

**CORDS OF TIME: AN ICONOGRAPHIC ANALYSIS OF THE
FLAT TWO-DIMENSIONAL KNOT IN THE CONTEXT OF
CLASSIC PERIOD MAYA REPRESENTATION**

Tessa P.E. Robinson

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UNIVERSITY COLLEGE LONDON, INSTITUTE OF ARCHAEOLOGY

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This work is dedicated to my father, Eugene Robinson, and to my daughter, Eugenie Robinson-Lee.

Abstract

In his book *A Study In Maya Art And History: The Mat Symbol*, Robicsek draws our attention to what he considers to be a well-defined group of motifs represented on Maya artifacts, and which he diagnoses as mat symbols (Robicsek 1975: 17). Robicsek identifies forty three varieties of mat-symbols which he organizes into four sets based on their design (Robicsek 1975: 186). The first design ‘consists of two bands of equal lengths twisted around each other’ (Robicsek 1975: 187), whilst the second conforms to the first design except that the twists are ‘enclosed within a medallion-like frame’ (Robicsek 1975: 187). The third design is an ‘interwoven design, which shows not only simple twists, but also a more intricate “in-and-out” pattern’ (Robicsek 1975: 187). The fourth he terms a ‘decorated design’ resembling the first with the exception that ‘circular motifs’ (Robicsek 1975: 187) are shown as attached to the twists.

The third set, the motifs with an interwoven design are the items which interest me and which form the subject of this research. I have identified these motifs as representations of knots and propose that they should be categorized—based on their shared characteristics which I describe in Chapter Four—as members of a particular type of knot. The focus of this research is therefore not Maya knots *per se* but rather a particular knot type characterized by an interwoven design.

Knots are constructed from perishable material, which does not survive in the archaeological record; therefore my dataset comprises representations of knots pictured on different media such as ceramics, sculpture, monuments and architecture. Because knot representation is richest in the Classic Period, this is the time period on which my research focuses.

I propose that how or where this particular knot type was displayed was not arbitrary, but rather reveals intentionality; the implication is that knot motifs were vehicles for the communication of certain ideas or concepts and as such were infused with meaning. This position is supported by the research set out in Chapter Three which looks at the use of knots by different cultures over time and through space. Recovering meaning involves an analysis of the relationship between the knot representations and the items or personages, such as

thrones or deities, which display the knots. Also entailed is a consideration of when (the date of the representation) and where (which sites), the knots were displayed. By means of these analyses an understanding is gained of the knot, based on its relationship with people and things over time and through space.

The identification of one group of Robicsek's purported 'mat motifs' as knots serves to open the door to more rigorous analysis. As a first step in unraveling and deconstructing Robicsek's 'mat symbol' hypothesis, it is hoped that this work will inspire further research on the remaining motifs which are still erroneously interpreted as 'mats'.

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My introduction to Mesoamerican archaeology consisted of evening classes at Birkbeck College, taught by Elizabeth Baquedano. Elizabeth's passion for her subject influenced my decision to go on to study Maya archaeology, and with her support I applied and was admitted to the M.A. degree program in Archaeology at the Institute of Archaeology, UCL. It seems a long time ago since my first step in the direction of Maya studies, but the journey has been worth it. On the way I have met so many people passionate about the subject. My thoughts about Maya archaeology have been hugely shaped and tempered by conversations with people I encountered on buses, at archaeological sites, dusty roadsides, villages and towns in Belize, Mexico and Guatemala. Archaeology is an area of study which has to do with recall, through the investigation of material remains, of a past defined by collective acts by people who continue to inhabit the present. As inheritors of that past, those with whom I

spoke felt that archaeology occupies a very important place in their lives. Archaeology could reconnect people with their past, awaken memory and strengthen identity; but equally, it can disconnect and disenfranchise people from their past. For the words of hope and caution I thank those who shared their thoughts with me on my journeys. Your faces and your words are ever on my mind.

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Chapter One: Introduction

The knots that are the subject of this research are most clearly in evidence in Classic-period representation, but they also appear in Preclassic and Postclassic representation suggesting considerable time depth to their display. Because antecedent themes can shed light on the use of knots, it is important for the reader to have some awareness of developments in terms of both Maya chronology and inter-regional relationships; therefore I begin this chapter with a brief overview of the different periods which comprise Maya history and follow this with a discussion of the impact of Robicsek's 'mat symbol' theory and how this has dominated interpretative strategies. Also in this chapter, the items identified as 'mat symbols' by Robicsek are re-evaluated and diagnosed as knots primarily based on observations of their use as fastenings for cord in the context of altar stone representation.

Following on from this chapter, Chapter Two sets out the research questions and methodology whilst Chapter Three deals with the theory underpinning the work. Chapter Four introduces knots and knotting as a technology distinct from weaving or basket making. I also list in Chapter Four the various attributes of the mat motifs/knots and show how these attributes can be used for the purposes of identification both in the context of knot compendia but also in the area of ancient Maya representation. Chapter Five comprises a classification framework where the knots are organized or grouped according to the objects or items on which they are displayed and Chapters Six to Thirteen comprise an analysis and interpretation of each knot group listed in the classificatory framework. Chapter Fourteen involves a chronological review of the knots through time and space, and is followed by the conclusion to the research.

1.1 Situating the Maya

The Maya region encompasses southern Mexico, Guatemala, Belize and parts of El Salvador and Honduras (see Fig. 1.1). In terms of chronology, Maya civilization is broadly organized into the Preclassic (2000 BC to AD 250), Classic (AD 250 to AD 909) and Postclassic (AD 909 to 1697) periods (Martin and Grube 2008: 8-9; Jones and Satterthwaite 1982: Table 1, 6).

Chronological Table

Maya Long Count positions	Gregorian year equivalent*	Monument style phases	Tikal monument periods	Tikal ceramic complexes	Currently used period names
				Caban	Postclassic
10.4.0.0.0	A.D. 909			Eznab	Terminal Classic
10.3.0.0.0	889	---		---	---
10.2.0.0.0	869				
10.1.0.0.0	849	Decadent Phase			
10.0.0.0.0	830				
9.19.0.0.0	810	---			
9.18.0.0.0	790	Dynamic Phase	Late Tikal Period	Imix	
9.17.0.0.0	771				
9.16.0.0.0	751	---			
9.15.0.0.0	731	Ornate Phase			
9.14.0.0.0	711				Late Classic
9.13.0.0.0	692	---		---	
9.12.0.0.0	672		---		
9.11.0.0.0	652	Formative Phase		Ik	
9.10.0.0.0	633				
9.9.0.0.0	613				
9.8.0.0.0	593	---		---	
9.7.0.0.0	573				
9.6.0.0.0	554		Early Tikal Period		
9.5.0.0.0	534	Early Cycle Nine			
9.4.0.0.0	514				
9.3.0.0.0	495				
9.2.0.0.0	475				
9.1.0.0.0	455				
9.0.0.0.0	436	---		Manik	Early Classic
8.19.0.0.0	416				
8.18.0.0.0	396				
8.17.0.0.0	376	Late Cycle Eight			
8.16.0.0.0	357				
8.15.0.0.0	337				
8.14.0.0.0	317				
8.13.0.0.0	297				
8.12.0.0.0	278				
	250	---	---	---	---
				Cimi	Protoclassic
	150	---	---	---	---
				Cauac	
	100 B.C.	---	---	---	Late Preclassic
				Chuen	
	250 B.C.	---	---	---	---
				Tzec	
	500 B.C.	---	---	---	
				Eb	Middle Preclassic
	1000 B.C.	---	---	---	---
					Early Preclassic
	2000 B.C.	---	---	---	---

Table 1.1: Chronological divisions and its relationship to the Long Count (after Jones and Satterthwaite 1982: Table 1).



Fig. 1.1: Map of the Maya region (adapted fromLooper 2003: P.1., ix).

Preclassic Period

The Preclassic is further divided into three sub-periods known as the Early, Middle and Late Preclassic (with the terminal Preclassic sometimes referred to as the Protoclassic (Jones and Satterthwaite 1982: Table 1; Reese-Taylor and Walker 2002: 107)). The Preclassic is widely recognized as a time when complex societies began to emerge both within and beyond the Maya region (Demarest 2004: 14-15; Martin and Grube 2008: 8). By ‘complexity’ is meant differentiation in social, political and economic status, hierarchical relations among sites, the development of monumental art forms and civic architecture (Rice 2007: 75). It is during the

Early to Middle Preclassic that we see the rise of the Olmec civilization along the Mexican Gulf Coast (Clark 1997: 217). The appearance of Olmec elements in the art, iconography and writing of the Late Preclassic and Classic Period Maya has led to discussions about the relevance and extent of Olmec influence on the development of Maya civilization (Demarest 2004: 65-66; Demarest 2003: xiii; Foster 2002: 29, 30; Clark and Hansen 2001: 1-36). By 500 BC, large cities such as Nakbe and El Mirador had emerged in the Maya lowlands (Martin and Grube 2008: 8). Many cultural traits which later define Classic Period Maya civilization appear in their nascent form at this time such as the stela-altar complex tied to the calendar, hieroglyphic texts, and depictions of rulers in monumental sculpture and painting (Demarest 2004: 83; Braswell 2003: 6; Foster 2002: 31). The continuities noted between the Preclassic and Classic Period extend to knot representation and images of ropes, and binding (Reilly III 2002: 47-50). In the context of my research, Preclassic data on binding (exemplified by La Venta Altar 4) are brought to bear on the interpretations of Classic Period Maya representations of knotting and binding.

Classic Period

The Classic Period, subdivided into the Early, Late and Terminal Classic (Jones and Satterthwaite 1982: Table 1, 6), is equated with the florescence of Maya civilization. It is during the Classic Period that we see the full development of the Maya institution of divine kingship (*K'ul Ajaw*), a system of rule legitimized and propagated through monumental art and elite ideology which had first made its appearance in Preclassic times (Demarest 2005: 108-110; Foster 2002: 43; Sharer and Golden 2004: 31-33). Researchers paint a picture of rivalry between cities, and in particular between Tikal and Calakmul. The competition between these two powers and their involvement in the political affairs of individual Maya polities across the Maya region is presented as impacting on and structuring relationships among Classic Period sites (Sabloff 2003: xxii; Martin and Grube 2008: 7; Demarest 2005: 108-110; Valdés and Fahsen 2005: 140-141; Braswell et al. 2005: 164). Evidence also points to the presence of Teotihuacan, a central Mexican superpower, in the political landscape of the Classic Period Maya (Martin and Grube 2008: 9; Stuart 2002a: 506). Debates as to the extent and nature of this influence are ongoing (Braswell 2003: 1-43; Ponce de León 2003: 167-198; Laporte 2003: 199-216; Pendergast 2003: 235-247; Taube 2003). However, Demarest proposes that the founding of some of the Early Classic dynasties at sites such as Tikal, Uaxactun, and Copan was stimulated by relations with Teotihuacan (Demarest 2004: 104). Teotihuacan-derived iconography and symbolism such as Tlaloc imagery, Mexican

Year Signs, and War Serpents infiltrate the repertoire of Maya artistic expression, and even after the fall of Teotihuacan at around AD 600 these Teotihuacan elements continue to be reproduced (Taube 2002: 270; Fash and Fash 2002: 451; Foster 2002: 46-48). With regard to knot iconography, it should be noted that the wealth of data on knots available for the Classic Period has meant that most of the knot iconography analyzed in the context of my research dates to this time.

Following the fall of Teotihuacan, Maya civilization peaks, yet by AD 800 there are signs of stress experienced in terms of population loss and dynastic decline particularly in the Petén region (Demarest, Rice and Rice 2005: 553-555; Culbert and Rice 1990). Theories pointing to invasion, war, drought and over-population have all been espoused to account for the hiatus (Foster 2002: 61-65). In other areas this decline is much more gradual whilst parts of Belize and Northern Yucatan witness a new florescence marked by population growth and new styles in architecture (Demarest 2004: 111, Graham 2004: 223-241).

Postclassic Period

The Postclassic Period is presented as being shaped by, and arising out of, the events which take place during the Late Classic and Terminal Classic (Chase and Chase 2005: 26), such as the demise of Classic Period kingship and the institutions which sustained it and the rise of new economic dynamics (Demarest 2005: 123-124; Demarest, Rice and Rice 2005: 572; Braswell et al. 2005: 192; Graham 2004: 223-241; Graham 2006: 109-124). It is proposed that systems of shared governance involving councils of lineage heads (*popol na* system) take the place of the earlier institution of divine rule (Demarest, Rice and Rice 2005: 560). There is an abandonment of southern Maya lowland centers of the western and northern Petén (Demarest, Rice and Rice 2005: 572) as populations move to or become concentrated in the northern Yucatan, and in southern areas around lakes, along rivers and the coast (see map) (Martin and Grube 2008: 9; Graham 2011). During the Postclassic, Chichen Itza, believed to have first been occupied at around AD 700 (Cobos Palma 2005: 542), becomes a regional power in the Yucatan with ties to central Mexico and Gulf Coast (Martin and Grube 2008: 9). The nature of these 'Mexican' or foreign ties remains the subject of much debate with some researchers pointing to Toltec influence originating in central Mexico and mediated during the Postclassic via Tula to Chichen Itzá (López Austin and López Luján 2002: 23-27; Kristan-Graham and Kowalski 2011; Gillespie 2011). 'Toltec' is a generic term denoting an inhabitant of Tollan, a place of ancestral origins and political power (Kristan-Graham 2011:

430; Taube 1986: 52; Seler 1902-1923, V: 149), ‘where lords were invested with the titles and insignia of political and royal offices’ (Kristan-Graham and Kowalski 2011: 9; Tedlock 1997: 295n151). As such Tollan has been applied to many cities including Teotihuacan, hailed as the original Tollan (Stuart 2002a: 502-503; Carrasco 1984: 104-109). Tula and Chichen Itza are also claimed as Tollans, where Tollan refers to a specific concept for place of origin and investiture. In the Late Postclassic, Chichen Itza is succeeded by Mayapan (Milbrath and Peraza Lope 2003: 109-124). However by 1441, Mayapan is abandoned and the 16th century is dominated by the arrival of the European powers (Restall 2001, Graham 2011).

During the Postclassic one of the richest sources for knot representation is murals. Knots are profusely pictured on murals, at sites such as Tulum, Santa Rita, Mayapan and Tancah, as well as illustrated in codices.

1.2 Maya Art and Representation

The discussion of Maya chronology and history covers a period of over 3,000 years, and it stands to reason that art styles and representation changed over this time. Because the material record is richest from the Classic Period, it is Classic Period representation with which I am predominantly concerned. However, as noted above, I also draw from Postclassic, ethnohistoric and ethnographic sources to support my arguments about the importance of the concept of ‘knot’ in Maya culture.

The term ‘knot’ does not itself define a material, and knots can be used and are used in the manipulation of a variety of materials such as textiles, basketry, cordage, rope – in other words generally pliable materials. Where knots appear on painted ceramics, carved stone or wood, they represent or symbolize pliable materials. Therefore some discussion of the representation of pliable materials in Maya art is in order.

Textiles and Basketry in Classic Maya Imagery

There is an element of realism in ancient Maya art (where realism refers to the accurate reproduction of what can be seen [Boldrini 2009: 45; Walder 1995: 18]) which appears to be more pronounced than in other Mesoamerican art styles such as that of the Zapotec, Mexican or Mixtec cultures. This realism can be witnessed in the fine detail of costume (where even

textile motifs are exactly replicated), setting and drama; therefore many of the objects depicted are immediately recognizable even with little background knowledge of Maya culture. However some objects are less accessible because they are particular to Maya culture and do not have equivalents in our own cultural repertoire. Also the relationships between the objects represented and the people shown manipulating them can be difficult to read because of the symbolism involved. This is where studies in iconography and epigraphy become indispensable as potential approaches for recovering meaning.

Researchers into Maya iconography recognize the importance of representations of textiles and basketry in Maya art. By textiles I mean cloth woven from 'long' yarns on a loom, and by basketry I refer to objects constructed of 'short' plant strands or fibers (Wendrich 2006: 254). Wendrich, a specialist in Egyptian basketry, points out that basketry is often described as a textile technique and this is perhaps why it is often subsumed within studies of textiles. However in an attempt at distinguishing between what are essentially different products with different uses, researchers have come up with a number of criteria by which to distinguish between textiles and basketry. These criteria include tools (i.e. looms of varying complexity), the types of raw materials, and the shape and function of the objects (Wendrich 2006: 254). Wendrich points out that the fundamental difference between baskets and textiles is 'that the basket-maker has to make amends for the often irregular shape of the raw materials and the short strands he or she is working with. Textiles, on the other hand, are made of long yarns, which in theory are uniform in size along the entire length' (Wendrich 2006: 254). Producing the kind of long, even, yarns requisite for weaving textiles involves greater or more intensive processing than that required to produce the strands for basket making.

Studies of Mesoamerican textiles and weaving patterns have taken many forms, such as Anawalt's (1981) identification and classification of the costumes illustrated in the codices, or Looper and Tolles's (2000) analysis of the motifs and designs found on the loose-fitting textile garments known as *huipiles* worn by Maya women pictured on Classic Period monuments. Archaeologists have also begun to study textile production based on finds of textile-related tools such as spindle whorls and bone pins in burials or caches (Chase et al. 2008: 127-142; Beaudry-Corbett and McCafferty 2002: 52-67). Studies of contemporary Maya dress and weaving technology illustrate some continuity between the present and the

ancient past, especially in terms of weaving technology but also textile patterns (Holsbeke and Montoya 2003; Altman and West 1992).

Basketry has not received the same kind of attention as textiles. This possibly reflects the fact that representations of baskets appear less frequently in Classic Period Maya iconography whereas textiles are abundantly recorded on monuments, painted vessels, and figurines (Holsbeke 2003: 21-31; Reents-Budet 2001). The lintels of Yaxchilan, which display some of the best examples of Maya textiles, are also hailed as depicting the best examples of ancient Maya basketry (Robicsek 1975: 119, fig. 100). A few partially preserved examples of basketry have been retrieved from the cenote at Chichen Itza, which testify to the fact that baskets were in use (Mefford 1992: 91). Basket making is still a thriving industry in the Maya areas and has been the subject of ethnographic study (e.g. Osborne and Osborne 1965).

What Characterizes Studies of the Representation of Textiles, Basketry and Other Pliable Materials to Date?

Scholars such as Looper and Tolles (2000), and Anawalt (1981; 2000), have studied textile representation in an attempt at learning about the range of clothing worn in ancient times in Mesoamerica. To some extent the same has been done with basketry by Robicsek (1975: 119-130) and Osborne and Osborne (1965).

Many scholars, however, have been concerned with the symbolism in the representation of ancient Maya textiles or other pliable materials (Montoya 2003: 104-124; Trevelyan and Forbes 2002: 118-135; Looper and Tolles 2000: 17-36). Attempting at getting at the meaning of symbols is tricky because firstly it depends on being able to recognize what the Maya are depicting and then proposing the meaning of the depiction. How close one is to discerning meaning is dependent on the ability to recognize what is depicted, and often the arguments about meaning ignore the fact that what is 'recognized' must also be supported. A prominent example is Robicsek's interpretation of the 'mat' symbol.

In *A Study in Maya Art and History: The Mat Symbol* (1975), Francis Robicsek draws on ethnohistoric and ethnographic sources such as codices, chronicles by catholic clergy, native historical texts and witness accounts as supporting evidence for the proposal that amongst Postclassic, post-Conquest and modern Maya the mat was an important item denoting

authority and overlordship (Robicsek 1975: 22-60). He suggests that this meaning was also valid during the Classic Period. However during the Classic Period, rulers did not use mats as seats but instead turned to more appropriate arrangements such as royal thrones (Robicsek 1975: 101).



Fig. 1.2: The use of mats as utility items to cover the floor or for seating was a pan-Mesoamerican practice (Cajas et al. 2009). In this photograph, a Maya woman and girl are shown seated on small mats. They are pictured weaving on backstrap looms (after Altman 1992: fig.18).

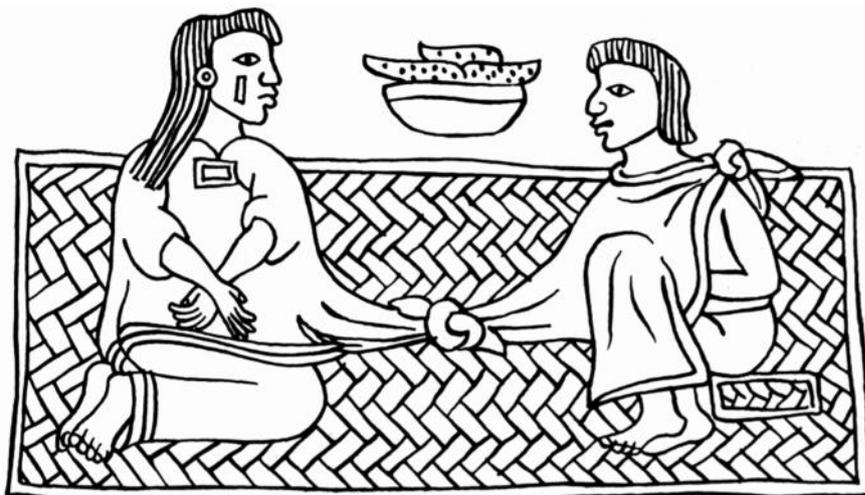


Fig. 1.3: Illustration from the Mexican Codex Mendoza showing a marriage ceremony where the bride and bridegroom are depicted seated on a mat (after Robicsek 1975: fig.292). Their clothing is tied together as a means of expressing the concept of marriage as a union.



Fig. 1.4: Drawing of a scene from a Classic Period Tikal polychrome vase showing a ruler seated on the kind of portable jaguar skin covered throne pictured on Tikal Lintels (adapted from Robicsek 1975: fig. 79).

Therefore in Maya representation of the Classic Period the mat was reduced to, and replaced by, a mat motif which took the place of the mat and continued (like the mat from which it was derived) to symbolize authority, noble birth and overlordship (Robicsek 1975: 17, 184).

There is a well defined group of motifs in ancient Maya sculptural and pictorial art which could be appropriately call ‘mat-symbols’. The design of these motifs reflects the woven pattern of the Maya mat, the *pop*. On the basis of information available, it appears with reasonable certainty that the mat and the mat-design derived from it were important symbols of power among the ancient Mayas. The distinction of being seated on the mat in an official capacity, of being eligible to wear the symbol, and to bear the title of ‘Lord of the Mat’ was reserved to the highest ranking officials. Being so distinguished was an indication of noble birth, supreme authority and probably military, secular and judicial power’ (Robicsek 1975: 17).

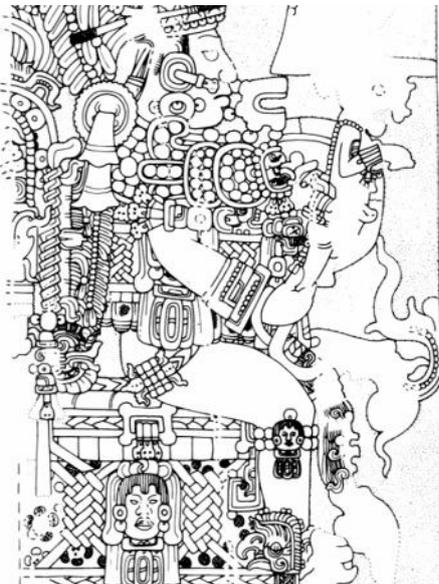


Fig. 1.5: Drawing of Tikal Temple I Lintel 3 (adapted from Jones and Satterthwaite 1982: fig. 70) showing the ruler seated on a jaguar skin covered throne decorated with what Robicsek terms as ‘mat symbols’ (Robicsek 1975: fig. 237).

Part of the reason that Robicsek has come to the conclusions that he has is that the items which he identifies in representation as mat symbols resemble the woven pattern of the perishable materials (rushes and leaves) from which mats are constructed. In Robicsek's discussion of the material composition of contemporary and ancient Maya mats (actual as opposed to representations of) it is evident that there is and has been a strong tradition in the use of plant material such as palms, reeds, rushes, and grasses for weaving mats (Robicsek 1975: 20-22). However, we need to ask: Is Robicsek's recognition of the symbol in question, as a 'mat', the whole story? Or is the nature of the manipulation (weaving, plaiting, tying) involved in the making of the 'mat' worth analysis in its own right?

1.3 The Mat Symbol

Robicsek points out that the woven mat 'is an important part of the meager furnishings of the Maya hut' (Robicsek 1975: 20), where mats function as bedding, table cover and screening. These utilitarian uses for the mat are proposed as extending right back into pre-history (Robicsek 1975: 20). Robicsek provides artefactual data as evidence for the presence of mats in ancient Maya culture such as mat impressions on Preclassic pot sherds (Robicsek 1975: 20-21). These artefacts reveal a plaited weave pattern consistent with the plaited patterns of contemporary Maya mats (see Robicsek 1975: fig.1, fig.3).

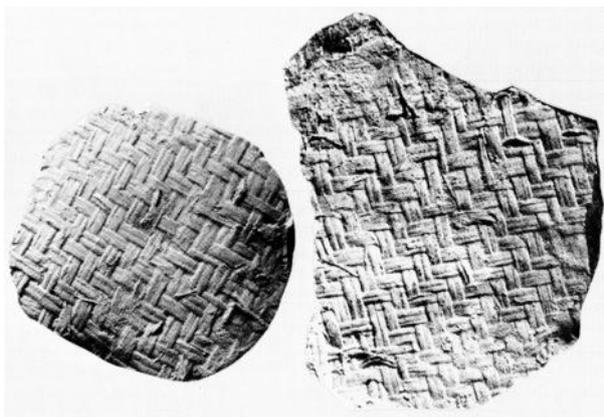


Fig. 1.6: Photograph of imprints of mats on Early Preclassic potsherds (after Robicsek 1975: fig. 3).

Materials such as palm and rush from which pre-Conquest mats are proposed to have been made are still used in matting today, illustrating the fact that both ancient and modern Maya mats are items woven from natural fibers (Osborne and Osborne 1965: 186-187). The material make-up of a mat is one factor used by Wendrich to distinguish a mat from a textile. Where mats are made from plant parts, these mats are categorized as belonging to the craft of

basketry along with other items constructed from plant parts (e.g. stem, leaf) such as sandals, bags, brooms and so forth (Wendrich 2006: 254-255). Another criterion for defining a mat has to do with the technology used. Hatcher states that unspun ‘fibers, either soft or stiff may be woven together to make baskets, mats, bags and the like. Spun fibers, usually twisted on a spindle, are woven into textiles either with the fingers (perhaps using some kind of a device to hold the threads such as a ‘warp-weight loom’) or on a true loom, or they may be tied and twisted together using aids such as crochet hooks and knitting needles’ (Hatcher 1999: 60).

A photograph of a sacred ceremonial mat of the Chorti *cofradía* provides an example of what Robicsek means by the term ‘mat’ (Robicsek 1975: 23). Robicsek points out that ‘the mayordomo of the Chorti brotherhood is called ‘Lord of the Mat’’ (Robicsek 1975: 24).



Fig. 1.7: Photograph of the sacred mat of the Chorti *cofradía* (after Robicsek 1975: fig. 4).

From Robicsek’s photographs and descriptions of mats, it is clear that he is referring to what is generally recognized in English as a ‘mat’. By ‘mat’ I mean a flat covering spread over a floor or horizontal surface (but which can optionally be put to other uses). The mats described and pictured by Robicsek fulfill some of the criteria used by specialists for differentiating mats from other objects. Mats are defined as items that are essentially two-dimensional and

flat as opposed to baskets which are three dimensional, rigid or semi-rigid containers (Adovasio et al. 599: 2003). It can be added that mats are flexible or supple in contradistinction to the rigidity of baskets.

Robicsek's concept of the mat is consonant with the English definition of 'mat' as opposed to items such as baskets, which are sometimes put by researchers in the same category as mats (Wendrich 2006: 254-267). Robicsek however makes clear the distinction when he says that baskets in the context of Maya iconography do not deliver coded messages (in other words they do not function as symbols) but rather are used as props in theatrical scenes (Robicsek 1975: 129). When Robicsek refers to a 'mat' he infers a particular function, which is very much a part of his definition of a mat. Therefore when he says a mat is a symbol of authority he does not mean a mat as a roof covering or as a screen but rather a mat which functions as a seat for an official or ruler (Robicsek 1975: 29-30). Function is implicit to his concept of a mat and he makes this clear when he describes the mat as the seat of the Maya prince (Robicsek 1975: 92). He conjectures that the early Maya would have spread mats under honored men whenever they sat in their official capacity (Robicsek 1975: 92). The word 'spread' identifies the mat as an item which is unrolled for use. In the context of Robicsek's symbolism, floor mats are for seating, and it is specifically this association (as seats) that qualifies them as symbols of authority.



Fig. 1.8: Detail of a mural painted on the Temple of the Frescos at Tulum (after Robicsek 1975: fig. 270) showing a deity standing on a 'mat symbol'.

Robicsek's mat theory has been widely accepted by Mayanists and is referred to in both early and recent publications on Maya art (Jones and Satterthwaite 1982: 49, 79; Miller 1998: 199; Whittington, Griffin and Bradley 2001: 206, fig.79; Foster 2002: 318; Montoya 2003: 124; Taube 2004: 293; Rice 2007: 133; Saturno 2009: 128). This perhaps has something to do with the prominence of the so called mat symbol itself which appears on monumental masterpieces at some of the largest ceremonial centres in the Maya region, such as Palenque, Yaxchilán, Tikal and beyond. Because the iconography of these monuments is constantly being discussed and re-interpreted, the so called mat symbols and the meanings attributed to them by Robicsek are often put forward as supporting evidence for the different interpretations.

1.4 A Review of Robicsek's Arguments

Lord of the Mat

Robicsek offers linguistic evidence to support his argument that the meaning of the mat as a symbol of authority and overlordship originated in the Classic Period. He follows Lounsbury's theory (Lounsbury 1974: 130-135) that the *Ben-Ich* hieroglyphic compound found on Classic Period inscriptions is a royal title reading *Ah Po(p)*, 'Lord of the Mat' (i.e. where the word '*pop*' means 'mat'). This title not only defined the holder as a high-ranking personage of noble birth with supreme authority in matters of governance, but also points to the early use of material mats as symbols of power (Robicsek 1975: 61-75).

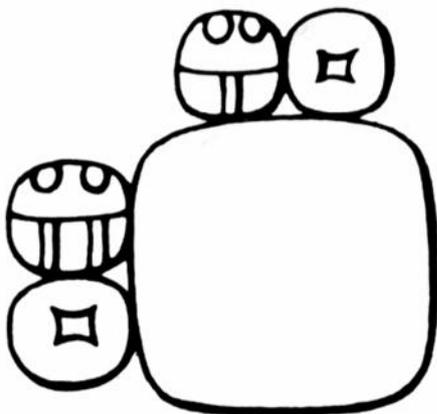


Fig. 1.9: The *Ben-Ich* affix normally found attached to a main sign and which reads as *Ah Po(p)* (after Robicsek 1975: fig. 41).

According to Robicsek, because the Classic Period is characterized by an increase in the pomp and circumstance surrounding the consumption and display of wealth by Maya rulers, the simple mat lost much of its appeal. Maya lords, no longer satisfied with mats for seats looked to more appropriate seating arrangements such as thrones (Robicsek 1975: 101). He proposes that the transition from mat to throne may have occurred in three ways: ‘the Maya rulers could have used royal seats constructed of rushes; they may have used thrones covered with mats, or both’ (Robicsek 1975: 101). Eventually as palace furniture became more sophisticated, materials other than woven reeds, such as jaguar skin, were used to cover thrones. However notwithstanding these developments ‘thrones continued to be distinguished with carved and painted images of the mat and mat-symbols indicating that the occupant was indeed *Ahau Ahpop*, Lord of the Mat. Such seats are seen on the monuments of Tikal’ (Robicsek 1975: 107-108).

Robicsek identifies the aim of his work as an investigation into the origin of the royal title ‘Lord of the Mat’ (*Ah Pop*) amongst the ancient Maya as well as a study of the significance of the woven mat symbol associated with the title (Robicsek 1975: 17). He supports his argument with linguistic and iconographic evidence derived from the Classic Period Maya record (monumental art, ceramics and epigraphy) together with ethnohistoric and ethnographic data (Robicsek 1975: 85-259).

Problems in Using Postclassic and Post-Conquest Data

The evidence for mats as symbols of authority is primarily derived from post-Conquest codices (texts and images) as well as chronicles such as the *Chilam Balam*, the *Popol Vuh*, and the *Title of the Lords of Totonicapan* amongst others (Robicsek 1975: 29-91). Robicsek notes that post-Conquest Maya documents such as the *Title of the Lords of Totonicapan*, a historical account of the Quiche written in 1554 (Bricker 1981: 167), and the *Ritual of the Bacabs*, an 18th century collection of incantations (Wells and Mihok 2009: 321), mention the *petate* (Robicsek 1975: 87). *Petate*, meaning ‘mat’ is a Nahuatl (Aztec) loan word (derived from the Nahuatl word ‘*petlatl*’) which has entered common Spanish speech (Robicsek 1975: 22; Karttunen 1992: 192; Kellogg 1995: 225). In Guatemala, contemporary floor mats are still called *petates* (Robicsek 1975: 22).

Another example of a Nahuatl loan word is ‘Tollan’ which derives from the Nahuatl words ‘*tullin*’ or ‘*tollin*’ which translates as ‘place of reeds/ cattails’ (Kristan-Graham and Kowalski 2011: 9; Molina 1977: 148; Simeón 1977). References to Tollan are recorded in the Postclassic and colonial histories of the Yucatan, Oaxaca and elsewhere in Mexico (Stuart 2002a: 502). The usage of words of Nahuatl origin in Maya post-Conquest documents offers linguistic evidence for Central Mexican influences in the Maya region. Recent research supports this proposal and it is believed that during the Late Postclassic, Nahuatl was spoken in Yucatan where it may even have functioned as a kind of lingua franca (Dakin 2010: 217-240; Knowlton 2010: 241-260). The Postclassic is now seen to have been a period of ‘intense interaction between Nahuatl-speaking populations from the central area of Puebla-Cholula and speakers of Mayan languages in northern Yucatan’ (Dakin 2010: 218).

Given the presence of a Nahuatl loan word for mat in Maya post-Conquest literature, it is interesting that in Robicsek’s book on the mat symbol, the only representations of mats which actually look like, or can be clearly identified as, mats (i.e. as opposed to other forms of woven products such as rigid three dimensional basketlike seats) come from Mexican (Aztec) codices, such as Codex Mendoza (Berdan and Anawalt 1997: 223, Folio 61r; Matos Moctezuma 2009: fig.15, 59, Cat.17, 72). In one illustration from this codex the Aztec ruler Moctezuma II is shown seated on a mat whilst in another illustration a married couple are depicted seated together on a mat, their clothing knotted together to denote the concept of marital union (Robicsek 1975: fig. 67, fig. 292). These images point to a history of mat use not just by Aztec citizens but also by Aztec rulers. The possibility exists that the value of mats as symbols of authority is a Mexican/Aztec concept.

Mexican influences aside, using Postclassic data (whether Maya or Mexicanized Maya) as a means to understanding the symbolism of mats amongst the Classic Period Maya can pose problems. The ancient Maya may not have had the same relationship with mats as their Postclassic successors. Postclassic data on mat use and symbolism can give insights into the use and symbolism of mats amongst the Classic Period Maya only where there are identifiable correspondences between the two periods. However, where the Classic Period Maya data on mat use and symbolism show none of the patterns or associations diagnosed for the Postclassic period, this is a signal that the meanings between the two time periods are not comparable.

The Classic Period

Mat impressions from archaeological contexts at Tikal suggest that in the Classic Period, mats had multiple uses (Maholy-Nagy 2003: 91). At Tikal mats appear in burial chambers where they may have been used to lay out the body of the dead (Moholy-Nagy 2003: 91). Similarly a burial from Lamanai also pointed to a mortuary context for mats. The Lamanai burial indicated that the occupant had been interred wrapped in a mat (Pendergast 1981). Impressions on mortar and plaster at Tikal suggest that mats were also used in construction work. It is noted that mats had been wrapped around the ends of wooden beams, and together with cloth, mats had been laid between building stones in Str. 5D-33 and Str. 5D-34 (Moholy-Nagy 2003: 91).

Although the word ‘mat’ (*pop*) appears in Postclassic texts, such as the Dresden Codex, as well as post-Conquest texts, such as *The Books of Chilam Balam*, where it functions as a metaphor for a throne and consequently connotes rule (Schele and Grube 1997), it does not appear in Classic Period inscriptions. Therefore the extant catalogues and dictionaries of Classic Period Maya hieroglyphic inscriptions do not list a word for ‘mat’ (see Macri andLooper 2003; Macri and Vail 2009; Thompson 1991; Montgomery 2002: 359; Montgomery 2003). That these inscriptions deal mainly with elite history and ritual (Martin and Grube 2008: 12), it is possible that during the Classic Period mats were omitted because they were not accorded special significance as items for elite consumption. Where data on mats is concerned, the discrepancy between the Classic and Postclassic Periods can be understood in terms of political and social changes which took place in the interim to the two periods. As already noted in this chapter, the Postclassic is marked by influences from Mexico and these influences may well account for the new visibility, but also values, of the mat in Maya representation and literature.

The evidence forwarded by Robicsek for the prevalence of the Classic Period ‘Lord of the Mat’ title is based on a reading of glyphs which today are recognized as meaning ‘*Ajaw/Ahaw*’ rather than ‘*Ah Pop*’ (Lord of the Mat) (Macri andLooper 2003: 285; Macri and Vail 2009: 224; Montgomery 2002: 27; Montgomery 2003: 53; Kaufman and Norman 1984: 115; Davoust 1995: 576; Ringle and Smith-Stark 1996: 346; Bricker 1986: 210). Robicsek notes the appearance of the title ‘*Ah Pop Camha*’ in a line of text from the *Title of the Lords of Totonicapan* where it refers to officials who are described as carrying a red *petate* (Robicsek 1975: 87). In this instance the presence of the Nahuatl-derived word

'petate' makes obsolete the further inclusion of the Maya word for mat (*pop*) in the title *Ah Pop Camha* or Lord of the Mat Camha. Here, the title *Ah Pop* would seem to mean *Ajaw* or Lord and not mat.

Nikolai Grube (personal communication) proposes that the Classic Period word for mat was *pop*. That *pop* stands for mat in more than twenty modern Mayan languages, such as Yucatek, Itza, Mopan, Chorti, Chol, Chontal, Quiche, and Kekchi, offers strong support for Grube's proposal (Dienhart 1997). Given the extensive use of mats, as utilitarian items by contemporary Maya peoples, it is not surprising that the word '*pop*' (as mat) is found in so many Mayan languages. Evidence similarly points to the widespread use of mats during the Classic Period by all sectors of society. Rather than being items reserved for elite use and display, mats are commonplace items and performed an array of utilitarian functions. It is possibly because mats were items of mass consumption that Classic Period inscriptions, known to have exclusively documented elite life, do not make mention to them.

Robicsek indicates that '*Pop*' was a Classic Period word naming the first month of the *haab*. The hieroglyph denoting '*Pop*' comprises a sign with in-fixed crossed and twisted strands. He argues that these crossed strands identify '*Pop*' as ideographic, meaning that it is a symbol for the idea of a mat rather than a picture representing a mat or a sign denoting the phonetic sound for 'mat' (Robicsek 1975: 33-34). He notes the occurrence of the twisted and crossed bands on 18 different *Pop* glyphs, and in each case the bands appear together with an in-fixed *k'an* cross, a sign meaning 'yellow, sometimes green, preciousness, precious stone, jade, or water in general' (Robicsek 1975: 33-40). He proposes a meaningful association between the two signs. However, we now know that *K'anjalab*, and not *Pop*, named the first month of the year amongst the Classic Period Maya (Kettunen and Helmke 2010: 56; Pitts 2009: 60; Rice 2007: 41). Further, the two signs which in-fix the hieroglyph for *K'anjalab* transcribe as *k'an* and *jal*. The glyph *jal* translates as 'to manifest' (Kettunen and Helmke 2010: 98; Montgomery 2002: 106) and appears in Classic Period accounts of Creation where it refers to the manifesting or appearance of cosmological phenomena in the sky on the day of Creation (Looper 2002a: 184).

Robicsek also notes that the twisted and crossed bands appear in ancient Maya representation alongside planetary symbols in the context of skybands (bands of symbols referring to planetary bodies and the heavens in general [Carlson and Landis 1985]) in ancient Maya

representation, yet he does not follow up this clue. He concludes that the meaning of the twisted and crossed bands remains uncertain and uses this vacuum in knowledge to locate his mat theory (Robicsek 1975: 33-41). However the link between the twisted and crossed bands and the skyband is worth further investigation.

Twisted and Crossed Bands

Amongst the Nahuas (Aztecs), the twisted and crossed bands symbolize ‘*ollin*’, meaning ‘movement’. The Nahuatl word ‘*ollin*’ shares the same origin as the word for ‘rubber’, ‘*olli*’. This probably reflects the fact that movement is inherent to, or a property of, rubber. Rubber bounces and moves as if under its own volition. Uriarte (2001: 49) and Laura Filloy Nadal (2001: 30) both propose that these two words (*ollin* and *olli*) hold part of the key to unlocking the symbolism of the ballgame. The rubber ball in the Mesoamerican game has been understood to represent the Sun or Venus and as such the movement of the rubber ball along the court replicates the movement of heavenly bodies (Filloy Nadal 2001: 30; Uriate 2001: 49). A direct relationship is proposed as existing between the word for rubber, movement, and the rubber ball (i.e. as a celestial body) (Filloy Nadal 2001: 30; Uriate 2001: 49). The depiction of the twisted and crossed bands within the line of planetary symbols in Classic Period Maya representation is meaningful and possibly links the twisted and crossed bands to planetary movement, time and the calendar rather than the mat. This reinforces an approach that considers symbols that work to demonstrate processes or actions, as opposed to representing static materials or objects.

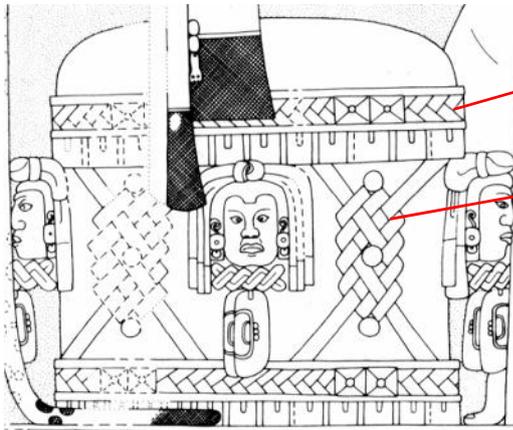
Omission of Mats from the Classic Pictorial Record as a Symbol of Power

Although Robicsek maintains that, during the Classic Period, mats (for sitting on) were items denoting rank and power (Robicsek 1975: 92-106) he is unable to point the reader to recognizable representations of mats on Classic Period monuments or ceramics. He notes a plait design edging a throne on a carved Late Classic vase from Jaina and interprets this as a mat overlying a throne. Similarly the thrones depicted on Tikal lintels are described as edged with mat bands and decorated with mat symbols. The mat bands are interpreted as a motif intended as a pictorial representation of matting (Robicsek 1975: 107, 131, figs. 237-238).



Mat represented by a plait.

Fig. 1.10: Representation incised into a Jaina vase showing a mat covered throne (Robicsek 1975: fig. 74). The mat is represented a plait which runs along the top of the throne.



Mat band

Mat symbol

Fig. 1.11: Drawing of a throne represented on Tikal Temple III Lintel 2 (detail of Jones and Satterthwaite 1982: fig. 72), showing a mat symbol and mat band.

That the ancient Maya did not depict mats in the kind of detail which would enable them to be securely identified is unusual given that other items denoting rank, authority, power and governance, such as thrones, sceptres, headdresses, and jewellery (necklaces, ear and nose adornments) are shown in precise detail on architecture, monuments and ceramics. The omission of clear, recognizable images of mats in the context of Maya representation suggests that the Classic Period Maya did not privilege them for special display or emphasis.

Although Robicsek indicates that mats did not survive in the archaeological record, impressions of mats on Preclassic adobe and Middle to Late Classic ceramics found in tombs

register mat impressions (Robicsek 1975: 20-21). These impressions reveal a herringbone weave. The superficial resemblance between the weave patterns of mat impressions and the woven texture of mat symbols depicted in Classic Period representations on monuments and ceramics led Robicsek to conclude that the two are related (Robicsek 1975: 20-21). It is clear that for Robicsek, a symbol is something which represents something else with which it shares physical characteristics or which it resembles. Therefore, because the under-and-over structure of the woven items, which he terms mat symbols, resembles the woven structure of mats, it follows that they must be symbols for mats. The resemblance between the weave patterns on mat impressions and mat symbols is the closest Robicsek gets to discussing weaving technology and its relationship to material mats. The importance of weaving and the weave pattern to Robicsek's argument is considerable. However without information on weaving technology it is hard to understand how and why Robicsek's mat symbols should be derived from or represent this particular technology.

My focus, however, is not on identifying an object (e.g. 'mat') per se but on the representation of how material — that might have been used in the making of mats or other sorts of basketry — was manipulated. Of particular importance is the act of tying, or 'knots', and their representation.

1.5 Beyond 'Mats'

An important clue that the motifs interpreted as mat symbols by Robicsek have importance on another level of analysis came as a result of looking at the pictorial representation carved into the monuments at Tikal. I noticed that in the context of Tikal altar stones, the motifs identified by Robicsek as mat symbols are shown functioning to fasten cords around a number of altars.

I call this kind of representation 'altar stone-binding'. In these instances the items were clearly functioning as knots. This was the first of many observations made of these particular knots. In the second instance, I realized that the knots shown in association with bound altars at Tikal also appeared in other contexts, such as thrones depicted on Tikal lintels. In these circumstances, the knots are removed from their working context. By this I mean that the knots are not shown in their working role to fasten cordage but rather seem to be displayed as insignia or symbols.

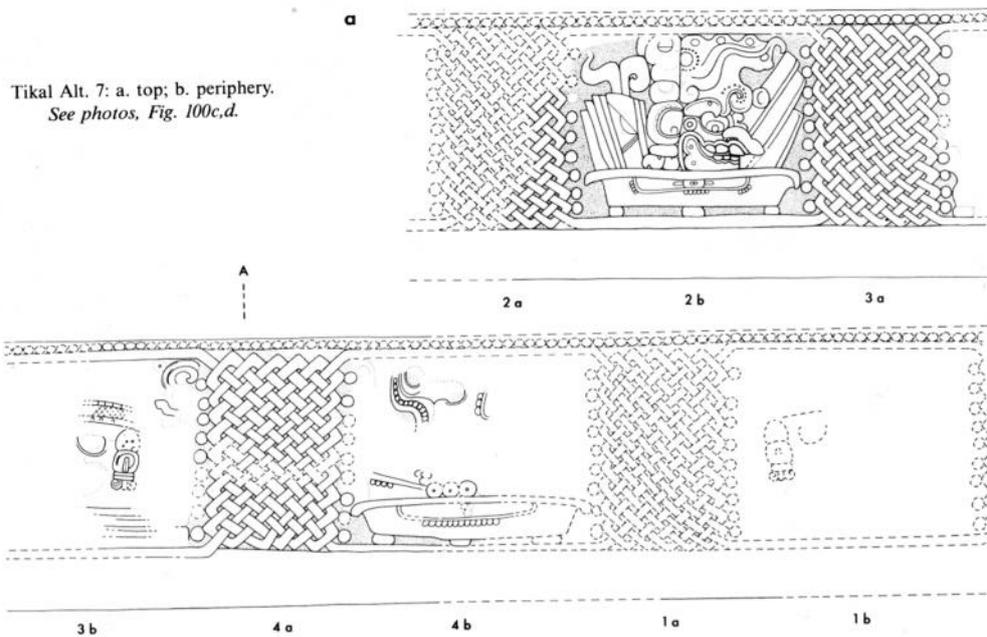


Fig. 1.12: Drawing of the sides of Altar 7 (after Jones and Satterthwaite 1982: fig. 40.b), showing four Large Flat Two-Dimensional Knots functioning as fastenings for cords which bind the altar.

It is in the context of what I have termed ‘altar stone-binding’ that these knots are shown functioning or performing as would real knots, and this suggested to me that it was here, in the arena of stone-binding, that they derived most of their meaning. I hypothesize that these knots, when removed from their working context, continued to negotiate meanings derived from their function in fastening cords around altar stones.

I also noted that a number of the altars represented as ‘bound’ at Tikal were paired with stelae bearing a particular phrase, *k’altuunn*, understood to mean ‘stone-binding’ (Stuart 1996: 149-171; Stuart 2002b: 2; Stuart 2005: 154; Stuart 2011: 4; Martin 2001: 3; Montgomery 2003: 108; Montgomery 2002: 146; Helmke, Kettunen and Guenter 2006: 7). This observation led me to question whether the stone-binding phrase (*k’altuunn*) on the stelae referenced the bound altar stones themselves. The stelae which mentioned the binding of stones also gave additional details, which I believe reveals important information on the meaning of altar stone-binding and, through association, the knots which fastened the bindings.

Chapter Two: Method - What Evidence is there for an Alternative Interpretation of the ‘Mat’ Motifs as Knots?

2.1 Research Questions

There exists a widely recurring motif in Maya imagery that is commonly interpreted as a ‘mat symbol/motif’ (Rice 2004: 175; Newsome 2001: 77; Fash 1998: 251; Schele 1998: 499-500). I focus in this research on all known Classic Period representations of those ‘mat motifs’ which I have interpreted as knots. Because my work involves iconographic analysis, the availability of good quality drawings and/or photographs of the symbols/motifs in question is paramount, although my hypotheses entails more than substituting knots for mats. It entails reconsideration of the assumptions about the significance of the mat motif, and draws attention to sources of representations and symbols that have heretofore not been studied.

Research Questions

My research questions can be articulated as follows:

- I. If we seek an alternative to Robicsek’s mat motif hypothesis, what evidence is there to support an interpretation of the motif as a knot?
- II. What sorts of representations of tying and binding phenomena are present at sites which display the motifs?
- III. How do representations of tying and binding phenomena appear to ‘function’?
- IV. What can we say about the identity, meaning and significance of the motif?
- V. Is there anything that can be said regarding the distribution of the motif through space and over time?

Background to the Method

The primary method for diagnosing the meaning or the values which the Classic Period Maya attributed to the knots/mat motif in the context of this research derives from recording and analyzing patterns in association between the motifs and their contexts. The objects to which the motifs are attached or on which they are displayed have been the subject of considerable investigation by iconographers; accessing the wealth of data regarding the function and value

of these objects in Maya social and political life can potentially reveal much about the motifs and what they were intended to represent.

Rather than seeing knots as purely functional items, in this work I approach knots as items imbued with meaning. My position is supported by research on material knots (and representations of material knots), which proposes that knots are closely allied with thought (Kuechler 2001: 57-71) and its traditionally accepted offshoots, language and writing. So important is the connection between knots and thought and so critical is it for us to consider this connection in Maya iconography that I have devoted an entire chapter (Chapter Three) to its resolution.

The link between knots and thought, surfaces repeatedly in the process of analyzing and evaluating the mat motif in the context of this work. For instance, the intersection of writing and knots is clearly illustrated in the representation on Copan Stela J, which displays a large knot tied from cords in-filled by words. In this instance the knot, constructed as a word knot, is intimately linked to writing. I have also noted that in a number of cases, the knot motif is shown fastening cord or else pictured overlying ropes which serve to bind the altar stone, which in turn is paired with a stela bearing inscriptions. These inscriptions feature the binding of stones (i.e. the *k'altuunn* or stone-binding phrase [Stuart 1996: 154-156]), which led me to consider the relationship between textual descriptions of bound stones and the actual 'bound' stone altars themselves. It occurred to me that an analysis of the stone-binding phrase may hold clues to the meaning of the knots which fasten the bindings around the altars. Therefore in Chapter Nine, in which I examine the association between the occurrence of the motif and altar stone-binding, I consider both Stuart's proposal that the *k'altuunn* phrase refers to the binding of stones by cords and ropes (see Chapter Seven) as well as his interpretation of the stone-binding act as having relevance to Maya concepts of time and its accounting.

The use of language and writing to interpret and understand ancient Maya representation has been spearheaded by Coe (1973, 1978; Miller 1989: 179-180), who proposed interpretations of many ancient Maya images by referencing them against myths recorded in the ancient Maya sacred book, the Popol Vuh (Tedlock 1996). More recently, Stuart (2005) has applied similar methods in deciphering and interpreting the rope-taking phrase inscribed on monuments at Palenque. By comparing the rope-taking phrase to images from Palenque that

show individuals wearing various forms of rope constructions and bindings, Stuart attempts to get a clearer picture of the meaning of the phrase (Stuart 2005: 28, 29). Relations between ancient Maya linguistic and iconographic systems is fully explored in *Word and Image in Maya Culture* (Hanks 1989), particularly in the contributions by Reents-Budet (1989: 189-197) and Cohodas (1989: 198-231). The debate regarding how language relates to image is an old one, and no clear resolutions have been drawn. The problem may lie in the thinking which generates the debate, which emphasizes the differences or divergences between language and representation. Archaeologists now have at their disposal alternative models or paradigms by which to approach the language/writing versus image debate, and these alternatives (listed below) contribute significantly to my research.

The impasse in relating language/writing to images has less to do with resolving differences and more to do with shifting attitudes and adopting a new approach to material culture. Changing the way we think is a key factor; and the theory and methods I use in my research are an attempt at recognizing and taking on new ways of thinking about material culture current in anthropology. Also, I propose my interpretations as hypotheses to be tested. Therefore I try to be as clear as possible about my assumptions and my evidence to facilitate testing or further analysis by others.

There are new theoretical perspectives in anthropology which propose that thought is not just a property of language and writing (Derrida and Spivak 1974: 130, 131) but also of objects (Kuechler 2001: 57-60). This opens up new ways of approaching and thinking about the text versus image debate. Recognizing that we not only think with objects (Kuechler 2001: 59, 65) but use them as material metaphors to negotiate complex ideas with multiple meanings (Tilley 1999: 28-32) helps to prepare the way for, as well as demonstrate the validity of, an approach to representation (integrated into such objects as stelae and altars) as having the capacity to express thought on a par with language and writing.

Methods used in the Context of this Research

The methods employed in my research have been shaped by my observations on the representations of 'mat' motifs pictured on Tikal monuments. As described in Chapter One, in the early stages of my research, I noted that representations of mat motifs appeared on the sides of stone altars from Tikal, where the 'mats' appeared to function to fasten bindings around the altars; this suggested to me that the mat motifs were in fact knots with a clear

working context of altar stone-binding. Based on the above reasoning I have developed a framework for questioning, comparing and evaluating the representations of mat motifs/knots found on Classic Period media.

2.2 Investigative Framework

The framework was developed around the five major research questions outlined at the beginning of this chapter. I will list each question and follow it with the method by which it will be addressed.

I. If we seek an alternative to Robicsek's mat motif hypothesis, what evidence is there for an alternative interpretation of these motifs as knots?

- A. The first step is to address the 'knot' as a definition and a concept. **How do we define a 'knot' and what is its *significance*?** As noted above, I discuss the 'knot' both materially and conceptually in Chapter Three.
- B. The next step is to provide evidence that the representations which I intend to analyze were indeed recognized as knots – that is, as things that served to tie or bind – by the Classic Maya. **What evidence is there in Maya material culture for the presence of materials that were tied or bound, and what types of tying or binding phenomena (i.e. knots) are represented?** These questions are addressed in Chapter Four. I have consulted knot compendia and located knots similar to those depicted on Tikal altars and lintels. Based on the compendium, I have typed and named the knots. I also experimented with tying the knots. Because the knots identified by Robicsek as mat motifs are characterized by what superficially appears as a woven texture, I also briefly look at why and how knots and knotting technologies are different from weaving and weaving technologies.

II. How do the representations of tying and binding phenomena appear to function?

- A. ***What evidence is there to support the function of tying and binding phenomena as knots?***
- B. ***Are there patterns in knot representation?***

Addressing these questions involves recording all known representations of mat motifs/knots in separate tables, each organized according to the object which hosts the motif; therefore a table will only list those motifs which are directly attached to or overlies a particular object.

For instance knots/mat motifs pictured as attached to or overlying thrones will be listed in a table specifically aimed at capturing and recording the pattern in display of these motifs on thrones; similarly knot/mat motifs shown as functioning to bind cords around monuments or pictured directly overlying monuments will be listed in a table specifically aimed at capturing and recording the pattern in display of these motifs on monuments. Each table will record the motif, the site at which it is displayed, the locus for its display and the date of the item (monument, ceramic or architecture etc.) on which it is displayed. In this way I hope to capture the patterns in association between the motifs (as knots) and the objects to which they are attached or over which they are displayed.

III. What can we say about the identity, meaning and significance of knots?

In Chapters Six to Thirteen I analyze the different patterns in association between the knot representations and the items on which they are attached or displayed. The objects/personages on which the motifs are displayed such as thrones, deities or rulers point to the kinds of cultural domains (e.g. religion, kingship etc.) within which the knots were deployed. Based on the idea that how a knot is displayed in representation reflects intentionality and is therefore meaningful, a review of what is known about the objects/personages which host the knot should help to reconstruct the meaning of the knot itself. Therefore in being attached to a particular object or person the knot in effect shares in the identity of the object or person to which it is attached or displayed.

IV. Is there anything that can be said regarding the distribution of knots/mat motifs through space and over time?

Addressing this question involves arranging the knot data (as recorded in the tables) in chronological order to establish which sites show the longest knot motif display history but also to ascertain when knot motifs are most or least visible in the iconographic record. In an attempt at understanding the distribution of the knots/mat motifs over time and through space, I will also review some of the main political events which shaped the Classic Period to determine whether or how these events affected the display history of knots motifs.

Chapter Three: The Knot – From Material Construction to Concept

My first Research Question arises out of seeking an alternative to Robicsek's 'mat symbol' hypothesis, and my first step is therefore to ask how we define a 'knot' and to explore the knot's significance. Knots are increasingly being investigated by disciplines such as archaeology (van der Kleij 1998: 31-42; Wendrich 1998: 43-68; Chen 1998: 89-106; van de Griend 1998: 113-122), anthropology and mathematics (van de Griend 1998: 205-251; Turner 1998: 261-263); however there is still much ground to be covered, especially at the basic level of definitions, theory and method. The study of knots has been held back by the fact that, except for research such as that of Kuechler (Kuechler 2001: 57-77), there is virtually no theory to facilitate analysis (Turner 1998: 262, 269, 270, 278), nor is there a defined method by which to extract the available information. There also appears to be no satisfactory definition of a knot (Turner 1998: 269).

In attempting to address these deficiencies in definition and theory, I examine the meanings given to knots by various researchers; and from these meanings I distil a set of representative ideas and show how these ideas overlap with the theoretical concepts developed by Kuechler on knots. I also demonstrate how the use of knots in the past in different cultures reflects both the definitions of a knot developed in this chapter, as well as the theoretical concepts presented by Kuechler.

3.1 Developing a Definition of a Knot Based on the English Language

The word 'knot' is believed to derive from the Anglo-Saxon word '*cnotta*' or from the word '*canute*' (Turner 1998:268). A definition for a knot (at its most simple) would be a fastening made by the interweaving of cordage (Turner 1998: 268). Based on such a definition, it is believed that virtually every language has a word to describe such a construction. Therefore the Germans say '*knoten*', the French '*noeud*', the Italians '*nodo*' and the Swahili '*fundo*' (Turner 1998: 268). However a wider definition of a knot, as given below, highlights the fact that a knot is far more than a simple construction made from cordage but rather a concept which is immensely complex.

A knot is defined as an intertwining of a rope, string or other medium (Onions 1988: 1161; Sykes 1987: 555; van de Griend 1998: 110, 114, 207; van der Kleij 1998: 31) so as to form a secure fastening or an obstruction when drawn tight (Onions 1988: 1161). It is also a set method of tying such a fastening (Brown 1993: 1502). In terms of a mathematical or spatial entity, a knot is a closed unicursal curve in three dimensions which does not intersect itself anywhere (Onions 1988: 1161; Kuechler 2001: 65; van de Griend 1998: 205). A knot is a design or figure of crossing lines (Onions 1988: 1161; Kuechler 2001: 65-66) such as a monogram depicted within a heraldic badge (Brown 1993: 1502). It is a tangle (Onions 1988: 1161; Sykes 1987: 555; Warner 1998: 20), a complex or confining problem or the complication in the plot of a story; it is also something which maintains a union, tie, bond, or link (Onions 1988: 1161; Kuechler 2001: 71), such as a marriage (Onions 1988: 1161). A knot is an obligation, a binding condition, a restriction or a spell that binds (Onions 1988: 1161; Brown 1993: 1502).

3.2 Intersections between Definition and Theory

The above definitions — a knot is a physical construction tied from ropes or strings; a design such as a heraldic badge composed of crossing lines; an obligation; or a binding condition — suggest that knots are both physical three-dimensional entities as well as graphic (i.e. visual) signs and even mental concepts. In other words, knots are three-dimensional constructions, two dimensional representations, as well as mental or cognitive phenomena. Therefore knots operate and exist on several planes or dimensions. As rope constructions they achieve material presence; as concepts they belong to the area of cognition; and as heraldic designs they become visual representation.

Kuechler proposes that the knot is the knowledge of the linking of things material and mental (Kuechler 2001: 71). This is also the linking of the visible with the invisible (Kuechler 2001: 73), where visible can be taken to refer to the material world and the invisible as the social relationships that arise out of our interaction with and ties to (i.e. claims to) the material world. By dint of their nature as entities that link things which may as well exist apart (Kuechler 2001: 71), such as mental concepts and physical reality, knots are perfectly placed to exploit the complex relationships that people find themselves in with regard to each other and the material world. Hence Kuechler mentions that binding — a property of knots —

exemplifies the coming together of affective and cognitive processes, enabling one to think with objects (Kuechler 2001: 59). Knots are exceptionally good to think with (Kuechler 2001: 65).

The efficacy of knots stems from their ability, as observed by Kuechler, to bridge the visible and invisible, the material and immaterial (Kuechler 2001: 73). Hence knots have the peculiar power to contain in visible form the immaterial or conceptual, such as the wind knots mentioned in the writings of the ancient Greeks and Byzantines (Day 1950: 232-233) which were brought onto ships in order to make certain that there would be enough wind for sailing (Wendrich 1998: 66). Wind knots are also known to have been popular during the 14th century amongst the peoples of northern Europe (Day 1950: 232-233).

3.3 The Knot as Embodied Experience

As human beings our reference point is our body by which we locate ourselves in the world as well as perceive and apprehend the world (Tilley 1999: 34). The body as a discrete unit is not necessarily what is meant here; rather, as Zenzen (1999: 287) argues, our ‘body-schema or body-image has been formed in and through the bodies of other things and other persons’. The suggestion here is that embodiment involves the experience of extending ourselves through the concept of body-image to include other bodies or things. Our body is ‘an axis from which spatiality and temporality are oriented’ (Tilley 1999: 34). Embodiment is an orientational exercise by which we measure ourselves in relation to other things. In the process of orienting ourselves, we inhabit, by means of the senses, other people and things. Tilley mentions that in speaking we do not mirror the world; rather speech is a way of extending the human body in the world in order to gain knowledge of it and alter it (Tilley 1999: 34). Similarly Kramrisch (as cited in Gell 1998: 117), influenced by ancient Indian philosophy, proposes that sight is a form of touch by which we grasp external objects. It has also been argued that we have but one sense, the sense of touch, of which all the other senses are but slightly more subtle forms (Gell 1998: 117). It is through this process of extending the body in the world that we gain knowledge of the world (Tilley 1999: 34).

Because knotting is a ‘doing’ enterprise it can be understood in terms of embodied experience. In the process of making the knot we experience its qualities cognitively but also bodily. We inhabit the knot and as such the knot becomes a category of human experience.

Understanding how the body extends itself through sight or touch and inhabits what it sees, or touches, allows us to understand how the knot, in its making, becomes intimately linked to human experience. As Zenzen (1999: 286) puts it ‘we feel like what we see like and we participate in what we create and are informed by it’. Where concepts of complexity or union are given as meanings for a knot we can understand this to mean that the mental experience of complexity or unity is analogical to the experience of making or looking at a knot. A knot is a physical entity but it is also a category of experience.

The manner in which our body accrues knowledge through extending itself to inhabit other things is also the basis for participatory knowing, as separate and different from rational accounting (Zenzen 1999: 287). Hence experience diminishes the opposition between mind versus body or world as separate from self. Both positions reflect a duality underpinning objectivism (Lakoff and Johnson 2003: 229-231).

Throughout this chapter, the discourse on knots touches on the indivisibility of the material and mental, the visible and the invisible. This is not just a reflection of a theoretical position which offers new ways to understand such things as society or culture (Tilley 1999: 16, 28-32); but it is also a reflection of a new science which pursues another interpretation of reality. The exclusivity of objectivism in scientific enquiry is being challenged by new branches of research (Lakoff and Johnson 2003: 195-225), such as quantum theory, which espouse that the world of objects does not exist independently of our perception of them (Davies 1980: 12). The idea that a knot can be at one and the same time both material and mental should not be taken solely as reflecting some sort of mystical or indefinable magical transformation between the two states but should also be approached in terms of an understanding of reality as comprising both states at all times. The mental and physical planes of experience can be conceived or approached as fluid rather than hermetically sealed off from each other. Manipulations on the plane of the mental can directly register effects on the plane of the physical. Therefore thoughts or intentions sealed or symbolized by a knot are expected to have effect on the material plane.

In the same way that experience and perception are the hinge pins to recognizing the indivisibility of mind and matter so the experiential aspects of knotting are vital to understanding the transformation of a knot from material entity to mental concept. In the following sections, the understanding of a knot in terms of experience is expanded upon. The

knot as experience becomes the means for making sense of both the material and immaterial qualities of knots.

3.4 Binding – Experiencing the Knot

The three dimensions in which knots appear (i.e. the material, the visual and the mental) are also points of reference in terms of human experience. Therefore Kuechler proposes that it is the bringing together of experiences from a number of domains which is the very reason for the symptomatic use of knots as contractual objects (Kuechler 2001: 68). The relationship between knots and contractual relations is deep-rooted and is based on the understanding of both knots (Kuechler 2001: 71) and contracts (Young 1972: 171) as peculiar types of binding media. Kuechler isolates the concept of binding as indispensable to understanding and negotiating the problems presented by the knot (Kuechler 2001: 71). It is through dismantling the concept of binding that one also begins to dismantle knots.

Binding is seen to be a physical property of a knot, a property which can also be experienced in the process of knotting (Kuechler 2001: 71). That binding should not only be a physical property of a knot but also a category of experience reflects the metaphysical nature of the binding act, experienced as a field of reference which is both relational and transformational (Kuechler 2001: 71). Therefore in the process of binding one thing to another or simply in tying two separate cords together, one is creating a relationship between two things which were previously separate; in so doing, an entity which is neither one or the other, but entirely new, is formed (Kuechler 2001: 68). It would seem that it is the logic of binding as embodied experience which empowers the knot and enables it to transform from material to concept.

3.5 Transformations through Binding

The emphasis on binding as both a property of a material knot as well as a process of transformation closely affiliated to thought or experience is reason enough to pause for a moment and briefly investigate the word ‘bind’. The word ‘bind’ makes a detour back to the concept of a knot by means of shared definitions. Therefore the word ‘bind’ is listed as to make fast or fasten with a tie or to tie a knot. The word ‘bind’ is also defined as contractual (Onions 1988: 193). Hence its definitions include: to conclude a bargain or to make any contract fast and sure; to tie or restrain by a covenant or oath, also to constrain with legal

authority. Other definitions relating to the legal connotations of binding are: to subject to a specific legal obligation or attach by ties of duty, gratitude (Onions 1988: 193).

Binding has powerful legal overtones, which is possibly why, in Europe during the Middle Ages, knots were used as symbols of legal agreements, including marriage agreements (Day 1950: 251). Witnesses (i.e. those who give formal or sworn evidence, such as evidence under oath) who were illiterate would, in a court of law, tie a knot in a strap which was then attached to the document as confirmation of their testimony. Hence the word '*nodator*' or *knot-tyer* became a medieval legal term for witness (Day 1950: 251).

The physical act of binding involved in the process of knotting carries deep connotations of other types of bonds better understood as social. These social bonds are expressed by the above definition of binding, as attaching through ties of duty and gratitude. An example of such a social bond (i.e. one which attaches people by social ties such as duty, gratitude, obedience or other equivalent kinds of social indebtedness) would be marriage or certain types of friendships such as those between members of secular and religious orders (i.e. such as those relationships signaled by badges, insignia or heraldry). Binding in this sense implies a connectedness which is more substantial than simple friendship. A binding relationship is one which attempts to make secure social ties by means of certain binding (restraining) conditions. In this manner connections between people begin to accumulate substance and to resemble affinal ties. Wengrow (2006: 195) touches on these ideas when he likens binding to the giving of gifts. In this instance the recipient, in accepting the gift, is bound into a relationship involving reciprocation. In accepting the gift one incurs a debt; hence 'binding is at one and the same time an act of extension and restriction' (Wengrow 2006: 195). Here, binding expresses a relationship with strings attached. The strings attached are the debts incurred and which are to do with reciprocation or repayment of some form.

This restrictive aspect of the concept 'to bind' is expressed by the dictionary definition of bind as a restraint delivered through an oath or through legal authority (Onions 1988: 193). The restrictive aspect of the word 'bind' is also mentioned by van de Griend (1998: 397) who proposes that the symbolic meaning of the word 'knot' implies something bound, whereas 'bound' implies an act, the aim of which is to impede or hinder the actions of another person or thing. Binding impedes freedom of movement, which in social terms means that one is

compelled to maintain a relationship because not to do so would prove detrimental to oneself or others in some way.

It is as 'restriction' that the word 'bind' enters legal language. Legal historians propose that within English Law during the Middle Ages, agreement was not the basis of liability. Rather, the ground for action was duty (De Cruz 1995: 295). What made an agreement binding was the concept of duty, which was understood in terms of indebtedness (De Cruz 1995: 295). Further, in the 14th century a great number of legal arrangements were reckoned in terms of promises (De Cruz 1995: 295). It would seem then that duty as a concept is essentially binding; and promises or similar types of formulaic speech such as oaths, pledges, and vows are similarly binding because in different ways these work to set out the nature of the duties involved in an agreement.

Whitelock writes that in Anglo-Saxon times the exchanges of symbolic pledges (i.e. promises, oaths or vows) were important acts. These pledges, known as *wedds*, were the very things which made the contract valid and binding (Whitelock 1930: xxvii). Because of the binding character of these *wedds*, the embodiment of the oral and formal contract in writing was not necessary (Whitelock 1930: xxvii). It was the *wedd* (i.e. pledge) which transformed the contract into a binding obligation or duty.

3.6 Knots and Metaphor

To reiterate the previous discussion, a knot is more than its superficial materiality. A knot is an experience understood in terms of binding. According to Kuechler, binding is the sole basis for experiencing the knot (Kuechler 2001: 71). Binding 'evidences a complex relational and transformational field which can be discovered simply by doing it and looking at it' (Kuechler 2001: 71). It is undoubtedly this relational and transformational field of reference experienced in the process of binding which allows the knot to become metaphor (see Lakoff and Johnson [2003: 19-21] for an overview of the experiential basis of metaphors).

It has been proposed (Zenzen 1999: 285; Lakoff and Johnson 2003) that metaphor is about reality but that it refers to reality in a complex way. Metaphor suspends ordinary reference in order to build on it and create a second order reference. Hence metaphor requires a complex mental maneuver – to keep in mind two different perspectives at the same time (Lakoff and

Johnson 2003: 10-13). It is this stereoscopic vision which allows for the ambiguity of reference in metaphor (Zenzen 1999: 285). The idea of entertaining two references at once, and assimilating the differences or similarities to create a second-order reference, is very similar to the action of binding two things together and in the process creating something entirely new (i.e. Kuechler's understanding of the knot as a binding experience which is relational and transformational).

3.7 The Knot as Root Metaphor or Core Symbol

Tilley argues that it is imperative that we begin to understand metaphor in relation to objects and activities (Tilley 1999: 28). He illustrates how certain objects such as Pandanus plants amongst the Baktaman of Highland Papua New Guinea (Tilley 1999: 29-30), the human body amongst different cultures such as the Dogon of West Africa (Tilley 1999: 37-38) or the house amongst the Batammaliba of West Africa (Tilley 1999: 41-43) are all familiar objects by which the unfamiliar (i.e. culture) is mapped (Tilley 1999: 28). Although culture is a key concept in anthropology (as it is in archaeology) it is not easy to define (Tilley 1999: 28, 36). However through the mediation of metaphors such as the body or the house, something as difficult to define as culture becomes graspable.

Metaphoric connections involve analogic reasoning (Tilley 1999: 28-29). Therefore the knotted qualities of a complex problem, a complicated storyline, a marriage, an obligation or a monogram depicted within a heraldic badge are all based on analogic reasoning which likens these different entities to either a physical knot made from such binding materials as cord, rope or string, or to the binding process itself (both according to the dictionary definition mean the same thing – 'knot'). The knot becomes the material metaphor by which all the above concepts are experienced. A complex problem, a complicated storyline or a social union such as marriage are all difficult-to-define- concepts because they are a kind of disembodied experience. Understanding these experiences in terms of the knot allows these to become embodied and objectified. In a similar way Lakoff and Johnson explain how a concept such as time is experienced as an object. Therefore time can be lost, spent or gained (Lakoff and Johnson 2003: 7-9).

Because the knot has many metaphoric extensions and because each metaphoric extension is equivalent to another of its meanings, the knot can be likened to Tilley's core symbol or root

metaphor. Core symbols can have multiple meanings; hence a single symbol becomes the vehicle for several distinct metaphors. A root metaphor is a symbol with the capacity for conceptual elaboration (Tilley 1999: 31-32). However, Tilley points out that material metaphors at work in a culture are not arbitrary but are chosen because the 'concrete symbol's objective qualities and apparent suitability to its actual meaning are vital' (Tilley 1999: 28). Following on from this it could be said that the suitability of the knot to its various meanings has to do with how a knot looks and works. A knot is both a tangle and an intertwining of cord which when drawn tight becomes an obstruction. As such it physically maps out feelings to do with complexity in the guise of a complex problem or complicated storyline. As previously mentioned by Zenzen, 'we feel like what we see like and we participate in what we create and are informed by it' (Zenzen 1999: 286).

Tilley mentions that there is no tight structure or definable, clear cut, system linking the different metaphoric extensions (i.e. derived from a single material symbol), to different areas of thought or action (Tilley 1999: 30). Material symbols do not depend for their meaning on their place in a digital code but rather meaning is to be found through 'the transformation effected from an object to a symbol by means of a particular mode of representation' (Tilley 1999: 28). One important mode of representation highlighted by Tilley is ritual. The role of ritual action is to link cognitively and emotionally the different meanings subsumed within the same material symbol (Tilley 1999: 30). As such, a ritual message expressed via the active manipulation of a material symbol may be interpreted differently, depending on whether a participant's knowledge of the material symbol is partial or complete (Tilley 1999: 28-29).

Like Tilley's core symbol I would expect knots to be deployed in ritual or other contexts in ways which would intentionally play on a knot's multiple metaphoric associations derived from different cultural domains such as religion or lineage. I would also expect to find a characteristic complexity to the messages disseminated through the deployment of knots in ritual or other forms of representation owing to a knot's multiple metaphoric extensions. The result is that an onlooker may, depending on her/his knowledge of the core symbol, be able to draw multiple interpretations from the manipulation of knots in a single representation.

It is important to bear in mind, however, that Tilley's examples of core symbols are all drawn from anthropological research, where representation through action is clearly visible and

available for study because what is being observed are living cultures. Archaeology deals with past cultures and as such action or praxis is available for study in a different form. As it pertains to knots, action can be traced in terms of how and where a knot appears (i.e. the mobilization of knots). Representation becomes literal – such as how a knot enters into relationship with other things through depiction in language, writing, sculpture, or painting.

3.8 Metaphors in Maya Language and Representation

The word for knot in several contemporary Mayan languages is *'mok'*, sometimes spelled *'moc'* (Dienhart 1997; Bricker et al. 1998: 186). The word *'knot'* (*mok*) also appears in ancient Maya text as part of the name of a deity known as Mok Chi (Knot Mouth or Knotted Mouth) (Kerr 2000). This deity is often shown with knots in front of the mouth, an association that perhaps links the knots in some way to speech. However without clear information on knots and speech in the context of hieroglyphic text, this proposal cannot be substantiated.

What can be said with a degree of certainty is that amongst colonial and contemporary Maya, certain types of agreements between people, perhaps written or spoken, were conceived as knotted. Colonial dictionaries identify the phrase *'moc than'* as an expression for a written contract, deal or alliance (Bolles 2001; Michelon 1976; Acuña 1993). Additionally, the word *'moc'* or *'knot'* appears in another Mayan phrase which, reminiscent of the English phrase for marriage (i.e. tie the knot), serves as an expression for marriage (Bolles 2001; Acuña 2001). In contemporary Yucatec Mayan, the phrase *'mok t'an'* (Bricker et al. 1998: 186, 290), meaning knotted words, is an expression for allies (personal communication with Nikolai Grube). Another phrase in which knots are associated with speech is *'asa mookju t'an yeetel'*. This phrase translates as *'he tied his words with somebody'*, meaning that an appointment has been made with someone (personal communication with Nikolai Grube). The use of knots as metaphors for certain types of agreements between people suggests that knots may have been important in negotiating contractual relations. This alerts us to the kind of meanings and contexts in which knots may have operated in the Classic Period.

The expectation that amongst the Classic Period Maya, knots functioned as metaphors is not solely based on the observation of knot metaphors in the context of contemporary Mayan language, but also on the knowledge that ancient Maya representation, painted on ceramics or carved into monuments, is replete with visual metaphors. The wealth of connective

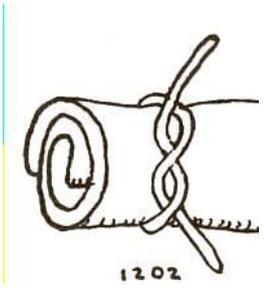
associations between objects depicted in Classic Period Maya representation, such as for instance between the ecliptic path, ropes and snakes (Milbrath 1999: 74-78; Hull 2006: 43-54; Schele 1998: 481-496), points to the fact that the thinking which generated the images was deeply metaphoric. The path taken by the sun over the course of the year, known as the ecliptic, is a celestial phenomenon. In the context of Classic Period Maya imagery, ropes and serpents are metaphors for the ecliptic path. Although the ecliptic, as trajectory, does not have a physical presence, it begins to acquire materiality through the mediation of such metaphors as celestial ropes, cords or serpents. It is, no doubt, because serpents and celestial ropes/cords share properties with the ecliptic (i.e. as a line of progression or a trajectory), such as sinuousness, or a resemblance to a path when laid out or pulled tight, that they were chosen by the Maya as metaphors for the sun's passage across the sky. The value of cords (and other kinds of binding media) as metaphors for the ecliptic, tells us that knots, because they are tied from cords, are likely to be vehicles for multiple meanings. It is to be expected that a number of these meanings will derive from the association between cords and the ecliptic; an association which brings on board meanings to do with the sun's passage, time and the calendar. As such, knots in Maya representation are likely to function in the same way as Tilley's core symbols.

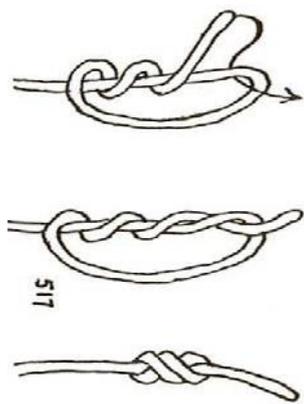
An investigation into the role of metaphors in Maya representation, thought and writing, represents a vast area of research and is beyond the scope of this work. However, the ubiquitous presence of metaphors in Classic Period Maya representation does mean that in the course of analysing knots in this work, the subject of metaphors will crop up time and again.

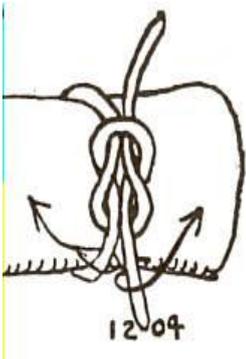
3.9 Material Knots

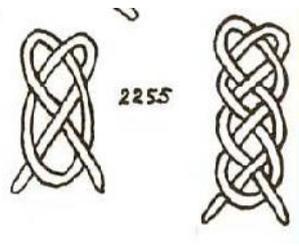
The following table looks at some of the knots which will be referred to in the context of this chapter. These are examples of the 'real or tangible' knots that tie or hold fast various types of binding media. The variety, complexity and varied purposes they serve provide the basis for the metaphorical uses of knots in so many cultures worldwide.

