is a type of constrictor. The deadly Fer-de-lance or Barba Amarilla are plausible choices as well (David Stuart pers. comm. 2006).

On the TC the snake serves as a conduit in which two powerful emblems of kingly rule emerge, namely K'awiil (a god of elemental powers, i.e. lightning and thunder) and the Jester God (a god of sustenance). Many Classic paintings of gods emerging out of a snake maw are described by their glyphic captions as acts of birth. For instance, scribes on Kerr Vessel 5164 write the birth verb **SIH-ya-ja** to describe

God N as he is burped out of the snake's maw (fig. 2.35). Equally interesting is that the Classic words for 'snake' and 'sky' are homophones and are referenced by two word glyphs with the value **CHAN** which sometimes interplay. So it is no surprise that the body of the snake visually substitutes for a Sky Band. Finally, jade signs are frequent elements in Star Bands and the place name "Jade-'Celt' Sky" is a common reference to a celestial locale where the actions of gods occur.¹⁰ These combined concepts of snake, birth, sky and bejeweled heavens could be at work symbolically at Palenque in the form of the draped serpent.

The Bowl

Description

At the base of the cross sits a bowl, its body infixed with a prominent **K'IN** or 'sun' glyph (fig. 2.36). This **K'IN** sign is an essential feature relating it to heat and burning. The bowl on the TI lid also has **TE'** markings on lip and body indicating that it too is made of wood. The bowl holds three primary objects: a floral element with crossed bands, a stingray spine (or shark's tooth), and a spondylus shell (Kubler 1969:33–46; Green 1974:77–81; Schele 1976:18). The entire bowl sits on the cranium of a monster head which has fleshless lower jaws and is fitted with giant ear spools..

Simplification

The Rio Hondo vase shows the **K'IN** bowl as a simple gourd standing beside the tree (see fig. 2.5). It has no **TE'** nor **K'IN** markings, nor does it sit atop an

¹⁰ See Palenque's Temple 19 platform, South Side, glyphic caption D8, where the actions of pre-creation gods "happened at jade-celt sky" or "ut ta (jade-CEL T) CHAN."

animated head. Interestingly, on Kerr Vase K2356 and the Delataille Tripod the monster head or bowl is depicted as standing next to the tree rather than directly underneath (fig. 2.37). These examples offer the intriguing possibility that bowl on the Palenque examples may sit out in front of rather than directly under the cross (Schele 1976:17).

Elaboration

The bowl itself takes on a personified form when used as an incensario. The bowl morphs into the head of an animated being bearing another grotesque face with a downward-curling snout and gaping mouth (see fig. 2.15c–d). This animated bowl with its fully-fleshed face and prominent beak-like nose is not to be confused with the skeletal head at the base of the cross on the TC, which, with its giant ear flares, fleshless lower jaw and vegetal volutes emanating off the sides of the forehead, is quite different. As previously discussed, the bowl can display spiked nodules when the artist chose to collapse elements of ceiba tree and incense burner into a single form.

Elimination

The **K'IN** bowl, when standing alone, is used in the glyphic expressions for 'east' and a house dedication rite, and is a type of incensario (Stuart 1987:161; and 1998:390). As a main sign for east, the empty **K'IN** bowl sits atop a sun glyph (fig. 2.38b). The sign reads **EL-K'IN** (Stephen Houston pers. comm. 1992 after Stuart 1998:389) and literally translates as 'rise, come out' (Stuart 2005:168). When it is a

verbal sign relating to “house censing,” volutes of fiery smoke spill out over the bowl’s rim (fig. 2.38a). In both cases, it is important to note that the **K’IN** bowl is directly related to heat and burning and was conceived as a type of burner bowl (Taube 1998).

Substitution

The **K’IN** bowl appears in unusual contexts outside of cross imagery. It appears as the headdress of a god, as a hand-held object, or is carried on the backs of female gods and the backside of the Cosmic Monster (Kubler 1969:37–46; Green 1974:77–93). The aquatic god known as GI from the Palenque Triad wears the bowl with its tripartite elements as a headdress (fig. 2.39a–b). Inscriptions from Palenque’s Temple of the Inscriptions, Middle Panel clearly name the bowl and its contents as the **KO’HAW** or ‘helmet’ of GI (fig. 2.36c).

On the TC main panel, a young K’inich Kan Bahlam holds a version of the bowl and monster head in his right hand. In this instance, the infixed **K’IN** sign has been replaced by a **CHAN** sign. Liquid, possibly blood, flows from the mouth of the monster on which the bowl sits. The bowl appears held in the hand again on the west jamb of the TC. The bowl is also carried on the backs of women as a backpack of sorts, like that illustrated on Palenque House D, Pier D (fig. 1.4). A good example of the Old Moon Goddess toting the **K’IN** bowl is found on K501 (fig. 2.40). It is unclear for what purpose these women carry the bowl as their burden.

The celestial creature known as the Cosmic Monster or Starry Deer Crocodile wears the bowl on its backside (fig. 2.30). This creature has a body with heads on both ends. The eye of the front head will often carry a star symbol. Its ears and legs are that of a deer. The rear head is always an inverted monster head that carries the **K'IN** bowl with the tripartite elements. When the bowl takes this inverted position, liquid marked with bejeweled symbols can sometimes spill out from the container. As Tate notes, the rear ends of the Cosmic Monster with the **K'IN** bowl are consistently associated with the east, especially in the art of Yaxchilan (Tate 1992:66 after Stuart 2005:168).

Discussion

The bowl and monster head at the base are not always located directly underneath but can sit to one side of the cross. This brings up the intriguing possibility that the bowl and monster head on the Palenque examples may sit out in front of rather than directly underneath the cross. As Schele (1978:17) noted, the main shaft of the cross may be rising separately behind the bowl. The superimposition of one picture or object over another is a common scribal device (i.e. Emblem Glyphs of a city superimposed over **AJAW** signs) so it is not surprising to see it at work within larger portraiture.

How GI is connected to the **K'IN** bowl is unclear, yet as Stuart (2005:167–168) suggests, the god is clearly a deity of the water and has aquatic features (i.e. fish barbs on the cheek and shell ear flares on the ears) as well as features of the Sun God

(i.e. squinted eyes and buck tooth). All of these associate the god with the sun, the east (the **K'IN** bowl headdress) and a watery locale, and have led Stuart to tentatively propose that GI is god of solar rebirth from the watery underworld (Stuart 2005:170).

The **K'IN** bowl is undeniably connected to burning, heat, the east, and by extension, the sun. It is also directly connected to sprouting when trees and blossoms rise in or beside it. As the primary emblem for east, the **K'IN** bowl could be acting as a toponym of sorts that ties the Palenque cross to the eastern locale. As Stuart notes, the bowl itself was considered emblematic for the rising sun in the east (Stuart 2005:168). A cross emerging in the east challenges the current assumption that the cross stands at the *axis mundi* of the world (Schele and Freidel 1990:242).

The Monster Head

Description

At the very base of the cross just beneath the **K'IN** bowl rests a grimacing monster head with a toothy grin, fleshless lower jaw, beaklike nose with flared nostrils and large, square eye sockets with hooked irises (fig. 2.50). The skeletal jaw is a feature shared with the Death God (also the number ten) and marks this creature as an underworld denizen. It also wears gigantic ear spools with dangling “Ajaw” beads. Just above the ears, vegetal scrolls curl off the sides of its head. This monster head appears frequently in Maya art in connection with all sorts of underworld plants and gods. While its features below the brow remain fairly constant, a multitude of

highly specific signs and elements will substitute directly into its forehead (David Stuart, pers. comm. 2005).

Simplification

While many extraneous features of the monster head may slightly change and vary (such as a round ear flare as opposed to a circular one), its most consistent and irreducible feature is that of a fleshless jawbone. The appearance of the skeletal jaw clearly distinguishes the head from the animated **K'IN** bowl and the head variant of the **TE'** sign which can also inhabit the base of the tree. The animated bowl will never display a fleshless lower jaw while the **TE'** head variant is without one completely.

Elaboration.

The monster head is unique in that it lacks in elaborate details and is the only feature within the cross assemblage that seems to serve a generic function. In all instances, it is a head without a body and never morphs into a full-figured form. Also, artists do not specify (via added details or glyphic signs) its relationship to any particular earth or underworld deity. It is never elaborated beyond its portrayal as a skull and so acts more as a generic label for the underworld than as a specific creature or deity. It simply functions as a skull whose brow is a carrier of different objects.

Substitution

Substituting into the forehead of the monster head can be any number of different signs or plants. Kerr Vessel K2723 shows a profile of the monster head with

a “cracked Ajaw” kernel inserted into the forehead, out of which the Maize God emerges (fig. 2.41a). The Robicsek and Hales Plate 116 shows another version of the same scene; this time the Maize God erupts directly out from its cleaved head (fig. 2.41b) (1980:90). The skeletal head will also sprout aquatic plants. On the Cosmic Pot, the head appears directly below Chak Xib Chaak and near the pot rim (see fig. 2.10). Here, the monster head has a God C face portrait infixed into its forehead, out of which emanate animated water lilies. Other instances of skull confirm that the head stays the same while various lily pads and plant scrolls and sprout from the forehead. For instance, Kerr Vase K1162 shows the monster head in profile with lilies and tubers sprouting from a WINAL sign inserted into the forehead (fig. 2.42).

Elimination

It is perplexing why the monster head at Palenque has vegetal scrolls curling off either side of its temples. These scrolls are not attached to any visible plant which normally inhabits the forehead. Very likely, the Palenque artists (due to consideration of space) had to alter the monster head to accommodate both the vegetation and **K’IN** bowl simultaneously. They collapsed portraits of plant and bowl into a single space by eliminating the plant (leaving the tendrils) and replacing it with the bowl. One can only guess if the item eliminated was an “*ajaw* kernel,” a water lily or some other plant.

Discussion

The monster head remains one of the most enigmatic characters of the cross assemblage due to its generic character and varied manifestations throughout the corpus of Maya art. Opinions differ as to its proper identification. Early scholars likened it to an earth or mountain monster by relating it to similar tree and skull imagery depicted in Aztec manuscripts (Joyce 1914:235). David Stuart's recent work on Maya mountain imagery identified the particular features of the *Witz* monster head (1997:13–17). If the monster head from the cross were an animated mountain it would, at the least, manifest the “lazy” half closed eyelid and be marked with “*Cauac*” markings on the face. Since it carries neither of these essential traits, it cannot be interpreted as a mountain.

The monster skull has also been misread for the animated version of the **K'IN** bowl/censer. I disagree with the assessment that the animated censer (like that on side IV of the Birth Vase) is identical to the Quadripartite Monster (Taube 1994:668). Upon close inspection, the monster head and animated **K'IN** bowls never share the key diagnostic feature of the skeletal jawbone and so cannot be considered one and the same. In fact, the animated censers are always rendered with fleshed faces and large beaklike noses.¹¹

¹¹ One exception is found on El Cayo Altar 1 which depicts an animated “spiked” bowl with fleshless lower and jaguar ear. The combination of traits is quite confounding and does not relate to the bowls surveyed in the current work..

As the Quadripartite Monster, the skeletal head and **K'IN** bowl are thought to be inseparable units and two parts of the same creature (Greene 1974:77 and Schele and Freidel 1990:414). On pottery scenes, the skull is sometimes painted standing alone, beside the tree and without the bowl (see K2356). Equally puzzling is why the Quadripartite Monster suddenly loses the plant scrolls spilling off the sides of its head when acting as the back side of the Cosmic Monster. Examples like these call into question the supposed inseparability of the bowl with the head and its key traits.

The role of the monster head in the iconography can be better understood by looking at how artists used the head as a “placeholder” into which they inserted different flowering objects (David Stuart, pers. comm. 2005). On the Cosmic Plate the monster head is found again not at the base of the tree but at the very bottom lip of the plate, where animated lily-like tendrils emanate from its forehead--which also contains the image of God C. Yet at times, the head will also appear with a split “ajaw kernel” inserted into the forehead, from which the Maize God sometimes emerges. With many differing elements substituting into the forehead, it is clear the head is acting more as a general placeholder for objects rather than as a specific creature.

Equally plausible at Palenque is that the volutes of plant foliage curling off the sides of the monster's brow indicate that the head does carry one of a the sprouting “ajaw kernels.” The cleaved forehead of the “ajaw” seed is not visible since the **K'IN** bowl is superimposed over the kernel or the kernel has been partially eliminated due

to lack of space. Yet the sprouting volutes are there to indicate to the viewer that the seed is indeed present.

Sky Bands and Background Elements

Description

The Palenque crosses are bordered by Sky Bands which consist of two narrow horizontal beams divided into compartments by vertical posts (fig. 2.43a–b) (Schele and Miller 1986:47; Carlson 1988; Schele and Freidel 1990:416). Each compartment of the Sky Band holds a celestial symbol for a particular star or planet. The most commonly recognized symbols are those for darkness (**AK’BAL**), moon (**UH**), star (**EK’**), sky (**CHAN**) and sun (**K’IN**). Other symbols include a pair of “crossed bands” infixed with **TE’** signs, the T1017 head variant of the jade glyph, a square-nosed serpent, a tilted sky sign with a curl breaking along its upper band and a shield/flower sign infixed with an oval jade sign.

Elaboration

The Sky Band will form the body of the of the Cosmic Monster known as the Starry Deer Alligator (fig. 2.43c) (Schele and Miller 1986:45). The Cosmological Throne at Palenque shows the Sky Band inscribed on the back of the Cosmic Monster (fig. 2.44). A tentative glyphic reading of the monster’s name from Palenque’s Temple XIX seems to confirm that it is the monster’s back and not his belly that is indeed painted with star signs (Stuart 2003:2).

Sky Bands do not always have horizontal bands but will take on a stepped appearance. K8622 presents a good example of such a stepped band with star and night signs occupying various niches (fig. 2.45). The Sky Bands can be stacked one atop the other to form a stepped stairway or throne as seen on K8497 and K3056, as well as on Naranjo Stela 32 (fig. 2.46a–c).

Substitution

As mentioned, the Sky Band can replace the serpent body of the ceremonial serpent bar. It can also substitute for edges of all sorts. Palenque's Cosmological Throne illustrates how a bench could incorporate a Sky Band along its outer lip. The fringes of cloth, the margins of architectural niches and the inside corners of a room also host Sky Bands. So, the concept of edge and border are closely linked to the Sky Bands (Schele and Miller 1986:47).

Discussion

On the TC, the beams and posts framing the Sky Band compartments are marked by **TE'** symbols suggesting that they are of wood construction. Wooden beams and posts suggest the Sky Bands form some type of fixed heavenly scaffolding under which all stars and planets fit.

At the very least, these Sky Bands provide the base line or pictorial frame in which the depicted event is set. The Sky Bands reference a scene to a heavenly locale. On the TC, Kan Bahlam II stands directly above the band indicating that his accession rite occurs atop a celestial plane. The Sky Bands to the left and right of the

cross on the TI lid center the image between two particular levels of the sky. Artists seemingly opposed elements between Sky Bands like the **AK'BAL** and **K'IN** signs on the upper corners of the lid, reinforcing the idea of two separate horizons (Schele and Mathews 1998:110).

Curiously absent on the TI lid Star Bands are the abundant **TE'** markings on all the horizontal beams and vertical posts framing the celestial signs. Yet **TE'** markings do occur on quatrefoil-shaped holes on the top and bottom frames of the TI lid from which human heads emerge. These quatrefoils are not exclusively used to indicate openings in stone, or cave entrances. Exactly these types of quatrefoils appear on Pier A of Palenque's Temple of the Sun where they are again inscribed with **TE'** markings and sprout leafy foliage from their corners (fig. 2.47). It will be recalled that quatrefoils as knot holes in trees do exist on the K4546 tree trunk as well as on portraits of the **TE'** head variant. So there is a possibility that the top and bottom frames on the TI lid are acting in part as wooden posts that hold apart two separate levels of sky.

Finally, stepped and stacked Sky Bands coupled with the idea of wooden scaffolding give a distinct impression of a celestial wooden ladder or stairway by which gods and stars scale through the heavens one step at a time. The ideas of celestial stairway and layered levels of sky are still popular among modern Yucatec and Tzotzil Maya today (see Tozzer 1907, Thompson, 1970:195 and Leon-Portilla 1973:141). These examples in the corpus could very well have served as visual

antecedents to the Post-Conquest survivals of a heavenly stairway in which the sun and moon climb on their diurnal journey.

It is worthy of mention that TI lid and TC panel host a variety of background elements, symbols and hieroglyphic signs that seem to float about the cross (fig. 2.48). These objects include beads, jade jewels, shells and feathered ornaments. Two mathematical signs for zero and half-period completion also appear. Schele and Matthews (1998:112) note that similar signs appear on blood scrolls issuing from the hands of rulers depicted at Quirigua and Yaxchilan. They believe these materials embody the **K’UHUL** or **K’UHLEL** or life force that inhabits the blood of humans and all living things and that their function is partly to signal that the crosses exist in a place of “ambient sacredness” (ibid.).

Near the base of the cross on the TC float four hieroglyphs that seemingly have no connection to the historical captions telling of Kan Bahlam’s kingly rites. Each glyph has the bar-and-dot numeral prefix five or six (fig. 2.49). Their meaning has been the source of much speculation over the years (Kelley 1965:114; Cohodas 1974:97; Stuart 1988 and Aldana 2004:299).

Four glyphs spatially arranged around the tree invoke ideas of quatrefoil arrangement and cardinality. New evidence from Appendix I and II of the current work notes that the “five-square-nosed-blossom” glyph is read **HO’–(jeweled flower)–TE’** for ‘five jeweled-flower tree’ and stands for a tree bearing five branches

with five square-nosed-serpent blossoms at the end of each arm. One can only wonder whether the other three glyphs also reference sacred plants.

Chapter 3

A Partial Translation of the 11th and 12th *Katun* Passages of the Middle Panel of the Temple of the Inscriptions, Palenque.

Columns A and B as well as G and H on the Middle Panel from Palenque's Temple of the Inscriptions reference events during the 11th and 12th *K'atuns* which occurred under the reign of K'inich Janab Pakal (fig. 3.1–3.3). The primary subject matter of each passage is the bejeweled trees currently under investigation, and so is of great importance to this study. The texts convey in part that by the 11th *K'atun* Palenque began to prosper under the leadership of Pakal and that prosperity brought great quantities of jade tribute. This rise in wealth paralleled many other prosperous events occurring in the kingdom. A short synopsis of Palenque's history before and during the Pakal's rule helps place the 11th and 12th *K'atun* texts into a greater historical context.

Events Prior to the 11th *K'atun*

Inscriptions at Palenque and its satellite kingdom of Tortuguero attest to the many historical events which took place before and after the 11th *K'atun*, which began on October 14, 652 A.D. and ended on July 1, 672 A.D. with the seating of the 12th *K'atun*. Prior to Pakal's taking the throne in 615 A.D., Palenque was in a sorry state of affairs. It had suffered attacks by its rival Calakmul in 599 A.D. (Martin 1995). The Calakmul king known as Scroll Serpent (579–611) took credit for the war

campaign. A second and more decisive battle in 611 A.D. led to the death of several members of the Palenque nobility (ibid.). By the latter part of *K'atun* 11 (650 A.D.), Palenque's fortunes began to change for the better. Tortuguero allied itself with Palenque, and records that the lord Bahlam Ajaw conquers Comalcalco (Schele and Grube 1994:117–118). Shortly thereafter in 654 A.D., Pakal institutes a large-scale building program at Palenque's main palace. Between 9.10.15.0.0. and 9.11.15.0.0., buildings such as the Temple of the Count, the Subterranean Galleries, and Houses B, C, and E were built (Schele 1986:118). House E of the Palace (named the *Sak Nuk Nah*) is where Pakal displayed the Oval Palace Tablet depicting his own accession (Martin and Grube 2000:163–64). The entire East Court, a place for large presentations and receptions (Houses B, C, and A), was dedicated between 661 A.D. and 668 A.D. Carved panels at the base of House A, on the east side of the court, are especially telling of war. Oversized portraits of prisoners flank the base of the stairways. Accompanying texts relate that all prisoners were captured on successive days in 662 (ibid.).

The wars with neighboring kingdoms show that Pakal was now on the offensive. The battles surely served to secure Palenque's borders, and allowed Pakal the manpower and the enormous wealth to initiate such large-scale building. So, the 11th *K'atun* ushered in a period of revival, and with it, a flow of booty, tribute and the conscript labor to fuel Palenque's construction boom. High on the list of tribute would have been precious jade which, in the form of masks, diadems, ear spools, nose

ornaments, necklaces, chains and belts, served to make jewelry for adorning men and gods (David Stuart pers. comm. 2005). This influx of jade cargo is exactly what the initial passage on the Temple of the Inscriptions alludes to. Let us proceed now to the translation.

Translation Method

Interpretation of the hieroglyphic passages will undergo four levels of decoding. It begins with a literal transcription of each glyphic block. A transliteration is then made that transfers the glyphic data into Classic Maya dates, words, and phrases. Word signs are written using capital letters while syllabic signs are written with lower-case letters. All numbers are written using Arabic numerals. Also, words in quotation marks emphasize that the glyph translated is but an approximation of the actual word or phrase. The transliteration then undergoes two additional levels of translation that renders the text at each level into a modern, western prose. The final translation is followed by an interpretative commentary that elaborates on several glyphic details.

Initial Passage, Columns A and B (including Glyph blocks C1 and D1)

Transcription¹²

u-2-ta-la u-CHUM-mu TUUN-ni 12 AJAW 8 CHAK-SIHOOM u-11-
["K'ATUN"] AJAW-ya-ni ["JADE/CELT"]-LAJCHAN-na
["SPROUT/SPLIT-EARTH"]-la-ja ["JADE/CELT"]-UH-TE'
["SPROUT/SPLIT-EARTH"]-la-ja HO'-["SQUARE-NOSED-SERPENT"]-
TE' NAL-CHAN-na i-ka-tzi KAB'-la i-ka-tzi u-ha-ja tu-pa-ja 9-CHAN-na
yo-OOK?-K'IN-ni 16 OOK-K'IN-ni 9-TZ'AK-[bu?]-AJAW

Transliteration

ucha'tal uchumtuun lajchan ajaw waxak chak-sihoom ubuluchk'atun ajawyan
["CELT"] lajchan ["SPROUT/SPLIT-EARTH"]-laj ["JADE/CELT"] uh te'
["SPROUT/SPLIT-EARTH"]-laj ho' ["SQUARE-NOSED-SERPENT"] te' chanal
ikatz kab'al ikatz 'uhaj tupaj bolon chan yok? k'in waklajun yok? k'in bolon
tz'ak/tz'akb'u? ajaw

¹² Note: there is no AJAW ("AH-PO") above the ta in the u-2-ta-la (glyph block A1). The two circles for the numeral 2 (cha') were misdrawn as an AJAW sign.

Translation I

“His second his *TUUN* seating 12 *Ajaw* 8 *Chak-Sihoom*, became lord (ruler)/[lordly?] the (god of) twelve, (it sprouted from the earth) the “jade/celt”, jeweled tree, (it sprouted from the earth) the five flower tree, sky tribute, earth tribute, jewels, ear flares nine sky its foot/pillar day 16 foot/pillar day the 9 governor/in order ruler.”

Translation II

“It was his second *TUUN* seating on 12 *Ajaw* 8 *Chak-Sihom* the god twelve became ruler/lord [or the lordly god twelve]. It sprouted from the earth the “jade/celt”, jeweled tree, it sprouted from the earth the five flower tree, its sky tribute, its earth tribute of jewels and ear flares, nine sky pillar of the day, sixteen foot/pillar day the great governor/successor ruler/lord.”

Commentary

The opening glyphs from the middle panel of Palenque’s Temple of the Inscriptions commemorates the seating of the eleventh *K’atun* on 9.11.0.0.0. 12 *Ajaw* 8 *Chak-Sihoom* (October 14, 652 A.D.) (glyphs B1–A3) (fig. 3.2). The date falls

within the reign of K'inich Janab Pakal who was born within the eighth *K'atun* (9.8.9.13.0 8 *Ajaw* 13 *Pop*) (March 23, 603 A.D.) and died within *K'atun* twelve (9.12.11.5.18 6 *Etz'nab* 11 *Yax*) (August 28, 683). So, by the time the 11th *K'atun* dawned Pakal was forty nine years old.

The scribe notes that the number 12 (taken from the day 12 *Ajaw*) reigns over the 11th *K'atun* and the day *Ajaw* (A3–A4) (David Stuart pers. comm. 2005).¹³ The head variant of the number 12 is a **CHAN** sky sign combined with the youthful and fertile Maize God who appropriately reigns over this time of rebirth (Marc Zender pers. comm. 2000 in Guenter 2006).

What follows in the succeeding glyph blocks (B4–B6) is a verbal couplet whose main sign (glyphs B4 and B5) is the earth sign **KAB'** that is cleaved or split at the top (fig.3.4). These verbs are a challenge to translate since they are largely logographic and remain undeciphered. Initial readings have conjectured the verb reads “wakablah, “with meanings ‘rose’ or ‘stood up’ which correspond, in part, to the rising of the planet Venus (Jones 1995:95–7). Despite the epigraphic challenge, some clarity is possible when one takes into account the many historical relationships at Palenque within which the passage takes place, and when one considers similar glyphs and imagery found in the Maya corpus.

¹³ David Stuart (personal communication, 2005) points out that this expression “lordship twelve” is proof the Maya revered numerals by equating them with specific gods. Here the number 12 rules over the 11th *K'atun* and the day 12 *Ajaw*. A similar reference on the middle panel (H4–G5) notes that the number 10 (the death god) rules over the 12th *K'atun* and the day 10 *Ajaw*.

Even if the verbs were written with syllabic signs, it is clear that scribes wrote the event in poetic/metaphoric terms rather than literal terms. The poetics are evident from the “**SPROUT/SPLIT-EARTH**” verbal couplet consisting of two parallel lines (Christenson 2003:50) and the fact that the agents of the verb (jade trees) exist only in the poetic mind and not the real world. Fortunately, the picture-like character of the glyphs shows graphically that the verbal action (consisting of a sprout flowering from a “split-earth” sign) pertains to some type of flowery emergence from the ground.

Rising out of the split-earth is a “sprout” with an infixed “mirror” (T24) sign. The “Split-Earth” sign is quite similar to other cleft signs or portraits from which vegetation, humans and gods emerge. A good example of this is found on Kerr Vessels K634 and K2723, which show the Maize God emerging out of a personified split maize kernel (see fig. 2.41). The glyphic sign for the verb **LOK’?** meaning “emergence” or to exit (Kaufman and Norman 1984:125) also displays a worm-like creature writhing out of another cleft sign (fig. 3.5d). In the Madrid Codex, Page 20a, the **LOK’?** verb accompanies various scenes illustrating the emergence of gods out of a serpent maws (fig. 3.6) (Saturno et al 2005:48). Even more telling, scenes depicting ancestors as flowering trees exist on the sides of Pakal’s sarcophagus. Here, Pakal’s ancestors are pictured as sprouting trees arising out of a cleaved earth band inscribed with **KAB’** signs (see fig. 2.13b). The **SPROUT/SPLIT-EARTH** sign occurs again in the glyphic captions on the Cosmic Plate (K1609) where it names the scene below

(the flowering of the tree from Chak–Xib–Chaak head) as “**K’UHUL SPROUT/SPLIT–EARTH**” for “holy sprout/split–earth” (fig. 3.5b) The sign occurs again on Tikal MT 56 (a cup), where it modifies the word for chocolate or *kakaw* (fig. 3.5c) (Stuart 2005:137).

The key action depicted in every circumstance is one of flowering emergence, like that which takes place when the first sprouts of a seed shoot out of the soil. Equally significant is that the accompanying imagery shows that the point of emergence of these plants lies within a place of heat and burning. The tree flowering out of Chak–Xib–Chaak’s head on the Cosmic Plate also has strong connections with east. As noted by the scribes of the Dresden Codex (see page 30b of the Dresden) *Chak–Xib–Chaak* occupies the eastern quadrant and therefore dwells in the place of the rising sun (David Stuart pers. comm, 2006). The TC and the TI lid show explicitly that the jade tree is rooted directly in or beside the fiery **K’IN** bowl—the main sign for east. The emergence of maize is also directly connected to heat and fire. Kerr Vessel K1892 illustrates the Maize God reborn out of a cracked turtle carapace. At the base of the crack flares a smoking torch atop a skull (fig. 3.7).¹⁴

The scribe does provide a verbal suffix that is quite telling. The suffix *–laj* classifies the word as having a probable positional root (CVC plus *–laj*). A positional is a special type of intransitive verb describing the position or location of an object in

¹⁴This extraordinary plate illustrates how one Maya artist symbolically represented the essential elements needed for successful plant growth. For a corn seed to sprout, it needs soil, heat and water. All three of these elements are vividly depicted. The turtle represents the earth/soil, the torch is equal to heat, and the water jar being tipped and poured out by the figure to the Maize God’s left embodies water.

space (Hopkins 1985) (Stuart 2005:117, footnote 39). This verbal suffixation is complementary to the portrait of a sprout emerging erect out of the ground and relates to the sprouting of the two trees named as the subjects of the verb.

The subjects of the two “split–earth” verbs have also remained elusive until now (A5 and B6). David Stuart (2005:138) suggests these names signify trees, marked as such by their prominent **TE’** signs at the bottom of each glyph block (see Appendix A for a reading of the **TE’** sign). In addition to the **TE’** sign on glyph block A5, there is a prefix and main sign consisting of an oval ornament and a skull (fig. 3.8). The prefix encoded by Thompson as T24 (Thompson 1962:445) is a portrait of a jade celt and is read here as “jade” (see Appendix A for reading of the T24 sign). The main sign, a skull, has the **IK’** glyph infixed in the forehead. The entire skull has the reading **’UH**. The word **’UH** is widely shared amongst Mayan languages as ‘jewel’ (see Whittaker 1965:169; Attinasi 1973:328; Aulie and Aulie 1978:151 and 177; Barrera Vasquez 1980:823 and 896). If one reads the initial T24 sign as “jade” and the final sign as ‘tree’, the glyph block at A5 is read “**JADE” ’UH TE’** for ‘jade jeweled tree.’

The second subject of the second verb at A6 is prefixed with the numeral for the value five and is attached to the portrait of a personified head known as “the square–nosed–serpent” (fig. 3.9a). From the analysis in Chapter II, it is understood that the square–nosed portrait is a personified tree blossom. So glyph block A6 is read as **HO’** “square–nosed–blossom” -**TE’** or ‘Five–“Square–Nosed Flower” Tree’.

Interestingly, the very same name appears at the base of the cross on the TC and TFC. It is one of four hieroglyphs floating along the right and left of the tree trunks (Kelley 1965:114; Cohodas 1974:97; Stuart 1988; and Aldana 2004:299). Alfred Maudslay's photos and drawings of this glyph on the TC indicate a very prominent "mirror" or jade sign infixed into the forehead, further emphasizing that the square-nosed flower is not just a blossom but a bejeweled flower (fig. 3.9b) (Maudslay 1899:Vol. IV, Plate 77).

As mentioned, Schele noted that the square-nosed serpent head is a portrait of the same square-nosed blossoms that hang from the ends of the TC cross image (1991:154). Other portraits of trees with square-nosed blossoms confirm Schele's identification. One such likeness is etched on a jade pendant from Copan's Structure 10L-26 (fig. 3.10) (Freidel et al 1993:fig. 19). The tree displays two personified blossoms, a draped serpent, a **K'AN** symbol on its trunk and a giant monster head with a **K'IN** bowl at its base. A carved shell pendant from Yaxchilan (from the burial of Lady Xok, Structure 21 Tomb V) is an even better match, depicting a tree radiating five branches (fig. 3.11). At the end of its arms are found five prominent square-nosed blossoms (Garcia Moll? 1991?:72, fig. 209). In addition to the five blossoms, a single-headed serpent is draped over the branches; a monster skull sits at the tree base and jewels and flowers float around the tree. With the glyphic title from the TI panel ('five "flower" tree') serving as the exact description of a tree with five personified

blossoms, there is little doubt that the Yaxchilan shell is the very portrait of the bejeweled tree quoted at Palenque (David Stuart pers. comm. 2005).

The six glyph blocks (B6–A9) following the naming of the second tree reinforce that jewelry and tribute are closely linked to the emergence of these two jade trees. The glyphs read *chanal ikatz*, *kab'al ikatz*, *'uhaj*, *tupaj* or 'sky tribute, earth tribute, jewels, ear spools'. In other words, tributes of jewelry, all such that lay between sky and earth, began to flow into Palenque during the start of the 11th *K'atun*. The term *ikatz* is inscribed on many jade artifacts (see Appendix A) and is commonly depicted on cloth bundles that hold jade tribute (Stuart 2002). This flow of tribute corresponded directly to the emergence of the two jade trees. Unless jade trees exist in nature, the sprouting of a jade tree is clearly a metaphorical event. But in a more material sense, the event may refer to the jade tribute and jewelry that was used to construct the jade trees themselves; the jeweled ear spools may actually be tree adornments (Guenter 2006) (see end of Appendix B for further discussion of this topic).

Finally, a set of poorly understood titles close out the initial passage. These titles must relate closely to successor titles of the ruling lineage, as is noted by the "9th lord of the accession" name in the very last glyph block located at C1. The subsequent events that follow the 11th *K'atun* passage describe in great detail the dressing of the Palenque Patron Gods in all their finery. Here again the objects named are jeweled hats, necklaces and ear spools (Macri 1988:117–120).

The Second Passage, Columns G and H (including glyph blocks I1 and J1)

Transcription

**10 AJAW 8 YAX-K'IN-ni u-12-["KATUN"] yi-yila-ji K'INICH JANAB' pa-
ka-la K'UHUL B'AKAL AJAW AJAW-ya-ni ["CELT"]-10-AJAW?-wa?
CHAM?-la-[HAAB?] ta-ki-ja ["JADE/CELT"]-UH-TE' HUB-yi EL-K'IN-ni
AJAW-TAK OCH-K'IN-ni AJAW-TAK ["KNEELING FIGURE"]-ba-ja 9-
CHAN-na yo-OOK?-K'IN-ni 16 OOK-K'IN-ni 9-TZ'AK-[bu?]-AJAW**

Transliteration

*lajun ajaw waxak yaxk'in ulajchan k'atun yilaj k'inich janab' pakal k'uhul b'akal
ajawnyan ["CELT"] Lahun Ajaw? Chamal? Haab'? tahk ["JADE/CELT"] 'uh te'
hub'uy el k'in ajawtak och k'in ajawtak ["KNEELING FIGURE"] k'eb'aj? bolon
chan yook? k'in waklahun yook? k'in bolon tz'ak/tz'akb'u? ajaw*

Translation I

“Ten Ajaw eight Yaxk’in, twelfth k’atun, he witnessed it K’inich Janab Pakal Holy Lord of [Palenque], became lord (ruler)/lordly? The number ten deathly years?, dried up, the “jade/celt” jeweled tree, came down? eastern lords, western lords, kneeled, nine sky its foot/pillar day 16 foot/pillar day the 9 governor/in order ruler.”

Translation II

“On Ten Ajaw Eight Yaxk’in, the twelfth katun ended. He witnessed it, K’inich Janab Pakal, holy lord of [Palenque]. The god ten became ruler/lord [(or) the lordly god ten]. Number ten, deathly years? It dried up? The “jade” jeweled tree. They were defeated? the eastern lords the western lords. They kneeled? Nine sky pillar of the day, sixteen foot/pillar day the great governor/successor ruler/lord.”

Commentary

The 12th *K’atun* passage parallels the previous passage by first giving the date, and names the god/number who rules over the day Ajaw (in this case the number ten, known as God A or the Death God) (Figure 3.3). In addition, the scribe notes that K’inich Janab Pakal, the holy lord of Palenque, oversees and celebrates the marking of the twenty year *K’atun* period. As Guenter (2006) points out, the Death God is the harbinger of bad times and his tidings are mentioned as “deathly years.” In

the next dozen years Pakal, his wife and their possible third son Tiwohl Chan Mat all die.

What follows next is a verb spelled out very clearly by the glyphs **ta–ki–ja**. The verb ta[j]kaj is a rare in the Classic inscriptions and poorly understood. A preliminary reading of ‘to dry’ or ‘to burn’ is given (see Attinasi 1973:319; Delgaty and Sanchez 1978:195; Aulie and Aulie 1978:115 and 177) (Marc Zender and David Stuart pers. comm. 2005). Following the verb is again the (“**JADE/CELT**”) ‘**UH TE**’ title. The glyphs here are a bit eroded but still quite legible. Are scribes conveying that the same tree that flowered in the 11th *K’atun* now is “withering” in the 12th *K’atun*?¹⁵

The next expression is one of war and refers to “eastern lords, western lords” as the recipients of the attacks. The West Tablet of the Inscriptions informs that in 659 A.D. (seven years into *K’atun* 12 Ahaw) Pakal captured the kings of Pomona and Santa Elena Balancan, thereby enforcing his dominion over these cities (Guenter 2006). Again, one can only speculate that the event described is one where Pakal declares he has defeated all lords that lay between the eastern and western realms. Finally, the same “god” titles follow which are parallel to names at the end of the initial 11th *K’atun* passage.

Conclusions

¹⁵ The idea of a prosperous 11th *K’atun* followed by a 12th *K’atun* filled with strife and warfare is later paralleled in the chronicles of Chilam Balam of Tzimin (Edmonson 1982:145–153).

The 11th and 12th *K'atun* passages convey the idea that by the 11th *K'atun* the Palenque kingdom prospered under the leadership of Pakal. These wealthy times brought an abundance of jade tribute. Scribes documented this age of florescence and wealth with a poetic couplet that described graphically the flowering of two trees. The titles of these trees evoke their bejeweled status. The first jeweled tree is marked with a jade celt while the second is said to be a tree with five branches bearing five personified jade blossoms. The first tree is a perfect description of the crosses on the TC and the TI lid, which are covered in a multitude of jade and tree hieroglyphs. The second tree with its five radiating arms and personified jade flowers is an exact match for the tree etched on a Yaxchilan pendant. Both trees are images of immense wealth and prosperity and stand in perfect accord with other events quoted on the rest of the TI main panel--namely, the influx of jade tribute over a period of successive *K'atun* celebrations, accompanied by the rich adornment of the Palenque patron gods with clothing and jewels.

Chapter 4

A Critique of the Schele and Freidel Argument for the *Wakah Chan*

This chapter will analyze four key assumptions underlying the Schele and Freidel argument for the Maya cross at Palenque. These assumptions will be revised in the light of new data obtained from the current work. In addition, this section will discuss why the assigned title of *Wakah Chan* is a misnomer.

In their publication *The Forest of Kings* (1990), authors Linda Schele and David Freidel presented their analysis and interpretation for the Palenque cross. They brought evidence to bear concerning the cross's identity, locality and proper name. In Chapter Six of their work, the authors laid out clearly those observations that led to every conclusion. In short, they proposed that the cross had the title *Wakah Chan* and represented a metaphorical tree that stood at the center of the cosmos. It was a tree that simultaneously represented a corn plant, a road to the underworld and the ruler himself.

In *Maya Cosmos* (1993), Schele, Freidel and Parker held fast to many conclusions and tacit assumptions first established in *The Forest of Kings*. They maintained that the central icons on the Temple of the Cross and Temple of the Foliated Cross were equivalent and that the *Wakah Chan* title was the proper name for the cross. They continued with their assertion that the image was a representation

of a mythical world tree standing at the *axis mundi*. They added that the cross also represented the Milky Way of the night sky, and according to its position along the ecliptic during different parts of the year, the ancient Maya conceptualized the Milky Way as having multiple forms including a raised tree, a corn plant, a starry crocodile and a celestial canoe that carries deities into the underworld. Being that the latter work stands on the shoulders of the former, it is vital to return to original arguments proposed in *A Forest of Kings*.

The authors derived their original claims from patterns they interpreted in the data. Their claims about the cross's identity, locality and proper name are beset with problems. I will show how each interpretation and its related conclusion relied on four key assumptions about triadic unity and centrality. Triadic unity refers to the perception of three distinct images as aspects of the whole. Centrality refers to the concept of an *axis mundi* at the center of the Maya spatial plane. Upon careful inspection, all four assumptions stand on evidence that is unsupported. I will now revisit and reanalyze these four primary assumptions using the authors' own words as a defense for my argument.

In Chapter Six of *A Forest of Kings* Schele and Freidel explain how the cross image fits into a unified architectural pattern within the Group of the Cross. The Cross Group contain three temples all facing a common plaza, and were built in commemoration of K'inich Kan Bahlam's accession to power. The three temples form a triadic complex that share similar architecture, decoration and inscriptions.

Each temple contains an inner sanctuary, or *pib na*, and a main tablet displaying one of three icons: a cross, a foliated cross and shield standing atop a throne. It is on these three images that the authors draw their first assumption:

The images used to represent the visions special to each *pib na* were all arranged in the same basic pattern. The resonances and contrasts designed into the three compositions provided a means of enriching the information they conveyed and emphasizing the unity of their spiritual source. The pictures in each temple were carved on the central axis of the main tablets set against the back of the wall of the *pib na*. Each composition represented one of three paths to Xibalba as well as the three forms that supernatural power would take during the king's ecstatic trances (Schele and Freidel 1990:239).

Assumption 1: The image of the cross is part of a homogeneous complex of three temples commonly referred to as The Group of the Cross. Since all three temples share in this unified architectural and triadic pattern, their images are deemed structurally equivalent. Therefore, all three images can be likened to three pathways leading toward the underworld.

Next, the authors relate how the cross is a variant of one of five mythological World Trees set up by the gods at creation of the world. Each tree corresponds to one of the four cardinal directions with a fifth direction located at the center:

The central icon at the portal of each of the three temples in the Group of the Cross specifies the nature of the cosmic power community responsibility that defined kingship for that temple. At the portal of the Temple of the Cross, we see a variant of the World Tree. This cross-shaped Tree, with the Serpent Bar of kingship entwined in its branches and the Celestial Bird standing on its crown, was the central axis of the cosmos . . . The king himself was the worldly manifestation of this axis, and this emphasized his role as the source of magical power. He was not only the primary practitioner of rituals that contacted the Otherworld: He was the pathway itself (ibid:242).

Assumption 2: The cross is in part a mythological tree that was located, not at one of the four cardinal directions, but stood as the central tree at the *axis mundi* of the world. The king himself is the embodiment of this tree and pathway.

The authors use the same tacit assumptions of triadic unity and centrality to explain the “what” and the “where” concerning the central image on the inner tablet of the Temple of the Foliated Cross:

The portal of the Temple of Foliated Cross bears a foliated variant of the World Tree formed by a maize plant rising from a band of water and K'an–Cross Water Lily Monster, One of the symbols of the watery world of raised fields and swamps (ibid:243).

Assumption 3 (built on Assumptions 1 and 2): Because the icon on the Temple of the Foliated Cross falls within the same structural triadic pattern, it too must be an equivalent variant of the same image on the Temple of the Cross. Therefore, the central image on the TFC is also a World Tree (in the form of a maize plant) and it too stands at the central point of the cosmos.

Finally, the authors turn to interpreting the names the Maya gave to each image by reading the accompanying hieroglyphic texts. They propose that the name of each temple sanctuary relates directly to the central image on the temple's inner tablet:

All three sets of inscriptions [on the *Alfarda* tablets and on the texts of each main inner tablet] describe the action in the same manner. The verb 'to house' is followed by the proper name of each sanctuary, followed by the glyph *u pib nal*, 'his underground house.' Each pib na was named for the central image on its inner tablet: Wacah Chan for the World Tree on the Tablet of the Cross, Na Te Kan for the maize tree on the Tablet of the Foliated Cross, and Mah Kina ???-Cab for the shield stack on the Tablet of the Sun" (ibid:259).

It is further stressed in the Chapter Six notes that:

The clearest demonstration of the relationship of the central icon with the name of the sanctuary occurs in the Temple of the Foliated Cross. There the

icon is a maize tree emerging from a monster with a kan-cross in its forehead while the name of the house is a tree sign over a kan-cross. Since the same relationship must hold for the other two temples, we can identify Wacah Chan as the name of the Tree on the Tablet of the Cross. The Temple of the Sun is more difficult, but the glyph on the balustrade is a variant of the “new-sky-at-horizon” glyph that occurs as a name at Copán. Here it has Mah Kina proceeding it, possibly as a reinforcement that the GIII shield in the icon of this temple represents the sun (ibid:475).

This identification of *Wakah Chan* as the name of the tree on the Tablet of the Cross was further substantiated by inscriptions--relating to mythological creation events and the Palenque Triad God GI--on the Tablet of the Cross and on Maya pottery texts, especially on Kerr Vessel 1226, which shows Jun Junajpu shooting the Macaw out of a tree:

In the expression of this great cosmic event at Palenque [the setting of the World Tree which lifted the sky up from the primordial sea of creation, as witnessed by the “och chan event” on Kerr Vessel 1226] we learn that this “entering sky” also resulted in the dedication of a house called “wacah chan xaman waxac na GI”. This is the name of the structure created by GI’ when he set up the World Tree. It is the dome of heaven and the movement of the constellations as they pivot around the great northern axis of the sky-- the pole

star. But the Wacah Chan was also the proper name of the pib na in the Temple of the Cross, which in turn was named for the central icon on the main tablet—the World Tree itself (ibid:256).

Assumption 4: The three temple dedication names mentioned in the glyphic texts of each respective tablet are synonymous with the titles the Maya gave to the three central images. This connection between building name and image is most evident on the TFC. By extension then, the same relationship must hold true for the other two temples. Therefore, the name given the pib na from the TC is also the name given the central image on the TC.

All four assumptions demand that the researcher make an intuitive leap of faith that relies strongly on structural patterns of substitution and oblique associations, rather than on direct corollaries in the data. Also, these assumptions are seemingly driven by a Structuralist paradigm, an approach the authors openly confess to using (see Freidel et al 1993:415 n.42). The first assumption equates all three temples and their corresponding images as one and the same simply because they share a common plaza, architecture and purpose. Certainly the Group of the Cross served to legitimize the accession of K'inich Kan Bahlam and the three structures were built to serve a common directive. But to designate all three temple images as equal, one must show how a cross, a shield and a maize plant clearly substitute graphically and glyphically

for one another in Maya art at Palenque and elsewhere. Even though there exist abundant representations of trees, maize plants, and shields in texts and imagery, the authors do not attempt to correlate them. In reality, such an effort would prove futile and negate their first assumption. Hence one must call into question an argument based on triadic unity alone.

With respect to assumption two and the cross as *axis mundi*, the authors offer no supporting iconographic, glyphic or physical evidence. Nor do they compare the cross's axis with information from other Classic Maya sites and iconographic programs, although the evidence for a four-part division of the universe and the four repetitions of colors, trees and gods are mentioned (1990:67, fig. 2:1 and p. 410). Surely if their *axis mundi* identification were correct, it would be proven in those numerous representations where the cross or tree are present. Rather, it seems the authors arbitrarily picked the direction that best suited their argument and temple arrangement of The Cross Group. It will be recalled from Chapter 1 of this thesis that Schele first based her idea of the tree's centrality and the spatial organization of the Maya cosmos on Thompson's ethnographic work on Maya religion, a work that relied heavily on fragments of Colonial Yucatec documents and Yucatec ethnographies. As Tedlock points out (1995:118), there are great problems "with the continuing use of Thompson as a definitive source for Maya thought and religion." Thompson drew a coherent Maya world view based on reassembling small bits of text from colonial documents and not from the authors of those texts" (ibid.). So, the veracity of his

facts needs to be routinely questioned and checked against reliable data. Early on in her research, Schele accepted Thompson's interpretation without question and emphasized the concept of an *axis mundi* tree in her three-tiered Maya world model. It is only later in *Maya Cosmos* that the authors turn to ethnohistory and modern ethnographic analogy to confirm original claims of the Palenque tree's centrality (Freidel et al 1993:165–256). So its clear that the authors' original treatment of cross iconography contains a faulty datum. The two analytical operations of identification and interpretation were merged from the start and never clearly distinguished--operations that Panofsky always insisted one keep methodologically separate (Graham 1995:125). In *A Forest of Kings*, the supposition of centrality has effectively produced the observation of centrality; therefore the concept of the tree as *axis mundi* must be called into question.

Assumption three--that the maize plant is equivalent to the cross--is tied directly to assumptions one and two. If the validity of the first two assumptions is in question, then the third must also be suspect.

Assumption four is by far the most conspicuous. On slim iconographic evidence, we are asked to presume that the names the Maya gave to each temple sanctuary are synonymous with the names of the corresponding central image. A small attempt is made to show that the image on the TFC does resemble features found in the hieroglyphs denoting the temple name. Even if the TFC identification is correct, one cannot presume that the other two temples follow suit simply because

they fall within the same triadic pattern. In addition, it is now known that a key piece of evidence employed by the authors, the “*och chan*” event on Kerr Vessel 1226, was based on an incorrect reading of the verb. The event is now likely read **EHM CHAN-na** for ‘*ehm-[i]-ø chan*’ ‘he descends (from) the sky’ and refers not to the raising of the world tree but to the descent of the Principal Bird Deity into the tree branches (Stuart 2005:106 and Zender 2005:10).

As David Stuart points out, a more subtle relationship exists between the temple sanctuaries and the names of the central images and it is not a one-to-one relationship (Stuart 2006:116). The names given to each inner sanctuary refer more clearly to the decorations on their facades (ibid). In fact, the iconography contained in each respective title conforms exactly to the architectural setting and decoration around each inner sanctuary (Claude Baudez 1993). In addition, the lower bands from the lower friezes of the main tablets of the Cross Group also correspond directly to title and sanctuary decoration. The hieroglyphic names the Maya gave to each of these three temples contain as their main components **CHAN**, **KAB’** and **K’AN** Cross glyphs--signs which directly reflect sky, earth and water respectively. All three correspond directly to the same primary motifs decorating the inner and outer frames of each inner temple: sky bands, earth bands and water bands (ibid). Figure 4.1 illustrates these one-to-one correspondences. The strong visual links between names and temple decoration leave little doubt that the Maya intended each dedicatory name

to reflect the inner temple sanctuary itself and not simply the central icon of its main tablet.

Schele and Freidel are correct in noting that the name of the “north house” where the god GI performs a dedication ceremony at Creation exactly parallels the name Kan Bahlam gave to the inner sanctuary of the TC. The dedication statements for the TC from the *Alfarda* Tablets and the TC Sanctuary Jamb clearly reinforce this intimate connection. Yet once again we are asked to presume that the temple’s central icon is also a reflection of this title. To support such a claim, the authors would have needed to provide additional evidence within and beyond Palenque contexts which positively assigns the name Wakah Chan to the cross image. Nowhere in the corpus of Maya inscriptions do the scribes directly name the cross--or any tree--as the Wakah Chan. On the contrary, the title only appears as the name of the TC temple sanctuary, as a term for a mythical house dedicated in the North at Creation, and as partial title for GI. The compound also appears in name phrases of other historical rulers such as Chak Tok Ich’ak of Tikal.¹⁶

The Wakah Chan Misnomer

Schele and Freidel explain their rationale behind the *wac ah chan* or “Wakah Chan” reading in *A Forest of Kings* (1990:426, footnote 8) and later in *The Workbook*

¹⁶ There is one other instance in which the title appears in association of what may be the Maize God and that is on a pot from Structure 5D-87. The god is seemingly named the “**WAK-CHAN-WINIK**.” The association of name and god is tentative at best. It’s clear from Tikal Stela 26 (glyph block YA3) that the “**WAK-CHAN-WINIK**” is a title carried by the ruler known as Great-Jaguar-Paw or *Chak Tok Ich’ak*. Schele found the corollary valid since she believed that GI from the Palenque Triad was also the Maize God and that GI had clear mythological connections to the **WAK CHAN** as attested on the TC main panel (D13-D16) (see Schele 1992:150).

for the XVIth Maya Hieroglyphic Workshop at Texas (1992:129).¹⁷ They applied the term Wacah Chan Nal to the proper name given the celestial house the god GI dedicates shortly after Creation (fig.4.2a). The house name is located at glyph block D10 on the TC main tablet. The authors point out that a similar "Wacah Chan" glyph is recorded as the name of the TC sanctuary (see glyph block Bp7 of the TC Sanctuary Jamb) (fig. 4.2b). In sharing the same name, it is assumed that the TC sanctuary is conceptually a reproduction of GI's celestial house. The authors take these readings one step further insisting that, "by extension the name must refer to the central image of the interior panel. That central image is the World Tree" (1990:426). Hence, they named the cross the "wac ah chan."

However, the decipherment supporting the name "Wakah Chan" is highly suspect (Stuart 2006:109). The presumed root /wak/ for 'to raise' was proposed following a suggestion by Nicholas Hopkins that a word wakah was derived by combining the number six (wak) with the doubled T584 suffix (-AH/AJ--which it is not!). The doubled T584 "B'EN" middle sign is located directly above the Chan sign. Schele states that:

Nick Hopkins . . . first suggested that the number six [wak] could be combined with the ah signs over the sky to give wakah. He pointed out to me

¹⁷ The colonial orthography employed by Schele and Freidel contrasts with the currently most-accepted orthography in the representation of certain phonemes, here c vs. k for /k/.

that wak is Yucatek for 'stand up' and 'erect something'. The equivalent root in Cholan is wa' (Schele 1992:129).

In fact, the Yucatecan (and proto-Mayan) positional root is wa' 'upright'. In Yucatecan, wa' plus the positional participial suffix -Vk would generate wa'-ak--an adjective meaning 'in an upright position' (Barbara MacLeod pers. comm. 2006). But *wak-aj is not a logical next step, and in fact makes no sense.

The reading "Wakah" is based on a erroneous interpretation of the constituent signs. The -ah suffix derived from the flawed understanding that the doubled T584 "B'EN" middle sign could read AH. This interpretation is founded on even older epigraphic research on the T168 sign (the famous AH-PO superfix) wherein the single T584 is AH when cartouched as a day sign (see Lounsbury 1973). But the doubled T584 middle sign has yet to be deciphered. "Wakah Chan", beyond making little sense linguistically, is a misnomer.

Revising The Schele-Freidel Model

Having revisited Schele and Freidel's interpretations concerning the identity, locality and proper name of the Palenque cross, I will now offer an alternative interpretation based on data and insights provided in the current work.

Identity

The Maya cross is not entirely a mythological construct or stellar figure of the night sky. The physical evidence from archaeological contexts (see Appendix B)

shows that it functioned as an artifact--a man-made jade object of veneration--and was used by the elite, in part, as a cache offering in building dedications. At least two jade and shell mosaics, one from Palenque and the other from Rio Azul, prove that the Maya lapidaries carved and built miniature jade and shell mosaic replicas of the Palenque cross and its entire assemblage including the Principal Bird Deity, the draped serpent, the **K'IN** bowl and the monster head. Emphasizing the tree's inherent jade quality, artists in both cases were careful to render the crosses exclusively from jade while the bird and other components were fashioned from a combination of jade and shell. Archaeological remains from Palenque and Pakal's crypt are even more telling. Those who participated in Pakal's final tomb ceremony left a sizeable cache offering of jade atop the carved cross on the sarcophagus lid. They made a last act of reverence to the cross, and to the king himself, by physically dressing the tree with jewelry--including a life-sized jade necklace with four pendants and nine jade celts. They decorated the tree's trunk and branches with the verdant stone in recognition of its jade essence. The offering is even more appropriate if one interprets the image on the TI lid as Pakal sprouting into a jade tree. This sprouting event exactly parallels the ancestral orchard carved around the sides of the sarcophagus lid. Like Pakal, his ancestors (all dressed in a rich array of jewelry) are flowering out of the earth as bejeweled fruit trees. Therefore the physical evidence found at Palenque compels one to reevaluate the Maya cross as a material object that was venerated as a literal jade tree rather than a mythical construct of the mind.

Locality

A simple and direct iconographic argument can be made that shows that the Palenque cross and the **K'IN** bowl at its base are clearly tied to the east (See Chapter 2 for discussions on the bowl). The **K'IN** bowl alone is used in the glyphic expression for 'east'. The **K'IN** bowl, when displayed at the base of the tree, marks the tree as emerging from a place of fire. It is no coincidence that the Maya labeled the tree trunk with the same **EL K'IN** sun bowl used to identify the east, since both burner bowl and the east are places of heat from which maize and other plants are often portrayed as emerging (see Kerr Vessel K1892 fig. 3.6). The placement of the tree in the east resonates perfectly with other instances where the tree appears. For instance, on the Cosmic Plate it emerges out of the head of Chak-Xib-Chaak. The god himself is known from the Dresden Codex to have clear associations with the east. On the same plate, a tree (in the form of a square-nosed blossom) flowers from the upturned **K'IN** bowl on the backside of the Cosmic Monster. As noted in Chapter 2, the rear end of the Cosmic Monster and **K'IN** bowl are consistently oriented with the east in the art of Yaxchilan. In no case where tree and fiery bowl appear is the *axis mundi* emphasized. Rather, the tree is marked by the sign for east or is seen emerging from an eastern locale. The combination of **K'IN** bowl and tree make clear the conceptual connection between the cross, the east, and a place of heat and of emergence.