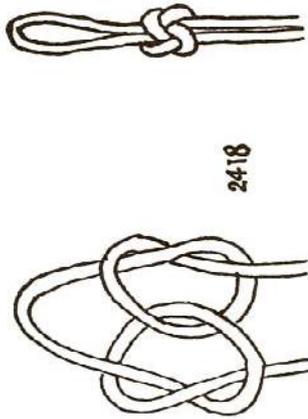
Table 3.1: A set of knots with their names, uses and properties.

<p>The Half Knot.</p>	<p>The Half Knot sometimes called the Single Knot, is the first movement for the class of binder knots that pass round an object once only. It is generally a part of a more elaborate knot but it also has several solo uses. The Reef Knot or Square Knot consists of two Half Knots, one being tied on top of the other (Ashley 1993: 220).</p>	<p>(Ashley 1993: 220)</p> 	<p>The ability of this knot in Ancient Egypt to contain and hold power is believed to be part of the reason for its efficacy in healing the body (Wendrich 1998: 66-67).</p>
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<p>The Threefold Overhand Knot.</p>	<p>The Overhand Knot is the simplest of all knot forms and is the point of departure for many of the more elaborate knots. It jams and is difficult to untie, often damaging the fiber. Hence it should be tied only in cord that is not to be used again. The Threefold Overhand Knot needs to be worked into shape and therefore it may be considered more decorative than practical (Ashley 1993: 84).</p>	<p>(Ashley 1993: 84).</p> 	<p>This knot was used in medieval times as an oath knot by the Franciscan order. Other knots used in a similar way by religious and secular orders at this time were the Granny Knot and the Figure Eight Knot (van de Griend 1998: 401).</p>
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<p>The Reef Knot also known as the Square Knot.</p> <p>This knot is also referred to as the Hercules Knot.</p>	<p>The Reef Knot is unique in that it can be tied and tightened with both ends. It is universally used for parcels, rolls, and bundles. However it not advisable to tie it as a bend, for if tied with two ends of unequal size, or if one end is stiffer or smoother than the other, the knot will slip. Except for its true purpose of binding it is a knot to be avoided (Ashley 1993: 220).</p> <p>This knot, used in tying a ligature, is preferred by many surgeons (Ashley 1993: 75).</p>	<p>(Ashley 1993: 220)</p> 	<p>In Ancient Greece and Rome this knot was known as the Hercules Knot and used as a love knot as well as a knot with healing properties (van de Griend 1998: 398-400). In Ancient Egypt the Reef Knot expressed the concept of unity (Wendrich 1998: 65).</p>
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<p>A knot of the Basket Weave variety.</p>	<p>Also known as a Platted Mat, this knot is started with an overhand knot. Mat knots are used as chafing gear aboard ships as well as applied as insignia on uniforms (Ashley 1993: 361, 365)</p>	<p>(Ashley 1993: 365)</p> 	<p>This knot appears as infill decoration for the letter N in The Book of Durrow (Nordenfalk 1982: 41). The use of knots to infill the bands which comprise letters are characteristic of Hiberno-Saxon book decoration.</p>
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<p>The True Lovers Knot.</p>	<p>The True Lovers Knot consists of two intertwined overhand knots that are brought together to form a symmetrical unit. The conscious romanticism that has been attributed to such commonplace forms reflects the fact that when drawn together they make a single beautiful and harmonious knot (Ashley 1993: 383-384).</p>	<p>(Ashley 1993: 387)</p> 	<p>The English True Love Knot is seen to be a descendant of a much older knot of Northern European origin. The True Love Knot was used as a formal sign of engagement and hence referred to as a betrothal knot (van de Griend 1998: 404-411).</p>
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3.10 Material and Non-material Knots

In the following sections I will show how knots, in their use by different peoples, conform to a pattern of usage. Various cultures consistently exploit the potential that knots have to bring together the material, and mental planes of experience. In bringing together different dimensions or planes of experience through the logic of binding, there is a tendency for knots to take on the quality of a contract (where a contract is understood as a type of agreement aimed at binding people to people or people to things).

That the concept of binding is all important to understanding the experiential quality of a knot, has already been established by Kuechler. In the following sections this experiential quality associated with binding is clearly evident in the instances where knots are experienced as social and genealogical ties, speech or legal agreement.

3.11 Marriage Knots

In Europe as in Asia the establishment of a relationship between a man and woman was given visible form in the True Love Knot (van de Griend 1998: 398). In many parts of pre- and early Christian Europe, sentiments of love between people brought into existence complex social bonds involving promises of marriage (today called engagement) which carried conditions, such as promises of faithfulness, loyalty and duty. The agreement to fulfill these conditions was negotiated through knots (van de Griend 1998: 403-406). For instance in medieval Scandinavia, as amongst all Gotho-Germanic peoples, faithfulness in love had always been negotiated through knots. Therefore attempts by the church to eradicate the use of knots (i.e. as authentic evidence of a love relationship), by introducing the exchange of engagement rings, was met with resistance (van de Griend 1998: 403-406). The use of knots as evidence of binding relationships between men and women can be found in many very different cultures separated in space and time, such as ancient Greece and Rome, sixth century China, nineteenth century Mexico, fourteenth and sixteenth century Europe (van de Griend 1998: 397-415).

An example of such a binding relationship negotiated through knots comes from ancient Rome, where it was the tradition for brides to tie their girdles with the Hercules Knot (van de Griend 1998: 399). This knot is interpreted by the Roman grammarian Festus as a symbol of the binding nature of the marriage oath (Day 1950: 252). On the marriage night the husband undid the knot and in so doing ushered the bride into a new phase of life. The undoing of the knot was an omen of fertility (Day 1950: 241, 252).

The same knot which fastens the bride's girdle also appears on the girdle worn by the Vestal Virgins of Rome (Day 1950: 241). These Vestals shared other items of dress in common with brides such as the form of their hairstyle. The hairstyle of both bride and Vestal was of ancient origin (pre-Roman) and consisted of six braids tied in a particular fashion. However whereas the bride's braids were undone once the rites which ensured her transfer to her new family were complete, those of a Vestal were retained for the entire time of her contract as a Vestal Priestess (Lorsch Wildfang 2006: 12-13). The wearing of this hair style together with the wearing of the Hercules Knot by both Vestal and bride indicated that the two shared a number of qualities in common. These qualities are chastity (i.e. virginity and hence purity) as well as the liminal position of Vestal and bride with regards to the traditional Roman

family structure (Lorsch Wildfang 2006: 11-13). During the wedding ceremony the bride is considered to be in between states, neither belonging to her past paternal family nor as yet transferred to her future family. The transition from outside to inside the traditional Roman family structure is negotiated through the doing and undoing of knots. Hence following the marriage ceremony the undoing of the braids and girdle knot symbolizes the bride's transition from her father's home, virginity and a childless state to her new family, sexual life and child bearing. These three areas of experience (family life, sexuality and child bearing) were forbidden to Vestals for whom any transgression of vows of chastity meant death (Freeman 1996: 380). The knots worn by Vestal Virgins remained tied for the entirety of their service (Lorsch Wildfang 2006: 13), pointing to the continuity of their liminal status outside the Roman family, sexual life and motherhood.

As we can see, knots were important to wedding rituals in ancient Europe and the Mediterranean. However it must be stressed that knots were and are still equally important in wedding rituals across Asia (Day 1950: 251). In Parsi and Iranian weddings, a cloth is tied around the couple and sealed with a double knot (Day 1950: 251). Brahmin bridegrooms tie a gold ornament around the bride's neck with three knots which seal the marriage contract making it indissoluble. According to Brahmin tradition a bride's father could withdraw his consent to the marriage prior to tying the knot, but on tying the knot, a change of state has occurred, meaning that the bride has passed from her father's jurisdiction to that of her husband (Day 1950: 251). It is further mentioned that amongst all castes in India the clothing of bride and groom is knotted together (Day 1950: 252).

The ubiquitous appearance of knots in wedding ritual in both Asia and Europe indicates that their use was far from accidental, and it is by researching the different occasions of knot use in wedding ritual that we can begin to understand why in Europe we describe two people who have married as having tied the knot (Day 1950: 252). The powerful relationship in Europe between knots and weddings infiltrates the language and customs of the people. Therefore in the past, the exchange of true lovers knots, known as betrothal knots, stood as testament to the promises or pledges of fidelity and duty which served to bind the couple together. Today one of the dictionary definitions for true love is still 'the knot' as well as someone whose love is pledged (Onions 1988: 2372). The interchangeability between a pledge and a knot seems to still be valid in the current definition for true love. The words 'true love' are derived from the Danish verb '*Trulofa, fidem do*', meaning 'I plight my troth, or faith' (van de Griend

1998: 405). Further the dictionary meaning of the word 'plight' is still given as 'plighted troth' as well as 'engagement' and 'pledge' (Onions 1988: 1608).

Finally if we look at the dictionary meaning for the word 'wed' or 'wedding' we find that it is both to pledge and to bind contracting parties in wedlock (Onions 1988: 2521). Further, in Anglo-Saxon times the exchanges of symbolic pledges were known as wedds, which functioned to make valid and binding a contract (Whitelock 1930: xxvii). The association between knots, wedding contracts and pledges (i.e. oaths, vows or promises) seems to be well established. Considering the relationship between knots, weddings and pledges, Festus's claim that the Hercules Knot on the bridal girdle represented the marriage oath would seem to have substance.

Summary

Based on the above examples it would appear that the workings of the knot in wedding ritual has much in common with the workings of Tilley's core symbol in ritual contexts. The knot as material symbol in wedding ritual has a number of metaphoric extensions enabling one to draw many different meanings from its use. Therefore in the above examples, the tying of the knot can represent promises or pledges taken, as well as abstract social concepts to do with union, by which feelings of love or social relationships such as marriage are grasped and understood. The tying or untying of the knot can also denote changes of state, such as a movement from sexual abstinence and infertility to sexuality and fertility.

3.12 Religious Knots

The Latin word *religio* is considered to be etymologically related to the word *religare*, meaning 'to tie' or 'to bind' (Day 1950: 252). Thus material knots have been used to symbolize the kind of binding that can exist between humans and gods, or binding on a spiritual plane.

It is interesting to note that the use of material knots to denote a state of being bound is believed to have superseded the use of oaths and vows to express conceptual binding. Therefore originally the knot as material symbol would have done the same work as a vow or oath (Gandz 1930: 193). Hence material knots would have stood for conceptual knots.

Gandz cites an example from the bible in which the word 'binding' is used in terms of oaths and vows. However he proposes that the last words of the biblical quote 'If a man vow a vow unto the Lord, or swear an oath to bind his soul with a bond', should in fact read 'to tie a knot against himself' (Gandz 1930: 193). According to Gandz, the essence of a vow is prohibitive; therefore a person would refrain from certain foods or certain kinds of social intercourse. These prohibitions would originally have been negotiated through the tying of knots. Later the knot was supplanted by the spoken word in the form of a vow or oath (Gandz 1930: 193). In other words even though the use of vows and oaths supplanted the knot, vows and oaths continued to retain the sense and meaning of the knot (i.e. as a binding entity which works to obstruct or impede), notwithstanding the change in form from material object to formulaic speech. Binding in the case of religion would seem to revolve around the concept of an oath or vow which acts to tie a person to his god or to a godly lifestyle (i.e. to a life path denoted by closeness to a god). Gandz also mentions that in the context of ritual speech the words 'bind' and 'loosen' are used interchangeably with prohibit and allow (Gandz 1930: 193).

Other socially binding relationships negotiated through the deployment of knots were those of allegiance to religious and knightly orders. In some cases the oath or the vow (represented by knots) acts to tie a person to his god or to a lifestyle — such as that set down in the Rule of St. Francis or the Rule of St. Benedict—meant to encourage closeness to god. The display of certain knots such as the Triple Overhand Knot, known as oath knots, by members the Franciscan order, or the Granny knot and Figure of Eight knots by similar orders (i.e. both religious and knightly) in medieval Europe and later (van de Griend 1998: 401-403; Warner 1998: 389-394) indicated that one had not only taken an oath of allegiance, but also assumed social identity with the respective order (van de Griend 1998: 401-403). These knots therefore symbolized not only one's spiritual obligations but one's friendship and social affinity (i.e. identification) with a group of people (van de Griend 1998: 401).

The Triple Overhand Knot or oath knot was tied into the girdles (i.e. cingula) of 13th century Franciscans. Similar to other orders, the friendship knots of the Franciscans represented the solemn oaths taken by its brethren. The knots worn by the Franciscans symbolize the oaths of poverty, chastity and obedience taken by its members (van de Griend 1998: 401). The knot was the material form which the oath took. The knotted girdles worn by Franciscans

were also placed above the door beams of houses to indicate that the inhabitants were related to the Franciscan Order (van de Griend 1998: 401).

Knots were not just taken up by religious orders but were also used by orders of knights, such as the knighthood Order of Naples founded by Queen Johanna of Naples in 1347 or the Order of the Holy Ghost in Naples founded by the King of Sicily in 1352 (van de Griend 1998: 402). Documentation on the Order of the Holy Ghost in Naples indicates that its members wore an identification knot on their chests as a sign of mutual belonging and friendship (van de Griend 1998: 402). These knots not only identified the 300 knights who were the Order's members but also symbolized the Order's constitution (van de Griend 1998: 402).

Interestingly documentation relating to the ritualized tying and untying of the knots tells how knights wounded in battle or who had themselves wounded foes in battle had to untie their knot. That the knot could not be retied until the knight had visited the Holy Sepulcher (van de Griend 1998: 402) indicates the deeply religious nature of the vow or vows that must have been taken during tying rituals. Other knightly orders known to have similarly used knots are the Order of the Garter founded by King Edward of England in 1350 and the Order of St Anthony founded at the court of Albrecht von Bayern in 1382 (van de Griend 1998: 402). The Dell' Annuziator Order founded by Amadeus VI of Savoy in 1360 had a Figure of Eight Knot in its chain. The Order's chain is wrapped around its insignia which remains on display in the church of Moudon in Switzerland. Amadeus of Savoy also had the Order's knot pattern applied as decoration to the cloths of his servants and the covers of his horses, an action which is believed to have set off a trend of using knots by landed private families as heraldic devices (van de Griend 1998: 402).

Summary

The above discussion of knots and religion—that is knots that symbolize what binds groups together—overlaps in significant ways with the previous discussion of knots and marriage. Similar to the use of a knot in wedding ritual to denote the marriage oath, the knot in religious contexts is clearly related to formulaic speech acts such as oaths, vows and promises. Also as seen with the Order of the Holy Ghost of Naples (i.e. where knights who have drawn blood in battle untied their knot and retook their vows), tying and untying of knots denotes changes of state.

Further, it is clear that the knot, both in the cases of marriage or group bonding is used to negotiate social relationships. Whether it is a religious brotherhood or a family of knights, the knot seems to be used to address non-kinship or non-affinal ties in ways which constantly bring to mind ideas of family or affinal ties. However whereas in the context of marriage the knot is applied to the body or bodies of the bride and groom only, in the context of a religious or knightly order, affinity is expressed by the wearing of the knot by each and every member of the order. In addition, amongst the Franciscans, the Triple Overhand Knots could also be attached to buildings. This illustrates how structures and other items can be consecrated through use to an order. The transfer of knots from people to things transforms the knot into a kind of signature on a par with a coat of arms used by individual families. The power of the order is not just to be evaluated in terms of its followers but also in terms of buildings used by its members. In the case of Amadeus of Savoy, servants and animals also bore the knot in the guise of a coat of arms. In terms of their religious use among the religious and among knights, knots function as insignia and are mobilized on both people and things as part of a practice aimed at defining concepts of membership and social brotherhood or sisterhood.

3.13 Knots and Speech

It is through analogy to the binding property of a knot that the oath acquires its binding properties. Speech such as the curses inscribed on lead tablets and found throughout the ancient Greco-Roman world were aimed at affecting the future outcome of law cases by binding the wits of the opponents in court or causing witnesses to become tongue tied (Farone 1985: 150-152). Similarly, because of the many instances where magical speech is synchronized with knot-tying (Day 1950: 230 - 253), it could also be said that it is through analogy with the knot that magical speech acquires its ability to bind. The relationship between speech used in this way and knots is expressed in the definition of a knot as a spell that binds. In both these instances — in the context of oaths or in the case of speeches that seek to affect outcome — there is a transference of qualities between domains from the material knot to speech and hence cognition; therefore the binding quality of the knot is transferred to certain types of speech (oaths, spells, incantations and charms).

When faced with instances in which binding, as a mechanical property of a knot, is aimed at harming a person or thing and in the other at healing a person or thing, the question arises as to what determines or guides the different uses to which binding is put. The incidence of

knots with identical mechanical properties being used to achieve different ends, such as to heal or to harm a person or thing suggests that how a knot is used depends less on its mechanical properties and more on the intentionality of the person operating the knot. In the same way that a person can be protected by analogy to a knot's obstructive properties which block harmful influences, a person can also be harmed through the same obstructive analogy which now works to impede the intended victim's actions. In both cases the mechanical properties of the knot as obstruction are the same but it is the intentions which are different and which determine the use to which the knot is put.

Hence for the knot to 'work' it needs someone to make the analogy between binding as protection (i.e. where the knot as obstruction, protects the body by obstructing harmful influences), or binding as harm (i.e. where the knot as obstruction harms another by obstructing their actions) and to use this analogy to fulfill a particular aim. This form of thinking is essentially analogical and as such metaphorical.

The thinking behind the knot and the manipulation of thoughts into a program of action (i.e. the use to which the knot is put) amounts to the intentionality behind the knot. In describing knots tied to heal various sicknesses, the Roman imperial writer Pliny the Elder indicates that the speech accompanying knot-tying is aimed at providing the reason or intention behind the knot (Day 1950: 238). Formulaic speech acts such as oaths, or magical speech such as curses and spells, all work to make clear the intentions of the person using the knot. And it is these intentions which transform the knot from a tool with mechanical properties into a cognitive force with volition, immediacy and substance. The ability of a person to transfer her/his intentions onto a knot is an important item to bear in mind when trying to understand why a knot should have been seen to have had the power to affect another person. Intentionality belongs to the domain of thought, and in becoming a tool for one's intentions, the knot 'allows' thoughts to be materially manifested. Where these thoughts are aimed at causing harm to another, then tying the knot becomes a visible act against that person or thing, and like any harmful act, tying such a knot becomes subject to legal or punitive action.

The processes recorded for imbuing knots with intentionality involved blowing and spitting on them together with the recital of curses, spells, invocations or other incantations (Day 1950: 245). Knots imbued with the power to harm are mentioned in the Koran, and have been recorded in countries such as India, Persia, Arabia, Australia, and New Guinea (Day

1950: 246). However in Europe a particular type of knot was greatly feared, so much so that tying one was seen as a serious crime. Hence punitive laws were passed to prevent the use of this type of knot. A person risked severe punishments for resorting to such a knot, the most extreme punishment being death. The knots in question are those tied to hinder or harm people in different ways, such as those knots specifically tied to render bridegrooms impotent (Day 1950: 246) or to prevent the marriage act (Gandz 1930: 194). In Germany in the Middle Ages this type of knot was called '*nestelknüpfen*', in France '*nouer l'aiguillette*', in Sweden '*nalknytning*' and in Medieval Hebrew '*asar*'. The legal term for tying such a knot was 'ligature'. Under Slavic law, to tie a ligature was a serious crime and cases of ligatures are known in 1635 from the Orkney Islands, whilst in Scotland in 1705 a man was sentenced to death for tying such a knot. As early as the seventh century A.D. the archbishop of Canterbury spoke out about this practice pronouncing it detestable and by 1208 A.D. it was punishable by excommunication from the church (Day 1950: 246).

As has been shown, magical knots are put to a number of uses, from influencing the weather to inciting love or to heal or harm a person. The purpose to which a magical knot is put depends on the intentions of the person manipulating the knot. Spells, charms, curses and incantations are closely connected with the tying of knots because these forms of magical speech make clear for whom the knot is intended, what it is intended for and also the nature of the higher powers called upon to carry out the necessary deeds. As such these forms of magical speech make clear the intentions behind the knot and are inseparable from the knot-tying process itself. Without the intentions (i.e. speech acts) guiding the knot, a knot is simply an object with mechanical properties.

Examples of Speech Accompanying Knot-tying

As shown in the examples of Egyptian magic, where spells (listed as M, N, O, P, Q and U [Wendrich 1998: 66]) are synchronized with knot-tying, the binding property of a knot is transferred to the spells which accompany the binding process, hence the understanding of the spell as binding. Other related forms of magical speech such as curses and incantations are also ultimately binding and are generally accompanied by the tying of knots. However, even when curses, spells and incantations are not accompanied by knot-tying, their efficacy remains dependent on the concept of binding which is preserved in the language used. Although in such cases binding is not directly linked by analogy to a real knot-tying process this does not affect the inherent meaning of a curse, spell or incantation as conceptually

binding. And because a definition of a knot includes conceptual knots such as binding spells, binding conditions, and restrictions, it is important to consider conceptual binding processes as authentic or alternative knots. With this in mind I have included below examples of curses and incantations which retain their capacity to bind even without clear association to a material knot (however it must be noted that the omission of information regarding the synchronizing of the recital of incantations and curses with knot-tying in the examples below may well reflect an oversight on the part of the researchers or simply that the material knots which accompanied magical speech were not important or necessary to the aims of their research project). The examples of incantations I have included below were used as amulets amongst the medieval Jewish community in Egypt, and offer an opportunity to analyze the type of speech which would have accompanied knot amulets and which would have provided the knot with its intentionality.

Incantations

Medieval Hebrew and Aramaic magical incantations in the form of writings on paper and parchment provide a valuable insight into Mediterranean magic in late antiquity (Swartz 1990: 163-164). Transformed into amulets, these writings become physical objects of power intended as mnemonic devices for oral recitation. Consistent with writings intended for oral performance the incantation texts contain formulaic phrases, rhythmic patterns, repetition, and so forth (Swartz 1990: 166). Studies of the material contained in these incantation texts have led researchers to suggest connections between Jewish literary magical traditions and those of ancient Palestine as well as Babylon (Swartz 1990: 166, 171).

It is noted that the incantations begin with a formula which in fact constitutes an oath. The formula is termed the *be-sem* formula and is also found in Greek magical texts (Swartz 1990: 172-173). The same words and formulaic arrangement of the opening lines of the amuletic incantation text also appears in the opening lines of medieval Jewish marriage contracts and other legal documents (Swartz 1990: 173), indicating an overlap in the formulaic patterns of speech which typify magic and law.

The Medieval Jewish incantation is a document which is essentially binding (Swartz 1990: 178, 179). Binding in this instance is understood in the legal sense of being liable. The incantation texts depended for their authority on the name of God as well as the King's seal which the magician (whose function was similar to that of a scribe), applied to the documents

(Swartz 1990: 178, 179). The incantation texts had a visible structure consisting of an opening invocation in which certain divine figures were ordered or adjured to do the client's bidding. The client was specified by name and the nature of the protection sought by the client or the benefits sought were listed. These requests were followed by biblical verse or other formulae and finally the incantation ended with the liturgical formula of amen (Swartz 1990: 178, 179).

Although there is no clear indication on how these amulets were worn, mention is made of their coexistence with other types of text of a purely religious rather than magical nature. These other types of texts are called 'phylacteries' and the descriptions of how these phylacteries were worn offer insight into the possible manner in which the amulets would have been displayed.

Phylacteries consisted of laws and old traditions written on small strips of parchment contained in tiny leather boxes (Gandz 1930: 197) and worn around the head or arm (Day 1950: 254). The knots which tied the phylacteries were believed to have been of even greater importance than the texts themselves. The knots were made in the form of letters which spelled the Almighty's name and were therefore believed to be divine (Day 1950: 254). The phylacteries are noted as resembling Jewish amulets and some researchers have referred to them as 'magical' amulets (Gandz 1930: 198). Therefore Jewish amulets and phylacteries were not only categorized together but also resembled each other. Apparently the similarities between the two were such that one could be mistaken for the other (Gandz 1930: 198). That the Jewish phylacteries and amulets were so similar that when worn they could be easily confused suggests that, like the phylacteries, the amulets were presented in the same way and were also tied with special sacred knots. This is supported by Gandz (1930: 198) who writes that the same knots appear on Jewish phylacteries and amulets. Yet Gandz (1930: 198) views amulets as 'magical' and therefore interprets the knots associated with amulets as 'magical' whereas the knots which tied phylacteries were mnemonic and memorial. Given the evidence, however, both in terms of uses of knots and the fact that 'phylactery' means protective amulet or charm, there is no basis for making such a distinction.

Curses

Curses inscribed on sheets of lead have been unearthed right across the Greco-Roman world and were believed to have been used in Athens as early as the 5th century BC (Faraone 1985:

150-151). It is suggested that prior to the written curse format, these would have existed as a purely oral form of binding speech or song (Faraone 1985: 153). Curse tablets in the Greco-Roman world were used as a hidden way of affecting the outcome of law suits (Faraone 1985: 153). Because of their relationship with court proceedings, the curse tablets found across the Greco-Roman world are referred to as Judicial Curse Tablets. These curse tablets were written by litigants in trial cases where the object was to bind the opponent's ability to speak and think clearly (Faraone 1985: 151) and, as a result, cause the opponent to lose the trial. It is believed that these curse tablets evolved in tandem with the court system itself (Faraone 1985: 154). The tactics of the curse tablets would seem to be offensive and as such generally mirrored the tactics of the court room where disputes were battled. The rival litigants in court were often supported by powerful patrons who had vested interests in the outcome of the trials (Faraone 1985: 153-154). The curse in this instance is a binding entity which in terms of purpose closely mirrors the offensive mentality and competitive quality of litigation. Aimed at binding an opponent's ability to think (Faraone 1985: 151), the curse was expected to function as a form of impediment or obstruction to the clear flow of verbal interchange in the courtroom and in so doing turn the tide in favour of its creator.

These curse tablets represent a verbal form of binding, but other forms of binding curses were also prevalent at the time. Bound lead figurines or dolls inscribed with the name of the person to be cursed were unearthed in excavation sites in Athens and elsewhere and illustrate the widespread synchronizing of curses with actual binding (Faraone 1985: 151). Therefore when approaching the Attic curses it should be remembered that at the time it was generally assumed there was a relationship between material binding and binding curses as evidenced by the finds of curses in the form of bound lead dolls. The use of bound and tied figurines was intended to bind a victim's mental or physical movement, and the practice was widespread amongst ancient Greeks and Romans alike (Faraone 1991: 189). The close relationship between the judicial curses and material forms of bindings can be gleaned from the discovery of a group of figurines dated to 400 BC and found in two graves. Lead thongs had been used to bind the hands of the figurines behind their backs and each figurine had a name inscribed on the arm or leg. They had been placed in small lead boxes on which was inscribed a judicial curse. The judicial curse was aimed at restraining the success of an opponent at law (Faraone 1991: 190). Similar figurines made from clay, lead, and wax appear in later periods wherever Greek culture exercised an influence (Faraone 1991: 191).

Knot Amulets

In the above sections magical knots have been shown to take many forms and have as many applications. The subject of magic (and its offshoot magic knots), is characterized by very indistinct boundaries and as such infiltrates other disciplines such as religion or law. The problem of where to put magic (religion or law) possibly reflects the possibility that at a very early stage in their history the subjects which today we term 'religion', 'law' and 'magic' had not as yet evolved into separate fields. The three areas, religion, law and magic were bound together and the common speech patterns (binding forms of speech) shared between them testifies to this proposal.

Because much of the information I have presented so far on magical knots involves binding forms of speech I felt it was important to find and include information on material knots used in the context of magic which were unaccompanied by speech. Although most forms of magic knots are associated with magical speech, I did come across a type of knot attributed with magical properties and which was not always associated with speech or writing. This is the amulet knot used as protection.

Because of its incidence in archaeological contexts and because it is found in most cultures across the world I have devoted a section to this knot. Also one of the benefits of looking at knot amulets is that there is sufficient information available for me to draw conclusions on how this particular type of magical knot would have been mobilized.

The definition of an amulet in the English Language is anything which is worn as a charm against evil, disease or witchcraft (Onions 1988: 62). The primary property of an amulet is bodily protection (Day 1950: 239) and this is expressed in the definition of an amulet as medicine (Onions 1988: 62). The use of knots as amulets is believed to extend into the remotest past. Linguistic evidence suggests a particular relationship between knots and amulets. In Russia the words for amulet and knot are closely related and the word for wizard translates as 'knot-tyer', whilst in Hebrew the word for enchanter is '*hober haber*' meaning one who ties magic knots (Day 1950: 239). In Egypt the two signs for amulet/protection are represented by a twisted cord or knot and a series of knots. According to Day (1950: 239), the Egyptian ankh was itself a knot construction venerated by the Egyptians as sacred and life giving. As such the ankh had much in common with the amuletic knot (Day 1950: 239) which was also accorded life enhancing properties.

A first dynasty dish sculpted in the form of a knotted ankh supports Day's proposal that the ankh may have represented a knot. The lower part of the ankh functions as a spout indicating that the dish was a ritual object. It is proposed that the water pouring from the ankh would have acted as a medium for transferring the life-giving properties bound up in the ankh to a recipient, possibly through his mortuary image (Wengrow 2006: 193). The compositional imagery of the dish also includes a pair of arms, the hieroglyph sign for 'ka', which is shown grasping the ankh sign (Wengrow 2006: 193). Both the ankh and the arms are Egyptian signs meaning life and spirit respectively. The 'ka' sign for spirit is used in words with magical potency such as for instance the ancient Egyptian word for magic (McDermott 2001: 79, 90, 101).

In the ankh example, the knot becomes a sign for life and is accorded magical potency by the accompanying 'ka' glyph. Day (1950: 239) proposes that in the same way that the knotted ankh is endowed with magical life-giving and protective power, so too knotted amulets are endowed with potency and protective life giving properties (Day 1950: 239). The ancient Egyptian knotted ankh exemplifies the manner in which an amulet is supposed to work.

Reef knots in the form of gold amulets were found over the thorax of the mummy of Tutankh-Amun (Wendrich 1988: 65-66, Day 1950: 240). In ancient Egypt the integrity of the body following death was vital to its survival in the afterlife. Knowing this, the god Seth killed his brother Osiris and dismembered his body, scattering the pieces across Egypt. Isis found the pieces and knotted the parts together (Wendrich 1988: 65). The knot amulets placed on the body of Tutankh-Amun refer to the binding together or uniting of Osiris's body, and by means of the analogy both to the Osiris myth and the binding function of the knot, ensures that Tutankh-Amun's own body retains its state of unity (Wendrich 1988: 65-66). Texts found in Ancient Egyptian burials contain spells with directions on how to protect the body against dismemberment in the afterlife. These texts indicate that protection against dismemberment can be obtained through the tying of particular knots whilst reciting spells or utterances (Wendrich 1988: 66).

Seventeen small hollow gold Reef Knots believed to have been part of a necklace and dated to the twelfth Dynasty were found at the ancient Egyptian site of Dahshur. Two of these represent stems of lotuses knotted together. Similar finds have been made at other ancient

Egyptian sites and it is believed that, like those found on the mummy of Tutanhk-Amun, these were amulets (Day 1950: 239-241). The wearing of knots as amulets around the neck, arms, or legs in order to protect the body can be found in many parts of the world, from ancient times to the present (Day 1950: 243-245).

In ancient Egypt, knots such as Reef Knots and Half Knots are also mentioned in texts which tell of their use as potent forms of medicine (Wendrich 1988: 66). These knots, like other forms of protective knots which ensure the body's health, protection and integrity, would also seem to be amuletic. An explanation for their use as medicine hinges on the understanding that knots have the unusual capacity to bind into themselves spells recited in the process of tying. The spells prescribed in connection with medicinal or protective knots in ancient Egypt are those known alphabetically as spells, M, N, O, P, Q and U (Wendrich 1998: 66). The knot not only binds to itself the power of the spell but also acts as a protective device by creating an obstruction against harmful influences (Wendrich 1998: 66-67). Therefore the tensions between tying and untying in ancient Egyptian healing practices are equated with different states of being or different experiences such as the passage from sickness to health (Kuechler 2001: 73).

Amuletic or Protective Knots in Christian Contexts

Celtic and Anglo-Saxon objects, such as brooches, monuments and objects such as illuminated scriptures and reliquaries are richly decorated with designs made from knotted interlacements and referred to as insular in style (Kuechler 2001: 66; Nordenfalk 1982: 37, 39, 43, 61; Kermodé 1907: 24- 63; Cumming 1857: 9, 16, 27, 36). One particularly well known insular object is the Monymusk reliquary which is rich in knot ornamentation and resembles a small portable casket in the shape of a hip-roofed house (Alcock 2003: 327). Made from wood and plated with silver, it was designed to hold the bones or remains of a saint. Other such reliquaries existed at the time, making the Monymusk reliquary one of a group of similar items (Alcock 2003: 327). Alcock's interpretation of the interlacements on the Monymusk reliquary (Alcock 2003: 329) and other insular objects (Alcock 2003: 319) are that these were protective.

Historical accounts indicate that reliquaries were used as processional items. Supporting the idea that these were processional items are accounts of reliquaries being taken into battle and carried around the troops in order to fortify their spirit. Similar to other reliquaries which

performed the role of battle standards, the Monymusk reliquary is also believed to have operated as a battle standard (Alcock 2003: 329). The existence of historical accounts which testify to its use as such adds substance to the claims that it had a performative social role in the field of battle.

A clue as to how the interacements of knots on the Monymusk reliquary performed in such instances can be gleaned by considering the performative roles of other Christian objects similarly decorated with knotted interlace patterns and also attributed with protective qualities. If we look at Early Byzantine Period textiles, we find that the most frequent motifs between the third to sixth centuries were knots and interacements. The knots and interacements are found primarily on non-Christian textiles but are also found on Christian specimens. Whether Christian or non-Christian, the knot and interlace designs function as magical signs aimed at protection or increase and prosperity (Maguire 1990: 216-218). Maguire writes that the power of knotted designs can be ascertained from the Greek word for 'bind' which means both to bind materially as well as to bind by spells or enchantment (Maguire 1990: 216).

Like the knot, the Christian cross was also believed to be protective and was accorded mystic power. The cross as a potent sign and worn as part of a necklace was often enhanced by the addition of a hollow in the cross itself for the addition of relics. Other necklace crosses were worn together with tiny boxes or phylacteries for the keeping of relics. Worn for protection, the cross is a sign whose potency is increased by the inclusion of a relic (Maguire 1990: 218). Maguire explains how in certain cases the power or force of the cross symbol was also enhanced by the interlace designs set into it (Maguire 1990: 219). The apotropaic function of interacements inset into crosses is supported by other researchers who propose that the infilling of crosses with interlace in the context of illuminated scriptures such as the Book of Durrow served a talismanic function (Nees 1978: 6).

With regard to Byzantine textiles decorated with knots and other designs, it is proposed that these functioned on two planes, the material and immaterial. In the material world the designs, together with the sumptuary value of the materials, denoted rank and status whilst in the immaterial world or the unseen world the designs functioned as weapons against harmful forces (Maguire 1990: 215). Similarly it would seem that the insular designs denoted by knots and interlace, and applied to personal secular items as well as scriptures and reliquaries

functioned on two planes. On the physical plane these designs, together with the materials from which they were made, denoted both rank and status whilst in the immaterial world their value was apotropaic.

That Christian objects decorated with knotted interlace appear in both pre-Christian, non-Christian and Christian contexts does not necessarily mean that their uses differed. In the early Christian period, the coupling of knots and Christian symbols such as crosses intensified the protective properties of the objects on which these appeared, turning these into potent charms. Therefore the Insular manuscript known as the “Cathach” of St. Columba, like the Monymusk reliquary, was taken into battle as a protective device (Nees 1978: 6).

The use of the Monymusk reliquary as a battle standard, a use shared with the insular manuscript of St Columba, points to the appropriation of Christian symbols by kings who saw them as mystical and even magical tools of power. The Christian king or leader who takes the bones of a powerful saint into battle as a protective device in the form of a battle standard is no different from a pre-Christian (‘pagan’) king who takes the bones or related paraphernalia of some powerful ancestor or god into battle as protection.

Summary

Similar to the use of knots in marriage and religious contexts, knots in magical contexts are closely associated with formulaic patterns of speech. Spells, incantations and curses are three forms of magical speech which are synchronized with knot-tying. These forms of speech work to lay out the intentions which guide the uses of the knot in homeopathic magic. However in the example of Jewish incantation amulets we can see that magical speech is not a formulaic speech pattern which is separate to or sealed from other types of formulaic speech patterns such as those used in legal and religious interactions but rather that there is much common ground between the three types of formulaic speech.

The binding property of a knot appears to be the primary metaphor by which the concept of magic is grasped and experienced. And similar to the references to binding in other contexts such as marriage and religion, binding in magic always appears to be obstructive. By this I mean that binding acts as a fixing force, a force that holds together and unifies. Therefore the protective amulets worn in Egyptian magical practices capitalize on this unifying force inherent to knots to keep the body intact and safe from the disintegrating forces of the

afterlife or other disintegrating and dangerous influences. Concepts already made familiar in the examples of the knots used in marriage and religion, such as those to do with unity as well as to do with changes in state, also appear in other uses of knots. This would seem to suggest that there are consistencies in the meanings of knots across cultures and time periods.

3.14 Knots as Concepts Integrated into Information Systems

Evidence suggests that knots were used as mnemonic devices as part of oral tradition prior to the invention, or widespread use, of writing (Day 1957: 12). Knots were used to record a profusion of different types of information--songs, genealogies, history, or matters of religion or law--both numerical and verbal (Day 1957: 8).

Knots, Time-keeping and Numbers

In ancient Greece, knots were used to keep a record of the passage of days and time.

Therefore Herodotus mentions a knot calendar comprising sixty knots in a thong which Darius gave to a group of Ionians. The Ionians were to untie a knot for each day that passed and if, at the end of the sixty days measured by the sixty knots, Darius had not returned from his battle with the Scythians, then they were to leave for their homes (Day 1957: 8-9).

Another account of a knot calendar is mentioned in the eighteenth-century by Keates, who writes of Abba Thulle, a native king of the Palau Islands who gave permission for his son to accompany Captain Wilson and his crew back to England. The king asked how long it would be before Captain Wilson returned with his son and was told that it would take thirty moons with the possibility of another six. At this reply the king took from a basket a piece of line and made thirty knots leaving a long space before adding another six (Day 1957: 12).

More complex numerical data kept via knot records comes from Japan. Knotted string records were used to keep track of commercial activity. Therefore pawnbrokers on the island of Okinawa recorded the dates and amounts of loans by tying knots in strings of sedge grass or bast. Each of the twelve months were indicated by different arrangements of knots, with the first nine months denoted by one to nine Overhand Knots in the upper parts of the string and the tenth, eleventh and twelfth month indicated by a Loop Knot, a Loop Knot and one Overhand Knot, and a Loop Knot and two Overhand Knots respectively. The amount of the loan was recorded in the lower part of the string and if decimals constituted part of the loan amount then knots denoting decimals were tied in a subsidiary cord formed by either splitting

the main cord or by tying another cord to the main cord at the required point (Day 1957: 17-18).

Knot Records

The above knot records used in commerce are reminiscent of those used by the Incas for the governance of their territories (Quilter 2002: 200). The Quechua word for knot is *khipu*, whilst amongst the Aymara the word for *khipu* is *chino* meaning knot record. The *khipu* was a device by which such information as songs, events, history as well as statistical information related to tributes, taxes, harvests, deaths and censuses were recorded (Day 1957: 18-19).

New evidence on the workings of the *khipu* is beginning to challenge previously held beliefs that it was simply a mnemonic device to aid the memory (Conklin 2002: 54-55). That it was referred to by a post-conquest informant as a letter indicates that senders and receivers of the *khipu* were party to a shared system of interpretation similar to our own writing (Conklin 2002: 55). It is known that the *khipu* was part of an empire-wide communication system. The receiving and sending of information via *khipus* would have necessitated that many people share equally in an interpretation system for decoding or reading the *khipu*.

It is proposed that the *khipu* or knot record, like our own writing system, was a method for representing information; but in contradistinction to our own sound writing system, the *khipu* is believed to have been a type of concept writing system (Ascher 2002: 105). However whether concept or otherwise it is evident that the *khipu* was used to record numerical data or narratives such as poetry, histories and so forth (Quilter 2002: xvi). Knots and their specific positions, together with the color of the cords and other elements all played a part in conveying information (Quilter 2002: xv-xvi).

A seventeenth century native chronicler by the name of Felipe Guaman Poma in his writings included drawings of *khipus*. Some of these show the *khipu* being sent via a messenger to its recipient. The *khipu* is clearly displayed in the messenger's hand and is labeled as a letter. Other *khipus* are held by the officials who used them and in these cases they are shown together with staffs of office and particular styles of dress (Urton 2002: 11). Based on these drawings it would seem that *khipu* were not just bureaucratic tools or informational devices but were also emblems to be displayed alongside staffs of office and other signifiers of profession such as forms of dress (Urton 2002: 11). Today the modern Peruvian district of

Tupicocha, comprising political and administrative units called *ayllu*, still uses *khipus* called ‘*quipocamayos*’. At the end of each year, civic meetings are held during which past presidents of the different *ayllus* ceremonially hand over to the new presidents the community *quipocamayo* (Salomon 2002: 298-299). The *quipocamayo* is tied around the new president like a sash (Salomon 2002: 298) and as such becomes a display item resembling the *khipus* drawn by Guaman Poma which also appear to function as items related to office. Based on the modern and colonial display forms of the *khipu* by officials, it would seem likely that in ancient times the *khipu* would have similarly been displayed by officials to signal their role and or position.

Although the *ayllu* now keep written records and as a result no longer use the *khipu* to tabulate information pertaining to the *ayllu*, the specimens which are displayed by officials closely match those drawn by Guaman Poma, indicating the conservation in form and display of the *khipu* since the seventeenth century (Salomon 2002: 302). A recording device similar to the *khipu* is known to have existed amongst the ancient Hebrews. Mentioned in the law of fringes or *sisith*, the ancient Hebrew knot record, like a *khipu*, consisted of knotted cords (Gandz 1930: 199-200). Both the ancient Hebrew knot record and that of the ancient Peruvians resembled fringes (Gandz 1930: 199-200). The ancient Hebrews wore the fringes as borders to garments. The fringes were made of white and blue wool twisted to form a cord into which knots were tied and arranged. The ancient Hebrew fringes served to help the Jewish people remember their laws, traditions and historical events (Gandz 1930: 200; Day 1957: 25).

In addition to numerical data recorded through placements of knots, evidence also exists of knots being integrated into writing systems of the Hebrews and Peruvians. Documents dating between 990-1050 indicate that amongst the Hebrews there existed a system of knot letters which resembled knotted forms of the Greek alphabet (Gandz 1930: 211-212). This information is reminiscent of that regarding the integration of knots within a syllabary or secret writing system known as the royal *khipu* and used by the Ancient Peruvian bards of the Inka Empire (Hyland 2002: 151, 161). Regarding this secret writing system of the Incas, it is mentioned that the symbol for ‘person’ consisted of a top knot followed by three knots and a skirt, whilst the symbol for ‘prince’ and ‘princess’ followed the same pattern as that for person except that the yarn was of a different colour (Hyland 2002: 161).

Summary

Knots were integrated into information systems in which knot placement and colour were all vital to the delivery and interpretation of data. In Peru, knot records were the sole information systems by which an entire nation was governed and administered, suggesting that knots are capable of delivering very complex types of information. There is evidence amongst the ancient Hebrews of knots being given sound values akin to our own alphabetical system. Also amongst the Peruvians there is evidence of a writing system in which knots are integrated into a syllabary. The greater part of the evidence however refers to the use of knots as numbers. Knots are particularly suited to counting, measuring and quantifying.

Taken together the evidence indicates that knots were integrated into various kinds of information systems where they worked in very different ways. Knots were used as a device to aid the memory, as concepts, and as writing systems similar to our own. Interestingly the fringe format to the knot writing system seems to have existed in different parts of the world at different times and points to the fact that something as innocuous as clothing could also function as an information system.

3.15 Knots and Rulership in Ancient Egypt and Britain

Ancient Egypt

In ancient Egypt knots appear in hieroglyphic text and pictorial images. One important image depicts two Nile Gods tying a knot from a lotus and papyrus stem, plants representing Upper and Lower Egypt respectively (Wendrich 1998: 65). The uniting of two separate lands is conceptually expressed by the tying of a reef knot by the two Gods Seth and Horus. The repeated depiction of this image through time politicized the eternal recreation by the Gods of the existing order (Wendrich 1998: 65). As such, tying the knot becomes a visibly binding act, not just aimed at unifying two lands but also at establishing the ground for the unification of the people of Upper and Lower Egypt under a single ruler. Unity of the lands also establishes the ideal of a unified kingdom. In this case, although the knot is shown as a recognizable material entity: it is establishing concepts to do with rulership. The two cords (depicted as plant stems), physically and conceptually tie the kingdom together, in image, thought and in actuality. In this example the knot brings together, through the logic of binding, multiple planes of experience, making it the perfect tool for the delivery of a complex set of ideas.

That unity is the meaning conveyed by the knot in this instance is further clarified by the fact that the item around which the knot is being tied is an abstracted image of a pole-like trachea, connected at its base to the lungs, which taken together is the hieroglyphic sign for unite (Wendrich 1998: 65). This potent unification image (i.e. of a reef knot tied from a lotus and papyrus stem (heraldic plants denoting upper and lower Egypt respectively) around a pole-like trachea with lungs or the hieroglyphic sign for unite), is often found on sculptural compositions of enthroned Pharaohs. In these instances the unification image is inscribed into the throne (Bongioanni et al. 2001: 287).

In the course of my own research I have noted that the unification image occurs most frequently on the thrones of Egyptian kings (Desroches-Noblecourt 1989: 39, 40, 52, 117; Hawass 2006: 37, 52, 155; Reeves et al. 1997: 60). The beautifully preserved and almost intact tomb of Tutankhamen provides a wonderful opportunity to analyze this motif and to note on what kinds of items it occurs. In ancient Egypt the images of enthroned kings show the king resting his feet on footstools. In Tutankhamen's tomb this 'unite' image appears not only on footstools (Desroches-Noblecourt 1989: 24, 50-51) but also on informal and formal thrones (Hawass 2006: 51-52, 154-155). It also appears on a large and elaborate perfume jar used as part of the rites of kingship as well as on Tutankhamen's chariot (Bongioanni et al. 2001: 292; Reeves 1993: 171). It is further depicted on a gilt shrine found in Tutankhamen's tomb which would have held statuettes of Tutankhamen and his wife. In the context of the gilt shrine the 'unite' image appears within a scene showing the queen anointing the king who wears the khepresh or blue crown. Here the 'unite' image is found on the side of the king's throne (Desroches-Noblecourt 1989: 39, 40).

This 'unite' image can be seen in contexts other than Tutankhamen's tomb, such as on a stela, as well as on paintings applied to the walls of tombs belonging to high ranking individuals and kings (Hawass 2006: 36-37; Desroches-Noblecourt 1989: 144). In the case of the stela as well as the tomb paintings the 'unite' image appears in scenes depicting or glorifying the king. In these instances the 'unite' image appears on the throne on which the king sits. The main compositional parts of the image (i.e. the knot tied from a papyrus and lotus stem and the pole-like lung and trachea) are always present in all of the depictions of the 'unite' image, indicating that these are the stable parts of the composition and hence are responsible for delivering the core meaning. Other elements such as the two gods representing upper and

lower Egypt are sometimes exchanged for prisoners (Desroches-Noblecourt 1989: 50-51, 144; Reeves 1993: 171). Where prisoners are included as part of the compositional parts of the unification image, the Reef Knot accrues new meanings to do with obstruction in terms of holding fast and imprisonment. In these instances the centrality of the Reef Knot to the unification image is further enhanced. It still unites upper and Lower Egypt by means of the knotting together of the two heraldic plants, the lotus and the papyrus, but it also acts to bind and subjugate Egypt's enemies at one and the same time. In the instances in which prisoners are depicted, the lotus and papyrus stems from which the knot is tied extend out from the knot itself and tether the prisoners by their necks (Desroches-Noblecourt 1989: 51, 144; Reeves 1993: 171). Here the imitative properties of the knot would seem to be intended. Like the figurines found in ancient Greece, in which a figure of a named person is bound with the expectation of like results to the intended victim, the images of Egypt's bound enemies likewise through sympathetic means bind and subjugate its real enemies (Faraone 1991: 173-175). Further, the style of dress worn by the enemies identifies their race as Nubian and Asiatic (Reeves 1993: 171; Desroches-Noblecourt 1989: 296), and thereby functions as a naming tactic comparable to the names inscribed on Greek curse figurines which identified the person for whom the curse was intended. Naming the two enemies of Egypt enlarges the intentions of the sympathetic magic to include not just individuals but entire nations. That the tying of the Reef Knot from the two heraldic plants representing Upper and Lower Egypt respectively was intended to affect events in reality rather than appear as merely symbolic is proposed by Wendrich (Wendrich 1998: 65).

In the above unification image, it is the relational and transformational aspect of binding which is being exploited. In the act of binding together two separate entities such as Upper and Lower Egypt a third is created – this third is a new unified Egypt. The repetition through time of this image not only hints that it was necessary to reinforce visually the concept of unification but also that perhaps unification was not a natural state. Here the dilemma of things which are tied, being untied, is overcome by the accentuation of the tying process rather than the untying process. Transformations in tying and untying (binding and unbinding) have considerable social consequences (Kuechler 2001: 73).

The deployment of knots in ancient Egypt to articulate concepts to do with kingship is mentioned by Wengrow, who writes that written and pictorial signs comprising images depicting various forms of binding were used to embody relationships between gods, kings,

the dead and the living elite (Wengrow 2006: 193-194). Images of knotted items similar to the stone dish previously mentioned under the context of magical knots (i.e. made in the form of a knotted 'ankh' held by two arms representing the hieroglyphic sign for 'ka' meaning spirit) appear as part of written and pictorial signs but seldom survive in the archaeological record. Similar to the dish, many of the objects depicted would have been employed in rituals aimed at sustaining the relationships between the gods, kings, dead and living (Wengrow 2006: 193).

Ancient Britain

The use of knots as metaphors for complex relationships between kings, their elite and their gods is not limited to Egypt but is also to be found in Britain. The peoples of Celtic and Germanic descent in Great Britain had developed a style of decoration referred to as 'insular' and consisting of interlaced patterns made from several strands which pass over and under each other alternately (Alcock 2003: 318; Nordenfalk 1982: 14). Although this description of interlace equates to one of the given meanings of a knot (i.e. an interweaving of cordage or intertwining of rope), it is a very broad term for what are essentially recognizable knots with names and uses. The work of Iain Bain analyses the various forms of interlaced Celtic knotwork found on insular illuminated scriptural manuscripts and sculpture (Bain 1990: 7-92). His book establishes the methods for reconstructing this style of knotwork (Bain 1990: 6), and based on these reconstructions it would appear that most of the different forms of Celtic knotwork have evolved from the 'Plait', a linked or chained form of knotting which in *The Ashley Book of Knots* appears under the title 'Plats' and 'Sinnets' (Ashley 1993: 471-500). The value of knots to the ornamental program of insular interlace design is recognized by researchers such as Kuechler, Nordenfalk, Kermode and Cumming to mention but a few (Kuechler 2001: 66; Nordenfalk 1982: 37-61; Kermode 1907: 24-63; Cumming 1857: 9-36).

In Britain, interlace is the dominant art motif on high-value insular items such as worked metal objects and stone sculpture as well as paintings in the form of scriptural manuscript decoration (Alcock 2003: 318). The most visible or common insular metal work item is the brooch, which appears between the 7th and 8th centuries AD in Northern Britain (Alcock 2003:320). Made by skilled artisans, these brooches are believed to have been worn by high ranking personages such as kings and nobles (Alcock 2003: 322-323). Other similarly decorated examples of insular metal work such as a gold buckle, purse snaps and mounts for

lyres and harps have been found in royal burials at Sutton Hoo and Taplow (Alcock 2003: 298).

The rich interlaced patterns found on insular brooches are matched in quality and workmanship by other types of objects understood to be entirely religious in character, namely reliquaries such as the Monymusk reliquary, dated to the 8th century AD (Alcock 2003:328-329) and illuminated gospels (Alcock 2003: 337-352). These illuminated scriptures were written between the 7th and 9th centuries AD (i.e. 650 AD and 825 AD) (Alcock 2003: 337). The fairly large body of work which has survived to the present day suggests a prolific output by scribes and painters which is only matched by the output of metalworkers (Alcock 2003: 337).

The prime purpose of the gospels is to preserve the word of God (Alcock 2003: 359) and viewed in this context the ornamentation applied to the illuminated scriptures can be seen as auxiliary to the Word. That words and interlace are relationally similar can be witnessed in the manner in which they are handled in the context of insular scriptures. The initial letters of gospel text are often knotted in different ways. Sometimes the bands from which the letters are made are in-filled with interlacements of knots such as folio 124 of the Book of Kells, as well as extenuated to end in tendrils tied into knotted forms (Alcock 2003: 352, 353; Nordenfalk 1982: 13, 14). At times the elaborate ornamentation is expanded to infill the letters as well as the spaces between the letters causing the text to be almost illegible, such as folio 34 of The Book of Kells (Alcock 2003: 360; Nordenfalk 1982: 117,119), or folio 2 of St. Mark's Gospel, where the interlacements and scrollwork fuse the letters together (Alcock 2003: 339).

In tracing the roots of this decorative style back in time one finds that it originates in metalwork patronized by a heroic warrior aristocracy of Celtic and Germanic descent (Alcock 2003: 361). Yet given the warlike reputation of the class of peoples who patronized this decorative art form in early Christian times, it has been noted that the greater number of objects on which the interlaced knots appear are not, as expected, on militaria such as sword hilts, scabbards, harness gear or shields (Alcock 2003: 326). Instead the type of object on which the knotted interlace appears comprises personal ornaments and Christian religious objects. Further, researchers have noted the similarity in form and style between the knotted interlace patterns on personal ornaments and those on early Christian religious objects such

as illuminated scriptural manuscripts and reliquaries (Alcock 2003: 328, 343). Hence the knotted and interlaced animals which characterize some of the Hiberno-Saxon scriptural decoration closely match those decorating the treasures from the Anglo-Saxon royal burial at Sutton Hoo, Suffolk (Lloyd and Laing 1992: 153-155). This leads to the question as to why a style of decoration found on objects used by kings and nobles is also found on Christian religious objects. To answer this requires an investigation into the associations between interlace design and Christian imagery on one hand and interlace design and early British kingship on the other.

Nordenfalk writes that the glorification of the incarnation initials (i.e. XPI) a monogram denoting Christ's sacred name in *The Book of Lindisfarne*, *The Book of St. Chad* and *The Book of Kells* (Nordenfalk 1982: 67, 77, 117), by means of elaborate interlacings of knots and other design elements is understood as connected to genealogy. The high esteem that Celts and Anglo-Saxons had for lineage is projected onto Christ, whose own aristocratic or royal heritage is being alluded to through the deployment of increasingly elaborate ornamentation (Nordenfalk 1982: 68). That a style of decoration associated with Celtic and Anglo-Saxon aristocratic lineage should be employed in the context of biblical scriptures (Alcock 2003: 343, 361) can be seen as natural progression when one considers Christ's own royal lineage and also that the lives of various kings are charted in the bible. Regarding biblical kings, Alcock writes that the concept of divine kingship amongst the early British Christian kings was exemplified by King David, a biblical king and warrior (Alcock 2003: 229). The David theme appears frequently on such insular objects as decorated manuscripts and sculpture (Alcock 2003: 300).

Pictures based on King David's life appear on the side of an insular stone monument, a royal sarcophagus believed to have held the body of a Scottish king. The sarcophagus is rich in interlace knot designs which infill the arms of a cross on one end panel, whilst on a corner slab knotted interlace surround a double cross (Alcock 2003: 389-390). Other forms of zoomorphic interlace are created from the intertwined and knotted limbs of serpent-like monsters (Alcock 2003: 389). This royal tomb was believed by some scholars to have had a sloped lid like a reliquary (Alcock 2003: 389). It had once stood by a church altar where it would have been the object of processions (Alcock 2003: 229). Another sculptural monument depicting David imagery and which is also associated with a British king is the Dupplin cross. The Dupplin cross bears an inscription which although in a poor state of

preservation can be read in part. The readable part of the inscription contains the name Custantin Filius Fircus, a Pictish king who had lived between AD 789 and AD 820 (Alcock 2003: 231-232). This monumental stone cross is rich in knotted interlace as well as other designs and boasts five carved panels. The panels are understood to be pictorial statements of divine kingship and military might (Alcock 2003: 232). And similar to the sepulchre monument these statements of divine kingship are conveyed by means of images relating to David's life (Alcock 2003: 232). It would seem that the depiction of King David's life by early British Christian Kings in the form of scenes sculpted onto their monuments added to their own prestige through appropriation of David and his history, not to mention his sacral lineage.

David imagery also appears within the illuminated pages of insular scriptures. On folio 81v of the Durham Cassiodorus king David appears on his throne (Nordenfalk 1982: 84, 85; Alcock 2003: 300). The throne is high backed and built of slats fixed to side posts ending in dog's heads. The design of the throne, and the harp on which David plays, is decidedly British in style and appearance. The harp is of the kind documented in the Sutton Hoo ship burial, whilst the throne is decorated with typically insular designs composed of interlacements of knots (Nordenfalk 1982: 84, 85). The two dogs' heads emerging from the side posts of the throne have gaping mouths from which interlacements emerge (Nordenfalk 1982: 84, 85). A similar throne decorated with interlaced knots appears on folio 9v of The Canterbury Codex Aureus whilst yet another made from animal forms with interlaced tongues and tails appears in the Gospel of Saint Chad (Nordenfalk 1982: 102, 103, 78, 79). Based on the popularity of David imagery depicted on insular objects it would appear that insular artists did not just copy well known Christian images but rather selectively chose those images with embedded story lines which best reflected their own concepts (Alcock 2003: 301) or cultural affinities.

That a pre-Christian style of decoration associated with aristocratic lineage should later be employed in the context of scriptural manuscripts is not just on account of the royal bloodlines charted in the scriptures, but also because it was on the basis of royal patronage that Christianity spread through both Anglo-Saxon England as well as Scandinavia (Sanmark 2003: 551-552). Christianity's spread was along pre-existent lines or pathways comprising 'bonds of loyalty that tied underkings to their' overkings (Sanmark 2003: 551-552). Christianity was first a religion of the aristocracy and only later did it filter down to the wider

population. Rulers made binding their ties of loyalty with underlords, through the offering of valuable benefits or advantages (Sanmark 2003: 551-554).

To convert to Christianity was a sign of loyalty to one's king, and was well rewarded. The rewards or advantages were gifts circulated as part of a system of gift-giving — a means of securing and maintaining power in a loyalty system connected to the old religion and which had nothing to do with Christian teachings (Sanmark 2003: 551-555). That the gold and silver bejeweled insular style personal ornaments were part of this gift-giving system is proposed by Alcock (2003: 309). Even the Christian objects such as the illuminated gospels and reliquaries were in different ways integrated into this system (Alcock 2003: 308-309). The giving and receiving of valuable gifts as part of a social system aimed at creating and maintaining alliances between kings and nobles is also believed to have existed between pontiffs such as popes who were also known to distribute icons and liturgical objects to kings (Alcock 2003: 299).

Based on the above evidence it would seem that valuable objects decorated with knotted interlacements were used to establish binding social relationships between kings, underkings, nobles and churchmen (who were themselves in many cases of noble families) (Alcock 2003: 343). The picture is of a hugely social network of alliances negotiated between a certain social group by means of material markers in the form of high value gifts. That the knotted interlacements on the objects distributed as gifts, were analogical to the binding relationships being established is possible. However the close association of knot interlacements with writing in the context of insular scriptures alternatively suggests the close association of interlace with words. Nordenfalk touches on this association but seems to suggest that it has to do with lineage. A similar conclusion to Nordenfalk's (i.e. that the interlacements of knots are associated with aristocratic lineage) can be drawn on the basis of associations between metalwork objects decorated with interlacements of knots and secular royal burials (i.e. Sutton Hoo and Taplow), as well the association of interlacements of knots with stone monuments dedicated to British kings. Further the appearance of interlacements of knots applied as decoration to thrones in the context of insular scriptural imagery also suggests connections between interlace and royal heritage

Summary

The examples of Egyptian knots (i.e. the unification image and the *ankh* dish) as well as the examples of knot designs in British insular art suggest that knots were metaphors used to convey or negotiate complex ideas to do with kingship. However, based on the uses of knots by different cultures as outlined in the previous sections (i.e. marriage, religion etc), I realize that, like Tilley's core symbol, knots tend to have multiple values. Exemplifying this multiplicity of meanings is the Egyptian knot used in the 'unite' image (i.e. in the context of kingship) which articulates concepts to do with unity and imprisonment or restriction. This warns against a too hasty interpretation of knots or knot imagery amongst the Celts and Saxons in terms of a single value or meaning. The consistency in the use of knots amongst different cultures as core symbols with a diverse range of meanings underscores the need to be open to the possibility that amongst the Celts and Saxons, knots may also have had multiple meanings and may have also referenced more than one cultural domain. And as mentioned in the section on knots and speech, interlacements of knots on insular objects were believed to have been protective and as such worked in comparable ways to an amulet. The value of knots in the context of their relationships to talismanic symbols such as the cross in insular art is an instance of just one of the many possible meanings which the knot may have had amongst Celts and Anglo-Saxons.

Further, Sanmark's description (see above) of the social relationships between early British Christian kings, their god and their nobles, uses terms which are based on analogies to knotting and binding. The language and social relationships referred to by Sanmark replicate some of those already discussed in previous sections where real knots are deployed as material metaphors for the binding relationships to which they become analogous. Having realized that language is an important clue not just to the presence of knots but also to their values, makes an analysis of the texts that accompanied Celtic and Saxon knotted interlace patterns an important avenue of investigation. However although insular scriptural texts and their relationship to interlace ornament in the context of kingship has been examined, I am unaware of any other analyses having been carried out such as the relationships between texts on insular cross monuments and interlace design in the context of kingship.

3.16 Knots, Lineal Ties and Inheritance in Scandinavia and Britain

Scandinavia

Examples of representations of knots (Graslund 2003: 490; Lager 2003: 499; Sawyer 2000, 27, 31, 32, 54, 61, 75, 127, 159) appearing in association with writing come from Scandinavia (i.e. Norway, Denmark and Sweden). In Christianized Viking Age Scandinavia, depictions of knots on tomb stones (i.e. known as rune stones) are shown as bands infilled with runes. These stelae appear during the conversion period of the tenth and eleventh centuries (Sawyer 2000: 2-3). The tradition in Scandinavia of inscribing the bands (i.e. from which the knots are composed) with writing is believed to have instigated a similar tradition in Britain. The inscribing of True-Love Knots in England and Scotland with written promises is believed to have originated in Scandinavia (van de Griend 1998: 403-405). Brought over with the Danish invasion, True-Love Knots are considered to be directly related to the custom in Scandinavia of inscribing images of knots with runes (van de Griend 1998: 403-405). By directly writing words along the knotted ribbon from which the knot is tied, the power of the spoken word is visually bound into the knot, transforming it at one and the same time into both a word knot and an early form of documentary evidence. The visual encasement of runes within interlaced bands (sometimes with animal attributes) makes clear the association between the concept of binding and text. Interestingly one of the rune monuments from Sweden indicates that the intentions of the runes are 'to bind'. The text reads 'Äsbjörn carved the stone, coloured as a memorial, he bound it with runes. Gylla raised it after Gerbjörn, her husband, and Gudfrid after his father. He was a yeoman best in Kil. Let him read who can' (Jansson 1987: 156).

The knotted beasts incised onto rune stones are reminiscent of those on insular illuminated gospels as well as on the metalwork and sculpture in Britain during the conversion period. Although these Scandinavian monuments were raised to the dead, they also served important social functions for the living (Sawyer 2000: 2). Unlike grave monuments which only mention the deceased, these monuments always name the sponsors of the monument (Sawyer 2000: 2). The value of the living's relationship to the dead is of prime importance and this is indicated by the fact that the name/s of the next of kin and the exact nature of their lineal ties to the deceased are always mentioned prior to the name of the deceased him/herself (Sawyer 2000: 2).

It is through studying these inscriptions that scholars have begun to gain insight into the religious, social and political life of the late Viking Age people (Sawyer 2000: 2-3). The formulaic and repetitive nature (Sawyer 2000: 10, 11, 20) of the inscriptions is in keeping with the type of language already discussed which accompanies knot-tying such as oaths, curses, incantations. And in common with these formalized types of speech which often overlap (i.e. the Hebrew incantation texts), some of the inscriptions combine aspects of both magical (Sawyer 2000: 128) and Christian invocation (Moltke 1981: 240; Sawyer 2000: 140). The content of the Scandinavian inscriptions is uniform and the language used is always Old Scandinavian (Sawyer 2000: 2-3). The inscriptions are conventionalized into a highly formulaic speech pattern which went as follows: 'X raised this stone in memory of Y' (Sawyer 2000: 8-10). Appearing first in Denmark this type of monument quickly spread to parts of Sweden, Norway and the British Isles (Sawyer 2000: 10). The writings on these monuments not only publicize the exact nature of the relationship between sponsor and deceased but many give additional details such as the title of the deceased (Sawyer 2000: 10).

The title of the deceased is given as *thegn* and *dreng* understood to mean that the person was a member of the king's nobility and bodyguard. However the existence in eleventh century England of a local elite known as *thegns* and 'knights' who were landowning, exercised control over the people and were involved in local and national governance has given greater insight into the roles of the Scandinavian lords bearing the title *thegn* and *dreng* (Sawyer 2000: 103-106). The use of the same title in England and Scandinavia is believed to reflect the fact that English influence in Scandinavia was very strong at that time as a result of the links between England and such Scandinavian Kings as Sven Forkbeard and Knut (Sawyer 2000: 103-106). It is believed that similar to the situation in England, the title *thegn* refers to one who served a superior, normally a king (Sawyer 2000: 104).

The runic inscriptions (conceptually and graphically tied into knots) convey messages which tell of bridges built for the souls of the dead. The building of bridges by surviving family members was a form of payment made to the church for benefits received in the form of intercession on behalf of the soul of the dead person or for absolution (Graslund 2003: 490-491). As such these rune knots or binding runes were a form of documentary evidence testifying to an exchange between the Church and a noble family, whereby the Church promised to pray for the soul of the deceased in return for certain benefits. Rune stones were

monuments raised by aristocrats wealthy enough to both pay for the building of bridges and the carving of the stones (Welinder 2003: 522-523). These agreements between Church and a noble family would seem to fall in the area of legal arrangement.

The interactions between church and nobles suggest that relationships with God were not just of the spirit but also involved very earthy agreements and exchanges. The building of bridges was just one form of gift-giving to the Church, of which land and other valuables were also customary (Sawyer 2000: 134-139). That spirituality was not the mainstay or single source of the interactions between Church and noble families can be gleaned from the fact that these stones also worked to establish inheritance rights sanctioned by the Church and its protector, the king himself. As such they would have been an early form of legal document (Sawyer 2000: 47).

It appears that the sponsors of these monuments were the closest surviving kin to the deceased. As would be expected, these surviving kin took every care in documenting the exact nature of their relationship to the deceased in order to establish their rights of inheritance (Sawyer 2000: 47-48). The knowledge that kings were both protectors and propagators of the Church and its teachings in Scandinavia (i.e. as in England) has implications for the interpretation of the Church's role in the social relationships which surrounded this rune stone monument system (Sawyer 2000: 20-23). Understanding the nature of the Church's authority as a combination of the king's and God's authority allows one to make sense of why surviving kin should wish to negotiate inheritance rights through the Church. The Church imputes the authority of both God and king to the inheritance claims allowing these to be established as indisputable. Also when one considers the church's role in witnessing and officiating marriages as well as witnessing and legitimizing the children born of these marriages one can begin to appreciate its role in the inheritance claims made by lawful offspring of nobles, kings and landed gentry.

Britain

As in Scandinavia, stone monuments bearing knotted designs (Kermode 1907: 24, 26, 27, 35, 62, 63; Cumming 1857: 9, 16, 27, 36) together with inscriptions also existed in Britain. These stone monuments generally took the form of crosses or rectangular stelae such as those on the Isle of Man onto which were carved in relief various forms of the cross symbol. From the late 7th century onwards (Alcock 2003: 377) examples of insular-style sculpted stone

crosses and stone stelae appear across the British landscape (Alcock 2003: 382-384). Rosemary Cramp mentions that the style and iconography of these stone crosses are related to sculpture in English Monastic churches and to manuscripts produced in English monastic scriptoria (Cramp 1992: 55). Designs comprising elongated ribbon-like limbs and extensions of animals together with intersecting cords found on these monuments 'form interlace patterns of knots' (Cramp 1992: 213) and are reminiscent of those on both metalwork and illuminated scriptures (Alcock 2003: 385-388). The knotted animal forms are seen to reflect Scandinavian influences which by 900 AD are represented by Scandinavian colonies in Britain and eventually the establishment of Scandinavian Kings at York (Cramp 1992: 228). Many of these cross monuments have been found on the Isle of Man and have received considerable attention by researchers. The Isle of Man was occupied by Scandinavians from the 9th to the 13th centuries and as a result a number of the legal and organizational institutions on the island were Scandinavian in origin. The division of the land into six shires as well as the Meetings of the Tynwald is seen to reflect Scandinavian influence. The Meeting of the Tynwald was an adaptation of the old Scandinavian Thing, a meeting of chiefs and assembled peoples for the purpose of openly airing issues relating to law and governance (Cumming 1857: 1-3). Like the Scandinavian monuments, those on the Isle of Man commemorate deceased individuals in the form of inscriptions, many of which are runic and adhere to the same formula found in Scandinavia where the sponsor of the monument is first mentioned followed by the deceased as in the formula 'X raised this stone in memory of Y' (Kermode 1907: 89). The nature of the kinship tie in cross monuments is also made clear.

The interlacements of knots found on these cross monuments on the Isle of Man include many examples of plait-work (Kermode 1907: 62). In the context of these monuments the interlacements of knots infilling the space of the crosses or surrounding the crosses resemble both those on manuscripts (Cumming 1857: 9; Alcock 2003: 388) and insular metalwork in the form of jewellery such as the Hunterston Brooch (Kermode 1907: 151).

Based on the similarity in material form and written content between the Scandinavian rune stones and the British cross stones, it could be said that the British cross stones are Scandinavian in inspiration and that, like their Scandinavian counterparts, they functioned as monuments documenting hereditary rights. However as Cummings points out, though very similar to the Scandinavian monuments, the cross monuments in the Isle of Man as elsewhere in Britain are superseded by stone stelae which were also raised to the dead (Cumming 1857:

3, 4). These earlier monuments are referred to as *ogam* stones on account of the inscriptions in *ogam* letters carved into them. Inscriptions in *ogam* characters are the oldest on the Isle of Man and date from the end of the fifth century to the beginning of the sixth century (Kermode 1907: 71). Believed to have originated in South Wales or Ireland in the fourth century (Kermode 1907: 71) they are found on stone monuments which, like the later cross monuments, are considered to have been sepulchral (Kermode 1907: 96). *Ogam* stones of south-west Wales and south-west England contain some of the oldest written records of the Celtic language (Thomas 1994: 6). Like the Scandinavian rune stones, *ogam* stones are commemorative and bear formulaic inscriptions (Thomas 1994: 36, 305) which reproduce the x son of y formula (McManus 1991: 62-63) popular at a later age in Britain and Scandinavia. The mapping of seven of these memorial stones in the Cornish Landscape indicates that they were located on prime agricultural land. These land tracts are mentioned in the Domesday survey as having manorial status indicating that the stones were meaningfully placed (Thomas 1994: 307). The association of the stones with lineal descent as outlined in the inscriptions — which give both the name of the deceased and next of kin, together with their strategic placement in prime lands — would seem to indicate associations between the stones, groups of people and particular tracts of land. The conclusion drawn by Thomas is that these memorials were monuments set up by important leaders of powerful families. They represented a land-exploiting aristocracy who were Christian and who also had in their service literate priests (Thomas 1994: 308).

The conclusion drawn by Thomas as to the function of the stones is not very far removed from those drawn regarding the Scandinavian rune stones. The *ogam* monuments of Cornwall worked to establish certain lands as seats of power for those named on the monuments. The inscriptions in having to do with descent are at one and the same time establishing the rights of a successive generation to the lands and chattels marked by the monument.

That *ogam* inscriptions in stone were used as evidence to title to land is confirmed by their mention as such in Early Irish Law (McManus 1991: 163-166). Further, in Early Irish Saga they are metaphorically referred to as ‘stone pillars of contest, fighters who fasten title’ (McManus 1991: 163-166). The role of *ogam* stones were twofold, as grave markers and as pillar stones, which established the boundaries of clan or family territories (McManus 1991: 165-166).

That the knots and interlaces in the later cross monuments are also associated with inscriptions to do with lineal descent suggest that in Britain, knots and lineal ties are possibly linked. Of course a similar line of argument has already been taken in the previous section on kingship where the interlacement of knots on insular scriptural manuscripts and objects is understood to be related to lineage or aristocratic heritage.

However it is also worth bearing in mind the many examples given in earlier sections in which formulaic types of speech are seen to be binding through analogy with knots. The types of relationships which these cross monuments establish are binding in more ways than one. Not only do the cross monuments speak of lineal ties but possibly also legal and contractual ties to do with inheritance. The relationships alluded to in the monuments may well achieve their binding quality through analogy to the various forms of knots and plait-work.

Summary

That the formulaic inscriptions on Scandinavian rune stones are a kind of legal document related to inheritance rights is well established. The form which the writing takes is always the same; that is, the words are always incorporated as infill within bands which either are tied into recognizable knots or are loosely twisted or bound together. In the case of the Scandinavian rune stones, binding and the knot itself become part and parcel of the format which the writing takes, indicating that these are a single unit. Although the inscriptions on British cross monuments are not visually bound into knots like those on the Scandinavian rune stones, the inscriptions are almost always complemented by the symbol of the cross and knotted interlacements. The interlacements of knots, the symbol of the cross and the inscription reappear so many times that it would seem that these are a meaningful unit. Similar to the Scandinavian rune stones they are a part of a communication format which combines visual signs with writing.

Based on the examples of knots appearing in contexts in which words are conceptually tied into material knots or where knots represent certain types of binding speech such as oaths, promises or speech intended to influence the course of events, it would appear that the inscriptions on stone monuments in Scandinavia and Britain can also to be understood as a formulaic type of speech which, through analogy with knots, becomes binding. Binding in

this instance refers to both lineal ties but possibly also legal and contractual ties to do with inheritance.

Conclusion

The evidence on knots and their uses amongst different cultures at different time periods indicates that knots were powerful tools for negotiating complex ideas. As shown in the examples, knots are conceptual in their application and meaning. Understanding knots as concepts involves recognizing first that knotting is a binding experience. Through binding we both experience and perceive a knot's complex relational and transformational qualities. Simply put, this means that tying a knot is an exercise in cognition. It is no wonder then that knots are deemed good to think with or that they are seen as thought-like. It is no wonder too, that knots were used to negotiate complex ideas within a wide range of cultural domains. Understanding the thought-like quality of the knot is the first step to approaching its meaning in cultural representation.

The patterns and consistencies in association and meanings of knots within different cultures at different time periods suggests that knots (as depicted in cultural media such as dress, sculpture, monuments and so forth) were not just decoration but were items used to convey layered and complex messages. The layered quality of the information conveyed through the deployment of knots can be best understood using Tilley's writings on material metaphors. If we look at the highly abstract concepts given as meanings for the knot (i.e. in the cultural examples of knot use previously covered), such as unity, obstruction, and changes of state, and then we look at the way in which the knot becomes a metaphor for these states, it is evident that the knot is not arbitrarily chosen to represent these states but rather that these states are related to how a knot is and how it works. The reason why we understand the abstract state of unity through the materiality of a knot is because a knot unifies things, it brings things together. The knot materially actualizes the abstract concepts for which it stands. A knot's capacity for conceptual elaboration identifies it as a root metaphor or core symbol. Tilley points out that root metaphors liken many aspects of experience through the material symbol itself. The knot is that material symbol.

The meanings given to knots by different cultures would seem to indicate that certain ideas are particularly well suited to negotiation through the knotting process. These ideas are unity, obstruction and imprisonment, and changes of state. The constant reoccurrence of these ideas

in different cultures at different times suggests that the ideas negotiated through knots and knotting may not be arbitrary. Rather there are a core set of meanings generally associated with knots and these are not infinite. There is an observable pattern to the meanings given to knots by different cultures at different time periods. Furthermore the meanings associated with knots are directly related to how a knot works. Knots both unify and hold fast (i.e. obstruct), whilst in their tying and untying, knots actualize changes of state.

Another noticeable pattern in the use of knots by different cultures at different time periods is the synchronizing of knot-tying with the uttering of formulaic speech. By formulaic, I mean that the speech adheres to a format which is repeated every time a particular type of cultural knot form is used. In almost every example of knot use covered, knots seem to have clear associations with word formulas. This may reflect Gandz's point that knots were used prior to the advent of writing as a mnemonic device for remembering thoughts. However in the examples given, it seems that knots are not associated with all forms and patterns of thought as set out in speech (i.e. language), but in fact are associated with very narrow forms of speech such as oaths, promises, vows and speech intended to influence events such as curses, incantations, spells and so forth. Also it is important to note that although these speech patterns may be separated out into types there is considerable overlap, as exemplified in the Jewish incantation texts. The speech associated with knots is formulaic and repetitive. In the case of the Scandinavian rune stones and Jewish incantation texts, examples of two or more speech types are found together (i.e. legal and magical), suggesting once again formal connections between the different types of speech associated with knot-tying. What this indicates is that knots are not associated with speech per se but are associated with a narrow range of speech forms which tends to be formulaic and repetitive. For instance, both Scandinavian rune stones and *ogam* stones bear formulaic inscriptions which reproduce the x son of y formula. I suggest that there is some sort of homogeneity in the formulaic speech patterns associated with knots in different cultural contexts. I also suggest that this homogeneity has much to do with the fact that the speech forms in question are all binding forms of speech.

To understand how speech accrues the ability to bind, one needs to look at the way in which the binding quality of a knot is transferred to the speech with which it is associated. It is this transference of qualities between domains (i.e. between the material knot and the associated thoughts organized as speech), which transforms the speech into a binding form of speech.

The aim of these binding speeches would seem to be to make clear the intentions behind the original act of tying the knot.

Knots are intentional, and the intentions that are tied into them are those of the person who commissioned the knot or who themselves tied it. On the whole the intentions set out in the speech formulas which accompany knot-tying are all about binding people to each other, or to the gods or to ideas and things. Binding relationships are often the end product or aim of the intentions set out in the speech formulas which accompany the knot-tying process. The transference of binding from knot, to speech, to persons and things, would seem to work through analogies which first originate in the binding property of the material knot itself.

The end product of binding analogies are relationships which in being binding share much in common with those understood as contractual. Contractual relationships are binding relationships, meaning that they are not free or unimpeded relationships. They involve restrictions which are negotiated through formulaic speech forms such as oaths, promises etc.

As already mentioned, binding forms of speech tend to accompany knot-tying. However the association between words and knots involves acts other than recitation and in many of the instances of knot use given, it is the written word associated with knots that is preserved and which serves as evidence of the close association between words and knots. The binding forms of speech, made permanent in writing and talked about in the examples, were no doubt still intended for oral recitation. The transformation of speech formulas into written word formulas has involved the creation of a sub-strata of documentation or evidence connected to knot-tying. Intentionality conveyed through speech alone is hidden whereas intentionality set out in writing begins to take on a public face and a sense of permanency at odds with the nature of the material knot itself which in being tied is subject to also being untied. Knots fixed as images on different media such as stone or metal become permanent as do the intentions with which they are associated.

The Scandinavian practice of inscribing the bands from which knots are tied with writing illustrates the inseparability of the knot and the written word. On the other hand, the term given to a witness in the medieval courtroom, the 'knot tier' or 'nodator', also illustrates the closeness between the knot and the spoken word. In ancient Egypt the 'unification' image presents the idea of 'unite' as a multilayered concept and uses pictorial images and hieroglyphs to convey subtleties in meaning which words alone could not effect. The

hieroglyph for 'unite' or *semaa* represents a trachea and lungs. It is around the pole-like trachea that the Reef Knot is tied (Wendrich 1998: 65). In this instance the hieroglyph for 'unite' appears together with the Reef Knot which actualizes the concept of unity. The association between hieroglyph and knot in this example makes clear the close partnership between written words and knots.

Knots are clearly informational in that they work to deliver messages and it is no surprise that we find them integrated into various information systems used by different cultures. Where knots are integrated into information systems they are given values on a par with those we find in our own numerical and alphabetical systems. The knot was used by the Japanese and Quechua alike to quantify and measure. Amongst the Inca and the Hebrews knots were integrated into writing systems which had much in common with our own alphabetical system.

Uses of Knots

In the same way that there are discernible patterns in the meanings and uses of knots there are also discernible patterns in the manner in which knots are utilized. In the context of marriage, knots are worn as items of dress by either bride or groom; in India, the clothing of bride and groom amongst all castes are tied together as part of wedding ritual. The display of marriage knots would seem to be closely associated with the bodies of the bride and groom. In the context of marriage, knots are active in that they are tied as part of the rituals attending marriage and work to express a number of concepts intrinsic to the married state. The life of marriage knots often seems to be limited to the duration of the wedding ceremony, after which the knot may be untied.

Magical knots such as amulets, similar to marriage knots, are also worn on the body. However amulets tend to be worn primarily in the form of jewellery, particularly around the neck, rather than being part of clothing. Also, whereas in marriage, a knot may be untied after the ceremony, knot amulets are more akin to permanent fixtures. This is because their protective efficacy is sought both in life and death and therefore an amulet will be found amongst the living and dead alike. And unlike marriage knots, which are briefly displayed within the clothing of the bride and groom only, knots such as amulets are often made of permanent materials such as stone or metal and are worn by a wide range of people for a considerable duration and are therefore likely to be more visible in images depicted in

cultural media such as murals, monumental art or ceramics as well as more likely to survive in the archaeological record.

The examples given of knots appearing in formal religious contexts indicate that these, like marriage knots, are integrated into the clothing of individuals. Amongst the Franciscans the Triple Overhand Knot was tied into the cords of girdles called cingula, whilst knights belonging to the Order of the Holy Ghost in Naples wore knots on their chests. However, whereas the marriage knot is noticeably limited to the persons of the bride and groom, religious knots worn by religious and secular orders were shared by a group of people. The wearing of a knot by people affiliated through belief or professed faith establishes group membership which is further strengthened by the same knot appearing on buildings used by group members. Group affiliation and membership are articulated through knots displayed on the person of members as well as on buildings or, as in the case of Amadeus VI of Savoy, the cloths of servants and the covers of horses were decorated with the Figure of Eight Knot. The display of knots by a group of people both on their person and on associated buildings and objects would seem to work to establish social cohesion through the material marker of the knot. However, the distribution of a particular knot type amongst people, buildings and objects not only indicates group cohesion but also that the group in question is fairly well organized. It is this web of relationships which is missing from the marriage knot and the amulet knot, both of which work to establish personal relations between people or between people and their deities rather than group relations. Where depictions of knots (i.e. in the context of material culture) are shown distributed between objects and things, there is a strong possibility that we are dealing with a highly organized and definable social group of people.

In terms of organization and social grouping, knots found in the context of kingship could be seen as a developed form of those found in the context of religion. And in fact there is considerable overlap between the religious use of knots and the use of knots in the context of kingship. Knots found in the context of kingship like those in religious contexts are distributed between persons and things. Therefore in Ancient Egypt and Britain knots were displayed on objects such as thrones or monuments such as tombs and stelae. However in Egypt the knot is particularly associated with the seat of power, the throne. Because I have found no instances in which the ancient Egyptian 'unite' image with Reef Knot is displayed in the context of the clothing or jewellery on the person of the king, it would seem that in

Egypt the 'unite' image with knot is not personally connected to the body of the king. This is in contrast to the appearance of knots in the context of British Kingship. Knots in the context of British kingship were displayed not only on the person of the king but on the person of nobles or elites associated with king. Knots conforming to a type of decoration known as 'Hyberno Saxon interlace' appear on brooches worn by kings and nobles. Knot designs also appear on personal monuments such as stone crosses associated with an elite core. The same insular knot designs also appear on religious items such as illuminated gospels and reliquaries used by kings and distributed as gifts between kings, nobles and clergy. The appearance of knots on objects shared by a group of elite individuals in Britain, points to the highly socialized function of the knot and its importance in identifying group participation and affiliation. This particular sort of social grouping has much in common with that mentioned in connection with religious knots.

In contrast, in ancient Egypt, the knot in the context of the 'unite' image is displayed on impersonal objects associated with governance and centralization of the kingdom. This particular knot does not appear on personal objects shared amongst a group but rather is only to be found on those items which function as symbols of kingship. The differences in the mobilization of knots in ancient Egypt and ancient Britain in the context of kingship suggest that kingship as a social institution was organized differently at different time periods or in different cultures. Whereas in Egypt the knot established the unity of the kingdom, in Britain, knots in the form of insular-style decoration established the concept of kingship as a shared enterprise negotiated through complex relationships between large numbers of people. The use of knots in the context of British kingship is reminiscent of the use of knots by religious and secular orders in Europe. The similarities may well reflect a particular type of social order present in both the institutions of Christian religion and early British kingship.

Chapter Four: Diagnosing the ‘Mat’ Motif as ‘Knot’

In this chapter I not only show that the ‘mat motif’ is a knot but also illustrate that knots are widely represented in Maya iconography. Given the arguments made in Chapter Three on the metaphorical, symbolic and cognitive significance of knots, their representation in Maya iconography needs to be addressed. Therefore in this chapter I provide information on how knots can be identified and also make a first attempt to classify some of the knots based on existing compendia. In addition I examine some of the defining features of the knots designated as ‘mat symbols’ by Robicsek. These features help in finding and identifying these knots in knotting compendia, as well as help to categorize them as belonging to, or as representing members of a particular group of knots.

Materials such as rope and cord from which a knot is tied constitute the primary means for defining knotting technology. This is because the single most important requirement for tying a knot is a length of binding material. A length of cord or rope is a deceptively simple entity; yet what one does with it, or turns it into (i.e. its manipulation) transforms it into something much more complex. This concept of complexity (addressed in Chapter Three) in many ways defines a ‘knot’ as a thing with powerful cognitive properties. The transformation process or the tying process involves not just the manipulation of rope or cord (the material from which knots are made) but also involves the recall of stored knowledge (i.e. recourse to a sort of knot memory bank), and the skill and the ability to visualize and replicate, through the tying process, the structure of the knot in question. The contribution of the mind in the process of tying knots, which I explore in Chapter Three, is not something addressed in knotting compendia yet represents an important component of knotting technology. Although I do not mention the role of the mind in the information presented in this chapter, I acknowledge that cognition is a constituent part of the technology involved in making a knot.

4.1 Rope - The Material Construction of Knots

Ashley points out that knotting has been part of the everyday lives of the earliest people; knots were used to fasten ‘huts, traps, canoes, and to harness with knotted thongs and withes’ (Ashley 1993: 1). In the recent past, knotting has been the prerogative of sailors. Because a

sailor's craft is entirely dependent on rope, a familiarity with knots is vital. The diverse requirements for knots aboard ship mean 'that the number of knots devised by the sailor is probably ten times greater than the sum of all other handicrafts combined' (Ashley 1993: 1). This quote by Ashley hints at the extent of stored knowledge on knots and tying processes, which a sailor in times past would have been required to possess and recall.

Rope is described as the most remarkable product known to mankind; comprising just a handful of intertwined fibers, it is a deceptively simple thing, and even after thousands of years its basic construction remains unchanged (Smith 1993: 1). There 'are three component parts of rope, fibers twisted righthanded into yarns, yarns twisted lefthanded into strands, and strands twisted or laid to the right. Each twist is made in the opposite direction to the previous twist. That is why rope holds its form, and it is the secret of its strength' (Smith 1993: 1).

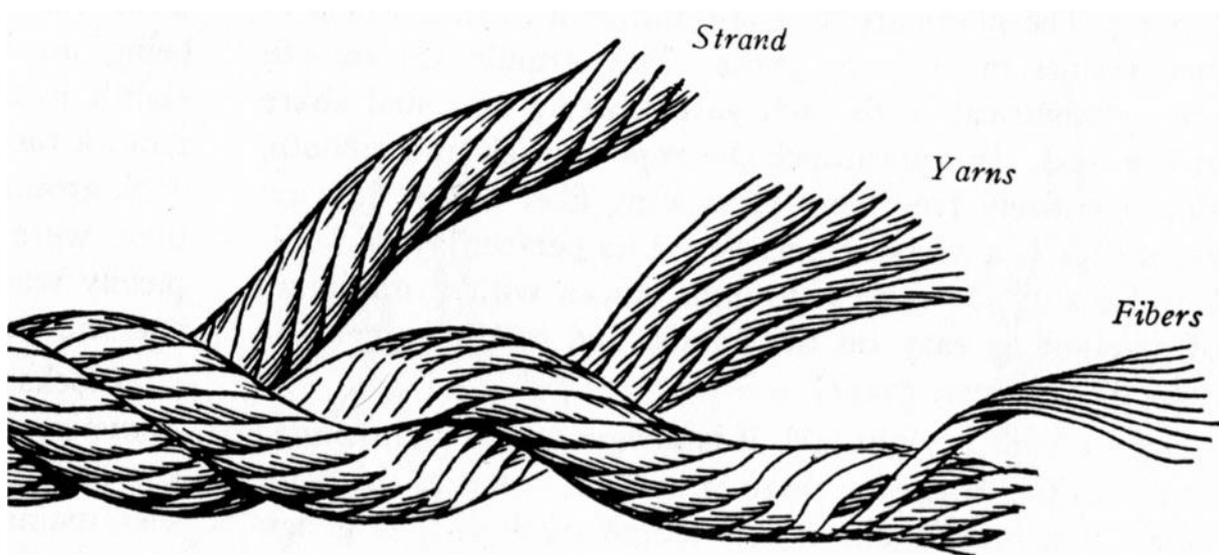


Fig. 4.1: Illustration showing what a rope comprises (after Smith 1993: 1).

Rope is usually composed of three strands which spiral around each other in a clockwise direction (referred to as right laid) (see above). Each strand is composed of seven individual yarns which are each twisted in a counterclockwise direction (left laid). Each yarn is composed of fibres twisted in a clockwise direction (right laid) (Smith 1993: 1). Smith's proposal that the construction of rope has changed little over millennia is supported by a rope find from the Tura Caves on the banks of the Nile dated to 500 B.C., which has a three-strand rope structure similar to the modern three-strand rope (McKenna et al. 2004: 1).

In contrast to the production of cloth, in which a loom is the mechanism behind manufacture, the tying of a knot requires nothing more than binding material, which could be forest vines, leather thongs, cords made from diverse fibres, or rope. For knot tiers, a rope (or any other type of binding material) has its different parts with different functions. Therefore Verrill describes the Standing Part of the rope as ‘the principal portion or longest part of the rope: the Bight is the part curved or bent while working or handling; while the End is that part used in forming the knot or hitch’ (Verrill 2006: 17-18) . He also points out that all knots are first begun by making loops or rings (Verrill 2006: 19).

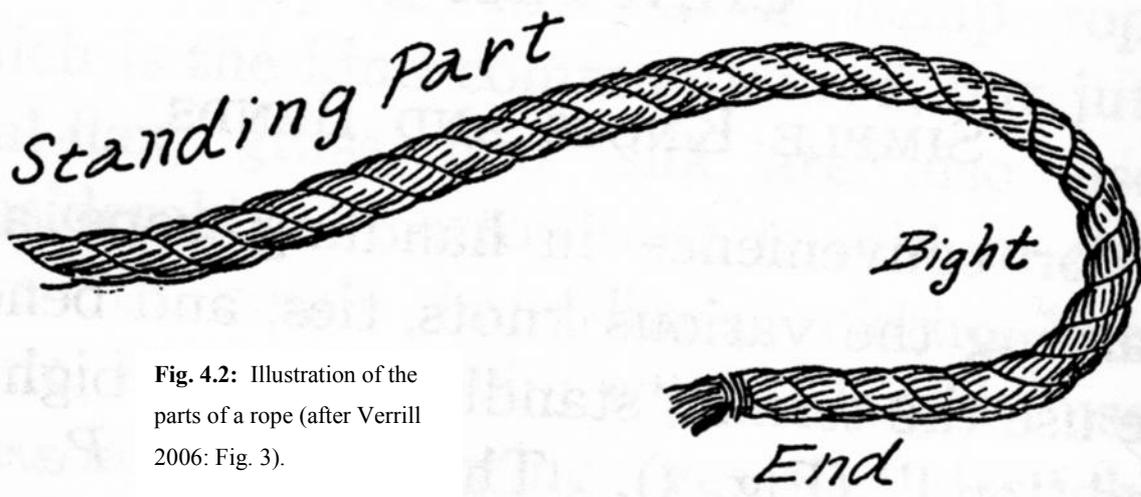


Fig. 4.2: Illustration of the parts of a rope (after Verrill 2006: Fig. 3).

4.2 Binding Materials at Tikal

The ropes shown binding altars at Tikal resemble the three-strand rope discussed above. For instance the twisted structure of the rope binding the edge of the upper face of Tikal Column 1 (Fig. 4.3) resembles Smith’s illustration of a three strand rope. It is possible that the rope binding the edge of Tikal Column Altar 1 was made from henequen (hemp). Tozzer notes that the Maya of the southern lowlands grew henequen (hemp) and made cordage from the fibres of this plant (Tozzer 1941: 89; Chase et al. 2008: 128). A single impression of a rope from a Tikal burial indicates that it was a three-ply rope (three strands plied together), with the rope strands measuring 1.3 and 1.4 cm in thickness and having a total rope width of about 2.5 cm (Moholy-Nagy 2003: 91). Thirteen impressions of string from Tikal, eleven of which came from the flat tops and bases of lidded burial cache vessels, indicate a two-ply string (Moholy-Nagy 2003: 91).



Fig. 4.3: a. Photograph of Tikal Column Altar 1 showing the top of the altar bound by a rope (after Jones and Satterthwaite 1982: fig. 110). b. Illustration of a three strand rope (adapted from Smith 1993: 1).

The knots identified by Robicsek as mat symbols are not tied from rope but appear to be constructed from some other form of binding material. Whereas the twisted and ribbed structure of rope makes it fairly easy to recognize and identify in representation (see above), the absence of these visual markers in the depictions of the binding material from which the knot/mat symbol is tied at Tikal means that the material from which these knots are constructed is difficult to identify or categorize. At Tikal, the cord from which the knot/mat symbol is tied is shown as smooth and is sometimes distinguished by a line down the middle. Trying to determine which of the multitude of potential fibres or materials the cord from which the knot/mat symbols at Tikal were tied would, I think, not lead to anything more than speculation. Stuart describes the use of strips of cloth to bind stones (Stuart 1996: 158, Fig.12) but what he terms ‘cloth strips’ are represented in similar fashion to the material from which the Tikal knots are tied. I propose that the material is more properly ‘cord’ and continue to refer to this material as cord.

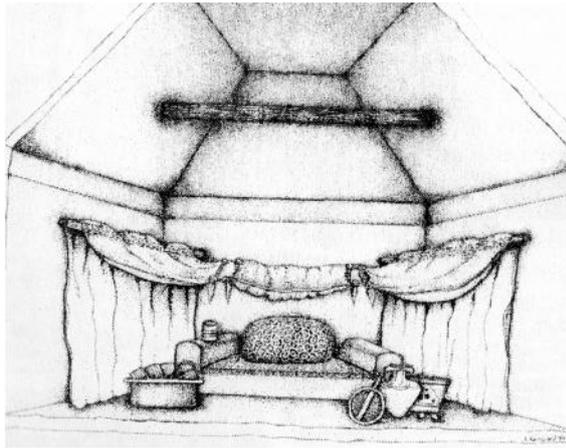
4.3 Identifying a Knot

An important identifying feature of a knot has to do with technology -- in other words, the knot's construction from a cord or cords. Unlike the production of cloth, in which thousands of threads are manipulated, knots are constructed from one or more cords. The cords left over from the tying process are visible at the corners of knots and act to identify the item as a knot. Some knots can be extended width-wise and lengthwise to produce items with the superficial appearance of cloth, yet the cords left over from the tying process persist in identifying the item as a knot rather than a textile. In order to address the critical question of the resemblance of certain knots to textiles (as is the case with some of the Tikal knots identified by Robicsek as mat symbols), I will clarify the differences between knotting and weaving.

Ancient Maya Weaving Technology

An obvious difference between weaving and knotting is the purpose of the respective craft. The purpose or intended result of weaving is the production of cloth or fabric. Cloth, being a length or expanse of woven material, functions to cover, wrap or envelop (Onions 1988: 352), and is therefore depicted in ancient Maya representation (vase painting, monumental sculpture, codices and ceramic sculpture) as a wrapping for ritual objects (i.e. presented as wrapped bundles), or as an item of clothing for wrapping, enveloping and covering the body (Holsbeke 2003: 23-29; Looper and Tolles 2000: 3-12). Textiles also appear in throne scenes as part of the coverings for fixed furniture and as drapes and hangings around the throne room or as part of the adornment and screening of architectural façades (Harrison 2001: 86. Fig.3.7; Looper and Tolles 2000: 6).

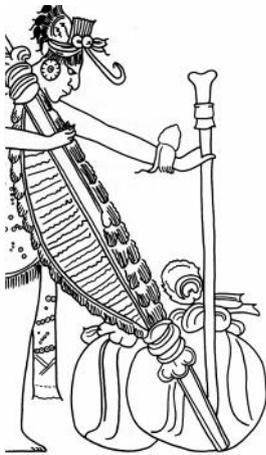
To produce a fabric with a sufficient surface area to function as a hanging, covering or wrapping requires a technology which is specifically designed to manipulate and process thousands of threads. Amongst the ancient Maya this technology consisted of weaving on the backstrap loom (Looper and Tolles 2000: 6; Altman and West 1992: 28-30; Holsbeke 2003: 29-30).



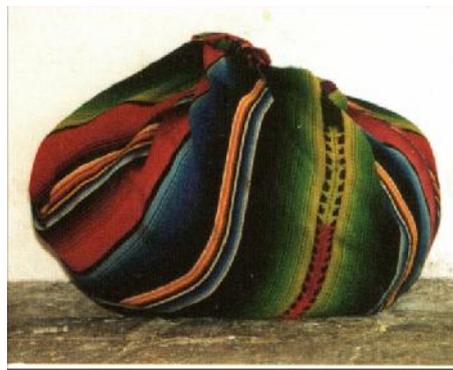
a.



b.



c.



d.

Fig. 4.4: a. Reconstruction drawing of a throne room showing draped hangings around the throne (after Harrison 2001: fig.3.7). b. Roll-out of a Late Classic polychrome vase showing textiles offered as tribute (after Looper and Tolles 2000: fig.11). c. Bundled textile from a tribute scene depicted on a polychrome vessel (after Looper and Tolles 2000: fig. 12). d. A modern day textile bundle (after Holsbeke 2003: fig. 1.10).

Prior to mounting the threads on the loom, cotton had to be spun into thread, and threads had to be stretched out on a warping board. The process of stretching the threads, referred to as the warp, on a warping board is depicted in the Madrid Codex. Page 102 of the Madrid Codex shows a Goddess unwinding thread from a spindle and stretching it between the vertical projecting posts of a warping board. The accompanying text reads ‘her warping board is strung’ (Looper and Tolles 2000: 6, 14-15). Therefore the manufacturing of cloth in ancient Mesoamerica involved a number of processes which included the spinning of thread

on a spindle weighted down by a spindle whorl (Sharer and Traxler 2006: 51), the stretching of the thread on a warping board followed by the mounting of the thread prior to weaving on a loom. These processes are absent from knotting for which the simple requirement is the production of rope.



Fig. 4.5: Page 102c. from the Madrid Codex showing an aged Goddess unwinding thread from a spindle and stretching it between the posts of a warping board (after Looper and Tolles 2000: fig. 15.c).

Late Classic figurines from Jaina depict women weaving on backstrap looms, which are still used by contemporary Maya women (Looper and Tolles 2000: 6-7; Holsbeke 2003: 29; Altman and West 1992: 28). The backstrap loom is a simple device composed of tensioned warp threads attached at one end to a tree or fixed post and at the other to a belt worn around the weaver's waist. Into the warp are introduced the threads of the weft (Holsbeke 2003: 29; Altman and West 1992: 28).

The tying of a knot from one or more cords, even a complex knot which has been extended, will clearly not cover the surface area which the weaving of thousands of threads has specifically been designed to do. In other words, one cannot substitute knotting for weaving because knots are not designed to cover surface area; rather they are designed to attach/unite/hold fast/bind or tie things together. The different uses to which textiles and knots are put, as well the differences in manufacture, set weaving and knotting apart as different technologies.



Fig. 4.6: Photograph of a Maya woman weaving on a backstrap loom (after Holsbeke 2003: fig. 1.22).

The Woven Mat

Robicsek repeatedly describes the mat as a woven item (Robicsek 1975: 17, 20, 22).

Preserved fragments of ancient Maya mats from Tikal are described by Moholy-Nagy as having edges that were finished by ‘folding back the strands, weaving them back through the border, and then cutting off the excess. This is the same technique observed on the mats purchased in Guatemala City for use at Tikal in the 1960s (Moholy-Nagy 2003: 91).

Moholy-Nagy also notes that comparisons between ancient Maya mat impressions and those of modern Maya mats indicate that most of the ancient Maya mats examples were woven from split thatch palm (Moholy-Nagy 2003: 91). A drawing of Tikal burial 196 shows skeletal remains laid out on a partially disintegrated mat (Cajas et al. 2009: fig.11) of a size akin to those woven today and pictured and described by Robicsek as functioning as bedding, table cover, curtains and so forth (Robicsek 1975: fig.4, 20-24). Robicsek describes modern mats as constructed from palm-leaves, reeds, rushes and certain grasses (Robicsek 1975: 22). Although the majority of the mat impressions from Tikal suggest manufacture from palm-leaves, some impressions point to grass, reeds and possibly corn husks (Moholy-Nagy 2003: 91).

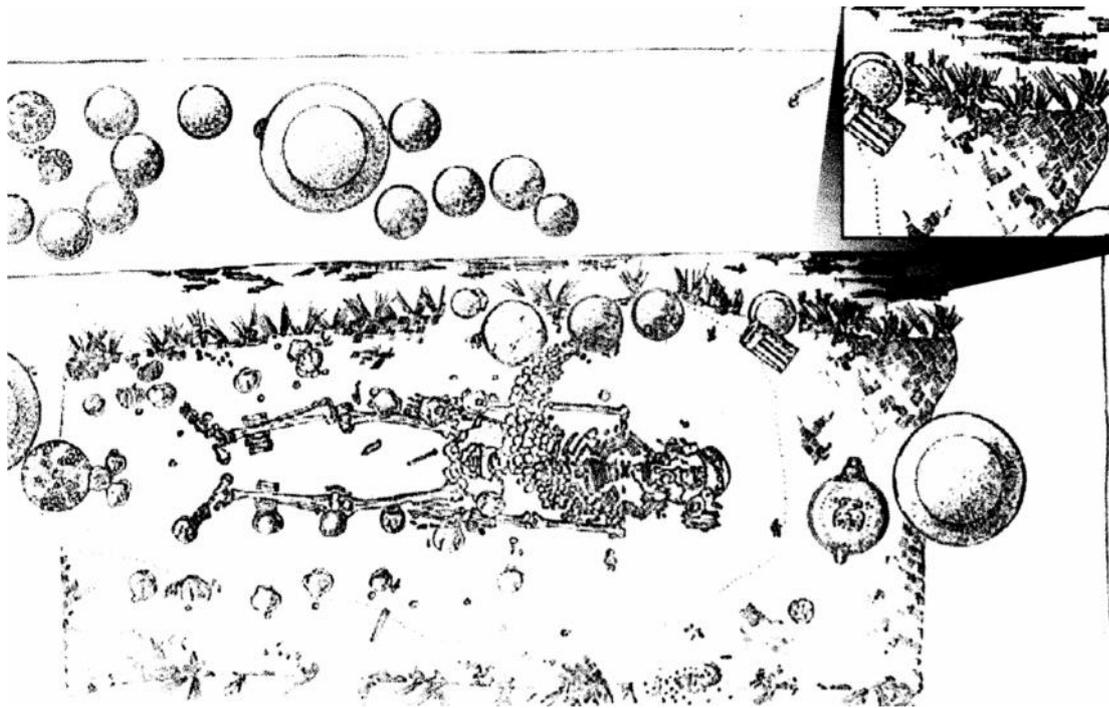


Fig. 4.7: Drawing of Tikal burial 196 showing skeletal remains arranged on a disintegrated mat (after Cajas et al. 2009: fig.11).

Weaving a mat of the size of the specimen from Tikal Burial 196 would have required a simple loom with which to tension the warp fibres, keep the weave tight, and prevent the mat from losing shape. Egyptian tomb reliefs from the Old and Middle Kingdom depict the production of mats. The tomb of Khety in Beni Hasan depicts a mat maker weaving a mat of a similar size to the Tikal burial 196 mat. The mat is woven on a simple loom consisting ‘of four pegs in the ground to which cross bars have been fastened, holding the tension on the warp’ (Wendrich 2006: 261). Wendrich mentions that the most important materials from which ancient Egyptian mats were made were palm-leaves and grass (Wendrich 2006: 255). It is possible that an equivalent simple loom may have been used by the ancient Maya to weave mats. Like cloth, mats are woven from numerous strands tensioned on a loom. Knots in contrast are tied by hand and may be constructed from a single cord.

4.4 Identifying the Mat Symbol as ‘Knot’

Every representation of the knot termed by Robicsek as a mat symbol at Tikal depicts a cord extending from one of the four corners of the knot (Fig. 4.8). A rope or cord has two ends, and in tying a knot from a single rope or cord these two ends will be visible. Where two cords are used four ends will be visible, two from either side of the knot. The four cord-ends

depicted in the representation of knot/mat symbols at Tikal suggest that two cords were used to tie the knot.

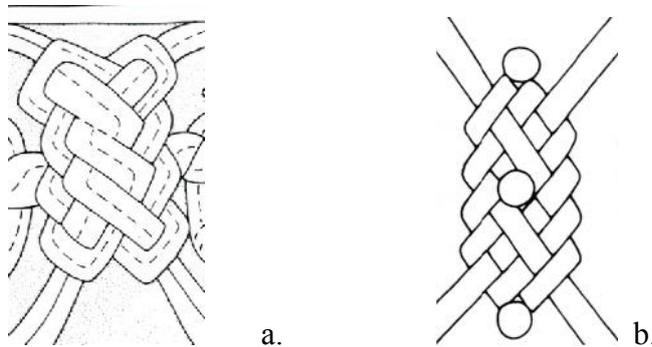


Fig. 4.8: a. Drawing of a knot/mat symbol (Flat Two-Dimensional Knot) from the side of Tikal Altar 3 (after Jones and Satterthwaite 1982: fig. 57). b. Drawing of a knot/mat symbol from the side of a throne depicted on Tikal Temple III Lintel 2 (after Jones and Satterthwaite 1982: fig. 72).

It is also possible to tie a knot from one cord and still produce a knot with a cord extending from each of the four corners of the knot (Fig. 4.9).

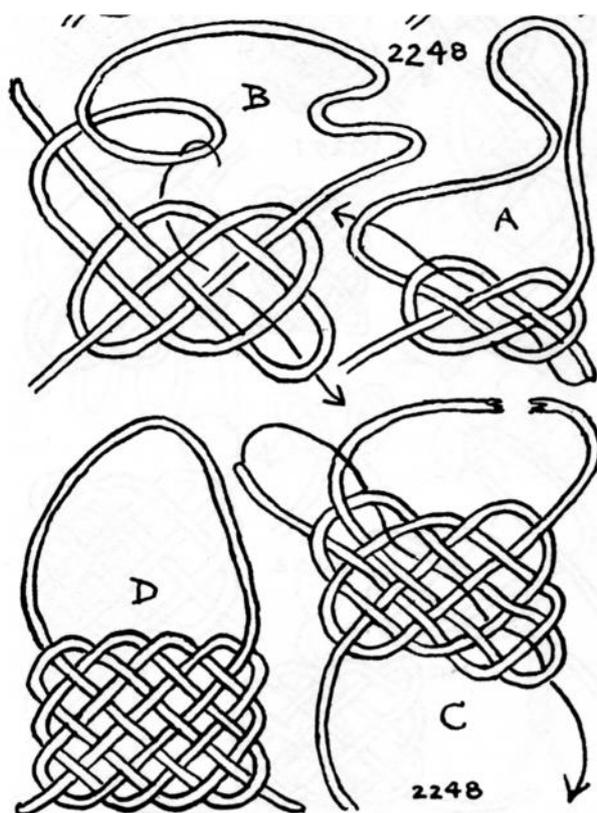
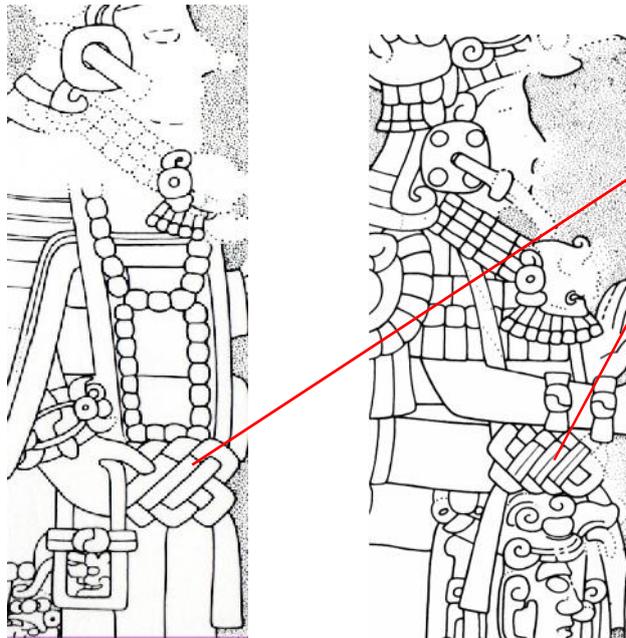


Fig. 4.9: A diagram of a Wide Basket Weave Knot (member of the knots known as Flat Two-Dimensional Knots) tied from a single cord (after Ashley 1993: 363).

Two Tikal monuments show knots/mat symbols possibly tied from a single cord, these are Tikal Stela 9 and 13. The representation on these two stelae shows Tikal rulers wearing the knots as items suspended from cords looped around their necks (Fig.4.10). The cord or strap

from which the knot is tied appears to extend up the chest, over the shoulders and around the back of the ruler's neck. The knot worn by the rulers on Tikal Stela 9 and 13, like all the other knots/mat symbols at Tikal, shows a cord emerging from each corner of the knot. The cords emerging from each of the four corners of the knot are an identifying feature of the Tikal mat symbols/ knots.



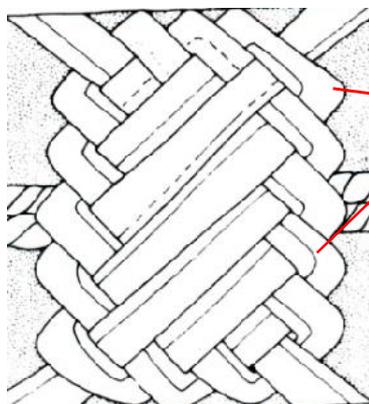
The cord or straps from which these knots are tied possibly loop around the back of the ruler's neck.

Fig. 4.10: a. Tikal Stela 13 (adapted from Jones and Satterthwaite 1982: figs. 19), showing a knot/mat symbol (Flat Two-Dimensional Knot) hung around the neck of the ruler. This knot is possibly tied from a single cord as illustrated in Ashley's diagrams. b. Tikal Stela 9 (adapted from Jones and Satterthwaite 1982: figs. 13), showing a knot/mat symbol hung around the ruler's neck.

a.

b.

Another identifying feature of knots at Tikal that have been termed 'mat symbols' by Robicsek is the scallop curves which define the edges of the knots. The scallops, known as 'bights' in knotting terminology, are formed by the curved loop of the cord as it doubles back into the knot (Budworth 1998:155; Ashley 1993: 361-382).



Bights

Fig. 4.11: This depiction of a knot/mat symbol (Flat Two-Dimensional Knot) from the periphery of Tikal Altar 10 (after Jones and Satterthwaite 1982: fig. 34) is characterized by scalloped edges which in knotting terminology are referred to as bights.

All the knots/mat symbols featured at Tikal have a particular appearance. They have a wide, flat, two-dimensional shape and are termed ‘Flat Two-Dimensional Knots’. There are a number of knot types which fall under the category of Flat Two-Dimensional Knot, such as for instance Lanyard Knots (Ashley 1993: 361).

The Carrick Bend is the smallest of the series of Flat Two-Dimensional Knots and is a member of the group of knots known as Lanyard Knots. Ashley points out that Lanyard Knots function well as Flat Two-Dimensional Knots (Ashley 1993: 363, 148). By this he means that Lanyard Knots are well suited to the kinds of uses to which Flat Two-Dimensional Knots are put. Flat Two-Dimensional Knots (FTDKs) are also known as Mats (Ashley 1993: 361-382). In terms of historical use (in European culture), Flat Two-Dimensional Knots served as chafing gear aboard ships. In places which received the most traffic or friction, a Mat (see below) tied from rope was placed to lessen wear and tear. Ashley describes how these knots are ‘nailed to the deck at gangways, thresholds and companionways, and, where needed, to rails and spars. They are employed to take up the thump of jib sheet and traveler blocks’ (Ashley 1993:361). These knots tied in gold braid were worn as part of insignia and are found applied to uniforms (Ashley 1993: 361).

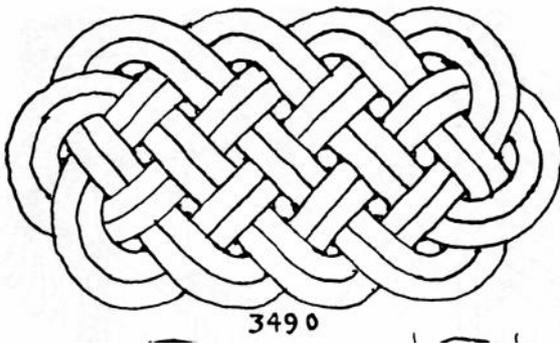


Fig. 4.12: A diagram of a Mat tied from rope and used as chafing gear aboard ship (Ashley 1993: 554).

Carrick Bends painted on a Classic Period Maya pottery vessel (Fig.4.13a), shown below, exactly replicate those illustrated in the Ashley book of Knots. The Ashley Book diagram illustrates the method for extending the Carrick Bend lengthwise. By extending the lower bight, as shown in the compendium illustration below, the Carrick Bend can be plaited to produce a braid of indefinite length (Ashley 1993: 261). This type of extended Carrick Bend is found on Postclassic codex style murals at Tulum, Tancah and Santa Rita (Miller 1982: Fig.110, Pl.6, 25, 28, 34).

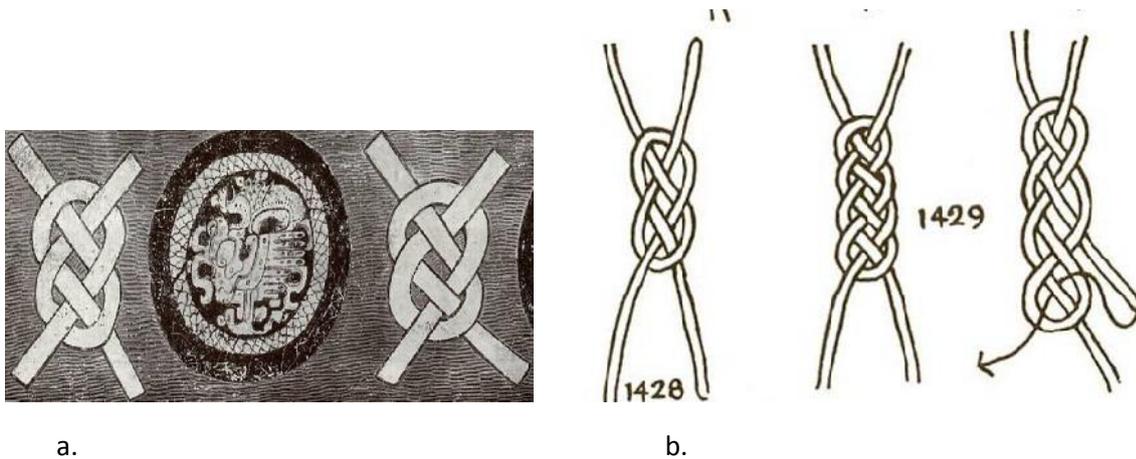


Fig. 4.13: a. A Carrick Bend painted on a Classic Period Maya polychrome vase (after Kerr 1989: 60). b. A diagram of a Carrick Bend and a platted braid tied from a Carrick Bend (after Ashley 1993: 261).

Both the Carrick Bend shown on the Classic Period vessel and the Carrick Bend shown in the knot compendium (*The Ashley Book of Knots*) are illustrated in a diagrammatic form, intended to both aid in the identification of the knot but also in its tying. That the ancient Maya depicted the Carrick Bend Knot in the form used today to teach knotting suggests that the Ancient Maya intended that these knot be recognized. The task of locating and isolating Flat Two-Dimensional Knots in the context of ancient Maya pictorial representation is aided by the fact that the ancient Maya often depicted these particular knots with textbook accuracy.

The extending of Carrick Bend Knots width-wise produces a more complicated knot with a woven texture. For instance a Late to Terminal Classic monument from El Baul depicts two knots (Fig.4.14). The first knot is a Carrick Bend extended to produce a knot three bights across and two deep. The method for tying this knot appears in *The Ashley Book of knots* (Chapter 30). Experimenting with the instructions in the *Ashley Book of Knots* (Ashley 1993: fig. 2247), I recreated a similar knot to those depicted on El Baul Monument 50 (with the exception that I extended the Carrick Bend further to produce a knot four bights across and two deep instead of three bights across and two deep). The first knot depicted on the El Baúl monument would have been tied with two cords. This knot in effect unites the two cords, meaning that there are no longer four working ends but two. A working end refers to the active end in a cord or rope, directly involved in tying a knot. In tying the first knot, all ends of the cord would have been actively used in the tying process. With the cord now

united, there are only two active ends (as is the case where a knot is tied from a single cord). This alters the way in which the knot would be tied. The process for tying a Flat Two-Dimensional Knot from a single cord is discussed by Ashley in Chapter 30 and Chapter 8 (Ashley 1993: 148-152).

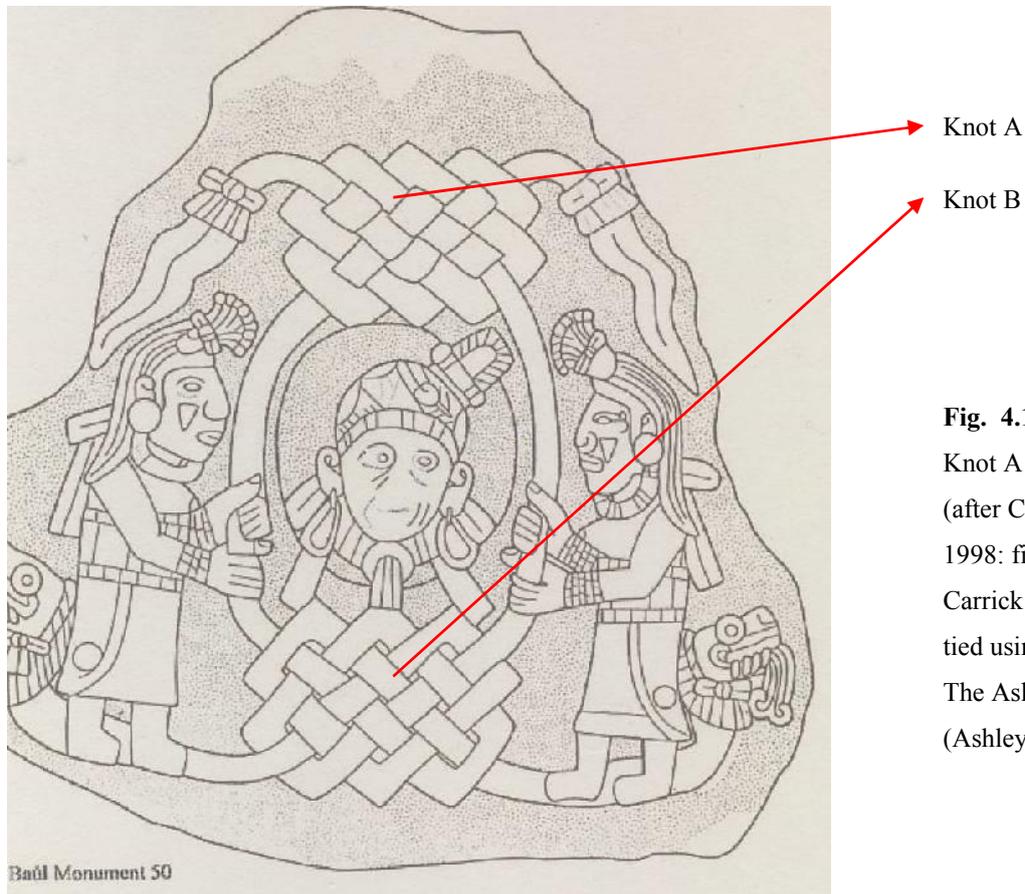
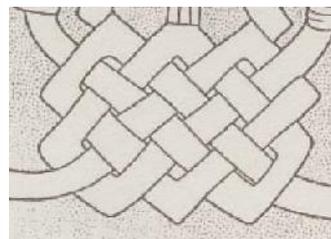


Fig. 4.14: The knot labelled Knot A on this El Baul monument (after Chinchilla Mazariegos 1998: fig. 27) is an enlarged Carrick Bend Knot which can be tied using instructions given in The Ashley Book of Knots (Ashley 1993: fig. 2246).



a.



b.

Fig. 4.15: a. An example of a Flat Two-Dimensional Knot tied from a Carrick Bend showing the same structure as the knots depicted on El Baul Monument 50. b. Detail of Flat Two-Dimensional Knot pictured on El Baul Monument 50 (after Chinchilla Mazariegos 1998: fig. 27).

Due to its alternate over/under weave structure, the El Baul knot would also be classed as a Basket Weave Knot (Ashley 1993: 361, 362), a variety of knot which falls under the term Flat Two-Dimensional Knot (FTDK). Many of the knots illustrated by Ashley in his chapter on FTDKs are in fact Basket Weave Knots (Ashley 1993: 361-382). A particularly elaborate FTDK with a typical Basket Weave structure is found on Tikal Altar 7.

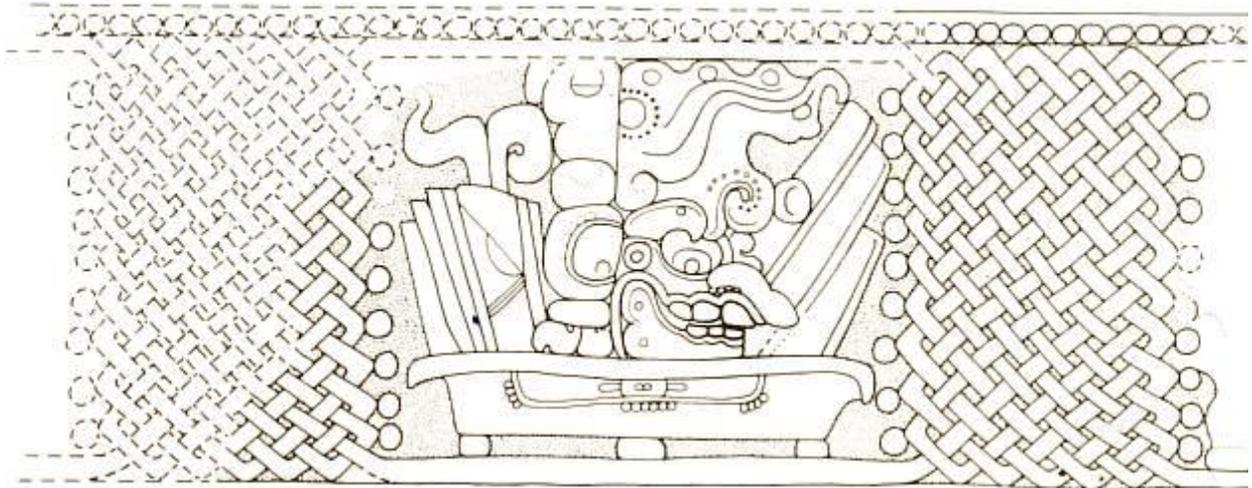


Fig. 4.16: Representations of Flat Two-Dimensional Knots of the Basket Weave variety which function to fasten cords around the sides of Tikal Altar 7 (After Jones and Satterthwaite 1982: fig. 40).

The knots illustrated in Fig. 4.16 have been extended both lengthwise and width-wise to produce a knot with the appearance of a textile; however, the cords extending from the four corners are tell-tale signs that these are knots and have been tied from two cords. The under-over-under weave texture of the knots identifies them as Basket Weave Knots.

There are a number of different ways of enlarging Carrick Bends to the size and form of Basket Weave Knots and these methods are given in the Ashley Book of Knots (Chapters 30 and 8) (Ashley 1993: 139-154, 361-382). The primary characteristic of Basket Weave Knots is their ‘over-one-and-under-one texture’. This woven texture, although attractive and hence the knots’ use as insignia, has the drawback of producing knots which tend to curl and twist; this is because the knots have little depth (which is why they are classed as Flat Two-Dimensional Knots). Depictions of the Basket Weave Knot and other forms of FTDKs at Tikal show the knot tied around solid objects such as altars and thrones. In such cases, the tendency of Flat Two-Dimensional Knots to curl can be counteracted.

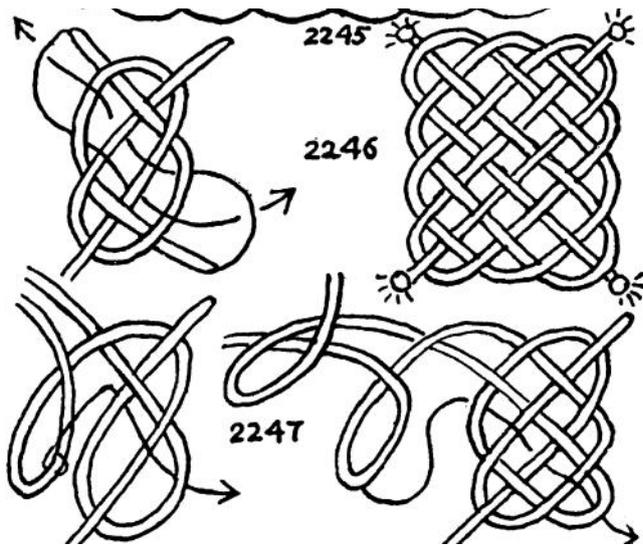
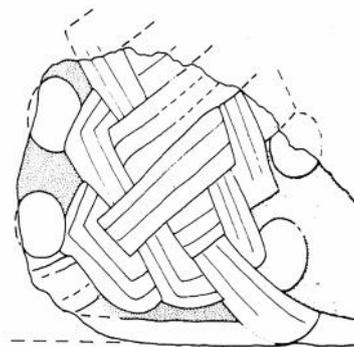


Fig. 4.17: Diagram illustrating two different ways to enlarge a Carrick Bend (After Ashley 1993: 363).

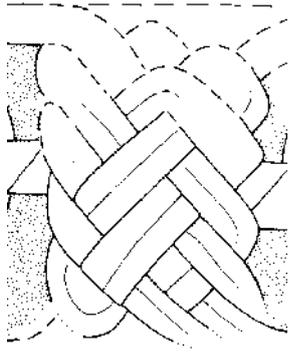
It should be noted that not all the ancient Maya knots identified as Flat Two-Dimensional Knots in this research have the over-one-under-one texture of Basket Weave Knots. This is true for the FTDKs depicted on Tikal Temple I Lintel 3, and Tikal Altars 10, 18 and 19. My attempt at reproducing the knots depicted on Temple I Lintel 3 and Tikal Altar 19 began with a Carrick Bend (Fig. 4.18). Extending this knot lengthwise would produce a knot similar to that depicted on the Tikal Temple I Lintel 3 throne.



a.



b.



c.



d.

Fig. 4.18: a. An experiment in tying the kind of Flat Two-Dimensional Knot shown on Tikal Temple I Lintel 3, and Altars 10, 18 and 19. b. Detail of a Flat Two-Dimensional Knot depicted on the side of Tikal Altar 18 (after Jones and Satterthwaite 1982: fig. 60.e). c. Detail of a Flat Two-Dimensional Knot depicted on the side of Tikal Altar 19 (after Jones and Satterthwaite 1982: fig.61). d. Detail of a Flat Two-Dimensional Knot displayed on the throne pictured on Tikal Temple I, Lintel 3 (after Jones and Satterthwaite 1982: fig. 70).

That the ancient Maya viewed the FTDK as a decorative item is illustrated in the representation of this knot on Tikal Altar 7 and Temple III Lintel 2, where beads are attached to the knot. The adorning of FTDKs with beads is shown in the Ashley Book of Knots as well as in Millidot's book on Chinese Knots (Ashley 1993: 378-382).

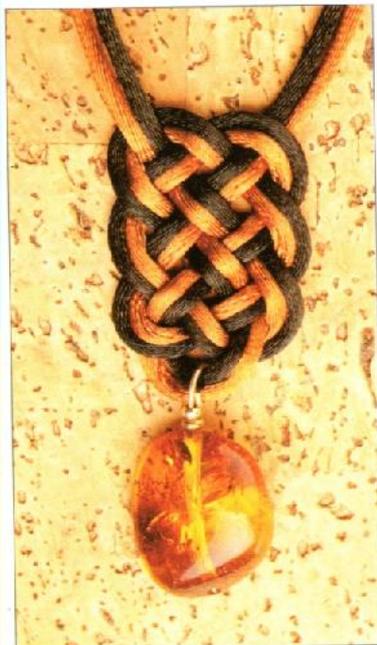


Fig. 4.19: Photographs of Chinese Knots (Flat Two-Dimensional Knots) adorned with beads (after Millidot 2003: 50; 61).

Chinese Knots similar to the knots depicted in Fig. 4.19 are classified as Flat Two-Dimensional Knots by Ashley (Ashley 1993: 378-382). Some of these Chinese Knots classified by Ashley as FTDKs also appear under the title of Fancy Knots (Ashley 1993: 393-398). The Chinese Knots (Fancy Knots) numbered 2460 to 2463 are of a similar round shape to the above decorative Chinese Knot (Fig. 4.19) (Ashley 1993: 394). Flat Two-Dimensional Knots tied from one or more cords come in various shapes and sizes (i.e. round, square, rectangular) (Ashley 1993: 361-382).

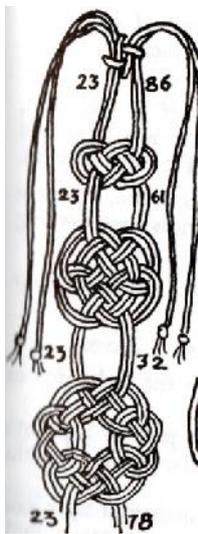


Fig. 4.20: Examples of two round Flat Two-Dimensional Knots (Ashley 1993: 381).

In comparison, the Tikal specimens represent a very narrow range of the full array of possible knots which fall under the category of Flat Two-Dimensional Knots, and it is only when compared against other knot types that it is possible to appreciate how distinctive and recognizable they are.

4.5 Comparisons between the Flat Two-Dimensional Knot and Other Knot Types

Below are a number of comparative images of knots taken from the *Ashley Book of Knots* which look and function very differently to Flat Two-Dimensional Knots. In the following examples, the qualities or attributes of the knots determine function.

Bowknots

Knots 2411 to 2414 are Bowknots used by dressmakers, florists, confectioners and hatters (Ashley 1993: 386). These knots are ornamental and decorative and it is these qualities which are sought by the various trades.

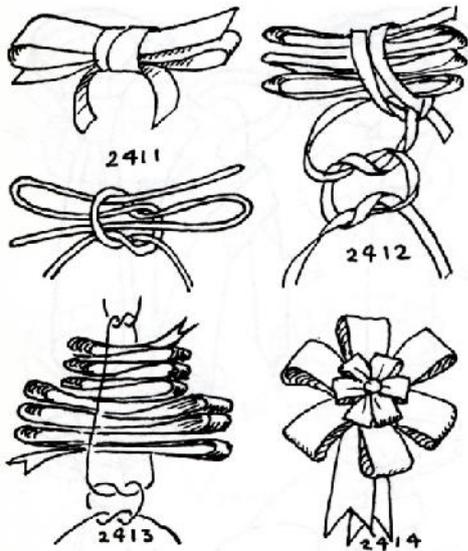


Fig. 4.21: Diagrams of Bowknots (after Ashley 1993: 386).

Hitches

Knots 2079-2081 are Hitches commonly used in lashings and slings. These knots are used to secure and lash together scaffolds (Ashley 1993: 342); however, the examples below depict them in use as part of parcel lashings. A Hitch is described as ‘a complication that secures a rope to another object, generally of a different nature’ (Ashley 1993: 283). Knots 1805-1809 also belong to the category of Hitches. These knots are used for hitching up horses to posts and securing boats to moorings (Ashley 1993: 305).

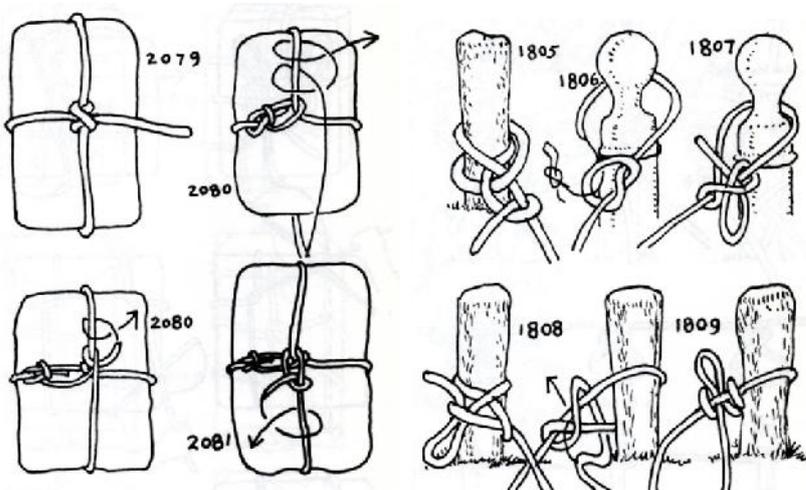


Fig. 4.22: These diagrams illustrate the different uses to which the Hitch is put (after Ashley 1993: 305, 337).

Loop Knots

Knots 1119-1121 are varieties of Loop Knots used in making a noose or snare. These knots are ‘tied in hand, and when placed around an object, renders and constricts when the rope is pulled on’ (Ashley 1993: 203-204). The three knots depicted are all Gallows Knots or Hangman’s Knots (i.e. knots used to hang convicted persons).

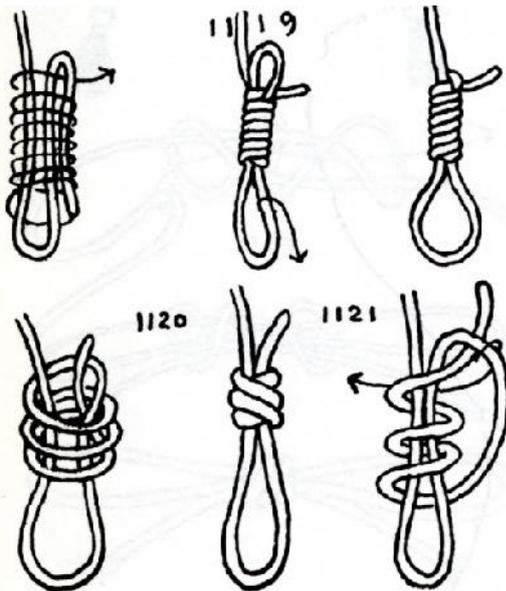


Fig. 4.23: Diagrams of the Gallows Knot (after Ashley 1993: 204).

Multi-Strand Button Knots

Knots 850-852 are Multi-Strand Button Knots (Ashley 1993:155-157). In contrast to Flat Two-Dimensional Knots, which are thin and flexible, these Multi-Strand Button Knots are hard, round and have depth, meaning that they function well as buttons.

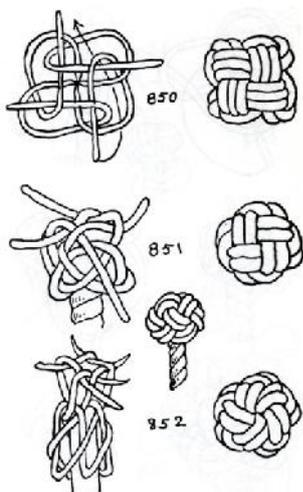


Fig. 4.24: Diagrams of Multi -Strand Button Knots (after Ashley 1993: 157).

Poachers Knot

Knot 409 is a Poachers Knot and is described as a noose, meaning that it belongs to the family of Loop Knots used in this instance to snare game (Ashley 1993: 65).

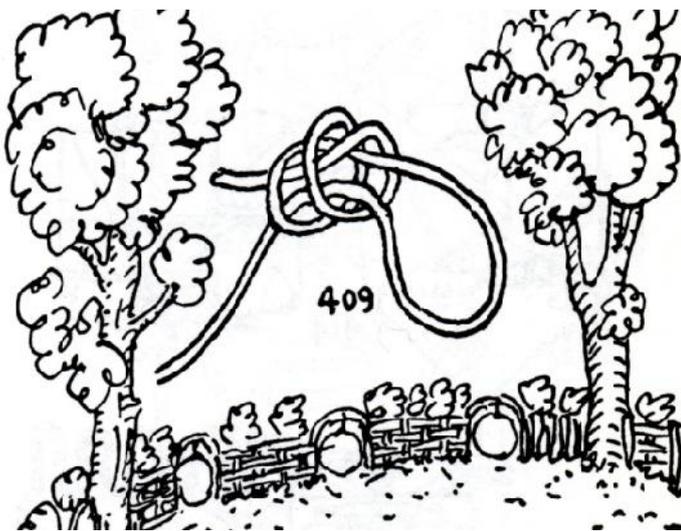
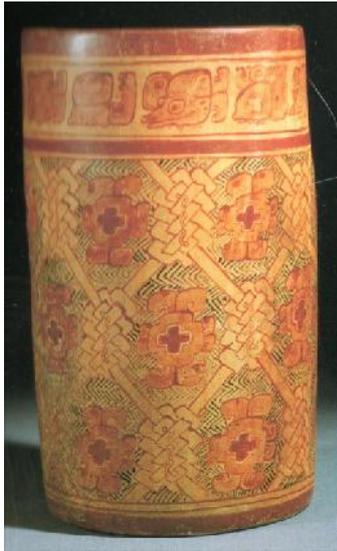


Fig. 4.25: Diagram of a Poachers Knot (after Ashley 1993: 65).

Knots and Macramé

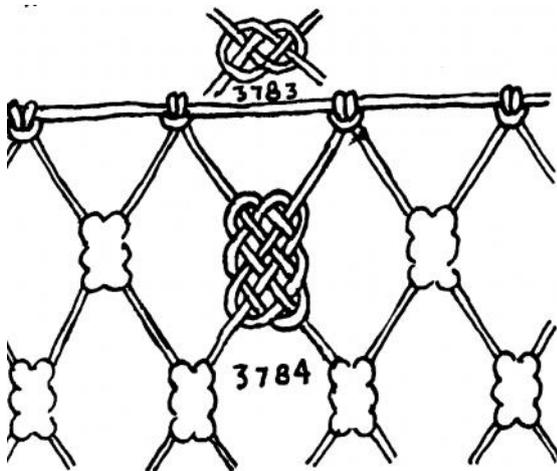
Some ancient Maya examples of FTDKs are tied in such a way as to create a mesh of knotted cords. Macramé, like net-making, is a technique in tying knots so as to create a webbed or meshed surface. Reents-Budet (Reents-Budet 1994:17, Fig.1.12) describes the knots illustrated on a Classic Period Maya vase as an example of macramé; she points out that the macramé knots overlie a herringbone weave textile. The use of macramé as a textile overlay is depicted on La Florida Stela 9, dedicated on a fifteen *K'atun* Period Ending (9.15.0.0.0 4 Ahau 13 Yax). This stela depicts a royal female wearing a *huipil* (a traditional Maya dress). Over the *huipil* she wears what is described as a chasuble (Graham 1970: 444-447, Fig. 9b). The textile from which the chasuble is constructed is overlaid with Flat Two-Dimensional Knots. The use of Flat Two-Dimensional Knots as part of a decorative netting is illustrated in the Ashley Book of Knots. This kind of decorative netting is similar to the examples of ancient Maya macramé; according to Ashley such decorative netting makes handsome fringes (Ashley 1993: 585).



a.



b.



c.

Fig. 4.26: a. Representations of macramé knots overlying a herringbone weave textile painted on a Classic Period cylinder vase (after Reents-Budet 1994: fig. 1.12, catalog 37). b. Drawing of La Florida Stela 9 showing a royal woman wearing a textile overlaid by macramé knots (after Graham 1970: fig. 9.b). c. Drawing of a decorative net tied from Flat Two-Dimensional Knots (after Ashley 1993: 585).

Summary

The Tikal FTDKs analysed in this chapter are characterised by a square or rectangular shape, scalloped edges and a cord emerging from each corner. Because of this conformity, it is possible to isolate a number of requirements for diagnosing the Tikal FTDKs, and these requirements can also be applied to FTDKs represented in different media at sites other than Tikal. The requirements are that the knots are wide or long (or both) with scalloped edges. They should have a cord extending from each of the four corners of the knot. Because these knots are flat, they tend to curl, meaning that representations of these knots will show them attached to items around which, or to which the knots can be tensioned or supported. Given these requirements, the ancient Maya specimens of FTDKs are both easy to recognize and categorize.

Chapter Five: Classification Framework

What I have identified as the Flat Two-Dimensional Knot is represented in a range of Classic Period media and occurs in a variety of contexts. All of these contexts bear on the knot's meaning and significance among the Classic Maya. In terms of media, representations of Flat Two-Dimensional Knots occur on:

1. Freestanding stone sculpture carved in bas-relief (such as stelae and altar stones).
2. Architectural sculpture carved in bas-relief from stone or wood and found on lintels or wall panels and façades; as well as mosaic stone sculpture attached to façades.
3. Modelled and carved stucco plaster found on panels and facing for temple façades.
4. Painted and incised ceramic vessels.
5. Lapidary art such as carved jade adornments.
6. Painted murals.

The fact that the knot's representation is not confined to a specific medium suggests that its importance lies in what it is meant to represent rather than in an association of the knot symbolism with a particular material. The Flat Two-Dimensional Knots recorded below have been categorized based on the objects on which they are depicted or shown to be attached to; or, if they are a free-standing element, on the basis of what they are associated with (overlying).

5.1 Flat Two-Dimensional Knots Displayed as Personal Adornment

In some instances Flat Two-Dimensional Knots are represented within complex figural scenes carved in relief on monuments and objects. In the context of these scenes, Flat Two-Dimensional Knots are sometimes shown as adornments or accoutrements worn by individuals.

FTDKS DISPLAYED AS PERSONAL ADORNMENT			
Hung Around the Neck	<i>Tikal</i>		<i>Palenque</i>
	Stela 9, Stela 13		Temple of the Cross East Jamb; Temple of the Sun Tablet; Temple of the Cross Tablet; Temple of the Foliated Cross Tablet; Carved Stone Censer
Belt or Waist Assemblage	<i>Tikal</i>	<i>Aguateca</i>	<i>Chichen Itza</i>
	Temple 1, Lintel 3; Structure 10 Lintel	Stela 7	Jade from Cenote of Sacrifice
In Headdress	<i>Bilbao</i>	<i>Palenque</i> (Tablets)	<i>Seibal</i> (<i>Ceibal</i>)
	Monument 3	Temple of the Cross; Temple of the Foliated Cross; Temple of the Sun	Stela 1

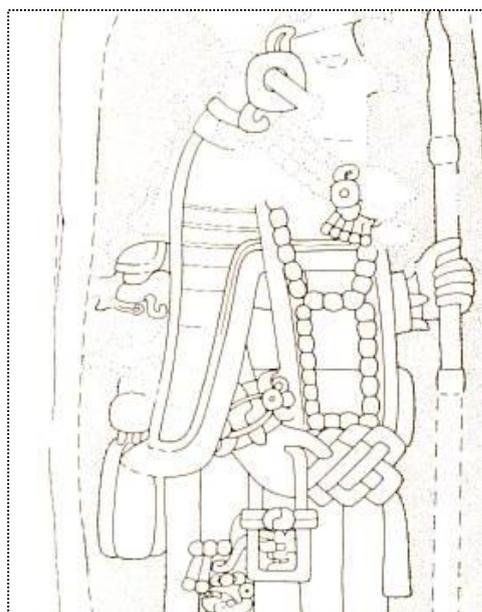


Fig. 5.1: An example of a Flat Two Dimensional Knot worn around the neck as an item of personal adornment (after Jones and Satterthwaite 1982: fig.19).

5.2 Flat Two-Dimensional Knots Represented as Directly Attached to, or Overlying a Monument (altar, stelae, monolith or mural), or Building.

The following representations of Flat Two-Dimensional Knots show them as items directly attached to or overlying the objects or structures on which they are displayed. The knots are sometimes shown as free standing items or as tied from cords which act to connect the knots together.

FTDKS DISPLAYED ON MONUMENTS AND BUILDINGS					
Altars	<i>Tikal</i>			<i>Zacpeten</i>	
	3, 7, 10, 13, 18, 19			Altar 1	
Monoliths or Stelae	<i>Copan</i>	<i>El Baul</i>	<i>Bilbao</i>	<i>El Castillo</i>	<i>Itzimte</i>
	Stela J	Monument 50	Monument 18	Monument 1	Stela 12
Buildings	<i>Palenque</i>	<i>Copan</i>		<i>Chichen Itza</i>	
	House B	Structure 22A		Temple of the Owls, West Pier	
Murals	<i>Río Azul</i>				
	Tomb 1				

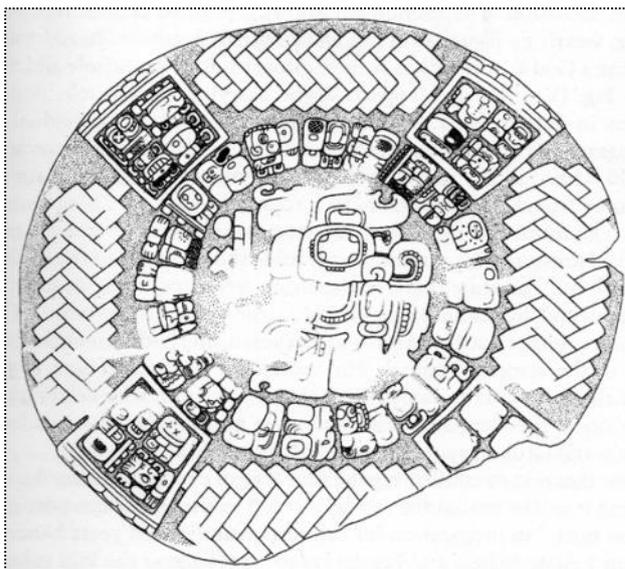


Fig. 5.2: An example of Flat Two-Dimensional Knots displayed on the top of Zacpeten Altar 1 (after Rice 2004: fig.5.23).

5.3 Flat Two-Dimensional Knots Displayed on Portable Furniture or Objects

High status, portable objects such as thrones and jewels are also locations for Flat Two-Dimensional Knots.

FTDKS DISPLAYED ON PORTABLE FURNITURE OR OBJECTS	
Portable Thrones	<i>Tikal</i>
	Temple I, Lintel 3; Temple III, Lintel 2; Temple IV, Lintel 2
Bar Pendant (Lapidary Art)	<i>Copan</i>
	Jade from Structure 10J-45, Burial 36

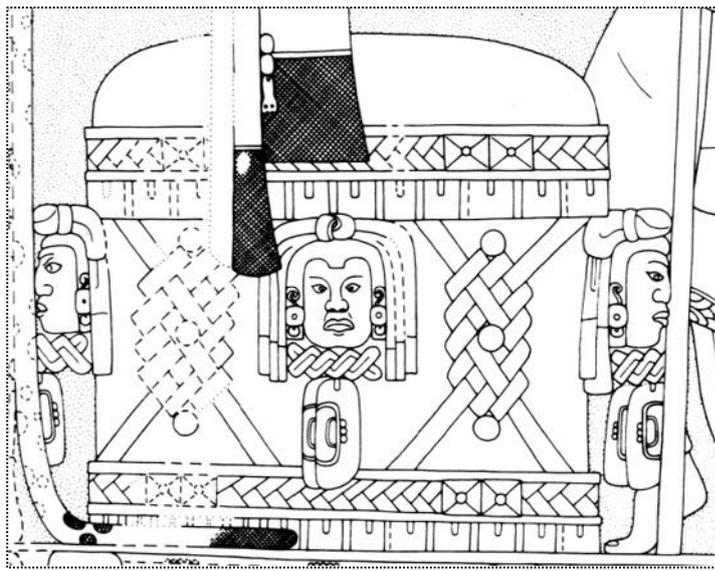


Fig. 5.3: An example of Flat Two-Dimensional Knots displayed on a portable throne (adapted from Jones and Satterthwaite 1982: fig.72)

5.4 Flat Two-Dimensional Knots Displayed on Textiles

An important location for the display of Flat Two-Dimensional Knots is on clothing. Clothing represented on lintels, panels, and stelae show Flat Two-Dimensional Knots on *huipiles* (loose fitting shift dresses worn by women), loincloths and garments pulled over the head and worn by men.

FTDKS DISPLAYED ON TEXTILES				
Garment Pulled Over the Head	<i>Dos Pilas</i>		<i>Aguateca</i>	
	Stela 5; Panel 19		Stela 1; Stela 5	
Garment Known as a Huipil	<i>Yaxchilan</i>	<i>Piedras Negras</i>	<i>La Florida</i>	
	Lintel 25	Stela 3	Stela 9	
Loincloth	<i>Palenque</i>		<i>Yaxchilan</i>	
	Group IV Tablet of the Slaves; Stone Panel from the Temple XIX Pier		Lintel 24	
Footwear	<i>Palenque</i>	<i>Piedras Negras</i>	<i>Yaxchilan</i>	<i>Naranjo</i>
	Stone Panel from the Temple XIX Pier	Stela 8	Lintel 46	Stela 40
Offering Bundle	<i>EL Cayo</i>			
	Altar/Pedestal 4			

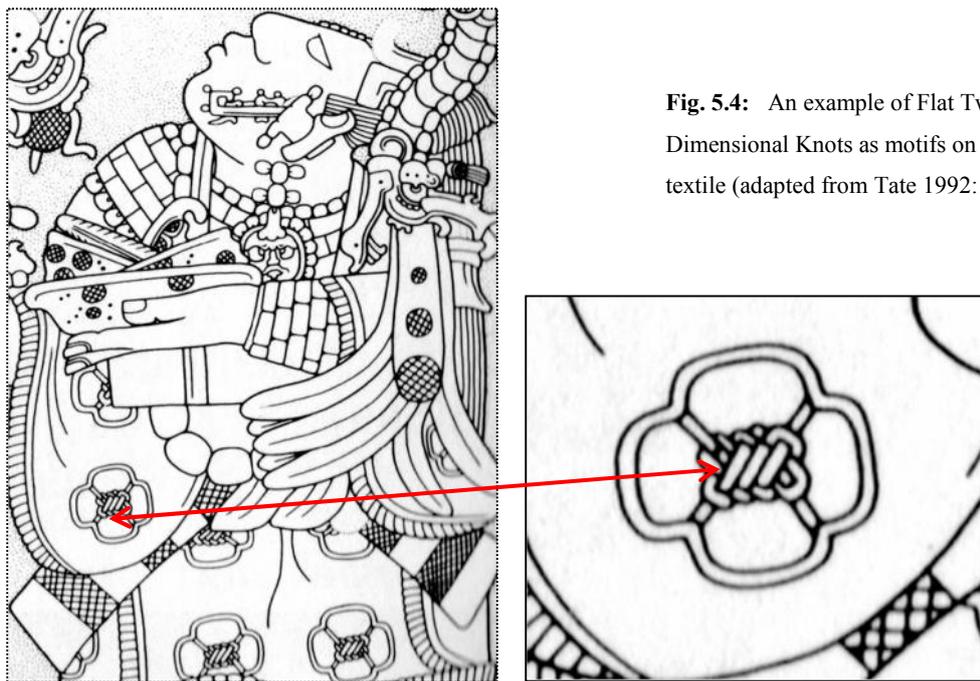


Fig. 5.4: An example of Flat Two-Dimensional Knots as motifs on a textile (adapted from Tate 1992: fig.98).

5.5 Flat Two-Dimensional Knots Represented on Ceramic Vessels

Flat Two-Dimensional Knots appear in the context of representation painted or incised on ceramic vases where the knots are shown in association with abstract decorative motifs, as well as glyphic signs and palace scenes.

FTDKS DISPLAYED ON CERAMIC VESSELS			
	<i>Kerr</i> (www.famsi.org)	<i>Robicsek 1975</i>	<i>Reents-Budet 1994</i>
Pottery vessels	Nos. 1117; 4732; 4968 (Honduras); 4628 (Honduras); 4629 (Honduras); 6070	Plate 73 (Campeche region); Fig. 112d (Uloa-Yojoa Valley); Fig. 113 (Uloa-Yojoa Valley); Fig. 112a (Uloa-Yojoa Valley); Fig. 256; Fig. 257a	MS1268 (Uaxactun region); MS0639

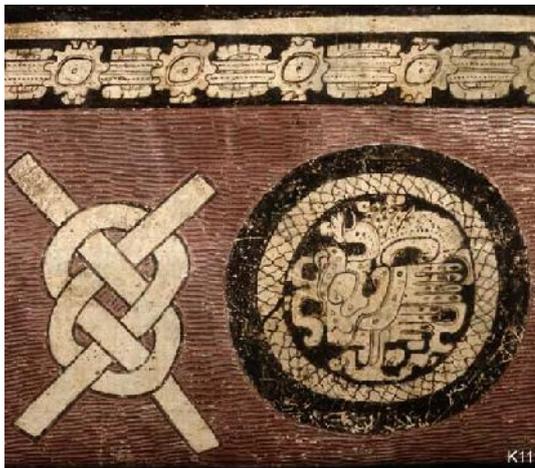


Fig. 5.5: Detail from a polychrome vase showing a FTDK positioned next to a cartouche. Both items sit below an abstracted rim design (after Kerr 1989: 60).

The classification framework sets the order for the following chapters. Therefore Chapters Six to Eight comprise analyses of FTDKs worn as part of costume accoutrement (around the neck, on belts and on head dresses); whilst in Chapters Nine and Ten I examine FTDKs on monuments and architecture. In Chapter Eleven I look at the display of FTDKs on portable objects and in Chapters Twelve and Thirteen I

focus on FTDKs on textiles and ceramic vessels respectively. The reason for commencing the chapter analyses with the FTDK worn around the neck is that this chapter outlines the Creation myth which is a primary reference point for subsequent chapters. Each of the chapter analyses expands on points raised in the previous and in this way I build up an argument, piece by piece.

Chapter Six: Flat Two-Dimensional Knots Displayed as Personal Adornment – Hung around the Neck

Considering the entire corpus of Flat Two-Dimensional Knot representation, a total of seven monuments from the two sites of Tikal and Palenque depict the Flat Two-Dimensional Knot worn suspended from a cord looped around a person’s neck.

Table 6.1: Table listing all occurrences of FTDKs worn as an item hung around the neck.

Site	Locus of FTDK	Gregorian Year	Long Count
Tikal	Stela 9	A.D. 475	Early Classic 9.2.0.0.0 (Jones and Satterthwaite 1982: 23-24).
Tikal	Stela 13	A.D.485	Early Classic SD* 9.2.10.0.0 (Jones and Satterthwaite 1982: 33).
Palenque	Temple of the Cross Tablet	A.D.690	Late Classic 9.12.18.5.19 (Kettunen 2006: 637).
Palenque	Temple of the Cross, East Jamb	A.D.692	Late Classic SD* 9.13.0.0.0 (Kettunen 2006: 673).
Palenque	Tablet of the Sun Tablet	A.D.692	Late Classic 9.13.0.0.0 (Kettunen 2006: 637).
Palenque	Temple of the Foliated Cross Tablet	A.D.692	Late Classic 9.13.0.0.0 (Kettunen 2006: 637).

Palenque	Sculpted Stone Censer Stand	A.D.800	Late Classic

SD* Style Date

Tikal and Palenque have been the subject of considerable investigation by epigraphers and iconographers alike. The wealth of data generated by research (e.g., Martin and Grube 2008; Rice 2004; Schele and Freidel 1990; Stuart and Houston 1994; Greene Robertson 1985, 1991) allows for a detailed analysis of the individuals shown wearing the Flat Two-Dimensional Knot in these monuments and greatly enhances the interpretation of the knot at the two sites. The FTDK worn around the neck is closely linked to the personhood of its wearer; the identity of which is pieced out between the items of costume worn as well as the objects held in hand. Therefore the following analysis of the individuals who wear the FTDK also extends to the objects they hold.

6.1 Tikal

6.1a Stelae 9 and 13 (Fig. 6.1a-b)

Both Tikal Stela 9 and 13 depict the Tikal Ruler K'an Chitam (Martin and Grube 2008: 37) wearing a large Flat Two-Dimensional Knot suspended from a cord looped around his neck. As an impersonator of a fire deity – the evidence for which I discuss below – the knot worn as an item of K'an Chitam's costume accrues meanings to do with fire and the drilling of fire. The fire deity impersonated by this ruler, being an aspect of a well-known Creation deity, additionally suggests ideas to do with Creation and the reckoning of time.

Stelae 9 and 13 are members of a larger group of Tikal Stelae referred to as 'staff stelae' on account of the staff held by the ruler on each monument (Martin and Grube 2008: 37; Rice 2004:106; Schele and Freidel 1990: 165,166). Such decorated staffs are displayed at Period Endings in the Maya calendar (Houston and Stuart 1996: 299; Schele and Freidel 1990: 165,166). Stela 9 is a Period Ending stela commemorating the end of the second *K'atun* (Jones and Satterthwaite 1982: 23, 24; Martin and Grube 2008: 37)). The *K'atun* is a measure of twenty years in the Maya calendar, the completion of which was often commemorated with the raising and setting of carved stelae (Stuart 1996:150; Rice 2004: 66).