Proper Name

With the bejeweled character of the Maya cross firmly identified in Chapter 3, a new reading for the cross's proper title is now possible. The 11th K'atun chronicle from Palenque's Temple of the Inscriptions Middle Panel features a passage wherein recorded history, glyphic title, verbal action and the portrait of a jade tree perfectly coincide. The text is a poetic couplet that describes graphically and literally the flowering of two trees. One of the trees was named the **(JADE/CELT) 'UH TE'** for "Jade" Jeweled Tree, a name exactly describing the crosses on the TC and the TI lid which are themselves marked with jade signs. The appellation was not invented by Palenque scribes but was shared among other scribes and artists who commonly placed it on their arboreal portraits by using hieroglyphs for jade and tree.

Conclusions

The following work has sought to re-analyze the Maya cross in the light of new data and findings in hopes of understanding fully its true name, geographic orientation and material identity. In the process, it has reexamined and revised many old ideas and theories. The analysis verified previous investigations that the cross was indeed a stylized tree and in some cases could represent a giant Ceiba tree. It also showed that the **K'IN** bowl in which the tree sits conceptually ties the tree to the eastern realm of the sacred Maya landscape rather than to the *axis mundi*. Furthermore, the analysis showed how the glyphic labels on the face of the tree trunk mark it as being made of wood and precious jade.

The cross' connection to jade is verified by new hieroglyphic readings of its proper name. The *K'atun* Histories on Palenque's Temple of the Inscriptions records the name the "Jade" Jewel Tree. This title serves as a perfect description for the cross motif. Not only is the name wholly identifiable with the cross but it is solidly supported by the archeological evidence. The jade crosses found at Palenque and Rio Azul serve as irrefutable evidence that the Maya carved and assembled real jade trees, and that the cross was conceived of, and fashioned as, a jade object. These objects are a key component in our new understanding of what the cross was made from. In addition, it forces one to view the cross more in terms of a man-made object rather than a symbolic product of myth and allows new inquiries about its material composition.

Once the cross is understood as a jade tree, other pieces of evidence begin to fall into place. It is now known why the Maya dressed the cross on Pakal's sarcophagus lid with jade. Conceiving it as a jade tree, they found it only proper to decorate the cruciform image with jade ornaments. Even the stiff, geometric posture of the Palenque cross can be explained by its identification as a jade object. Presuming the cross image to be a stone portrait of an actual jade mosaic, then its stiff posture may be representative of a sculpted assemblage where jade plaques were cut and fitted around a ridged cylindrical mold of wood or clay. The tall cylindrical jade jars from Tikal prove beyond doubt that Maya lapidaries had the skill and technology to fashion just such jade sculpture.

Finally, given that the Palenque Temple V jade cross is a mini-replica of the central motif on the Temple of the Cross sanctuary, it is not difficult to imagine Palenque artisans creating a life-sized jade cross whose likeness they later carved on the Temple of the Cross. What better way to display the wealth, pomp and power of Pakal's renewed kingdom than to construct a tree from jade tribute, and to have this resplendent tree take center stage during rites of accession?

In the final analysis, one can only hypothesize what the Maya of Palenque were trying to say about the cross. There is no ancient artisan to initiate us into their philosophy or guide us through their symbology. The cross stands before us as mute as the stone on which it is carved, unwilling to shake off the dust of centuries and divulge its secrets. Yet one thing is certain: the Maya cross challenges each new generation of researchers with a series of new questions that lead to ideas beyond the grasp of present knowledge. Almost two hundred years after its rediscovery, the cross still remains the center of scholarly debate, recalling once again John L. Stephen's observation that the Maya cross gives rise "to more learned speculations" than perhaps any other object discovered at Palenque.

Appendix A

Analysis of the **TE'** and T24 “Mirror/Celt” Hieroglyphic Signs

The **TE'** Sign

The **TE'** hieroglyph, like many word-glyphs, has a fascinating and often perplexing distribution within Maya iconography and writing. The word itself is glossed in several Maya languages as the general term for ‘wood’ or ‘tree’ (see Whittaker 1965:167; Attinasi 1973:196 and 320; Aulie and Aulie 1978:110; Barrera Vasequez 1980:85; and Kaufman and Norman 1984:132). Two logograms for **TE'** occur repeatedly as “normal” and “head-variant” forms in the hieroglyphic corpus.¹⁸ The former is more abstract, consisting of a joined circle and oval, while the latter is the animated profile of a grotesque human head missing a lower jaw.

The normal form of the **TE'** glyph is composed of two basic parts (fig. A.1). The first is a circular bead with one or two circles inscribed within. Attached to the circle is an oval-shaped ornament from whose edge juts one or two jagged “teeth.” Inscribed in the oval is a line or a bar on which hangs two or three dots. This line-and-dot-cluster serves as the essential feature of the **TE'** glyph and acts as a main sign that labels wood items. For instance, Maya artists placed the line-and-dot-cluster on depictions of trees, plates, bowls, canoes and canoe paddles to mark these

¹⁸ In his book *An Introduction to the Study Of The Maya Hieroglyphs* (1975:24-25), Morley distinguished between the “normal form” and “head variant” of a glyph, the distinction of which is adopted here.

items as made of wood (fig. A.2). Long after the Maya replaced wooden plates with ceramic dishes, scribes still marked them as derived from wood by labeling them with a **TE'** sign. For instance, Kerr vessel K4669, a tripod plate, identifies itself in the PSS text as **u-ja-wa-TE'** for **u-jawa[n]te'** 'his wide (tripod) plate' (fig. A.3) (Stephen D. Houston, David Stuart and Karl Taube 1989:723).¹⁹

The head variant of the **TE'** glyph is the profile or frontal portrait of a human face missing a lower jaw (fig A.4). The head displays a pair of large crossed eyes, a cruller motif running under the eye socket, and a disembodied jaguar paw above the ear. From its jawless mouth dangle root-like protrusions. This face is a portrait of the very same head that inhabits the trunks of many trees painted on Classic vases. The **TE'** faces on these trees can also show an oval jade/celt sign emblazoned on the forehead or a pierced nose with an "Ajaw" bead for a nose jewel. The mouth of the **TE'** head contains either the T712 sign or root-like tendrils. In every instance as a full tree, the lower jaw of the **TE'** mouth is below ground level, a fact that argues that the substance trailing from the mouth represents roots or tubers of some sort.

The **TE'** sign was written abundantly by Classic scribes as a numerical classifier in counts of the days of the Haab or 365 year period. The morpheme *te'* is one of many classificatory suffixes that qualify a word and relate what class a counted

¹⁹ As Steven Houston (et al. 1989) points out, many tripod plates contain in their PSS text the name 'u-ja-wa-TE' for u-jawa[n]TE' 'his wide (tripod) plate'. Erik Boot notes (2003:6) that the suffix -TE' could very well relate that originally these plates were made of wood, not ceramic material. Boot adds, "all ceramic containers originally were made of some kind of vegetal material; the Classic cylindrical ceramic vessels possibly were made from cut mature bamboo, which also in the present day makes excellent drinking cups."

objects falls into (Tozzer 1921:103 and 292, Thompson 1960:54). A most elaborate example of this is found within a Long Count inscription on Copan Stela D (fig. A.5) (David Stuart, pers. comm. 2005). Copan scribes wrote the entire calendrical text with full-figured variants of numbers and periods. The Calendar Round recorded is **10 AJAW 8 CH'EN**. The numbered Haab month reads **WAXAK-TE'-CH'EN** with the numeral eight displayed as the full-figured portrait of the Maize God. Cradled in the Maize God's left hand is the head variant of the **TE'** sign with the root-like protrusions dangling from the mouth.

Another variant of the **TE'** sign occurs within the context of calendrical signs. The **TE'** head serves as the Patron of the Month for the month **PAX** (fig. A.6).²⁰ In such cases, the face of the **TE'** head carries an added nose ornament associated with ink/soot and which is often translated as **SIBIK** (Zender 2004:8). A full-figured, personified form of the **PAX** God/**TE'** sign occurs on Quirigua's Zoomorph B (fig. A.6d) (Taube 2005:30). Here, vegetal leaves sprout from the reclining figure's mouth. Head variants of the **PAX** God also occur on Yaxchilan Lintel 48 and Copan Stela 9 (fig. A.6a) (Thompson 1971:figure 23). A possible name for this **PAX** patron is **SIBIK TE'** (Zender 2005:8). As Miller and Martin (2004:28-29) point out, the personified form of **SIBIK TE'** occurs as part of a sculpture on the Amparo Throne Back. The throne shows the **PAX** Patron as possessing a bizarre set of serpent-

²⁰The portrait of the **PAX** god will inhabit the central element of the Introductory Glyph from a Long Count inscription. This central element will change according to the Haab month noted in the Long Count (Thompson 1971:105). Incidentally, the glyph for the month **PAX** displays "sprouts" emanating from a cleaved **TUUN** sign which may indicate a vegetal connection.

headed wings underneath his arms (fig. A.7). He sits cross-legged between two figures, one of which is dressed as the God Itzamna. The accompanying glyphic text refers to the **PAX** God as the “messenger of Itzamna” (ibid).

Finally, anthropomorphized figurines of the **PAX** god were carved from pure blocks of jade (Wagner 2000:67; Taube 2005:29). At Copan, the Early Classic grave of *K’ak’ Yipyaj Chan K’awiil* produced a rectangular shaped pectoral carved as a standing figure of the **PAX** god, complete with the definitive jaguar ears and stylized roots protruding from its mouth and oval T24 signs on its legs (fig. A.8a) (Wagner 2000:67). Even more remarkable, the back of this pectoral is carved with a square-nosed blossom and oval T24 sign (Elizabeth Wagner pers. comm. 2006) (fig. A.8b). The combination of personified **TE’** sign and a portrait of a square-nosed blossom etched on a jade object confirm the intimate connection between jade and this arboreal god.

In summation, the **TE’** sign shows great variability and wide distribution in the script due in part to its popular uses in the language both as a general term for tree or wood and as a numeral classifier. It possesses both normal and head variant forms, the latter being the animated portrait of a tree trunk. It was used extensively to label wooden objects or trees. As a patron for the month **PAX**, it acquired the revered status of a deity who at times served as a winged messenger for the gods.

The T24 Sign

The crosses at Palenque display on their bodies so called “mirror/celt” signs. The glyph is catalogued by Thompson as T24 (Thompson 1962:445). In general, the T24 sign is quite simple, consisting of two oval-shaped rings with a smaller oval ring infixed into the larger (fig. A.9). Two parallel bands form a partial loop or arch within the infixed ring.

Linda Schele and Jeffery Miller (1983) first coined the term “mirror” for this sign suggesting that it had a value of **NEN** or ‘mirror’ and conveyed the idea of “brightness” in association with the jewelry items and gods on which it was inscribed. Following a suggestion by Nikolai Grube (1988), Schele later adopted the idea that these signs meant “precious substance” (Grube and Schele 1991:2).

T24 signs are also known as “celt” signs and commonly appear in the art as oval belt ornaments hanging off royal belts, such as those depicted on Dos Pilas Stela 1 and 17 (fig. I.9b).²¹ Oval belt ornaments occur abundantly in the archaeological record as thinly carved jade pendants, commonly indexed as jade “celts” for their resemblance to axe heads. These celts are blue/green stone pendants, with a single hole drilled at the top in order to be hung from belts and back racks.²² One of the most famous of these jade celts is the Leiden Plaque from the Early Classic Period (fig. A.10). It bears an inscription on one side and a kingly portrait on the other. The

²¹ These Dos Pilas monuments showing celts hanging from the belt were painted with blue paint; it is the only example of a painted royal belt from a stone carving to have survived from Classic times with paint intact (Schele and Miller 1986:77). Classic Maya jades display multiple blends of blue and green colors.

²² It is important to note that Mayan languages do not make a primary distinction between the colors blue and green and see them as a single color, commonly referred to by the name “Yaax” (Thompson 1971:252).

king himself is fitted with oval celts hanging off facial masks mounted on his royal belt.

The T24 signs appear abundantly on depictions of axe heads in Maya art. The Chaak God wields just such an axe, as seen on the so called “Baby Jaguar Vases” painted in the Codex Style (fig. A.11). Chaak axes show a solid one-to-one correlation between the T24 sign and its use as an axe head.

Reinforcing semantically that this is indeed the case, the passage inscribed on a broken Pre-Classic jade celt names the object with the T24 sign (fig. A.12) (David Stuart, pers. comm. 2005). The inscribed passage reads **?-CHAN-(“mirror /celt”) u-K’ABA’**, or “?-sky-(T24) its name” (Grube and Martin 2001:II-36).

I agree with David Stuart that the T24 sign has a head variant form (Stuart: 2002). This head variant is found in Thompson’s catalogue as T1017 (Thompson 1962:457) and is the same animated face of a cross-eyed supernatural that inhabits the base of the cross on the TI lid (fig. A.13a-b). The face has very distinct features, including a quatrefoil-shaped mouth with a shaved, buck-tooth incisor, a curled nostril, and square-shaped eye sockets with crossed eyes. In addition, infixed into its forehead at the back of its head is a T24 sign.

Over the years, previous scholars have assigned multiple identities to the T1017 head. A short review of these readings is in order. Seler associated it with the Sun God (Seler 1901-1902:19). Greene also labeled it as portrait of the Sun adding that the face occurs as a celestial element in Star Bands (1973:82). Linda Schele later

equated the T1017 face with God C. Schele asserted that the face was commonly used as a logogram in the glyphic expression of **K'UHUL** and equated it not with the sun, but with the concepts of 'holy' and 'sacred' (Schele and Miller 1986:77). She reasoned that if the glyphic title of the God C head is read phonetically as **K'UHUL**, then the head acted as a marker for 'holy' (Schele and Freidel 1990:410). Still later, Schele abandoned the 'holy' reading in favor of new phonetic evidence. She claimed it possessed the phonetic value **TZUK** meaning 'partition' or 'division'. The 'partition' meaning supported her belief that the cross on the TI lid (with the T1017 head at its base) was the 'partition' tree that stood at the center of the world, and the Maya inscribed the **TZUK** head on the cross to mark it as the central partition of the Maya universe (Grube and Schele 1991:4).

All previous readings for the T1017 head are found lacking upon close evaluation of the iconographic and phonetic evidence. First, the T1017 head and the head of the Sun God do not share an equal set of facial characteristics and only partially resemble one another. As noted, the T1017 head on the TI lid cross has a very distinct quatrefoil-shaped mouth with a shaved, buck-tooth incisor, a curled nostril, and square-shaped eye sockets with crossed eyes and a T24 sign in the forehead. The face of the Sun God also sports a buck tooth and crossed eyes. But the face of the of the Sun (who also is the head variant for the number 4) is missing the essential quatrefoil about the mouth and prominent mirror sign in the forehead (fig. A.13d). Second, the face of God C and the T1017 face on the TI lid simply do not

match. With the exception of the curled nose, the God C head from the **K'UHUL** glyphic expression share none of the prominent T1017 facial characteristics like the quatrefoil-shaped mouth with a shaved, buck-tooth incisor (fig. A.13c). David Stuart (1988:201) points out one substitution between the God C head and the T1017 head where the two signs seem to be equivalent. In this instance, the T1017 head is not an exact match, and is prefixed by the **K'UHUL** title and carries a “**b'i**” syllabic sign in the forehead. Stuart warns that “the God C-Sun God cannot be thought of as a “variant” of God C in all cases, because it appears in a wide range of contexts different from those of God C” (ibid:203). So, the God C and T1017 heads cannot possibly be deemed a match on iconographic evidence alone. Lastly, Schele’s **TZUK** reading hinged upon the belief that that the T1017 head directly substituted for the “gourd” glyph (T559 with an infixed **K'IN** sign) that was thought at the time to read phonetically as **tzu** (Grube and Schele 1991:2). Current decipherments by David Stuart refute the **tzu** value showing strong evidence that the “gourd” glyph (with **K'IN** infix) actually reads **TAK** and functions to pluralize animate nouns (Stuart and Houston 1999:II–25). So all previous identifications suggested for T1017--Sun, God C and **TZUK** are highly doubtful.

If T1017 is the head variant of the T24 sign, then both will occur in similar contexts. Just as the “mirror/celt” sign marks axe heads, so too the T1017 head marks stone axes carried by various gods. Chaak often swings a circular axe emblazoned with the T1017 face (see fig. A.11) (as seen on K4013 and K521). The smoking axe

in *K'awiil*'s forehead will carry the T1017 face (fig. A.14a) (David Stuart pers. comm. 2005). *Itzamnaaj K'awiil* (Ruler 2) from Dos Pilas uses a *K'awiil* portrait in his name phrase on Stela 8. Here, *K'awiil*'s smoking forehead axe displays the T1071 animated celt with a slight difference. The head has a circular jade bead on its forehead rather than the more common T24 sign.

To verify that the oval celt sign and the T1017 supernatural head are indeed equal signs, one looks to the inscriptions of Naranjo, and to Stelae 24 and 29 erected by Lady Six Sky (Grube and Schele 1991:5). On Stela 24 a portion of her title consists of two glyph blocks, with the latter being a **CHAN** glyph with an unknown superfix followed by the oval celt sign that is reversed—i.e. points to the right (fig. A.14b). On Stela 29, the same title is spelled slightly differently; the supernatural head (also reversed) directly substitutes for the celt sign and reads **CHAN**–(T1017 supernatural head) (fig. A.14c–d).

Another clear one-to-one substitution occurs within the calendrical signs called “Lords of the Night”. The Lord of the Night G5 often carries for its main sign the oval T24 sign (fig. A.15a). On Yaxchilan Lintel 48, scribes replace the T24 sign with the T1017 head (fig. A.15b). These direct substitutions at Naranjo and Yaxchilan leave little doubt that the two hieroglyphs are equivalent.

As evidence of its close affinity to jade stone, the T1017 head was placed directly on green stone by Maya lapidaries, as seen on a green jadeite block from Palenque's Temple 12 (fig. A.16) (Stuart 2002:6; Miller and Martin 2004:234). The

T1017 head carved on the front of this block is accompanied by an inscription on the back consisting of three glyphic columns. The text is read from left to right and down single columns. The inscription describes the object as a tribute item from a Pomoná king. Following the date **1 AJAW 3 POP** and God N dedicatory verb, the inscription reads (B2–C3): **YAX–T1017** supernatural head- **u–K’ABA’ yi–ka-tzi** “Sun–Raiser Jaguar” [Pomoná] **AJAW**, for ‘green–“T1017 supernatural head”, is its name, his tribute, Sun Raiser Jaguar, Pomoná lord’ (ibid). The scribe specifically names the jade block as the ‘green T1017 supernatural head.’ So, there can be no doubt that the object named as tribute is the jade block itself.

This association between the T1017 supernatural head as a name tag and a polished, green stone as the named object refutes prior suggestions that the T1017 head relates to concepts of ‘sun’, ‘holy’, and ‘partition’. Instead, the iconographic, linguistic and material evidence confirms that the T1017 supernatural head denotes in this case a highly polished jade surface, and acts as the head variant of the T24 sign and possibly jade itself (David Stuart, pers. comm. 2005). David Stuart suggests these signs embody the quality of resplendence as one finds on a jade surface.²³

Let us review the evidence so far presented. T24 and the T1017 head are equivalent signs. T24 is itself a mini–portrait of a jade axe head. As hieroglyphic

²³ One cannot discount the fact that the T24 sign occurs in iconographic and grammatical contexts that seemingly do not relate to jade. One such case is on the backs of toads, the arms of gods and on mountain scrolls; all three of these surfaces may hold in common that they are akin to polished jade. Another case is in the introductory glyph of the PSS while still another T24 sign sits in the hand of the CH’AM accession verb. The sign is also found attached to the name glyphs of the Maize God and Death God in the Dresden Codex. Multiple occurrences like these argue that the sign obviously carries multiple meanings and is dependent on the particular context.

signs, both were employed by scribes to directly name jade celts and jade objects. This strongly suggests that both glyphs signaled a semantic value closely akin to the polished green surface of jade, and served at times to specifically label jade stones. Accordingly T24 and T1017, in the context of the Palenque cross and jade objects, will henceforth be referred to as “jade signs”.

Reading the T1017 head as jade has a significant impact on the interpretation of the Palenque cross. As it will be recalled, the T1017 supernatural head quoted in the name phrase of the jade block from Palenque’s Temple 12 is an exact one-to-one match for the supernatural head carved on the base of the cross on the TI lid. The connection implies that the function of T1017 head on the cross is to label it as a jade object. The T1017 head acts as a label in the same way that the **TE’** sign marks the cross as a tree. So, the Palenque cross is labeled both as a tree and as a jade object.

Appendix B

Detailed Assessment of the Temple V North Group Cache at Palenque

Alberto Ruz Lhuillier first described fragments of a remarkable mosaic from the Temple V North Group in the ANALES de INAH publication from 1958. The find has remained for the past fifty years an obscure footnote in Palenque's archaeological record until David Stuart identified the cache fragments as components of a mosaic of the Maya cross.²⁴ It is the purpose of this section to offer a detailed examination and description of the Temple V cache and to propose ideas about its original configuration and composition. In addition, the find will be compared to other jade caches at Rio Azul and Palenque.

Location and Description

The cache of jade and shell was one of several offerings found below the floor and along the central axis of Temple V (fig. B.1). Labeled 'Ofrenda No. 2,' it was located directly in front of the threshold and just below the inner sanctuary door. Ruz gave the find the following short description:

La OFRENDA II se descubrió en la orilla del umbral del pórtico dentro del núcleo y junto con carbón y restos de tela carbonizada. Se componía de numerosos fragmentos de jade, concha y nácar, algunos parcialmente ahumados o carbonizados (Ruz 1958:247).

²⁴ The Temple V fragments do appear again in *The Bodega of Palenque, Chiapas, Mexico* (Schele and Mathews 1979: figs. 595–97), where they are treated to short descriptions.

The offering numbered one hundred and seven pieces in total with thirty jade and seventy seven shell elements.²⁵ Seventeen of the shell pieces were mother of pearl. Figure B.2 shows the drawings of these fragments as they first appeared in the original 1958 publication. The tallest piece is marked by the T1017 supernatural head and shows red paint in the incisions (Schele and Mathews 1979:fig. 595). Ruz mentions that the *K'awiil* heads are marked with cinnabar in the grooves (Ruz Lhuillier 1958:plate XXXVIII). Burnt markings on many of the pieces indicate that prior to burial the mosaic had been set on fire. The entire assemblage was very likely burnt in place as part of a termination ritual or dedicatory offering. The carbonized wood and cloth fragments found with the cache are equally significant. The wood probably served as the backing upon which the mosaic was attached while the cloth was likely used to wrap the object into an offering bundle.

Identification of Cache Fragments

Using the central images on the TC and TI sarcophagus lid as a guide, about thirty pieces of the mosaic can be positively identified as relating to parts of the Principal Bird Deity, the cross, the draped serpent, the **K'IN** bowl, the monster head, the great bony jaws of the underworld centipede, and floating flowers and jewels. Figure B.3 reconstructs the assemblage to spatially mirror the cross on the TI lid. Figures B.4–5 attempt to identify each piece of the mosaic. Interestingly, the cross

²⁵ In his 1956 publication on the Temple V cache, Ruz did not include a full set of drawings for the shell and jade pieces in Figures 12 and 13. He left out many of the drilled conch shells. Fortunately, his photos of the mosaic include all pieces with the exception of one circular shell, which is only found as a drawing in Figure 13. To make an exact count one must consult both photos and drawings.

itself (blossoms and trunk) is of pure jade. Such exclusivity with materials reinforces the idea that the cross was seen by the artist as a jade tree. Figure B.6 compares each part of the mosaic with the image on the TI lid using yellow highlights. Figure B.7 marks each piece of the mosaic with highlighted colors: orange marks various pieces of shell, pink marks the mother of pearl, while green highlights pieces of jade.²⁶ The mosaic is neither a direct copy of either the TC image or the sarcophagus lid image, but rather draws on features from both. For instance, the tree blossoms from the mosaic are more like those represented on the TC and have bell-shaped outlines. The draped serpent of the mosaic has two *K'awiil* gods emerging from its double maws and is similar to the TI lid in which *K'awiil* and the Jester God emerge from the snake. The bird itself does not correspond exactly to either the bird of the TC or the TI lid. The bird has two opposing serpent heads rendered from mother of pearl that originate from its left and right wing-tips. These thin serpent heads are exclusive to the Principal Bird Deity. The opposition of wingtips implies that the bird stood atop the cross with wings outstretched. The Early Classic Kerr Vessel K3105 displays such a frontal, outstretched posture (see fig. 2.26).

Makeup and Assembly

²⁶ A note of caution about the mother of pearl fragments: there is some confusion on the matter since Ruz did not accurately specify in the figure caption on Plate XLV which portion--the top or the bottom of the photo--is shell or mother of pearl (See Ruz Lhuillier 1958). Plate XLV is split horizontally across the center. In the caption he wrote "Fragmentos de mosaico de concha y nacar." I interpret this as meaning the upper portion of the photo contains the shell while the lower portion displays the mother of pearl.

How did ancient Maya lapidary craftsmen assemble the finished product?

With the exception of some drilled plaques of unknown usage, none of the pieces of the mosaic cross contain drill holes, so parts cannot have been strung or nailed. The presence of the floating jewels and flowers suggests that some sort of backing was used to secure each part of the mosaic. One option was to fit each jade piece precisely in place into pre-cut grooves on a support of shell or wood (Wagner 2000:67). As previously mentioned, the carbonized wood fragments found with the jade and shell pieces most likely served as a backing to inset pieces of stone and shell.

Given the absence of drill holes, the jade pieces were not pinned together as were the surfaces of jade mosaic jars from Tikal (fig. B.8). To create the Tikal jars, Maya craftsmen first drilled a hole in each jade plaque, then applied a resin glue of unknown substance, and then pegged each plaque onto wooden cylinders with wooden nails. Finally, a tiny jade plug covered each pin hole (Coe 1975:794). Like the Tikal jars, the Palenque mosaic must have been attached to a surface using a bonding agent. There are a few examples of jade inlays into shell, wood and bone which may offer clues. At Dzibanche' in Yucatan, a carved shell plaque depicting a seated lord was studded with bits of jade (Fig. B.9) (Stuart 2004:134). Each piece is stuck to the surface of the shell by an unknown adhesive. Jade inlays on wood also appear in the archeological record at Chichén Itzá. In the Temple of the Warriors was found a circular plaque mosaic fitted together with hundreds of turquoise and pyrite tesserae (fig. B.10) (Morris et al. 1931:184–190; and Fastlicht 1960).

An incredibly durable adhesive is associated with Maya ornamental dentition. As early as the Middle Pre–Classic, the Maya decorated teeth by drilling and embossing them with jade studs (Hansen 2000:54). A bonding agent was employed to cement the stud into the tooth (Flashlight 1960:124). High amounts of calcium phosphates within the bonding agent reveal that the ancient dentist knew how to prepare an insoluble glue to permanently fix stone to tooth. This glue was so strong that it remained stable for over a millennium. Neither death or decay have lessened the glue’s grip. It is logical to assume Maya artisans had access to all these glues, and used them to craft mosaics of jade and shell.

Collaborating Evidence

A jade mosaic similar to that of the Temple V cache is known from Rio Azul, Guatemala. Cache 3 from Structure B-56 included forty-seven items of both jade and shell (Adams 1999:62). Figure B.11 shows rubbings of ten of these original jade plaques. At least eleven of these fragments can be reassembled into another cross (fig. B12). The jade plaques show four square–nosed blossoms, sun bowl with two tripartite elements, a serpent head and one oval jade sign. The bird is carved from a single shell plaque. Like the Palenque Temple V cache, the Principal Bird Deity is carved exclusively in shell while tree, **K’IN** bowl, serpent and blossoms are of jade.

What the cache deposits from Palenque and Rio Azul now confirm is that the cross image existed as a miniature, man–made jade object. These miniature mosaics

beg the question of whether the Maya also fashioned a life-sized model of the cross, like the jade tree to which *K'inich Kan B'ahlam* pays homage on the TC panel.

Intriguing evidence found atop the TI sarcophagus lid points to this very possibility. When Alberto Ruz Lhuillier opened Pakal's tomb, he found offerings on top of the lid. Before enclosing the tomb, the Maya placed precisely over the middle portion of the cross bits of jade mosaic, jade pendants, and shells (fig. B.13b). The entire offering fell within a square meter area that was outlined by a line of red cinnabar. Ruz Luiller explained how the jade lay over the cross image:

Al penetrar en la cripta se hallaban sobre lápida que cubre al sepulcro numerosos fragmentos de jade, aparte de nueve pendientes de piedra en forma de hachuelas, dos plaquitas de concha nácar y una conchita marina. Estos objetos estaban esparcidos sin orden aparente, precisamente sobre la cruz, es decir en la mitad Norte de lápida, en una extension que no pasaba de un metro cuadrado, cerca de un reguero de cinabrio. De los fragmentos de jade, 118 fueron recogidos previo levantamiento por coordenadas de su posicion exacta sobre lápida, sin que esto ayudara a la reconstrucción de las piezas, con excepcion de una sección de mosaico que apareció formada (Ruz Lhuillier 1973:152).