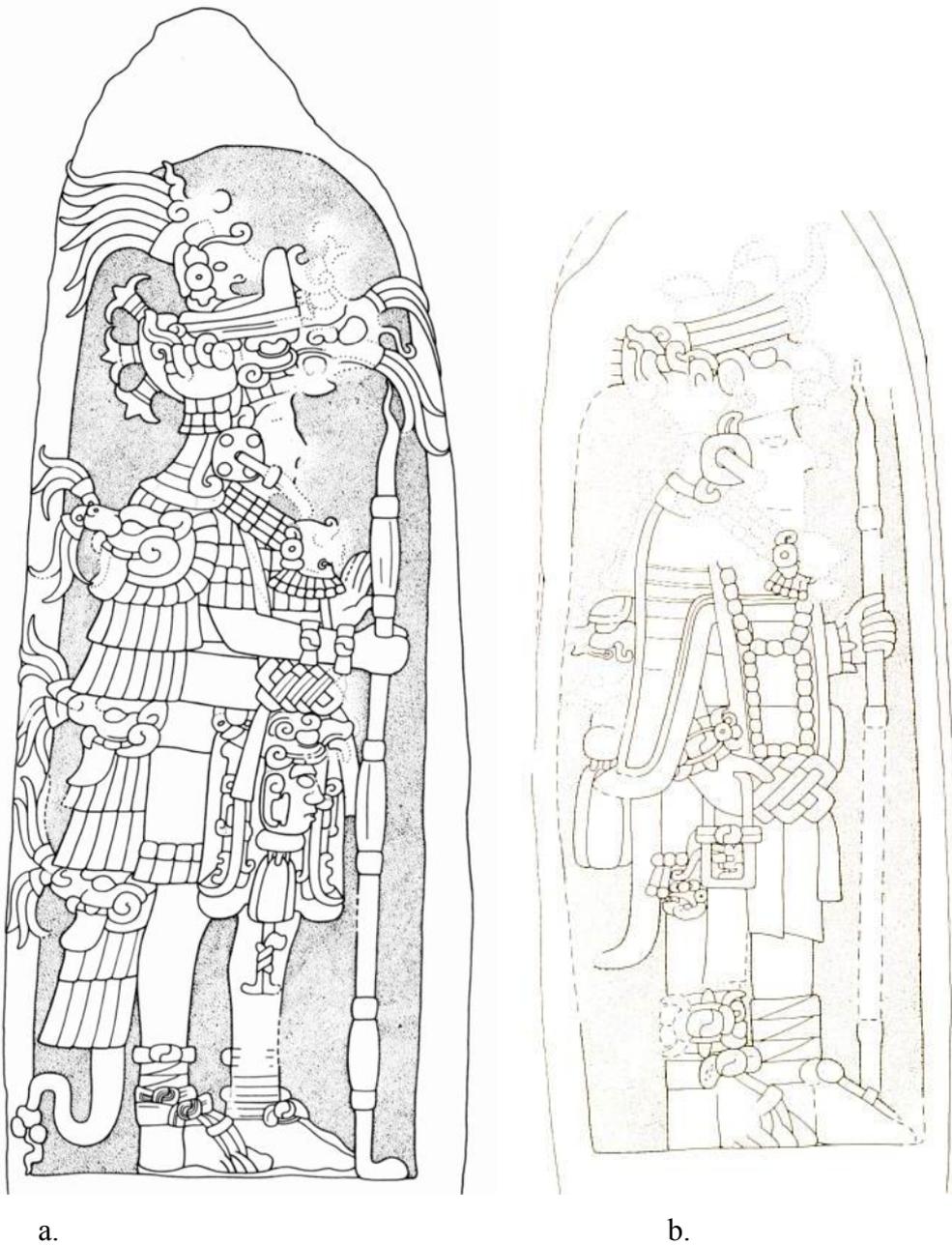


Fig. 6.1: a. Drawing of Tikal Stela 9 showing the Tikal ruler K'an Chitam (adapted from Jones and Satterthwaite 1982: fig. 13) dressed as a fire deity. He holds a ceremonial fire drill and also wears a FTDK suspended from a cord which loops around his neck. b. Drawing of Tikal Stela 13 showing K'an Chitam (adapted from Jones and Satterthwaite 1982: fig. 19) again impersonating a fire deity. He holds a ceremonial fire drill and wears a FTDK suspended from a cord looped around his neck.

Stela 13 has no surviving Dedicatory Date. However the representation on Stela 13 is similar to that of Stela 9. In a comparative study of Stela 9 and 13, Bailey illustrates that the ruler depicted on each of these stelae shared a similar beaded staff, body pose, plaited pendant, necklace, collar pendant, earplug, headdress type, and cape (Jones and Satterthwaite 1982:

34). The similarities in costume establish that the deity impersonated by K'an Chitam is the same in both stelae. The wearing of this costume at the completion of the *K'atun* intimates that this deity played a particular role in the rituals by which the Period Ending was commemorated.

FTDK and Fire

Tikal Stela 9 and 13 represent the earliest of the 'staff stelae' series (Martin and Grube 2008: 37). A number of Late Classic versions of the staff stela composition depict a much more elaborate staff held by the ruler (Martin and Grube 2008: 37; Rice 2004: 245). The accoutrements of the rulers depicted on Stela 9 and 13 indicate that they impersonate a fire deity; and the hand-held staff, understood to be a ceremonial fire drill, together with the jaguar mask-studded capes worn by both rulers would seem to be part of the costume of this deity (Martin and Grube 2008: 37; Taube 1998: 441-442; Stuart 1998: 404). Houston and Stuart (1996: 299-300) indicate that the glyphs alongside the portraits of the rulers on Tikal Stela 9 and 13 name this fire deity as the Jaguar God of the Underworld (see Figs. 6.4, 6.5)

Fire deities have a long history of representation in Mesoamerica. Depictions of Huehuetotl, the old fire God of central Mexico, are known from at least 600 B.C. (Carballo 2007: 53-67). The headband worn by the ruler on Tikal Stela 9 is the same as that worn by the Central Mexican God of Fire, Xiuhtecuhtli, in the Codex Laud. Xiuhtecuhtli is an Aztec fire deity who resides in the fire hearth at the centre of the world (Taube 2002: 294, Fig.10.15.c). Page 8 of Codex Laud shows Xiuhtecuhtli wearing the headband whilst drilling a fire on the body of the fire serpent known as the *Xiucoatl* (Taube 2002: Fig.10.15.c).

Given that the headband and the staff are symbols known to be associated with a fire deity, the implications are that the FTDK worn suspended around the neck is also a component of a fire deity's costume or is linked in some way with the deity's actions or domain. Therefore the next thing to look for is further confirmation in the iconography of Stelae 9 and 13 of associations with fire and/or with concepts associated with fire drilling such as Creation (Taube 2002: 292-293).

Houston and Stuart (1996: 299) note that the glyphs naming the Jaguar God of the Underworld on Stelae 9 and 13 are preceded by the sign for smoke or fire. The sign for fire, transcribed as *k'ak* is represented by a volute of smoke (Stuart 1998: 385; Montgomery 2002:

143; Macri andLooper 2003: 290-291). On Stela 9 this sign appears at B3 as a prefix to a portrait head wearing a headband and is followed at B4 by the portrait head glyph of the Jaguar God of the Underworld wearing his attribute, the cruller device (see also the portrait head inscribed on Tikal Stela 17 [see Fig. 6.]). The ‘cruller device’ is a twisted cord believed to represent the twisted cord of a kind of fire drill known as a pump drill (Taube 2002: 292). Images of the Jaguar God of the Underworld on incense burners show this cord following the contours of the eyes, forming a twist at the nose bridge (Stuart 1998: 408; Taube 2002: 292-293).

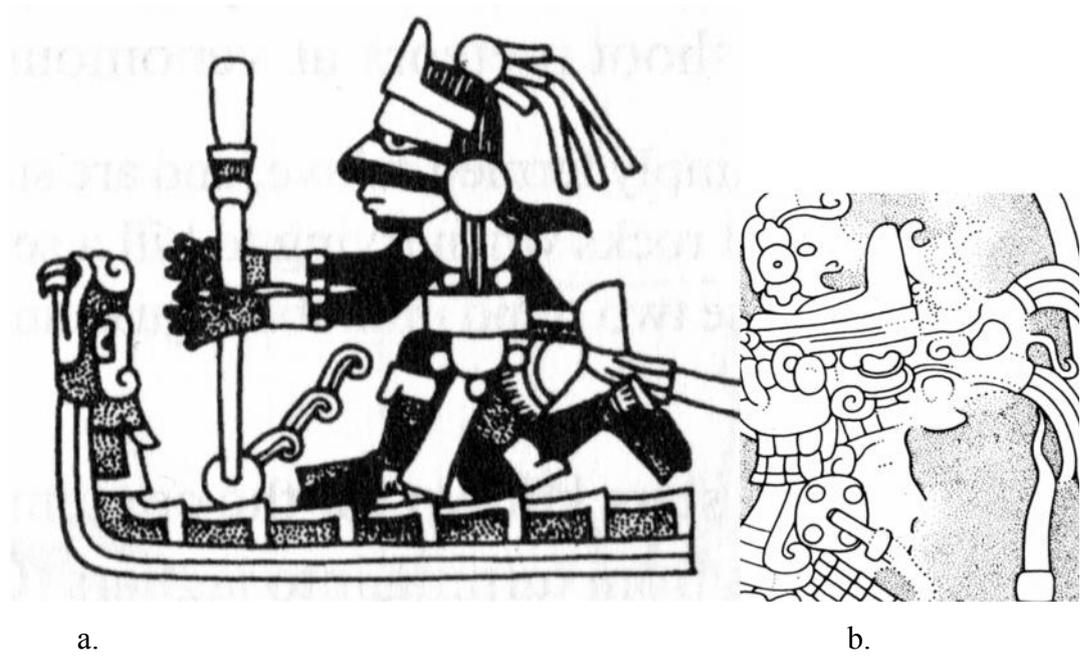
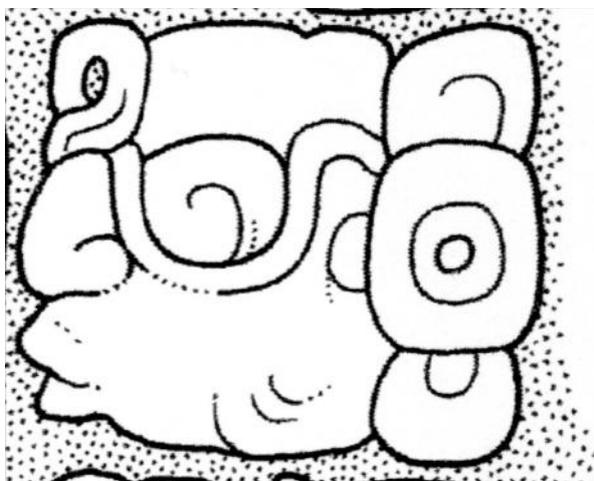


Fig. 6.2: a. Image from Codex Laud of Xiuhtecuhtli drilling a fire on the Xiuhcoatl fire serpent (after Taube 2002: fig.10.15.c). b. Detail from drawing of Tikal Stela 9 (adapted from Jones and Satterthwaite 1982: fig.13).



“Jaguar God of the Underworld”

Fig.6.3: Portrait head glyph of the Jaguar God of the Underworld from Tikal Stela 17 (adapted from Martin 2005: 6, fig.11).

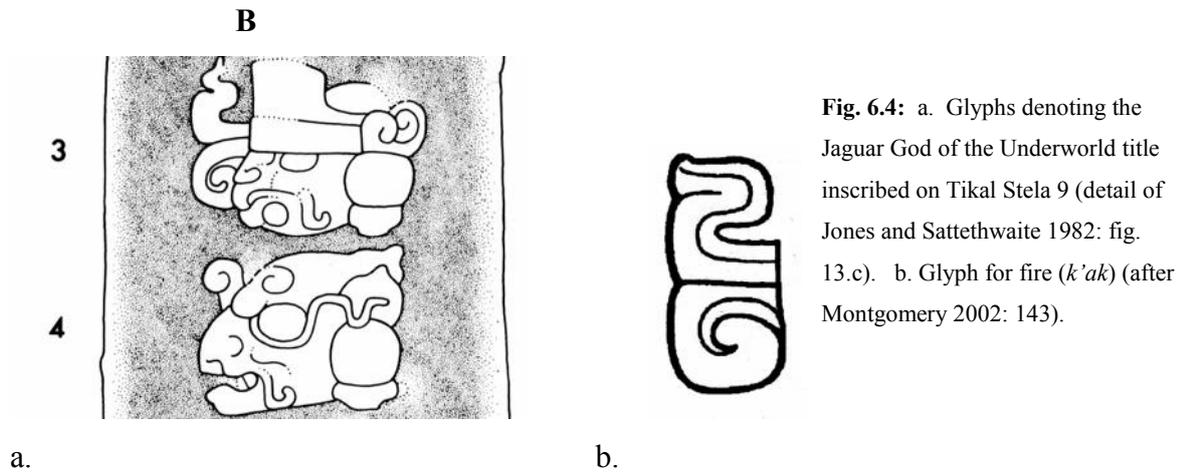


Fig. 6.4: a. Glyphs denoting the Jaguar God of the Underworld title inscribed on Tikal Stela 9 (detail of Jones and Sattethwaite 1982: fig. 13.c). b. Glyph for fire (*k'ak*) (after Montgomery 2002: 143).

Stela 13 is inscribed with the portrait head glyph of the Jaguar God of the Underworld at B3 wearing his signature, the cruller. The main sign at B2, preceding B3 is difficult to read owing to damage. However the prefixed *k'ak* sign reading 'fire' is clearly visible. Therefore the association of the images of the rulers depicted on Stela 9 and Stela 13 with fire and its symbolic domain is strong and suggests that the FTDK in this context, worn around the neck as costume or adornment, reinforces this association in some way.

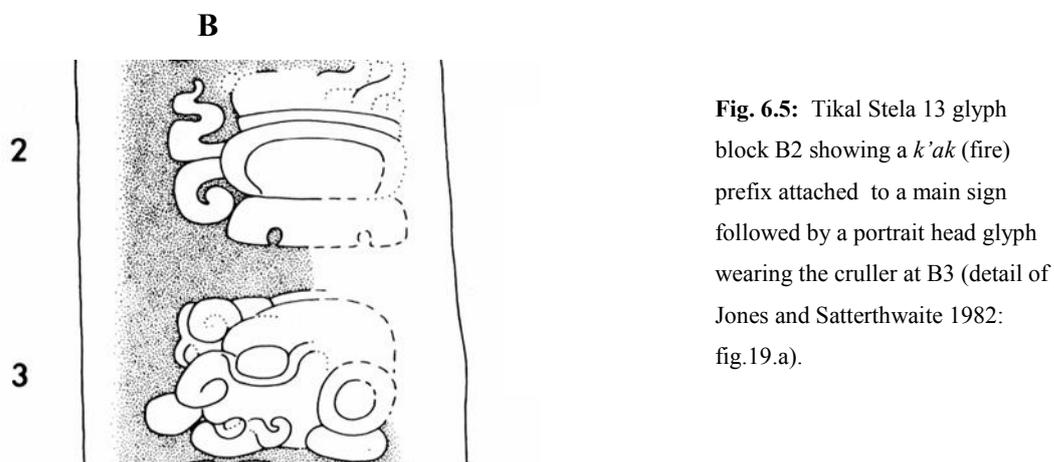


Fig. 6.5: Tikal Stela 13 glyph block B2 showing a *k'ak* (fire) prefix attached to a main sign followed by a portrait head glyph wearing the cruller at B3 (detail of Jones and Satterthwaite 1982: fig.19.a).

Fire and Creation

The Jaguar God of the Underworld has recently been identified as the Jaguar Paddler, a well-known character from ancient Maya Creation story (Taube 2002: 292). The Jaguar Paddler and his twin, the Stingray Paddler, are Creator Gods and denizens of an ancestral place known as *Na Ho Chan* (Taube 2002:292; Stone and Zender 2011:51;Looper 2003:10-12). In the Late Classic the Paddlers are associated with *K'atun* and *Lajuntun* Period Ending

(Schele and Freidel 1990: 66; Taube 1988: 195). At Chichen Itza, for example, a turtle carapace marked with a *Witz* Mountain God mask (symbol for the mountain) substitutes as the mountain of Creation (Kowalski 2011: 226-227; Taube 1988: 195, 196).

The important part of the Creation story for our purposes is that immediately subsequent to the manifestation of the Creation Turtle, three stones were set and bound (Looper 2002a: 184-186; Montgomery 2003: Fig.16.5). Each stone was set by a deity or deities and is described as associated with a throne (Martin and Grube 2008: 221; Bassie-Sweet 1996: 136). The first stone is set at a Jaguar Platform/Throne by the pair of Paddler Gods known as the Jaguar Paddler and the Stingray Paddler at *Na Ho Chan*. (The second stone is set at a Snake Platform/Throne at an Earth Town whilst the third stone is set at a Water Platform/Throne by *Itzamnah* [Bassie-Sweet 1996: 136; Looper 2002a: 184-186; Looper 2003: 10-12]). Thus the Jaguar Paddler was seen by the Maya as playing a critical role in Creation. The three stones are referred to in Classic Period inscriptions as the First Three Stone Place (Looper 2003:11; Bassie 1996:136), which is also identified as a celestial hearth (Vail and Bricker 2004: 179). As a hearth, it is not surprising then that the Three Stones of Creation are sometimes shown with a smoke volute, as in the headdress of the Naranjo ruler pictured on Stela 30 (Taube 1998: 435, Fig.3e; Looper 1992: 3). This ruler holds a fire drill and wears the cruller diagnostic of the Jaguar God of the Underworld and, like Tikal Stelae 9 and 13, the Naranjo ruler is named in the accompanying text as the impersonator of the Jaguar God of the Underworld (Houston and Stuart 1996: 299).

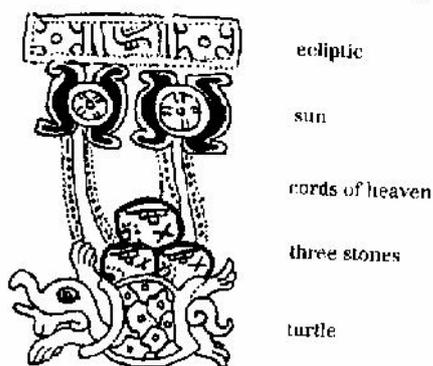
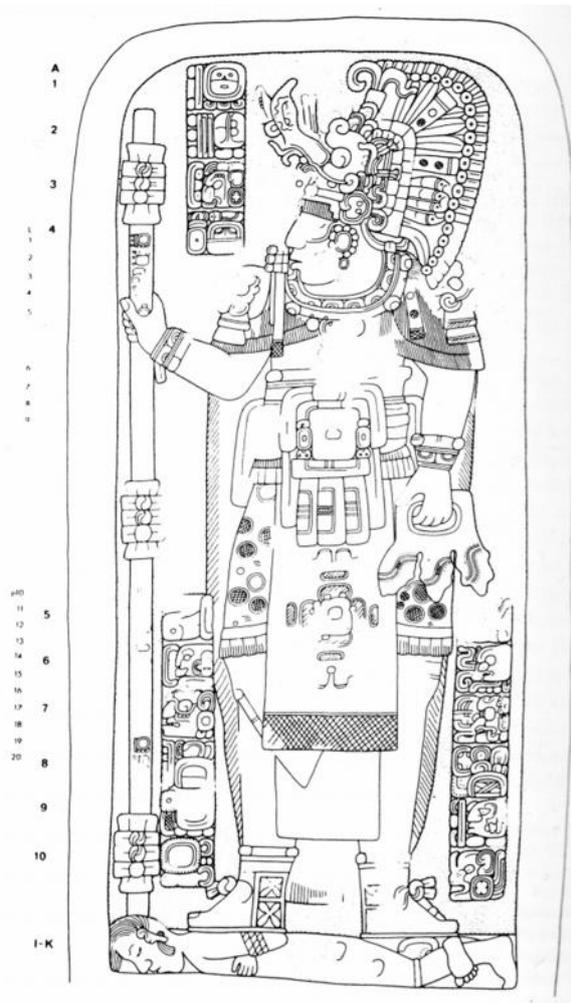


Fig. 6.8: Detail from the Madrid Codex (after Freidel, Schele and Parker 2001: fig.2.16) showing the Cosmic Turtle carrying the three stones of Creation on its back.

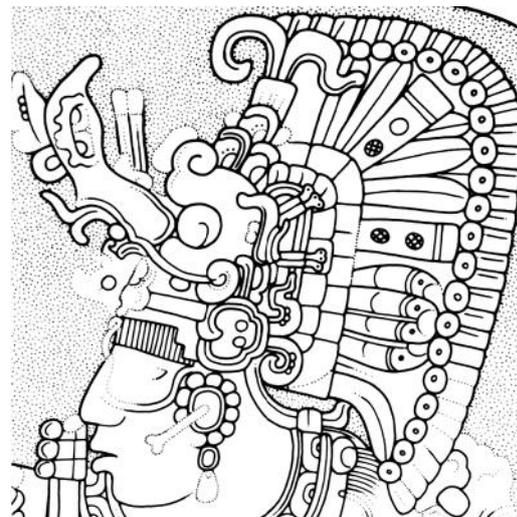
The Naranjo ruler, however, is not wearing the FTDK suspended around his neck suggesting that this knot was not a constant attribute of the deity. However this is not unusual as Stuart (1998: 404-407) notes the impersonation of the Jaguar God of the Underworld by rulers at a

number of Maya sites including, Sacul, Naranjo and Tikal and although there are a few traits which recur (such as the holding of a trident flint and drill staff and the wearing of the cruller), for the most part the costume assemblage differs between sites. This may reflect the many aspects and faces of the Jaguar Paddler as a denizen of *Na Ho Chan*, as a fire deity, stone binder and so forth.



a.

Fig. 6.9: a. Naranjo Stela 30 (after Graham 1978: fig. 2.79), showing the ruler wearing the cruller and Stack of Three Knots as a nasal element. He holds in one hand a fire drill bound by Stacks of Three Knots and in the other the trident eccentric flint. b. Detail of Naranjo Stela 30 (adapted from Graham 1978: fig. 2.79), depicting the Three Stone Hearth Place as an item in the ruler's headdress.



b.

At Tikal in the context of Stela 9 and 13, the associations for the FTDK are Period Ending rituals involving fire and fire drilling. Therefore the FTDK worn around the neck at Tikal was one of a number of costume items donned by rulers when impersonating the fire deity known as the Jaguar God of the Underworld for these ritual events.

6.2 Palenque

At Palenque five monuments depict the Flat Two-Dimensional Knot worn by the ruler in the same fashion as at Tikal: looped around the neck. These are the Temple of the Cross Tablet, the Temple of the Cross East Jamb, the Temple of the Sun Tablet, the Temple of the Foliated Cross Tablet (Greene Robertson 1991: figs. 9, 43, 95, 153), and a freestanding sculpted stone censer stand. In these monuments the Flat Two-Dimensional Knot is worn by the deceased Palenque ruler Janaab Pakal I, and two deities.

6.2a *The Temple of the Cross East Jamb (Fig. 6.11)*

The perspective of the Flat Two-Dimensional Knot worn by the figure in profile on the Temple of the Cross East Jamb has been altered so that it is viewed as if from the front. The awkward protrusion of the knot into the pictorial space accentuates the irregularity in composition as well as visually privileging the Flat Two-Dimensional Knot as an item of special interest. Similar to the Tikal examples, the FTDK in the Temple of the Cross East Jamb is worn by a deity who played a very important part in the story of Creation.

The individual wearing the FTDK on the Temple of the Cross East Jamb is identified as the Maya merchant deity, God L. In keeping with his status as a long distance traveller, the two ends of his loincloth curve upwards to form a sinuous road marked by nine footprints (Grofe 2009: 8). If we examine the context of the knot, we see symbolism associated with fire and bloodletting. The *k'ak* sign, which is used in Maya iconography to denote fiery objects, marks the smoking cigar in God L's mouth, as well as his forehead, and hat. These fire signs, together with the smoke-capped *Ajaw* sign attached to the tail of his jaguar skin cloak, mark him out as a fiery deity.



Fig. 6.10: Illustration from the Madrid Codex (page 51) showing two merchant deities drilling fire on a road identified by footprints (Stone and Zender 2011: fig.51.4). Vail (2004: 223) however, interprets the footprint motif in the Madrid Codex as signalling time and its passage. In the representation of the Temple of the Cross, East Jamb, similar footprints mark the extended ends of God L's loincloth and possibly serve to identify him as a God of long distance trade involving travel, but additionally link him to rituals, such as the drilling of fire, tied to the calendar.

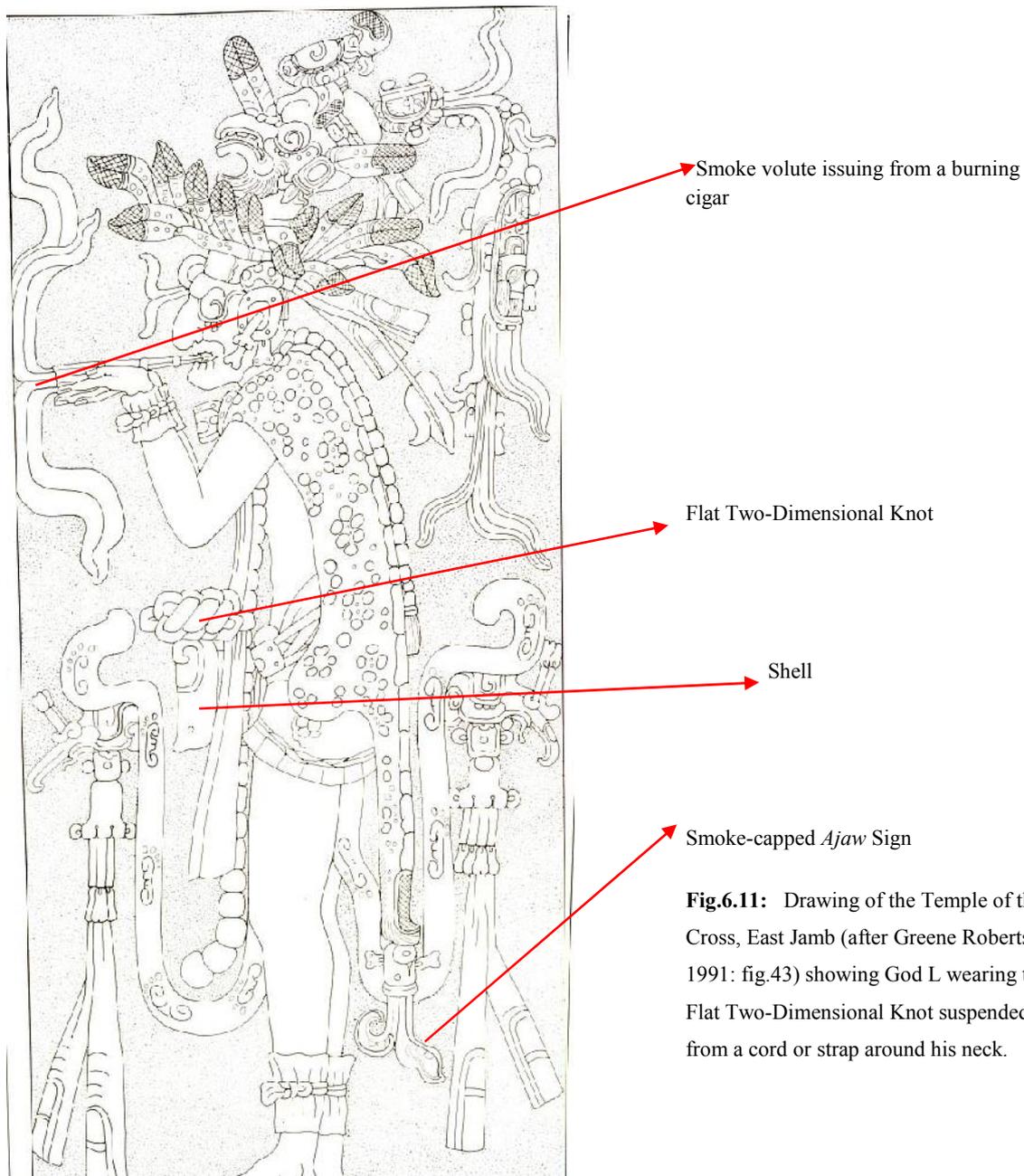


Fig.6.11: Drawing of the Temple of the Cross, East Jamb (after Greene Robertson 1991: fig.43) showing God L wearing the Flat Two-Dimensional Knot suspended from a cord or strap around his neck.

Attached just below the FTDK worn by God L is a shell. The shell and stingray spine are items found together in bloodletting plates, and in particular the *kin*-marked plate carried on the head of the Quadripartite God. The Quadripartite God (sometimes referred to as the Quadripartite Monster) is an assemblage of bloodletting implements arranged on a *k'in* (sun) marked bloodletting plate supported by a skeletal head (Freidel, Schele and Parker 2001: 216, 217). Like the stingray spine, the shell is invested with meanings to do with blood and bloodletting. Therefore the shell attached to the FTDK endows this knot with meanings to do with blood and bloodletting.

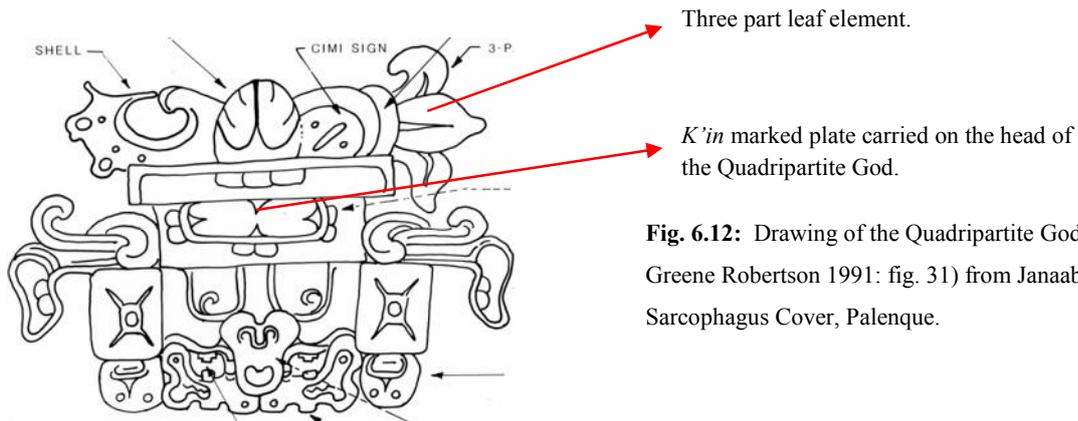


Fig. 6.12: Drawing of the Quadripartite God (after Greene Robertson 1991: fig. 31) from Janaab Pakal's Sarcophagus Cover, Palenque.

6.2b Temple of the Sun Tablet (Fig. 6.13)

In the Temple of the Sun Tablet, two aged deities wear the Flat Two-Dimensional Knot suspended from a cord around their necks. Both figures are pictured holding up the first throne of Creation, the Jaguar Throne (Kerr 1992: 114), and are therefore associated with the act of Creation. The Jaguar Throne (see myth of cosmogenesis above) is one of three Creation thrones, each one, according to the Maya Creation story, paired with a hearth stone. As such both deities and the throne they hold aloft are linked to Creation, fire and the cosmic hearth.

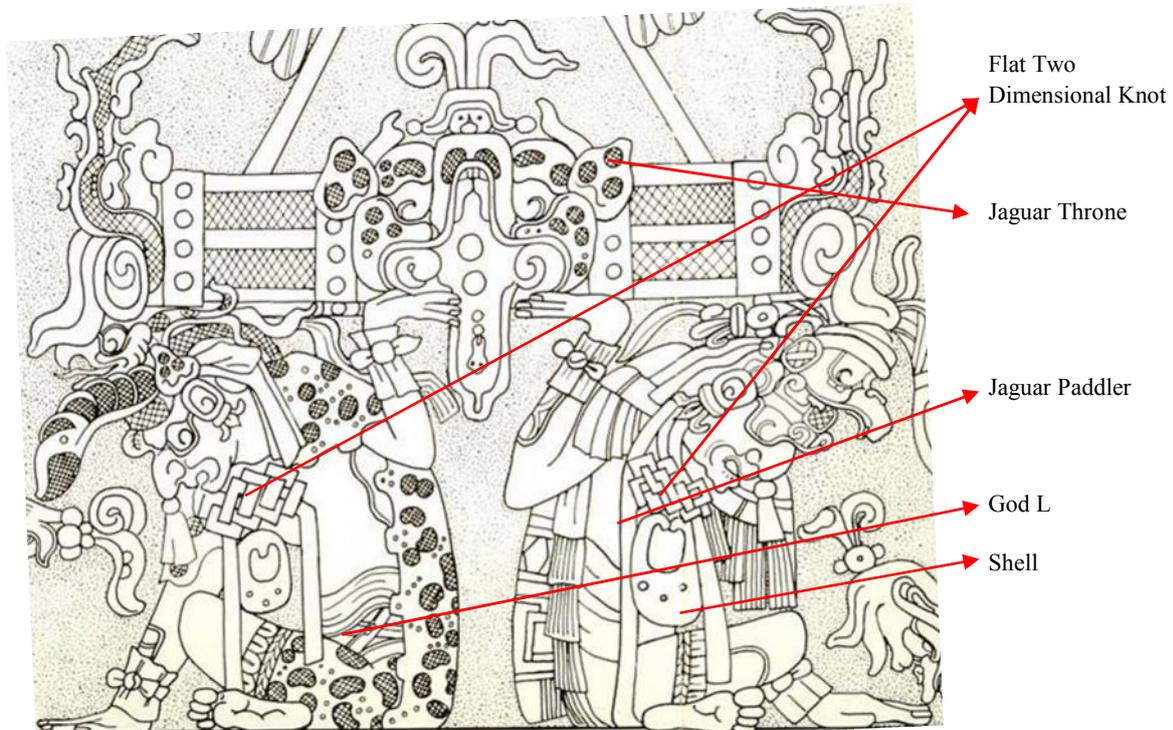


Fig. 6.13: Detail of the Temple of the Sun Tablet (adapted from Greene Robertson 1991: fig.95) depicting the two aged deities bowed under the weight of the Jaguar Throne. Both deities (God L and Jaguar Paddler) wear the Flat Two-Dimensional Knot suspended from a strap or cord around their necks.

The two figures holding up the Jaguar Throne have been identified as God L and God M (Greene Robertson 1991:42; Parmington 2011: 58). In both instances the knot worn by each deity is adorned with a shell which hangs below the body of the knot, as was the case with God L on the East Jamb of the Temple of the Cross.

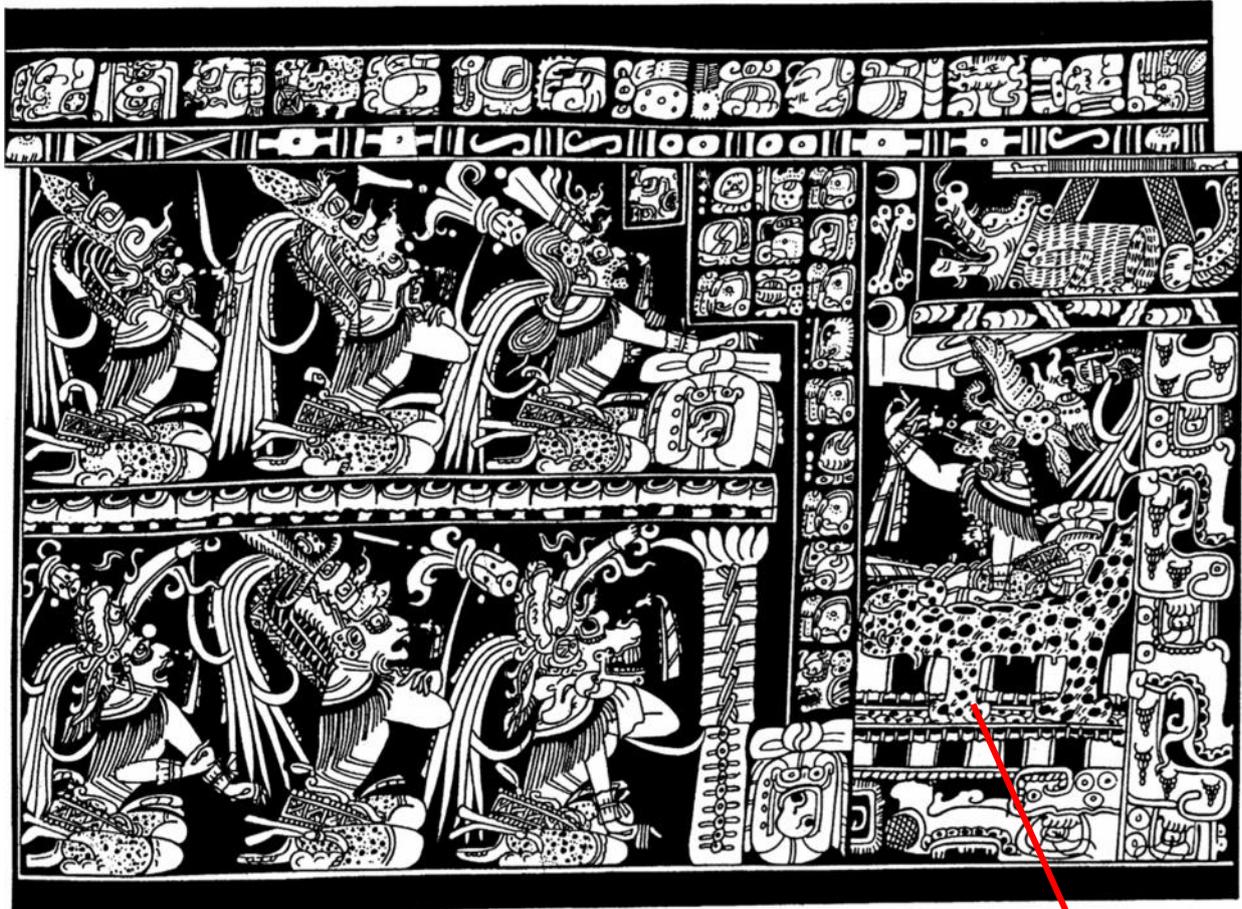
God L is shown wearing his attributes including the Muon screech owl worn in his headdress and the jaguar skin kilt (Taube 1992: 81-88). However he is also shown wearing the cruller device which marks him out as a fire deity. Although the second figure has been named as God M (Greene Robertson 1991: 42; Kelly 1965: 105), this identification is uncertain because God M, also a merchant God, is a Postclassic deity primarily represented in codices. Recognised as the Postclassic version of the Jaguar God of the Underworld, God M is an amalgam of both the Classic Period God L and the Central Mexican merchant deity Yacatecuhtli (Taube 1992: 88-92; Miller and Taube 1997:147-148). The second figure does not exhibit God L's attributes nor does he resemble Yacatecuhtli; instead he wears the cruller device and exhibits the aged features consistent with the Jaguar Paddler. I suggest that this figure is the Jaguar Paddler (see Bassie-Sweet 2008: 233). If the second deity is the Jaguar Paddler then his wearing of the cruller is in keeping with his secondary title as Jaguar God of the Underworld. However, in the context of the Temple of the Sun Tablet, God L is also shown wearing the cruller device. Further, the jaguar attributes of God L, such as his jaguar skin cloak and kilt (see Fig. 6.13), are costume elements worn by rulers for nocturnal fire-drilling rituals (Stuart 1998:408). As Creation deities, it is possible that both the Jaguar Paddler and God L were entrusted with drilling and maintaining the Creation fire at the centre of the Three Stone Hearth. It is worth noting, however, that God L plays a very different role to the Jaguar Paddler in the Maya Story of Creation. The relationship between the Jaguar Paddler and the Creation story has been touched upon but the relationship between God L and the Creation story has yet to be told. Understanding this relationship is vital to grasping the meaning of God L's presence in the Temple of the Sun Tablet. Making sense of who God L is also helps in uncovering the meaning of the FTDK worn by him on both the Temple of the Cross East Jamb and the Temple of the Sun Tablet.

God L and the Jaguar Throne

Illustrated on a much acclaimed Classic Period ceramic vase known as the Vase of the Seven Gods is a scene showing God L sitting on a Jaguar Throne (Looper 2002a: 193) addressing six Creator Gods who sit before him. Forming a wall behind the throne, as well as making up

the floor supporting the throne, are *Witz* Mountain Gods which tell us that the location for the Jaguar Throne is in a mountain cave (Boot 2008:15). The glyphic text on the vase tells of the ordering of the world out of darkness (Grofe 2009: 5; Rice 2007:144). The 4 *Ajaw* 8 *Kumk'u* date recorded on this vase identifies the time and place as Creation and pinpoints God L as having played a primary role in overseeing the events of creation (Freidel, Schele and Parker 2001: 68; Foster 2002: 173).

on 4 Ahaw 8 Kumk'u was ordered, Black-Is-Its-Center



the six seated gods are named in the middle set as the beings who put Black-Is-Its-Center in order

jaguar throne stone

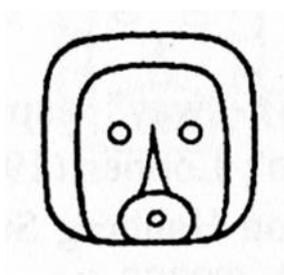
Fig.6.14: Court scene painted on the Vase of the Seven Gods showing God L sitting on the Jaguar Throne on the day of Creation (after Freidel, Schele and Parker 2001: fig.2.6).

The court scene painted on the Vase of the Seven Gods identifies a Jaguar Throne as the seat of God L; in the Temple of the Sun Tablet, the shouldering of the Jaguar Throne by God L may be metaphoric of a seat of office as a burden. Another ceramic, known as the Vase of the Eleven Gods (Kerr No. K7750), again depicts God L holding court seated on a Jaguar

Throne (Boot 2008: fig.8; Kerr and Kerr 2006: 75, Fig.9). The Princeton Vase too shows God L seated on a throne (Kerr and Kerr 2006:71-73, Figs. 1, 2), but this time the Water Lily Jaguar appears above the canopy to the throne rather than as part of the throne itself. Two jaguar heads face outwards from either end of the canopy mimicking their arrangement on double headed Jaguar Thrones depicted at Copan, Chichen Itza and Palenque.

The Jaguar Throne – Creation and Fire

In the Temple of the Sun Tablet, God L and his partner are depicted in the familiar stance of burden holders. The burden they bear is the Jaguar Throne (Kerr 1992: 114). In ancient Maya representation there is a convention of presenting certain gods as carrying burdens. These Gods are referred to as *Bacabs* or *Pawahtuns* (Schele and Mathews 1999: Fig.6.39, 243). To the ancient Maya a burden (*kuch*) was not just something of considerable weight which needed to be carried but was metaphoric of the responsibilities involved in the taking up of office or of rising to positions of power and authority (McAnany 2000: 117). Therefore *Bacabs* or *Pawahtuns*, charged with the heavy weight of office, were functionaries who took part in the governance of the kingdom (Schele and Mathews 1999: 243; Rice 2004: 229). The depiction of the two Gods in the familiar stance of burden holders suggests that they have been entrusted with the duties or weighty responsibilities associated with the burden they hold aloft, the Jaguar Throne – in other words, rulership or kingship. In addition, I suggest that the title of the office symbolized by the Jaguar Throne is that of Fire Lord; a title which Stuart indicates had political ramifications (Stuart 2005:18).



a.



b.

Fig. 6.15: a. *Ajaw* hieroglyph (after Macri andLooper 2003: 65). b. The smoke-capped *Ajaw* sign on forehead of the Water Lily Jaguar (after Schele and Miller 2006:51, figs 36-37).

The jaguar head, which marks the center of the throne held aloft by God L and the Jaguar

Paddler, displays certain attributes which identify it as a particular symbol referred to as the Water Lily Jaguar. In some myths, the Water Lily Jaguar is known to reside within the Cosmic Three Stone Hearth (Taube 1998: 443, 444). Therefore the throne with the Water Lily Jaguar reinforces both the idea that the throne is cosmic and that the person who sat on it, namely God L, wielded the powers of Creation. In keeping with its cosmic hearth location, the Temple of the Sun Tablet Jaguar Throne is vested with fire properties. The smoking *Ajaw* sign above the forehead of the jaguar at the centre of the Jaguar Throne establishes the fire association for this throne.

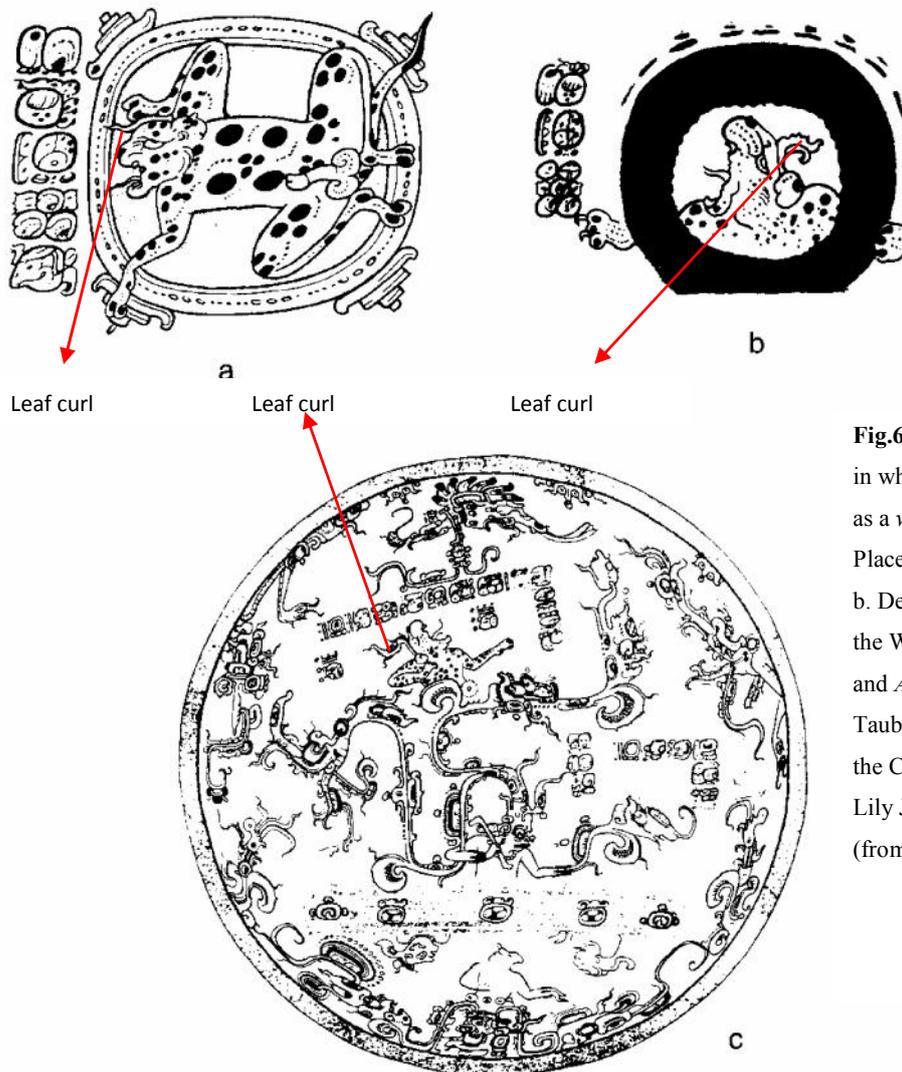


Fig.6.16: a. Detail of codex-style vase, in which the Water Lily Jaguar is labeled as a *way* and *Ajaw* of the Three Stone Place (from Taube 1998: fig. 8a). b. Detail of a polychrome vessel in which the Water Lily Jaguar is labeled as a *way* and *Ajaw* of the Three Stone Place (from Taube 1998: fig. 8b). c. Interior view of the Cosmic Plate, showing the Water Lily Jaguar above the Three Stone Place (from Taube 1998: fig. 8c).

Taube notes that the smoking-capped *Ajaw* glyph (T535) is found in parentage statements where it is interpreted as ‘child of father’ (Taube 1992: 54). The smoking-capped *Ajaw* glyph often appears in representation attached to the head or tail of the Water Lily Jaguar identifying this beast with fire and lineage through the male line (Taube 1992: 54). It is worth noting that the smoking-capped *Ajaw* glyph is attached to the tail of the jaguar skin cloak worn by God L on the Temple of the Cross East Jamb suggesting that the cloak worn by this deity is the skin of the Water Lily Jaguar.

Another fire icon pictured in the Temple of the Sun Tablet is the shield stationed above the throne and which bears on its face a portrait head of the Jaguar God of the Underworld (Milbrath 1999:124, fig.4.2g), the Classic Period God of Fire with identifying cruller (Taube 2002: 292). The Jaguar Throne together with the Jaguar God of the Underworld shield identifies the place of enthronement as being informed by the events of Creation. An indication that the landscape intended is cosmic and to do with creation is the mention in the Temple of the Sun Tablet inscriptions of the manifestation of the precious/first Three Stone Place on the date 4 *Ajaw* 8 *Kumk’u* (Stuart and Houston 1994: 69-71).

To sum up, in the context of what is known about the iconography and inscriptions of the Temple of the Sun Tablet, the two human-like figures who wear the FTDK around their necks appear to be prototype fire deities with critical connections to the first throne of Creation. The shell suspended from the FTDK may in fact identify the wearer as a supernatural (denizen of the other world conjured through the letting of blood) in contrast, for example, to the figures on Tikal Stela 9 and 13, who are clearly living rulers impersonating a deity, or taking on the deity’s attributes. The deities depicted on the Temple of the Sun Tablet are also connected to the Jaguar Throne, a symbol that is well known to legitimize rulership or kingship in Maya iconography. God L in other contexts is commonly shown seated on a Jaguar Throne, which reinforces his particular association with rulership. According to the Creation story recounted on Quirigua Stela C, it was at this throne that the Jaguar Paddler and his partner the Stingray Paddler set and bound a stone, thus tying the very concept of rulership to Creation, a critical link in terms of legitimation. The relationship between the FTDK and the two deities, as well as the relationship between this knot, the Jaguar Throne and the Water Lily Jaguar motifs, reinforce the idea that the FTDK when worn around the neck of an individual implicates the individual, God or man, in the events of Creation that are linked to rulership.

6.2c Censer Stand - Jaguar God of the Underworld (Fig. 6.17)

A stone censer stand sculpted into the image of an old or aged figure, possibly the Jaguar Paddler in his guise as Jaguar God of the Underworld, wears the Flat Two-Dimensional Knot around the neck. This identification is based on the cruller worn by the figure.



Fig. 16.17: Photograph taken during my visit to the on-site museum at Palenque showing a carved stone censer stand in the form of an aged deity, possibly God L wearing the Flat Two-Dimensional Knot suspended from a cord around the neck.

The censer stand is housed in the archaeological museum at the site of Palenque which is where I saw it. The information at the museum dates the stand to the 8th century A.D. and describes both the snake framing the figure and the small human face emerging from the maw of the snake. The serpent entwined around the aged figure wearing the Flat Two-Dimensional Knot, like those displayed at Yaxchilan for bloodletting rituals (Tate 1992: 88-91), point to bloodletting and the vision quest. The representation of the Jaguar God of the Underworld on this censer is in keeping with the pattern noted throughout the Maya area of representing the visage of the Jaguar God of the Underworld on incense burners. In the context of the censer stand, the FTDK is both associated with fire, the letting of blood and the vision quest.

6.2d The Tablets of the Cross, Sun and Foliated Cross (Figs. 6.18, 6.19, 6.20, 6.23))

Three Palenque monuments, the Temple of the Cross Tablet, the Temple of the Sun Tablet, and the Temple of the Foliated Cross Tablet depict the Flat Two-Dimensional Knot worn by a deceased ruler identified as Janaab Pakal I (Schele and Freidel 1990: 242, Greene Robertson 1991:13). Like previous examples, the FTDK is worn for rituals which draw from, and look to the Creation story as a means of legitimizing concepts of lineage, dynasty and rule. The representation of the Temple of the Foliated Cross Tablet clearly shows the knot standing proud of its wearer. Although Pakal is presented in profile on the Temple of the Foliated Cross Tablet, the Flat Two-Dimensional Knot worn around his neck is depicted as if it is being viewed from the front. The altering of the perspective of the Flat Two-Dimensional Knot suggests that it was important that this knot be seen and recognized.

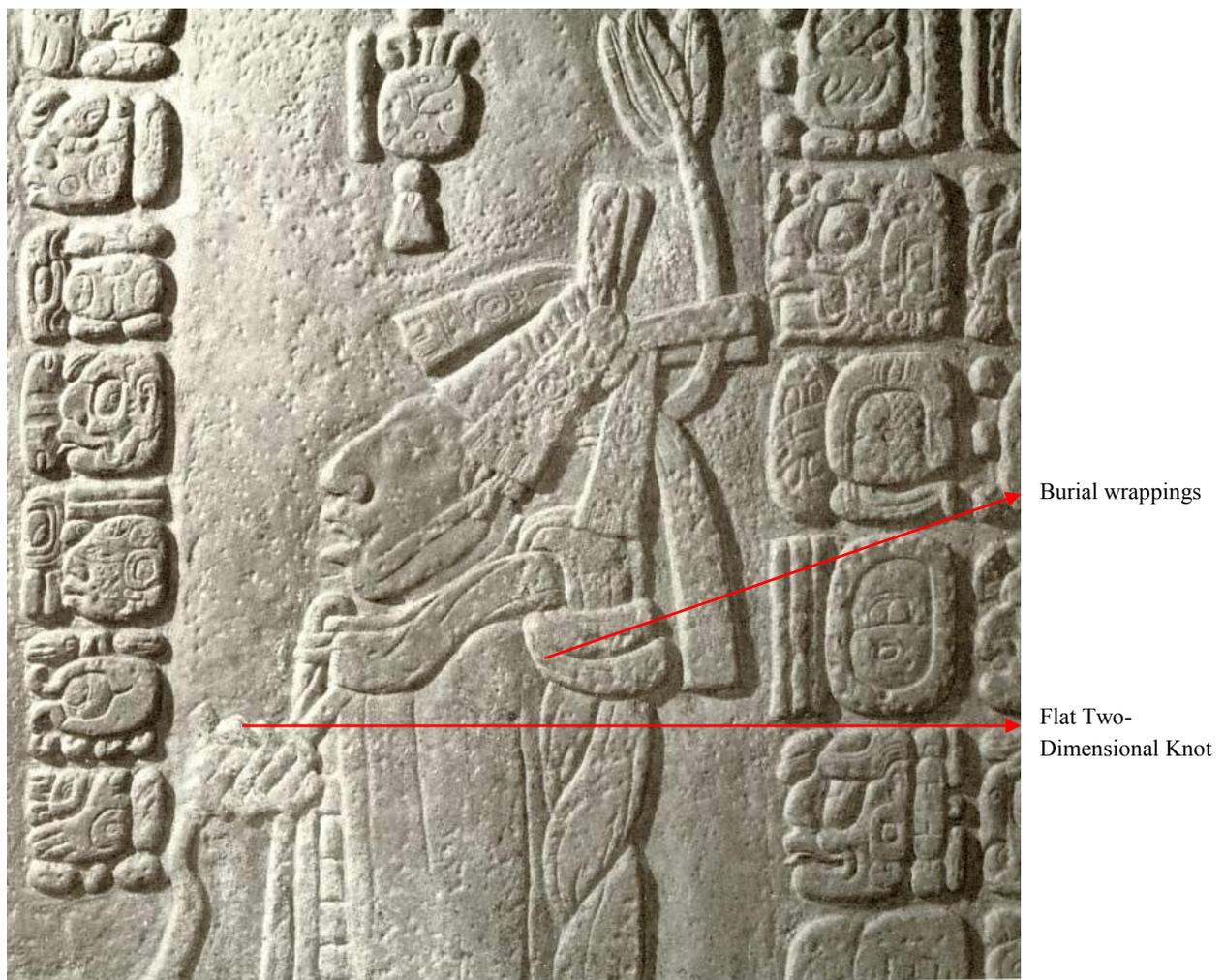


Fig. 6.18: Detail from the Temple of the Foliated Cross Tablet (after Greene Robertson 1991: fig.163) showing the deceased Pakal wearing the Flat Two-Dimensional Knot suspended from a strap or cord around his neck.

The three tablets are housed in three pyramid-temples referred to by scholars as the Cross Group. The Cross Group comprises the Temples of the Sun, Cross and Foliated Cross. Foster describes how the temples were originally capped by roof combs on which *witz* masks were modeled in stucco. The *witz* mask (*Witz* Mountain God), as symbol for the ancient Maya Creation Mountain, marks the temples out as a trio of mountains (Foster 2002:174-75).

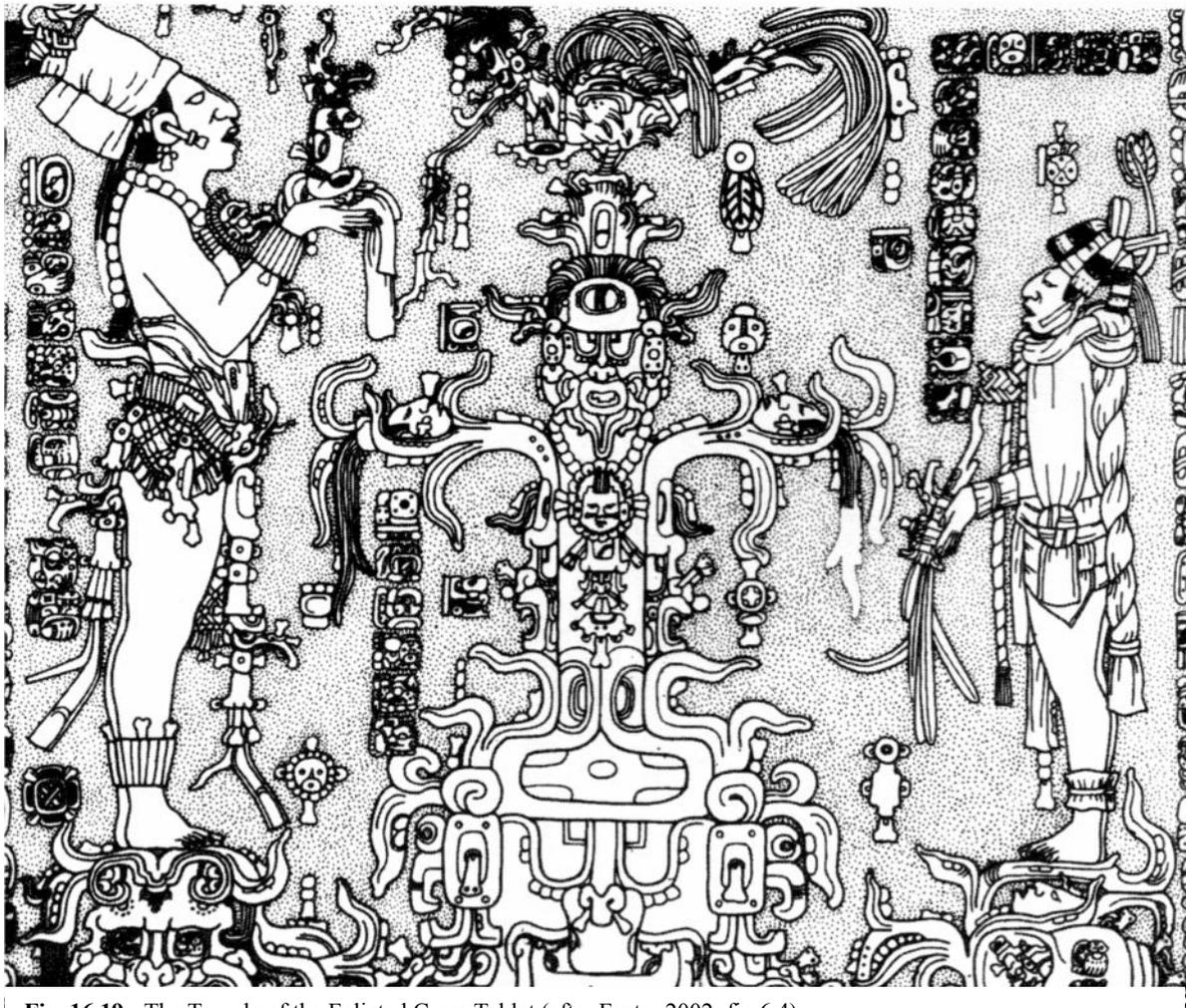


Fig. 16.19: The Temple of the Foliated Cross Tablet (after Foster 2002: fig.6.4).

The Creation Mountain or *Witz* is one of the most pervasive and powerful symbols of the ancient Maya Creation event. The Maya in their inscriptions describe it as *Yax-Hal-Witz* (Schele 1998: 492-295; Freidel, Schele and Parker 2001:138-139; Loofer 2002b:192). It is at *Yax-Hal-Witz* that the first three stones of creation are set (Taube 1998: 456). Inner temple sanctuaries within each of the three man-made mountains functioned as ‘otherworld realms’ where communion with the ancestors took place. It is within these inner sanctuaries that the

three tablets are housed. The inscriptions on the three tablets record the accession of K'inich Kan Bahlam II (Foster 2002:174).

On both the Temple of the Cross and the Temple of the Foliated Cross, Janaab Pakal I is shown holding a bloodletter or perforator. In the Temple of the Cross Tablet he holds the Quadripartite God as a sceptre from which issues a stream of blood (Greene Robertson 1991: 41, fig.28). In the Temple of the Foliated Cross Tablet the item held in hand is the Perforator Deity with diagnostic triple knots binding the head of the deified blade (Roberston 1991: 49).

In the Temple of the Sun Tablet, Janaab Pakal I is shown holding the Flint-Shield God, a symbol of lineage and dynasty (Greene Robertson 1991: 41). The Flint-Shield God appears in all the accession programs at Palenque with the exception of the Oval Palace Tablet (Schele 1979: 8). *Kawak* (stone) markings together with its eccentric shape identify the Flint-Shield God as a deified eccentric flint (Schele 1979: 8).

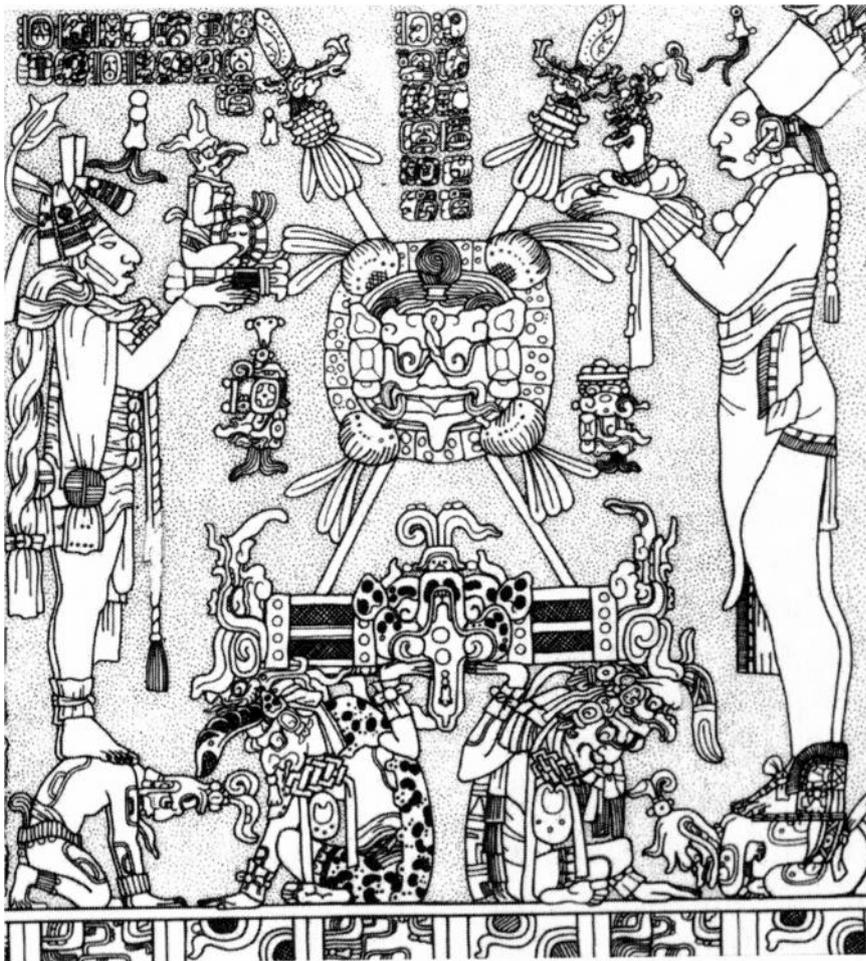


Fig. 6.20: The Temple of Sun Tablet (after Foster 2002: fig.6.6) showing the Jaguar Throne with the Jaguar God of the Underworld shield directly above the throne.

That the accession and bloodletting rituals depicted on the three tablets took place at the Period Ending is suggested by the display of quadripartite completion signs [glyphs denoting the completion of the *K'atun* (Coggins 1980: 728,729; Rice 2004: 71, fig.3.6.)], in the blood gushing from the hand-held Quadripartite God in the Temple of the Cross Tablet and on Pakal's headdress in the Temple of the Foliated Cross Tablet.

Whilst the Tablets of the Cross and Foliated Cross have as their central motif the World Tree, in the composition of the Temple of the Sun Tablet, the central motif is a Jaguar God of the Underworld shield and a Jaguar Throne (Foster 2002:174-178).

3 COMPLETION SIGNS IN HEADDRESS



Fig. 6.21: Image of Pakal from the Temple of the Foliated Cross Tablet (after Greene Robertson 1991: fig.155), wearing a textile headdress marked with three completion signs.

In the representation of the Temple of the Cross Tablet, the World Tree, symbol for the centre (Schele and Miller 2006: 282-285), grows out of the bloodletting plate carried on the head of the Quadripartite God (Greene Robertson 1991: 25-26). The positioning of the Quadripartite God at the centre of a skyband informs us that the centre point marked by the tree is celestial. Sitting at the top of the World Tree is the Principal Bird Deity. For the ancient Maya this

bird standing at the topmost flowering branch of the World Tree was the bird of the centre. Standing at the centre of the cosmos, this tree connected the natural and supernatural worlds (Schele and Freidel 1992: 242, 418). The accompanying inscriptions to the representation of the Temple of the Cross Tablet mention, at glyph block C6 to C7, the manifestation of the Three Stone Place of Creation (Stuart and Houston 1994: 69-71; Taube 1998: 462; Freidel, Schele and Parker 2001: 69).

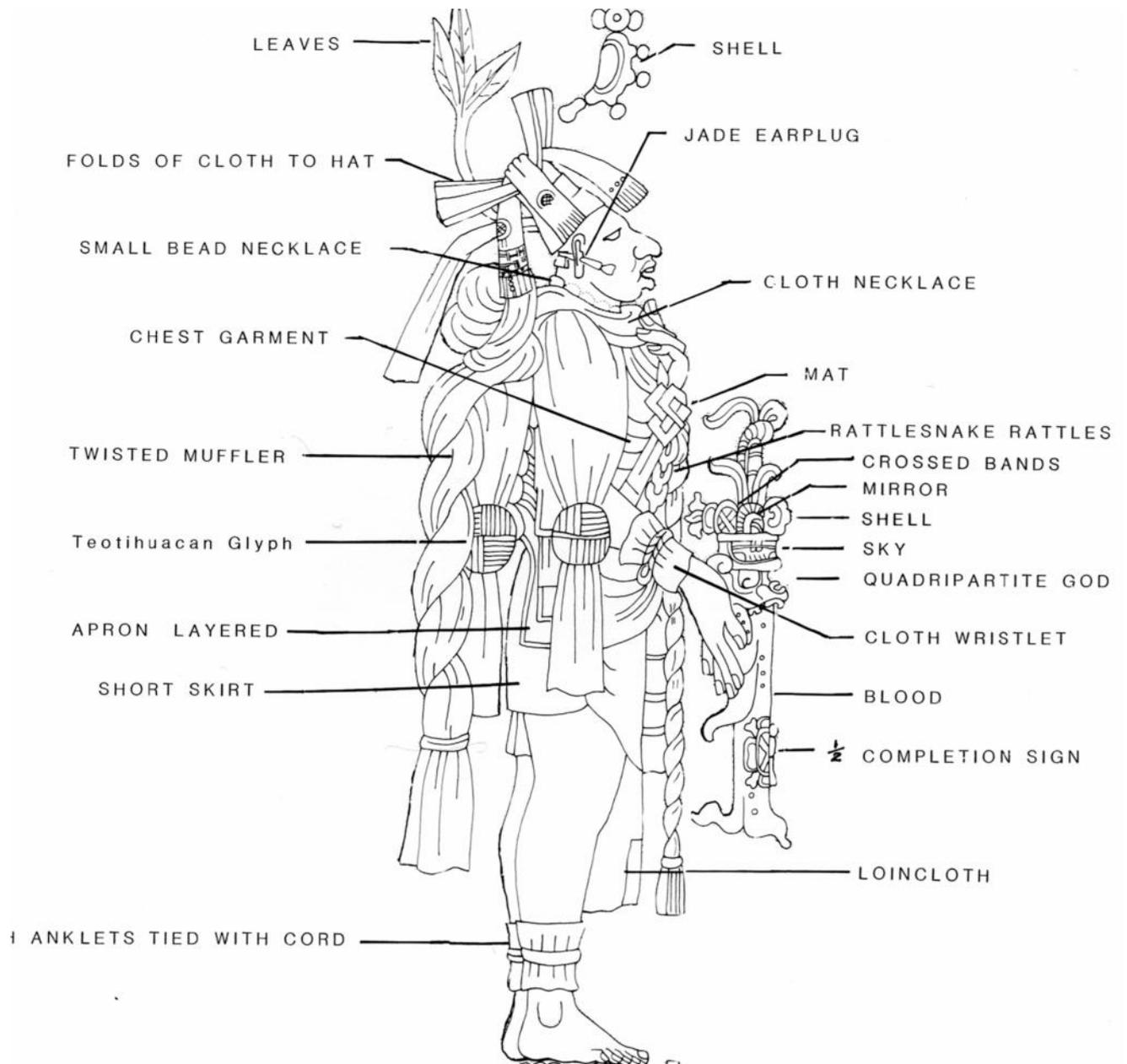


Fig. 6.22: Detail of the Temple of the Cross Tablet (after Greene Robertson 1991: fig. 28) showing Janaab Pakal I holding the Quadripartite God as a sceptre from which blood flows. Within the stream of blood is a half completion sign.

The FTDK worn by K'inich Janaab Pakal in the Tablets of the Cross, Foliated Cross and Sun is an item which evokes the ancestral world as well as the contact with this world through bloodletting. It is an item worn for Period Ending rituals which commemorate accession and which most importantly draw on the story of Creation.

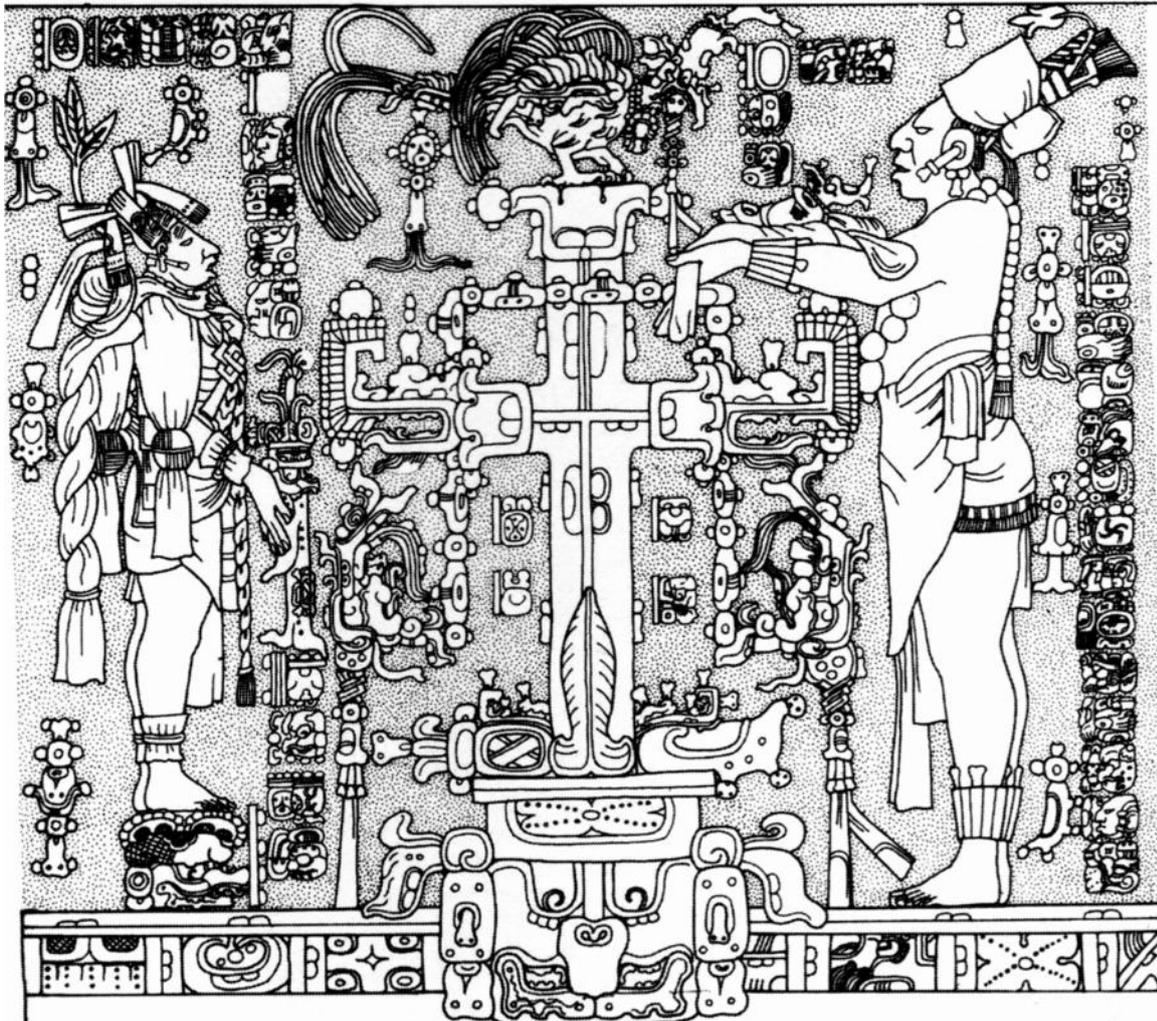


Fig. 6.23: The Temple of the Cross Tablet (after Foster 2002: fig. 6.5) showing the *k'in* marked dish with bloodletting equipment set on the head of the Quadripartite God. The World Tree emerges from the dish.

Summary

At Tikal and Palenque, individuals who wear the Flat Two-Dimensional Knot looped around the neck are participants in Period Ending rituals which involve fire, the drilling of fire, and bloodletting. The Maya Creation event both informs and is the backdrop or context for these rituals. The rulers pictured on Tikal Stela 9 and 13 impersonate the Classic Period God of Fire referred to by researchers as the Jaguar God of the Underworld but also known as the

Jaguar Paddler. Thus as rulers they demonstrate their place between the world of humans and the world of the gods and ancestors. At Palenque, deities associated with the origins of kingship at Creation wear the Flat Two-Dimensional Knot looped around their necks. Therefore in the Temple of the Sun Tablet, this knot is worn by God L and the Jaguar Paddler. Both God L and the Jaguar Paddler wear the cruller device identifying them as fire deities. Both are also associated with Jaguar imagery, and God L with the Jaguar Throne, which legitimizes kingship. The iconography of the Temple of the Sun Tablet consolidates the many ideas already noted above and reinforces the concept of succession in the form of the Jaguar Throne. At Tikal, the rulers impersonate deities (Fire Lords) who are linked to the origins of kingship at Creation. At Palenque, the actual deities linked to the origins of kingship at Creation are shown. Similar to Tikal, the FTDK at Palenque is also worn by a historical personage – the ancestral ruler known as Janaab Pakal I. Unlike Tikal, however, the immediate associations for the knot when worn by a Palenque historical personage is not fire or fire drilling but rather lineage, ancestry and bloodletting.

My hypothesis is that the Flat Two-Dimensional Knot in Maya iconography is worn by prototype fire deities and their impersonators. These fire deities played an important role in the ancient Maya story of Creation. The occasion for wearing of the Flat Two-Dimensional Knot is Period Ending rituals which commemorate accession and involved the drilling of fire and the letting of blood.

Chapter Seven: Flat Two-Dimensional Knots Displayed as Personal Adornment – On Belt or Waist Assemblage

Carved, painted, and modeled images of men and women on architecture, monuments, ceramic vessels and figurines have left us with a diverse record of belts in use during the Classic Period. Belts were made from an array of materials both perishable and imperishable. Some were simple cloth sashes; others were made from a composite of items including cloth, animal skin, and wood.

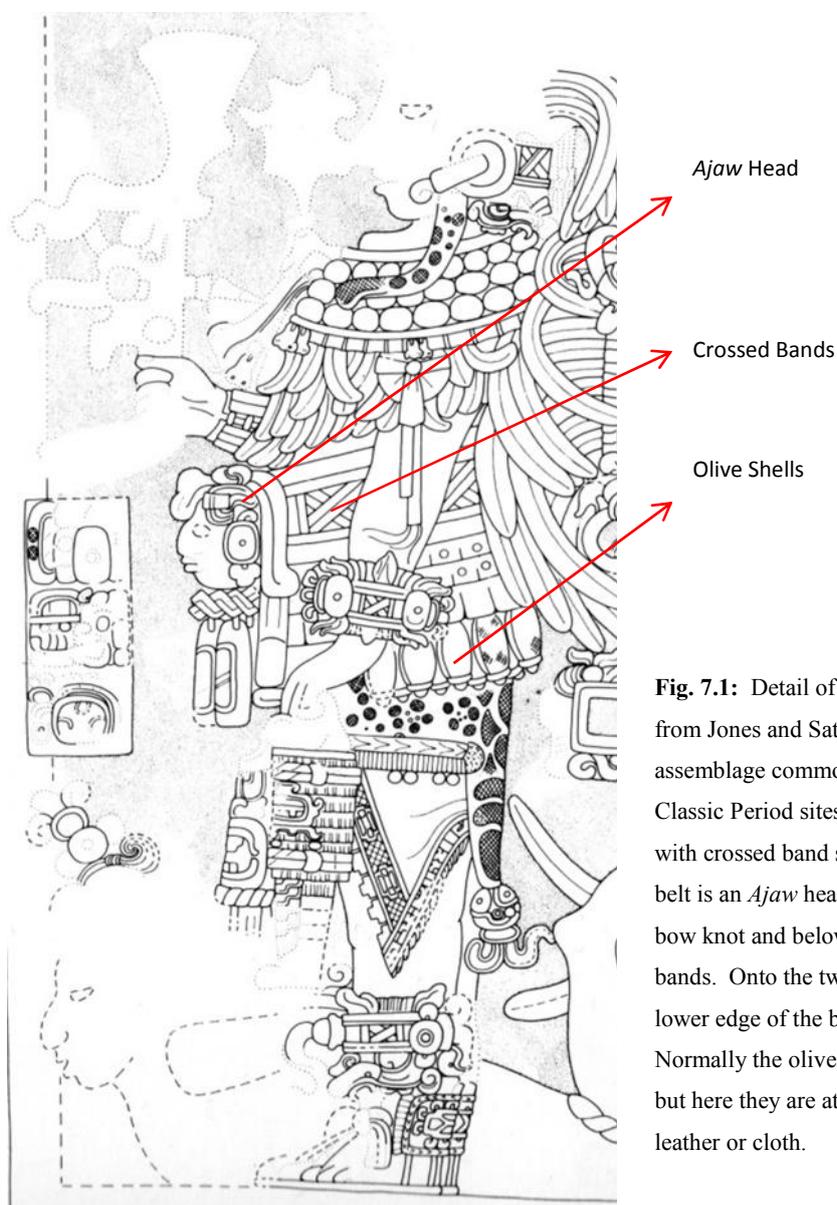


Fig. 7.1: Detail of drawing from Tikal Stela 5 (adapted from Jones and Satterthwaite 1982: fig. 7) showing a belt assemblage commonly worn by rulers at Tikal and other Classic Period sites. The broad band of the belt is in-fixed with crossed band signs and attached to the front of the belt is an *Ajaw* head. The *Ajaw* head is surmounted by a bow knot and below the chin are two crossed and twisted bands. Onto the twisted bands are attached two celts. The lower edge of the belt is framed by a line of olive shells. Normally the olive shells are directly attached to the belt but here they are attached to layered material, possibly leather or cloth.

Any number of objects could be fixed onto these belts such as effigy heads, leather/cloth pouches containing bloodletting equipment, celts, and shells (Schele and Miller 2006: 70-72). Belts also functioned as support structures for backracks made from wood, feathers, paper and other lightweight materials (Schele and Miller 2006: 70-72).

The belts worn by the rulers pictured on Lintel 3 of Tikal Temple I, Structure 10 Lintel, and Aguateca Stela 7 conform to a particular type identified by Schele and Miller (2006: 70-71) as a belt reserved for kings and high-ranked nobles. Comprising a wide band inset with crossed-band symbols, this belt functioned as a base structure onto which *Ajaw* portrait heads were fixed. A large bow knot tied from a band of cloth is typically arranged on top of the *Ajaw* portrait head, and below the head dangle three celts. Olive shells hang in a line from the lower edge of the belt (Schele and Miller 2006: 70-71). In the context of the belts displayed on the three monuments from Tikal and Aguateca, the crossed band symbols are replaced by FTDKs.

Table 7.1: Table listing all occurrences of FTDKs displayed on belt or waist assemblages.

Site	Locus of FTDK	Gregorian Year	Long Count
Tikal	Temple I, Lintel 3	A.D. 695 or 697 (see Clancy 2009: 122)	Late Classic 9.13.3.0.0 or 9.13.5.0.0 (Jones and Satterthwaite 1982: 97-98; Clancy 2009: 122).
Tikal	Structure 10 Lintel	A.D. 741	Late Classic 9.15.10.0.0 (Jones and Satterthwaite 1982: 104).
Aguateca	Stela 7	A.D. 790	Late Classic 9.18.0.0.0 (Graham 1967: 26).
Chichen Itza	Jade from the Cenote of Sacrifice		Late Classic (Paxton 2001: 135; Adams 2005: 314; Proskouriakoff 1974).