As modern day celebrants hang a Christmas tree with ornaments, the Maya decorated the cross with jade celts and masks of human heads. Participants in Pakal's

final tomb ceremony made a last act of reverence to the cross, and to the king himself, by physically dressing the tree with jewelry including three jade masks and nine jade celts. They decorated the tree's trunk and branches with the verdant stone in recognition of its jade essence.

There is but one published blurry photo and vague drawing made by Ruz that documents these ornaments *in situ* (fig. B.13a). In disagreement with Ruz's description, the picture reveals that the celts at least were carefully positioned on top of various parts of the image. Four celts lay directly across the forehead of the T1017 supernatural head inscribed at the base of the cross. Two more celts lay directly above the jeweled flowers floating beside the trunk. The haphazard distribution of the remaining fragments could well be due to the disintegration of the mask mosaics as they fell apart over time. Unfortunately, neither the photo, drawings nor written description disclose the exact positions of the mask pieces. Ruz remarked that when assembled, the heads and masks could very well have formed part of a collar or belt as depicted on the nine stucco figures adorning the walls (*ibid*). Later scholars are inclined to believe that the jewelry formed a part of a royal belt and was intended for Pakal and not the cross (Miller and Martin 2004:236).

Taking into consideration that the Maya recognized the cross as a bejeweled jade tree, there is the intriguing possibility that the jewels atop the TI lid did not serve to adorn Pakal but instead once dressed a life-sized image of the cross--one that was equal in size and character to the jade cross on the TI lid and the cross TC panel.

Dressing an arboreal statue with human garb was not uncommon. Images from the TFC and the New Year pages of the Dresden Codex (pages 25–28) testify that plants and trees wore human vestments and jewelry. On the TFC the primary stalk of the maize plant is mounted with a giant mask that sprouts a nice head of hair and a beard (fig. B.14a). The mask also sports earrings and an oval jade sign on its forehead. Below the mask hangs a beaded necklace with a giant “Ajaw” pendant. The New Year pages of the Dresden show cardinal trees wearing human vestments such as scarves and capes (fig. B14b–c). The tree dedicated to the east (located at the bottom of page 25) is completely covered in garb. The tree is mounted with a *Chaak* mask and wears a beaded necklace, a scarf, and a cape with a foot imprint. The human apparel indicates that the Maya saw certain plants as animate beings who required vestments and adornments of humans. The dressing of the cross on the TI lid with jade stones exactly parallels the TFC and Dresden Codex examples and points to the possibility that the pendants and necklaces served to ornament the tree itself.

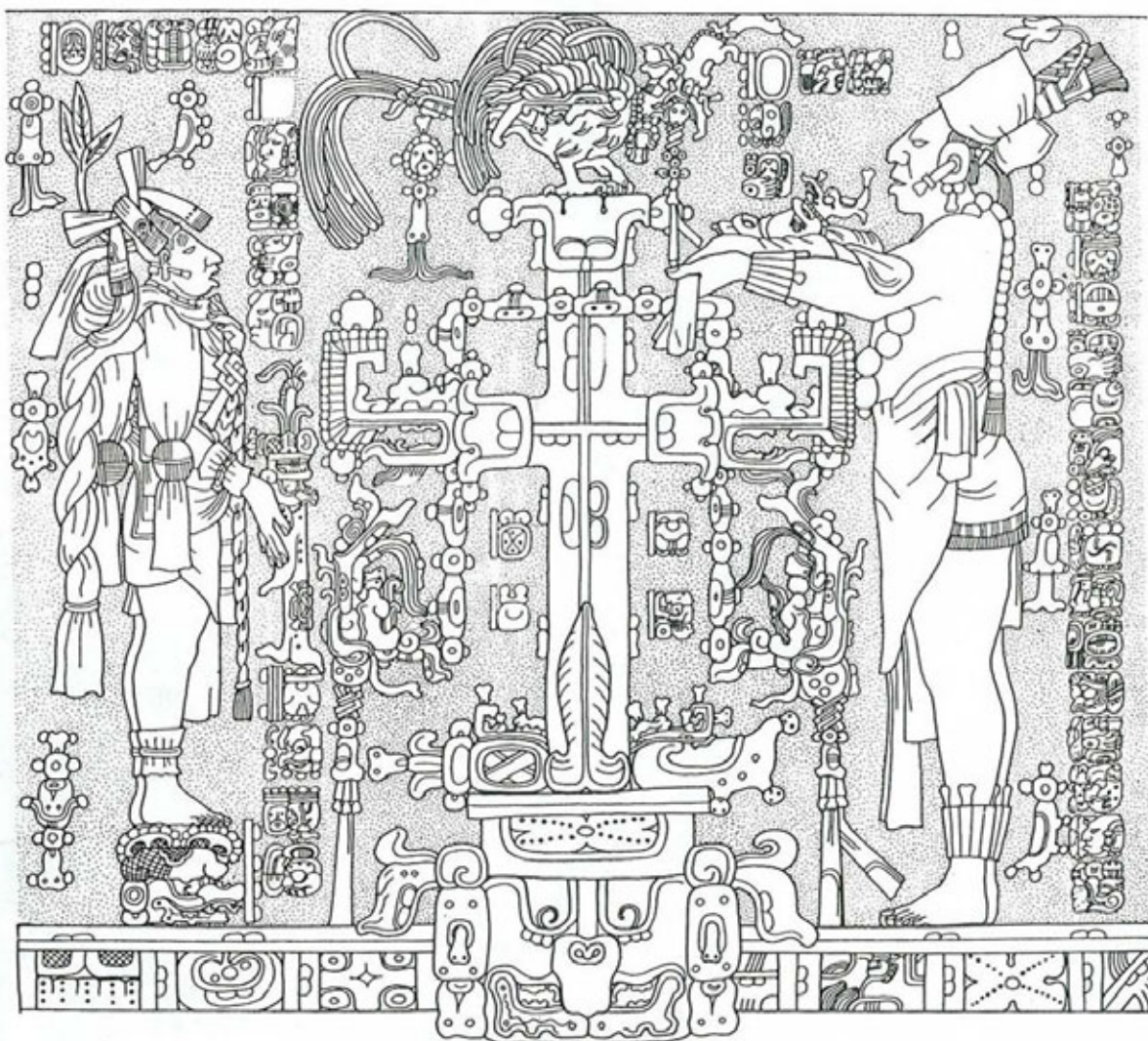


Figure 1.1 The Temple of the Cross Main Sanctuary Panel (after Schele and Miller 1986:115).



Figure 1.2 The Sarcophagus Lid from the Temple of the Inscriptions (drawing by Merle Greene after Schele and Miller 1986:282).

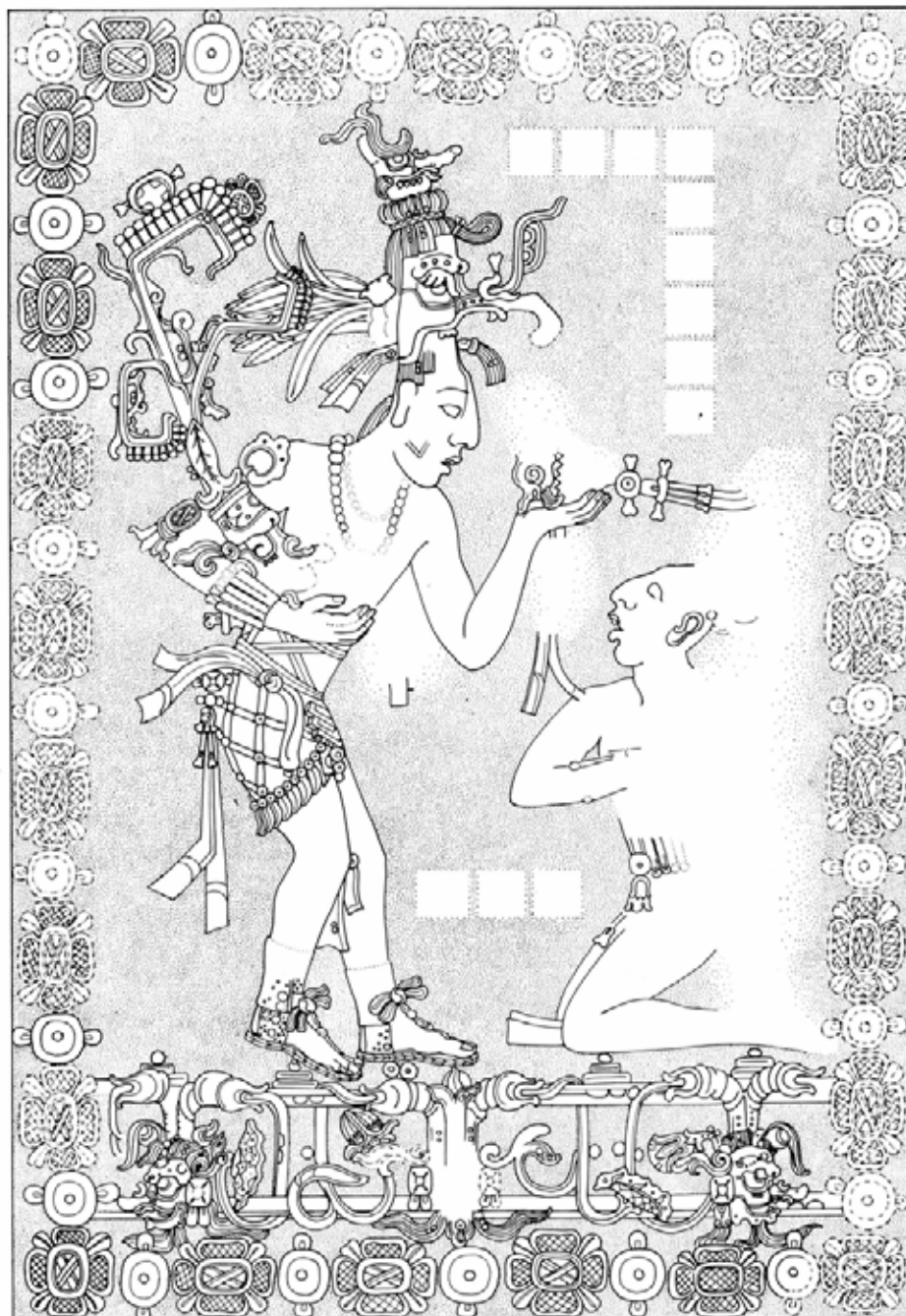


Figure 1.3 Palenque's, House D, Pier C (after Greene 1985:162).



Figure 1.4 Palenque's House D, Pier D (after Greene 1985:fig. 182).

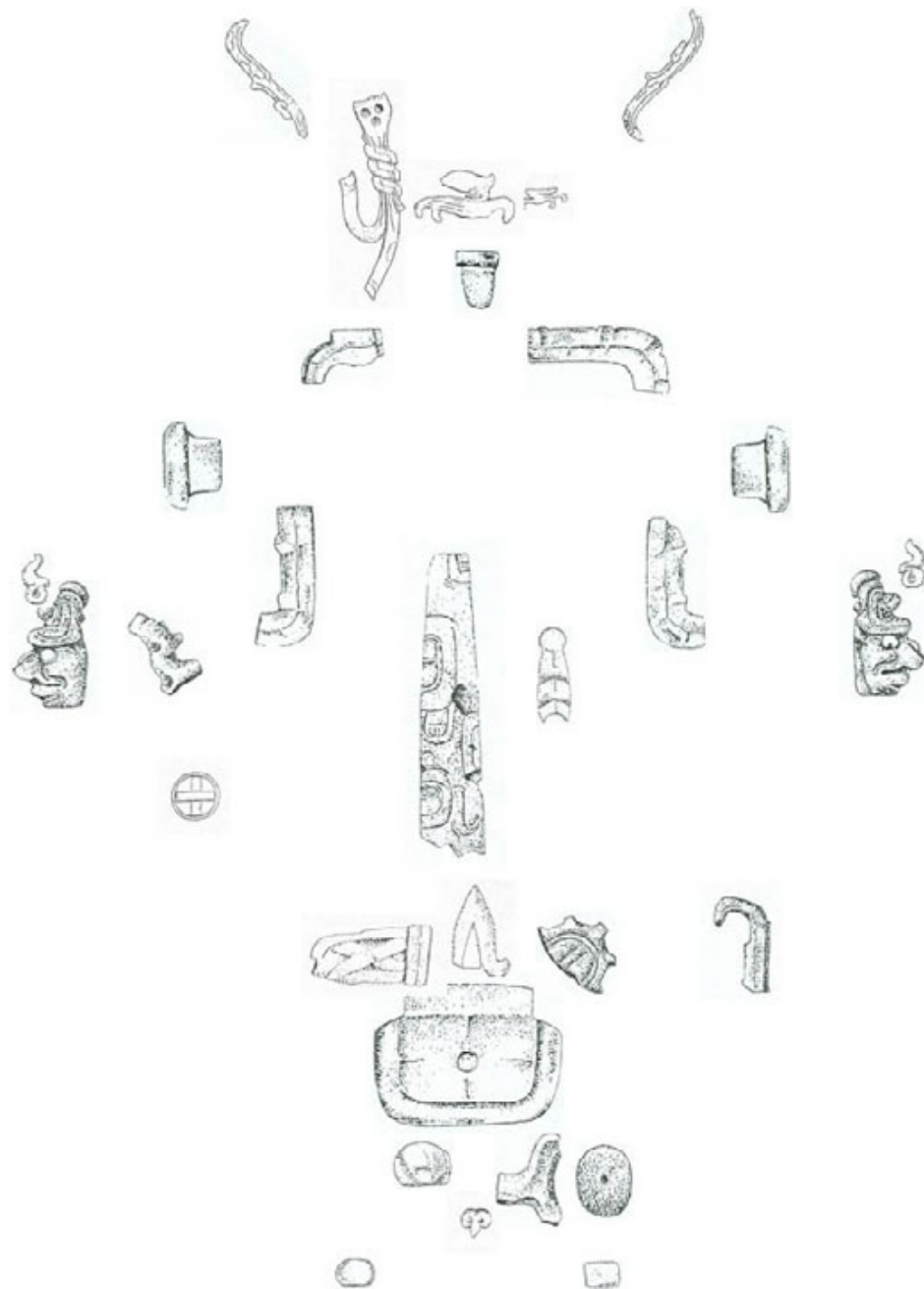


Figure 1.5 Reconstruction of Palenque's Temple V Cache (reconstruction by Carl Callaway & Elizabeth Wagner based on drawings of fragments found in Ruz Lhuillier 1958: figs. 12 &13).

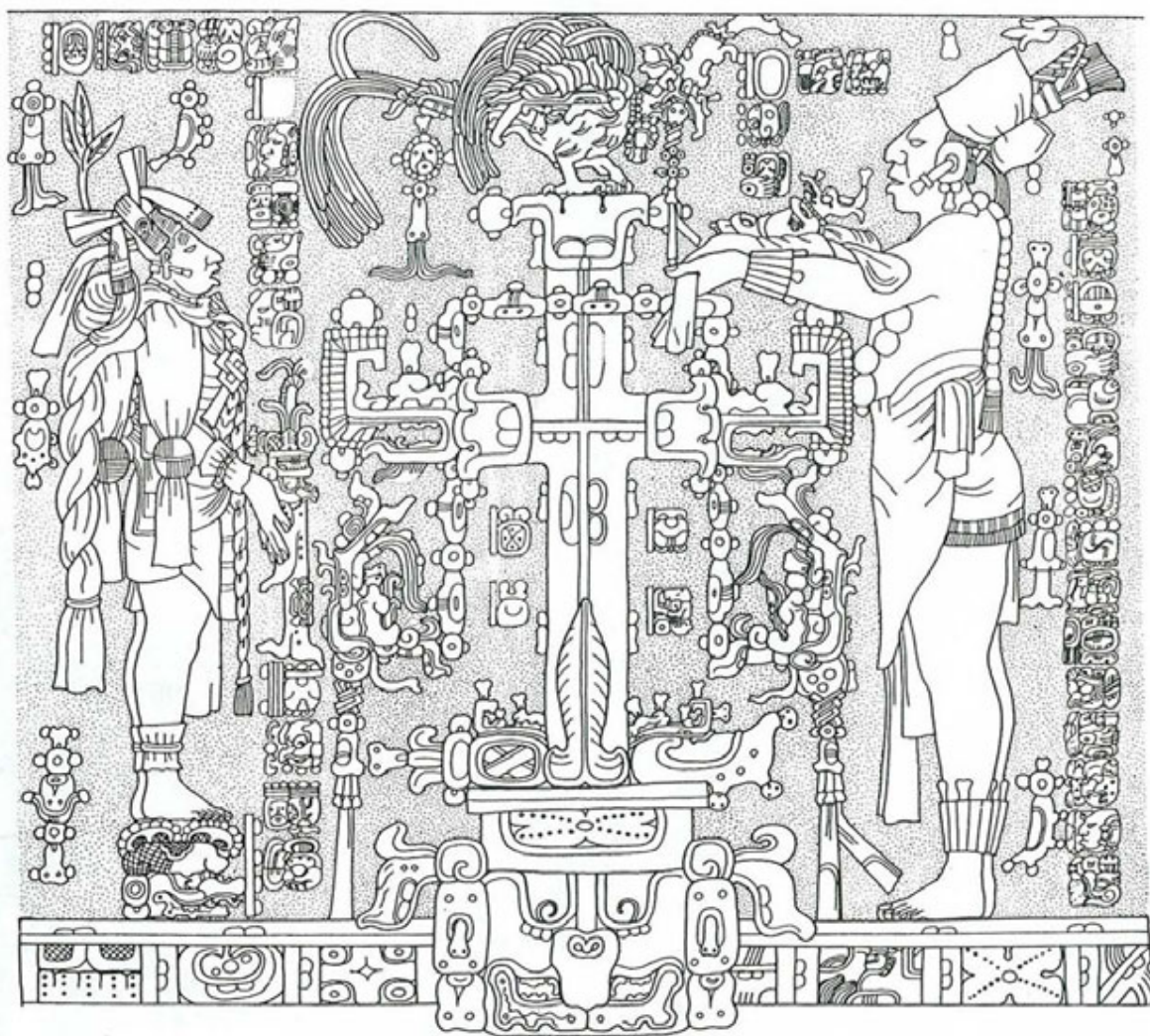


Figure 2.1 The Temple of the Cross Main Sanctuary Panel (after Schele and Miller 1986:115).



Figure 2.2 The Sarcophagus Lid from the Temple of the Inscriptions (drawing by Merle Greene in Schele and Miller 1986:282).



A



B

Figure 2.3 Examples of Naturalized Trees (A) K1126; (B) K4546 (see Kerr Database 2005: K1226 and K4546).

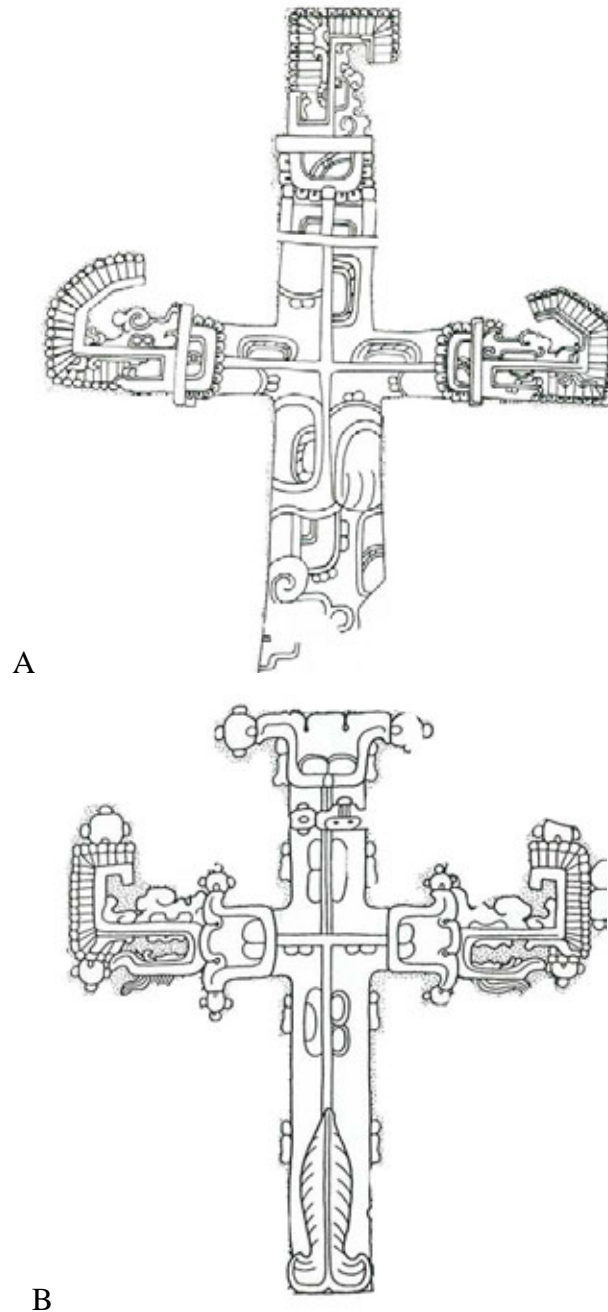


Figure 2.4 Comparison of Cross Forms from (A) Pakal's Sarcophagus Lid and (B) Temple of the Cross, Main Panel (drawings cut from Schele and Miller 1986:115 and 282).

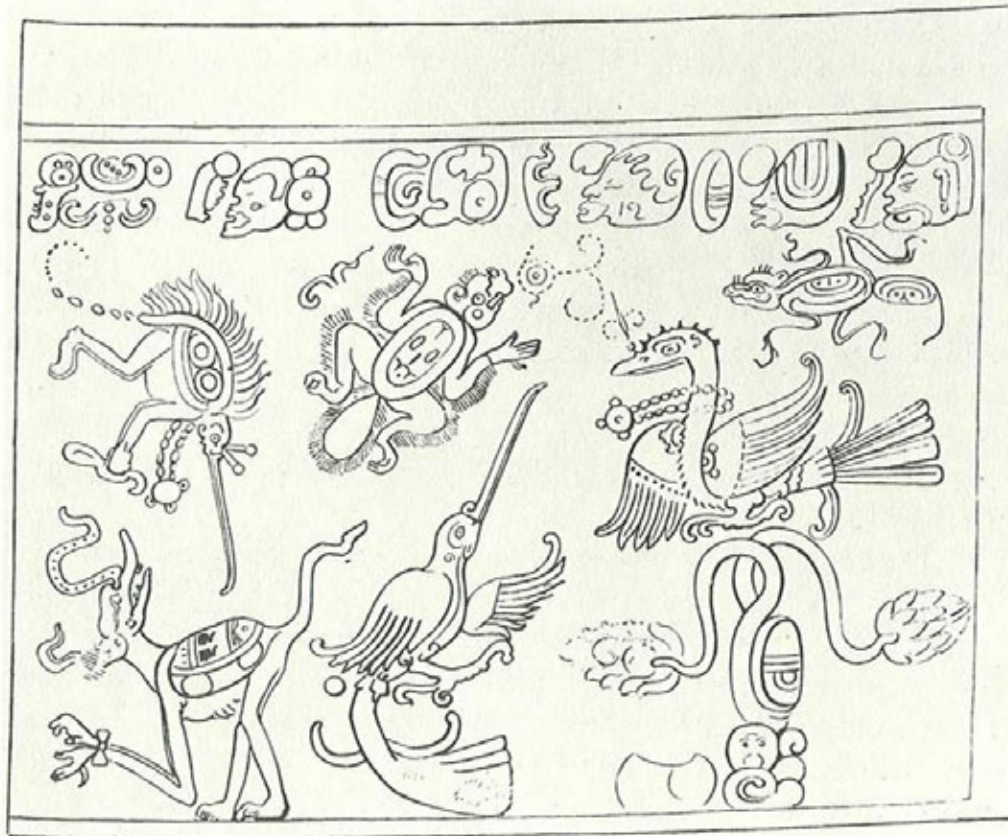


Figure 2.5 The Rio Hondo Vase (drawing by Annie G. Hunter after Gordon and Mason 1928:plate XLVIII).



A



B

Figure 2.6 The Tree as a Leaf Sprout (A) Seated Lord wearing K'IN Bowl Headdress with Leaf Sprout and Water Bird (after Hellmuth 1987:74, fig. 96); (B) Monster Head with K'in Infix and Sprouting Leaves (After Hellmuth 1987:92, fig. 125).



A



B



C



D

Figure 2.7 Simplified Trees from (A) K555; (B) K2785; (C) K998; (D) K4336 (all drawings by Karl Taube 1988:336).



Figure 2.8 Swollen Tree Trunks with Embedded TE' Heads from (A) K1226; (B) K4546; (C) K1345; (D) K4013 (for A–C see Kerr Vase Database 2005:K1226 K4546 K1345 and K4013); (E) Hellmuth Vase (after Hellmuth 1987:268 fig. 579).



Figure 2.9 Kerr Vessel K4013 (see Kerr Database 2005:K4013).



Figure 2.10 The Cosmic Plate, K1609 (see Kerr Database 2005:K1609).



A



B

Figure 2.11 Caiman Trees on (A) K1607 (See Kerr Database 2005:1607); (B) Caiman on the Delitaille Tripod (after Hellmuth 1988:164, figure 4.17).



A

Photograph © Justin Kerr File no. K501



B



Figure 2.12 Trees Emerging from Sacrificed Humans on (A) K501; (B) K631; (C) K998 (See Kerr Database 2005:K501, K631 and K998).

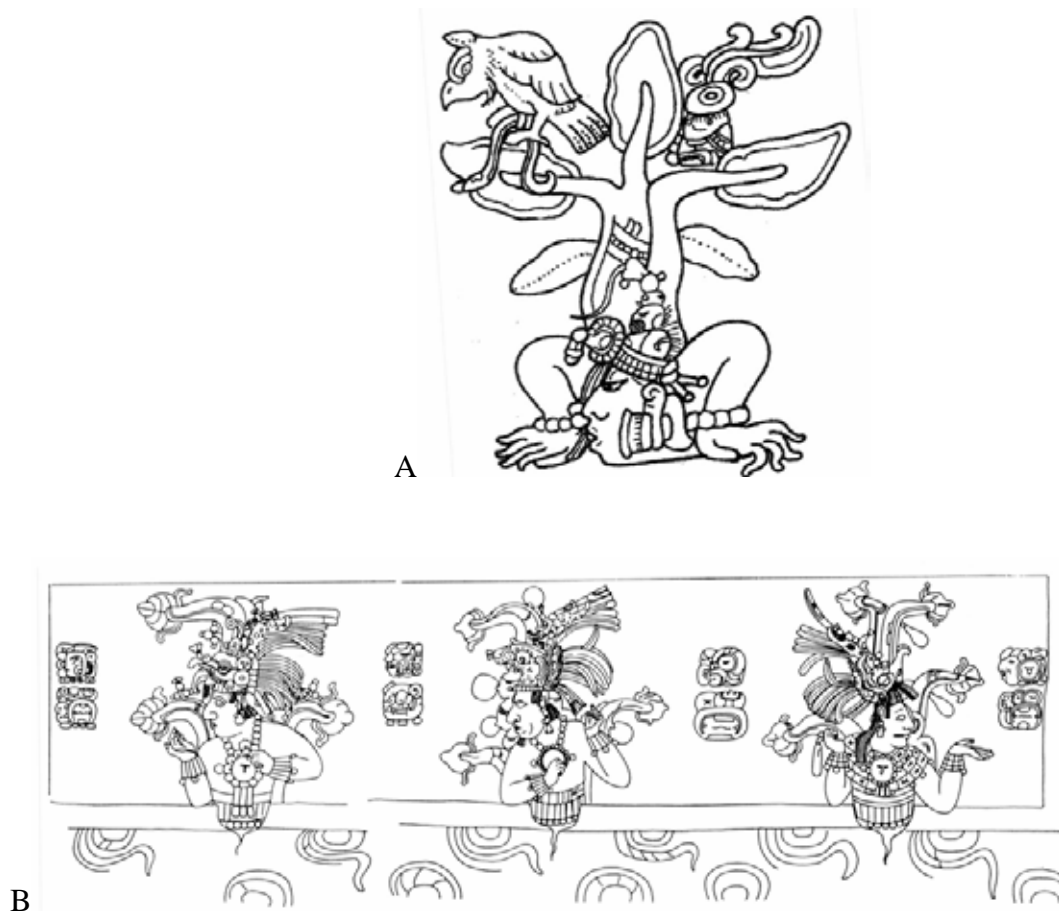


Figure 2.13 Gods and Ancestors as Sprouting Trees (A) Maize God as a Sprouting Cacao Tree on K6547 (after Taube 2005:26, fig. 2f); (B) Ancestors as Sprouting Trees on the East Side of Pakal's Sarcophagus Lid (after Schele and Miller 1986:284).