7.1 Tikal

7.1a Temple I Lintel 3 and Structure 10 Lintel (Figs. 7.2, 7.4)

The FTDKs on the Tikal Temple I Lintel 3 belt, though partially hidden by the ruler's arm and backrack extensions, are clearly identifiable. Under the ruler's elbow, the contours of an *Ajaw* portrait head can just be seen, together with the three dangling celts. Two of the olive

shells are also visible. The belt assemblage pictured on this lintel encircles the middle of the ruler's body extending almost from the chest to hips. It juts out at the back where it works to support the structure of the back rack. In many ways this kind of stiff or inflexible belt resembles those used by ballplayers to deflect the ball. The ruler pictured on Tikal Temple I Lintel 3, Jasaw Chan K'awiil, is seated on a throne also decorated with FTDKs. This throne and the FTDKs displayed on it are discussed in Chapter Eleven, however it is worth noting here that the *Ajaw* portrait heads and knots on the belt mimic or mirror those on the portable throne, suggesting some sort of identity relation between this particular belt and the throne. The Structure 10 Lintel belt is almost entirely hidden by the arm, shield, and other costume items worn by the ruler, meaning that the different diagnostic elements which ordinarily work to identify the belt are not visible. Also, only a portion of the FTDK can be seen overlying the jaguar skin which covers the structure of the belt. In contrast, the items which make up the belt assemblage worn by the Aguateca Stela 7 ruler — including the FTDK, jaguar skin, *Ajaw* portrait head with bowknot and celts, and olive shells — are all visible. The jaguar skin and FTDK of the Structure 10 Lintel belt are items which are shared with the Aguateca Stela 7 belt, and my assumption is that the depictions of the individuals wearing belts adorned in this way are intended to convey the same meaning.

The wearing of the FTDK as a belt element by the enthroned ruler Jasaw Chan K'awiil I, pictured on Temple I Lintel 3, personalizes the knot and links it to the identity of its wearer. A similar link was described in Chapter Six where the knot functions as an item of costume worn by Tikal rulers shown impersonating the fire deity known as the Jaguar God of the Underworld. In Chapter Six, I showed that the cruller, a primary identifying attribute of the Jaguar God of the Underworld, is worn by a number of Creation deities, including God L and the Jaguar Paddler, suggesting that several deities assumed the role of fire deities. Why rulers should choose to dress as fire deities is not a subject that has received much attention. Rulers, however, and presumably those over whom they ruled, shared the belief that the Three Stone Hearth lay at the centre of Creation as *axis mundi*. This mythical hearth became a primary metaphor for Maya kingship and the person of ruler himself (Taube 1998: 427-469); from this it stands to reason that the importance of the hearth in Creation charges fire deities with acts (i.e. the drilling of the Creation fire and the binding of the Creation hearth) which structured rule. Over time the re-enactment of these acts by rulers transforms the acts into official duties linked to governance and rulership. This proposal is supported by the representation on Palenque's Temple of the Sun Tablet which shows God L and another

deity, possibly the Jaguar Paddler (wearing the cruller and a FTDK suspended from a cord around their necks), shouldering a heavy burden, the Jaguar Throne (see Chapter Six). The representation of the two deities bowed under the weight of the throne is suggestive of the heavy burden of office associated with this seat.

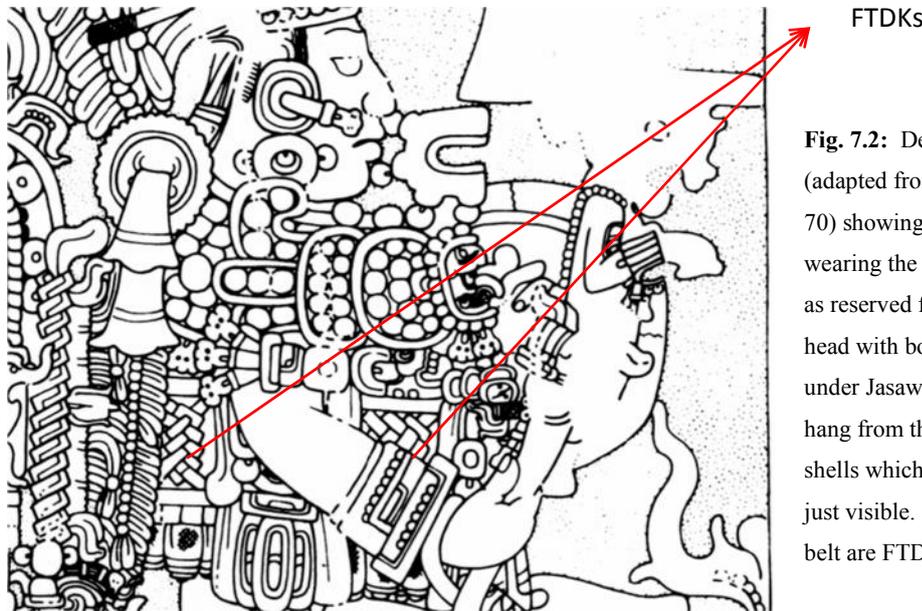


Fig. 7.2: Detail of Tikal Temple I Lintel 3 (adapted from Jones and Satterthwaite 1982: fig. 70) showing the ruler Jasaw Chan K'awiil wearing the belt described by Schele and Miller as reserved for rulers. The outline of an *Ajaw* head with bow knot can be seen peeking from under Jasaw Chan K'awiil's arm. Three celts hang from the *Ajaw* head and some of the olive shells which frame the lower edge of the belt are just visible. Inset within the band comprising the belt are FTDKs.

Given the function of the knot as a kind of insignia or symbol sometimes worn by rulers impersonating fire deities and by the Creation fire deities themselves, the FTDK worn on the belt by Jasaw Chan K'awiil I and the Structure 10 Lintel ruler implies that they are charged with overseeing acts such as the lighting and maintenance of a sacred fire hearth (symbolizing the Three Stone Place Creation hearth); an activity carried out by Creation deities at the beginning of time. Although the two rulers represented on the lintels do not wear the cruller, a shield bearing the visage of the Jaguar God of the Underworld is carried by the Structure 10 Lintel ruler. This deity is frequently pictured on shields and censers (Benson 1998: 64; Stuart 1998: 408). The face of the shield represented on Temple I Lintel 3 is held away from our field of vision, meaning that we do not know whether it too was embellished with the portrait of the Jaguar God of the Underworld; however given the frequency of this deity as a shield icon it is possible that it did. In Palenque's Temple of the Sun Tablet, the Jaguar God of the Underworld shield is stationed above the Water Lily Jaguar Throne. Two crossed spears behind the shield replicate or form the *jal* glyph, meaning 'to manifest' (Kettunen and Helmke 2010: 98; Montgomery 2002: 106). Comprising two crossed bands, the *jal* glyph is part of the 4 *Ajaw* 8 Kumk'u Creation account (Macri andLooper 2003: 228;

Thompson 1991: 54), where it refers to the manifesting of the Maize God from the entrance at the centre of the Creation turtle's carapace, a place marked by the Three Stone Hearth (Looper 2002a: 184-186, fig. 10.6).

The Jaguar God of the Underworld shield in the context of the Temple of the Sun Tablet is stationed at exactly where the two spears cross, telling us that the Jaguar God of the Underworld Shield is located at the place of the Creation fire hearth. The shield itself appears to be fashioned from a turtle carapace, perhaps an allusion to the Creation turtle. The Jaguar God of the Underworld Shield held by the Structure 10 Lintel ruler affirms the Creation context for the wearing of the FTDK; and if, as I suggest, the Temple I Lintel 3 ruler, Jasaw Chan K'awiil, also holds a Jaguar God of the Underworld Shield, this would suggest that both Tikal rulers are wearing or displaying accoutrements of fire deities. In the representation of Temple 1 Lintel 3 and the Structure 10 Lintel, the FTDK worn as a belt element is possibly part of the fire deity costume.

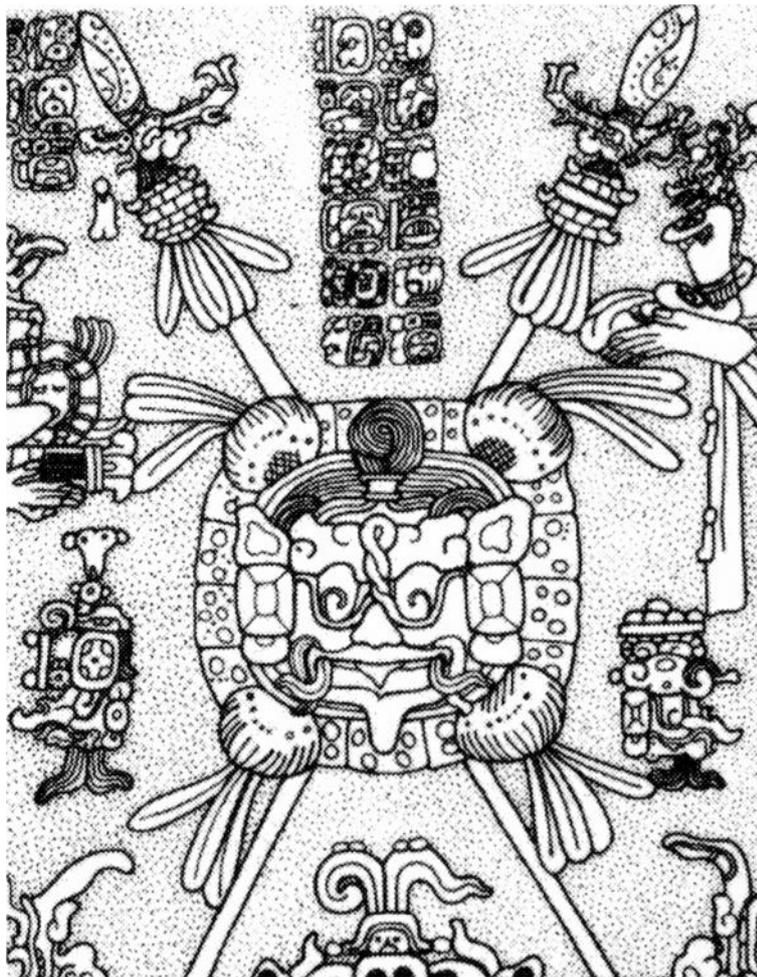


Fig. 7.3: Detail of drawing from Palenque's Temple of the Sun Tablet (adapted from Greene Robertson 1991: 95) showing the Jaguar God of the Underworld shield stationed at the place of Creation marked by crossed spears. The crossed spears mimic the crossed bands which comprise the Maya sign *jal* meaning 'to manifest'.

Both Temple I Lintel 3 and the Structure 10 Lintel were dedicated at a Period Ending, with Temple I Lintel 3 dedicated at either the completion of three years into the *K'atun* or a *Hotun* (five year division of the *K'atun*), and the Structure 10 Lintel at a *Lajuntun* (ten year division of the *K'atun*) (Jones and Satterthwaite 1982: 97-104; Clancy 2009: 122). The ritual objects held by Jasaw Chan K'awiil I and the Structure 10 Lintel ruler tell us about the acts which took place at the Period Ending. Effigies of K'awiil, such as the serpent-footed K'awiil sceptre held by the ruler pictured on each lintel, are displayed in Classic times by rulers in Period Ending scenes (completion of the *K'atun* and its divisions) pictured on Maya monuments (Milbrath 2002: 126-142; Milbrath 1999: 247-248). The link between K'awiil and the Period Ending is also known for the Postclassic, at which time this deity is seen to be an embodiment of the *K'atun* (Milbrath 2002: 127). The K'awiil sceptre held by the Tikal rulers in the representation of Temple I Lintel 3 and Structure 10 Lintel is a strong clue that the display of the FTDK was sensitive to time and its commemoration. Given this observation, it is worth considering in more detail the meanings which researchers have accorded to K'awiil.

The Presentation of K'awiil (God K)

In a comparative analysis of Postclassic Paris Codex throne structures, referred to as *K'atun* thrones, and the Classic Period Piedras Negras niched scaffold throne structures, Helmuth notes that the basal platforms of both depict a bound crocodile above a sky frame (skyband) (Taube 1987: 1-9). Comprising thirteen pages, of which the last page is missing, the Paris Codex charts the succession of thirteen consecutive *K'atuns* or a full *K'atun* Cycle (Taube 1987: 1; Love 1994: 17-25). The *K'atun* Cycle refers to the cycling of thirteen successive *K'atuns* which the Maya visualized as a wheel divided into thirteen parts (Rice 2004: 66-67; Taube 1988: 184-186). The passing of each of the *K'atuns* is described in the same way 'as the installation or accession of an incumbent into high office' (Taube 1987: 1). Each scene depicts an enthroned personage receiving a K'awiil (also known as God K [Stuart 1987: 15; Milbrath 1999: 231]) effigy head. Taube concludes that the presentation of K'awiil/God K in the Paris Codex indicates change in political or religious authority. He bases his interpretation on Classic Period scenes where effigies of K'awiil are presented at accession and dynastic rites (Taube 1987: 1).

The harnessing of accession/succession to the passage of the *K'atun* in each of the pages of the Paris Codex indicates that time and its passage, as measured by the *K'atun* Cycle,

structured and modeled Maya concepts of rule. Given the similarity between the Piedras Negras scaffold thrones and the *K'atun* Thrones depicted in the Paris Codex, the possibility exists that the Piedras Negras scaffold thrones were *K'atun* Thrones. Love (1994:17-25) points out that the *K'atun* Thrones depicted in the pages of the Paris Codex also have counterparts at Naranjo (Naranjo Stela 32 depicts a scaffold throne). The people seated on the *K'atun* Thrones (scaffold thrones) at Naranjo (and Piedras Negras) are rulers of Classic Period sites and polities. Similarly the personages shown seated on the *K'atun* Thrones in the Paris Codex are also proposed as real political rulers (Love 1994: 17-25). The Period Ending context for Tikal Temple I Lintel 3 and its depiction of a ruler holding a K'awiil sceptre raises the question whether the throne (displaying FTDKs) on which the ruler is seated (see Chapter Eleven Fig. 11.6) is also a *K'atun* Throne.

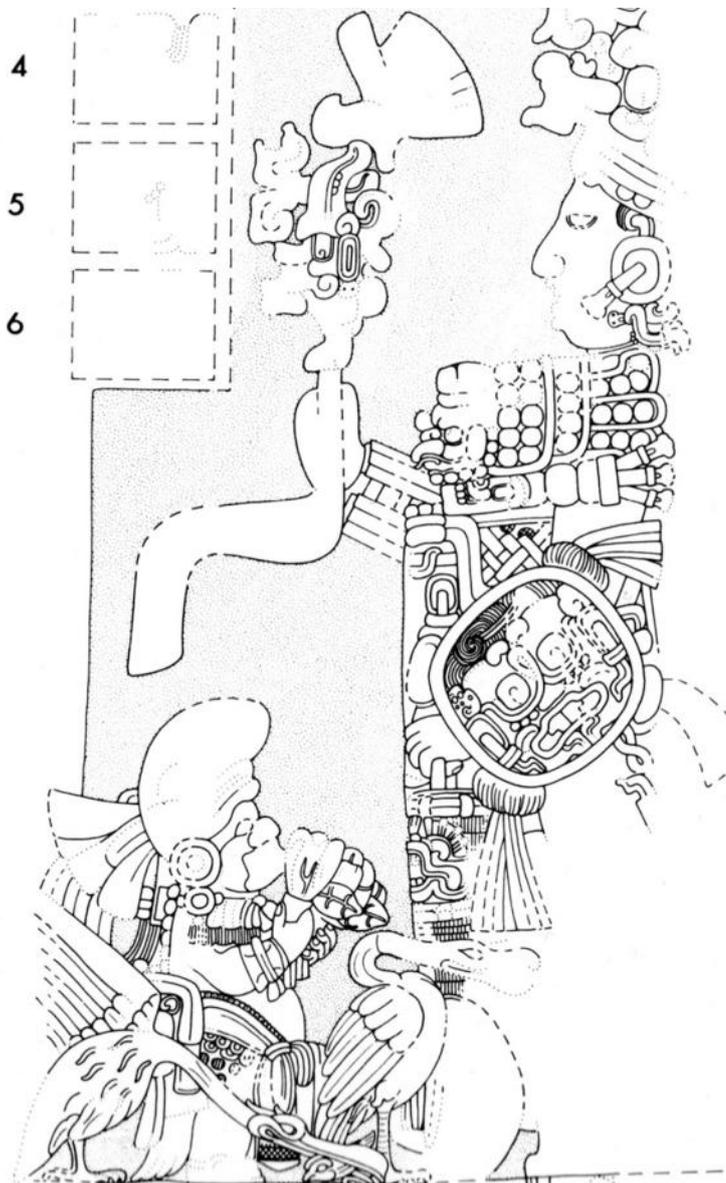


Fig. 7.4: Detail of Tikal Structure 10 Lintel (adapted from Jones and Satterthwaite 1982: fig. 75) showing the ruler wearing the FTDK as an element inset within the band which comprises his belt. Although parts of the image have been lost, it is nevertheless possible to distinguish the FTDKs on the ruler's belt and also a part of the Bow Knot and earflare which would have adorned the *Ajaw* head at the front of the belt. The continuous line which demarcates the front of the ruler's costume is not in keeping with images of Tikal rulers and which show effigy heads as front belt adornments or else rosettes or other adornments. I suggest this smoothed area over the ruler's stomach is a misreading of what should be an *Ajaw* head.

Tikal lintel scenes display portable thrones on elevated structures; the elevated structure in the case of Temple IV Lintel 3 appears to be lashed together in keeping with the scaffold throne structures at Piedras Negras. Clancy (2009: 120-125) notes the similarities between the throne structures at both sites and argues that they are accession structures. That these throne structures have time depth in the monumental art at both Tikal and Piedras Negras lends credence to the idea that they were local to, or embedded within, the visual history of each site.

It is worth bearing in mind that the Piedras Negras monuments which picture such scaffolds or throne structures are dedicated at the Period Ending (See Clancy 2009: 27-137) and this supports the idea that the *K'atun* and its divisions may have been important junctures for negotiating change in political or religious authority. If the Piedras Negras thrones are in fact Classic Period versions of the Postclassic *K'atun* thrones pictured in the Paris Codex, then it is possible the same applies to the Tikal throne structures. I believe the Tikal Structure 10 Lintel also originally displayed a representation of a portable throne which would have occupied the space behind the standing ruler (now an empty space due to weathering).

In the context of the representation of Tikal Temple I Lintel 3 and the Structure 10 Lintel the FTDK is linked to Period Ending ritual, Creation, and lineage. The wearing of the knot on the body of the ruler personalises the FTDK and transforms it into a symbol in the same way that the shield and K'awiil Sceptre are symbols held by the ruler. The manner in which the belt elements, including knots and *Ajaw* heads, mimic those on the throne lead me to suggest that the knots are intimately linked to ideas of kingship and in particular the assumption of office at the Period Ending.

7.2 Aguateca

7.2a Stela 7 (Fig. 7.5)

Stela 7 depicts the Ruler Tahn Te' K'inich who ruled at Dos Pilas's twin capital, Aguateca, between A.D. 770 and A.D. 802 (Martin and Grube 2008: 64). The territories over which Than Te' K'inich ruled were considerably changed since the rule of his predecessor, K'awiil Chan K'inich. This has to do with the events which transpired at the end of K'awiil Chan K'inich's 20 years of rule, when he was made to flee Dos Pilas under circumstances which

are still not fully understood. The reference to his flight is recorded on a hieroglyphic stairway from Tamarindito. After this reference nothing more is heard of K'awiil Chan K'inich and it is at this time that Dos Pilas is abandoned. With the fall of Dos Pilas, it is believed that the surviving Dos Pilas lineage took up residence at Aguateca (Martin and Grube 2008: 62-65).

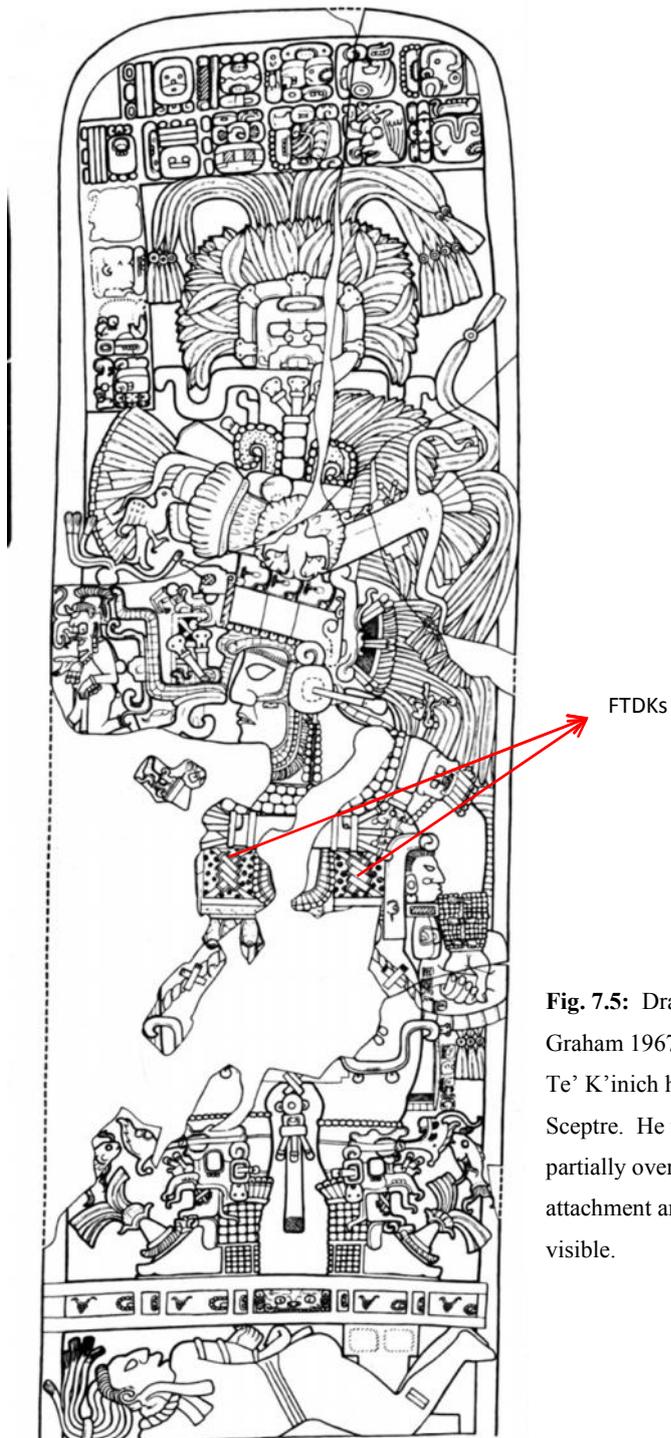


Fig. 7.5: Drawing of Aguateca Stela 7 (after Graham 1967: fig. 17) showing the ruler Tahn Te' K'inich holding a shield and K'awiil Sceptre. He wears a jaguar skin covered belt partially overlaid by FTDKs. An *Ajaw* head attachment and two of the olive shells are clearly visible.

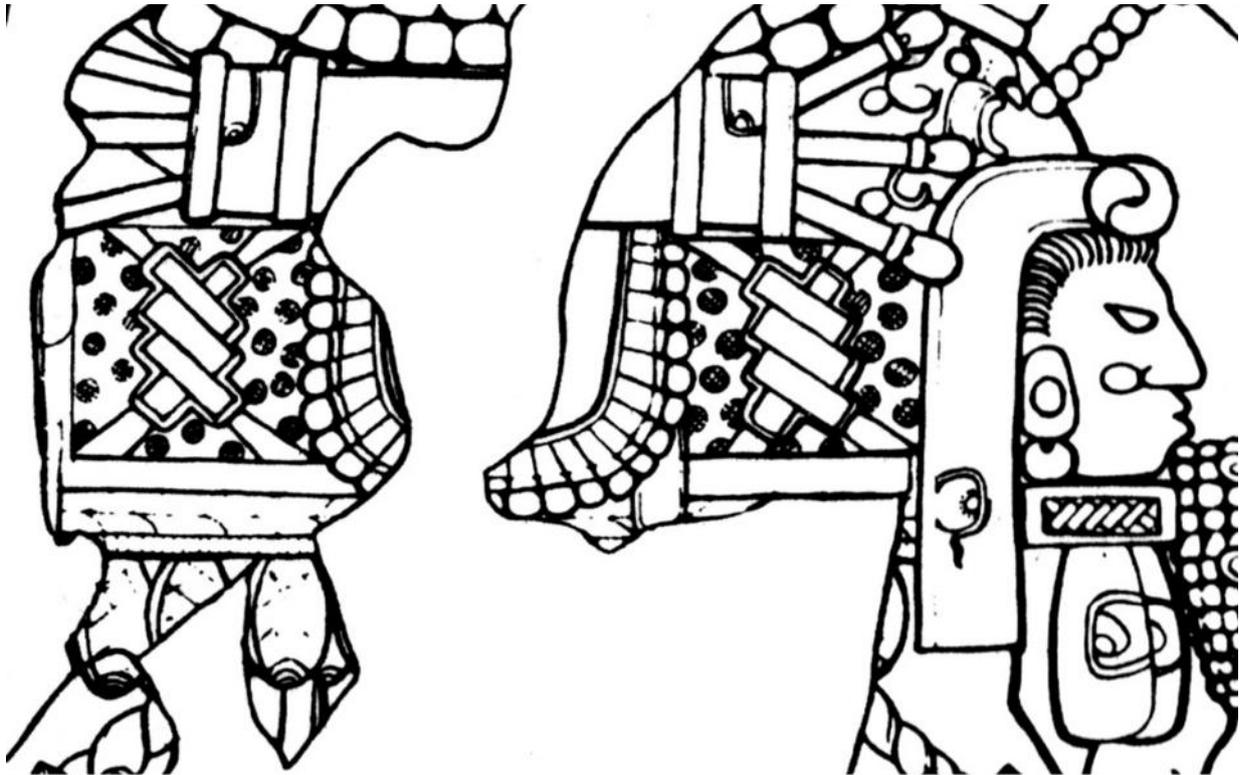


Fig. 7.6: Detail of Aguateca Stela 7 (adapted from Graham 1967: fig. 17) showing the belt worn by the ruler Tahn Te' K'inich. The FTDKs are not well defined, however, the line across the four corner cords do suggest that they were interlaced.

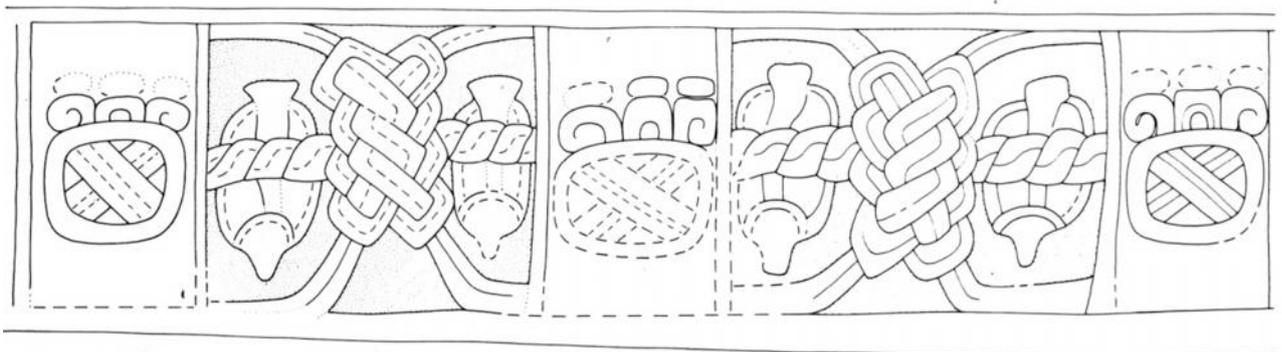


Fig. 7.7: Detail of Tikal Altar 3 (after Jones and Satterthwaite 1982: fig.57) showing FTDKs which bear some resemblance in structure to those on Aguateca Stela 7. The knots are inset between panels marked by cartouches bearing the crossed band symbol. The juxtaposition of the two motifs affirms the proposal that the FTDK and the crossed band were related in some way.

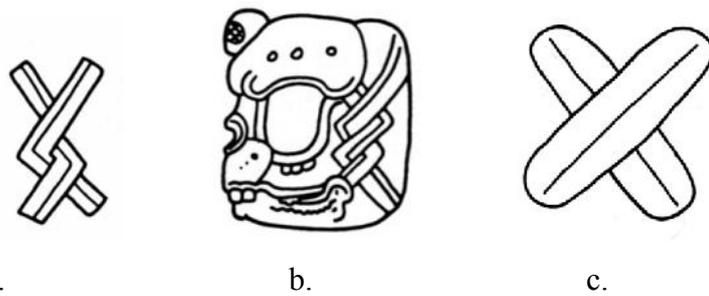


Fig. 7.8: Differentf Maya glyphs comprising of crossed bands (Vásquez 1980: 174; Montgomery 2002: 106; Macri andLooper 2003: 228). a. *Jal* glyph pictured as two twisted and crossed bands. b. *Jal* glyph in-fixed within a main sign and shown as two double twisted and crossed bands. c. *Jal* glyph comprising crossed bands.

Stela 7 was dedicated at the completion of the 18th *K'atun* (9.18.0.0.0.) in A.D. 790 (Graham 1967: 26). The ruler Tahn Te' K'inich, pictured on the face of this stela, similar to the rulers represented on the Tikal lintels, holds a K'awiil sceptre and shield. The face of the shield is held away from the viewer so it is not certain whether it would have displayed the visage of the Jaguar God of the Underworld. He wears the belt described above as reserved for kings and high-ranked nobles and which comprises a wide band fashioned from jaguar skin inset with FTDKs.

It is worth pointing out here that whilst the interwoven cordage of the Stela 7 FTDK is discernible at the points where the cord extends from the four corners of the knot, the outer scalloped edges of the knot are not clearly shown as interlaced. There is a possibility that this is not a FTDK but rather one of the twisted forms of the crossed band symbol misinterpreted as a FTDK. This leaves me with the decision of either rejecting it as a representation of a knot or of including it, but with a caution. I have decided on the latter option.

The proposal that the Aguateca Stela 7 FTDKs were worn for a Period Ending ritual is based on the Period Ending Dedicatory Date of the stela but also on other items of his dress such as Tahn Te' K'inich's headdress. The headdress worn by Tahn Te' K'inich also appears at Yaxchilan where it is dubbed the Bird-and-flower diadem headdress (Tate 1992:72). It consists of large circular blossoms, each attended by a hovering hummingbird sucking nectar. Tate notes that this headdress is worn for Period Endings by rulers pictured on Aguateca Stela 7, Tikal Stelae 16 and 22 and Site Q Stelae A and B. She also points out that of the six occasions on which this headdress is worn at Yaxchilan, three show it worn by female bloodletting assistants (Tate 1992: 72).

At Aguateca, as at Tikal, the FTDK is displayed as part of the insignia of rule reserved for Period Ending ritual. At Aguateca the two symbols displayed alongside the FTDK for the Period Ending are the shield and the K'awiil Sceptre. This sceptre speaks of lineage and ancestral rights, concepts which, in subsequent chapters, will be shown to be closely connected to the FTDK.

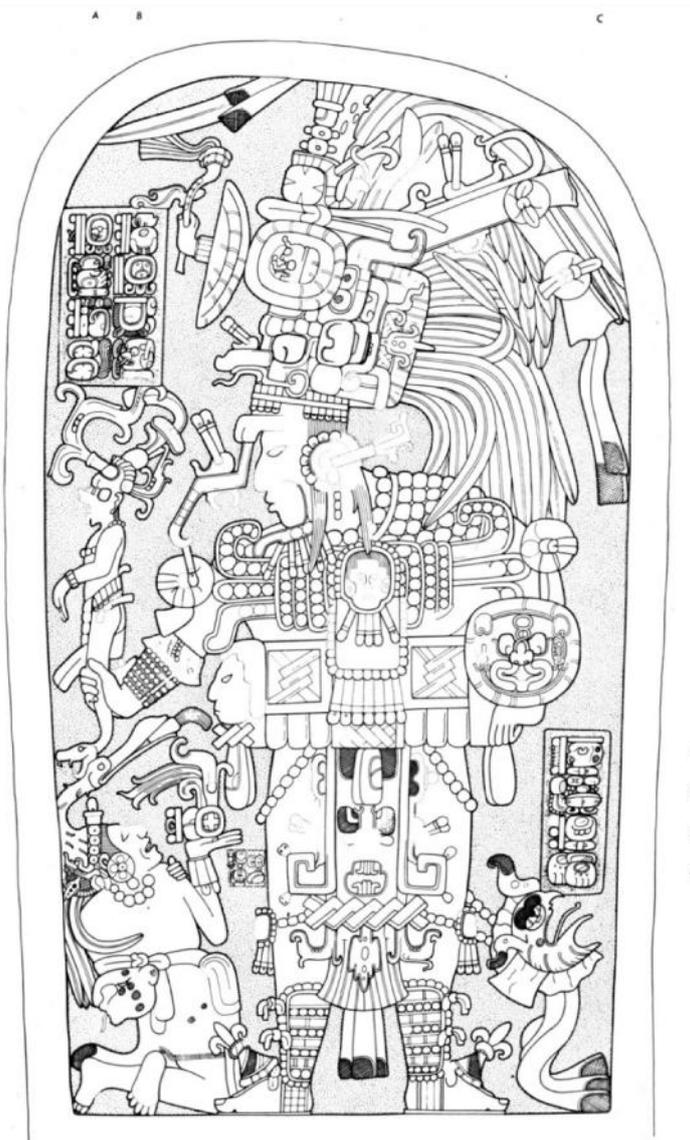


Fig. 7.9: Drawing of Machaquila Stela 2 (after Graham 1967: fig. 44) showing a Machaquila ruler wearing the belt assemblage pictured at Tikal and Aguateca. However, here the FTDKs are replaced by twisted crossed bands. An *Ajaw* head is attached to the side of the belt and a line of olive shells acts as a kind of fringe. The ruler holds the Jaguar God of the Underworld shield and K'awiil Sceptre. This particular belt together with the K'awiil Sceptre and Jaguar God of the Underworld shield appear to form a display unit at many Maya sites and this observation impacts on the interpretation of the shield pictured on Temple I Lintel 3 and Aguateca Stela 7 as a Jaguar God of the Underworld shield.

7.3 Chichen Itza

7.3a Jade from the Cenote of Sacrifice (Fig. 7.10)

The jade from the Cenote of Sacrifice is dated stylistically to the Classic Period. As an item of jewellery, it is pierced by a number of holes for threading leather or cord, suggesting that it may have been worn around the neck, or was perhaps attached to a headdress or other object. The jade has been carved into the form of a Maya lord wearing ear flares, a beaded necklace and wristlets. His hands, clenched into fists, are raised to the height of his chin and he wears around his middle a belt made from a double cord tied into a FTDK. The knot is a Carrick Bend and its size, taking up almost a third of the jade, indicates that it was intended to be seen and recognized. The jade is one of many found in Chichen Itza's Sacred Cenote (also known as the Cenote of Sacrifice). Researchers indicate that the jade pieces were placed in the cenote during the Late Classic (Paxton 2001: 135; Adams 2005: 314; Proskouriakoff 1974). How and why these jades came to be in a cenote is important as it hints at the kind of value which the Maya placed on this piece of lapidary art.

Cenotes are a natural feature of the Yucatan landscape, formed when the roof of an underground limestone cavern collapses, creating a sinkhole. Rainwater percolating through the surrounding porous limestone rock drains into the sinkholes forming valuable fresh water reservoirs in an otherwise dry terrain (Kuiper 2011: 68). Two large cenotes are noted at Chichen Itza, one believed to have been used by the ancient Maya as a water source and the other, the Sacred Cenote, as a place of veneration for water deities such as the Chaahks (Adams 2005: 314). The dredging of the Sacred Cenote not only brought up a great number of Late Classic carved jade pieces (Proskouriakoff 1974) but also pottery and human bones (mostly from children and adolescents) (Adams 2005: 314; Ringle and Bey 2009: 330) pointing to a rich set of ritual and burial practices connected to the cenote.

Jade has a long history of use in Mesoamerica and this is evident in the many findings of jade objects traced to the Olmec civilization (Miller and Taube 1997: 102). Amongst the Maya, as with other Mesoamerican peoples, jade was a precious stone consumed and displayed by royalty. In addition to serving as a luxury good destined for trade, jade was also greatly revered for more abstract reasons. Invested with rich symbolism, partly derived from its blue-green colour, jade was identified with water, sky and vegetation (Sharer and Traxler 2006: 39, 84-96, 165-206; Miller and Taube 1997: 101-102; Coe 1988: 225). Associated

with verdant growth, in particular the maize plant, jade was a symbol for life itself. The water associations for jade made it a fitting gift to the water deities or Chaahks associated with the Sacred Cenote (Miller and Taube 1997: 101-102).

That the Sacred Cenote played an important part in the ritual life of Chichen Itza is evidenced by the deposits of ritual material dredged up from its bottom. In keeping with the concept of a highly charged place where access to the otherworld is maintained, the Sacred Cenote functioned as a portal or supernatural entrance (Miller and Samoya 1998; Ringle and Bey 2009: 333; Paxton 2002: 98).

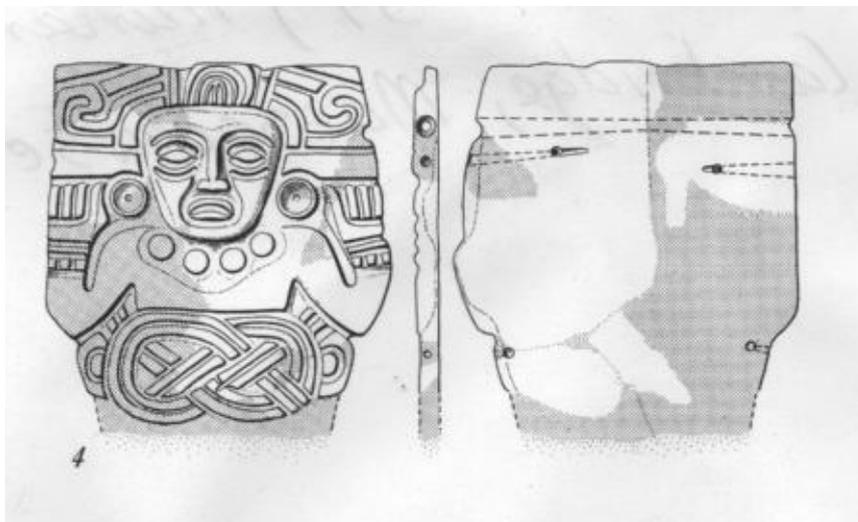


Fig. 7.10: Drawing of jade dredged from the Sacred Cenote at Chichen Itza (after Proskouriakoff 1974: 170). A large FTDK is worn by the Maya lord represented on the jade to fasten his belt.

The FTDK carved into the jade is embedded within a set of meanings derived from the value of the rock itself, but also its depositional context, function (i.e. as adornment) and visual representation. The material (jade) links the FTDK to concepts of wealth and abundance. Other meanings, derived from depositional context, have to do with ideas of a portal or supernatural entrance where rites to do with kingship were negotiated during important rituals, such as the Period Ending or accession (see Chapters Nine and Ten for information on supernatural entrances and kingship).

Summary

At Tikal and Aguateca the FTDK is displayed on belts worn by rulers for Period Ending rituals. Usually it is the crossed band which is pictured inset into the band comprising this particular belt. The replacement of the crossed band by FTDKs (also noted in other contexts within this thesis) suggests a degree of equivalence between the two motifs. In Chapter

Twelve I will show how the crossed band pictured at the centre of *k'an* crosses and quatrefoils which decorate textiles references Creation. It is this relationship with Creation which is also proposed as being meaningful here.

The Period Ending rituals for which the FTDK is worn as a belt element by rulers are also opportunities for displaying icons such as the K'awiil Sceptre and the Jaguar God of the Underworld shield, objects which together politicize lineal rights as extending from Creation - where Creation is reckoned in terms of the centre and all this entails: the Three Stone Creation Hearth and fire.

The Temple I Lintel 3 throne scene (which shows the FTDK on both throne and ruler), can be seen as belonging to a tradition in Maya representation extending from the Classic to Postclassic which features thrones as important elements of Period Ending ritual. These Period Ending throne scenes lead me to question whether Period Endings were important to rule and succession. The perceived relationship between the Period Ending and succession in the context of this research suggests a role for the Period Ending in Maya models of governance and rule; it is only through addressing this role that we can also address the question of why the FTDK is found on the person of the ruler and objects which symbolize rule, such as a throne, in the context of Period Ending representation.

Chapter Eight: FTDKs Displayed on Headdresses

For the ancient Maya as with other Mesoamerican cultures, the area of the head was an important place for display in negotiating identity; therefore headdresses pictured in Maya and Teotihuacan art become primary locations for displaying rank and title in the form of glyphic attachments or particular headdress elements (Taube 2000:15; Houston and Stuart 1998). It is expected, then, that the items, such as FTDKs, displayed on headdresses pictured on Classic Period Maya monuments are meaningfully linked to the identity of the individual wearing them.

Headdresses pictured on Maya monuments are complex constructions made with a variety of materials (e.g. cloth, paper, wood, plant materials) displaying a particular set of symbols, objects, or images such as representations (or in some cases real parts) of flora or fauna: effigies or symbols of deities; and even ritual implements such as bloodletting equipment (Schele and Miller 2006: 67-69; Tate 1992:70-78; Clancy 2009: 88). Notwithstanding the myriad items found on headdresses, a pattern can be discerned in the wearing of certain headdress types for occasions such as accession or Period Endings. Tate, in her analysis of Yaxchilan headdresses, notes that a number of headdresses worn at this site also appear in the monumental art of other Maya centers. For instance a headdress fashioned into a long-snouted zoomorphic head and worn at Yaxchilan for Period Endings and bloodletting rites is a headdress worn and displayed in the representation of Maya sites from as early as A.D. 436 (9.0.0.0.0) (Tate 1992:70). Other standard headdresses are the Drum-Major Headdress, worn for accessions and famously depicted on the Oval Palace Tablet at Palenque, and the Water Lily Jaguar Headdress (Tate 1992:70-78).

Although the headdresses adorned with FTDKs and recorded below do not belong to any of the standard headdress types listed by researchers, a number of the items found on standard headdresses also appear on the headdresses displaying FTDKs.

Table 8.1: Table listing all representations of FTDKs displayed on headdresses.

Site	Locus of FTDK	Gregorian Year	Long Count
Bilbao	Monument 3	A.D. 600/650 – 900/1000 (Chinchilla Mazariegos 2001; Sharer 1994:424-427; Witschey and Brown 212:108-111).	Late to Terminal Classic
Palenque	Temple of the Cross Tablet	A.D.690	Late Classic 9.12.18.5.19 (Kettunen 2006:637).
Palenque	Temple of the Sun Tablet	A.D. 692	Late Classic 9.13.0.0.0 (Kettunen 2006:637).
Palenque	Temple of the Foliated Cross Tablet	A.D. 692	Late Classic 9.13.0.0.0 (Kettunen 2006:637).
Seibal	Stela 1	A.D. 869	Late Classic 10.2.0.0.0 (Kowalski 1989:173).

8.1 Bilbao

8.1a Monument 3 (Fig. 8.1)

Description of the FTDK and its context

The Flat Two-Dimensional Knot in-fixed at the centre of a quatrefoil adorns the head of a figure appearing to descend from the sky on Bilbao Monument 3. The knot is of the Basket Weave variety seen on Tikal Altar 7 (see Fig. 9.4). The figure's face seems to act as the fourth 'petal' of the quatrefoil. Thus the knot is both a headdress and constituent part of the figure, and the figure can be seen as part of the knot.

The figure wearing the FTDK emerges or descends from a serpent's mouth, identified by its fangs or teeth. Looping between the arms of the figure is a rope, interpreted as the ecliptic

rope, along which a disk, probably the sun, is positioned (Milbrath 1999: 83; Parsons 1969:106). Tongues of flame radiate outwards from the disk and from the arms of the figure. The descending figure itself is interpreted as a solar deity or ancestor (Milbrath 1999: 82-83).

Standing below the solar deity is a ballplayer wearing a ballgame yoke (a U-shaped belt made from perishable materials and worn around the middle of the body as protection from the heavy rubber ball [Schele and Miller 2006: 248; Martin and Grube 2008: 41]) and knee garter/pad. His left arm is raised and the left hand is either covered with a glove or holds an object. Parsons' interpretation is that the ballplayer is offering an anthropomorphic cacao pod effigy to the solar deity/ancestor (Parsons 1969:106). Next to the main ballplayer is another ballplayer, also wearing a ballgame yoke, dressed in skeletal accoutrements and interpreted by Parsons as a skeletal death companion (Parsons 1969:106).

Rationale for interpretation of the FTDK's context

That the figure wearing the FTDK is a sun and/or an ancestor deity is supported by an Early Classic vessel from Kaminaljuyu, on which scholars have identified a sun deity emerging from the jaws of a serpent and described as having been 'exhaled' out of Flower Mountain (Taube 2004a: 81). For the Maya, Flower Mountain referred to the place of Creation in terms of a verdant mountain. Flower Mountain was also a point of ascent for the sun and ancestors; therefore the Kaminaljuyu vessel shows a sun disc moving along a serpentine ecliptic path (Taube 2004a: 82-93). In the context of Abaj Takalik Stela 4, the ecliptic as serpent is a conduit for ancestral spirits; therefore an ancestor is shown emerging from the serpent's mouth (Taube 2004a: 82, Fig.11.b). Such an ecliptic is referred to in the *Popul Vuh*, in a Creation myth in which a cord ties or connects the womb of heaven to the womb of earth (Milbrath 1999:74; Edmonson 1971:7-8).

Milbrath suggests that the effigy which the ballplayer holds up towards the solar deity is a human heart (Milbrath 1999: 83); however, the pattern in representation of cacao pods as disembodied human heads at Bilbao indicates rather that the anthropomorphized pod is symbolic of post-game decapitation. Images of magical substitution, where cacao effigy pods substitute for the post-game decapitation (Parsons 1969:102, 103), support an interpretation of the offering as a symbolic head. From the mouths of the ballplayer and his skeletal companion, speech scrolls issue upwards (Parsons 1969:106) suggesting that the individuals are singing, chanting or praying. Elizabeth Baquedano (personal communication) has

suggested an alternative reading of the speech scrolls, as bones. The items, whether speech scrolls or bones, function to connect the mouth of the ballplayer to the mouth of the skeletal figure, suggesting that the underlying intension was to illustrate some sort of communion between the two figures.

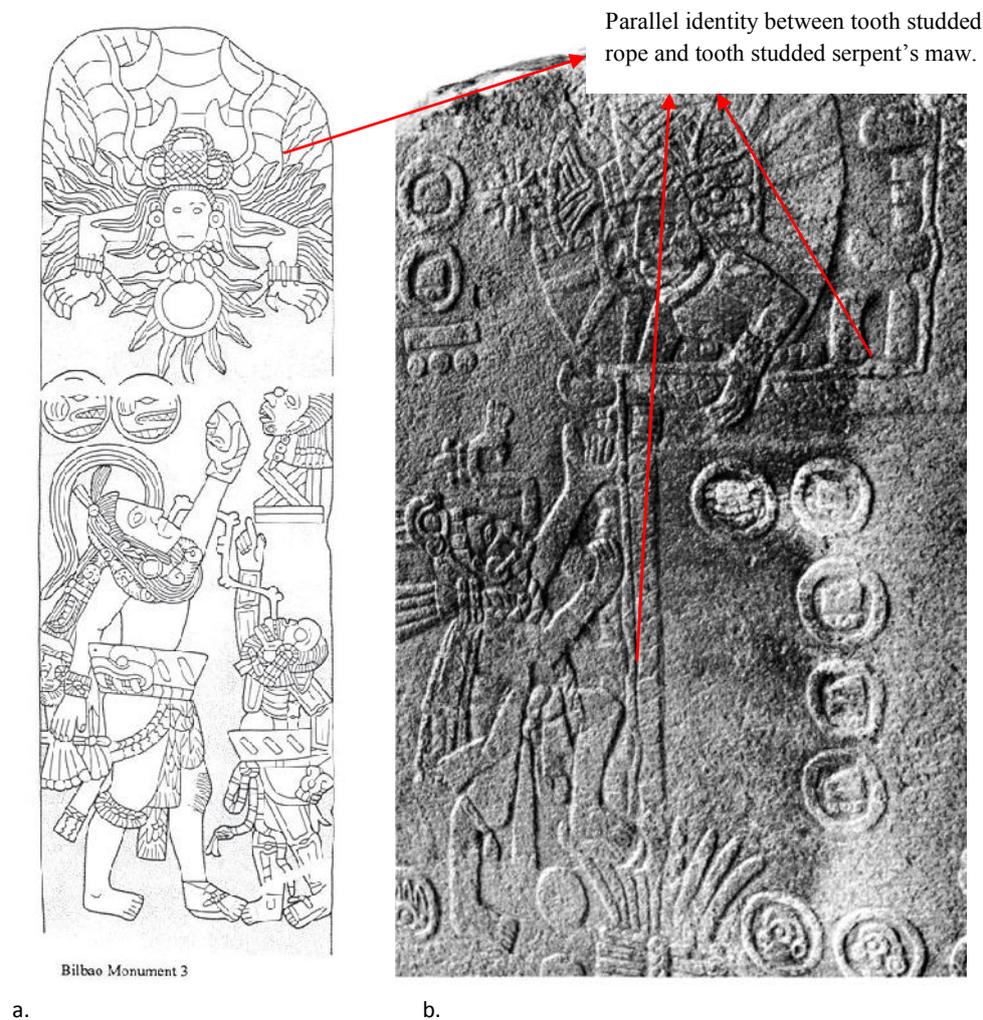


Fig. 8.1: a. Drawing of Bilbao Monument 3 (Chinchilla Mazariegos 1998: Drawing 3), showing a solar deity wearing a Flat Two-Dimensional Knot inset into a quatrefoil as a crown. This deity emerges from a serpent's maw. b. Photograph of El Castillo Monument 1 (Parsons 1969: Plate 59), showing a ballplayer climbing a tooth studded rope into an open maw from which a vision of an ancestor or solar deity emerges.

The depiction of the FTDK as the centre of a quatrefoil motif is a pattern noted in Chapter Twelve in which the quatrefoil is proposed as symbolizing the Creation portal. In Bilbao Monument 3, the Flat Two-Dimensional Knot at the centre of a quatrefoil is associated with the emergence of a deity or ancestor from an open mouth (another reference to the portal [see Stross 1993: 5]). In this case, there is also an association with the ballgame, and perhaps specifically with the death of a ballplayer in the game. The movement of the sun along the

ecliptic rope qualifies the portal as a place of ascent and descent of the sun and ancestors, and therefore as a possible reference to the place of Creation.

8.2 Palenque

8.2a Temple of the Cross Tablet, Temple of the Foliated Cross Tablet and Temple of the Sun Tablet (Figs. 8.3, 8.4, 8.5)

Description of the FTDK and its Context

At Palenque, in the context of the Tablets of the Cross, Foliated Cross, and Sun, the FTDK is worn by the ruler K'inich Kan Bahlam II as a headdress element. Born in A.D. 635, Kan Bahlam II acceded to the throne in A.D. 684. Eight years later, in A.D. 692 he dedicated the Temples of the Cross, Foliated Cross and Sun to mark the 13th *K'atun* (Martin and Grube 2008: 168 -169). Although each of the three temples — which house the Tablets of the Cross, Sun, and Foliated Cross — bears an inscription which records the accession of Kan Bahlam II in A.D. 684 (Foster 2002:174), it is likely that the temples themselves would have served as a locations for *K'atun* Ending rituals perhaps similar to Tikal's Twin Pyramid complexes.

Both the headdress and the objects held by Kan Bahlam II in each of the three tablets, being accoutrements of his costume, work together to reveal his identity. It is therefore important to discuss not just the headdress but also the objects which he holds. Before analyzing these items, however, I think it necessary to acknowledge that the place where Kan Bahlam II stands or his location in space is also meaningful. In the representation of the Temple of the Cross Tablet, Kan Bahlam II stands on a skyband which tells us that he is situated in a place conceived as celestial. In the Tablet of the Sun, Kan Bahlam II stands on a partitioned horizontal band infilled with *cab* (earth) glyphs (Schele and Miller 2006:47, Fig. 27). This tells us that Kan Bahlam II is now at a place conceived as earthly. This earth band terminates at either end in the head of the Sun God with in-fixed mirror in his brow. Generally it is the *k'in* (sun/day) which is in-fixed into the brow of the Sun God; however the mirror at times replaces the *k'in* glyph as an attribute of the Sun God (Milbrath 1999: fig. 3.7, 87). The ear flares worn by the Sun God on the Temple of the Sun Tablet are inscribed with the glyph for path or road (*b'ih*) (Macri andLooper 2003:188; Macri and Vail 2009:139; Montgomery 2002: 43), a reference to the ecliptic as a path taken by the sun in its journey and which is retraced by apotheosized ancestors. In the context of the Tablet of the Sun, the Jaguar

Throne, which stands at the centre of the composition, is depicted here as the throne or seat of living rulers.

In the Temple of the Foliated Cross, the Maize Tree at the Centre of the composition bears ears of corn in the form of the Maize God's head. Standing before the maize tree, Kan Bahlam II wears the Maize God's beaded jade skirt. As impersonator of this deity, Kan Bahlam II stands over the stony entrance or portal of a *Witz* Mountain God (Greene Robertson 1991: 50-51; Bassie-Sweet 2002a: 27; Bassie-Sweet 2002: 11-12). It is from this entrance that the Maize God emerges in Maya Creation iconography. The *Witz* Mountain or Creation Mountain is set into a water band identifying the location with rain, water and the otherworld (Greene Robertson 1991:50-51). In this tablet Kan Bahlam II is located within the watery otherworld, perhaps in a cave at the centre of the 'mountain', from which maize first appeared. In the context of these three tablets the FTDK is strongly linked to place.

Rationale for the Interpretation of the FTDK's Contexts

The Headdress

In all three tablets, the headdress consists of a plain or unpatterned textile headband tied around Kan Bahlam's head. In each tablet, the headband is also shown as securing or holding in place an assortment of items including the FTDK, a flower and a Mexican year sign. Although the Mexican Year Sign is clearly pictured in the Temple of the Cross Tablet headdress, it is less easy to diagnose in the Temples of the Sun and Foliated Cross Tablets.

Mexican Year Sign

The Mexican Year Sign, also known as Trapeze and Ray or TR sign, is a symbol denoting the solar 'year' and political authority (Coggins 1983:59; Lopéz Luján et al. 2002: 233). It is a Teotihuacan-derived insignia which was adopted together with other insignia, such as the Tlaloc motif, at the beginning of the Classic Period by the Maya (Tate 1992:82; Langley 1986: 114, 149). At Yaxchilan, the Mexican Year Sign is a headdress element worn for bloodletting rites followed by fire offering (Taube 2002: 276-277).

Flower

Sprouting from the FTDK in Kan Bahlam's headdress in all three tablets is the stem of a flowering plant. At Palenque there is a pattern in representation of flowering plants attached to ancestors. For instance, carved in relief on the sides of Janaab Pakal's sarcophagus (Kan

Bahlam's father) are a line of ancestral kings and queens each shown as a tree emerging from the earth (Martin and Grube 2008:160). Sprouting from the body of each lineage member are flowering stems. In the representation of the Oval Palace Tablet, Pakal is shown with a similar flowering stem attached to his hair at the occasion of his accession. Carlsen and Prechtel, in their research into Maya concepts of the lineage as symbolized by the World Tree, consider the sprouting ancestors on the sarcophagus as evidence of the 'deep historical centrality of the Maya belief in ancestral renewal founded in the life cycle of plants' (Carlsen and Prechtel 1991:35). They also note the way this idea of ancestral renewal symbolized through the life cycle of plants, and in particular the World Tree, functions as a means of defining and informing concepts of rulership amongst the ancient Maya (Carlsen and Prechtel 1991:35).

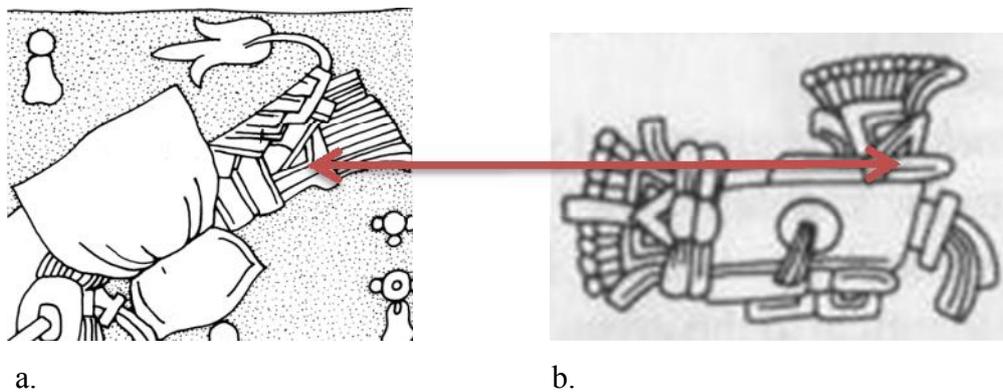


Fig. 8.2: a. Detail from the Temple of the Cross Tablet showing a FTDK and a Mexican Year Sign as items worn on the head (adapted from Greene Robertson 1991: fig.9). b. Detail of Yaxchilan Lintel 17 showing a profile of a headdress with two Mexican Year Signs, one pictured from the side and the other front on (after Taube 2002: fig.10.6c).

The foliage and floral stems which emerge from the FTDK worn in Kan Bahlam's headdress mark the knot as an ancestral item linked to ideas of cyclical renewal and continuity, both ideas (i.e. where cyclical renewal invokes ideas of temporal cycles or measures of time, and where continuity is reckoned in terms of existing through time) are consistent with Maya concepts of Kingship.

The Jester God

In the representation of the Temple of the Cross and Foliated Cross Tablet, Kan Bahlam II holds up an unwrapped effigy of the Jester God (Taube 1998:458; Greene Robertson 1991:29, 51) whilst in the Temple of the Sun Tablet he holds up an unwrapped effigy of K'awiil (Milbrath 1999: 224; Greene Robertson 1991: 41). Sacred cloth bundles both

wrapped and unwrapped are pictured in representation carved on monuments and painted on ceramics (Tate 1992: 68;Looper and Tolles 2000: Fig.12, 11-12). The contents of the unwrapped cloth bundles held by Kan Bahlam II add further clues as to the occasion and context for the wearing of FTDKs at Palenque.

The Jester God in Classic Period representation usually takes the form of the head of the Principal Bird Deity topped by a trefoil or triple-lobed leaf element (Jester God jewel) and worn at the centre of the forehead attached to a headband or other headwear (Taube 1998: 454-459; Fields 1991: 167-174). Originating in Olmec times, the Jester God ceases to be represented in the Postclassic (Miller and Taube 1997:104-105). The representation of the Jester God as a full figure deity is rare (Miller and Taube 1997:104). Taube notes that this jewel is a composite of a number of symbolic elements which together establish it as an emblem for the centre as world axis. The head of the Principal Bird Deity combined with the three-lobed leafy element, each tipped by a rounded ball symbolizing a hearth stone (which according to the text of the Temple of the Cross Tablet were each lifted into the sky by the Wakah Chan or World Tree), conflates the identities of the World Tree as *axis mundi*, the Principal Bird Deity, and the three hearthstones into a single multi-layered concept for the centre (Taube 1998: 454-462). In wearing the Jester God jewel at the centre of his headdress, the ruler becomes the personified Maize Tree, or World Tree. Holding up the Three Stone Sky Hearth, the ruler as personified tree is himself the embodiment of the centre (Taube 1998: 462; Tate 1991: 109).

The tying of the Jester God headband around the ruler's forehead was a coronation ritual and as such constituted an important act of investiture (Martin and Grube 2008: 14). Although in the context of the Temples of the Cross and Foliated Cross Tablets the Jester God is not pictured in the more common headband form, nevertheless the connotations with investiture and the place where this takes place – the creative centre, are still applicable or still hold true.

K'awiil

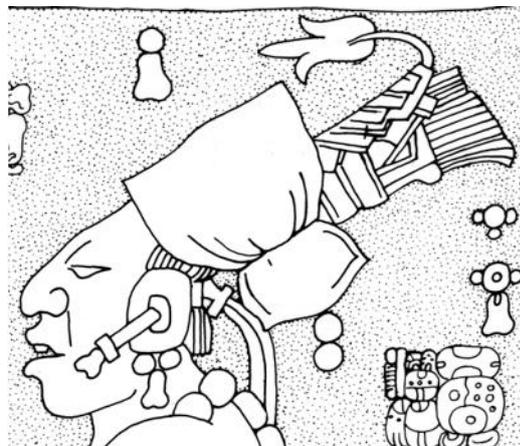
Another act of investiture involved the taking of K'awiil, a sceptre sculpted into the form of a snake-footed, long-snouted deity (Martin and Grube 2008:14). Although primarily represented as a sceptre, full figure effigies of K'awiil recovered from Tikal Burial 195 are evidence that other forms of this deity were in circulation. These full figure K'awiil effigies carved from wood and coated in stucco (Martin and Grube 2008: 41) display the same

upright, seated posture as the unwrapped K'awiil effigy held by Kan Bahlam II on the Temple of the Sun Tablet. The holding of K'awiil, a symbol of lineage and rulership, by Kan Bahlam II on the occasion of his accession is in keeping with the pattern in representation of K'awiil being handed to rulers in Classic Period accession scenes (Taube 1992:78-79; Milbrath 1999: 230; Milbrath 2002:131-142). However, as previously noted, K'awiil is also seen to embody the *K'atun* and this dual role as a God of lineage and rule and a God of the *K'atun* (Milbrath 2002:118-142) brings up the question of the role of the *K'atun* in the organization and meaning of rule amongst the Maya, as well as its function in the context of accession.

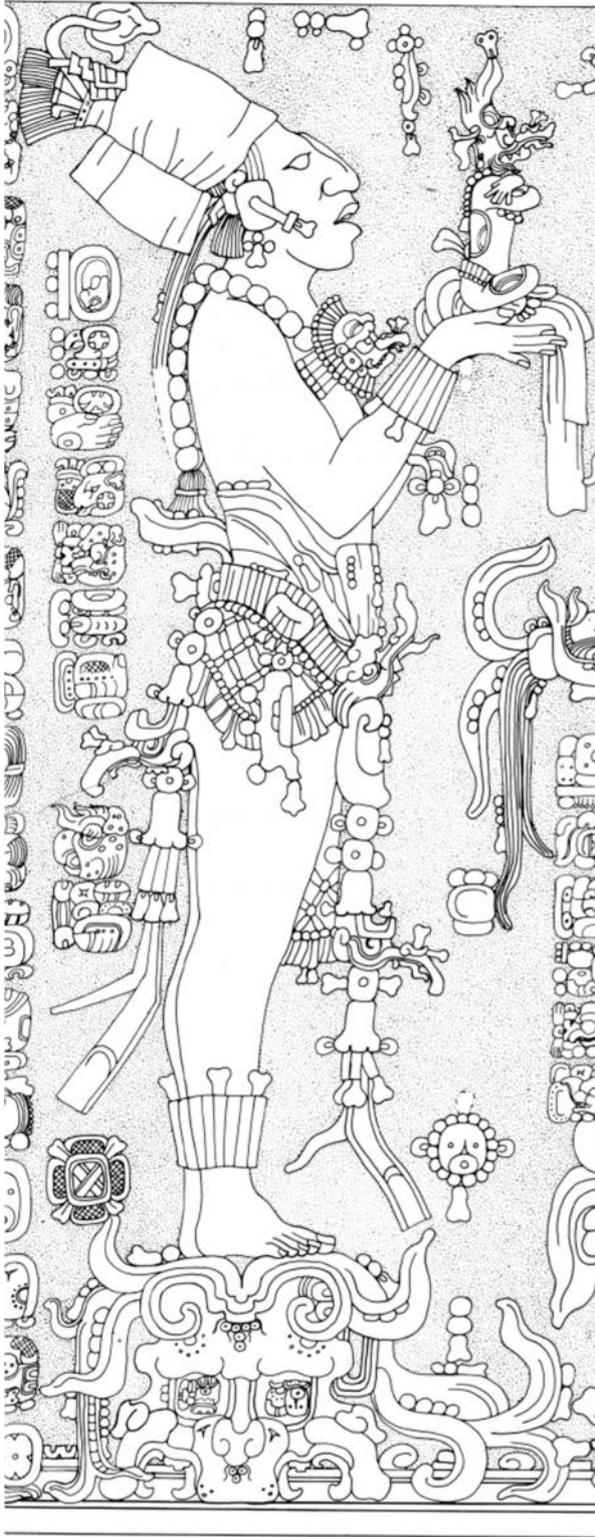


a.

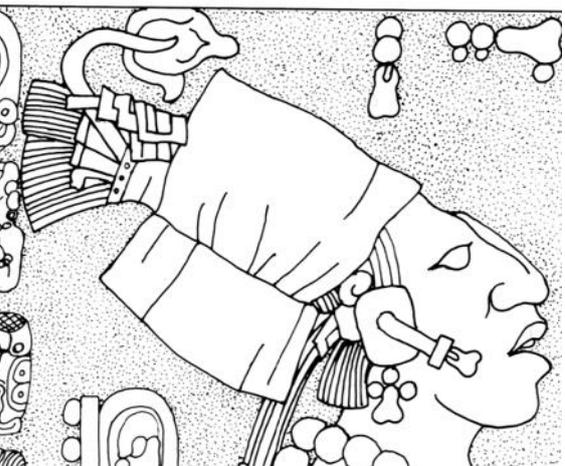
Fig. 8.3: a. Detail from the Temple of the Cross Tablet showing Kan Bahlam II holding an unwrapped, seated effigy of the Jester God (adapted from Greene Robertson 1991: fig. 9). b. Detail from the Temple of the Cross Tablet showing the cloth or paper headdress worn by Kan Bahlam II (adapted from Greene Robertson 1991: fig.9).



b.

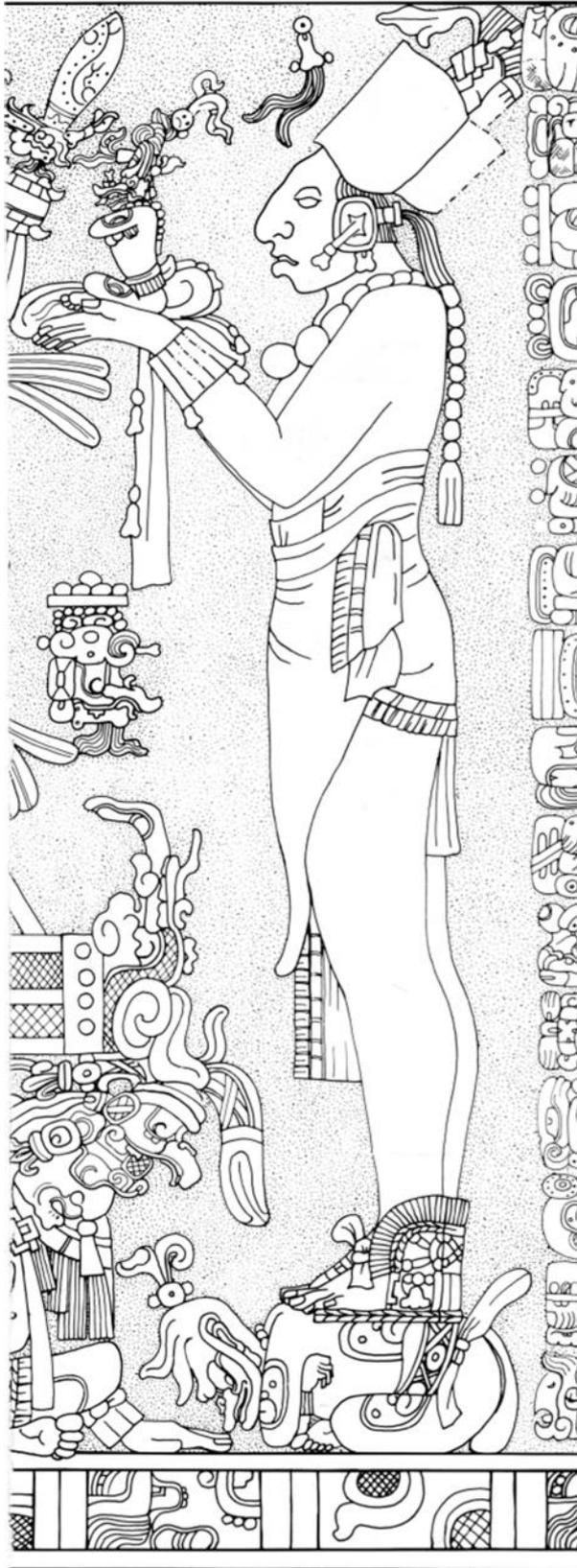


a.



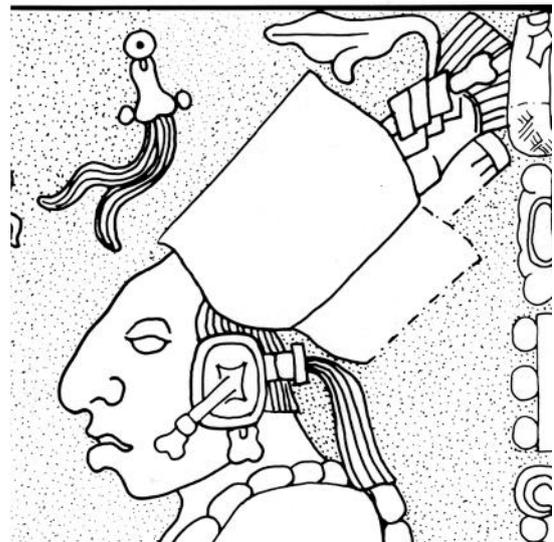
b.

Fig. 8.4: a. Detail from the Temple of the Foliated Cross Tablet showing Kan Bahlam II holding an unwrapped effigy of the Jester God. Kan Bahlam II wears the Maize God's beaded skirt and stands at the stepped opening at the centre of a *Witz* Mountain God (adapted from Greene Robertson 1991: fig.153). b. Detail from the Temple of the Foliated Cross Tablet showing the cloth or paper headdress worn by Kan Bahlam II (adapted from Greene Robertson 1991: fig.153).



a.

Fig. 8.5: a. Detail from the Temple of the Sun Tablet showing Kan Bahlam II holding an unwrapped effigy figure of K'awiil/God K (adapted from Greene Robertson 1991: fig.95). b. Detail from the Temple of the Sun Tablet showing the cloth or paper headdress worn by Kan Bahlam II (adapted from Greene Robertson 1991: fig.95).



b.

In the representation of the Tablets of the Cross Group at Palenque, the FTDK marks the wearer as situated at the centre, with all its connotations – rulership, entrance to the other world, cyclical renewal expressed in terms of time cycles and the repetitive motions of the heavenly bodies.

8.3 Seibal

8.3a Stela 1 (Fig.8.6)

Seibal Stela 1 was dedicated at the end of a *K'atun* (10.2.0.0.0) in the year A.D. 869 (Kowalski 1989:173) and depicts a Seibal ruler holding a spear in one hand and what appears to be a deified pouch or incense bag in the other. There is evidence to suggest that the Stela 1 individual is related to an Itza ruler at Chichen Itza (Kowalski 1989:174-177). The monument exhibits many stylistic features shared with Chichen Itza, such as the pose of the individual, whose body is full-face but whose feet are seen in profile, pointing in the same direction. Other similarities with Chichen Itza include the knotted cloth gaiters, and the bird with flint-tipped wings and in-fixed *k'in* sign displayed (above the FTDK) in the headdress (Kowalski 1989:173-174). At Chichen Itza, this particular long-necked bird with flint blades on the wing and associated *k'in* glyph functions both as an iconographic motif and a personal name in inscriptions at this site. Understood to be a name glyph (dubbed by researchers as 'Knife-Wing'), this flint-winged bird appears not only in the iconography and inscriptions at Chichen Itza (Temple of the Four Lintels) but also at Yula (Kowalski 1989:173-174). Kowalski notes that Maya rulers wore their name glyphs in their headdresses and this practice is evident in the iconography of Seibal Stela 1, in which the central figure carved on this monument wears his name glyph, 'Knife-Wing', on his headdress. Kowalski also notes 'that the references to the historical figure named "Knife-Wing" in the Chichen Itza inscriptions refer to the figure portrayed at Seibal' (Kowalski 1989:174). As I noted above, Knife-Wing is proposed as being related to an important leader/ruler of the Itza at Chichen Itza known as Kakupacal (Kowalski 1989:174-177; Kelley 1982: 6; Milbrath 1999: 82).

The FTDK worn by the figure on this stela is tied from two double-headed serpents; touching the edge of the knot is an opened hand. The opened palm functions as a glyph for the word *k'al* in Maya writing meaning 'to tie, fasten, enclose' or 'completion' (Stuart 1995: 404f;

Montgomery 2002:144). However the 'k'al' hand sign comprises a flat hand extended along a horizontal plane rather than pointing upwards as in the stela image; in addition this sign is not one which the Maya displayed as a motif integrated into iconography, suggesting that the reading of the hand motif as *k'al* may not be what was intended here.

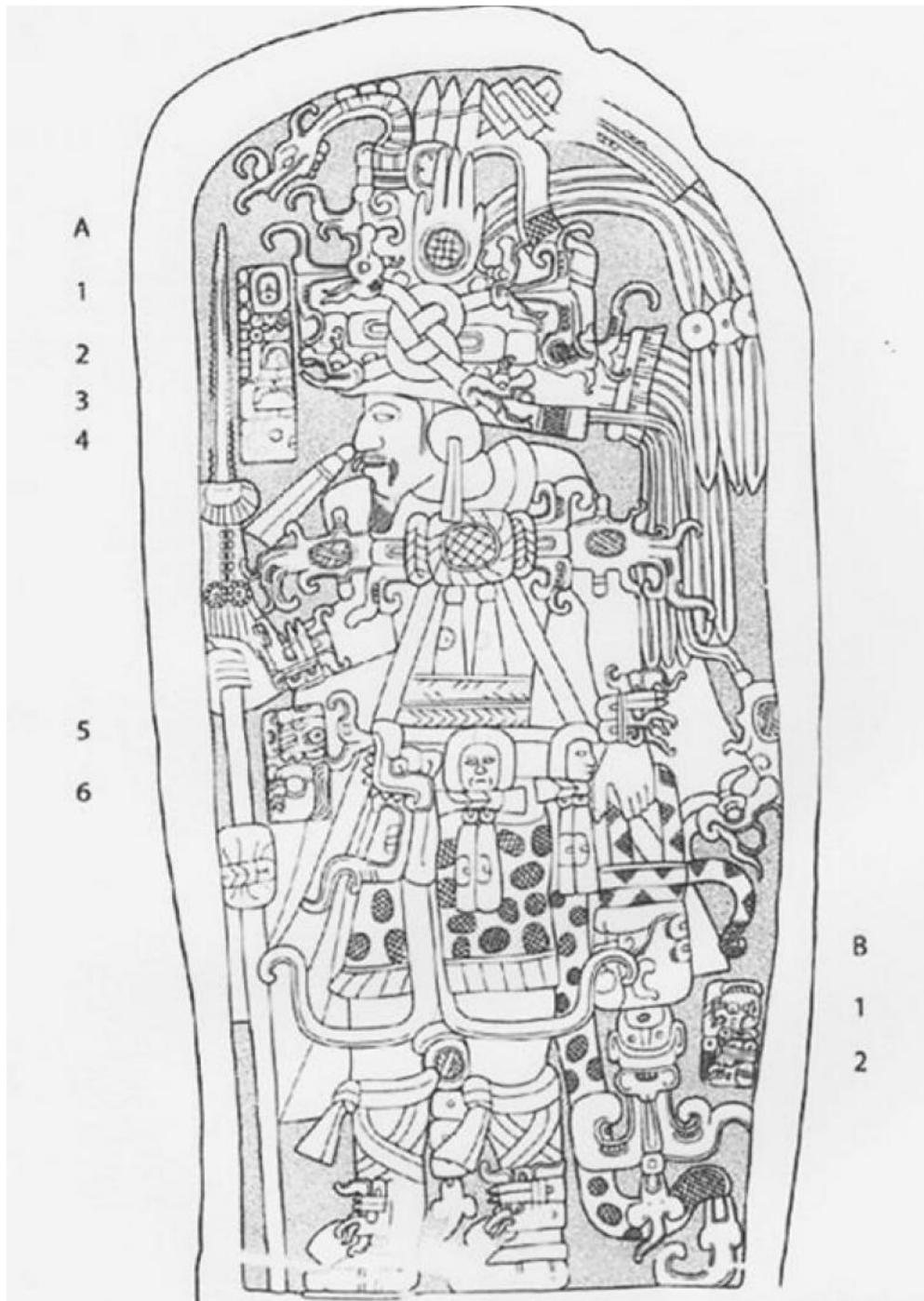


Fig. 8.6: Drawing of Seibal Stela 1 showing the ruler of this site (dubbed Knife-Wing) wearing his name glyph consisting of a long-necked water bird with three flint knives and a *k'an* cross motif on its wing. A large FTDK and an opened hand, symbols illustrated in Teotihuacán representation, are also pictured in his headdress (after Graham 1996: fig. 7:13).

The hand as iconographic motif together with the FTDK, as shown in Seibal Stela 1, does function as a symbolic unit in Teotihuacan art. In mural paintings from Teotihuacan (Tetitla and Tepantitla murals), a disembodied hand motif appears with drops falling from the fingers, indicating hand scattering rites. Murals from the Tetitla compound at Teotihuacan depict the same FTDK (Carrick Bend Knot) with accompanying hand from which drops or pellets are scattered (Berlo 1992: fig.7, 135). Although, in the context of Seibal Stela 1, the FTDK and Teotihuacan-style hand suggest Teotihuacan symbolism and point to possible influences derived from a city which, at the time of the raising of this stela, was greatly diminished in size, it is to be expected that Central American culture lived on. Teotihuacan or Central American-derived motifs are depicted on Late and Terminal Classic Maya monuments (Taube 2000:1-56).

The dress of the Seibal Stela 1 lord is consistent with Maya dress. The jaguar skin kilt is an item of clothing worn by Maya Creation deities such as God L in the Temple of the Sun Tablet and a mural showing strong Maya influences from the site of Cacaxtla, in the modern state of Tlaxcala (Taube 1992: 85; Grofe 2009: fig.10; Greene Robertson 1991: fig.95). The painted representation of the Vase of the Seven Gods shows God L on the day of Creation again wearing the jaguar skin kilt whilst presiding over a gathering of other Creation deities, who also wear jaguar skin kilts (Foster 2002: fig.6.3, 172-173). The jaguar skin kilt is an important signature of rule and we know this because rulers from many different sites — such as Tikal (Stelae 5, 11, 19, 22, 23), Ixlu (Stela 1, 2), Aguateca (Stela 1), and Machaquila (Stelae 3, 4, 5, 6, 7, 12) — are represented wearing this kilt (Jones and Satterthwaite 1982: figs.7-80; Graham 1967: figs.3-65). The wearing of the jaguar skin kilt, an item of costume worn by Creation deities may allude to impersonation of deities linked to Creation.

The Period Ending dedicatory date of this stela together with the incense pouch marked with the smoke-capped *Ajaw* sign (an attribute displayed by the Water Lily Jaguar as a sign of male lineage) suggest scattering and ritual acts reserved for the Period Ending. The representation of the cords (from which the FTDK is tied) as serpents is also seen on El Baúl Monument 50 (see Fig. 7.20). The Seibal Stela 1 knotted serpents and those pictured on El Baul Monument 50 emit curls of smoke from their mouths identifying them as fire serpents. Similar to the El Baul fire serpents, the Seibal Stela 1 fire serpents identify the FTDKs as both celestial and associated with fire and the drilling of fire (see Taube 2002: fig.10.15.c,

285-295).

Constructed from serpentine cords, the Seibal Stela 1 FTDK is embedded into a complex set of metaphoric relations to do with fire and Creation. The display of the FTDK below the 'Knife-Wing' name glyph also links the knot to the identity of the Seibal Stela 1 ruler.

Summary

In the representation of Bilbao Monument 3, the display of the FTDK at the centre of a quatrefoil, interpreted as a supernatural entrance/portal, conforms to a pattern in representation of this knot in the context of textiles. The portal association for the FTDK in the Bilbao Monument is further qualified by the representation of a saurian maw from which the solar deity or ancestor wearing the knot emerges. As in other monuments in this section, such as the Tablet of the Sun at Palenque, the Bilbao FTDK is associated with an ancestral realm which, because it is visualized in terms of the sun and its movement, is solar.

Representing one of a number of related, yet different manifestations of the place of Creation, this solar realm is the setting for the performance of acts by rulers, including bloodletting and the presentation of the Jester God and K'awiil sceptre. Displayed alongside such symbols of office, FTDKs worn in headdresses resemble insignia. Although the occasion for the display of the FTDK at Palenque would appear to be accession, the evidence from the monuments discussed in this section suggest that the FTDK as a headdress element is embedded in rites which commemorate the completion of time.

Chapter Nine: Flat Two-Dimensional Knots Represented as Directly Attached to, or Overlying a Monument (Altar, Stelae, Monolith)

Where a FTDK is not represented as part of the clothing (i.e. headdress, adornment) of an individual, nor as a part of an object held in hand, but instead is depicted as an independent symbol or motif overlying a stone monolith, the implications are that the knot in this context has a function related to the material (stone) on which it is carved.

On a total of twelve monuments from the sites of Tikal, Copan, Itzimte, Zacpeten, El Baul, Bilbao and El Castillo, the Flat Two-Dimensional Knot is represented as directly attached to or overlying a stone monolith. These monuments comprise Tikal Altars 3, 7, 10, 13, 18, 19, Copan Stela J, Zacpeten Altar 1, Itzimte Stela 12, El Baul Monument 50, Bilbao Monument 18, and El Castillo Monument 1.

Table 9.1: Table listing all occurrences of FTDKs displayed as directly attached or overlying a monument.

Site	Locus of FTDK	Gregorian Year	Long Count
Tikal	Altar 3	A.D.488 or A.D.495	Early Classic 9.2.13.0.0 or 9.3.0.0.0 (Jones and Satterthwaite 1982: 11-13, 20-21).
Tikal	Altar 7	A.D.810	Late Classic 9.19.0.0.0 (Jones and Satterthwaite 1982: 52-53).
Tikal	Altar 10	A.D.771	Late Classic 9.17.0.0.0 (Jones and Satterthwaite 1982: 48-49).
Tikal	Altar 13	A.D.292 (Guernsey 2006: 13)	Early Classic 8.12.14.8.15 (Jones and Satterthwaite 1982: 61-62).

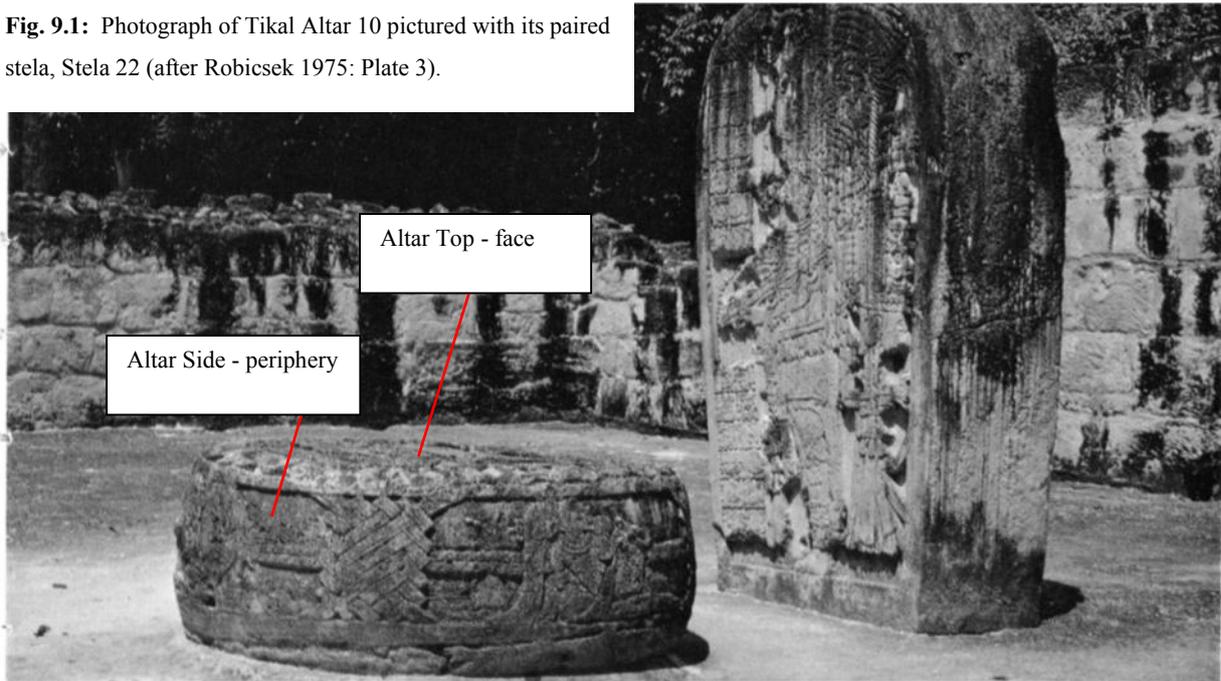
Tikal	Altar 18	A.D.692	Late Classic SD * 9.13.0.0.0 (Jones and Satterthwaite 1982: 81).
Tikal	Altar 19	A.D.446	Early Classic 9.0.10.0.0 (Jones and Satterthwaite 1982: 64-74).
Copan	Stela J	A.D.702	Late Classic 9.13.10.0.0 (Baudez 1994: 69; Newsome 2001: 77).
Zacpeten	Altar 1	A.D.830	Late Classic 10.0.0.0.0 (Rice 2004: 161).
Itzimte	Stela 12		Late – Terminal Classic
El Baul	Monument 50	A.D. 600/650 – 900/1000 (Chinchilla Mazariegos 2001; Sharer 1994: 424-427; Witschey and Brown 212: 108-111)	Late Classic – Terminal Classic
Bilbao	Monument 18	A.D. 600/650 – 900/1000 (Chinchilla Mazariegos 2001; Sharer 1994: 424-427; Witschey and Brown 212: 108-111)	Late Classic – Terminal Classic
El Castillo	Monument 1	A.D. 600/650 – 900/1000 (Chinchilla Mazariegos 2001; Sharer 1994: 424-427; Witschey and Brown 212: 108-111)	Late Classic –Terminal Classic

SD* Style Date

9.1 Tikal

In the following sections I make reference to the altar ‘top’ and ‘sides’. By top I mean the horizontal face of the altar and by side or sides I mean the vertical faces.

Fig. 9.1: Photograph of Tikal Altar 10 pictured with its paired stela, Stela 22 (after Robicsek 1975: Plate 3).



9.1a. Altars 3, 7, 10, 13, 18 And 19 (Figs. 9.9, 9.4, 9.5, 9.10, 9.2, 9.11)

Tikal Altars 3, 7, 10, 13, 18 and 19 display representations of FTDKs on their sides. In the context of the six altars, Flat Two-Dimensional Knots are represented 1) as independent free-standing motifs, and 2) as fastenings for cords which appear to ‘bind’ the side of the altar. On four of these altars, the FTDK depictions directly overlie ropes. In the following analysis I identify two meaningful patterns for the FTDK at Tikal. These are associations between a.) the FTDK and the altar stone; and b.) the FTDK and the binding of the altar stone by ropes and cords. These two patterns in association suggest meanings for this knot at Tikal to do with altar stones (as opposed to stelae or other monument types), and binding itself; or more simply put, between the FTDK and altar stone-binding. As fastenings for cords which bind altar stones at Tikal, FTDKs structure ideas related to binding and tying irrespective of whether they are shown as stand-alone elements or as working knots (i.e. shown to be fulfilling their function to hold fast or fasten cords). I propose that FTDKs are a critical part of the visual language of binding at Tikal; this is evident in the display of the FTDK as a motif superimposed over ropes which act to bind the altar stones. This display pattern was both intentional and meaningful.

Two of the six altars are in a fragmented state – these are Altars 13 and 18. A single fragment from Altar 18 and three fragments from Altar 13 have survived. Whilst the surviving fragment of Altar 18 shows a part of a single freestanding Flat Two-Dimensional

Knot, the fragments of Altar 13 depict parts of the interlacing (under and over passing) of two Flat Two-Dimensional Knots and the cords connecting the knots. The similarity between Altars 13 and 19 is commented on by Bailey (1972:169), who proposes that both altars depicted similar scenes on their upper faces. Also the axis for the scenes carved in relief on both altars was oriented to one of the knot elements on the altar sides (Jones and Satterthwaite 1982: 80). Therefore the missing parts of Altar 13 can be reconstructed or imagined by recourse to Altar 19.

In all instances when a Flat Two-Dimensional Knot appears on a well preserved altar at Tikal, it is displayed in the same manner. The knots are always displayed in numbers of four and set equidistant around the altar sides as in Tikal Altars 3, 7, 10, and 19 (see Figs.9.9, 9.4, 9.5 and 9.11). Where there are only fragments of the altar, the knot is highly likely to have been one of four, based on the convention at Tikal of using design elements to quarter altar peripheries (Jones and Satterthwaite 1982: 17).

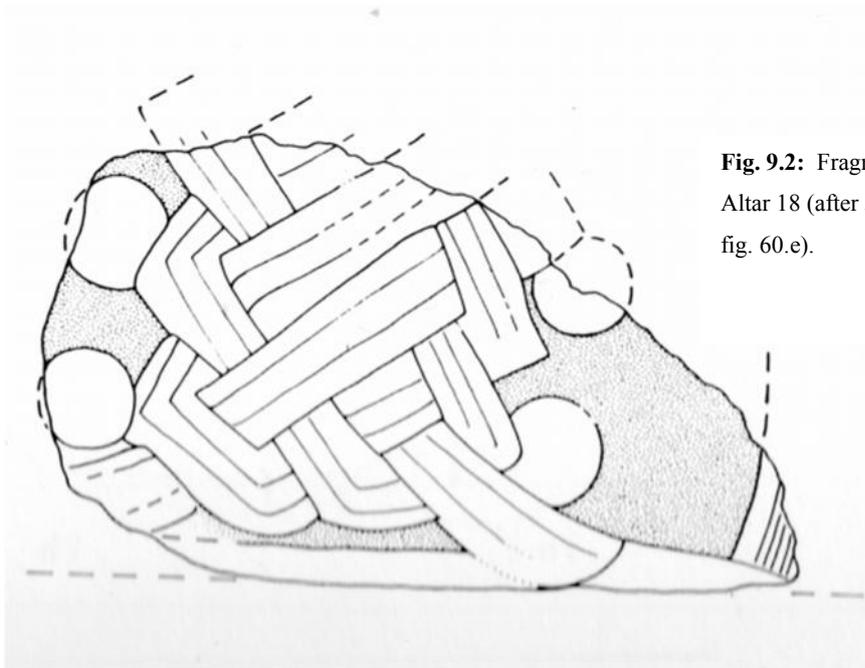


Fig. 9.2: Fragment from the side of Tikal Altar 18 (after Jones and Satterthwaite 1982: fig. 60.e).

Altars 3, 10, 13 and 19, all display depictions of Flat Two-Dimensional Knots directly overlying ropes, where the ropes appear to function as items which bind the altar. The Flat Two-Dimensional Knots on Altar 10 appear as free-standing whereas the knots on altars 3, 13 and 19 function as fastenings for cords which encircle the sides and thus 'bind' the altars.

The Flat Two-Dimensional Knots which fasten cords around Altar 7 are not shown in association with ropes. Altar 18 is the only altar which was possibly meant to be represented as unbound; this proposal is based on a reading of the single representation of a portion of a FTDK preserved on a fragment from this altar. The association between Flat Two-Dimensional Knots and the binding of altar stones is meaningful and I suggest this pattern is worth further investigation.

My interpretation of the role of the FTDK in the iconography of binding is supported by glyphic evidence. However before commencing with an analysis of this pattern at Tikal, I think it is important first to turn briefly to Stuart's interpretation of images of bound monuments at Copan – partially derived through a reading of the glyphic inscriptions associated with the images. One reason for taking this route is that glyphic information on the binding of stones appears on a number of Tikal stelae paired with bound altar stones. The reason why other researchers did not realize or pursue this avenue (i.e. linking the knots to altar stone-binding) is that they saw the FTDK as a 'mat' motif.

Glyphic Data on the Binding of Stones at Tikal

Stuart (1996: fig.10, 156) proposes that actual monuments were bound as part of Period Ending commemorative events. His evidence derives in part from a scene carved into a peccary skull from Copan Tomb 1. The scene depicts two individuals seated on either side of a stela, which is represented as bound by rope or cordage. He further notes that the image of the bound stela is accompanied by an inscription which mentions the binding event (Stuart 1996: 156, fig.10; Fridberg 2005: 51). The word which he isolates as referring to the bound stela – or the event which it represents - is *k'altuunn*, which translates as 'stone-binding'. That the item bound is a stone is made clearer by the inclusion of *kawak* or stone markings. The stela is shown wrapped by cords or bands of cloth and is paired with a zoomorphic altar similar to those found in Copan's main plaza (Stuart 1996: 156). Because a number of actual Copan altars are shown as bound by representations of cloth strips, Stuart concludes that the stone-binding phrase may refer to a ritual in which stone (stelae or altars) is bound (Stuart 1996: 157; Martin and Grube 2008:14). It is also possible that the phrase refers to rituals in which stelae or altars with depictions of binding are set.

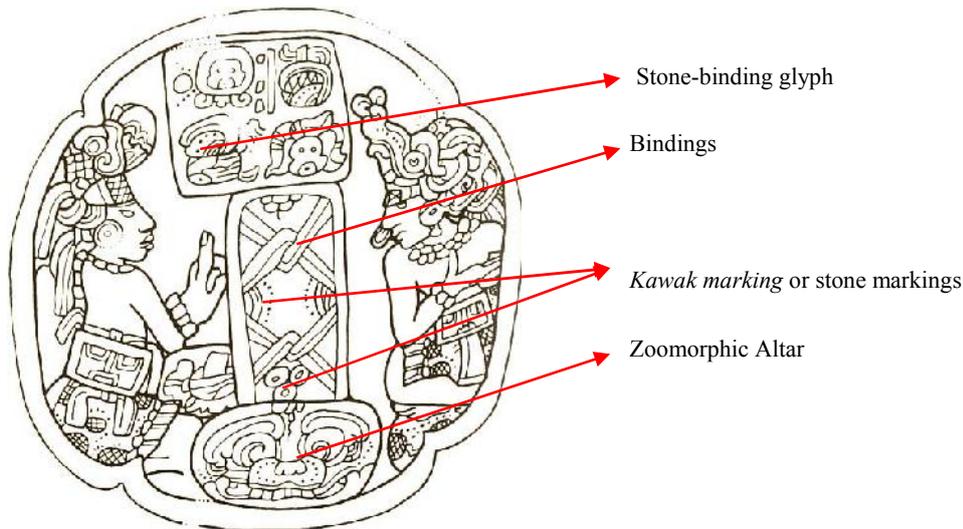


Fig. 9.3: Drawing of a stone-binding event (after Stuart 1996: fig. 10) which takes place at a quatrefoil entrance. The accompanying inscription mentions the binding of a stone at the completion of seventeen *K'atuns*.

He notes that Classic Period glyphic texts link stone-binding with *K'atun* endings (Stuart 2011: 4). He concludes therefore that stone-binding whether real or metaphorical was one of the principal dedicatory events recorded by the Maya. At Tikal, the stone-binding phrase is recorded on stelae 'erected in the so-called twin pyramid groups' - each twin pyramid group 'built and dedicated on a particular *K'atun* ending' (Stuart 1996: 156).

Six monuments in total at Tikal record the stone-binding (*k'altuunn*) phrase. These are Stelae 16 (paired with Tikal Altar 5), 19 (paired with Altar 6), 20 (paired with Tikal Altar 8), 22 (paired with Tikal Altar 10), 30 (paired with Altar 14) and 31 (Stuart 1996: 156-157). Tikal Stela 31 had been moved and reset in ancient times in a rear room of Structure 5D-33-2nd together with Altar 19. Altar 19 is proposed as having originally been paired with Stela 31 (Jones and Satterthwaite 1982: 64, 81-82; Rice 2004: 105). It is important to note that the altars with which three of the above six stelae are paired (Stelae 20, 22 and 31) are represented as 'bound'. Of these three stelae, two (Stelae 22 and 31) are paired with altars which display Flat Two-Dimensional Knots. The narration of stone-binding events on the three stelae paired with bound stone altars suggests strongly that stone-binding phrases on Tikal stelae directly reference images of rope binding displayed on their associated altars.

Another important point worth mentioning here is that Stuart proposes a meaningful link between the stone-binding glyph and the stone-seating glyph (*chumtun*), both of which are recorded in inscriptions as taking place on *K'atun* Period Endings. He adds that both the seating and binding of stones 'recall the terminology of royal office-taking' (Stuart 1996:

156-157, Fig. 2.b). Therefore the same words ‘*chum*’ and ‘*k’al*’ which appear in the stone seating (*chumtun*) and stone-binding (*k’altuunn*) phrases respectively also appear in the accession statements ‘*k’al sak jun*’ (bound/tied the white headband) and ‘*chum*’ (to be seated). What this suggests is that the ritual seating of the ruler, and the tying of the white headband around his head (to signify the binding (wrapping) of the king in office) was akin to the seating and binding (wrapping) of stones on or near Period Ending dates. The *k’altuunn* ritual, Stuart proposes, like that of wrapping the king in office, was to ‘protect and contain the divine essence held within the stones that embodied time and its movement’ (Stuart 1996: 157).

Tikal’s Bound Altar Stones

Altars 3, 7, 10, 13 and 19 are members of a wider body or group of altars at Tikal represented as bound. Although the binding takes a number of forms — some bound by ropes and others by cords — these monuments should be analyzed together because Flat Two-Dimensional Knots, in the context of altars, are shown in association with both kinds of binding (rope and cord).

Nine out of a total of twenty-two altar stones recorded for Tikal are depicted as bound (some by cords, others by ropes). However it should be noted that the binding of Tikal altars by ropes and cords takes different forms. There are four different patterns to the binding of altars: 1) the binding of altar sides by cords which are fastened by Flat Two-Dimensional Knots; 2) the binding of altar sides by a rope (for which the fastening knot is never shown), which passes under free-standing Flat Two-Dimensional Knots (Jones and Satterthwaite 1982: 82); 3) the double binding of altars by rope and by cord fastened by Flat Two-Dimensional Knots; and finally 4) the binding of the rim or circumference of the altar face by a rope.

That cord and rope are represented differently suggests that the intention was to distinguish one binding type from the other. Yet unusually, the Maya of Tikal chose to illustrate both binding forms on the same monument, pointing perhaps to an overlap or extension in meaning. Such is the case with Altars 3, 13 and 19. The sides of these three altars are depicted as bound both by cords fastened by Flat Two-Dimensional Knots and also by rope. Interestingly, the knots which fasten the ropes around the sides of Tikal altars are never shown. The only clearly identifiable knots depicted as fastenings for bindings around the

sides of altar stones are Flat Two-Dimensional Knots. Therefore the FTDKs become the means for articulating the idea of fastening both in the context of rope and cord. The text book accuracy of the representations of Flat Two-Dimensional Knots also indicates that Maya artists intended that the knots be recognized.

The Four Forms which Altar Stone-Binding Take at Tikal

In the following section I examine the different forms which binding takes at Tikal and I also analyze the iconographic elements displayed in association with the FTDKs.

The Binding of Altar Sides by Cords Fastened by Flat Two-Dimensional Knots: Altar 7.

Altar 7 is represented as bound by cords fastened by Flat Two-Dimensional Knots. The item set between the knots on the side of Altar 7 is a tripod dish or shallow bowl. The dish is framed by the knots and the cords. The contents of one of the better preserved images of the dish include the Flint-Shield God, a smoking or lit torch, and bloodletting paper (Schele 1979: 8-10).

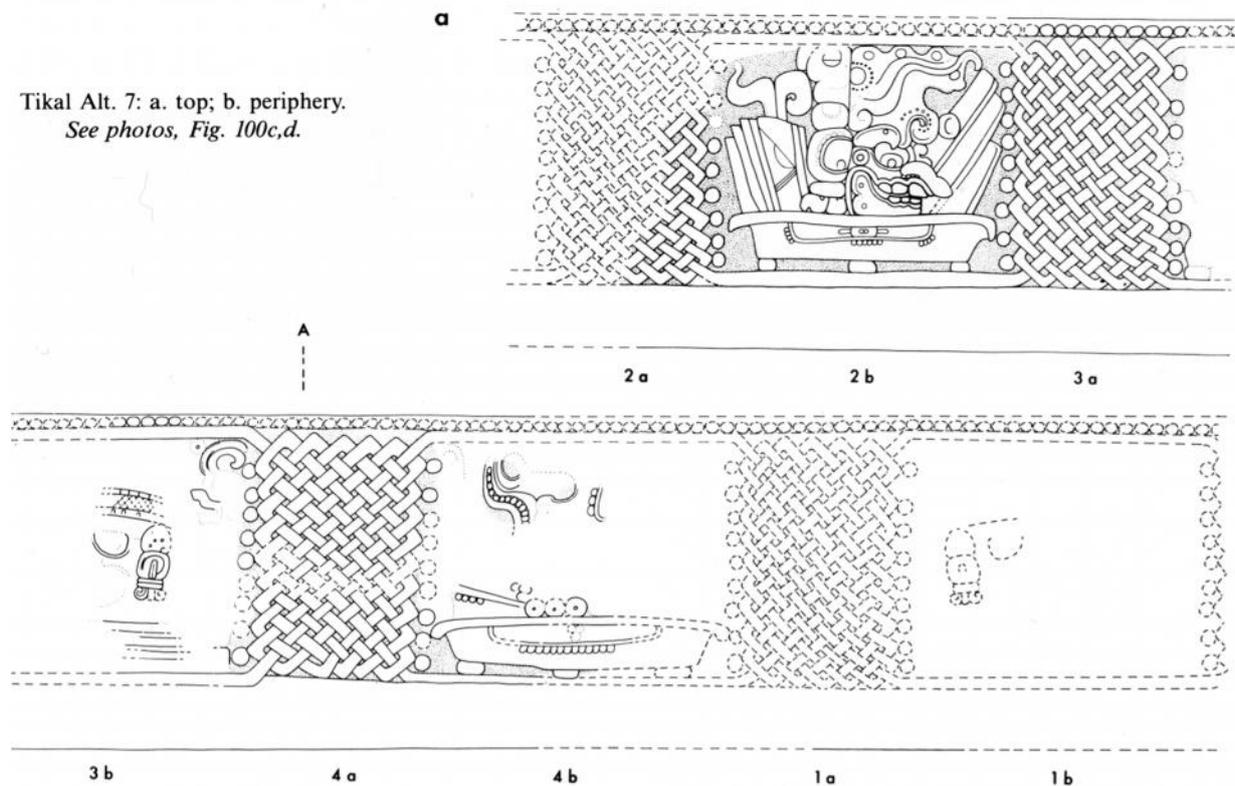


Fig. 9.4: Drawing of the side of Tikal Altar 7 (after Jones and Satterthwaite 1982: fig.40) showing four large Flat Two-Dimensional Knots which act to fasten cordage around the altar.

In the Palace Tablet at Palenque the deified eccentric flint known as the Flint-Shield God is similarly presented in a bloodletting dish (Schele 1979: 8-10, Fig. 6), and in Chapter Six, I noted that the Flint-Shield God was held by Pakal in the iconography of the Temple of the Sun Tablet. That the Flint-Shield God appears in accession programs at Palenque indicates that it is associated with lineage and dynasty (Greene Robertson 1991: 41), associations which are, I suggest, also relevant in this instance.

The top of Altar 7 has been severely weathered and little of the representation is preserved. However what can be said based on the preserved imagery of knots and dishes is that the FTDK in the context of this altar functions primarily to articulate concepts of binding and links binding to fire, bloodletting and accession. The rituals which accompanied the binding of the altar stones at the Period Ending may well have included the letting of blood, the lighting of fire, and seating.

The Binding of Altar Sides by a Rope Overlaid with Free Standing Flat Two-Dimensional Knots: Altar 10.

A single altar, Altar 10, depicts Flat Two-Dimensional Knots as free-standing elements displayed against a central binding rope, which is shown as having passed twice around the altar.

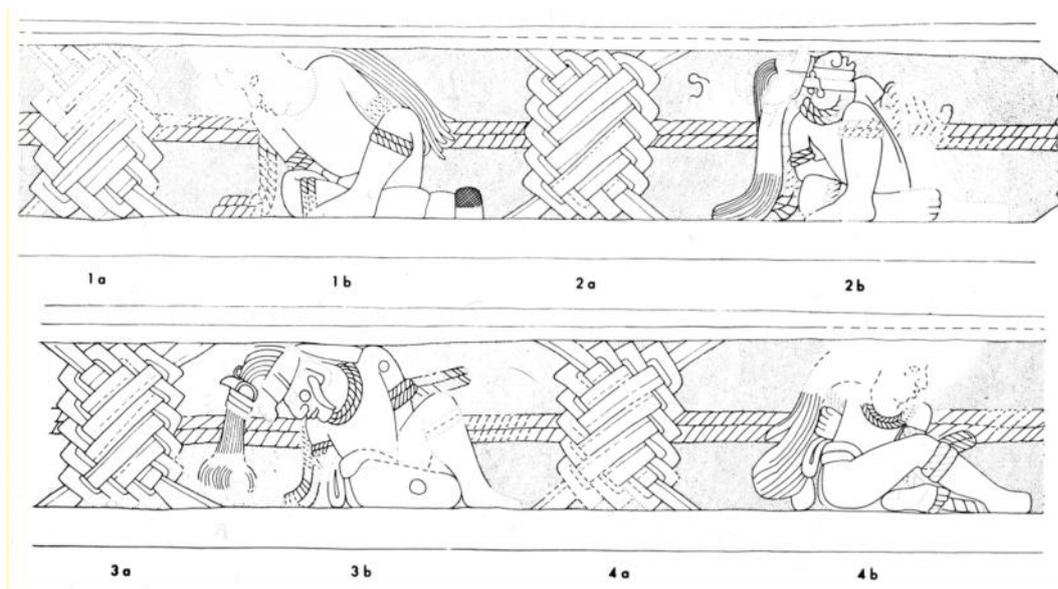
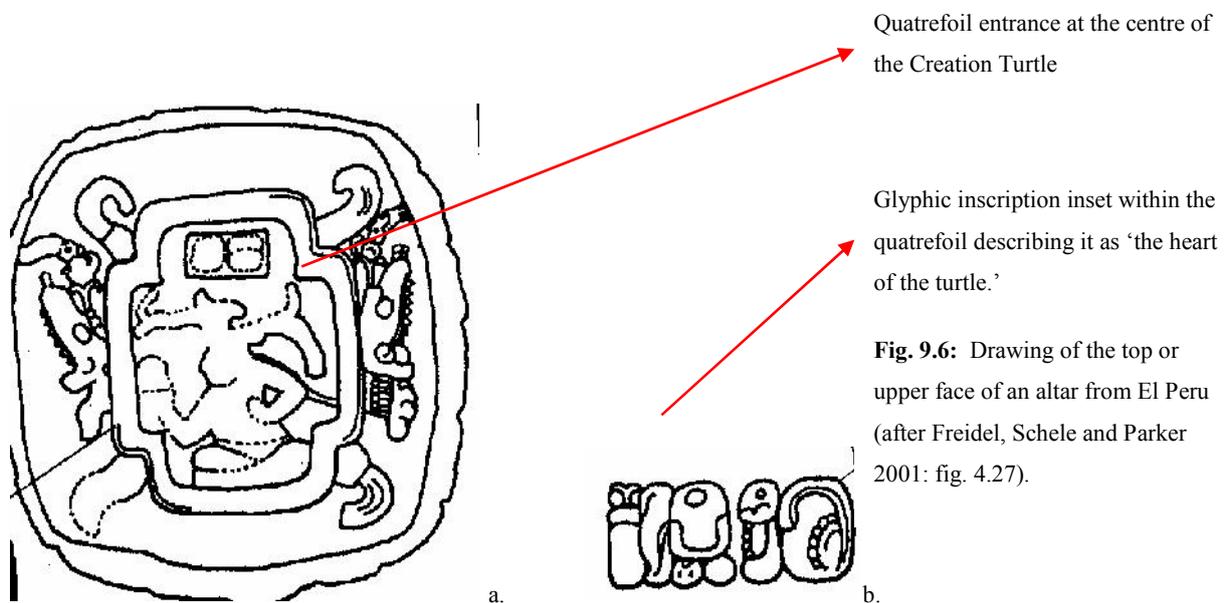


Fig.9.5: Drawing of the sides of Tikal Altar 10 (after Jones and Satterthwaite 1982: fig. 34.b) showing Flat Two-Dimensional Knots as free-standing elements overlying a double rope which serves to bind the altar. Four rope-bound captives are spaced equidistantly between the four knots.

Set between the knots are four rope-bound captives. There is an association between rope-bound captives and bound altars at Tikal and this will be addressed and expanded upon below. For the moment it is sufficient to say that the evidence suggests that this association has to do with the ballgame. The captive, belly down, on the face of Tikal Altar 10 lies on a frame of poles (also described as a scaffold) positioned at the centre of a quatrefoil motif. The quatrefoil motif on the top of Tikal Altar 10 marks the altar as a portal. A similar quatrefoil portal motif is carved in relief on the top of an El Peru altar. The quatrefoil on the El Peru altar bears an inscription which names the entrance as *u yol ak* (alternatively transcribed as *tu-yohl ahk* (Houston, Stuart and Taube 2006: 187-188) meaning ‘the heart of the turtle’ or ‘within the turtle’s heart’ (Freidel, Schele and Parker 2001: 215-218; Guernsey 2006: 138; Houston, Stuart and Taube 2006: 187-188). The quatrefoil motif is the crack in the Creation Turtle’s back (Freidel, Schele and Parker 2001: 215-218). This entrance, symbolised by the quatrefoil motif, is where the three stones of creation were set and bound (Freidel, Schele and Parker 2001: 217, 218, fig.4: 29b, Taube 1998: 432-438, fig.5d). At the four corners of the El Peru Altar quatrefoil are the maize motifs found in Preclassic Olmec representations of quatrefoil caves or entrances such as that shown on La Venta Altar/Throne 4 (see below).



Seated at the centre of the quatrefoil, the ruler places himself at the opening in the turtle’s carapace and in so doing has subsumed the role of the Maize God (First Father) of the Maya

story of Creation (see Guernsey 2006: 138). Like the Maize God, the ruler is also reborn from the crack or opening in the Creation Turtle (Guernsey 2006: 138).

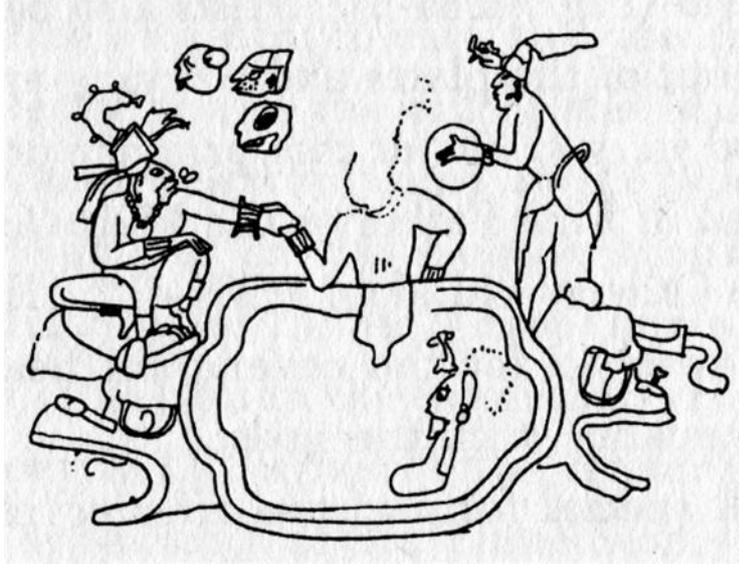


Fig. 9. 7: The Hero Twins resurrect their father, the Maize God from the crack/quatrefoil entrance in the Creation Turtle's carapace (after Freidel et al. 2001: fig. 4: 27)

The quatrefoil on the top of Altar 10 is framed by a band in-filled by a woven basket-weave pattern similar to the FTDKs displayed on Tikal Altar 7. The visual effect of the pattern is to project the idea of a continuous FTDK as the substance of the entrance. The Basket Weave Knot both demarcates as well as manifests the entrance. The scaffold or framework of poles on the face or top of Tikal Altar 10 (Jones and Satterthwaite 1982: 49) and other Tikal altars (Grube and Schele 1994: 6; Schele and Mathews 1999: 93) is diagnostic or emblematic of accession rituals such as those depicted on stelae at Piedras Negras (Schele and Mathews 1999: 93). The scaffold frame is represented on ceramics and monumental art in scenes commemorating the accession of a ruler (Schele and Mathews 1999: 93; Saturno 2009: 128) in which an individual, probably a war captive, is killed.

An Epiclassic accession scene from El Tajin depicts the scaffold 'sacrifice' scene, indicating that the rituals by which accession was negotiated were not limited to the Classic Period or to the Maya heartlands (Machado 2000: 34, 35). The El Tajin ruler sits within the framework of the scaffold and beside him, lying across an altar, is a captive who has been killed. That the death occurred in a ballgame is indicated by the image of the ball set beside the scaffold (Machado 2000: 34, 35). In keeping with the nature of killing associated with the ballgame, the captive has been beheaded and his chest opened. From the body cavity twisted intestines

emulating ropes rise upwards together with two plants (Machado 2000: 34, 35, fig.43, Fig.50) suggesting that his death signals a time of regeneration and new life for the ruler and his territories. The link between the Mesoamerican ballgame sacrifice and abundance, expressed in terms of fertility or renewed life, is discussed by Baquedano and Graulich (1993: 167-168)

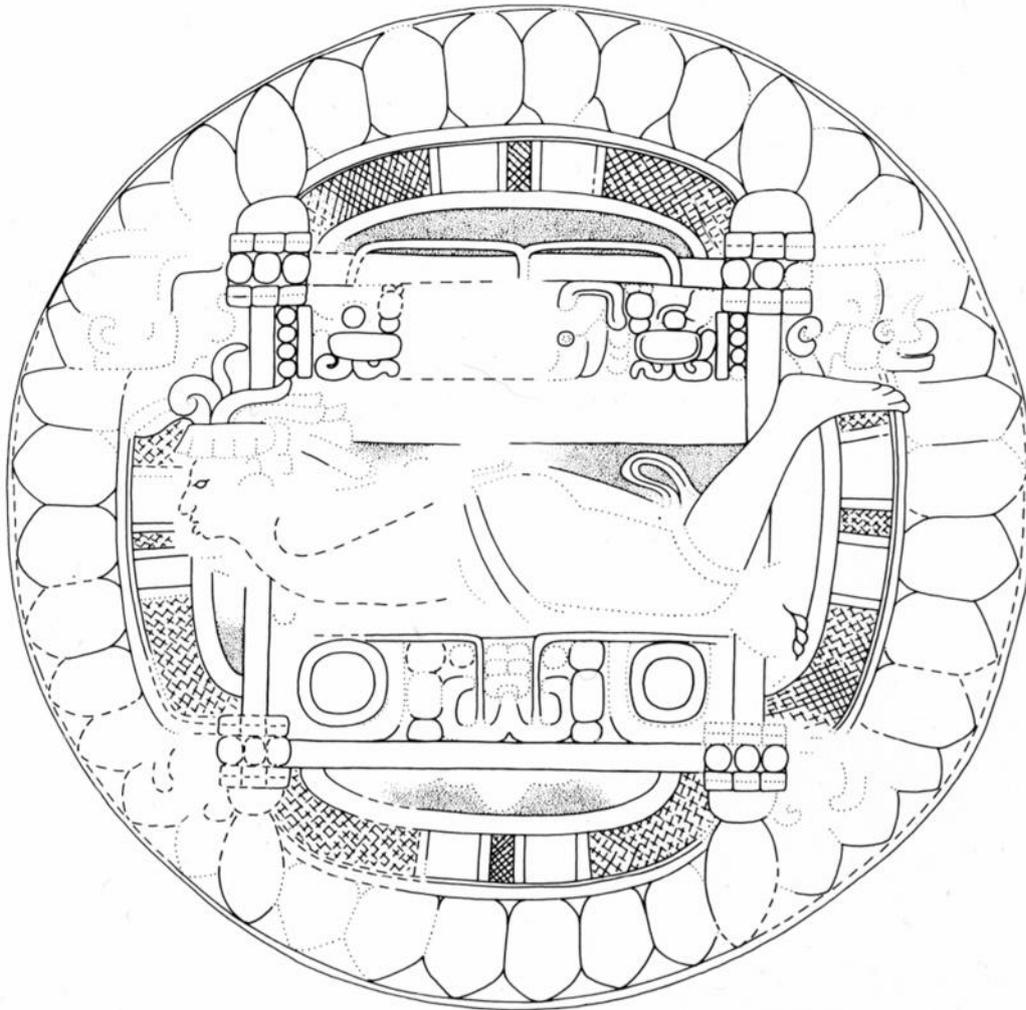


Fig. 9.8: Drawing of the face of Tikal Altar 10 (after Jones and Satterthwaite 1982: fig.34.a) showing a bound man in the belly down pose associated with captives depicted at the centre of balls at Yaxchilan. The captive lies on a frame of poles set at the centre of a quatrefoil.

The association between a scaffold accession event, a ballgame, and the death of a captive provides a template for understanding and interpreting the scaffold accession/captive scene on the face of Tikal Altar 10. The individuals depicted on Tikal Altar 10 are captives, and the context for their display suggests that they were involved in ballgame ritual in commemoration of accession. The binding of Altar 10 is a ritual act which served the purpose

of opening an entrance in the stone. This opening ritual would have taken place either before or after a ballgame during which accession was formally recognized and acknowledged.

The Double Binding of Altar Sides by Cords Fastened with Flat Two-Dimensional Knots and by Ropes - Altars 3, 13 and 19.

Altars 3, 13 and 19 depict the binding of the altar side by cords fastened by Flat Two-Dimensional Knots accompanied by a further binding of the altar by a rope which passes under the knots and under what Jones and Satterthwaite identify as cloth flaps.

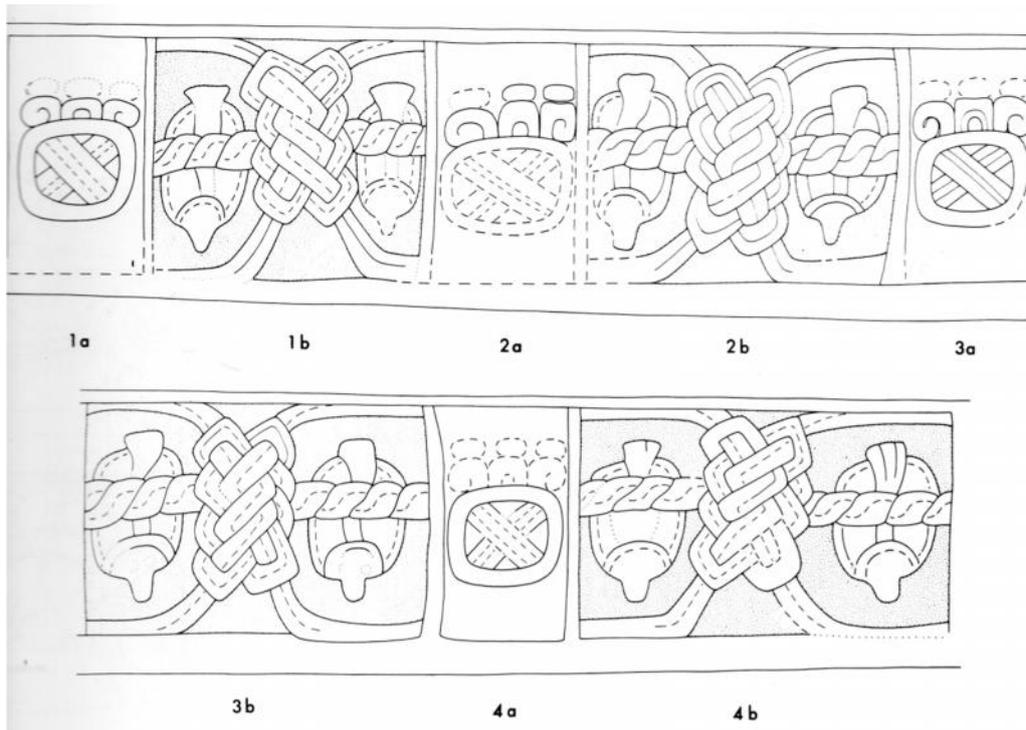


Fig.9.9: Drawing of the side of Tikal Altar 3 (after Jones and Satterthwaite 1982: fig.57) showing two kinds of binding; one by cords fastened by Flat Two-Dimensional Knots and the other by a central rope where the fastening is not shown. The material from which the knots are tied is depicted differently to the central binding rope. The Flat Two-Dimensional Knots are tied from flat strips of material which is in contrast to the texture of the rope which is shown as twisted.

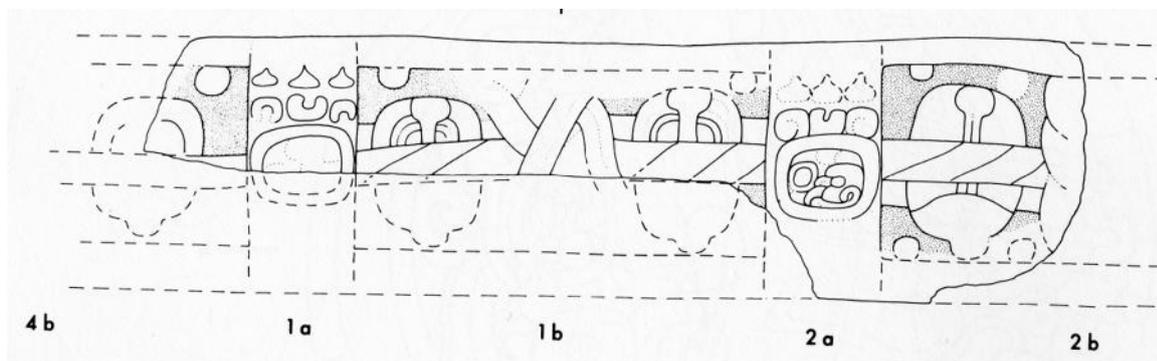


Fig.9.10: Drawing of the side of Tikal Altar 13 (after Jones and Satterthwaite 1982: fig.60.a) showing a double binding of the altar side by a rope and by cords fastened by Flat Two-Dimensional Knots.

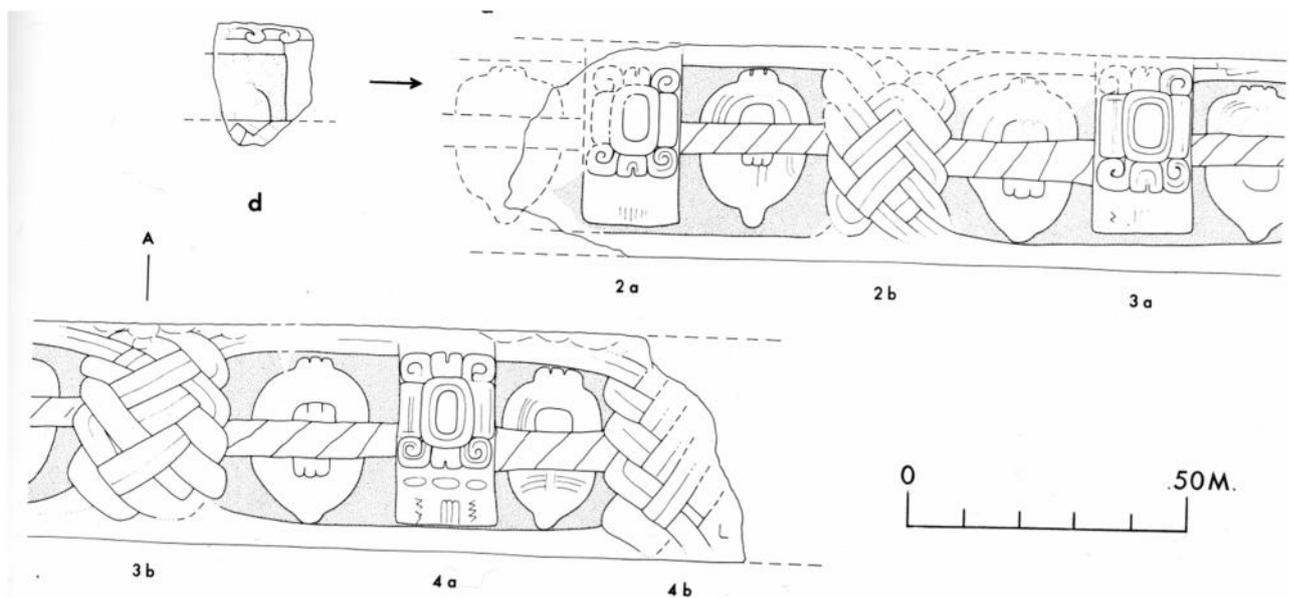


Fig. 9.11: Drawing of side of Tikal Altar 19 (after Jones and Satterthwaite 1982: fig. 61) showing cloth flaps and heart shapes set between Flat Two-Dimensional Knots. This is a double-bound altar where the Flat Two-Dimensional Knots are fastenings for cords which bind the altar. A rope passes behind the cloth flaps and knots.

The iconographic motifs on the sides of all three altars are arranged in exactly the same fashion. Elements described as heart-shaped by Jones and Satterthwaite are secured against the side of the altar by a central binding rope which passes under the FTDKs and glyphic panels of cloth (Jones and Satterthwaite 1982: 78-82). The FTDKs on all three altars are shown as fastenings for cords which bind the altar. Jones and Satterthwaite (1982: 78-82) suggest that the knots and cloth panels resemble motifs known from depictions of perishable thrones – or perishable parts of thrones – such as are illustrated on Tikal lintels. Therefore the altars may well have been used as seats by Tikal rulers.

In support of this proposal, the imagery on the top of Altar 19 shows a seated figure wearing a mask of the Principal Bird Deity. The trefoil jewel known as the Jester God is worn as part of his headdress (Parsons et al. 1989: 128). Known as *Sak Hunal* or ‘crown’ (Schele and Mathews 1999: 225, 412) this jewel identifies this individual as a ruler. Tikal Altar 3 also depicts a seated personage on its face, although much of the detail has been lost. Nevertheless, the trefoil pertaining to the Jester God jewel is clearly visible.

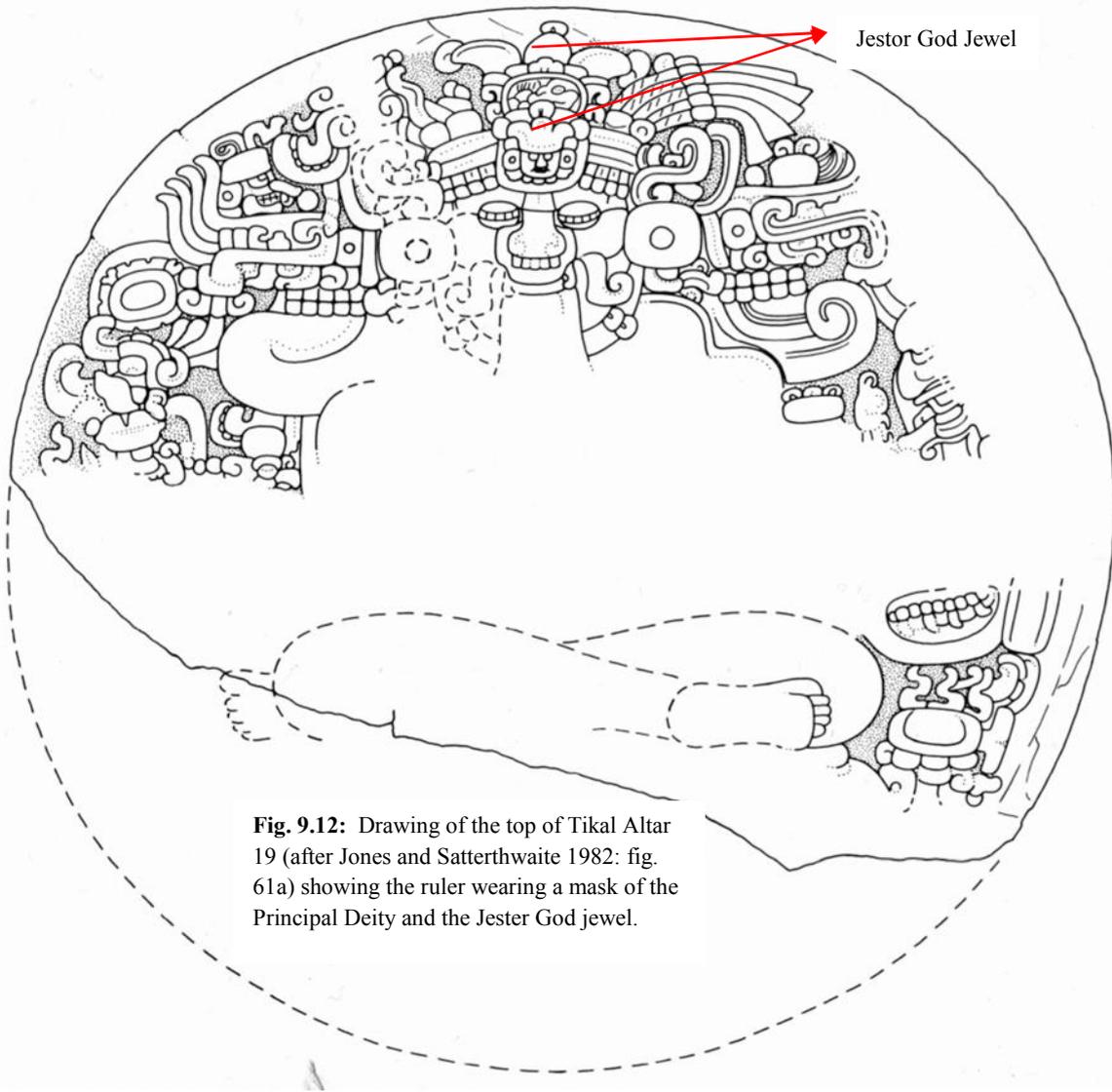


Fig. 9.12: Drawing of the top of Tikal Altar 19 (after Jones and Satterthwaite 1982: fig. 61a) showing the ruler wearing a mask of the Principal Deity and the Jester God jewel.

The resemblance of these three altars to thrones and the representation of seated rulers on the altar faces suggest that one of the ritual uses for the altars was as seating places. As I noted above, the top of Altar 19 displays a seated ruler wearing the mask of the Principal Bird Deity. As the bird of the centre, the Principal Bird Deity sits atop the World Tree; therefore in wearing this deity's mask the ruler is identified with the centre. It is here at the centre, the *axis mundi*, that the ruler seats himself. It is here that binding takes place, and it is from this place that the FTDK draws its meaning. These knots fasten cords which bind the centre. The centre is symbolized by a myriad of different items, each with its particular link to the story of Creation. In the context of Altar 10 it is the Creation opening, and in the case of Altar 19 it is the Principal Bird Deity. Each item holds a fragment of the story, a part of a very complex picture.

The Binding of the Altar Face by Rope – Altars 2, 8 and Column Altars 1 and 2

The faces of four altars — Altars 2, and 8, and Column Altars 1 and 2 — are represented as encircled by the depiction of a rope, which I suggest implies binding. Only fragments of Altar 2 have survived but based on an analysis of the iconography depicted on these fragments, Jones and Satterthwaite propose that, similar to Altar 8, the top of Altar 2 would have depicted a bound captive encircled by a rope frame (Jones and Satterthwaite 1982: 17).

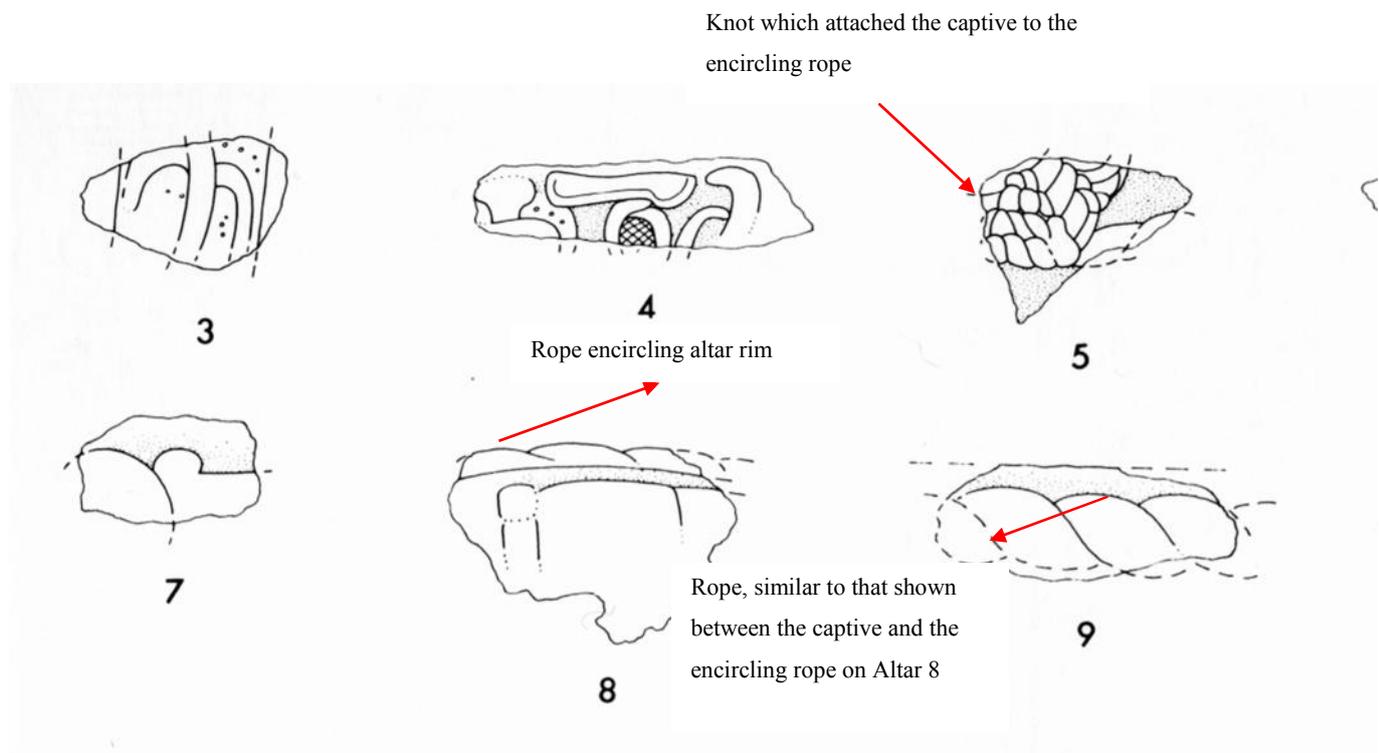


Fig. 9.13: Fragments of the face of Tikal Altar 2 showing the representation of rope which once bound the altar face and also the knot which like that depicted on Tikal Altar 8 attached the bound captive to the encircling rope (after Jones and Satterthwaite 1982: fig.8.c).

The knots which work to fasten the ropes around the rim of the face of Altars 2 and 8 are not identifiable but resemble a round, compact knob or tangle. Similar to the ropes around the sides of Tikal altars, the fastenings (knots) for the rope which encircles Column Altars 1 and 2 are not shown.

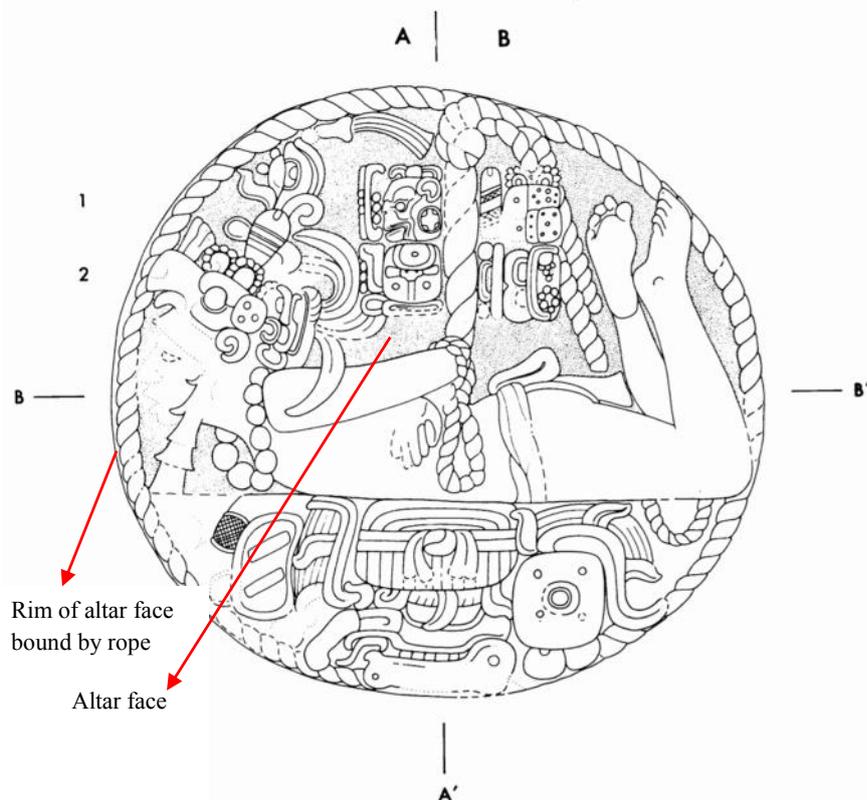


Fig. 9.14: Drawing of upper face of Tikal Altar 8 (after Jones and Satterthwaite 1982: fig.30) showing a rope binding the rim of the altar face. The rope is fastened by an indistinct compact round knot. A captive is bound by another rope which is attached to the main rope encircling the altar.

The face or top of Tikal Altar 8 depicts an individual lying belly down, knees bent and arms tied behind his back by a rope. The rope which ties his arms is directly connected to the rope that binds the rim of the altar face. Altar 2, similar to Altar 8, is also proposed by Jones and Satterthwaite as depicting the same composition (Jones and Satterthwaite 1982: 17). The positioning of the individual's limbs on the face of Altar 8 as well as the way in which his arms are bound is similar to bound captives depicted at the centre of ballcourt balls at Yaxchilan (Eberl and Bricker 2004: 20-21; Houston 1998: 357; Schele and Miller 2006: 249). A total of five rope-bound altars, Altars 2, 8, 10 and Column Altars 1 and 2, display rope bound captives. The captives pictured on the faces of Column Altars 1 and 2 are shown with their arms tied behind their backs by rope. The captive displayed on the face of Altar 10 is represented in the belly-down pose of ballgame captives. In keeping with ballgame captives his arms are tied behind his back.

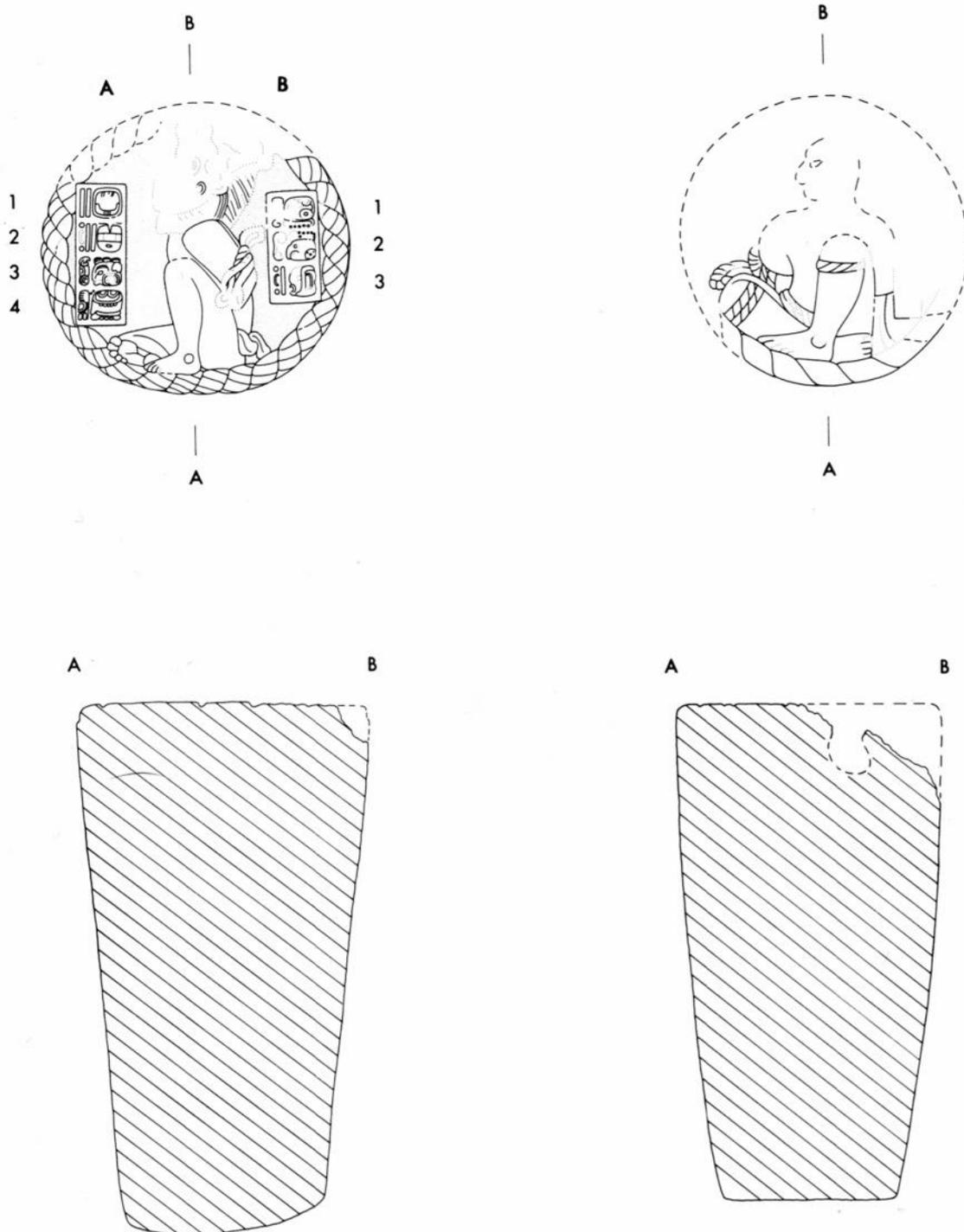


Fig. 9.15: Drawing of Column Altar 1 and 2, top or face (after Jones and Satterthwaite 1982: fig.62b), showing a bound captive in a scene encircled by a rope. The depth of the columns is not consistent with Tikal altars hence the likelihood that these are ballcourt markers.

Miller indicates that a ballgame monument, most likely a ballcourt marker, almost identical to Tikal Altar 8, and now lost, had been described by a nineteenth century visitor to Tonina (Miller 1998: 214-215). The similarity in composition between captives at the centre of images of balls and those depicted on Tikal altars (Altars 8, and 10) is seen to be intentional;

therefore Tikal Altar 8 is interpreted by researchers as a monument commemorating death in the ballgame (Miller 1998: 215; Becquelin and Baudez 1982: 784-785). The ballgame is proposed as having two parts, one involving the game itself played in a ballcourt and another, the ceremonial ballgame sacrifice enacted within the setting of a stepped structure at the conclusion to the game (Schele and Miller 2006: 246, 247; Houston 1998: 357). The Yaxchilan images of trussed captives at the centre of balls being hurled down steps has given rise to speculation as to the nature of the rituals which concluded the ballgame. The captive presented on Tikal Altar 8 is described as ‘trussed in preparation for the second phase of the ballgame’ which would have taken place against a stairway (Rice 2004: 256). Stairways being prominent features of Twin Pyramids mark these structures out as primary locations for spectacle and perhaps for this second and concluding part of the ballgame. Therefore Rice proposes that the prone, bound captives shown on stelae and altars in Tikal’s twin-pyramid groups would be the vanquished lords of the preceding ‘real’ ballgame (Rice 2004: 256, 257). The belief that these ballgame captives are destined to die is based on the knowledge that the ancient Maya ballgame culminated in the death of members of the losing team (Schele and Freidel 1990: 373; Eberl and Bricker 2004: 19-21; Parsons 1969: 104). However the larger context for the death of the ballplayers, according to Rice (2004: 257, 258), is the outgoing *K’atun*. In other words the ballgame was part of the rituals by which the *K’atun* Period Ending was commemorated.

The face or top of Tikal Column Altars 1 and 2 in both cases depicts a solitary rope-bound captive. The captive is pictured as seated within an encircling rope which binds the rim of the altar face. Even though the presentation of the captives on these two column altars does not conform to the belly-down pose of ballgame captives, it is likely (based on Jones and Satterthwaite’s analysis of the two altars), that they too were destined for death in the ballgame. Although found in secondary contexts, Jones and Satterthwaite propose that their similarity to Copan ballcourt markers may indicate that their original context would have been as ballcourt alley markers. A third altar, Column Altar 3, ‘though lacking the rope border, is of comparable size, shape, and motif, and might have been the third member of the set’ (Jones and Satterthwaite 1982: 84).

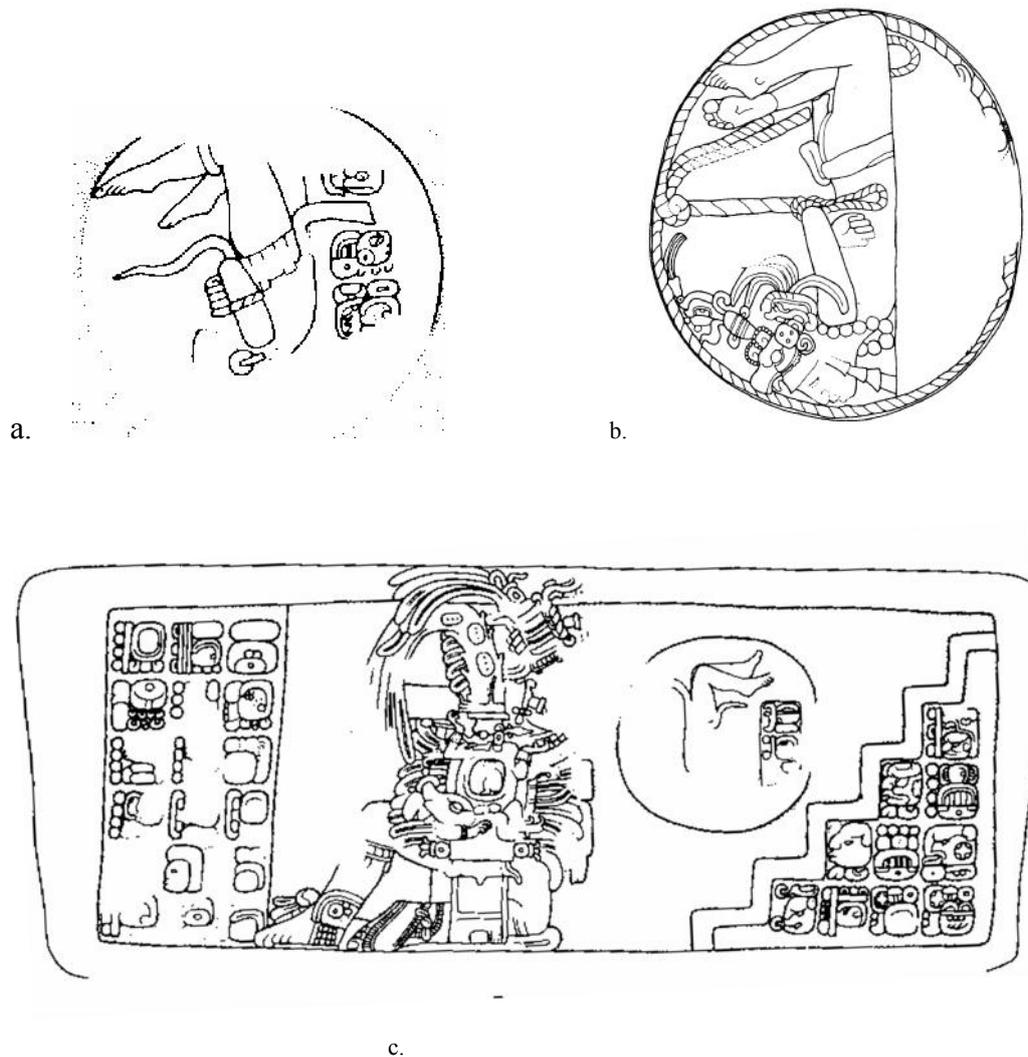


Fig. 9.16: Drawings of ballgame captives trussed and bound into balls. a. Detail from Tikal Altar 8 (after Schele and Miller 2006: fig.VI.9). b. Detail of Panel 7 from the Hieroglyphic Stairs at Yaxchilan (after Schele and Miller 2006: fig. VI.7). c. Detail of Panel 8 from the Hieroglyphic Stairs at Yaxchilan (after Freidel, Schele and Miller 2001: fig.8.16c).

An altar, Monument 4 from the Preclassic or Formative site (1000-400 B.C. [Rice 2007: 81]) of La Venta is shown as encircled at its base by a rope which functions to bind fast two captives on either side of the altar (Clancy 2009: 29; Rice 2007: 96). The association of the encircling rope, stone altar, ruler and captives suggests that metaphorically the ideas communicated are similar to what is meant to be communicated by the imagery of Tikal Altars 2 and 8. Reilly (2000: 392-393) describes how one arm of each captive is bound with the rope whilst the other is held against the captive's chest in a gesture of submission. He concludes that the captives were destined to be killed and that the blood that was shed opened the supernatural rites depicted on the altar (Reilly III 2000: 392, 393).

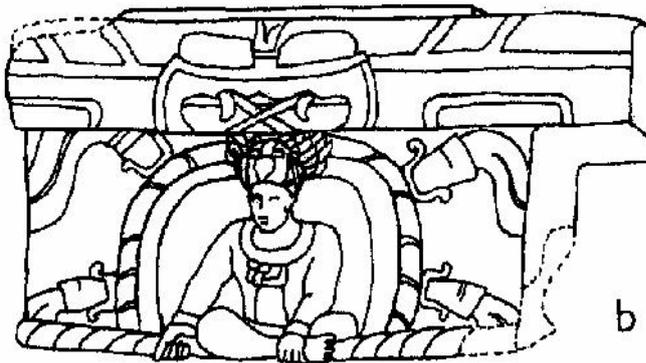


Fig. 9.17: Drawing of La Venta Altar/Throne 4 (after Clancy 2009: fig.3.2): showing the binding of the altar/throne by a rope which emerges out of a supernatural opening.

La Venta Altar 4 also illustrates that the binding of stones with rope was a significant act with a long history predating similar acts at Tikal. Altar 4 (now considered to be a throne rather than an altar [Rice 2007: 85; Clancy 2009: 29]), depicts a ruler seated at a cave-like entrance fashioned into a maw which has opened at the base of the altar/throne (Rice 2007: 85; Pool 2007: 116). The opened maw is marked at its four corners with ears of maize (Taube 2004b: 25-35, 114, fig.11, fig.17.c, fig. 54.d). A rope emerges from the maw/entrance at the base of the altar/throne and encircles the monument. The ruler holds fast one end of the rope and in doing so can be seen to become the fastener for the rope. In this instance the focus is on the ruler as fastener rather than on a knot. The representation carved in relief on the side of La Venta Altar/Throne 4 extends the pattern noted at Tikal between altar stone-binding and the binding of captives. That the rope which binds La Venta Altar/Throne 4 functions both to bind the altar/throne and the two captives supports the idea that the two bindings (of stone and captive) were intimately connected.

With regard to the meaning of the La Venta Throne 4 rope, this rope, because it emerges from the opening to the other world, the creative centre, would appear to be the mythical rope, the cosmic umbilicus, known as the *Kusansum*. The *Kusansum* was many things, including a pathway for the sun (ecliptic) and for the gods and ancestors. What we know of the *Kusansum*, is that it emerged from the place of Creation known as *No Ho Kan*, the very place where the Jaguar Throne or first Throne of Creation stood (see Creation story, Chapter Six) (Milbrath 1999: 148, 284; Freidel, Schele and Parker 2001: 105-106; Kappelman 1997; Loooper 1995: 131-134, 167; Loooper and Kappelman 2000). Reilly identified La Venta Throne 4 as a Jaguar Throne (see Reilly III 2000: 393). I suggest the cords emerging from the cavelike opening at the base of La Venta Throne 4 and which bind the throne are the *Na Ho Kan* cords of the *Kusansum*.

There are multiple lines of evidence which tie the iconography of La Venta Throne 4 to the story of Creation. Based on the Creation context for the dual binding of stone and captives represented on La Venta Throne 4, it can be proposed that at Tikal, the dual binding of altar stones and captive would similarly have taken place against the backdrop of Creation. Like the La Venta binding event, the binding of the altar would also have opened an entrance at the centre of the stone. Tikal Altar 10 illustrates this opened entrance as well as the bound captives.

9.2 Zacpeten

9.2a Altar 1 (Fig. 9.19)

The FTDK at Zacpeten is depicted distinctively and seems to serve the same functions I have outlined so far. The glyph denoting the completion of the *K'atun* is a quadripartite sign whose attributes are four petals or arms set out like a cross but with the interstices also marked (Coggins 1980: 728,729; Rice 2004: fig.3.6,).

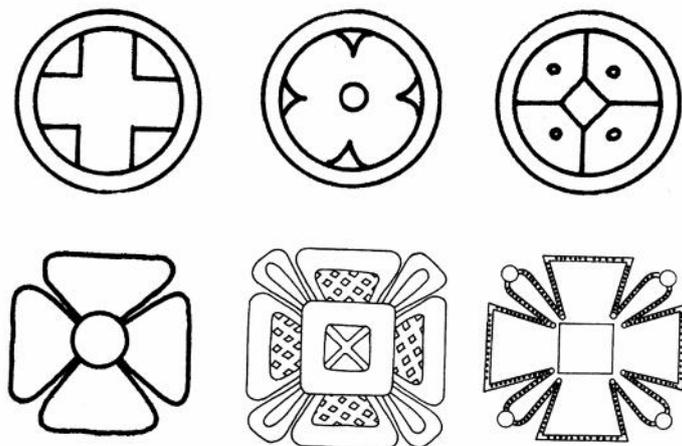


Fig. 9.18: Drawings of Maya quadripartite glyphs for completion (after Rice 2004: fig. 3.6).

The face or top of Zacpeten Altar 1 is marked by a large completion sign comprising four arms set in a cross formation with the interstices marked. Each of the four arms of the quadripartite completion sign is substituted by a Flat Two-Dimensional Knot (see Rice 2004: fig.5.23). Houston and Stuart propose that the text on this altar continues from an unidentified stela with which it would originally have been paired. They propose a *Bak'tun* Ending Dedicatory Date for this stela/altar pair of 10.0.0.0.0 (Rice, Rice and Pugh 1998: 236; Rice 2004: 161). The Flat Two-Dimensional Knot is described as continuing around the

sides of this altar (Rice, Rice and Pugh 1998: 236). Although I can't verify this as there are no illustrations showing the sides of this altar, it would appear that this altar was bound by representations of cords fastened by Flat Two-Dimensional Knots and would therefore constitute another example of a bound stone. This Zacpeten altar supports the proposal that Flat Two-Dimensional Knots are associated with Period Ending rituals. The representation of FTDKs in numbers of four on the sides of Tikal altars may similarly have something to do with the division of the *K'atun* into four parts (where each part roughly measures five years).

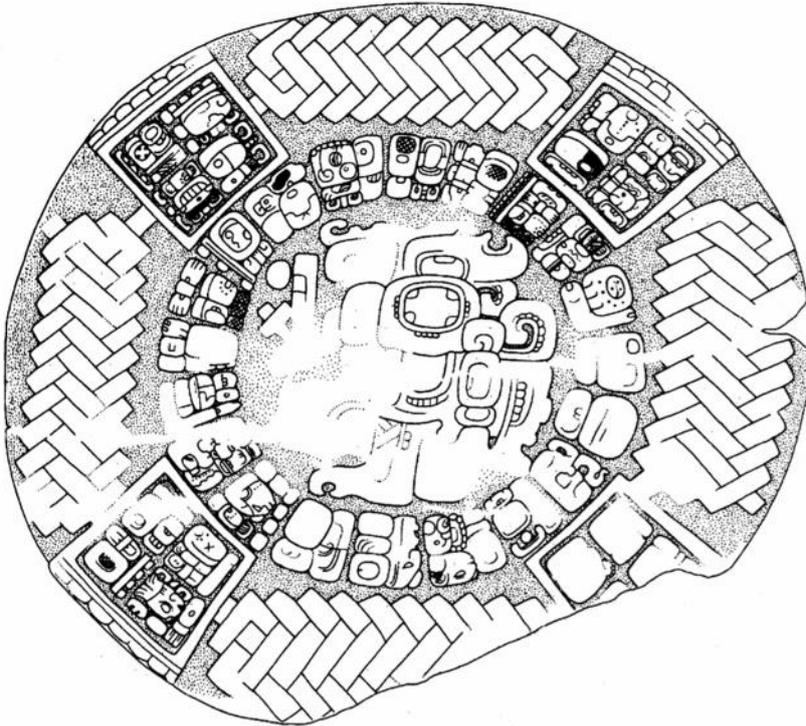


Fig. 9.19: Drawing of the face of Zacpeten Altar 1 (after Rice 2004: fig.5.23), depicting a large quadripartite sign for completion. A FTDK substitutes for each of the four arms which comprises the completion sign.

9.3 El Palmar

9.3a Altar 1 (Fig. 9.20)

As with Zacpeten Altar 1, the arrangement of the visual elements which comprise the imagery carved into the face of El Palmar Altar 1 (Skidmore et al. 2006: 98) conforms to the Maya quadripartite sign for completion. In the El Palmar example, four FTDKs mark out the four arms of the cross (one for each direction), the cross being the central component of the completion sign (see Fig. 9.18). The segmentation of the El Palmar altar face into four parts is further consolidated by four deity heads, each of which occupies one of the spaces between the arms of the cross. A further two FTDKs frame the image of each deity, creating a

cartouche effect. In keeping with Maya quadripartite signs, the centre, a place where the arms of the cross meet or alternatively radiate out from, is emphasized; sometimes it is a square which denotes the centre or else it is a circle (see Fig. 9.18). In this instance, the centre is marked by a fifth portrait head of a deity. The isolating of the centre through the use of different visual symbols or indicators tells us of the importance of the centre to Maya perceptions of space and the ordering of space. A further four FTDKs, reminiscent of the arrangement of four FTDKs on the sides of Tikal altars, are carved along the sides of El Palmar Altar 1.