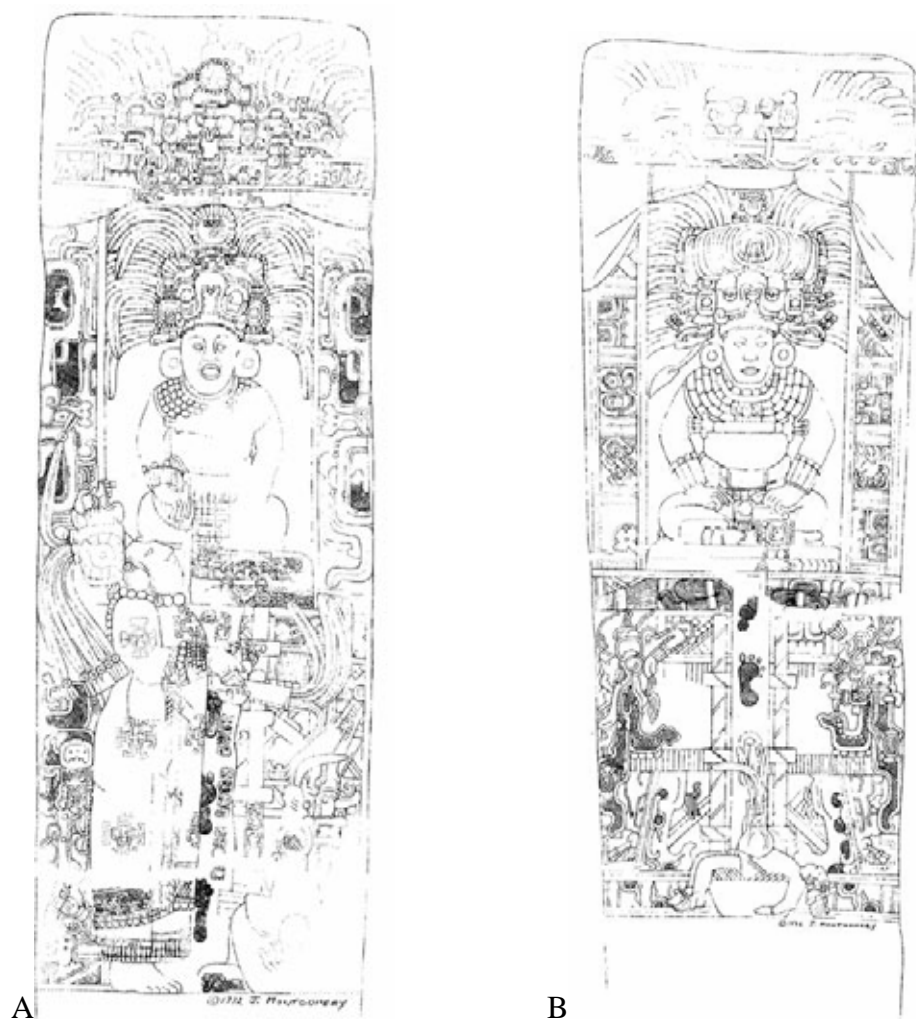


Figure 2.14 Piedras Negras (A) Stela 14, front; (B) Piedras Negras Stela 11, front (drawings by John Montgomery).



A



B



C



D

Figure 2.15 Examples of Censors (A) Incensario with embedded TE' sign on K1377; (B) A "Spiked" Incensario from K5476c; (C) Animated "Spiked" Incensario with K'IN Sign in the Forehead on K3702 (see Kerr Database 2005:K1377, K5476c, and K3702); (D) Spiked Censor from the Birth Vase (after Taube 1994:668, fig. 8a).



A



B



C

Figure 2.16 Square-Nosed Blossoms on Loincloths (A) Dos Pilas Stela 1 (after Schele and Miller 1986:77, fig. 1.4e); (B) Stela C, Copan, East Side (after Schele and Mathews 1998:141, fig. 4.9.4); (C) Lion Cloth Blossom on Stela C East Side, Copan (after Schele and Mathews 1998:141, fig. 4.11a).



Figure 2.17 The Backside of the Cosmic Monster from Kerr Vessel K1609 (see Kerr Database 2005: K1609).



A



B



C

Figure 2.18 Examples of Tree Elimination (A) K0998; (B) K4336; (C) K8233 (see Kerr Database 2005: K0998, K4336 and K8233).



Figure 2.19 Example of Tree Elimination on Kerr Vessel K3801 with Principle Bird Deity Standing Above a Bell-Shaped Blossom and Bowl (see Kerr Database 2006:K3801).



Figure 2.20 The Blom Plate (see Kerr Database 2005:K3638).



A



B

Figure 2.21 Examples of Ceiba Flowers (A) Ceiba Flowers with “Beaded” Pollen Sacs and “Bent” Pistils (photos courtesy of Paul Johnson); (B) Ceiba Flowers with “Bent” Pistils (after Schele 1992:154).



Figure 2.22 The Umbrella-Shaped Canopy of a Giant Ceiba Tree Along The Banks of the Usumacinta River (photo courtesy of Paul Johnson).

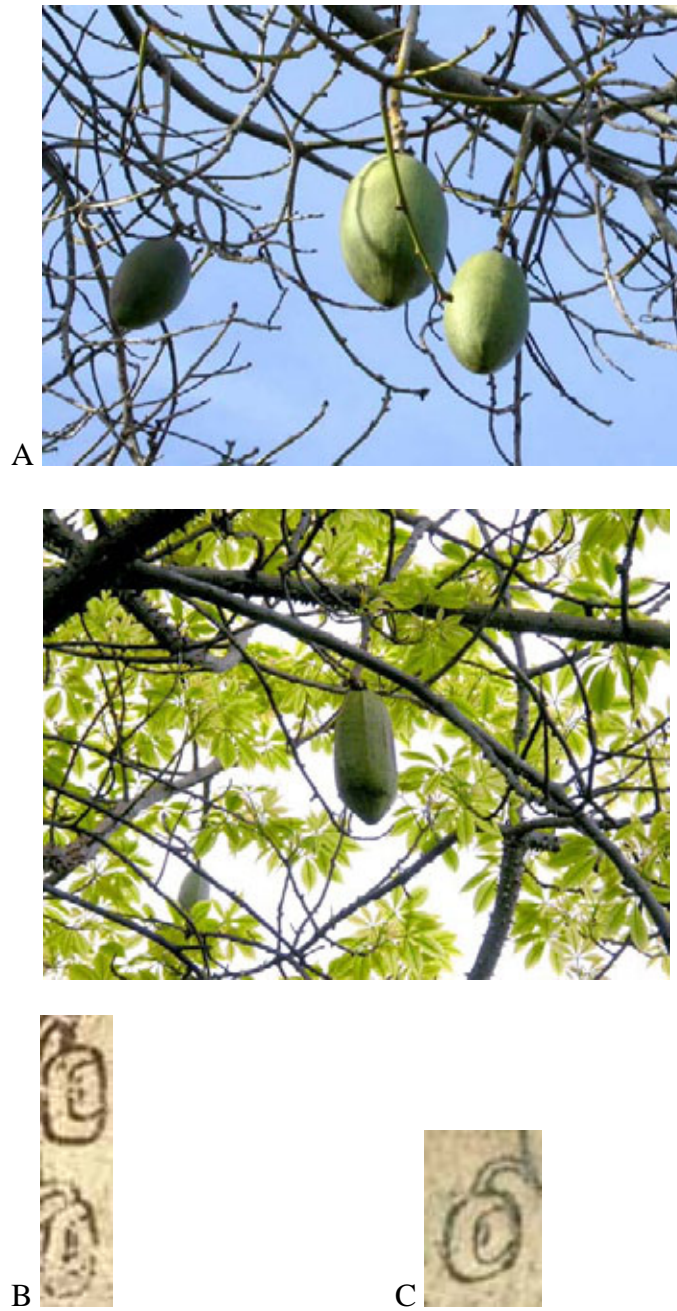
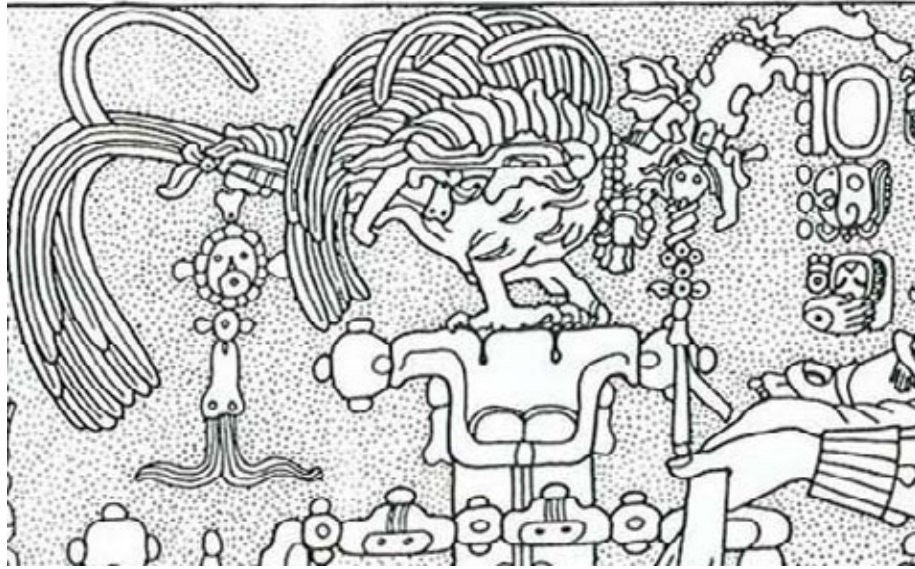


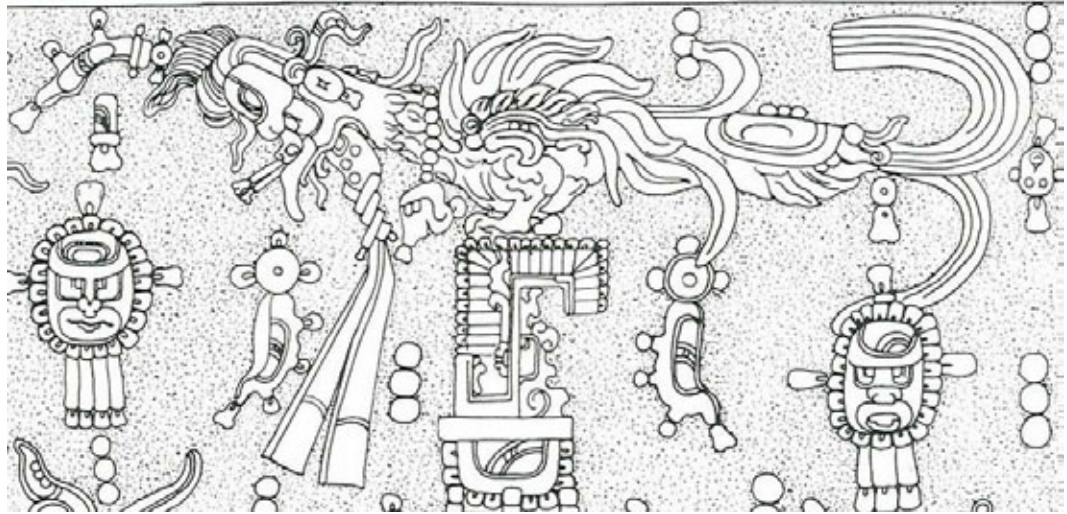
Figure 2.23 Examples of Ceiba Pods (A) Ceiba Pods (photos courtesy of Paul Johnson); (B) Ceiba Pods as depicted on K4546 and (C) K1226 (see Kerr Database 2005: K4546 and K1226).



Figure 2.24 Examples of Glossy Green Trunks of Young Ceiba Trees (photos courtesy of Paul Johnson).



A



B

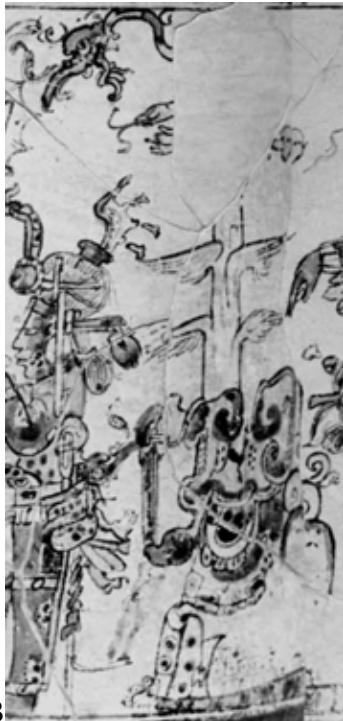
Figure 2.25 The Principle Bird Deity on the (A) Temple of the Cross (drawing by Linda Schele, after Schele and Miller 1986:115); (B) Pakal's Sarcophagus Lid (drawing by Merle Greene, after Schele and Miller 1986:282).



Figure 2.26 Kerr Vessel 3105 (see Kerr Vase Database 2005:K3105a, K3105c and K3105e)



A



B



C

Figure 2.27 Birds with Decapitated or Exploding Heads (A) K3007; (B) K5637; (C) Example of Exploding Head on the Blom Plate, K3638 (see Kerr Vase Database 2005:K3007, K5637 and K3638).

A



B



Figure 2.28 Bird Substitutions on (A) K6994; (B) K555 (see Kerr Database 2005:K6994 and K555).



Figure 2.29 Human Forms Substituting for the Principle Bird Deity (A) Kerr Vase K2356 (drawing after Hellmuth 1987:258 fig. 559); (B) On Kerr Vase K555 (see Kerr Database 2005: K555); (C) Bird Morphing Into The God Itzamnah (after Hellmuth 1987: page 268, figs. 578 and 579).

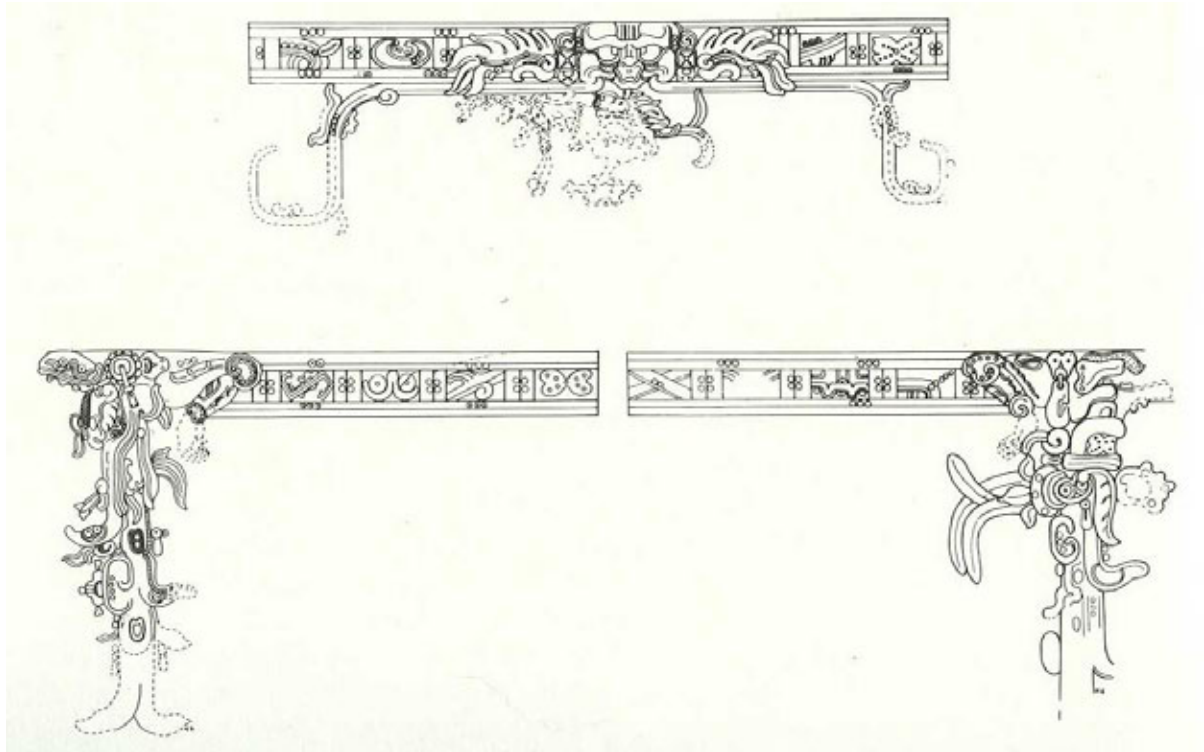


Figure 2.30 Palenque, House E Interior Stucco (after Greene Robertson 1985a:fig. 81, 83, 85).



Figure 2.31 Tonina Monument p48, a Portrait of the Principle Bird Deity with the Head of Itzamnaaj (drawing By Simon Martin).

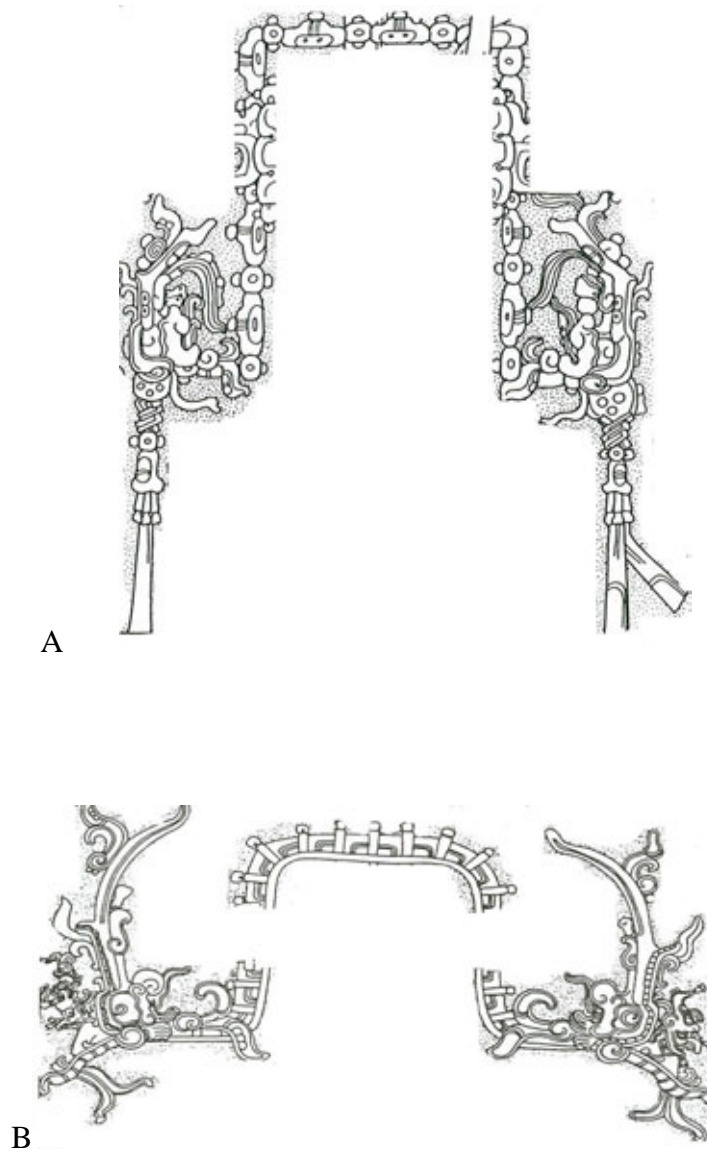


Figure 2.32 Comparison of Draped Serpents from (A) Temple of the Cross, Main Tablet; (B) Pakal's Sarcophagus Lid (drawings cut from Schele and Miller 1986:115 and 282).

A



B



Figure 2.33 Examples of Naturalistic Serpents on Maya Vases on (A) K0998; (B) K1345 (see Kerr Database 2005:K0998 and K1345).

A



B

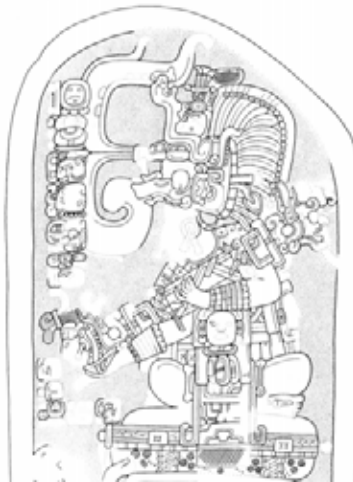


Figure 2.34 Example of Double-Headed Serpents (A) on K8540 (see Kerr Vase Data Base 2005:K8540); (B) as a Serpent Bar on Naranjo, Stela 22 (after Graham 1975:55).



Figure 2.35 Kerr Vessel 5164 Illustrating the Birth of God N from the Serpent Maw (see Kerr Database 2005: K5164).

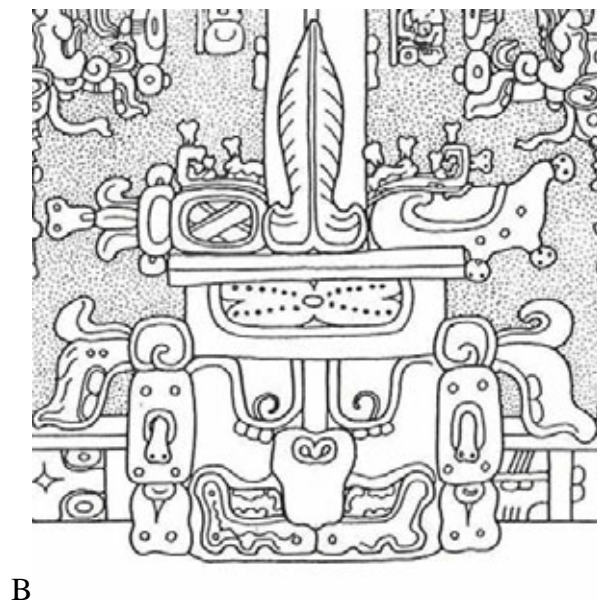
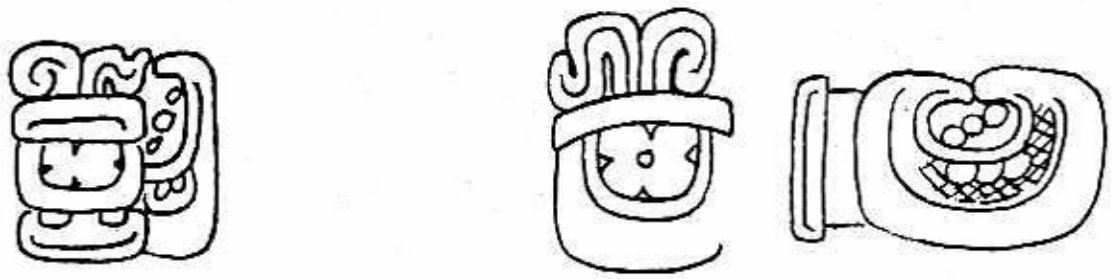


Figure 2.36 Comparison of K'IN Bowls atop Monster Heads on (A) Pakal's Sarcophagus Lid (drawing by Merle Greene, after Schele and Miller 1986:282); (B) The Temple of the Cross Main Panel (after Schele and Miller 1986:115).



Figure 2.37 Kerr Vessel K2356 Showing Monster Head Sitting Beside the Tree (see Kerr Database 2005; K2356).



A



B

Figure 2.38 The "Censing" Verb and the Hieroglyph for East (A) The "Censing" Verb (after Stuart 1998:390, fig. 11; (B) The Glyph for East from Rio Azul (drawing by David Stuart from Adams 1983:150).



A



B



C

Figure 2.39 Examples of GI God Portraits (A) GI From Copan, Stela I (drawing By Linda Schele); (B) GI from Tzakol, Petén (after Hellmuth 1988:70, fig. 76); (C) Passage From Palenque's Temple of the Inscriptions Mid-Panel (I8-J9) (drawing By Linda Schele).



Figure 2.40 Old Moon Goddess Toting the K'IN Bowl on the Back on K501 (see Kerr database 2005:K501).



A



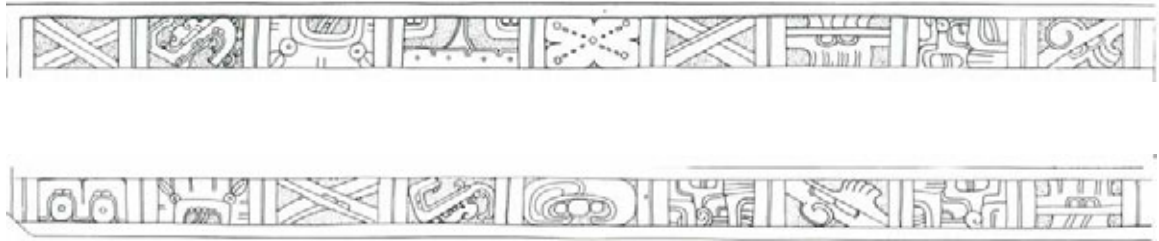
B

Figure 2.41 A Sprouting Maize God (A) Kerr Vessel K2723 (see Kerr Data Base 2005: K2723; (B) Robicsek and Hales Plate 116 (drawing by Elizabeth Wagner after Robicsek and Hales 1981:90).



Figure 2.42 A Monster Head with a "Winal" Infix Into the Forehead on Kerr Vessel K1162 (see Kerr Database 2005:K1162).

A



B



C



Figure 2.43 Examples of Sky Bands (A) Sky Bands from Pakal's Sarcophagus Lid; (B) Sky Band from the Temple of the Cross; (C) Star Band as the Body of the Cosmic Monster from Palenque's House E (after Schele and Miller 1986:45 fig 22).

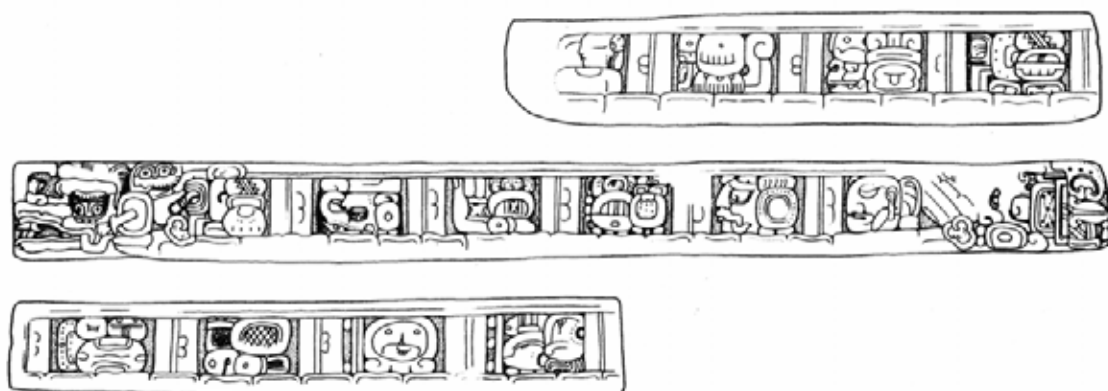


Figure 2.44 The Cosmological Throne at Palenque (Drawing by Linda Schele, see Schele Database 2005:123).



Figure 2.45 A Stepped Sky Band on Kerr Vessel K8622 (see Kerr Database 2005:K8622).