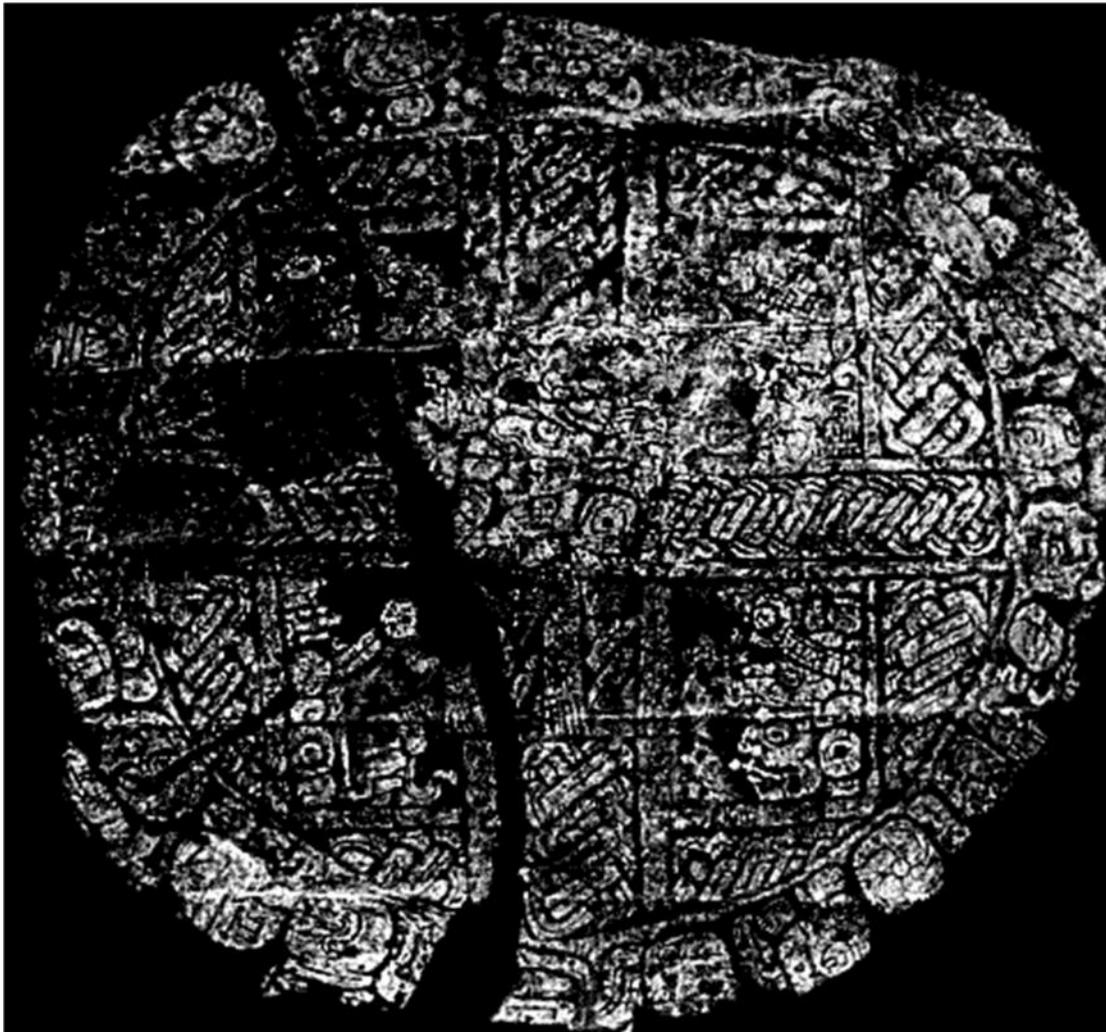
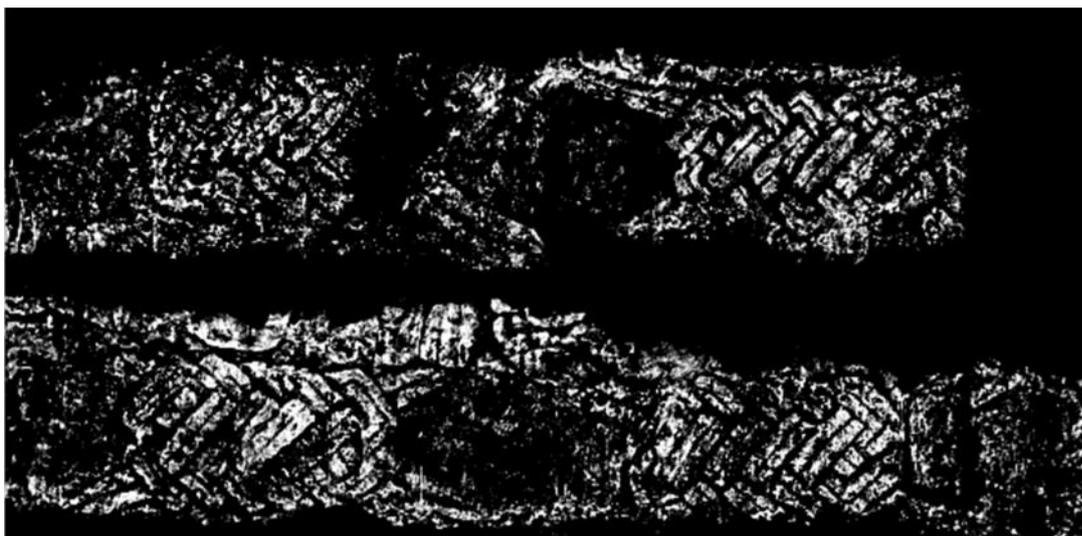


Fig.9.20: Photograph of the top of El Palmar Altar 1 (after Greene Robertson 1995) showing four FTDKs arranged so as to form a cross. Each FTDK marks out one arm of the cross. Four deity heads, each of which occupies one of the spaces between the arms of the cross, accentuate the four part structure of the design. A further two FTDKs frame the image of each deity.



9.21: Photograph of El Palmar Altar 1 (after Greene Robertson 1995) showing the FTDKs which decorate the sides of this altar.

El Palmar Altar 1 was dedicated in A D 554 (9.6.0.0.0) and commemorates a 6 *K'atun* Ending (Law 2006: 81; Mathews 1985). Both the sites of El Palmar and Zacpeten are located within close proximity to Tikal and this brings up questions as to whether the sharing of the same knot icon between Tikal and each site, at different time periods (the Early Classic at El Palmar and Late Classic at Zacpeten), is an indicator of underlying connections with Tikal. As with the Zacpeten Altar, the use of design elements, such as FTDKs, to divide the El Palmar altar into four parts conforms to a pattern noticeable at Tikal. The integration of FTDK imagery within Maya quadripartite signs for completion on altars from Zacpeten and El Palmar, infers that time and its passage was of utmost importance to the display of this knot at the two sites; it also supports the interpretation of quadripartition in the context of Tikal altars as linked to time and the calendar.

9.4 Copan

9.4a Stela J (Fig. 9.22a-b)

The entire east face of Copan Stela J is carved in the shape of a huge Flat Two-Dimensional Knot. As with the FTDKs carved into the façade of Copan Structure 22A (see Chapter Ten), the Stela J FTDK is widely identified by Mayanists as a representation of a mat (Schele and Mathews 1999: 36-38; Baudez 1994: 69; Newsome 2001: 77; Sharer 1994: Fig. 15.49); however, the flat strips of cord from which the knot is tied, and which extend around to the western face of the stela (imitating the binding of Tikal's altars by cords fastened with Flat

Two-Dimensional Knots) help to identify the item as a knot. That the stela is a representation of the Maya *Witz* or Creation Mountain is indicated by the large *Cauac/Kawak* (in new orthography referred to as *Witz* – see Chapter Ten) Mountain God head carved into the western face of Stela J (Newsome 2001: 77-81). The FTDK represented on the eastern face of Stela J fastens a cord around a representation of the Creation Mountain.

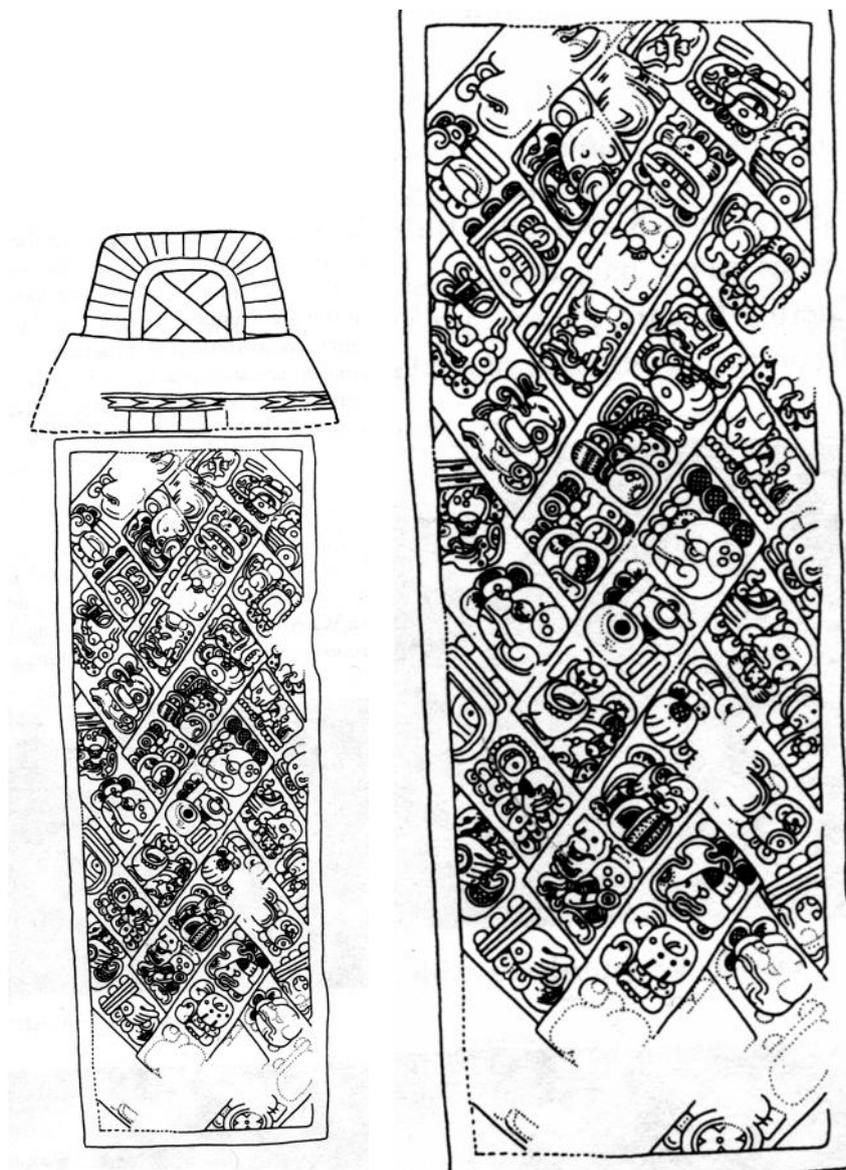


Fig. 9.22: a. Drawing of Copan Stela J (after Schele and Mathews 1999: fig. 4.5.2) showing the stela crowned by a stone carved to resemble a roof element. b. Drawing of Copan Stela J (after Schele and Mathews 1999: fig. 4.5.2) showing the interlacements of the FTDK infilled by glyphs.

Inscribed into the interlaced bands of the knot and bindings are glyphic inscriptions. The embedding of writing into the lacings of the knot is reminiscent of Scandinavian memorial tomb stones and likewise may reflect the intention of the words to function as a binding contract or covenant (Sawyer 2000: 47-48). Like the Scandinavian inscriptions, these writings may offer an insight into the kind of contractual relations which the FTDK may have

negotiated.

The inscriptions on Stela J document multiple Creation cycles, and link the Creation acts carried out by the Gods to that of the ruler Waxaklajuun Ubaah K'awiil (also known as 18 Rabbit) carried out at the Period Ending (Newsome 2001: 77-88). Newsome describes the Period Ending events documented in the Stela J inscriptions as belonging 'to the same category of recurrent events in cosmological and human history as those' described in inscriptions at Quirigua and Yaxchilan, 'and that sacrifice and the ball game may have played a role in their significance' (Newsome 2001: 86). Whereas the west face of Stela J documents the conjuring of the two Creation Gods, the Paddlers, on the half period (*Lajuntun*), the east face deals with accession (Newsome 2001: 77-88; Schele and Mathews 1999: 136-138).

Stela J had originally been crowned by a carved block of stone representing a thatched roof. On one side of the roof (now detached from the stela) a central cartouche depicts a crossed-bands sign and on the other a jaguar head (Baudez 1994: 72). These two symbols also appear together on the La Venta Altar/Throne 4 where I have interpreted them as referring to the concept of the centre as the place of creation.

Reading between text and image on Stela J it is clear that the FTDK articulates ideas to do with the binding of the centre. As previously mentioned, there are a number of objects which demarcate the centre and each one of these can be traced back to the Maya story of Creation. The place of Creation as mountainscape identifies the mountain as a centre. Other things which demarcate the centre are the three stones set on the day of creation. The three stones as cosmic hearth mark the centre as a place of fire. It is here that enthronement takes place and where we find the FTDK.

9.5 El Baul , Bilbao and El Castillo

The monuments described below are all in the Cotzumalhuapa art style (Parsons 1969: 137-185), meaning that they share certain stylistic elements common to a number of sites along the Pacific Coast of Guatemala. The Cotzumalhuapa style is Middle to Late Classic Maya development, focused primarily around the seven key sites of Aguna, Xata, Bilbao, El Baul, El Castillo, Palo Verde, and San Andrés (Parsons 1969: 137-185) which together comprise

the nucleus of the Cotzumalhuapa region. In the context of Cotzumalhuapa relief carvings the display of Flat Two-Dimensional Knots is closely tied to ballgame rituals.

9.5a El Baul Monument 50 (Fig. 9.23)

Monument 50 from El Baul (Chinchilla Mazariegos 1998: Drawing 27) depicts a round opening encircled by two serpent-like cords fastened by Flat Two-Dimensional Knots. An ancestor is shown emerging head first from the opening. The opening, like the Tikal Altar 10 opening or supernatural entrance, is located within the stone itself.



El Baúl Monument 50

Fig. 9.23: Drawing of El Baul Monument 50 (after Chinchilla Mazariegos 1998: Drawing 27) showing two Flat Two-Dimensional Knots tied from two serpents. The bound opening between the knots serves as a supernatural entrance.

In the representation of Monument 50, the material from which the FTDKs are tied are serpents. Smoke curls emerging from the serpents' mouths indicate that they are fiery beings, possibly War Serpents, known during the Postclassic as *Xiuhcoatl*. Sometimes the smoke

curls emerging from the mouths of fire serpents resemble forked tongues; however, Taube notes that the same smoke volutes are pictured emerging from the forehead of God K. The God K smoke curls are an iconographic form of the hieroglyph for smoke (i.e. the TI22 affix) (Taube 1998: 19-22; Stuart 1987: 10). Although Taube identifies the curled elements emerging from the mouths of fire serpents as smoke, another interpretation would be that these elements are forked or bifurcated tongues. Elizabeth Baquedano (personal communication) has interpreted them as such (i.e. forked tongues). As possible representations of fire serpents, the Monument 50 serpents link the FTDKs to celestial fire and the drilling of fire (see Taube 2002: fig.10.15.c, 285-295).

The curved flame-like tail of each knotted serpent replicates the curved shape of two obsidian eccentrics shaped into War Serpents found in Teotihuacan burials (see Taube 2002: fig.10.18c). The curved tails also resemble the flame tips of the fire drill staffs held by the Tikal rulers on Stela 9 and 13. According to Elizabeth Baquedano (personal communication), the shape of the Monument 50 serpent tails most likely suggests that they are meant to portray obsidian knives, a reading in keeping with the Xiuhcoatl's role as weapon. Taube (2002: 294-301) describes the Xiuhcoatl as an 'emblem of celestial fire and warfare', often appearing in the form of 'an *atlatl*, a shooter of fiery darts' (Taube 2002: 296).

The two figures holding the snake ropes on Monument 50 wear bunches of flowers in their hair. Similar bunches are worn as headdress elements at Yaxchilan in association with the Mexican Year Sign for 'bloodletting and subsequent fire offering scenes' (Taube 2002: 276-277). Described as pliant plant material with beaded ends, these bunches of flowers appear as fire offerings in Classic Period Maya representation (Taube 2002: 276-277). In Late Postclassic Central Mexican iconography, bunches of these flowers are shown attached to the tails of the Xiuhcoatl (Taube 2002: 278). Based on examples of equivalent plant bundles shown in codex imagery, the plant material has been identified as the sweet-scented marigold which was burnt as aromatic incense (Taube 2002: 278-280).

As beings which surround the hearth at the centre of the world (Taube 2002: fig.10.26b, 317) the binding event depicted is possibly a reference to the binding of the Creation hearth. The hearth as ancestral portal and place of contact with ancestors reiterates that the tying of these knots has something to do with the opening of entrances between worlds and the contact of ancestral spirits.

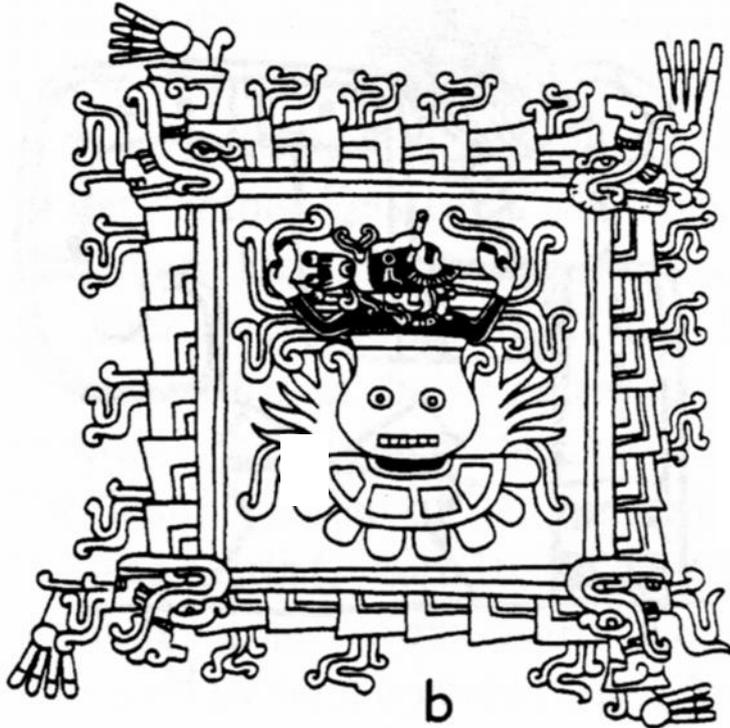


Fig. 9.24: Image from Codex Borgia, p. 46, depicting the turquoise hearth surrounded by four fiery Xiuhtecuhtli serpents (after Taube 2002: fig.10.26.b).

9.5b Bilbao Monument 18 (Fig. 9.25)

Bilbao Monument 18, similar to El Baul Monument 50, shows two figures interacting with cords fastened by a large Flat Two-Dimensional Knot. However in this scene the knot does not appear to fasten the cords around an object or opening. Parsons indicates that the figures are ballplayers involved in either a pre- or post- game ritual (Parsons 1969: Plate 37, 111, 112). The cords hang down over the monument and a third smaller figure standing behind the two focal figures, also holds a cord. A rim around the edge of the monument creates the sensation that the figures are held within a niche or recessed space.

The wearing of ballgame attire in Monument 18 (and other monuments from this as well as other Cotzumalhuapa sites) for the tying of FTDKs indicates that the ballcourt may have been a meaningful location for the display of these knots. This could be because the ballcourt itself symbolized the cleft opening into Creation Mountain (Looper 2003: 72-73; Schele and Mathews 1999: 73, 207).



Fig. 9.25: Photograph of Bilbao Monument 18 (after Parsons 1969: Plate 37) showing two ballplayers interacting with ropes from which a large Flat Two-Dimensional Knot has been tied

Flat Two-Dimensional Knot

9.5c *El Castillo Monument 1* (Fig. 9.26)

El Castillo Monument 1 is a stela with two carved sides. (Due to the grainy texture and darkness of the photograph (see Parsons 1969: Plate 59b, 112), I could not reproduce this image of two ballplayers tying FTDKs). One of the carved sides depicts the same arrangement of facing ballplayers holding cords fastened by a large Flat Two-Dimensional Knot (Parsons 1969: Plate 59b, 112). The ballplayers appear to be in the process of tying a second knot, suggesting that we are witnessing a similar occurrence to that represented on El Baul Monument 50, namely an opening of a supernatural entrance or portal.

The reverse side of El Castillo Monument 1 depicts another ballgame related scene (see Fig. 9.24). Here a ballplayer climbs a ladder made from teeth attached or fixed into a rope (Parsons 1969: Plate 59). At the top of the rope ladder a Sun God or solar ancestor surrounded by a solar disk emerges from a niched maw or entrance (Milbrath 1999: 82, 83).

The ladder and niched entrance are evocative of the Piedras Negras scaffold frame accession scenes which depict a ladder made from lashed poles leading to a niched seating area framed by a skyband. The speech scrolls issuing from the climbing ball player's mouth express the idea of spoken speech (i.e. song or prayer, as distinct from the written word [see Pasztory 1992: Fig. 20, 302-305]) which he offers to the solar ancestor/deity (Milbrath 1999: 82, 83).



Fig. 9.26: Photograph of El Castillo Monument 1 (Parsons 1969: Plate 59), showing a ballplayer climbing a tooth-studded rope into a maw from which a vision of an ancestor or solar deity emerges. The tooth-studded rope is reminiscent of the rope, threaded through the Yaxchilan queen's tongue, pictured on Yaxchilan Lintel 24 (Tate 1992: fig. 98).

Interspersed between the three Cotzumalhuapa monuments is a dialogue to do with the tying of FTDKs, the opening of portals and the ballgame. As the crack in the Creation Turtle/mountain, the ballcourt is exactly where we expect the tying of FTDKs to take place – at the centre. The scale of the knots relative to the size of human figures suggest that they were large entities and highly visible. Their tying would have entailed performance on a grand scale.

9.6 Itzimte

9.6a Stela 12 (Fig. 9.27)

The FTDK represented on Itzimte Stela 12 is linked to writing and words. The inscription on this stela frames a square cartouche carved with the image of a personage. The FTDK is displayed within the inscription frame and appears to link the two rows of glyphs.



Fig. 9.27: Drawing of Itzimte Stela 12 showing a FTDK displayed as part of the inscription (after Taube 1992: fig. 5b).

The figure at the centre wears the same hat bound by bands of knotted paper or cloth worn by a Tikal Lord on Tikal Altar 5. The Tikal lord displays costume accoutrements, such as the cruller, eccentric flint and fire drill, consistent with rulers who impersonate the Jaguar God of the Underworld (Stuart 1998: 407). However, the wide brimmed hat bound by bands of knotted paper is not part of the Jaguar God of the Underworld costume assemblage but is, in fact, a Late to Terminal Classic costume element associated with Chaahk, a god of lightening, thunder and rain (Taube 1992: 17-19). The axe held by the Itzimte Stela 12 figure is a symbol for lightening and a primary attribute for identifying Chaahk and his impersonators (Taube 1992: 17-22). During the Late Postclassic, Chaahk (also known as God B) is shown wearing the cruller (Pallán Gayol 2009: 22) and it is possible that Tikal Altar 5 is an early example of this conflation of attributes belonging to two separate deities. The Itzimte Stela

12 hieroglyphic inscription identifies the personage wearing the wide brimmed hat as Chaahk (Taube 1992: 19). Maya rulers not only impersonated Chaahk, but also incorporated this deity's name within their personal name. Therefore, at Chichen Itza and Uxmal, rulers shown wearing the wide brimmed hat are glyphically named as Chaahk (Taube 1992: 19; Pallán Gayol 2009: 17-29). Pallán Gayol notes that rulers made use of Chaahk's name 'for recalling mythical narratives that provided strong religious foundations to their exercising of power' (Pallán Gayol 2009: 30). Chaahk's role in the myth of Creation involved the striking and splitting open of Creation/Maize Mountain (*Yax-Hal-Witz*) with his lightning-axe. From the split mountain emerges the Maize God, a personification of maize; therefore Chaahk is responsible for acts by which maize, and indeed agriculture, is brought to humanity (Pallán Gayol 2009: 23-24, Fig. 4). Chaahk's lightning-axe is described as a 'combination of stony core, fire and serpent qualities' (Pallán Gayol: 33). The serpent is another of Chaahk's attributes, and often images of this deity show serpents falling from his mouth (Taube 1992: 19). In addition, Chaahk sometimes is pictured wielding a fire serpent resembling the Postclassic Xiuhcoatl. As with the Xiuhcoatl, the fire serpent wielded by Chaahk functions as a weapon (Taube 1992: 19-22; Pallán Gayol 2009: 32-33). The fire serpent brandished by Chaahk informs us that in one of his manifestations, Chaahk is a warrior (Taube 1992: 22-24). This martial aspect of Chaahk would appear to have been assumed by the Itzimte Stela 12 ruler, who carries a shield.

In the context of Itzimte Stela 12 the FTDK, similar to the FTDK on Copan Stela J, is annexed to language and writing. Other associations are possibly warfare but also the narrative of Creation.

Summary

At Tikal there is a pattern in association between Flat Two-Dimensional Knots and altar stone-binding. Although altar stone-binding has been interpreted by Stuart as a Period Ending act, other associations have been proposed here, such as the opening of portals and the ballgame. The narrative written into the lacings of the large FTDK carved into the face of Copan Stela J adds to these the story of Creation as well as the idea of the centre and accession. The Cotzumalhuapa images of ballplayers interacting with cords tied into FTDKs reinforces two themes in particular, and these are the ballgame and portals. The El Baúl Monument 50 FTDKs tied from fire serpents touches on the layered metaphors implicit in the knot tying process. Ropes and cords are metaphors for serpents and serpents are metaphors for fire. The item bound is a celestial hearth and place of contact with ancestors; it is also

the centre, a place of power, and a locus for seating and accession. In tying the FTDK, the tier was manipulating a multitude of concepts. As such the FTDK was a material metaphor of the highest order - through its tying the concept of kingship was made material.

Chapter Ten: Flat Two-Dimensional Knots Represented as Directly Attached to, or Overlying Architecture

At the sites of Palenque, Copan, Río Azul and Chichen Itza, FTDKs are displayed as items sculpted or painted on architectural features such as facades, interior walls and piers. The location of FTDKs on public architecture suggests that it was important to the lineages at these sites that the knots be displayed before the entire community. These four sites are located within the three major geographic zones which make up the Maya region, known as the Southern Highlands, the Central Lowlands and the Northern Lowlands (see Chapter One). Palenque is situated in the far southwestern periphery of the Central Lowlands as it rises into the Southern Highlands. Copan lies to the southeast of Palenque on the periphery of the Southern Highlands. Río Azul is sited at the very heart or centre of the Central Lowlands whilst Chichen Itza stands within the far northern reaches of the Northern Zone.

Table 10.1: Table listing all occurrences of FTDKs displayed as directly attached to, or overlying architecture.

Site	Locus of FTDK	Gregorian Year	Long Count
Palenque	House B	A.D.660-700 (Mathews 2006: FAMSI; Greene Robertson 1985: 3; Martin and Grube 2008: 163-164).	Late Classic
Copan	Structure 22A	A.D. 746	Late Classic 9.15.15.0.0 (Fash 1991: 134).
Chichen Itza	Temple of the Owls – West Pier	A.D.800-900 (Milbrath 2002: 119).	Late to Terminal Classic
Río Azul	Tomb 1	A.D.417	Early Classic 8.19.1.9.13 (Sharer and Traxler 2006: 327).

10.1 Palenque

10.1a House B (Fig. 10.1)

FTDKs are deployed as architectural embellishment on the façade of Palenque House B. In Chapter Four I noted that one of the properties of the Flat Two-Dimensional Knot is that it can be extended indefinitely by tying further knots to form a chain. It is this property of the Flat Two-Dimensional Knot to be extended to create a chain of knots that is capitalized on Palenque's House B. A chain of Flat Two-Dimensional Knots, fashioned in stucco, encircles the roof of House B (Greene Robertson 1985: 49; Miller 1998: 199).

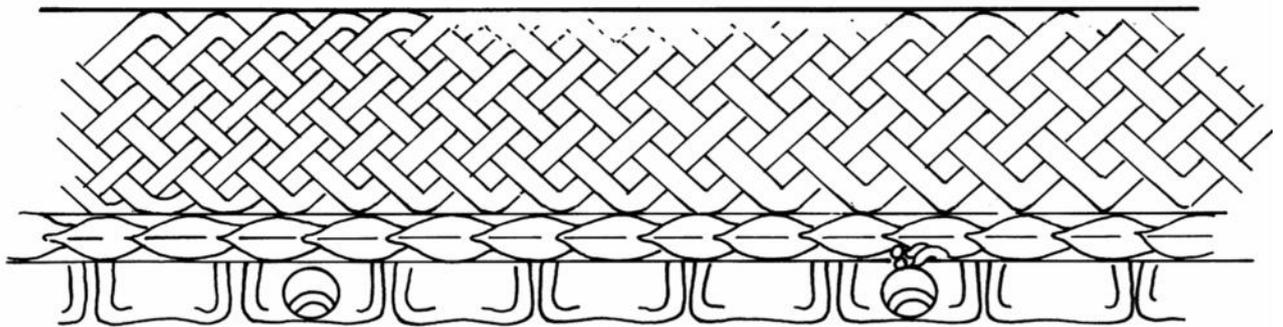


Fig. 10.1: Drawing of the extended chain of Flat Two-Dimensional Knots which encircle Palenque House B (after Greene Robertson 1985: fig. 197).

Kawak Gods (in new orthography *Witz* Gods [Kettunen 2006: 89]) set below the chain of knots, as well as the double-stepped cleft motif which covers almost the entire inner wall of House B's southeastern room, establish this building as a *Witz/Kawak* Mountain (Greene Robertson 1985: 46-50; Schele 1998: 497-499, fig. 12a). References to mountains in Maya inscriptions allude to temple pyramids and palace structures recognized by the Maya as *witz* (Schele and Freidel 1990: 71-72; Loten 2003: 231; Boot 2004: 1-10, Stuart and Houston 1994: 81, 82, fig. 96; McAnany 1998: 279). As a representation of a *witz*, House B, bound in this instance by FTDKs, is symbolic of the binding of the Maya Creation Mountain, which may establish the building as the setting for particular kinds of rituals, such as accession. In addition, images of the mountain as a royal seat at other sites (for example, at Tonina, see Graham 2006: fig. 9: 97; Stuart and Houston 1994: 82, fig. 96) identify the *Witz* Mountain as an alternative throne. With regard to the double-stepped cleft motifs on the inner wall of House B's southeastern room, these same motifs are found on the façades of structures at Tonina, Uxmal, Kabah and Xlabpak as well as a number of other ancient Maya sites where it

represents the cleft opening or entrance within the Creation Mountain or *Yax-Hal-Witznal* (Schele 1998: 497, fig. 12a-d; Boot 2004: 1-12).

On the inner wall of House B's southwestern room a scene sculpted in stucco depicts a woman holding a bloodletting dish. Sitting on a floor between two *Witz* God heads which act as stone supports for a throne, is a figure slumped forward seemingly in a trance; alighting on his shoulder as if announcing the arrival of his vision is the Principal Bird Deity (Greene Robertson 1985: 44, 45), bird of the centre and *way* or spirit companion of the ancient Maya God *Itzamna*, sorcerer and conjurer (Freidel, Schele and Parker 2001: 449). This bird also known as *Itzam Yeh* appears above doorways into inner sanctuary rooms (dubbed as conjuring houses) within temple structures at Palenque (Freidel, Schele and Parker 2001: 222, fig. 4: 31), as well as on the accession stelae of Piedras Negras (Freidel, Schele and Parker 2001: 449).

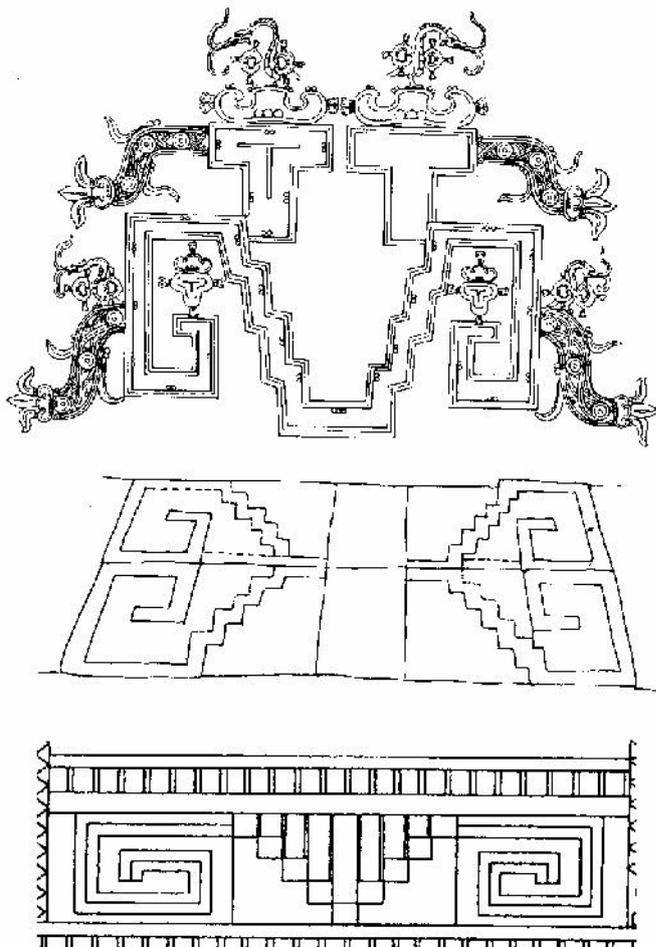


Fig. 10.2: Abstracted representations of the stepped entrance into the *Witz* (after Schele 1998: fig. 12).

a. Mountain cleft from House B Palenque.

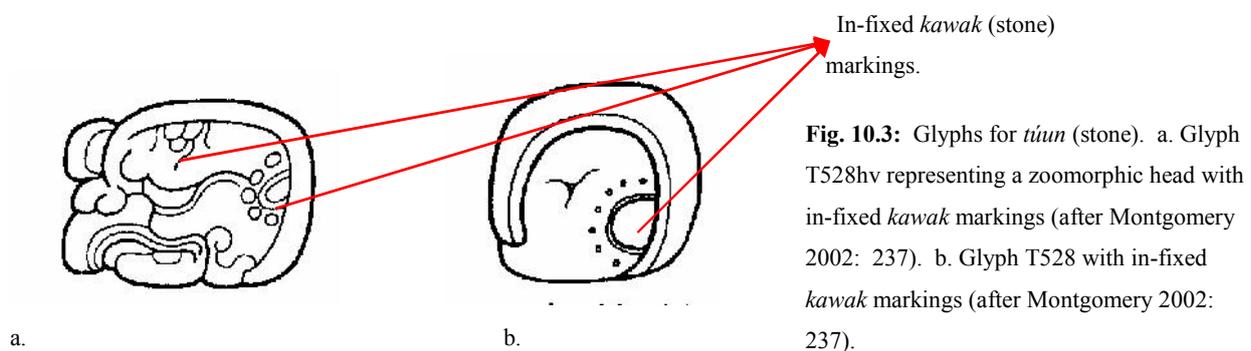
b. Mirrored clefts from Tonina.

c. Cleft symbol from Xlabpak Structure 1.

The stuccoed motifs and scenes represented on the façade and inner walls of House B inform us that, for the Maya, this structure functioned as a particular type of 'mountain' marked by a

supernatural entrance where contact with the ancestors was made. The chain of knots around the structure does not just function to bind the building, but binds everything which the building represents, including supernatural entrance and seating place. The bloodletting dish, the *witz* throne, the figure slumped on the floor with the Principal Bird Deity at his back all carefully describe the kinds of rituals which would have taken place in the interior, which can also be seen as a ‘mountain cave’ or ‘cave’.

Images of stelae/altars (Stuart 1996: fig. 10) and *witz* symbols (Boot 2004: 1-12), are characterized by certain infill motifs known as stone markings. These markings, alternatively referred to as *cauac/kawak* markings consist of dotted rings and clustered circles (Boot 2004: 1; Schele and Miller 2006: 45; Taylor 2002: 1-2; Schele and Freidel 1990: 407; Macri andLooper 2003: 216-217). *Kawak* markings also appear as infill to the glyphs for stone in Maya language. For instance the glyph for stone is represented by two different glyphs; a lozenge shaped glyph (glyph T528) with in-fixed *kawak* markings, and a zoomorphic head (glyph T528hv) with in-fixed *kawak* markings (see below).



The quality of stoniness would seem to be an attribute of supernatural entrances or portals (i.e. where a portal is understood as an opening in rocks and buildings made of rock). It is this idea of stony portal which is bound by FTDKs at Palenque.

Stone or stoniness is one of many qualities by which the Maya described the sometimes contrasting faces of the Creation Mountain. Each quality invests the mountain with another shade of meaning. The different names given by the Maya to the Creation Mountain reflect these different qualities and meanings. At Palenque it is a particular aspect of the mountain as stone portal (identified by the double-stepped cleft motif) which is bound.

Boot notes that the double-stepped cleft motif was sometimes represented as a stand-alone item removed from the *Witz* Mountain God to which it belonged. Both *Witz* Mountain God and the double-stepped cleft motif were ‘employed as independent but complementary architectural ornaments identifying the building on which they occurred as *witz*, hill or mountain’ (Boot 2004: 9). He indicates that this separation is particularly evident in Puuc style architecture (Boot 2004: 9). The separating out of the different facets which comprise the Creation Mountain can be observed at Palenque. Therefore House B, as stony mountain portal is annexed to House E as flowery mountain paradise. Merle Greene Robertson (1985: 28, 41, 42) notes that a doorway, blocked in later times, had once linked the two structures pointing to the connection between the two buildings. I suggest that the pairing of House E and B was intentional and that the Maya viewed the two structures as related entities. Given this understanding it is expected that an analysis of the iconography of House E would extend the meanings accorded to FTDKs in the context of House B.

House E

The painted flower emblems which decorate the façade of House E identify this structure as a Flower House or Flower Mountain (Schele 1998: 499, 498). Set against the wall opposite the central opening on the western face of House E is a throne and mounted on the wall above the throne is the Oval Palace Tablet. This throne backed by the Oval Palace Tablet was the coronation place for generations of Palenque’s kings (Greene Robertson 1985: 28). The Oval Palace Tablet shows Janaab Pakal I at the moment of his accession, seated on the Jaguar Throne. He receives the *Sak Hunal* or Jester God crown (Miller and Taube 1997: 104-105) from his mother Lady Zac-Kuk (Schele and Freidel 1992: 227, fig. 6.7). The characteristic leaf element on the jaguar’s forehead marks the throne out as a Water Lily Jaguar Throne. As the first throne of Creation, the Jaguar Throne (Schele 1994: 1, 2) is the location for the first stone of the cosmic hearth (Bassie-Sweet 1996: 136).

Sometimes Flower Mountain is also referred to by the Maya as Five Flower Mountain. A Tikal vessel mentions the Five Flower place and couples this with an image of a *Witz* Mountain God supporting the interpretation of this place as a mountain location (Looper 2003: 69). Looper proposes that Five Flower Mountain is a variant of the ancient Maya Creation Mountain, the *Yax-Hal-Witz* from which maize and the Maize God emerges. Like the Maize God who is resurrected from the mountain, the dead buried within Five Flower Mountain are also reborn (Looper 2003: 71). The Maya identified different types of

structures such as palaces or temple pyramids and ballcourts as Creation Mountains (Lacadena and Iglesias 2006: 647-659; Schele 1998: 479-512), suggesting that the ‘mountain’ was a complex landscape comprising a variety of spaces with distinct types of ritual activities (Chase and Chase 1998: 303-307). As ballcourt or ‘*hom*’ the mountain is conceptualized as a dark, stony cave or chasm (i.e. the interior of the mountain); as Flower Mountain it is conceptualized as a verdant paradise and dwelling place of the ancestors, characterized by a rich tapestry of flowers (i.e. the surface of the mountain); and as *Yax-Hal-Witznal* it is a place of sustenance where corn and the corn deity emerges (i.e. the summit of the mountain).

Buildings such as Palenque House B and E illustrate that enthronement or seating is a process which takes place over time. It involves performance and pageantry and is characterized by movement through spaces which represent the different aspects of the Creation Mountain. Therefore the binding of the portal at the centre of House B, attended by bloodletting and vision rites constitute some of the ritual acts by which accession would have been negotiated.

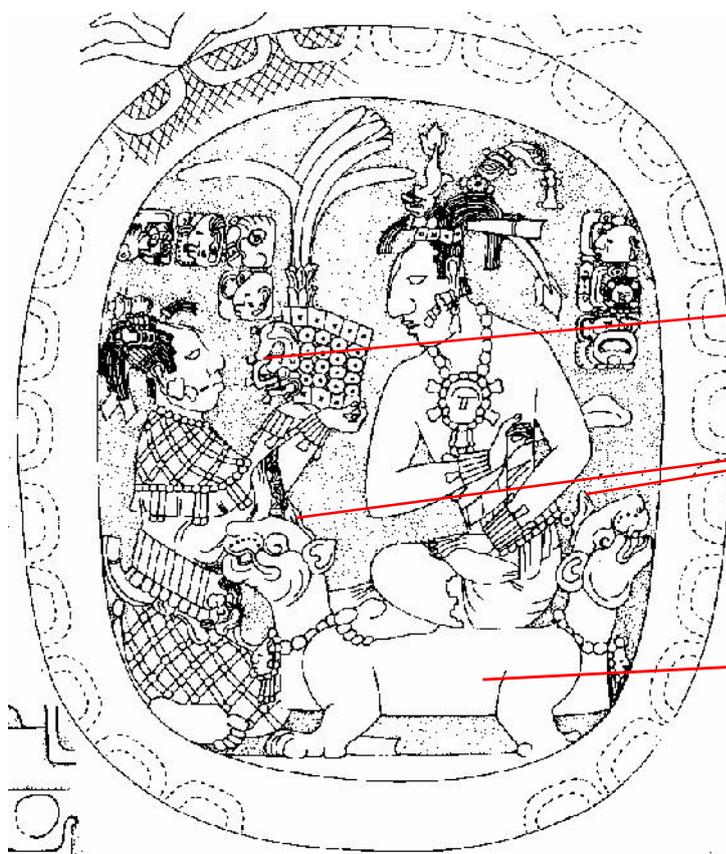


Fig. 10.4: Drawing of the Oval Palace Tablet (after Greene Robertson 1985: fig. 92).

Jester God Jewel

Leaf curl

Double headed Jaguar
Throne

However, it is interesting that at Palenque, it is the aspect of the Creation Mountain as stone portal which is illustrated as bound by FTDKs rather than the Flower Mountain. The multiple ways which the Maya described the binding of a supernatural entrance in stone reflects how deeply embedded this act was in the cultural expression of the ancient Maya. It also reflects a cultural preference amongst the Maya for Flat Two-Dimensional Knots above any other knots as fastenings around portals in stone. Both in terms of architecture (spatial relationship between buildings) and image, House E and B identify seating and stone-binding as relational acts. Palenque House B and E politicize and contextualize succession as a binding event which takes place against a Creation scape. The FTDKs which bind House B perform as both knot and cord/rope. Therefore at Palenque the FTDK is not just the fastening for binding, it is the substance of binding where binding is conceptualized both as a portal opening event and an act which complimented, informed and defined seating or enthronement. The opening of the portal would seem to be a key feature of accession rites.

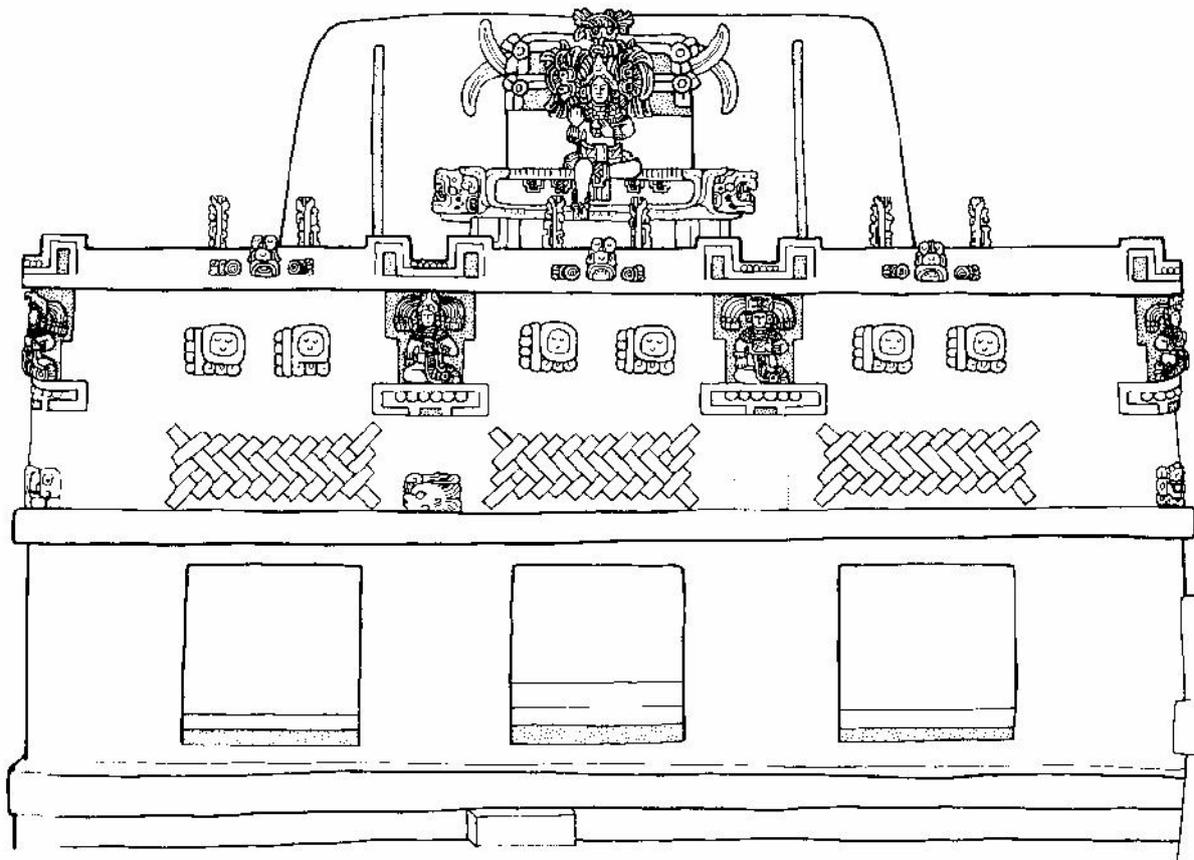
10.2 Copan

10.2a Structure 22A (Fig. 10.5)

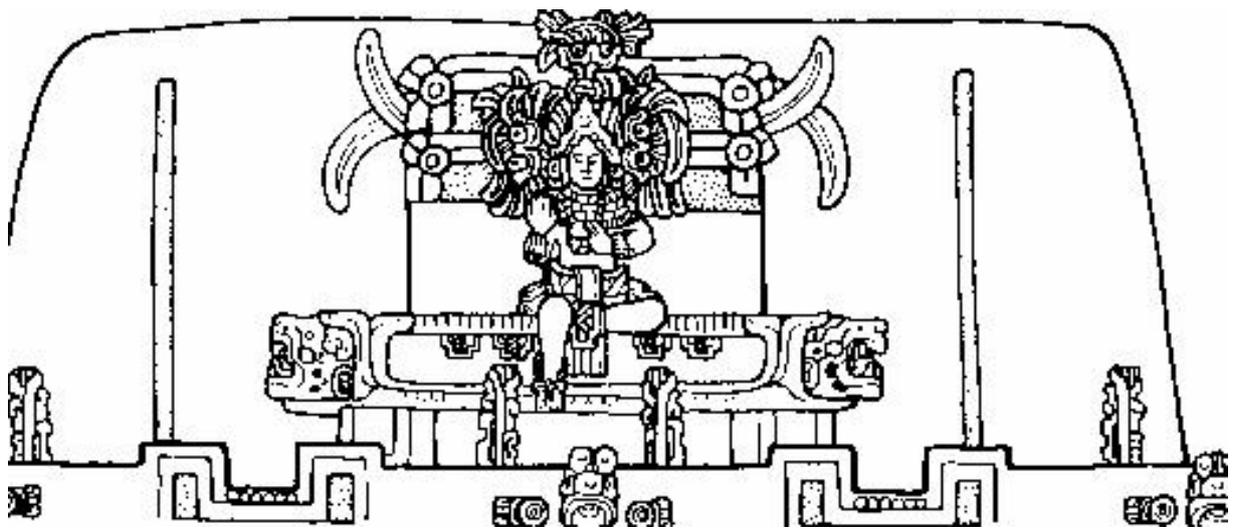
The front plan of Copan Structure 22A shows three FTDKs centered above three entranceways into the building. A further three FTDKs are located on the back of this structure. The interpretation of Structure 22A as a ‘mat house’ was first proposed by Barbara Fash, who came to this conclusion on the basis of the resemblance of the under-and-over structure of the FTDKs to woven mats (Fash et al. 1992: 419-442; Fash et al. 1996: 7). According to Fash, the woven mats identify the building’s role as a ‘*Papal Nah* or *Popol Otot*’ (mat house). As places where local officials or administrators met to discuss matters of governance, mat houses performed the role of Council Houses (Fash et al. 1996: 7). Sixteenth century accounts of Maya communities describe the existence of such buildings (Fash et al. 1996: 7). Seated figures, between and just above the knots on the front and back of Copan Structure 22A, are seen by Fash as further evidence supporting the ‘mat house’ hypothesis. These figures are seen as the representatives of outlying communities who met at Copan in order to discuss affairs of state (Fash et al. 1996: 7). Although the items designated as mats are in fact knots, this does not argue against the possibility that Structure 22A functioned as a gathering place for individuals who held high office. It strongly suggests, however, that the FTDK did not refer to a council or meeting place but instead was a symbol shared by the individuals or lineages depicted by the figures.

At the front of the building and above the knots are *Ajaw* glyphs (*Ajaw* being a lordly title and a unit of time completed) prefigured by the coefficient nine (Rice 2004: 176); The ancient Maya word '*B'olon*' meaning 'nine' and also 'many', identifies Structure 22A as a place of many lords (Macri andLooper 2003: 148; Barrera Vásquez 1980: 63; Bricker et al. 1998: 35). The knots together with the nine *Ajaw* glyphs conceptualize rule as a temporally binding force. These knots are the glue or the binding force that holds the pyramid of power relations together.

Similar to Palenque House E, Copan Structure 22A is a Flower Mountain. So in this case we have the FTDK associated with Flower Mountain. Floral motifs together with Pawatun deity heads (glyphic personifications of the number five (Montgomery 2003: 58-61)) carved into the façade of Copan Structure 22A mark it out as the place of Creation, the Flower Mountain location known to the ancient Maya as Five Flower Mountain (Looper 2003: 68, Fig. 2.23; Clancy 2009: 181).



a.



b.

Fig. 10.5: a. Plan drawing of Copan Structure 22A (after Rice 2004: fig. 6.3) showing Flat Two-Dimensional Knots above the three entrances into the temple structure. The ruler is shown seated on a double-headed Jaguar Throne (Schele 1998: 499) near the summit of a Flower Mountain (Structure 22A). b. Detail from plan drawing of Copan Structure 22A showing the double-headed Jaguar Throne (adapted from Rice 2004: fig. 6.3).

In keeping with its function as an ancestral location, Maya inscriptions identify Five Flower Mountain as a structure where important individuals such as rulers were buried. These inscriptions outline the kinds of ideas which the Copan Maya would have invested in Structure 22A as Five Flower Mountain. Piedras Negras Lintel 3 and a Cancuen Panel describe Five Flower Mountain as a temple pyramid built as a funerary structure for an important ancestral ruler (Looper 2003: 69; Kistler 2004: 9, 10). It is worth noting that the inscriptions on the Cancuen panel also describe a particular dedicatory encircling ritual which occurred at the base of the mountain. The phrase mentioning the encircling event is read as ‘it was encircled, the base of the pyramid at the Three Stone Place’ (Kistler 2004: 8). Guenter proposes that the dedication event involving encircling does not refer to the pyramid but to the placing of an altar, referred to as the Three Stone Place, in front of the pyramid (Kistler 2004: 9). In support of Guenter’s proposal, Taube points out that the glyph for ‘altar’ is composed of three stones, and he cites a number of altars which are supported by three stones such as Piedras Negras Altar 1 (Taube 1998: 442). The text on Piedras Negras Altar 1 opens with the Creation story (Looper 2003: 69). Reference is made to the 4 *Ajaw*, 8 *Kumk’u* Creation date and the Three Stone Place. The inscription also records how an ancestral ruler of Piedras Negras oversaw these events at the Five Flower place (Looper 2003: Fig. 2.26, 69; Taube 1998: 442). The interpretation of altars as Three Stone Places (see Villela 1993: 2)

suggests that this type of stone monument shared identity with temple structures envisioned as Creation Mountains before which the altars would have been placed.

The relationship between the altar as Three Stone Place, and the temple structure as Creation Mountain, is made explicit at Copan in the context of Temple 26, famed for its Hieroglyphic Stairway. Embedded into the Hieroglyphic Stairway, an altar shaped in the form of an inverted serpent's head was carved with a scene derived from ancient Maya cosmogenesis. The open maw of this serpent pictured on the altar top cradles an image of the Creation Turtle from whose cracked carapace emerges the maize plant (representing the Maize God) (Freidel, Schele and Parker 2001: 370-372, 8:25c). Encircling the upper reaches of the maize plant (and a scene which sadly is too effaced to read in its entirety) are cords/ropes which frame and link a number of figures (Creation deities) one to the other. The cords form an open knot around the maize plant. The scene is framed by skeletal maws indicating that the events of Creation took place at a supernatural entrance (Looper 2003: 119; Freidel, Schele and Parker 2001: 370-372).

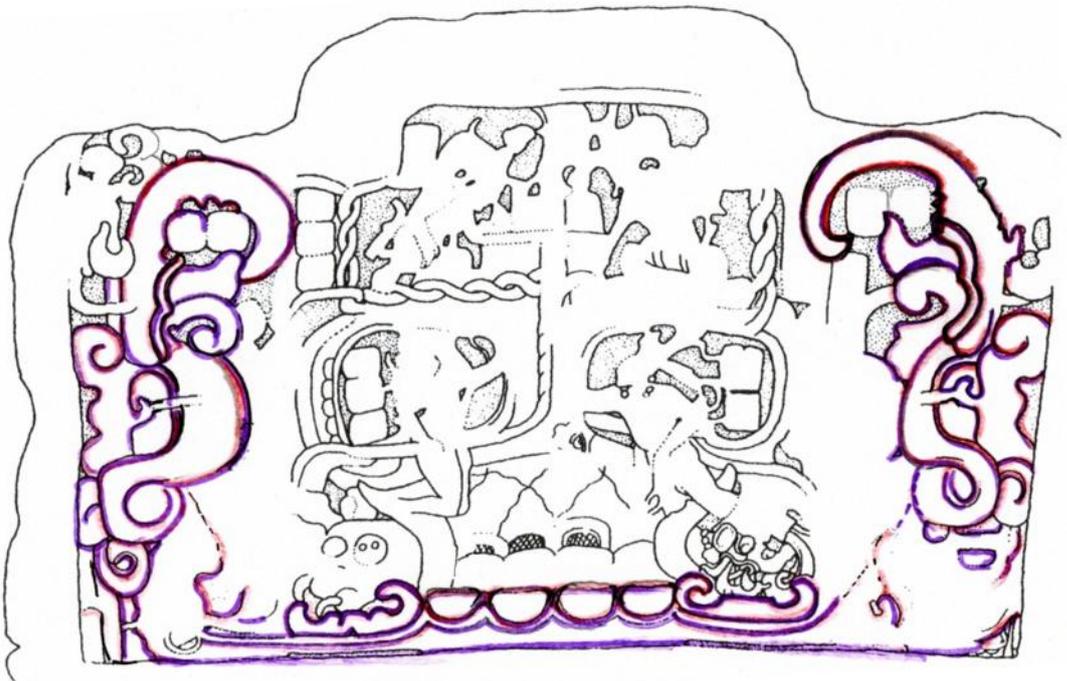


Fig. 10.6: Outline of the skeletal maw on the face of the altar inset into the Hieroglyphic Stairway at Copan. Just above the teeth at the centre of the maw is the Creation Turtle (adapted from Schele 1998: fig.4).

Located directly in front of the altar inset into the base of the Hieroglyphic Stairway is Stela M and the altar with which it is paired. Baudez mentions that Stela M (CPN 24) and its altar

are spatially associated with the altar inset into the base of the Hieroglyphic Stairway (Baudez 1994: 219). This relationship extends to the representation pieced out between the three monuments; therefore the open skeletal maw within which the Creation Turtle is cradled reappears at the base of Stela M just behind the standing ruler's legs, indicating that he, like the Creation Turtle stands at a maw or entrance to the otherworld (Looper 2003:119). The stone altar paired with Stela M also refers back to the creation scene depicted on the top or face of the altar inset into the Hieroglyphic Stairs. The altar paired with Stela M is sculpted into the shape of a turtle. The turtle carries on its back three *Witz* Mountain Gods (described by Baudez as *kawak* masks (Baudez 1994: 77)) identifying the turtle as the Creation Turtle. The three *Witz* Gods on the turtle altar paired with Copan Stela M possibly denote the three stones of creation carried on the back of the Creation Turtle thereby supporting the reading of altars as Three Stone Places. These three stones mark the entrance at the centre of the Creation Turtle (Schele and Mathews 1999: 414, Freidel, Schele and Parker 2001: 215, fig.4.27a-d, fig.4.29b).

The altar inset into the Hieroglyphic Stairway together with Stela M and its paired altar form a line of monuments which mark the central axis to the Hieroglyphic Stairway. The line of monuments extends up the stairs with five seated figures and one standing figure spaced along the central axis of the stairway (Baudez 1994: 221-229). Looper describes the inverted snake head altar inset into base of the Hieroglyphic Stairway as a vision serpent out of which the ancestors on the stairs are born (Looper 2003: 119). Such a serpent is an important feature of Creation Mountain where it represents the solar path. It is along this path that the sun travels into the sky followed by the ancestors. This path is the ecliptic, which is often represented in the form of entwined serpents (Milbrath 1999: 74-78, 148; Schele 1998: 490-491). The iconography pieced out between the Hieroglyphic Stairway and associated monuments such as Stela M and its paired altar tell us that the structure and monuments were considered by the Maya as a single entity. Both the altar inset into the Hieroglyphic Stairway and the altar paired with Stela M, as Three Stone Places, are locations where binding took place.

The cords which act to bind the Creation scene on the top of the altar inset into the Hieroglyphic Stairways are cosmic and possibly refer to the ecliptic as does the serpent whose inverted head functions as the body of the altar; implying that the knot which is in the process of being tied is solar in origin. The ascent of the sun from the hearth, along the

ecliptic to the summit of Creation Mountain tells us about the central role of the sun as both a measure of time/space (Šprajc 2009: 311) and rule. These are ideas which infiltrate the iconography of Copan Structure 22A and which inform an understanding of the FTDK pictured on this structure.

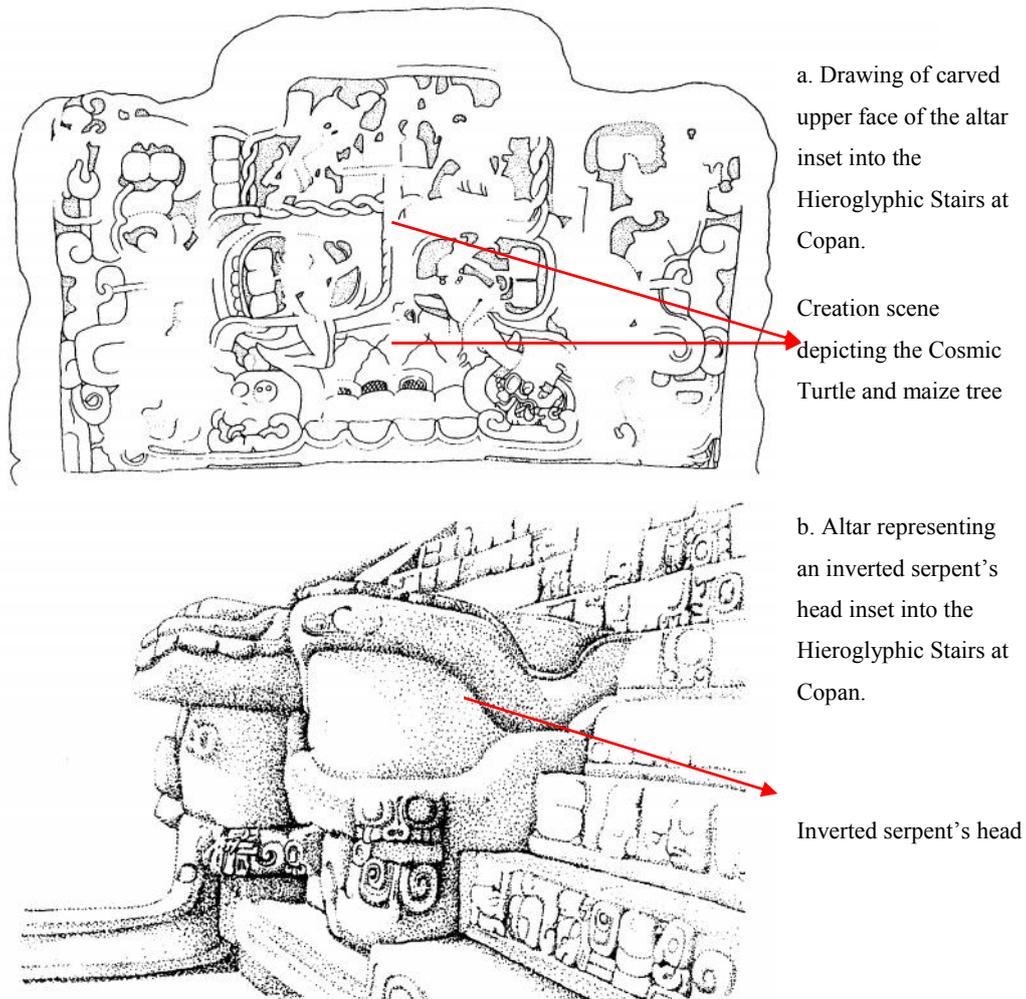


Fig. 10.7: a. Creation scene carved in relief on the top of the altar inset into the Hieroglyphic Stairway.
 b. Drawing of the side profile of the altar inset into the Hieroglyphic Stairway (after Schele 1998: fig.4).

The value of the celestial hearth as a place of ascent or birth of the sun (recalling a version of the Creation story known at Teotihuacan [Taube 2002: 309-327]), and the function of altars as Three Stone Hearth places has implications for our understanding of the bound altars at Tikal placed before pyramid structures. Therefore the representation of binding on the top of the altar inset into the Hieroglyphic Stairway as well as the description on the Cancuen panel of the binding of an altar stone at the base of a pyramid (multi-terraced stone structure) recall

images of bound altars at Tikal located at pyramids. It is worth noting that Tikal Stela 22 paired with Altar 10 (bound by rope overlaid by FTDKs) describes a stone-binding event at a mountain place qualified as Flower Mountain (Rice 2004: 139; Bassie-Sweet 1996: 172-174, fig. 61.b). Rice and Bassie-Sweet's reading of the Flower Mountain location inscribed on Stela 22 (represented by the glyphs T533 and T529) is supported by similar readings for these glyphs by others (Macri andLooper 2003: 65; Barrera Vásquez 1980: 569, 217; Kaufman and Norman 1984: 127,136).

A representation of Flower Mountain on Caracol Stela 14 shows individuals seated on three hearthstones set before a mountain adorned with pendant flowers. Beneath the mountain a figure sits in a chamber, possibly a burial crypt (Taube 2004a: 83). This idea of Flower Mountain as a place of the ancestors is also intimated in the iconography of Yaxchilan Stela 3 which depicts an ancestor figure, named as 'He of 5 Flower Mountain', within a solar cartouche (Taube 2004a: fig. 8d, 81). The understanding of Five Flower Mountain as a burial place and abode of the ancestors informs us that Copan Structure 22A as Five Flower Mountain may also have been dedicated to a particular ancestor or ancestors. In this instance the FTDK is a feature of the landscape of Creation. Central to this landscape is the Three Stone Hearth (identified with Creation Mountain) as a place of emergence of the sun and ancestors.

It is likely that Structure 22A as Five Flower Mountain and ancestral location was important to the construction of lineage at Copan. In keeping with this function Structure 22A is surmounted by a vast sculpture of a Jaguar Throne and seated ruler. This throne extends the concept of kingship back to the Creation event in which the Gods bestowed kingship. In the composition of the Temple of the Sun Tablet at Palenque, FTDKs worn by Creator Deities were juxtaposed against the Jaguar Throne. It is this composition of Jaguar Throne and FTDK which is politicized at Copan but on a monumental scale, and as in the context of the Temple of the Sun Tablet the focus is not on the power of the FTDK to fasten bindings around stone but on its conceptualization as a symbol or insignia of rule and rulership.

Copan Structure 22A interpreted byLooper as a Flower Mountain (Looper 2003: 68,69, fig. 2.23) stands adjacent to and is paired with Copan Structure 22 (Miller 1998: 199) understood as a representation of a *Witz* Mountain. Copan Structures 22 and 22A are proposed as replicating the relationship between Palenque's House E and B (Miller 1998: 199). Therefore

Copan Structure 22A and Palenque House E are Flower Mountains, and places where accession is formalized (Schele 1998: 499-500; Rice 2004: 176), whilst Copan Structure 22 and Palenque House B represent giant *Kawak/Witz* Mountain portals (Taube 1998: 438, fig. 5).

Stacked *Witz* Mountain God masks carved into the Southwest Corner of Copan Structure 22, together with the representation of the temple entrance as a vast open *Witz* God maw, mark this building as a manifestation of the stony opening, yawning chasm or mountain portal. Within the maw are the three stones of Creation (Taube 1998: 438, fig. 5). These three stones are a direct reference to the ancient Maya story of cosmogenesis. Similarly, a stairway shrine uncovered during the excavation of Tonina Structure E5-5 revealed a façade fashioned in the likeness of a ‘zoomorphic mountain, with the interior chamber constituting its open gullet’ (Taube 1998: 438). A single stone set at the centre of the shrine together with two stones, one on either side of the maw, represent the three stones of Creation (Taube 1998: 438). The three stones set in the maw of the *Witz* God and the three stones which comprise the glyph for altar in Mayan language again reiterate that the altar was conceived by the Maya as an extension of the Creation Mountain. Chase and colleagues (1991) point out that the triple-stone glyph (for Three Stone Place) appears at Copan, Tikal and in the Paris Codex where it is paired with logographic signs for temple pyramid (Taube 1998: 442; Chase, Grube and Chase 1991: fig. 4, fig. 5, fig. 7, 8-9). The three stones set within the maw of Copan Structure 22 represent the First Three Stone Place of creation often found arranged at the entrance and inner chamber or maw (portal) of *Witz* Gods depicted on Classic Period Maya monuments and architecture (Taube 1998: 438).

Copan Structure 22A can be likened to a three dimensional model of the pyramid of power relations within which the FTDK was embedded. At the top of the pyramid and inset into the roof comb sits the ruler on the double headed Jaguar Throne. On a tier below the ruler are eight lords (four on the front façade and four on the back façade) seated cross legged above toponymic glyphs (Rice 2004: 175) which are believed to name supernatural locations (Plank 2004: 136). Plank proposes that the eight lords are patron deities of Copan and that the building itself can be considered as a type of *wayib* (dreaming place).

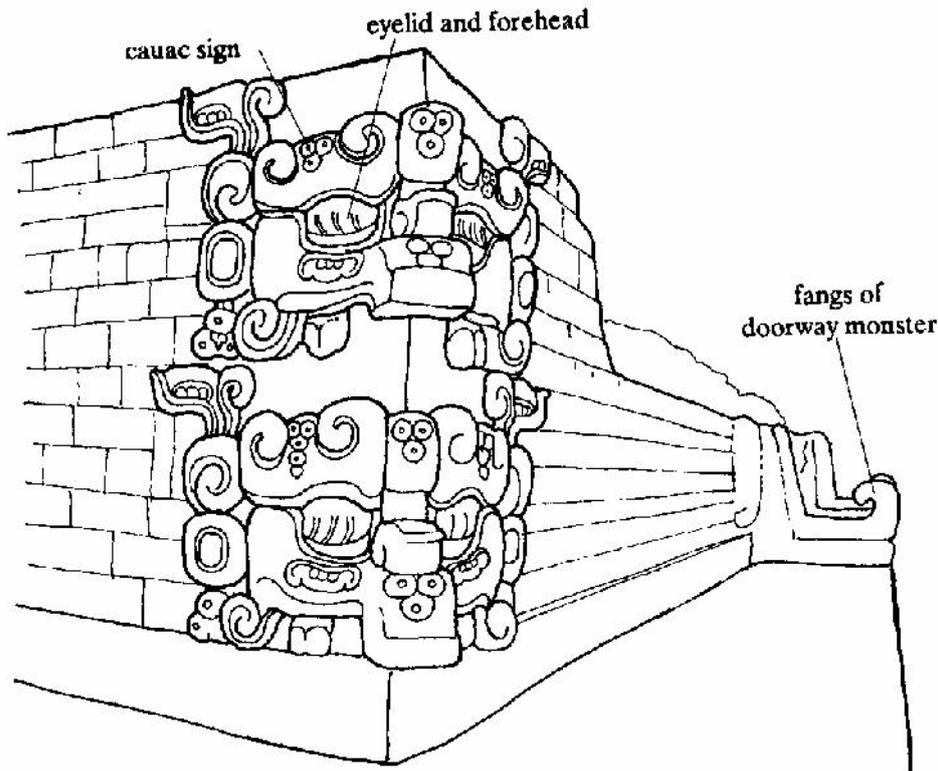


Fig. 10.8: Drawing of *Witz* God Masks on the Southwest Corner of Copan Temple 22 (after Schele and Freidel 1990: fig. 2.7).

To summarise, in the context of Copan Structure 22A FTDKs are not displayed as items which bind the three stone place (as altar or mountain). The concept of binding may have been part of the constructed identity of this knot, therefore showing them as binding knots may not have been necessary. The display of these knots on the façade of Structure 22A may be intended to help to conceptualize rule as binding. The people viewing this structure would have understood the message politicized by the juxtaposition of FTDKs and the Jaguar Throne - which is that the Maya concept of rule, as informed by the events of Creation, conceptualizes seating as binding. In this case binding accrues meanings which resemble contractual relations. In other words the FTDK becomes a material metaphor for kingship as something which is contractually binding.

10.3 Chichen Itza

10.3a Temple of the Owls, West Pier (Fig. 10.9)

Two rectangular carved piers at the entrance to the Temple of the Owls at Chichen Itza display FTDKs interspersed with owls. The carving on the front side of each pier facing outwards towards the plaza comprises an image of the World Tree in the form of a cacao tree

bearing cacao fruit and jewelled flowers. At the base of the tree the Maize God emerges from an opening or portal. The remaining three sides of both piers are each carved with two pairs of FTDKs (see Stone and Zender 2011: figs.31, 32; Schmidt 2011: 143-146). Above each pair of knots is an owl. The owls as emblems of God L are interpreted by Stone and Zender (2011: 213) as marking the building as God L's palace. The temple would have been the 'setting for elaborate recreations of the myth of God L, the Hero Twins and the rebirth of the Maize God' (Stone and Zender 2011: 213; Schmidt 2011: 146). The FTDKs displayed on the Temple of the Owls piers are directly associated with the concept of the world centre, marked by the World Tree and the mountain portal from which the Maize God is reborn.

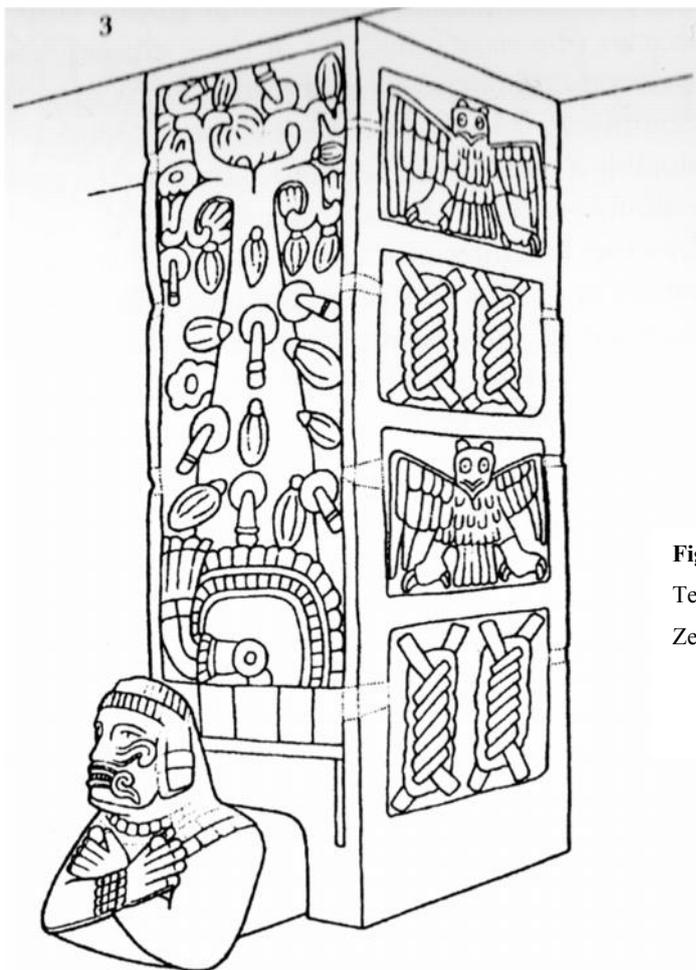


Fig. 10.9: Drawing of the West Pier of the Temple of the Owls, Chichen Itza (Stone and Zender 2011: fig. 92.3).

The depiction of the Maize God conforms to images of ancestors on various Maya media shown as tree spirits rising from tombs (Stone and Zender 2011: 108, 136, figs. 40.1, 54.2). The jewelled floral elements which adorn the cacao trees on the pillars identify the location as Flower Mountain - ancestral paradise and place of rebirth. In the context of the Temple of the Owls, FTDKs are linked to Flower Mountain, rebirth and the concept of the centre. In this case the centre is mediated by items such as the portal and the World Tree. It is possible

that the Temple of the Owls was an accession house and place where the ruler was bound into office. The FTDKs on this building similar to those on Copan Structure 22A conceptualize rule as a binding event.

10.4 Río Azul

10.4a Tomb 1 (Fig. 10.11)

A number of Río Azul tombs are constructed with plastered walls painted with murals comprising of text and image. This is the case with Tomb 1, an Early Classic tomb housed within Structure C1-A. Structure C1-A was built over an earlier palace building believed to have been occupied by the individual interred in the tomb (Acuña 2007: 8-16). In other words Structure C1-A, in keeping with what we know of Flower Mountain, is a burial pyramid built to house the tomb of an Early Classic ruler. The iconography painted on either side of the east wall of Río Azul Tomb 1 comprising an image of Flower Mountain and the Sun God rising out of the crocodilian earth illustrates ‘the journey of the tomb occupant to Flower Mountain and solar paradise’ (Taube 2004a: 83).

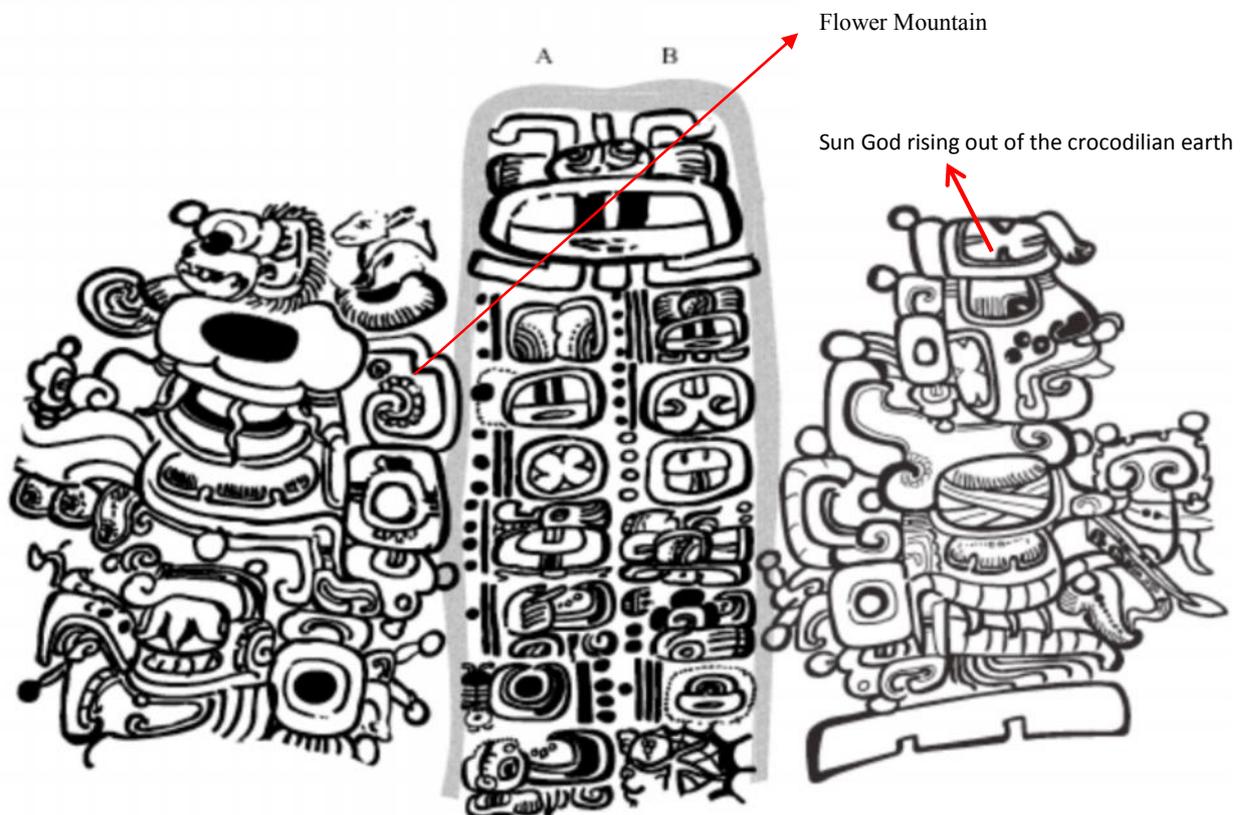


Fig. 10.10: Detail of Río Azul east wall mural (Acuña 2007: fig. 7) showing Flower Mountain and the Sun God rising out of the crocodilian earth.

Of interest are the two giant Flat Two-Dimensional Knots painted on the walls of Río Azul Tomb 1 which frame the scene (Acuña 2007: Appendix A). The Flower Mountain (*Nik Witz*) connection (where Flower Mountain is understood as a flowery solar paradise into which spirits of the dead after having passed through the watery underworld are reborn [Taube 2004a: 79-83; Lacadena and Iglesias 2006: 654; Saturno, Taube and Stuart 2005: 18-21]), transforms the FTDKs painted on the Río Azul Tomb 1 walls into items of ancestral significance. In the context of Río Azul Tomb 1, FTDKs are linked to a particular vision of death and rebirth derived from the movement of the sun on its daily course.

The setting of the sun into the earth and its rising into the sky is a journey of death and rebirth. Therefore an Early Classic vase, which depicts the Sun God emerging out of Flower Mountain, shows a wrapped corpse inset into the mountain, laid out a bench. One of the bench legs is marked with the glyphs *och b'ih* meaning 'enters the road' (Taube 2004a: 80-81). Amongst the ancient Maya 'to enter the road' (*och b'ih*) was a euphemism for death (Stuart 1998: 388). Taube identifies the wrapped corpse as the Maize God (Taube 2004a: 80) who, in being resurrected out of Flower Mountain, will enter the path or road of the sun.

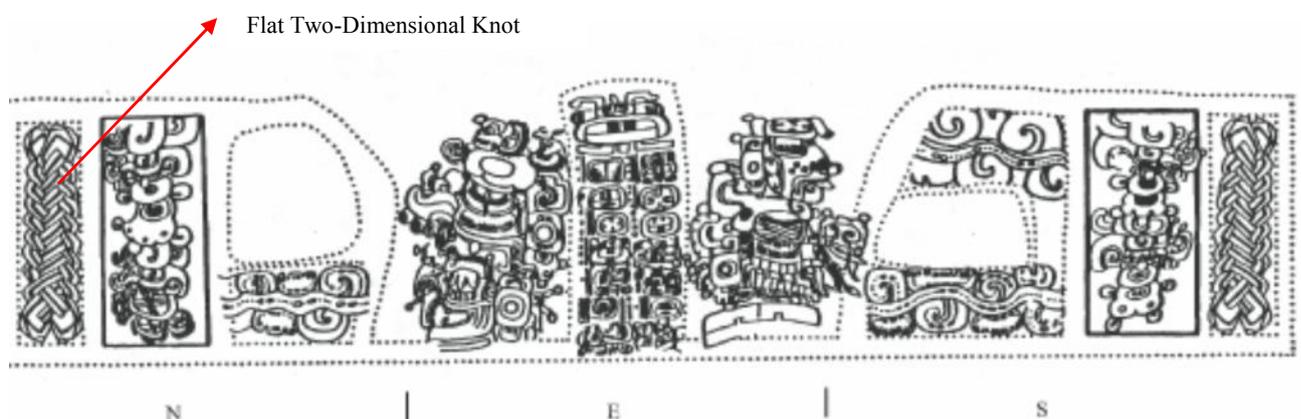


Fig. 10.11: Drawing of the east wall of Río Azul, Tomb 1 (after Acuña 2007: Appendix A) showing a depiction of Flower Mountain and two large Flat Two-Dimensional Knots.

The flowers which grow on Flower Mountain function to identify the mountain as a solar domain. In ancient Maya writing, the glyph for both the sun and breath was a flower, known as the plumeria (Milbrath 1999: 78, fig. 3.4d-f; Taube 2004a: 70-73, fig. 1e-g). Amongst contemporary and Classic Period Maya the concept of breath was equated with an ethereal essence which continued after death, as the soul of the deceased (Taube 2004a: 72;

Fitzsimmons 2009: 27-29). The multiple meanings for flowers, such as sun, or breath, as well as time, are illustrated in the context of Palenque House E.