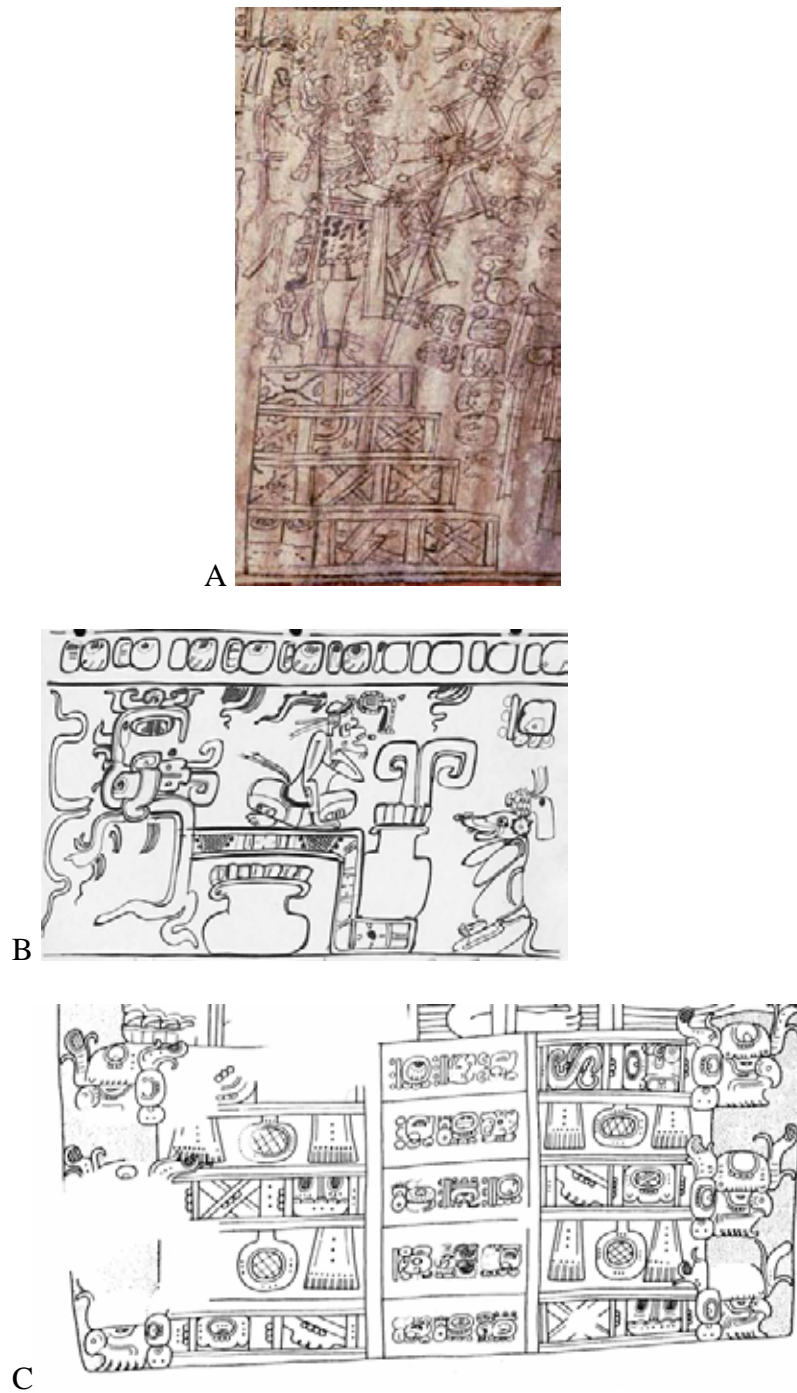


Figure 2.46 Examples of Stepped Star Bands (A) K8497 (see Kerr Database 2005:K8497); (B) K3056 (see Kerr Database 2005:K3056); (C) Naranjo Stela 32 (after Graham 1978).

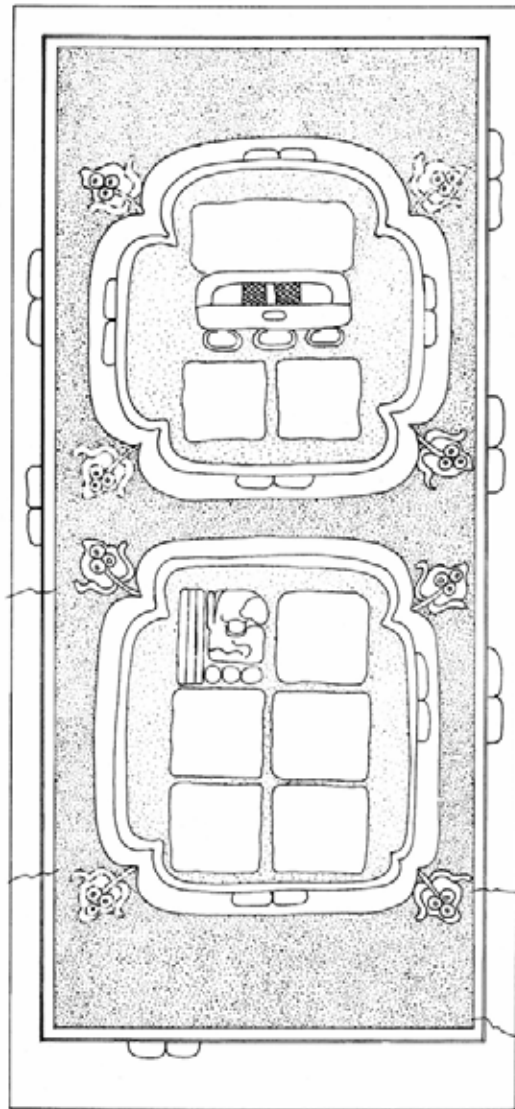


Figure 2.47 Palenque, Temple of the Sun, Pier A (after Greene Robertson 1991:fig. 121).

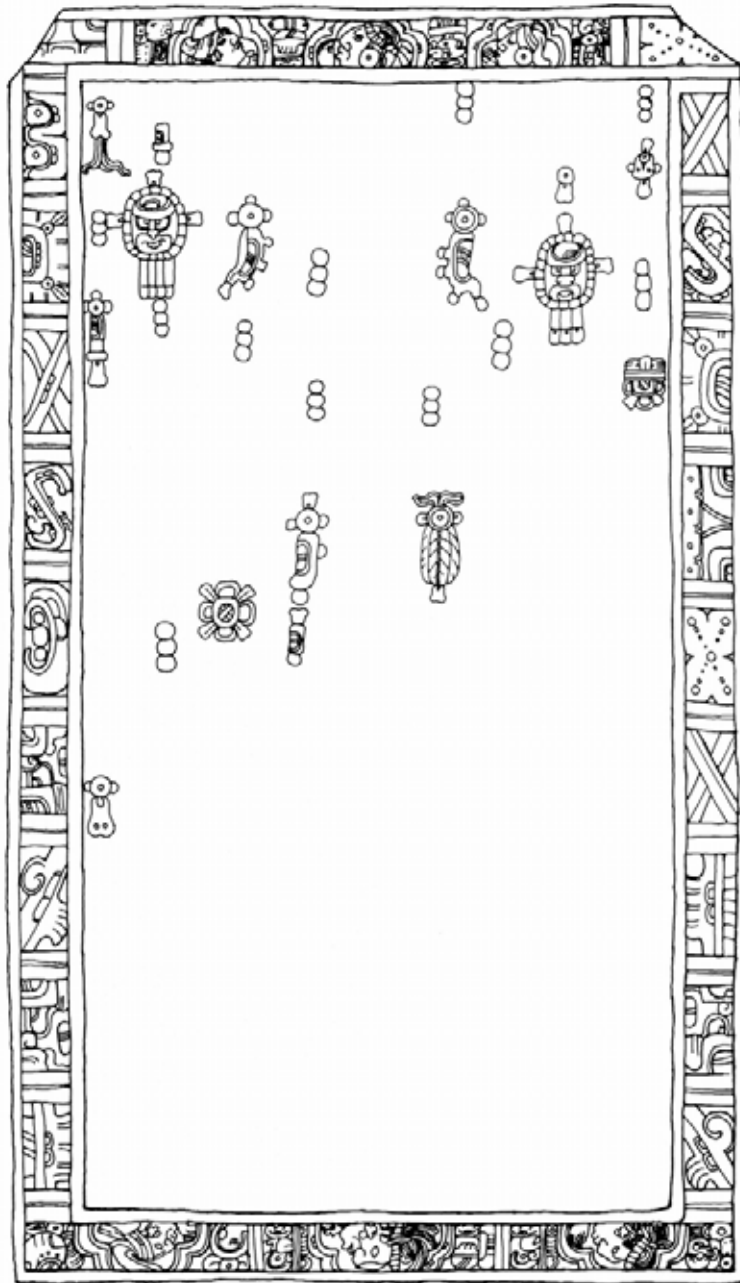
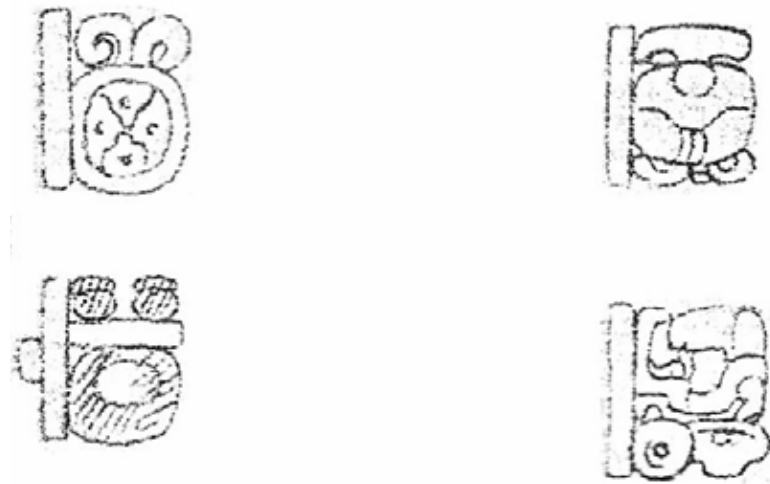


Figure 2.48 Floating Background Elements from the Sarcophagus Lid (after Schele and Miller 1986:283, plate 111b).

A



B

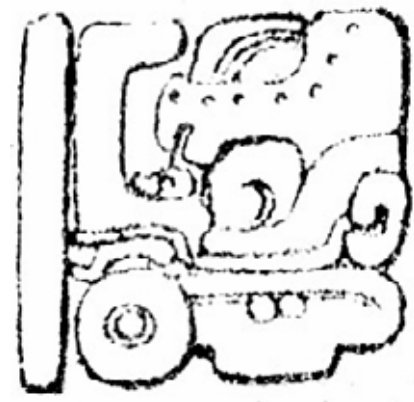


Figure 2.49 Hieroglyphs Floating Beside the Base of the Cross on (A) The Temple of The Cross, Main Panel (after Maudslay 1899: Vol. IV, Plate 76); (B) Close Up of Lower, Right Hand Hieroglyph (after Maudslay 1899:Vol. IV, Plate 77).



Figure 2.50. The Monster Head with K'IN Bowl from The Temple of the Cross (from Schele and Miller 1986:115).

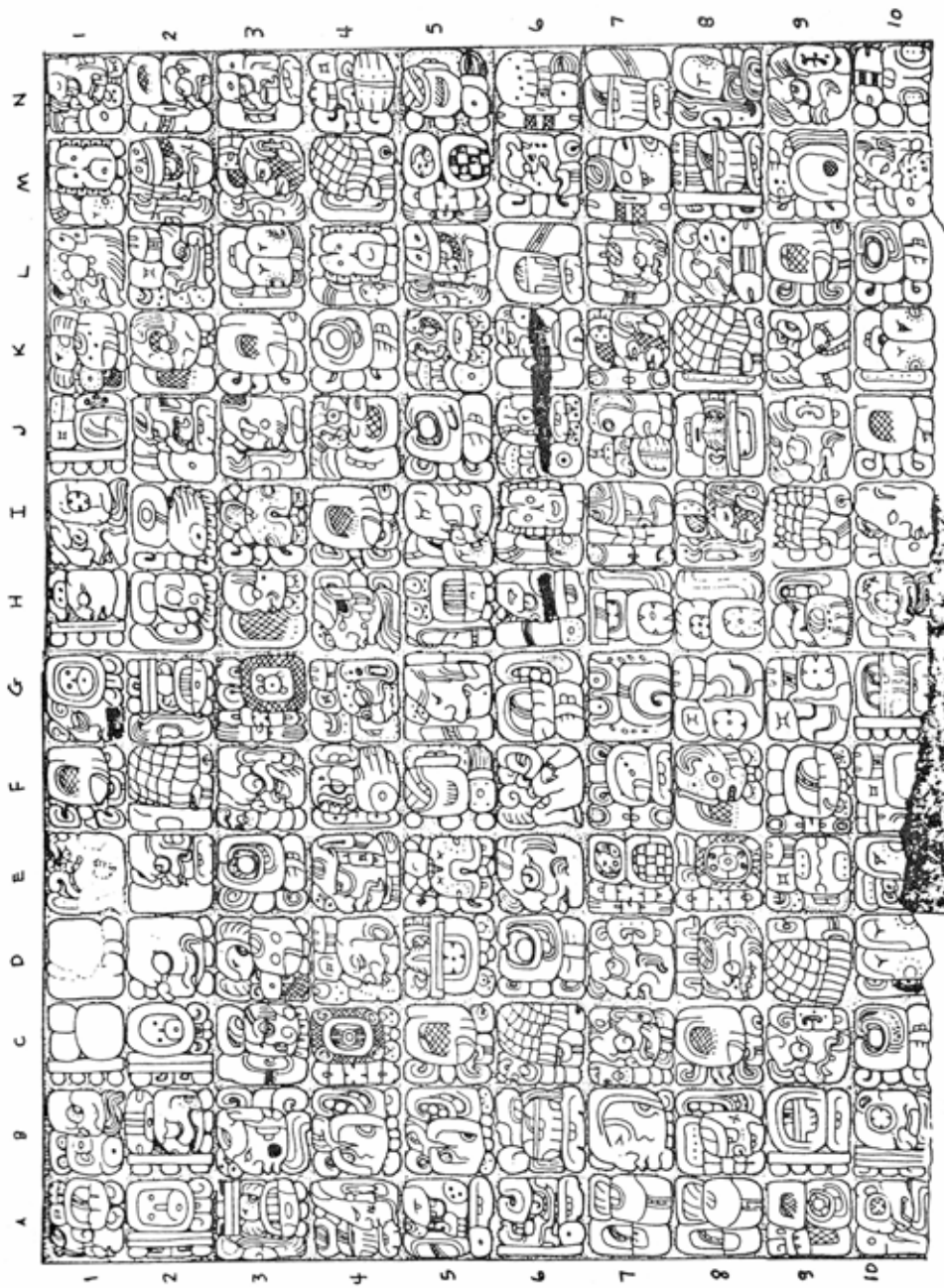


Figure 3.1 Temple of the Inscriptions, Mid Panel (drawing By Linda Schele).





















	A	B
u 2 tal		 u chum tuun
12 ajaw		 8 chak-sihoom
u 11 k'atun		 ajawyan
12		 (sprout/earth)-laj
(jade) 'uh te'		 (sprout/earth)-laj
5 (square-nosed flower) te'		 chanal
ikatz		 kab'al
ikatz		 'uhja
tupaj		 bolon chan
yook'in		 wak lahun yook'in

Figure 3.2 Temple of the Inscriptions, Mid Panel, Glyph Blocks A1–B10 (drawing by Linda Schele).





















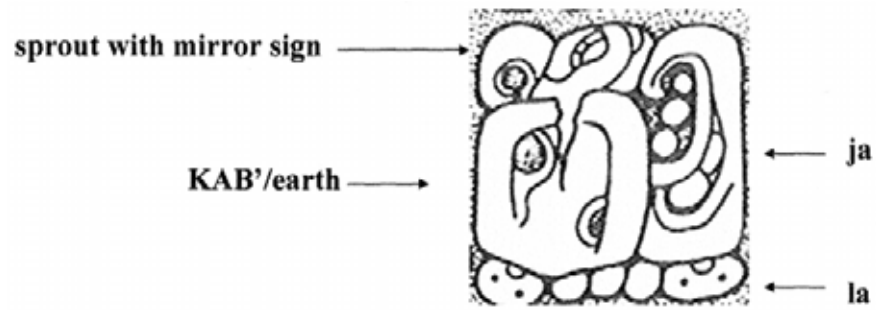
	G	H	
10 ajaw			8 yak'in
u 12 k'atun			yilaji
k'inich janab'			pakal
k'uhul b'akal ajaw			ajawyan
10 ajaw			chamal haab?
ta[h]k			(jade) 'uh te'
hub'uyi			el k'in
ajawtak			och k'in
ajawtak			k'eb'aj
9 chan			yook'in

Figure 3.3 Temple of the Inscriptions, Mid Panel, Glyph Blocks G1–H10 (drawing by Linda Schele).



“SPROUT/SPLIT-EARTH”-laj

“Sprouted”

Figure 3.4 Detail of Glyph Block A4 from the TI, Mid Panel (drawing by Linda Schele).

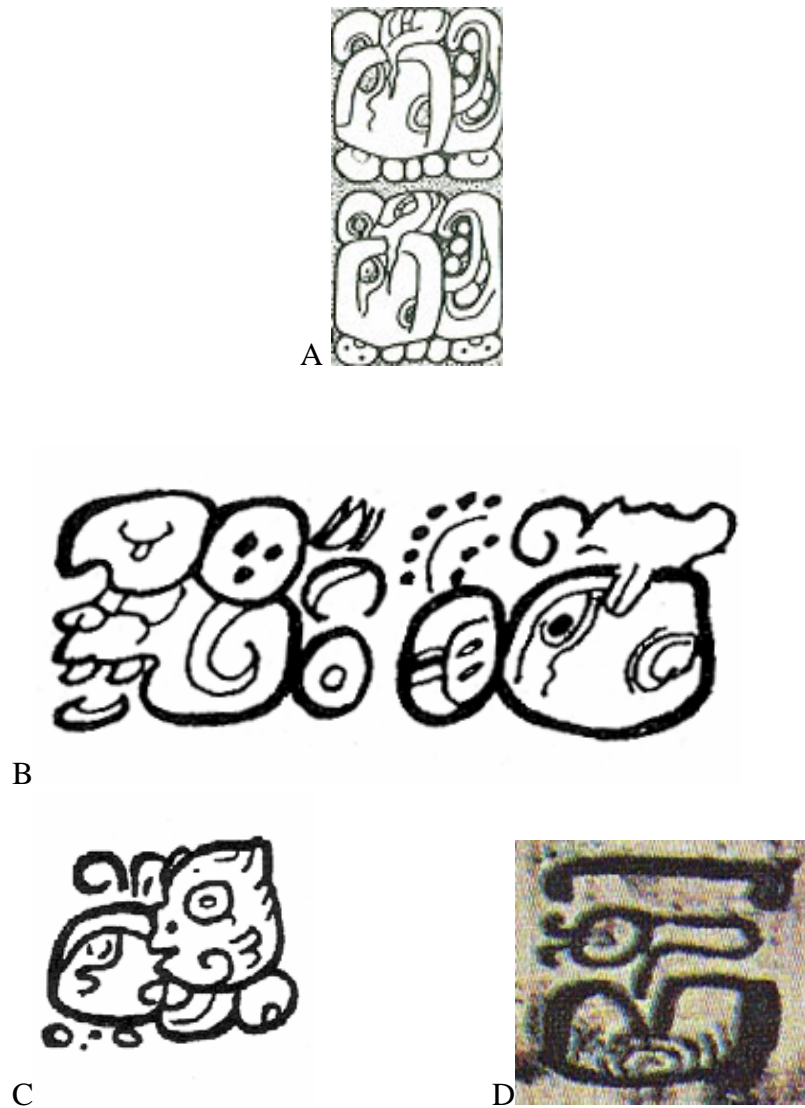


Figure 3.5 Examples of the "Sprout/Split-Earth" Glyph (A) The "SPROUT/SPLIT-EARTH" Glyph from the Tablet of the Inscriptions (B4 and B5) (drawing by Linda Schele); (B) The "SPROUT/SPLIT-EARTH" Glyph from Cosmic Plate (after Schele and Miller 1986:311, plate 122b); (C) The "SPROUT/SPLIT EARTH" Glyph Together with the KAKAW Glyph on Tikal MT 56 (after Stuart 2005:137); (D) The LOK verb from the Dresden Codex, pp.61 (B11).

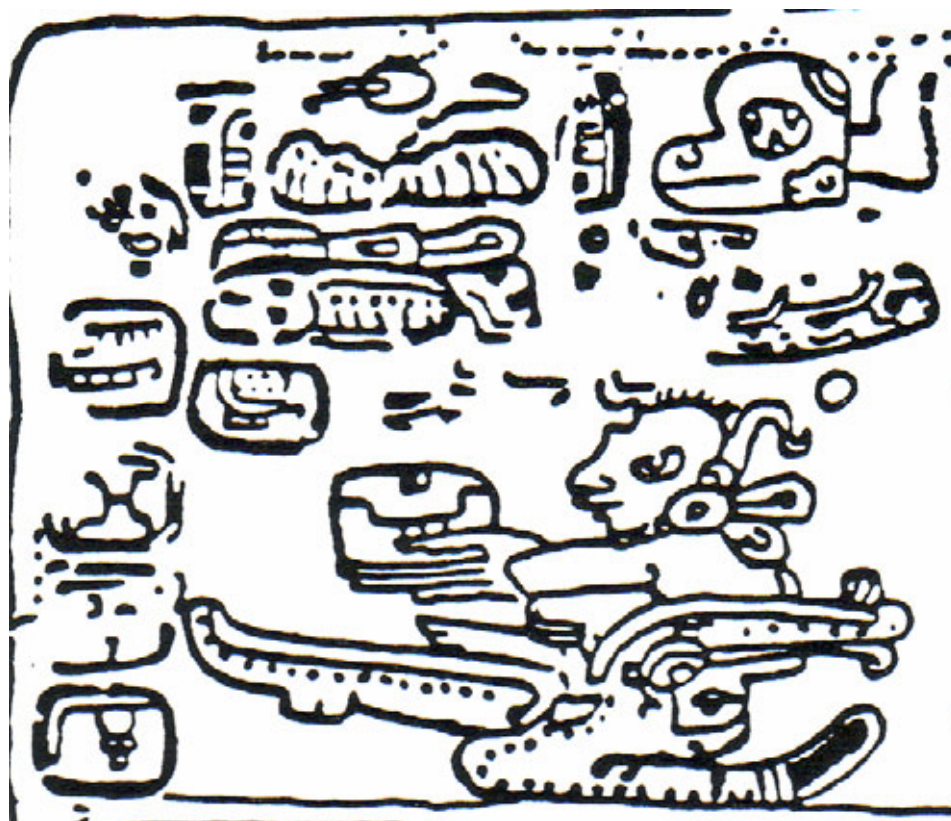


Figure 3.6 Scene From the Madrid Codex, Page 20a Showing the Emergence of a God Out of a Serpent Maw, with the Accompanying Text Using the **u-LOK'** Verb (drawing from Villacorta and Villacorta 1930:264).



Figure 3.7 Kerr Vessel K1892 with Maize God Emerging from a Split Turtle Carapace (see Kerr Database 2005:K1892).

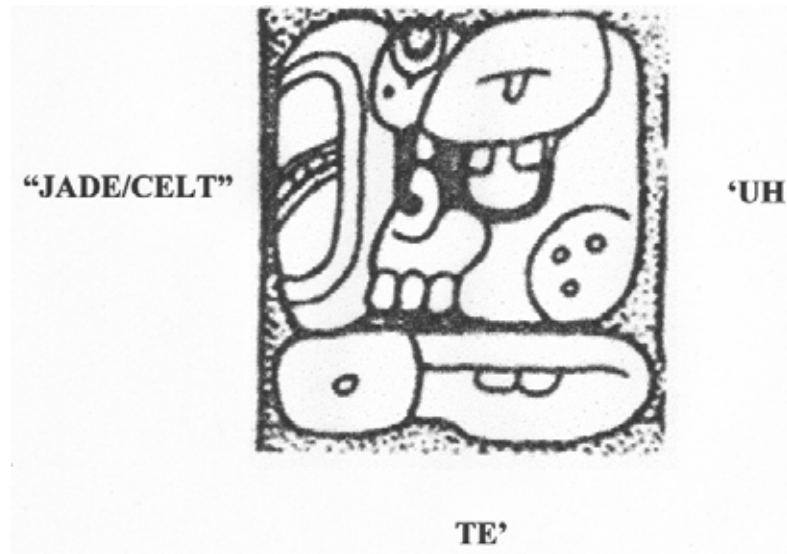
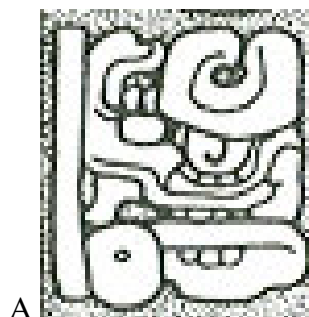
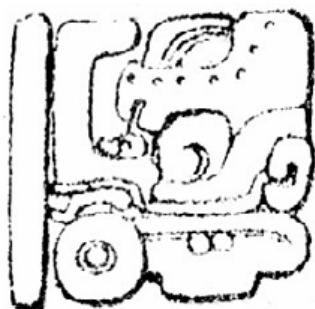


Figure 3.8 Detail of Glyph Block A5 from the TI, Mid Panel, Temple of the Inscriptions Mid Panel (drawing by Linda Schele).



A



B

Figure 3.9 Hieroglyph for the Five "Square-Nosed-Flower" Tree (A) Glyphic Caption for The "FIVE-SQUARE-NOSED FLOWER TREE" on the Temple of the Inscriptions, Mid Panel (A6) (drawing by Linda Schele); (B) Detail of Glyph Floating Beside the Base of the Cross on the Temple of the Cross, Main Panel (after Maudslay 1899:Vol. IV, Plate 77).



Figure 3.10 Incised Jade Slab from Structure 10L-26, Copan with World Tree Image (after Schele Freidel and Parker 1993:fig. 19).

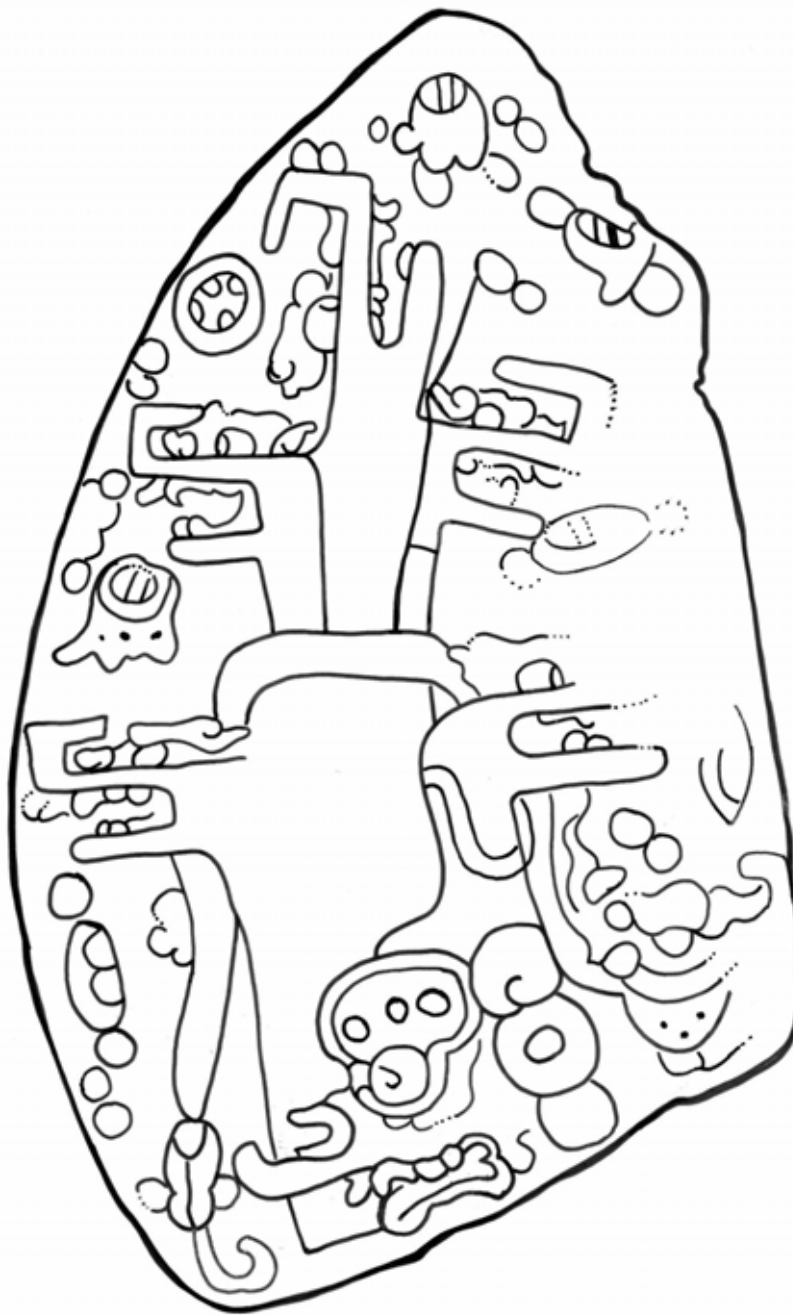


Figure 3.11 Incised Shell Pendant from Temple 21, Tomb V, Yaxchilan Showing the Five Branched Tree with Five Blossoms (Drawn by Carl Callaway after a photo in Mainichi Shinbun-sya et al. 1990: 72, fig. 209).

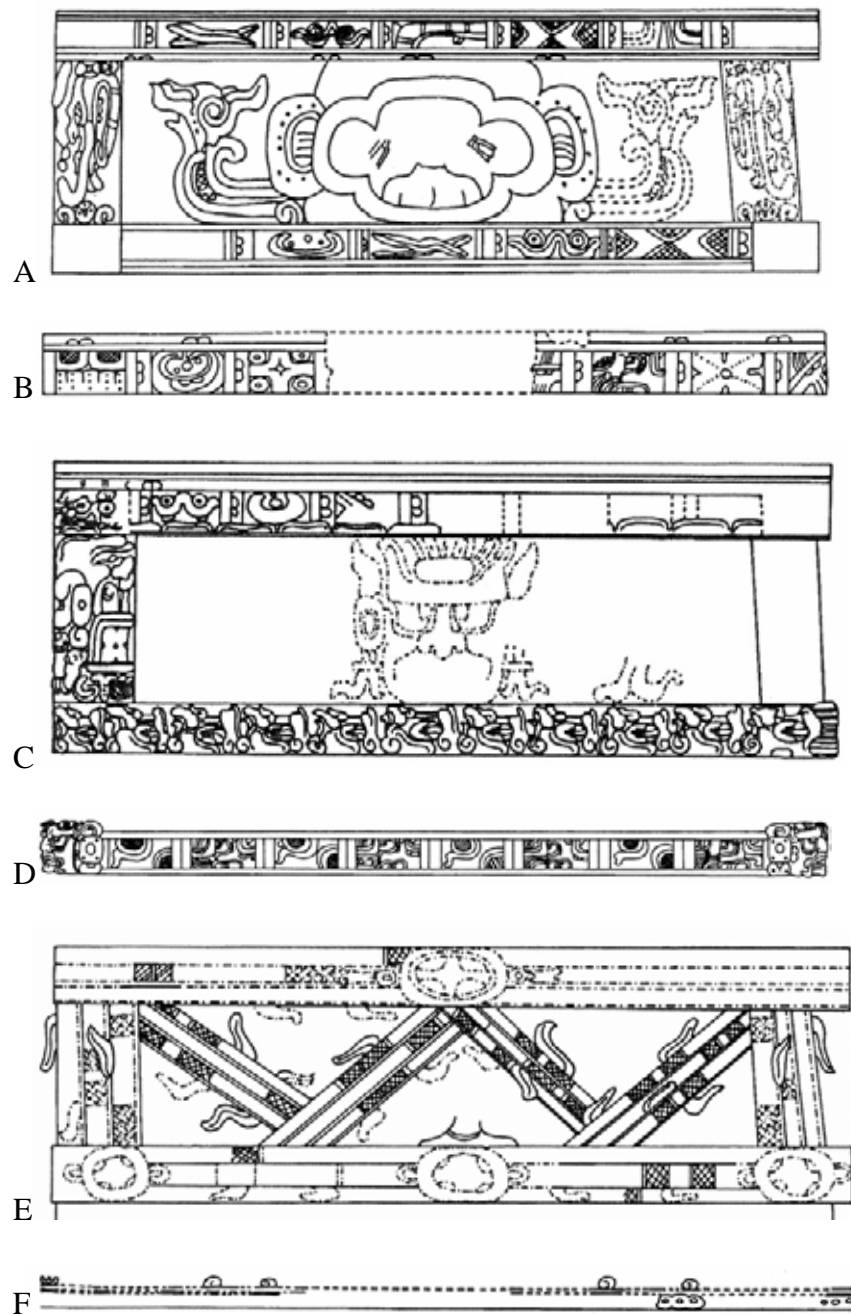


Figure 4.1 Comparison of Sanctuary Roof Panels with Lower Frieze on Sanctuary Tablets (A) Sanctuary Roof of the Temple of the Cross; (B) Lower Frieze from the Temple of the Cross; (C) Sanctuary Roof of the Temple of the Sun; (D) Lower Frieze from the Temple of the Sun; (E) Sanctuary Roof of the Temple of the Foliated Cross; (F) Lower Frieze from the Temple of the Foliated Cross (all drawings by Merle Greene Robertson).

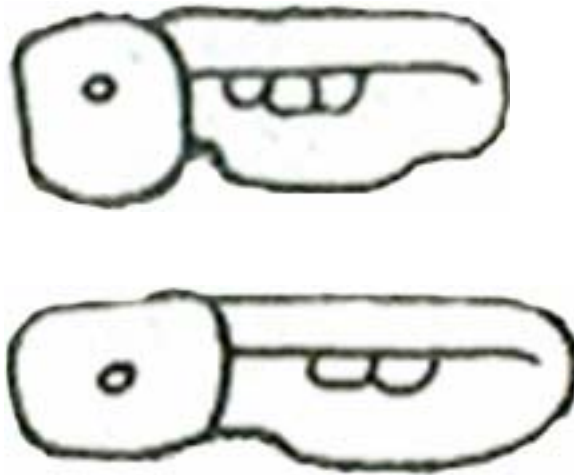


A

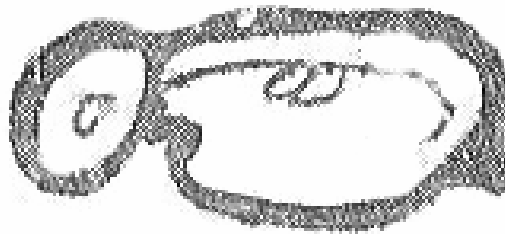


B

Figure 4.2 Hieroglyphs for the Wakah Chan Title (A) Glyph Block D10 from the Temple of Cross Main Tablet; (B) Glyph Block Bp7 from the Temple of the Cross Sanctuary Jamb (drawings by Linda Schele)



A



B



C

Figure A1 The "Normal" form of the TE' Glyph as found on (A) Temple of the Inscriptions, Palenque; (B) Kerr Vessel K4669; (C) Tablet of the 96 Glyphs, Palenque.



A



B



C

Figure A2 Examples of the TE' Sign on Wooden Objects (A) A Canoe (after Schele and Miller 1986:270 fig. VII.1); (B) Canoe Paddles (drawing by Linda Schele after Quenon and Le Fort 1997:886 fig. 4); (C) God with Bowl in Lap (after Coe 1973:82 fig 37).



Figure A3 Kerr Vessel K4669 (see Kerr Database 2005:4669).

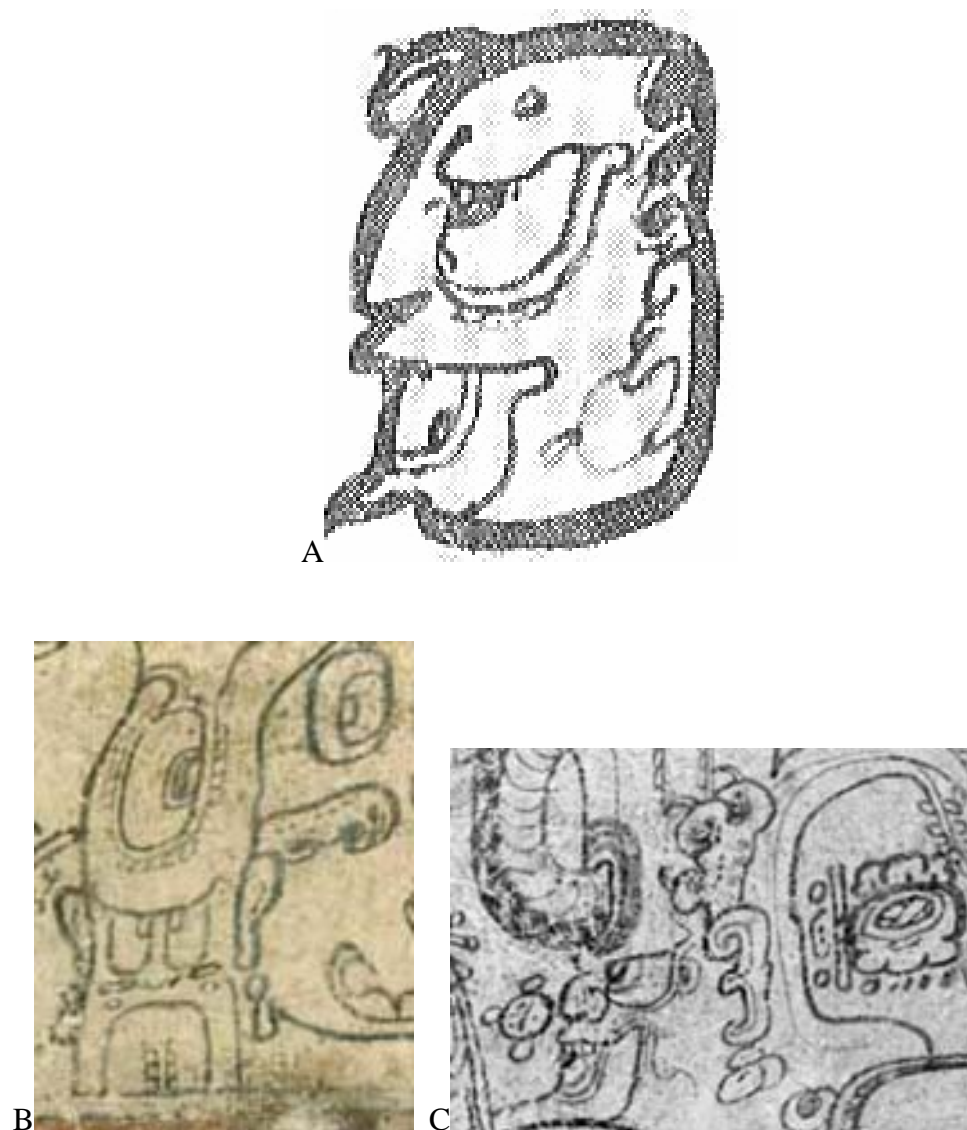


Figure A4 Examples of the Head Variant of the TE' Sign on (A) Kerr Vessel 4669; (B) K1226; (C)K4013 (see Kerr Database 2005:K4669, K1226 and K4013).

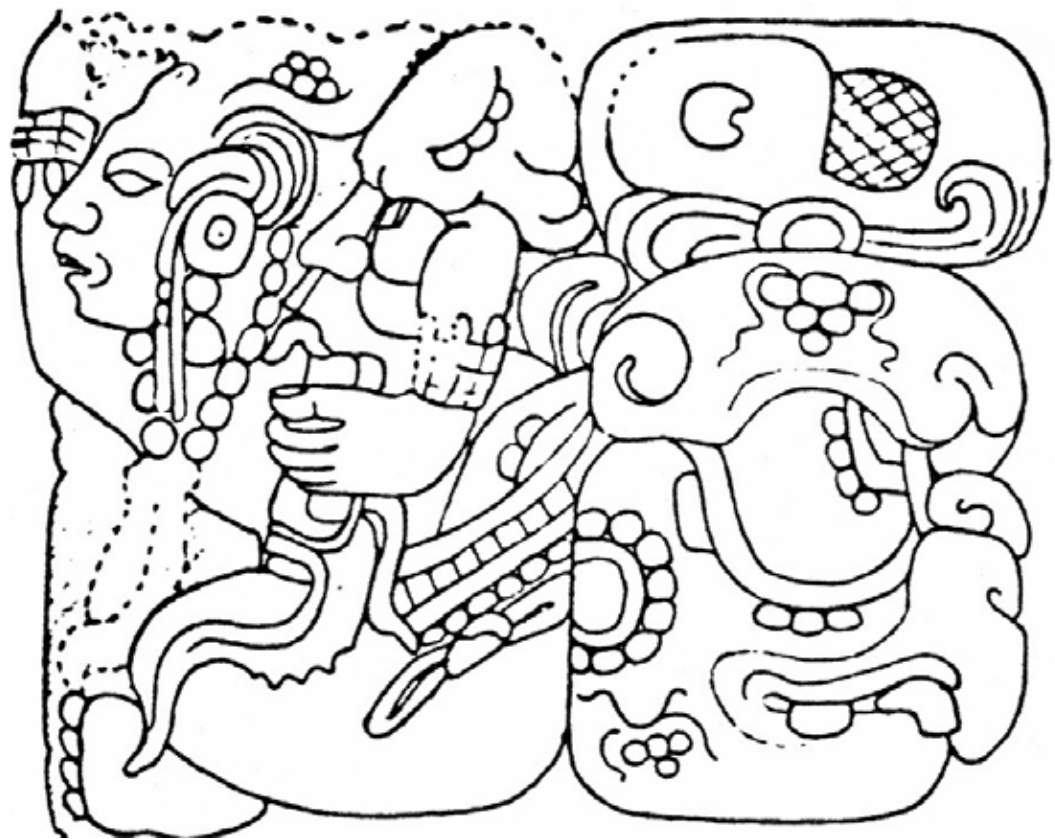


Figure A5 The TE' Sign as a Numeral Classifier on Copan Stela D, North (glyph block A9) (drawing By Linda Schele).

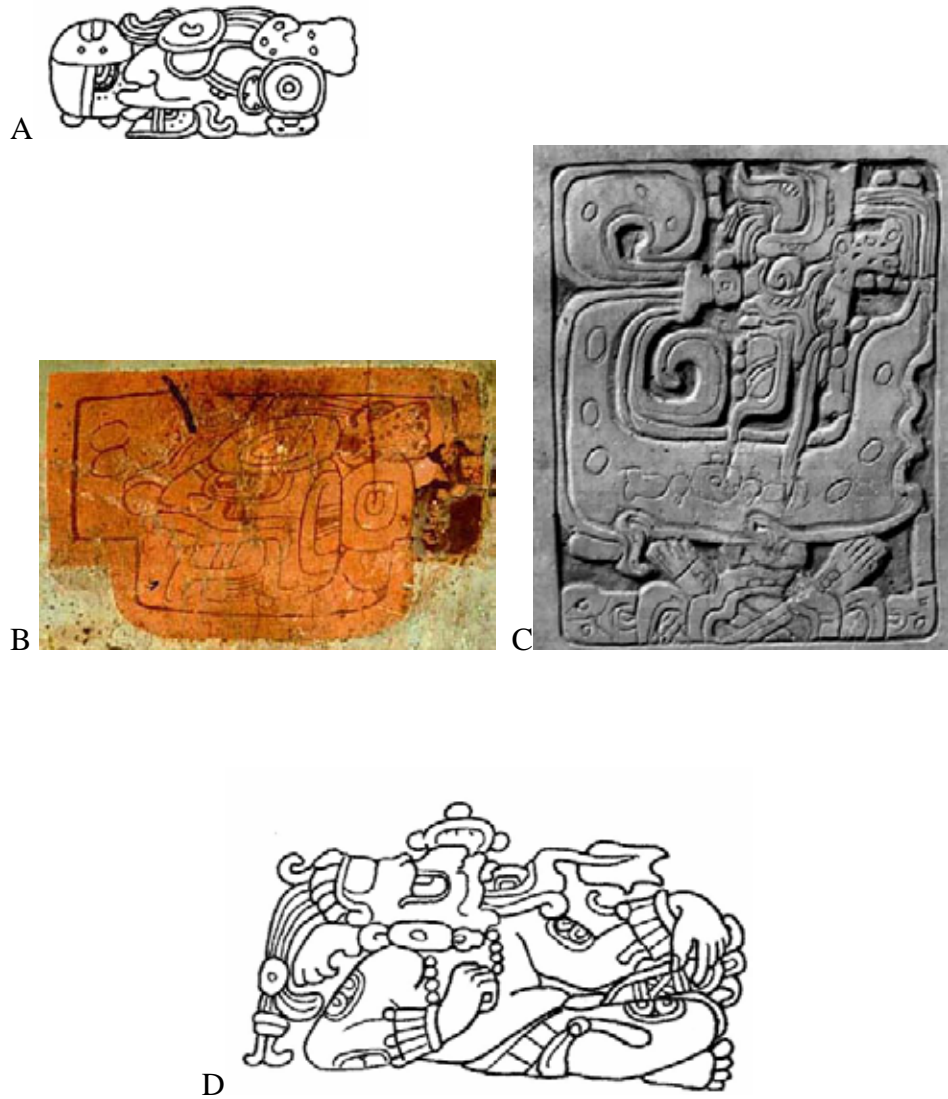


Figure A6 The TE' Sign as the Patron of the Month Pax (A) Appearing in the Introductory Glyph on Copan Stela 9 (after Taube 2005:30 fig. 5a); (B) on Kerr Vessel 5619 (see Kerr Database 2005:5619); (C) on Kerr Vessel 5053 (see Kerr Database 2005:5053); (D) Appearing in the Introductory Glyph on Zoomorph B (after Taube 2005:30 fig. 5b).

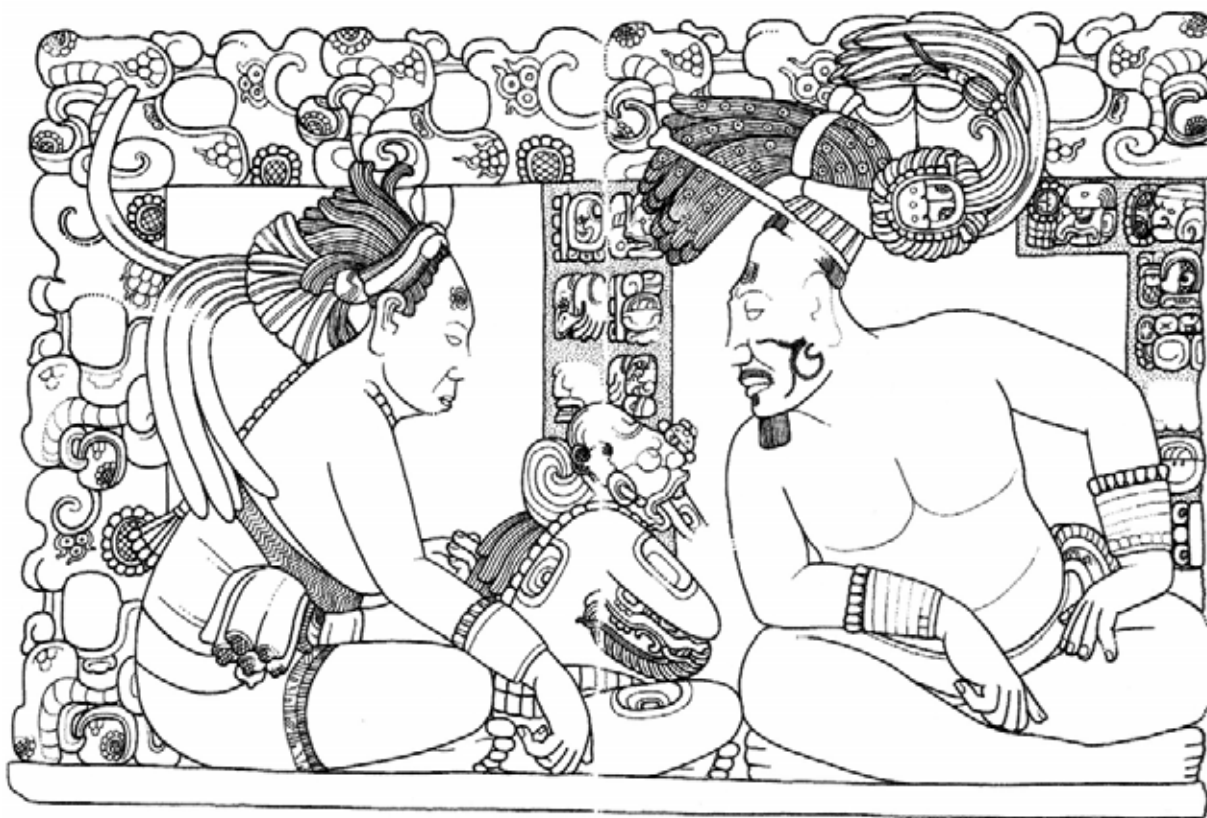
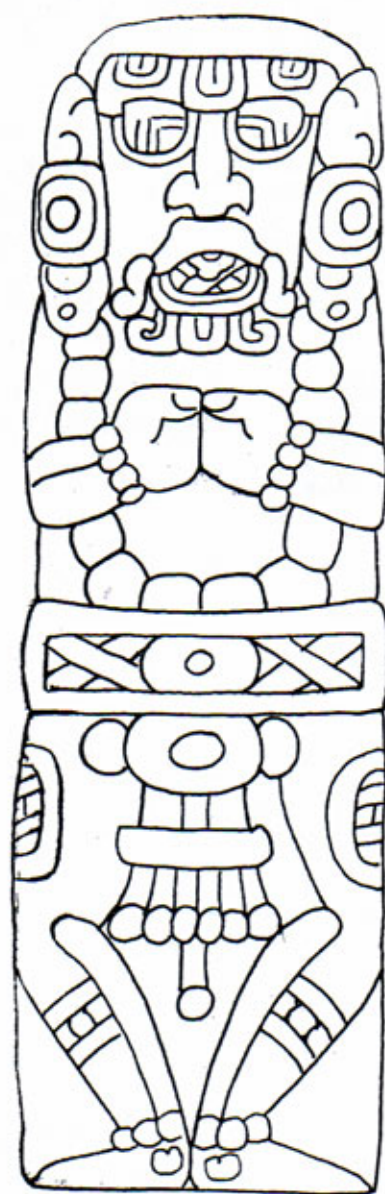


Figure A7 The Amparo Throne Back (after Zender 2005:12, fig. 9).



A



B

Figure A8 A Jade Pectoral from Structure 10L–26, Copan (A) Front View Showing Pax God (after Taube 2005:fig. 5); (B) Back View Showing a Square–Nosed Blossom with Oval T24 Sign (after a jade replica carved by Elizabeth Wagner).

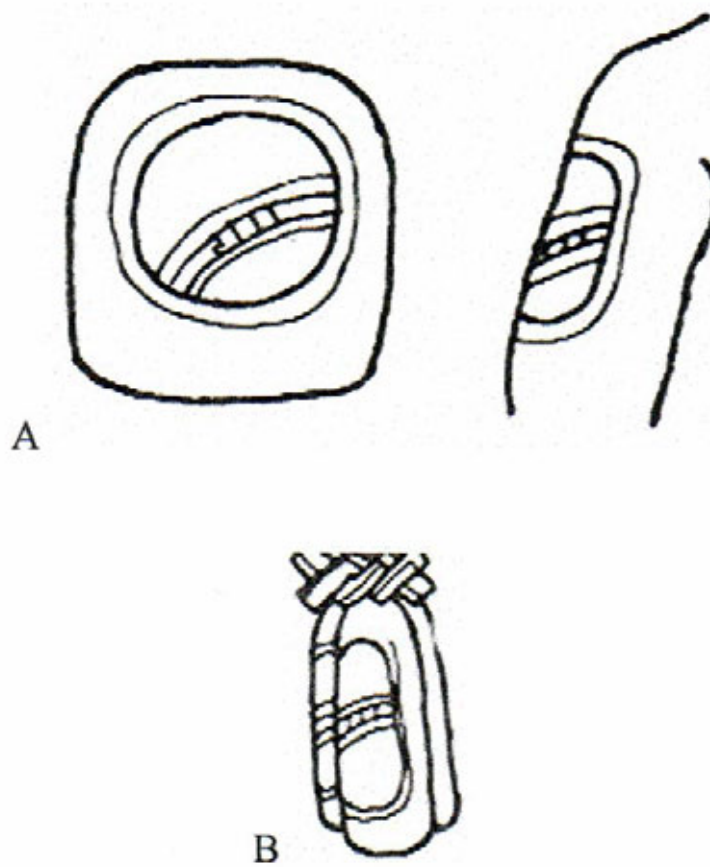


Figure A9 The "Mirror/Celt" Sign (A) Circular and Oval Forms (after Schele and Miller 1986:43, fig. 20); (B) Celts Hanging from a Royal Belt on Dos Pilas Stela 1 (after Schele and Miller 1986:77, fig. I.4e).



Figure A10 The Leiden Plaque (after Schele and Miller 1986:129 and 36, plate 33 and fig. 12).



A



B

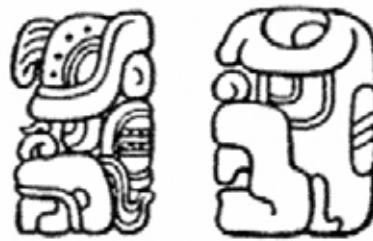
Figure A11 Examples of Chaak Welding Axes (A) K4013; (B) K521 (see Kerr Database 2005:K4013 and 521).



Figure A12 Inscription on Early Classic Jade Celt (drawing by David Stuart after Grube and Martin 2001:II-36).



A



1017 a

1017 b

B



C



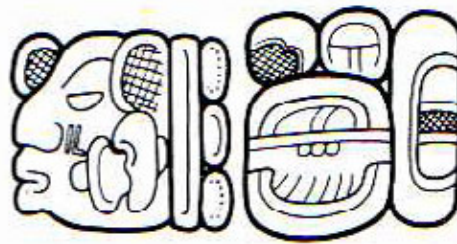
D



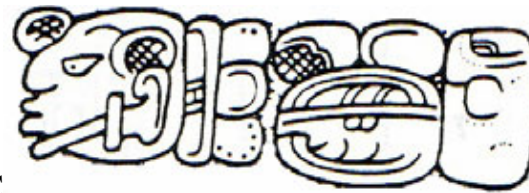
Figure A13 Examples of the T1017 Supernatural Head (A) from Pakal's Sarcophagus Lid (after Greene 1974:81, fig. 8); (B) from Thompson's Catalogue of Maya Hieroglyphs (after Thompson 1962: 457); (C) The God C Head (after Schele and Miller 1986:48, fig. 31b); (D) The Head Variant of the Sun God (after Morley 1975:97, fig. 51 j and k).



A



B



C



D

Figure A14 Examples of T24 and T1017 Substitutions (A) Itzamnaaj K'awiil Name Phrase on Dos Pilas, Stela 8 (H11–I11) (after Houston 1993:111, fig. 4–14); (B) Lady Six Sky Name Phrase from Naranjo (after Grube and Martin 2000:74); (C) and (D) Lady Six Sky Name phrase from Naranjo Stela 29 (glyph blocks H13–I13 and I17–H18) (after Graham 1978:72, vol. 2).

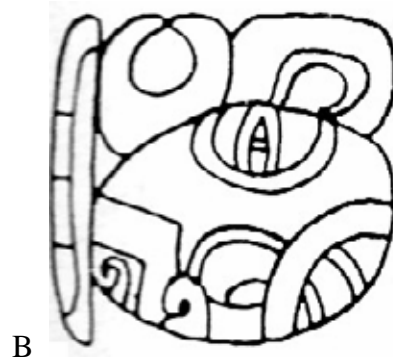
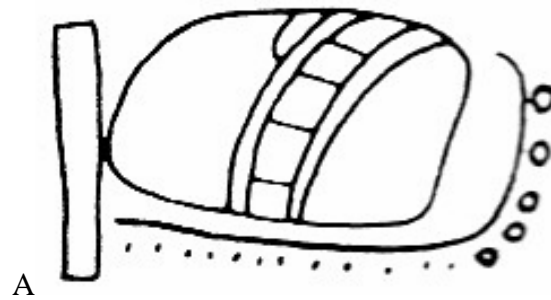


Figure A15 Examples of Lord of the Night G5 Glyphs (A) Lord of the Night G5 from the Leiden Plaque, (A8); (B) Lord of the Night G5 from Yaxchilan Lintel 48 (B4) (both figures after Thompson 1971:fig. 34).



Figure A16 Inscribed Jade Block from Palenque, Temple 12 (after Miller and Martin 2004:234, plate 130).



Figure B2 Drawings of the Temple V, North Cache (as it appeared in Ruz Lhuillier 1958:figs 12 &13).



Figure B3 Preliminary Reconstruction of Palenque, Temple V, North Cache (reconstruction by Carl Callaway & Elizabeth Wagner based on drawings of fragments found in Ruz Lhuillier 1958:figs. 12 &13).

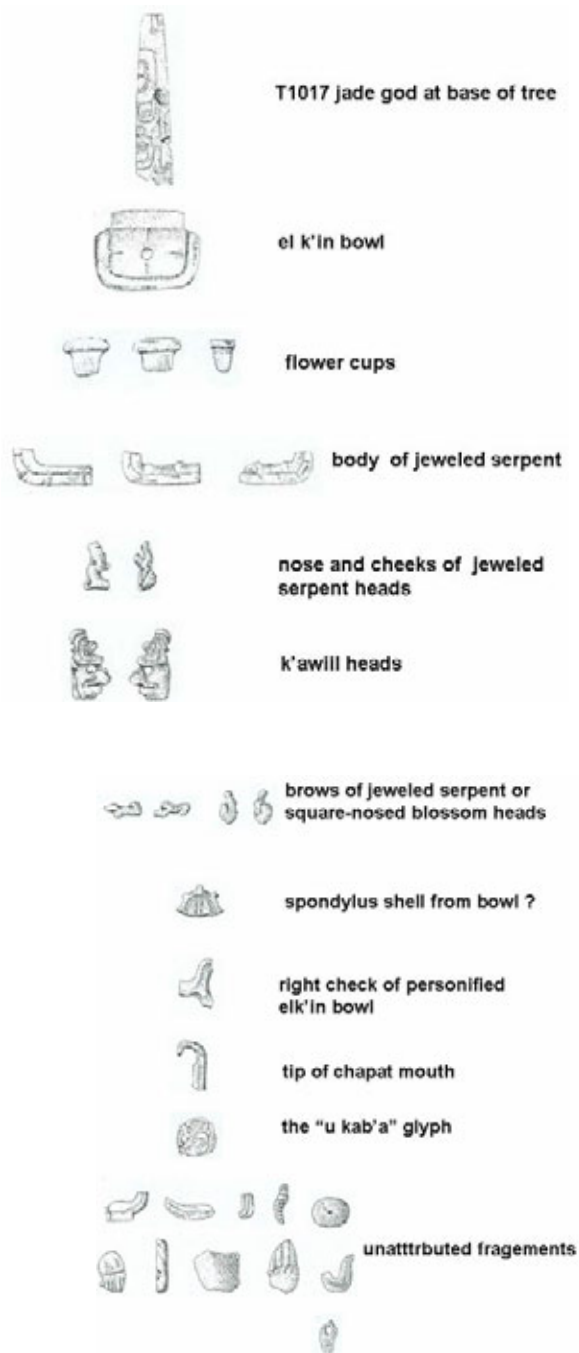


Figure B4 Preliminary Identification of Jade Fragments from Temple V, North Cache (drawings fragments found in Ruz Lhuillier 1958:figs. 12 &13).

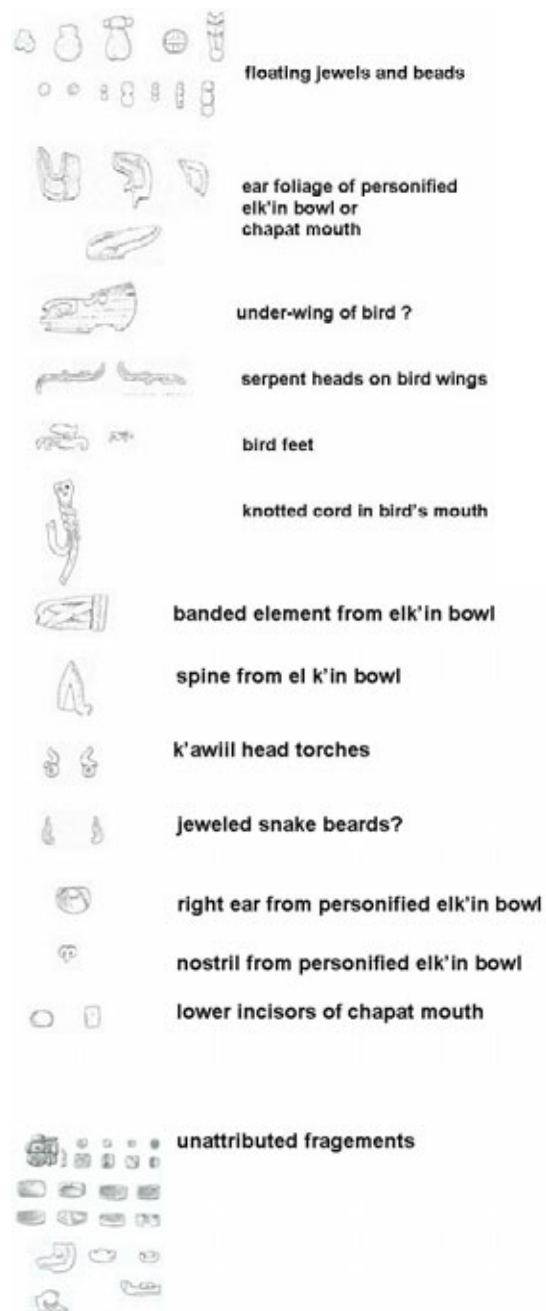


Figure B5 Preliminary Identification of Shell Fragments from Temple V, North Cache (drawings of fragments found in Ruz Lhuillier 1958:figs. 12 &13).



Figure B6 Comparison of Temple V Cache to Pakal's Sarcophagus Lid (drawing of TI lid by Merle Greene).

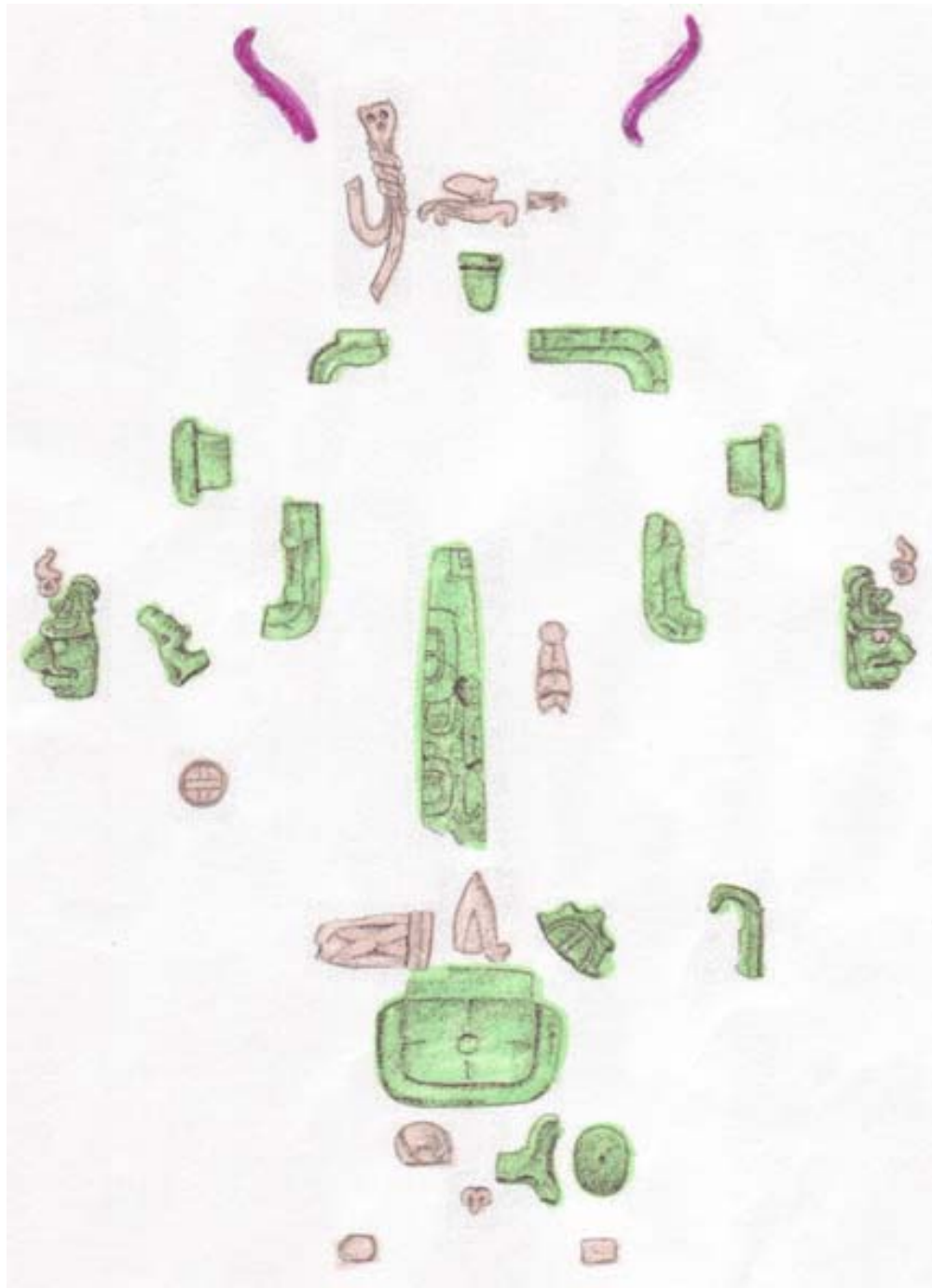


Figure B7 Reconstruction of Palenque, Temple V, North Cache Fragments with Colored Highlights (reconstruction by Carl Callaway & Elizabeth Wagner based on drawings of fragments found in Ruz Lhuillier 1958:figs. 12 &13).



A



B

Figure B8 Jade Jars from Tikal (A) from Structure 5D-73, Burial 196 (after Martin and Grube 2000:48); (B) from Temple 1, Burial 116 (after Coe 1975:794).

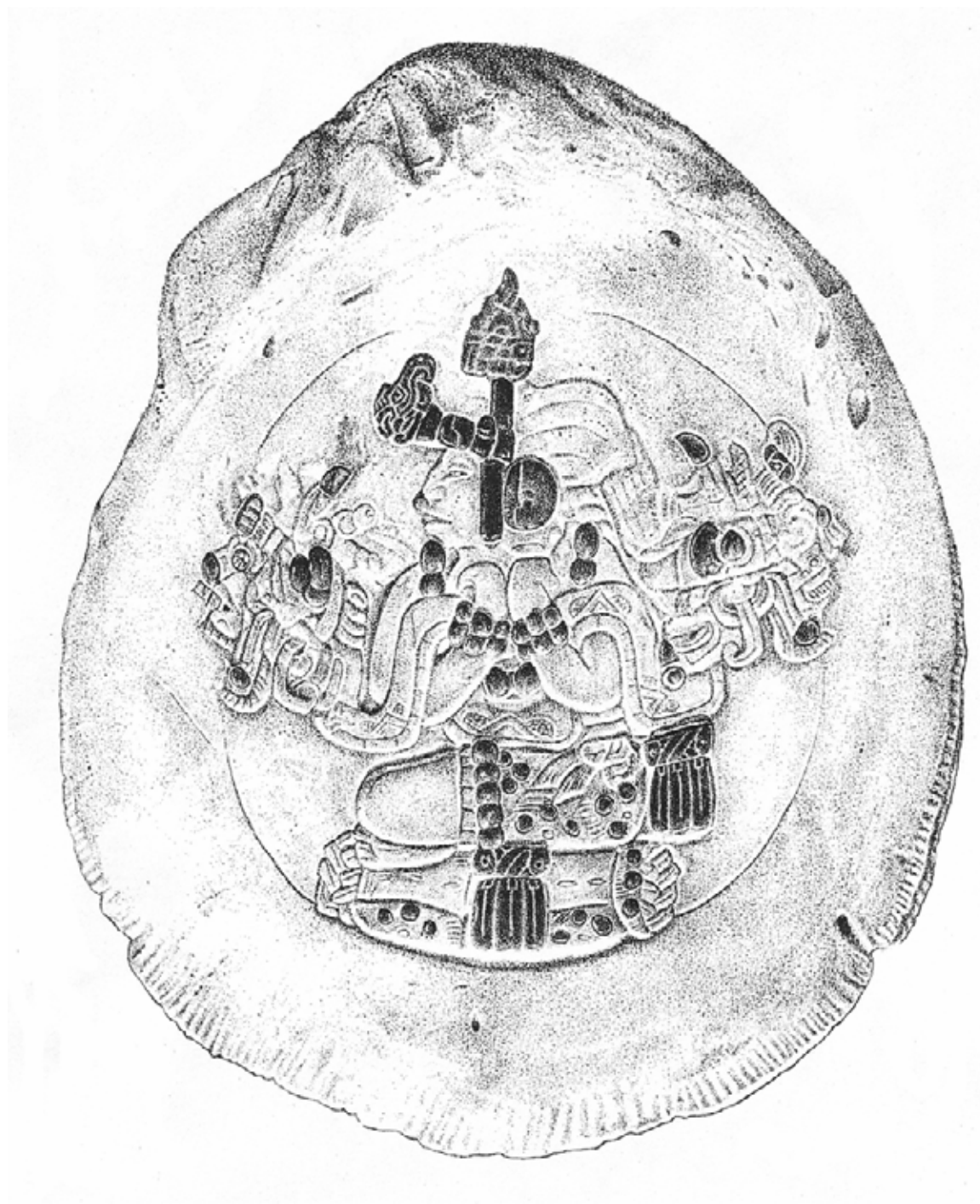


Figure B9 Shell Plaque from Dzibanche, Yucatan (after Stuart 2004:134, fig. 2).

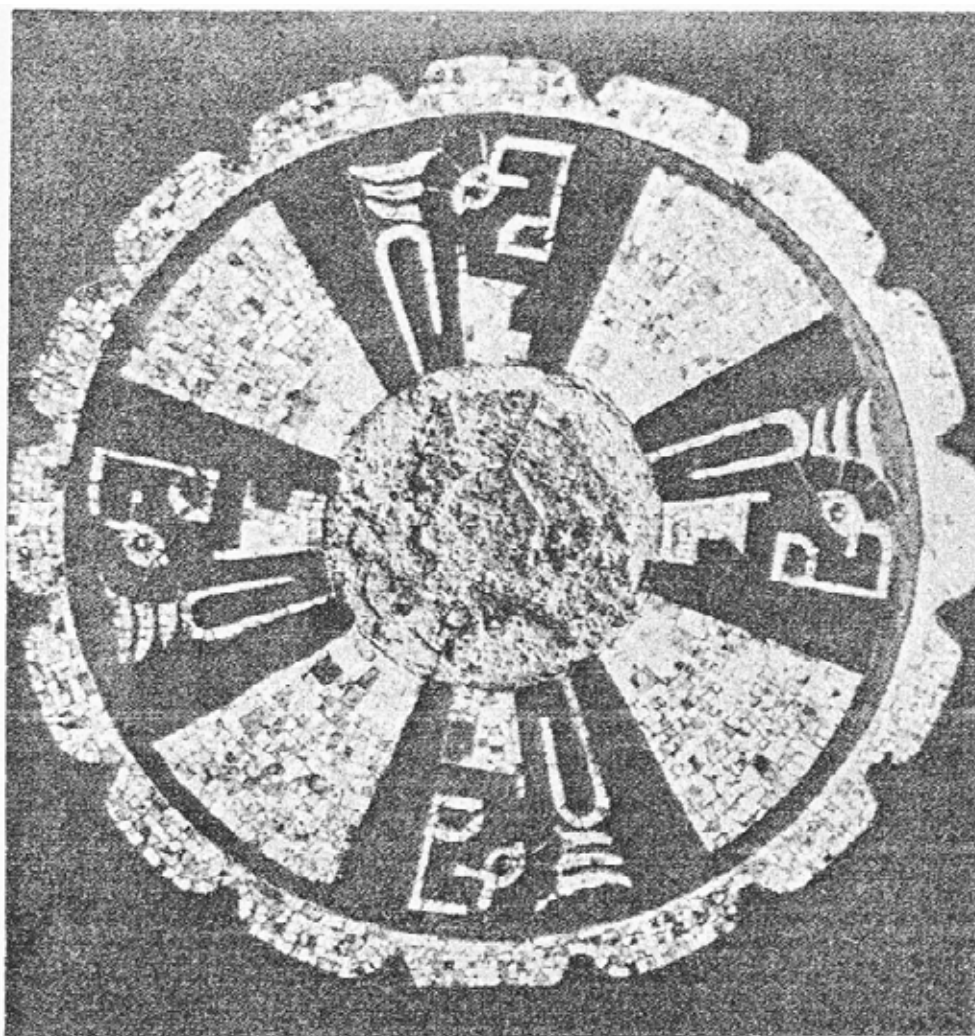


Figure B10 Mosaic Plaque from the Temple of the Warriors, Chichén Itzá (after Fastlicht 1960:plate III).

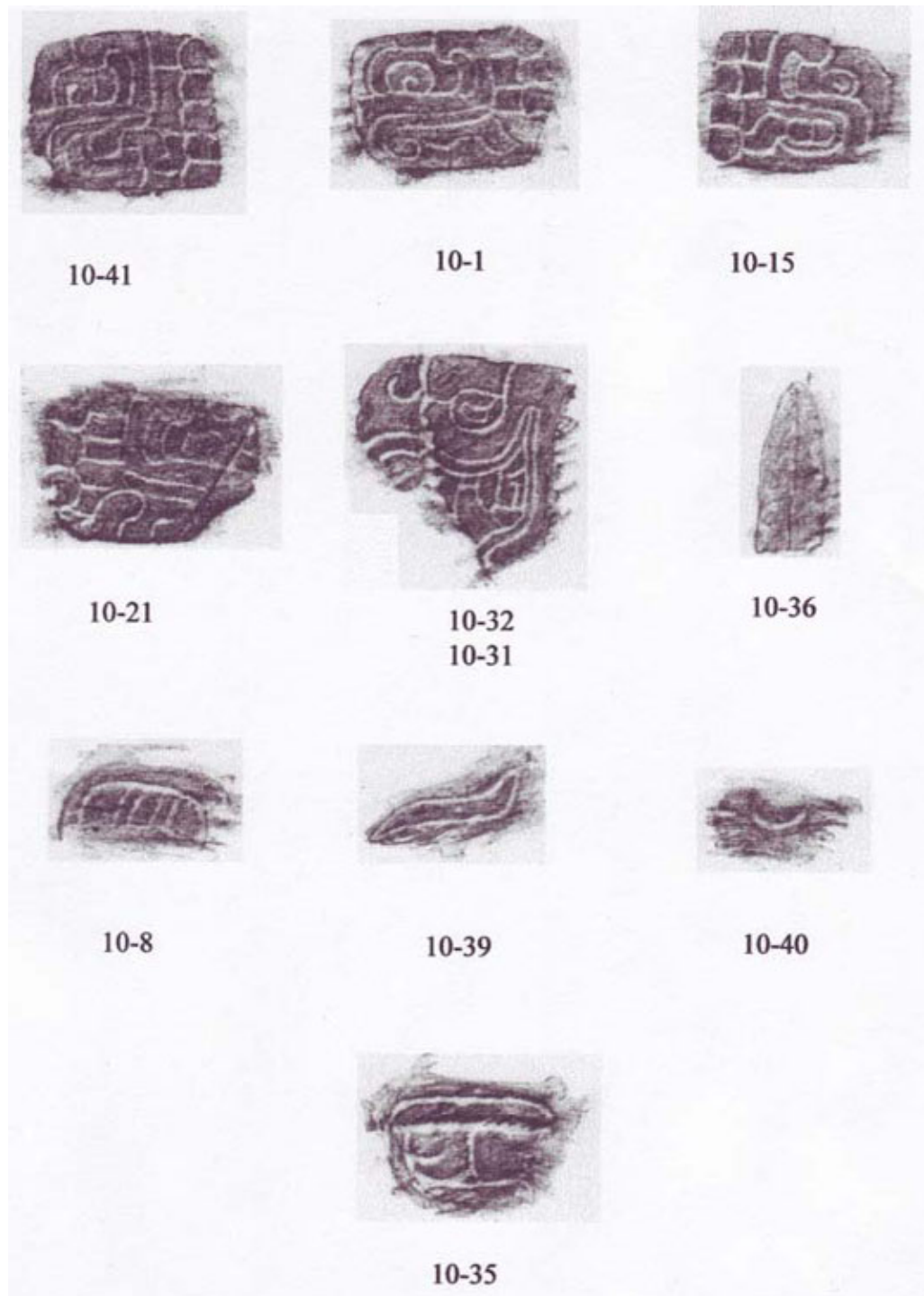


Figure B11 Rubbings of Artifacts from Rio Azul Stairway Cache 3, Structure B-56 Artifacts, Scaled at 129% (rubbings from Rio Azul Field notes courtesy of Dr. Richard E. W. Adams).

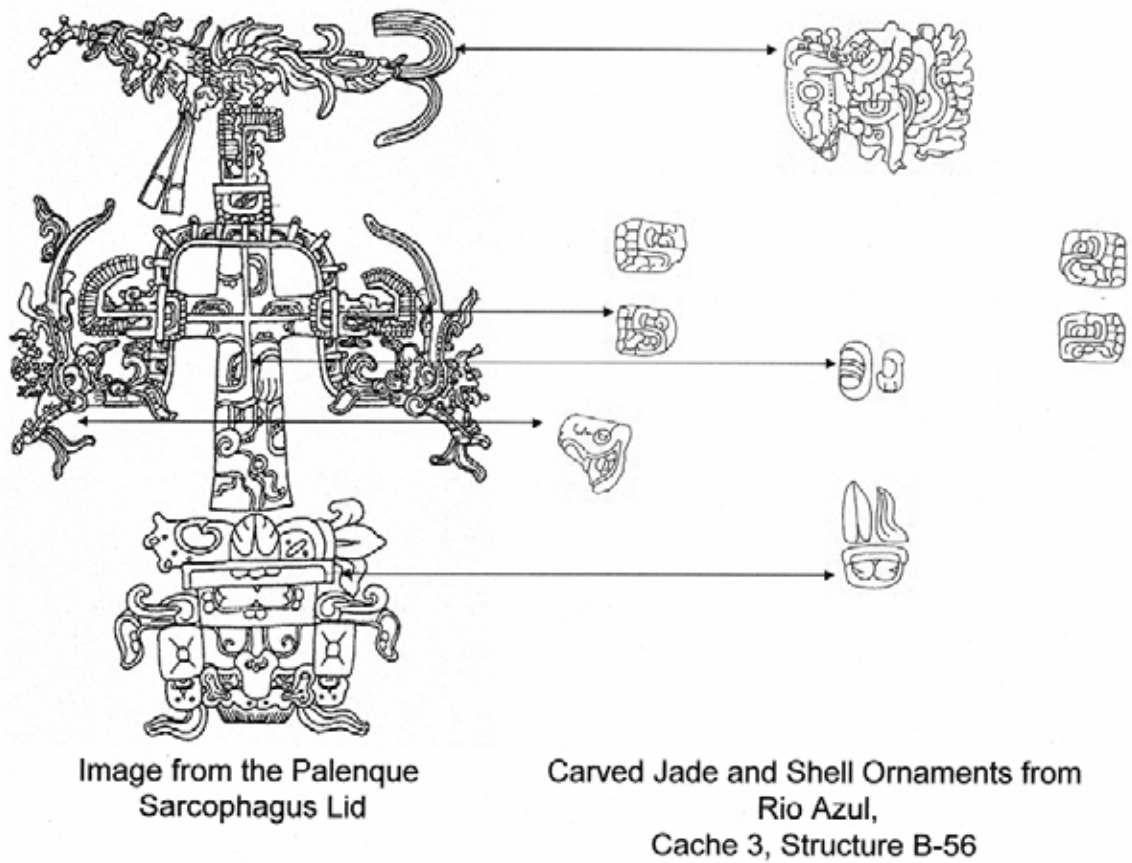
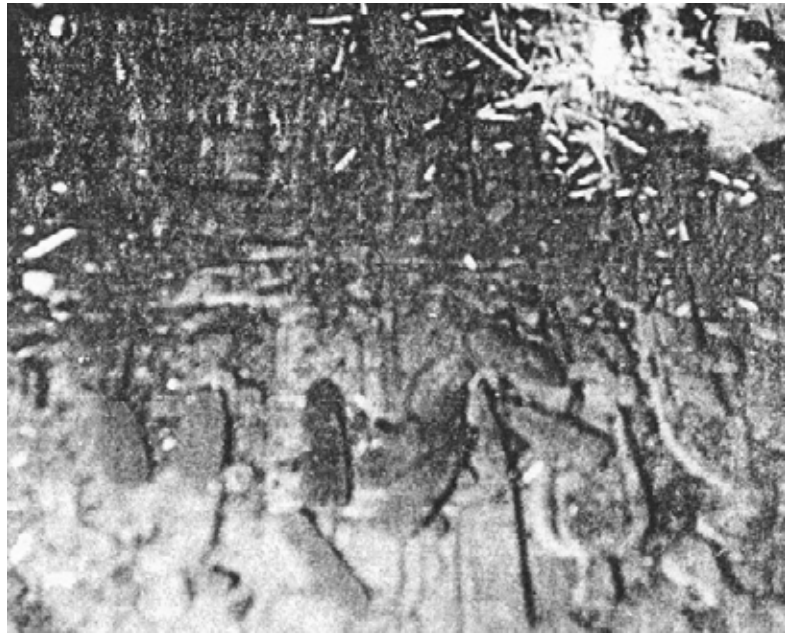
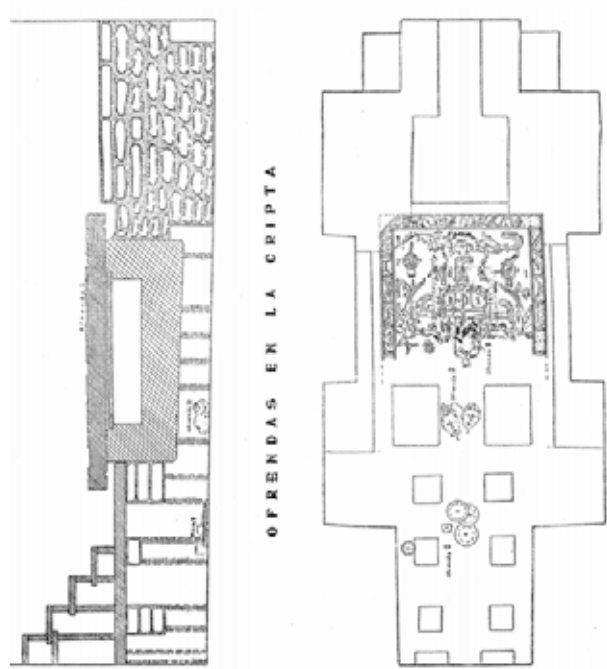


Figure B12 Comparison of Rio Azul Mosaic with Image from the Temple of the Inscription's Sarcophagus Lid (drawings of the Rio Azul fragments after Adams 1999:62; drawing of the TI lid cross by Linda Schele).

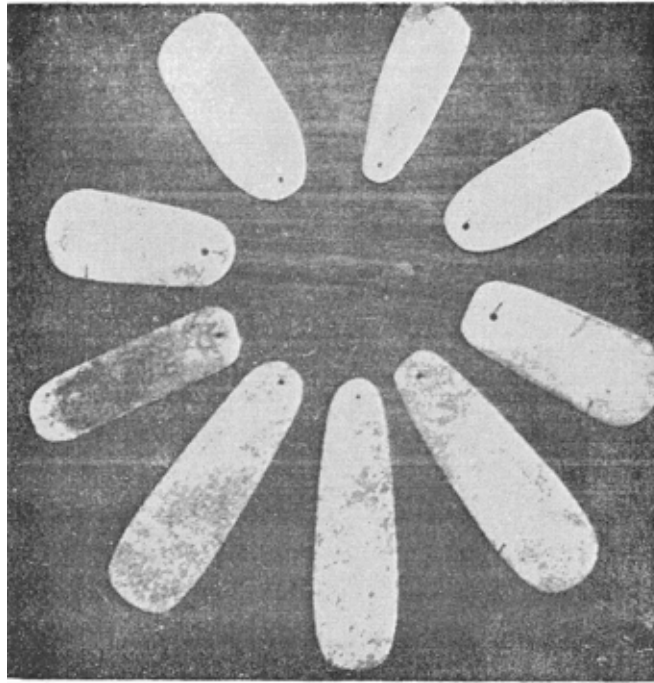


A



B

Figure B13 The Jade Cache Above Pakal's Sarcophagus Lid (A) Photo of Jade Cache Atop Pakal's Sarcophagus Lid (after Ruz Lhuillier 1973:fig. 184; (B) Map of Temple of the Inscriptions Offerings (after Ruz Lhuillier 1955:fig. 7).

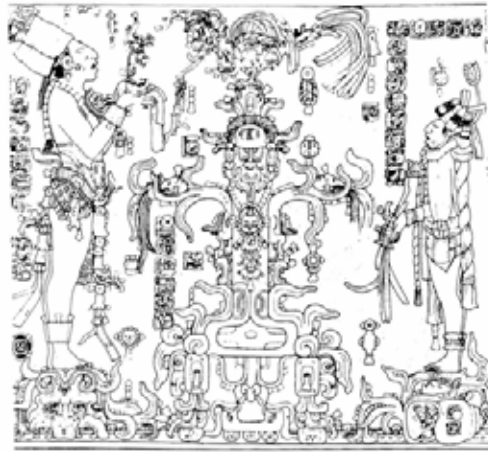


A



B

Figure B14 Detail of Sarcophagus Lid Cache (after Ruz Lhuillier 1955:plate XVIII); (A) Nine Jade Celts; (B) Four Jade Masks with Jade and Shell Plaques (after Ruz Lhuillier 1958:plate XLL).



A



B



C

Figure B.15 Examples of Plants and Trees Wearing Human Apparel (A) Temple of the Foliated Cross Main Panel, Palenque (after Schele 1978:41, fig. 1); (B) Dresden Codex Page 26c; (C) Dresden Codex Page 25c.

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Vita

Carl Douglas Callaway was born in San Luis Obispo, California on March 1, 1968, the son of Harold D. and Carol E. Callaway. He graduated from San Luis Obispo High School in 1986 and in 1992 entered the University of California at Davis in 1992. He received the degree of Bachelor of Arts in Anthropology and the minor degree in Native American Studies in May 1994. In September, 2002, he entered the Graduate School at the University of Texas at Austin.

Permanent Address: 4613 Windy Brook
Austin, Texas 78723

This Thesis was typed by the author.