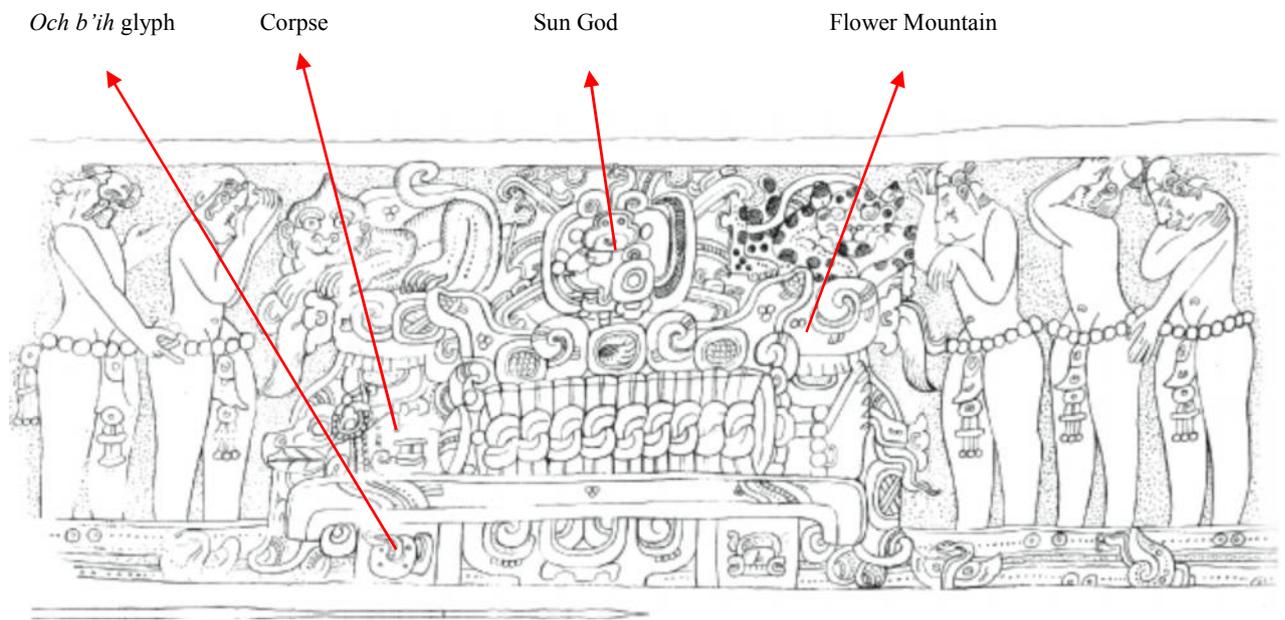


Fig. 10.12: Drawing of the death and resurrection of the Maize God out of Flower Mountain as depicted on the Classic Period Death Vase (after Acuña 2007: fig.53).

There are as many as sixty-four examples of a four-petal variety of flower painted on the walls of Palenque House E (Greene Robertson 1985: 14). Some of the flowers are represented as unopened or hanging blossoms and others depicted as opened quatrefoil or four-petalled flowers (Greene Robertson 1985: figs. 45-48).

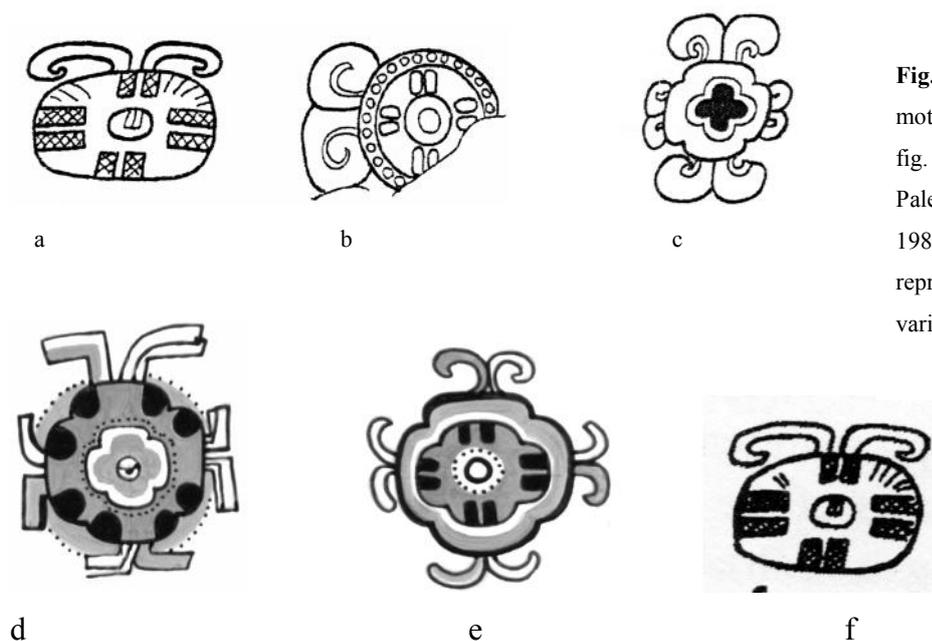


Fig. 10.13: a-c. Early Classic flower motifs denoting breath (Taube 2004a: fig. 1e-f). d-e. Flower motifs from Palenque House E (Greene Robertson 1985: fig. 42). f. Solar flower representing the Early Classic *K'in* variant (T646) (Milbrath 1999: 3.4 f).

The four-petalled flowers painted onto House E's walls function as glyphs meaning sun and time (i.e. *k'in* glyph) (Milbrath 1999: figs.3.4.b, d, f, 76-79). Such flowers refer to the flower world of the ancestors and are associated with Flower Mountain as a place of departure both for the sun but also the ancestors (Taube 2004a: fig. 1.e, f, 79-93).

Understanding the relationship between flowers, the sun and the soul helps in grasping why the Maya conceived of the solar path as a flowery road traveled by the spirits of the dead (Taube 2004a: 69-73) and also why Flower Mountain should have been seen as a point of departure for both the sun and the dead. Rising in the east with the sun, the souls of the dead take the flowery path. This is the path taken by the resurrected Maize God and retraced by the resurrected dead (Taube 2004a: 79-83). Therefore 'Flower Mountain is closely related to the symbolism of royal tombs and their overlying pyramids' (Taube 2004a: 83). However as illustrated by Freidel and Suhler (1994), this is also the path taken by the ruler at his accession.

The movement of the sun was closely observed by the ancient Maya who identified it with both rule and time; therefore at Palenque, Copan and Tikal, rulers are associated with solar imagery and are accorded solar titles such as 'great sun lord' or 'sun-faced lord' (K'inich Ahaw) (Stone and Zender 2011: 152-153; Stuart 1996: 165-167; Milbrath 1999: 58, 83-87). The recognition that deceased rulers at Palenque, Yaxchilan and Copan were either associated with the sun or apotheosized as solar Gods has led to suggestions that royal lineages traced their ancestry to the sun as solar ruler. The ancient Maya king, whether living or dead, embodied solar rule in his guise of 'sun king' (Milbrath 1999: 82-87; Stone and Zender 2011: 153; Miller 1974: 46). It is not surprising then, that House E with its many depictions of solar flowers was a place of coronation for generations of Palenque's kings (Greene Robertson 1985: 28, 35), or that Río Azul Tomb 1 with its representation of the ascending sun and Flower Mountain should be the location for the ruler's apotheosis as solar ancestor. In the context of Río Azul Tomb 1, the FTDK is embedded in a dialogue which essentialises rule as solar and therefore governed by time.

Summary

There are a number of themes which keep recurring in the imagery within which FTDKs are deployed. One of these themes is the binding of the centre conceived as a Creation Mountain portal. This supernatural entrance, represented by Palenque's House B, is qualified by its

stony properties. In the context of House B, FTDKs actively function to bind the stony heart of the mountain. The situating of House E, as Flower Mountain, alongside House B directly juxtaposes binding with seating negotiated in terms of the Jaguar Throne. I suggest that the binding of the centre was a primary meaning for FTDKs and this binding event was key to accession rituals.

In instances where FTDKs are shown as unattached freestanding items, they continued to articulate ideas to do with the binding of the centre. However the centre was a highly complex, many layered concept. A great number of items each linked in some way with the Creation story demarcated the centre. The Creation Mountain was perhaps the most pervasive symbol for the centre but even the mountain was a multi-faceted entity. At Copan, FTDKs displayed on Structure 22A, conceived as Five Flower Mountain, are symbolic of the centre and the binding of the centre. In the context of this building seating in office or accession is politicized as taking place at the centre, symbolized by the image of the ruler seated on a Jaguar Throne at the summit of Structure 22A.

Chapter Eleven: Flat Two-Dimensional Knots Displayed on Portable Objects

Flat Two-Dimensional Knots are displayed as decorative items attached to portable objects at Tikal and Copan. Three Tikal lintels show FTDKs attached to thrones. The lintels comprise Tikal Temple I Lintel 3, Tikal Temple III Lintel 2, and Tikal Temple IV Lintel 2. The profile view of the thrones pictured on the lintels shows two FTDKs attached to the sides of the thrones. As only half of the throne is visible it is possible that the two knots depicted on the side of the thrones are two of what would have been four knots. A jadeite bar pendant from Copan also displays a FTDK. The pendant, oblong and rounded in shape, is encased by a continuous FTDK.

Table 11.1: Table listing all occurrences of the FTDK displayed on Portable Objects.

Site	Locus of FTDK	Gregorian Year	Long Count
Tikal	Temple I Lintel 3	A.D.695 or 697 (see Clancy 2009:122)	Late Classic 9.13.3.0.0 or 9.13.5.0.0 (Jones and Satterthwaite 1982:97-98; Clancy 2009:122).
Tikal	Temple III Lintel 2	A.D.810 (SD*)	Late Classic SD* 9.19.0.0.0 (Jones and Satterthwaite 1982:100).
Tikal	Temple IV Lintel 2	A.D.741	Late Classic 9.15.10.0.0 (Jones and Satterthwaite 1982:101-102).
Copan	Jadeite Bar Pendant from Structure 10 J-45, Burial 36.		Early Classic

SD* Style Date

11.1 Tikal

11.1a. Tikal Temple I Lintel 3 (Fig. 11.6)

Lintel 3 depicts Jasaw Chan K'awiil I, who reigned at Tikal from A.D. 682 to 734 (Martin and Grube 2008: 44). Jasaw Chan K'awiil is shown enthroned on a palanquin or litter, and

the occasion is a celebration of a victory over Calakmul in A.D. 695 (Martin and Grube 2008: 45; Schele and Freidel 1990: 211). The dedicatory date of the lintel is either 9.13.3.0.0 (695) or 9.13.5.0.0 (697) (Jones and Satterthwaite 1982: 97-98; Clancy 2009: 122), meaning that the monument was dedicated at the completion of a three year division of the *K'atun* or else at the *Hotun* (five year division of the *K'atun*). Period Endings amongst the Maya are known to be occasions at which accession was commemorated, therefore the image of Jasaw Chan K'awiil seated on a throne may refer to this. The throne depicted, is covered in a jaguar pelt and decorated with FTDKs interspersed between *Ajaw* heads. Harrison (2001: 83-85) describes such thrones as portable, because they appear to have padded or cushioned seats set on a wood base over which skin or fabric has been stretched. Portable thrones are depicted resting on litters or palanquins as well as stationary apparatus such as stone benches and thrones.

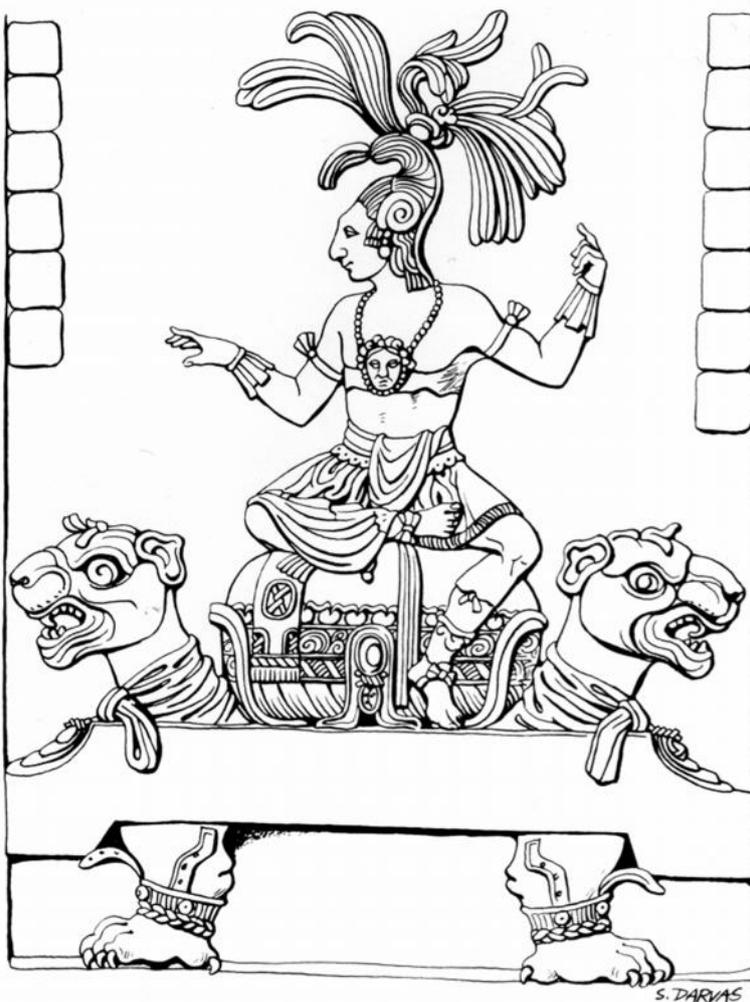


Fig. 11.1: An illustration, redrawn from Jean-Frédéric Maximilien Waldeck's 1822 Neoclassic interpretation of the Temple of the Jaguar Tablet (after Robicsek 1975: fig. 89; Waldeck, Jean-Frédéric Maximilien 1838), shows a portable throne, similar to those seen on Tikal lintels, mounted onto a double headed Jaguar Throne.

A portable throne similar to the portable thrones pictured on Tikal lintels is depicted on a sculpted stucco panel from Palenque's Temple of the Jaguar. The Palenque portable throne has been mounted onto a Jaguar Throne. Enthroned on this double seat is a Palenque ruler. At either end of the Jaguar Throne an outward facing jaguar wears the neck tie and leaf curl diagnostic of the Water Lily Jaguar (Clancy 2009: 95; Schele and Miller 2006: 51; Milbrath 1999: 123). The placing of the Palenque portable throne on the back of the Water Lily Jaguar is of particular import as it is this relationship between portable throne and Water Lily Jaguar which is reproduced at Tikal in the context of Tikal Temple 1 Lintel 3. I suggest that this beast is part of the identity of the Temple 1 Lintel 3 portable throne.

The Water Lily Jaguar and Thrones – Why they are Important to our Understanding of the FTDK at Tikal

There is a pattern of association between the Water Lily Jaguar and thrones in the context of Tikal monuments. In the representation on Tikal Stelae 36 and 20, images of thrones are sculpted in the form of the Water Lily Jaguar (see Jones and Satterthwaite 1982: figs. 56 and 29), whilst on Temple I Lintel 3 an enormous Water Lily Jaguar (Milbrath 1999:121) with open mouth and extended claws arches over the seated ruler. Although the FTDK is not always shown in association with the Water Lily Jaguar there is nevertheless a discernible pattern of association between the two, noticeable at sites such as Palenque (Temple of the Sun Tablet) and Copan (Structure 22A), where the Water Lily Jaguar and its symbolism would seem to be key to the significance of the FTDK and where it appears.

It should be noted that the representation of the Water Lily Jaguar in association with the FTDK has great time depth. For instance Stela 12 from Late Preclassic Izapa depicts a jaguar bound by serpentine ropes which descend from the sky. The ropes are tied into a Flat Two-Dimensional Knot under the suspended body of the jaguar (see Fig. 11.2). The forehead of the jaguar is marked by the smoking *Ajaw* sign found on the forehead of the Classic Period Water Lily Jaguar in Maya representation (Taube 1992: 54, fig.24.c). Taube (1992: 54) notes that the flames emanating from the jaguar's mouth is a convention seen with later Classic depictions of the Water Lily Jaguar. Below the Izapa jaguar, two attendants, possibly 'Lords of Fire', hold smoking censers which may symbolize the celestial hearth. A large rain glyph next to the jaguar's head (Norman 1973: pl. 23; Rice 2007: 118, fig. 6.7) speaks of water and fertility which is also reiterated in the foliage growing from the sky ropes.



Fig: 11.2: Drawing of Izapa Stela 12 (after Rice 2007: fig. 6.7) showing a jaguar held up by sky ropes fastened by a Flat Two-Dimensional Knot. This jaguar wears the smoking *Ajaw* sign which is later worn during the Classic Period by the Water Lily Jaguar.

The Water Lily Jaguar fashioned into a throne first makes its appearance at Tikal in the Early Classic in the representation on Stela 36 (Jones and Satterthwaite 1982: fig.56). Stela 36 depicts a ruler seated on a Water Lily Jaguar Throne and although weathered, the horn-like leaf element on the brow of the jaguar's head pictured on Stela 36 identifies the jaguar as the Water Lily Jaguar. In many instances, images of the Water Lily Jaguar only show this beast with the 'hornlike appendage that seems to be the leaf and stem of a water-lily plant' (Miller 1999: 123).



Fig.11.3: Drawing of Tikal Stela 36 (after Jones and Sattethwaite 1982: fig. 56.a) showing the ruler seated on a Jaguar Throne.

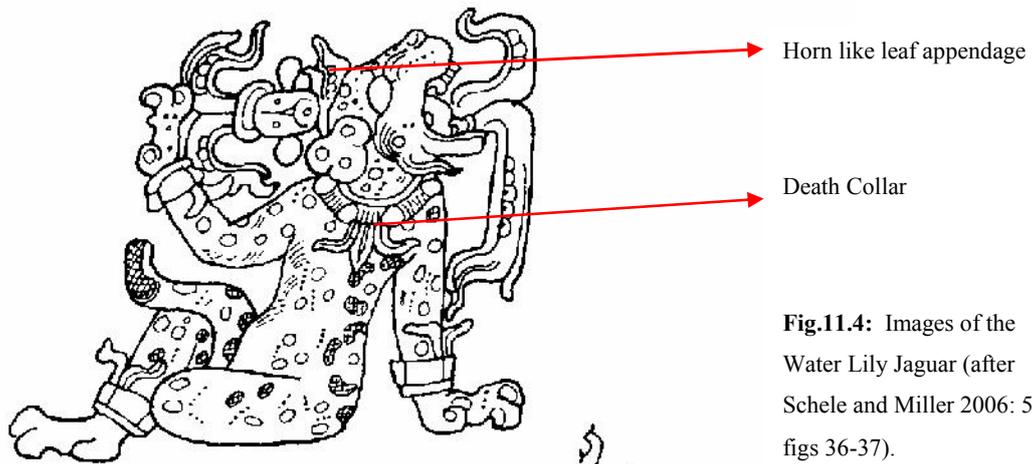
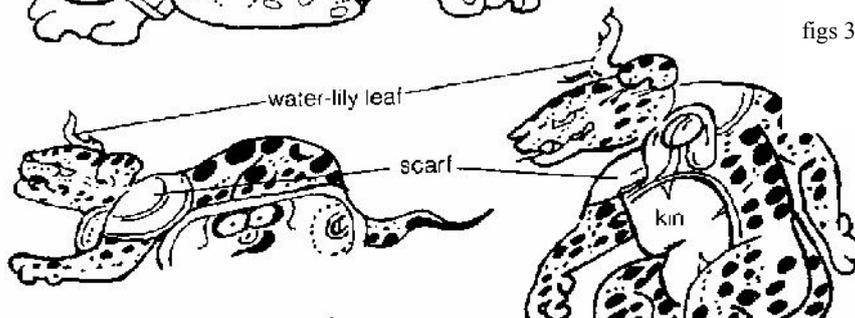


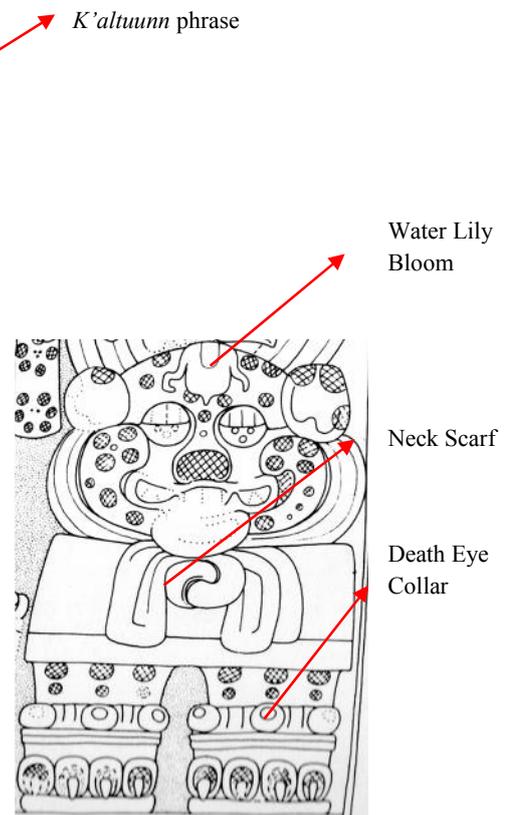
Fig.11.4: Images of the Water Lily Jaguar (after Schele and Miller 2006: 51, figs 36-37).



The Tikal Stela 20 Water Lily Jaguar wears his primary attributes, a water lily displayed on the forehead and a neck scarf worn around the neck (Clancy 2009: 95; Schele and Miller 2006: 51; Milbrath 1999: 123). Some representations of the Water Lily Jaguar also show him wearing what is termed a ‘death collar’; a neck device described as a ruff studded with extruded eye balls and generally worn by Maya death Gods (Miller and Taube 1997: 104; Taube 1992: 13). Sometimes the collar is worn around the neck but it can also be found on the legs of the Water Lily Jaguar as is the case with the Stela 20 Water Lily Jaguar and the Temple I Lintel 3 Water Lily Jaguar.



Fig. 11.5: a. Drawing of Tikal Stela 20 (after Jones and Satterthwaite 1982: fig.29). b. Detail of Tikal Stela 20 Jaguar Throne.



Temple I Lintel 3 cont. (Fig. 11.6)

In the context of Tikal Temple I Lintel 3, the Water Lily Jaguar is not presented in the familiar form of a throne seat, but instead is transformed into a guardian figure standing behind the throne.

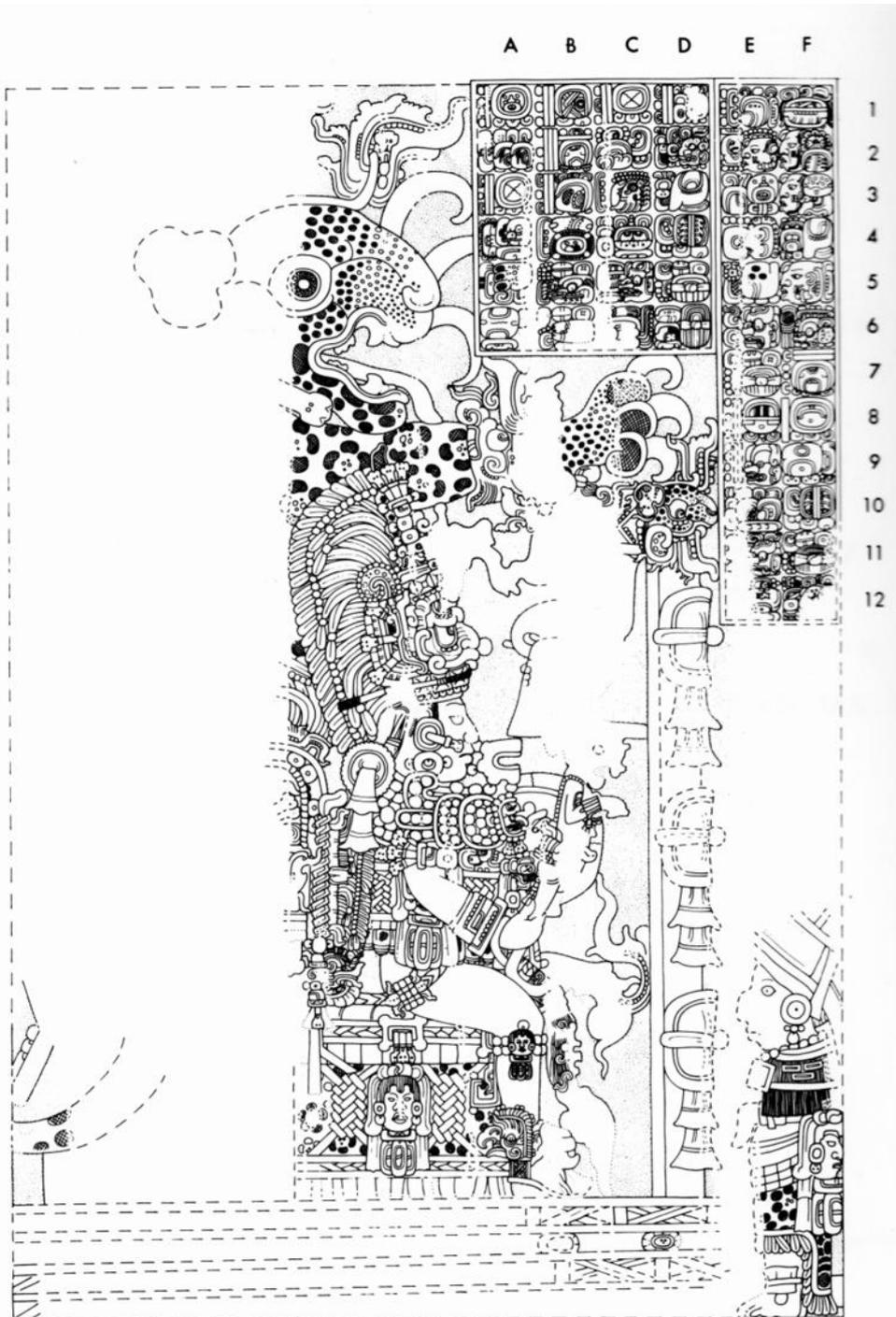


Fig.11.6: Drawing of Tikal Temple I Lintel 3 (after Jones and Satterthwaite 1982: fig.70) showing two large Flat Two-Dimensional Knots on the sides of a jaguar skin covered throne.

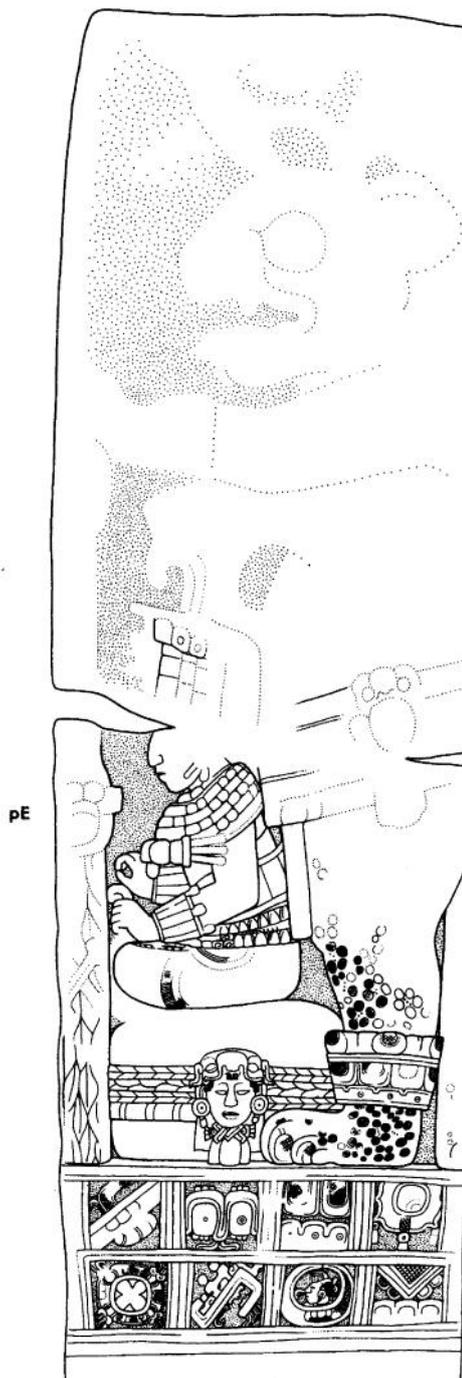


Fig. 11.7: Drawing of Piedras Negras Stela 10 (after Clancy 2009: fig.6.3), showing the Water Lily Jaguar as guardian to the throne. The same composition appears on Tikal Temple 1 Lintel 3.

Clancy (2009: 120-123) proposes that the Tikal Temple I Lintel 3 throne scene was influenced and inspired by accession iconography at Piedras Negras, therefore Piedras Negras Stela 10 similarly depicts an enthroned ruler presided over by a Water Lily Jaguar. She indicates that the formalising of accession in identical ways at both sites is no coincidence (Clancey 2009: 120-123). This may be true and I would add that throne scenes at a number

of Maya sites involve the presence in one form or other of the Water Lily Jaguar. As Lord of the Three Stone Hearth Place, the presence of the Water Lily Jaguar in throne scenes at sites such as Palenque, Piedras Negras, and Chichen Itza intimates that the Creation myth and in particular the role of the Water Lily Jaguar in this myth underpinned and informed accession amongst many Maya lineages. Both the Water Lily Jaguar and FTDKs appear in the representation of Palenque's Temple of the Sun Tablet. The imagery and inscriptions carved onto this tablet link accession to the story of Creation. As features of the Maya Creation myth the appearance of the Water Lily Jaguar and FTDKs in throne scenes at Tikal reiterates the Creation context for seating at this site.

The diverse forms which the Water Lily Jaguar takes on ceramics and monuments suggest a complex character and it is this complexity which is illustrated at Tikal. Previously in this work I have proposed that the Water Lily Jaguar is an entity which dwells in the Three Stone Hearth Place. The Water Lily Jaguar is also male and linked to male lineage. As a seat of power the Water Lily Jaguar negotiates male authority as descending or emerging from the Creation hearth. Through association, the FTDKs found on the Temple I Lintel 3 throne achieve the status of insignia or symbols associated with ancestral lineage as cosmic.

11.1b. Temple III Lintel 2 (Fig. 11.8)

Temple III Lintel 2 depicts the ruler, 'Dark Sun', described by Martin and Grube (2008: 52) as being engaged in a dance pageant in A.D. 810. Dark Sun is dressed as the Water Lily Jaguar with characteristic water lily emerging from the forehead. Icon heads of the Water Lily Jaguar also appear as part of the scene. The profile view of the throne, like the Temple I Lintel 3 throne, shows two FTDKs between *Ajaw* heads; three can be seen but four are implied.

There are three ways in which the depiction of the FTDK on Temple III Lintel 2 informs us of the knot's significance. First, monuments linked to Lintel 2, namely Stela 24 and Altar 7, work with Lintel 2 to connect the FTDK to the concept of stone-binding and the Creation events implied by this act. Second, by providing a link to Creation events, the FTDK serves as a symbol which legitimates the ruler. Third, the FTDKs on the throne in Lintel 2 reinforce the reading of Dark Sun as a lord of the Three Stone Hearth Place, (i.e., the place of creation).

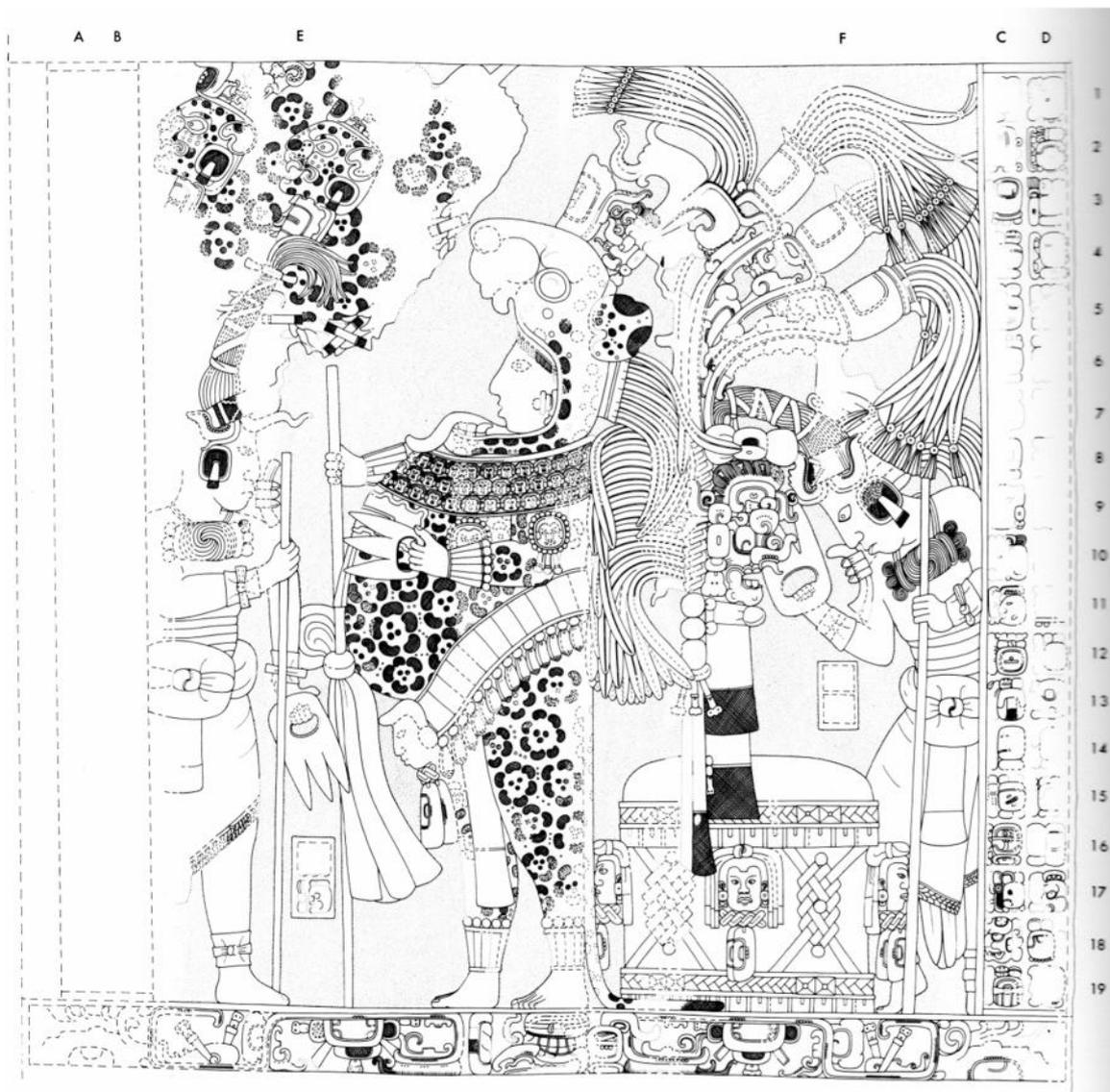


Fig.11.8: Drawing of Tikal Temple III Lintel 2 (after Jones and Sattethwaite 1982: fig.72) showing two large Flat Two-Dimensional Knots on the sides of a portable throne.

FTDK and Stone-binding

Tikal Temple III Lintel 2 is a Late Classic monument which originally spanned the inner doorway to Temple III pyramid (Jones and Satterthwaite 1982: 100, 101). The poor state of preservation of the glyphic panels on this lintel means that there is no surviving dedicatory date; therefore the date for this lintel is derived from its relationship to Stela 24 also understood to portray the ruler Dark Sun. Stela 24 and its paired altar, Altar 7, originally stood at the base of Temple III on the axis of the stairway. The dedicatory date for Stela 24 is 9.19.0.0.0, therefore this monument commemorates the 19th *K'atun* (9.19.0.0.0) of 810, (Martin and Grube 2008: 52). Altar 7 is bound – encircled by a representation of a cord fastened by extended Flat Two-Dimensional Knots - whilst Stela 24 depicts the hand

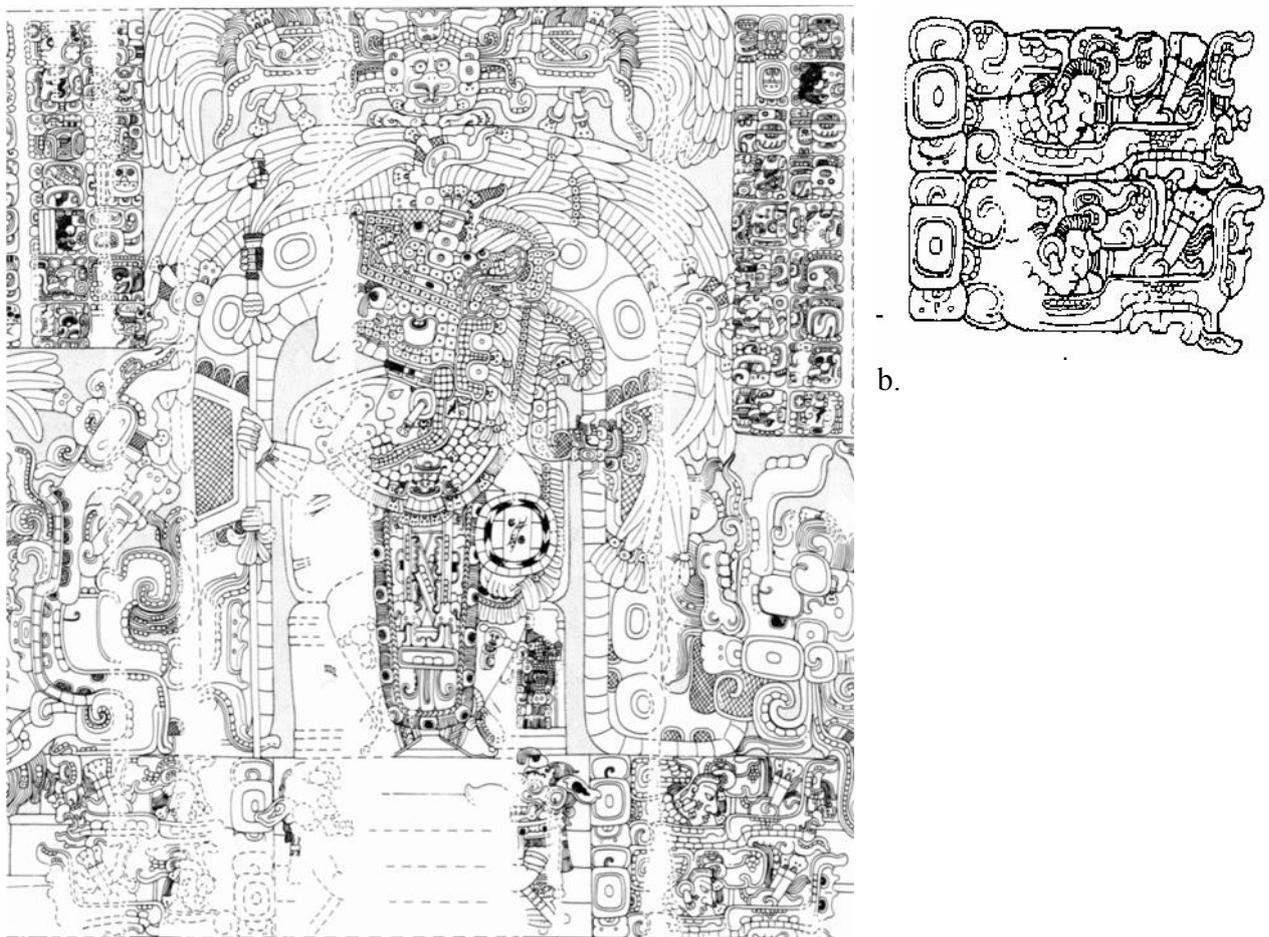
scattering gesture. In the context of Temple IV Lintel 2, the FTDK represented on the throne may be referential to the FTDKs which fasten bindings around Altar 7 situated at the base of this temple pyramid. The FTDKs on the throne politicize the binding of the altar stone as important to seating at the Period Ending. The glyph for altar comprises three stones (Taube 1998: 442; Chase, Grube and Chase 1991: 7-9); a glyph comprising three stacked stones also appears in the ancient Maya account of Creation where it represents the Three Stone Hearth (Looper 2003: 11-14). The equivalence between the altar, as hearth, and the Creation hearth itself is proposed by Taube (1998: 442). The binding of the altar with FTDKs is equivalent to the binding of the first Three Stone Hearth. I believe that the FTDK refers to the hearth and the binding of the hearth. It also refers to everything which this hearth symbolized to the Maya, including the concept of the center, renewal, the entrance to the otherworld, ancestral home, and lineage seat. These are some of the ideas by which the Maya conceptualized kingship.

Jones and Satterthwaite consider the thrones depicted on Temple I Lintel 3, Temple IV Lintel 2, and Temple III Lintel 2 as prototypes for the stone altars at Tikal. They come to this conclusion because the design features of Tikal altars, such as the display of Flat Two-Dimensional Knots flanked by glyphic panels representing bands of cloth on the periphery of altars, also appear on the thrones depicted on Tikal lintels (Jones and Satterthwaite 1982:79, 82). The sharing of iconographic elements between altars and representations of thrones at Tikal supports the proposal that the two object types shared identity relations. The interpretation of altars as a class of free-standing monument referred to by the ancient Maya as 'throne stones' (Sharer 1994: 641) suggests an overlap in function and meaning between thrones and altars. The term 'throne stone' as applied to altars points to the function of these flat stones as seats used by rulers for public ceremonies (Sharer 1994: 641). At Tikal the throne and the altar stone would appear to be linked through iconography but also through the acts of seating. It is possible that both objects featured in seating rituals.

Tikal Temple III Lintel 2, Stela 24 and Altar 7 depict three actions (stone-binding, scattering and seating/accession) which are described in inscriptions on monuments at sites across the ancient Maya heartlands. The visual pairing of hand scattering and stone-binding imagery on Tikal Stela 24 and Altar 7 may suggest that both acts were part of Period Ending rituals. If the three monuments are read as a single statement then it would appear that Period Endings at Tikal were attended by a number of acts. These involved the binding of a stone altar and

the scattering of drops at the foot of the temple mountain, at plaza level, followed by the ascent to the temple mount where seating took place.

The idea that seating was a Creation event at Tikal is clearly illustrated on Temple IV Lintel 3 where *Witz* Mountain Gods (or *Witz* Monsters) form the support for the enthroned ruler. From the cleft entrance in the forehead of the *Witz* God, the Maize God emerges, identifying the *witz* as the *Yax-Hal-Witznal* (Schele 1998: 492-494; Plank 2004: 61). Similarly Piedras Negras Stela 5 depicts two *Witz* Gods as supports for a Water Lily Jaguar Throne (Clancy 2009: 95, 96, fig.5.8). Piedras Negras Stela 5 and Tikal Temple IV Lintel 3 depict *Witz* Gods as supports for the throne, confirming the mountain context for seating or accession.



a.

Fig.11.9: a. Drawing of Temple IV Lintel 3 (after Jones and Satterthwaite 1982: fig. 74), showing the enthroned ruler seated on *Witz* Mountain Gods representing the *Yax-Hal-Witznal* from which the Maize God emerges. b. Detail of the *Witz* Mountain Gods which support the Tikal Temple IV Lintel 3 throne (after Schele 1998: fig.9b). The *Witz* Mountain Gods represent the *Yax-Hal-Witznal* from which the Maize God is shown emerging.

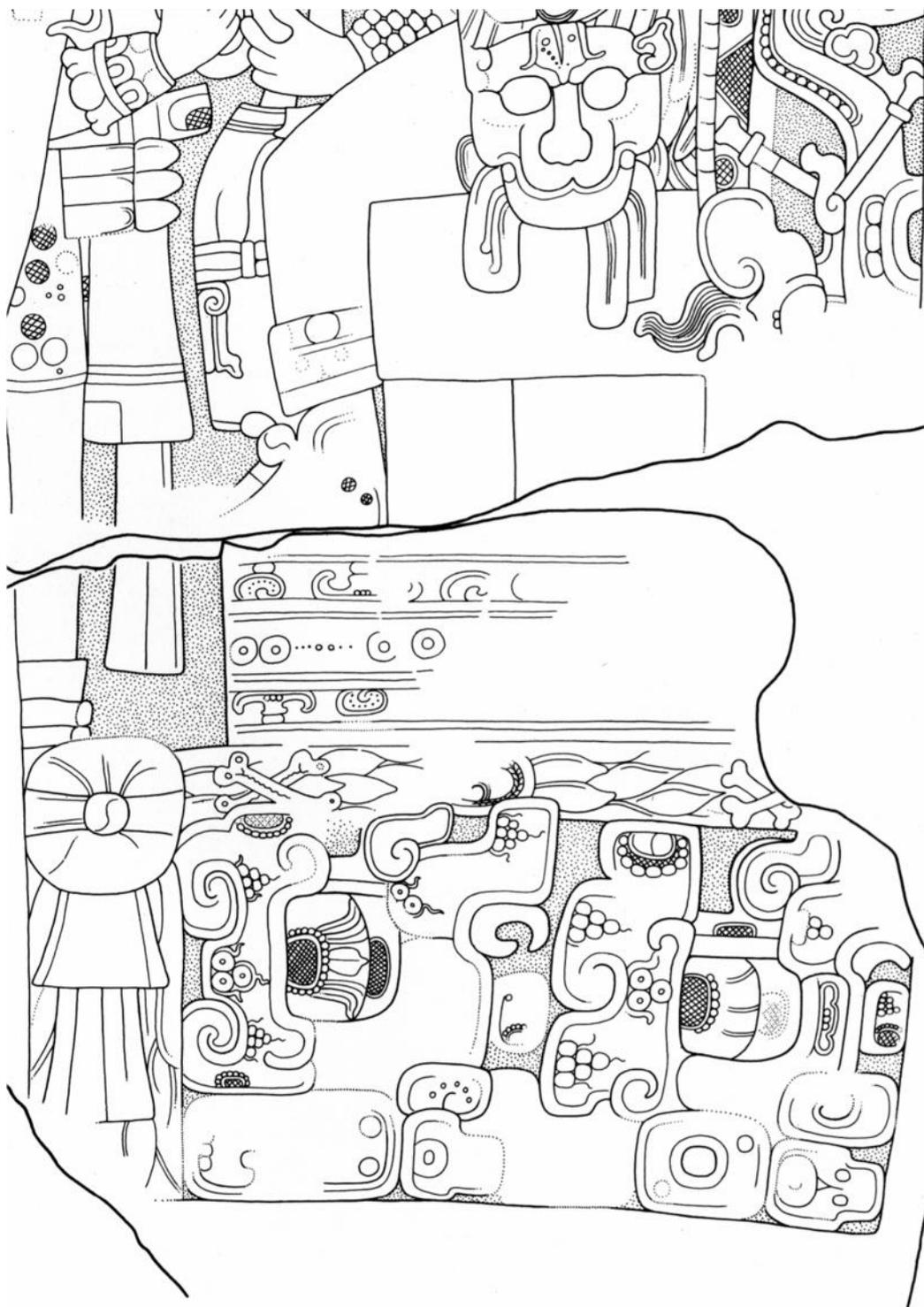


Fig.11.10: Drawing of *Witz* Mountain Gods as supports for the Water Lily Jaguar Throne on Piedras Negras Stela 5 (after Stuart and Graham 2003: fig.9:33).

That the rituals depicted on Tikal stelae actually took place on the spot marked by the stelae has been proposed by Coggins, Houston and Stuart (Bassie-Sweet 1996: 172). Although it is not certain that the three monuments were commissioned together, there is a possibility that

they may have been. The placement of these monuments at the base and summit of Temple III may indicate that stone-binding, scattering and seating took place on the locations marked by the monuments themselves. The prominent display of Flat Two-Dimensional Knots on the periphery of the Temple III Lintel 2 throne indicates that the ritual role of these knots in fastening cordage around Tikal altars, held some sort of value in the context of seating in office or seating on the throne.

FTDK as Legitimizing Device

By providing a link to Creation events, in particular the binding of the hearth, the FTDK serves as a symbol which legitimates the ruler. At Tikal, seating scenes pictured on lintels make reference to the hearth through multiple iconographic markers. FTDKs represent one of a number of Creation Hearth markers, other markers include the Water Lily Jaguar and representations of the hearth stones themselves. Therefore at Tikal both the Water Lily Jaguar (Lord of the Three Stone Hearth Place) and smoking hearthstones representing the three stones of creation appear in lintel throne scenes. Taube, in a comparative analysis of representations of cosmic hearth stones depicted on Classic Period ceramics and monuments, identifies a particular zoomorphic head version of a hearthstone with diagnostic smoke volutes on Tikal Temple IV Lintel 3 (Taube 1998: 445, Fig. 9e). It is worth noting that rulers at Tonina and Naranjo wear the three hearth stones (depicted with characteristic volutes of smoke) in their headdresses (Taube 1998: 441- 442;Looper 1992: 2-3).

Based on Taube's identification of anthropomorphic hearthstones, I suggest that anthropomorphic hearthstones are also worn as headdress elements by the ruler depicted on Tikal Temple III Lintel 2 dressed as a Water Lily Jaguar. If Taube is correct in his identification of the zoomorphic hearthstone, then the representation of hearthstones in a seating or throne scene at Tikal together with the presence of the Water Lily Jaguar establishes the location for the throne as linked to the hearth place at the centre of creation. I suggest that the ruler depicted on Temple III Lintel 2 shown dressed as the Water Lily Jaguar, and standing before a throne decorated with Flat Two-Dimensional Knots, displays an anthropomorphic hearth stone in his headdress to mark him out as lord of the Three Stone Hearth Place.

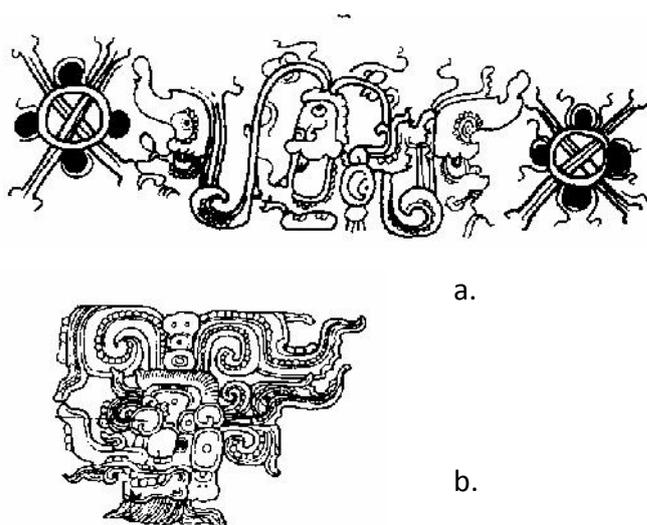


Fig.11.11: Examples of anthropomorphized hearth stones. a. Profile of the three hearth stones at the centre of Creation (after Taube 1998: fig.9b). b. Smoking hearth stone on serpent tail depicted in Tikal Temple IV Lintel 3 (after Taube 1998: fig.9e).

On Temple III Lintel 2, the ruler, in wearing the skin of the Water Lily Jaguar, takes on the identity of this beast. He personifies concepts to do with male lineage as descending from the fiery hearth at the center of Creation. The FTDKs on the side of the throne are symbols for the Three Stone Hearth Place and it's binding by Creator deities on the 4 *Ajaw* 8 *Cumku/Kumk'u* Creation date.

FTDK as Reinforcing a Particular Royal Title: Lord of the Three Stone Place

Given the hearth place link for the seating/accesion scene depicted on Temple III Lintel 2, it is interesting that both the ruler and his two attendants pictured on this lintel hold fire drills and tri-lobed eccentric flints. The fire drill and tri-lobed eccentric flint are costume elements of the Classic Period God of Fire, the Jaguar God of the Underworld and are displayed by impersonators of this deity. For instance the two rulers pictured on the face of Tikal Altar 5 wear the costume assemblage of the Jaguar God of the Underworld consisting of the cruller, fire drills and eccentric flint, described by Stuart as a trident flint (Stuart 1998: 407; Kubler 1977: 15-16). In wearing the costume elements diagnostic of the Jaguar God of the Underworld, the ruler and two lords shown standing at the throne on Tikal Temple III Lintel 2 can be identified as fire lords. The fire drill staffs and tri-lobed eccentric flints point to the acts which accompanied enthronement, namely the drilling of the hearth fire.

11.1c. Tikal Temple IV Lintel 2 (Figs. 11.12, 11.13)

The throne pictured on Temple IV Lintel 2 is covered in jaguar skin but unlike the two previous lintels, the jaguar deity associated with this throne is not the Water Lily Jaguar.

Standing behind the throne illustrated on Temple IV Lintel 2 is a giant figure wearing the facial markings (twisted cruller) of the Jaguar God of the Underworld (Clancy 2009: 123). Wearing a hearth stone as a headdress, the Jaguar God of the Underworld is identified with fire. As with Temple III Lintel 2 the FTDKs displayed on the throne are symbols for the hearth.

Unlike the Water Lily Jaguar, which is always depicted in zoomorphic form, often serving as a throne, the Jaguar God of the Underworld is shown in Maya iconography in anthropomorphic form with jaguar characteristics mainly limited to the face (Miller and Taube 1997: 104). The primary identifying feature of the Jaguar God of the Underworld is the twisted cord worn under his eyes and referred to as a 'cruller' (Miller and Taube 1997: 104; Schele and Miller 2006: 50; Taube 2002: 292). Like the Water Lily Jaguar, research suggests that the Jaguar God of the Underworld was also a denizen of the Three Stone Hearth Place (Taube 1998: 433-452). The hearth place association for the Jaguar God of the Underworld would explain why the figure wearing the cruller diagnostic of the Jaguar God of the Underworld pictured on Temple IV Lintel 2 wears an anthropomorphic hearthstone as a headdress element. This figure is also described as holding a double-headed monster from whose eyes emerge the Jaguar Paddler and another individual believed to be the Stingray Paddler (Freidel, Schele and Parker 2001: 314). The actions of these two deities on the 4 *Ajaw 8 Kumk'u* Creation date included the setting and binding of a stone at the Jaguar Throne. Their depiction on Temple IV Lintel 2 suggests that we are witnessing a re-enactment of Creation.

The ruler shown seated on the Temple IV Lintel 2 throne also holds a shield marked with an effigy head of the Jaguar God of the Underworld. In contradistinction to the Water Lily Jaguar, which is connected to water and verdant growth (Taube 1998: 443, 444, fig.8a-c, Milbrath 1999: 120-124), the Jaguar God of the Underworld is associated with fire. The two jaguar deities are polar opposites, one associated with fire and the other water, yet both are important features of seating and enthronement at Tikal. The presence of the Jaguar God of the Underworld and the Water Lily Jaguar identifies the throne as a place of duality, a fire/water place. Based on the attributed qualities of these two deities, both denizens of the Three Stone Place, we can say that the cosmic hearth at the centre of creation was a place of fire/water duality.

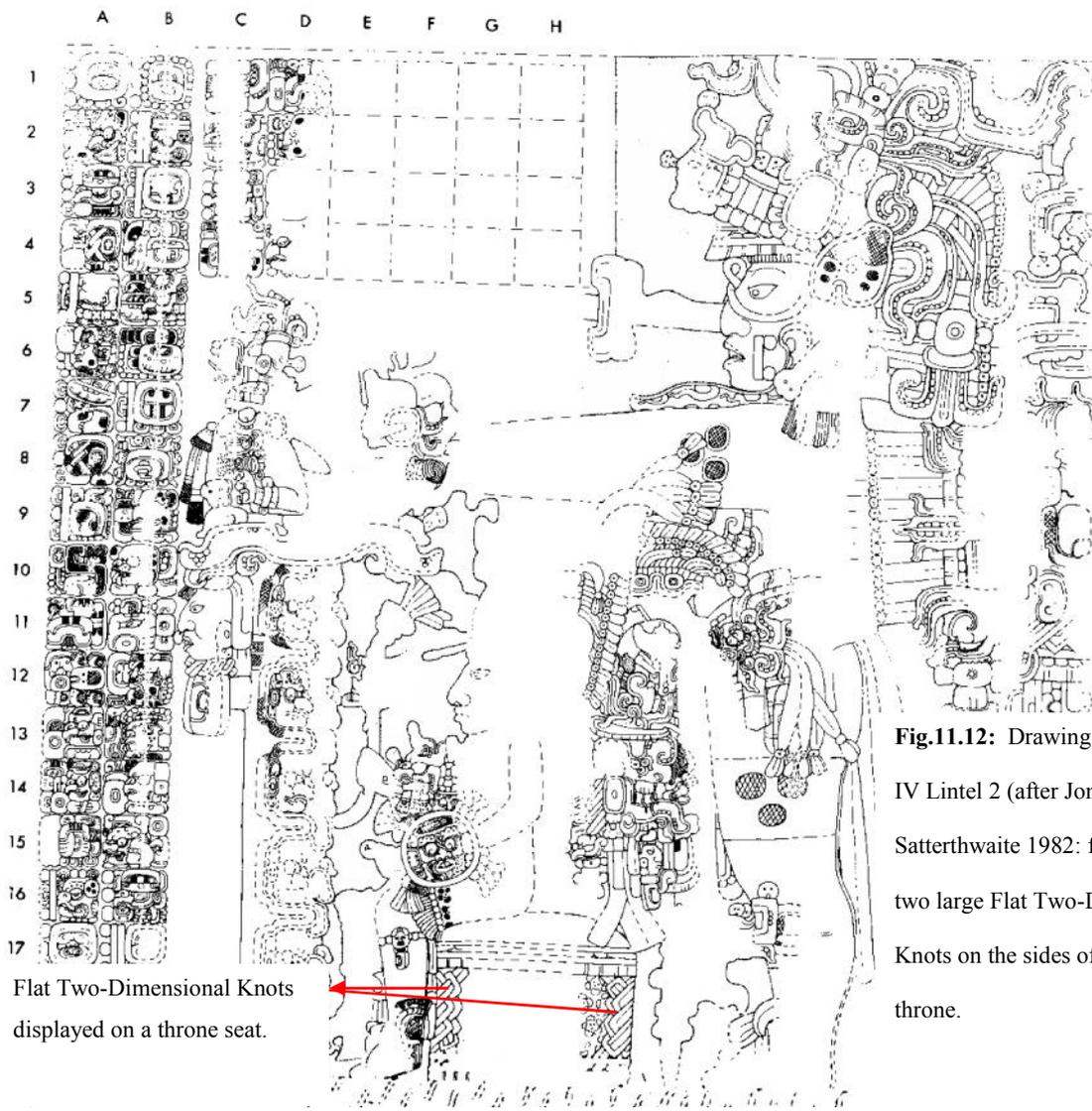
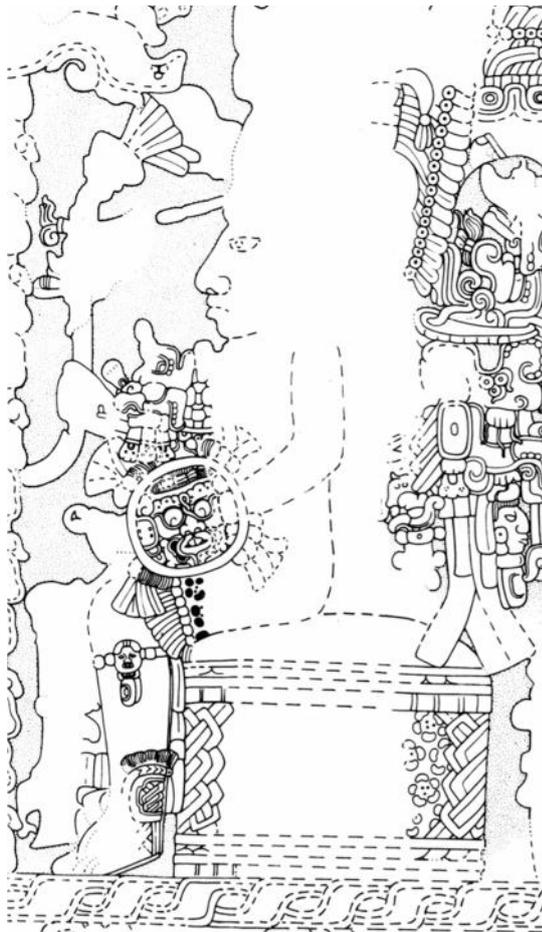


Fig.11.12: Drawing of Tikal Temple IV Lintel 2 (after Jones and Satterthwaite 1982: fig. 73) showing two large Flat Two-Dimensional Knots on the sides of a portable throne.

Taube comments on the duality of the Three Stone Hearth (Taube 1998: 433), where heat and moisture are the composite requirements for life to germinate and as such represent the matrix for all creation. The drilling of fires would have been a sacred act replete with connotations of creation. The friction of the vertical fire drill stick in the hole where the fire is started was equated with the acts of copulation and conception (Taube 2002: 292-293).

The fire/water duality of the throne place and hearth at the centre of Creation also extends to the language used by the ancient Maya to define and denote succession and change of rule. The ancient Maya word 'tz'ak', meaning succession and change of rule, is often represented by glyphs which denote dual opposing forces such as day/night, sky/earth, male/female and

so forth. Stuart describes the substitution of these paired terms for the word ‘*tz’ak*’ as the ‘binary relationship of opposition’ (Stuart 2003: 1-4). The pairing of these opposing concepts is seen to function as semantic illustrations of the word ‘*tz’ak*’ (Stuart 2003: 3). In other words these paired opposites help to visualise the thinking or cognitive links by which the ancient Maya apprehended rule and succession.



a.



b.

Fig.11.13: a. Detail of Temple IV Lintel 2 showing the ruler holding a Jaguar God of the Underworld shield in one hand and the K’awiil sceptre in the next. He sits on a throne on which Flat Two-Dimensional Knots are displayed (detail Jones and Satterthwaite 1982: fig. 73). b. The Jaguar God of the Underworld shield from Temple IV Lintel 2 (detail from Jones and Satterthwaite 1982: fig. 73).

As previously mentioned, in the Classic Period some of the meanings for the word ‘*tz’ak*’ are ‘succession’ or ‘change of rule’ (Montgomery 2003: 111, 204, 205); however in the Postclassic Dresden Codex, the word ‘*tz’ak*’ appears eleven times and the meanings given are, ‘to knot, a thing without end, to augment, tiers of kinship, unending reign, eternal, and succession of lords’ (Barnhart 2005: 8; Macri and Vail 2009: 150, 162). That the Postclassic meanings for the word ‘*tz’ak*’ as ‘knot’, ‘splice’, ‘succession of lords’, ‘eternal’ or ‘unending reign’ may have also been viable for the Classic is possible considering that the contents of

the Dresden Codex are believed to have been of ancient origin and were rewritten over the centuries (Barnhart 2005: 1). Postclassic meanings for ‘*tz’ak*’ support the idea that knots amongst the Maya were metaphoric of multiple concepts to do with rule and kingship. It is interesting how the above definitions for ‘*tz’ak*’ such as ‘a thing without end’, ‘eternal’, ‘unending reign’ implies that rule for the Maya was conceptualized as eternal. Equally interesting is the manner in which the properties of the Flat Two-Dimensional Knot materially reproduce these very abstract states. Therefore in the process of trying to tie the simpler versions of the Flat Two-Dimensional Knot I noticed that one of the properties of this knot was that it could be extended indefinitely creating an endless chain of knots. I also noticed that this property or propensity of the Flat Two-Dimensional Knot to be extended indefinitely was capitalized in certain monuments such as a Preclassic stela from Kaminaljuyu, Stela 10 (Sharer 1994: fig.3.12) where the knots are used as an endless frame for the pictorial representation. I have also seen Postclassic images of this knot where the cords appear to be spliced so that there are no open ends but instead the knot returns endlessly back into itself (see Miller 1982: Plate 28) like a figure of eight (the sign for infinity).

Having experimented with tying the Flat Two-Dimensional Knot it seemed significant that the properties of the knot itself seemed to actualize the very concepts such as continuity, endlessness, infinity and so forth, given as the meanings for the word ‘*tz’ak*’ (i.e. knot). According to Tilly, material metaphors are not chosen arbitrarily but because they model either in appearance or working, the concepts for which they stand. In keeping with the working of a material metaphor, Flat Two-Dimensional Knots may have been chosen as insignia of rule by the ancient Maya because in its tying it actualized the very concepts ascribed to rule by the ancient Maya such as eternal, unending reign, or an endless succession of lords. These ideas of rule as eternal or endless all find their source in the concept of Creation espoused by the Maya in the guise of the celestial hearth as a place of origins.

11.2 Copan

11.2a. Jadeite Bar Pendant (Fig. 11.14)

A jadeite bar pendant found in the burial of the Copan dynastic founder K’inich Yax K’uk’ Mo’ (Sharer 2003: 151) is carved in the round with a continuous FTDK. The encircling of the pendant by the FTDK is reminiscent of the knots which encircle Palenque House B. The

representation of the knots as an endless chain which repeats and returns back into itself reflects the ideas which the Maya associated with kingship and laid out in the section above.

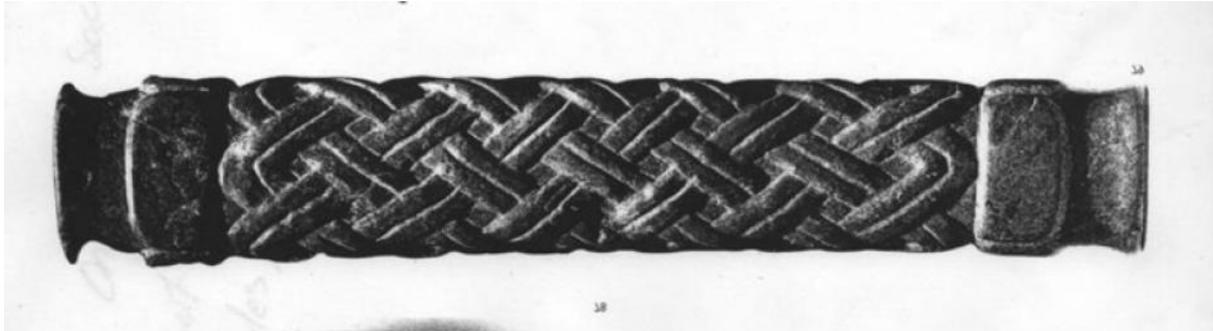


Fig.11.14: Photograph of a jadeite bar pendant from Copan Structure 10 J-45, Burial 36 dated to AD 350-450 (after Fields and Reents-Budet 2005: 182).

Copan Altar Q depicts K'inich Yax K'uk' Mo' wearing a bar pendant of the same size and shape to the jadeite bar pendant found in his burial (Sharer 2003: fig.5.1). Altar Q, dedicated during the reign of the sixteenth Copan ruler, Yax Pasaj Chan Yopaat, is a squared monolith carved with four Copan rulers on each of its four sides. In all, sixteen rulers are pictured on this monument (Sharer 2003: 144). The west side of Altar Q shows K'inich Yax K'uk' Mo' passing a symbol of state to the sixteenth ruler. The text on Altar Q describes the events leading to the founding of the Copan dynasty by K'inich Yax K'uk' Mo'. We are told that three days after taking the royal sceptre/effigy (the God K'awiil) he received his title. With the passing of 152 days he arrives as Lord of the West to a Three Mountain Place (*Ux Witik*) understood as referring to his arrival and founding of Copan (Sharer 2003: 144; Martin and Grube 2008: 192, 193).

The unbroken line of kings which encircle Altar Q beginning with the founding dynast and ending with the king who commissioned the altar illustrate the idea of kingship as a chain. The rulers function to bind the altar as would a chain of FTDKs; they materially manifest the word '*tz'ak*' as an unending knot, as a succession of lords, an unending reign.

K'inich Yax K'uk' Mo' is believed to have originated from the Peten area and possibly from Tikal (Coggins 1975; Marcus 2003: 350, 351; Sharer 2003:152; Martin and Grube 2008: 193). He was buried in a vaulted tomb under one of the early buildings known as the Hunal. The structures built over the Hunal by later generations at Copan appear to be funerary temples, however evidence amassed through excavation indicates that 'Hunal and its tomb established a symbolic center of the Acropolis that was maintained by the Founder's

successors during the remainder of the dynastic history of Copan' (Sharer 2003: 152). It is possible that the bar pendant was worn by the dynast K'inich Yax K'uk'Mo' at his death. The FTDK carved into the pendant may have been metaphoric of multiple meanings, such as the concept of rule as endless and eternal.

Summary

Flat Two-Dimensional Knots at Tikal are identified with a particular concept of rule expressed in terms of Creation and in particular the Creation hearth. As a place of power linked to origins, the hearth defined and negotiated concepts of lineage. Seated on the throne the ruler is metaphorically seated in the hearth at the centre of Creation - a place of beginnings from where the first ancestors emerged.

As a symbol for the hearth, as place of descent, it is appropriate that the Copan bar pendant carved with a continuous FTDK should have been interred with an originary ancestral king within a structure which marked the site centre.

Chapter Twelve: Flat Two-Dimensional Knots Displayed on Textiles

An important location for the display of Flat Two-Dimensional Knots is on textiles represented on carved lintels and pottery. Elaborate cloth with patterned borders and feather and bead trim was fashioned into garments such as *huipiles* worn by women and loincloths worn by men. *Huipiles* pictured on Classic Maya monuments indicate that these were simple shift-like, ankle-length dresses, made from rectangular pieces of cloth with a central opening for the head to pass through (Looper and Tolles 2000: 1-3). The richly patterned *huipiles* pictured on monuments would have been important garments primarily reserved for ceremonial occasions (Looper and Tolles 2000: 3). As such the patterns found on the textiles are considered to have been invested with significant meaning (Looper and Tolles 2000: 17-37; Montoya 2003: 93-125). The complex patterned *huipil* motifs and designs are also found on men's clothing (Holsbeke 2003: 25; Looper and Tolles 2000: 4).

An area of clothing often overlooked when considering textiles is footwear. Monumental art of the Maya shows sandals made from cloth patterned with the same motifs, beading, and feather trim as found on *huipiles* and loincloths. Thick strips of folded cloth are also shown fastening the upper parts of the sandals. Sandals with textile uppers richly decorated with embroidered flowers and other motifs are still sold in Maya markets today. FTDKs also appear on a particular garment described by Clancy (2009: 92) as a scalloped cape. This garment is depicted (infrequently) in the iconography of a number of sites where it is pictured as a scalloped, poncho-style, shoulder-length garment with an opening at the centre for pulling over the head. The images only show high-ranking Maya lords wearing this garment, suggesting that it was the prerogative of males. The Maya lords pictured are shown either in profile or from the front; therefore the back of the garment is never entirely in view. However the symmetry of the garment, with one scallop to the front and one to either side suggests that a fourth scallop at the back would have completed the fourfold structure. This shape conforms to the four-part design known amongst the Maya as a quatrefoil (see Chapters Nine and Ten). In the analysis below, this garment worn by men is simply categorized as 'pulled over the head'.

In addition to clothing, textiles are often depicted as bundled forms in ritual scenes (Looper and Tolles 2000: 12). A representation of one of these bundles on an El Cayo stone altar

shows a large FTDK attached to the bundle itself rather than incorporated into the patterned motif of the cloth, as is the case with clothing. This suggests that the knot's significance is related to the context in which the feathered bundle is displayed, rather than to any designs on the textiles themselves.

Table 12.1: Table listing all occurrences of FTDKs displayed on Textiles.

Site	Locus of FTDK	Gregorian Year	Long Count
Dos Pilas	Stela 5	A.D. 731	Late Classic 9.15.0.0.0 (Houston 1993:72, Table 3-2).
Dos Pilas	Panel 19	A.D. 729-740.	Late Classic (Martin and Grube 2008:61)
Aguateca	Stela 1	A.D. 741	Late Classic 9.15.10.0.0 (Graham 1967:6; Houston and Mathews 1985:8, Table 1).
Aguateca	Stela 5	A.D. 692	Late Classic 9.13.0.0.0 (Graham 1967:20; Houston and Mathews 1985:8, 24, Table 1).
Yaxchilan	Lintel 24	AD 709	Late Classic 9.13.17.15.12 (Tate 1992:204, 272; Kettunen 2006:663).
Yaxchilan	Lintel 25	AD 681	Late Classic 9.12.9.8.1 (Tate 1992:204, 272; Kettunen 2006:663).
Yaxchilan	Lintel 46	AD 713	Late Classic 9.14.1.17.14 (Tate 1992:257, 272).
La Florida	Stela 9	AD 731	Late Classic 9.15.0.0.0 (Graham 1970:446)
Piedras Negras	Stela 3	A.D.711	Late Classic 9.14.0.0.0 (Clancy 2009:86; Martin and Grube 2008:147).

Piedras Negras	Stela 8	A.D.726	Late Classic 9.14.15.0.0 (Clancy 2009:103).
Palenque	Group IV Tablet of the Slaves	A.D.729	Late Classic 9.14.18.9.17 (Kettunen 2006:674).
Palenque	Stone Panel from Temple XIX Pier	A.D.733	Late Classic 9.15.2.7.16 (Stuart 2005:24).
Naranjo	Stela 40		
El Cayo	Altar 4	A.D.731	Late Classic 9.15.0.0.0 - (Clancy 2009:118; Zender 2002:168).

12.1 FTDKs Attached to a Garment Pulled Over the Head

12.1a. Dos Pilas Stela 5 and Panel 19, Aguateca Stela 1 and 5 (Figs.12.1, 12.4, 12.3, 12.2)

Dos Pilas Stela 5 and Panel 19 are monuments raised by the Dos Pilas ruler dubbed as Ruler 3 who ruled from A.D. 727 to A.D. 741 (Martin and Grube 2008: 60). Ruler 3 was not in direct line to the throne and his rule is described as a form of regency ‘at a time while the heir’, K’awiil Chan K’inich ‘was still a child’ (Martin and Grube 2008: 60). In both monuments, Ruler 3 wears the scalloped poncho-style garment with attached FTDKs.

Aguateca Stela 1 and 5 depict the Dos Pilas ruler K’awiil Chan K’inich (Ruler 4), who also wears the scalloped poncho-style garment with attached FTDKs. Dos Pilas Stela 5 is a Period Ending stela commemorating the completion of a *K’atun* and Aguateca Stela 1 and 5 are Period Ending Stelae commemorating the completion of a *Lajuntun* and a *K’atun* respectively (Graham 1967: 6, 20, figs.3, 13; Houston and Mathews 1985: 24).

In the representation of Dos Pilas Stela 5 as well as Aguateca Stela 1 and 5, Rulers 3 and 4 are shown in the act of scattering (Eberl 2007: 74; Clancy 2009: 92; Houston 1987: 67; Graham 1967: 8, 20; Houston and Mathews 1985: 24). K’awiil Chan K’inich was the third in

a line of Dos Pilas rulers who traced their ancestry to Tikal. The founder of Dos Pilas, Bajlaj Chan K'awiil or Ruler 1 is believed to have been the half-brother of the Tikal ruler Nuun Ujol Chaak – this connection to the Tikal dynasty could explain why Dos Pilas rulers used the Tikal emblem glyph as part of their personal names (Martin and Grube 2008: 55-63; Martin 2003: 24-30; Houston and Mathews 1985: 5-7). Dos Pilas is alternately described as a rival to Tikal and a vehicle for the expansion of Tikal's interests into the territories to its West (Eberl 2007: 75; Houston and Mathews 1985: 9). These conflicting interpretations reflect the shifts in allegiance by Dos Pilas from Tikal to Tikal's competitor and rival, Calakmul during the Late Classic (Martin and Grube 2008: 56-59).



Fig.12.1: Detail of Dos Pilas Stela 5 (after Houston 1993: fig.3.12) showing Dos Pilas Ruler 3 wearing the quadripartite, scalloped garment decorated with a Flat Two-Dimensional Knot. Stela 5 commemorates a fifteen *K'atun* Period Ending (Houston 1993: 81).

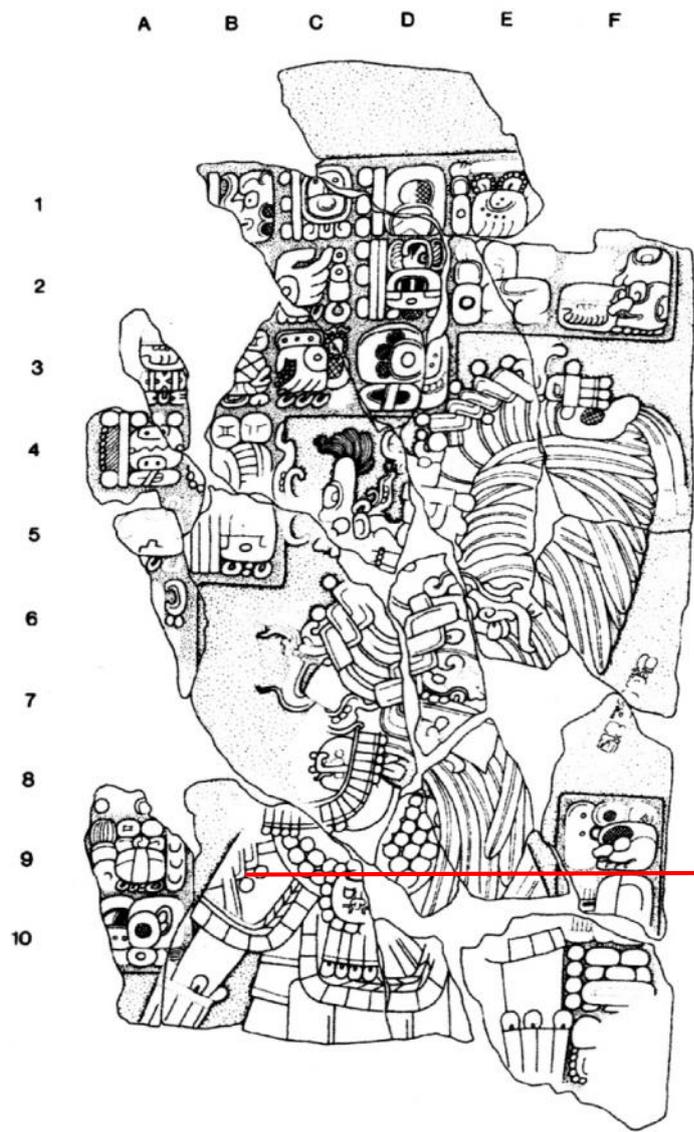


Fig. 12.2: Drawing of Aguateca Stela 5 showing the ruler K'awiil Chan K'inich, also known as Ruler 4, wearing the quadripartite scalloped garment decorated with FTDKs (adapted from Houston and Mathews 1985: 25, fig. 19).

G
 1 A portion of a FTDK, like those shown on the scalloped garment pictured on Aguateca Stela 1, suggests that the same garment is worn by Dos Pilas Ruler 4 on both stelae.
 2
 3
 4

A number of sites in the region around Dos Pilas, known as the Pasión and Petexbatun, are proposed as having been integrated into the Dos Pilas kingdom after A.D. 700 (Eberl 2007: 66). Based on a reading of glyphs on monuments at these sites dated prior to *K'atun* 9.10.0.0.0 or A.D. 633, Eberl (2007: 74) concludes that rituals were restricted to stone-binding (*k'altuunn*) but that later, in addition to stone-binding, there is also mention of the scattering of blood or incense. Like stone-binding, scattering is a Period Ending ritual (Jones and Satterthwaite 1982: 31; Thompson 1950: 193-194; Fash 1991: 33; Taube 1988: 192; Coggins 1980: 732, 737; Harrison 1999: 169; Rice 2004: 133; Grube and Stuart 1987: 2). However after A.D. 633 scattering is the most frequent Period Ending ritual recorded at the centres controlled by Dos Pilas (Eberl 2007: 74). The display of FTDKs at Dos Pilas and Aguateca for Period Ending hand scattering rites is significant because Tikal Altars 7 and 10,

emblazoned with representations of FTDKs, are paired with stelae which depict the ruler scattering drops of incense or blood. Stela 22 (paired with Altar 10) also mentions the binding of stones, and the altar paired with this stela is represented as bound by rope overlaid by FTDKs. It is possible that the Period Ending act of stone-binding would have occurred together with hand scattering as part of the rituals performed as a means of materially negotiating temporal completion (Coe and Van Stone 2001: 63-64). This proposal is supported by Martin and Grube (2008: 14) who argue that such rituals ‘replicated primeval acts that first set the universe in motion’ (Martin and Grube 2008: 14)

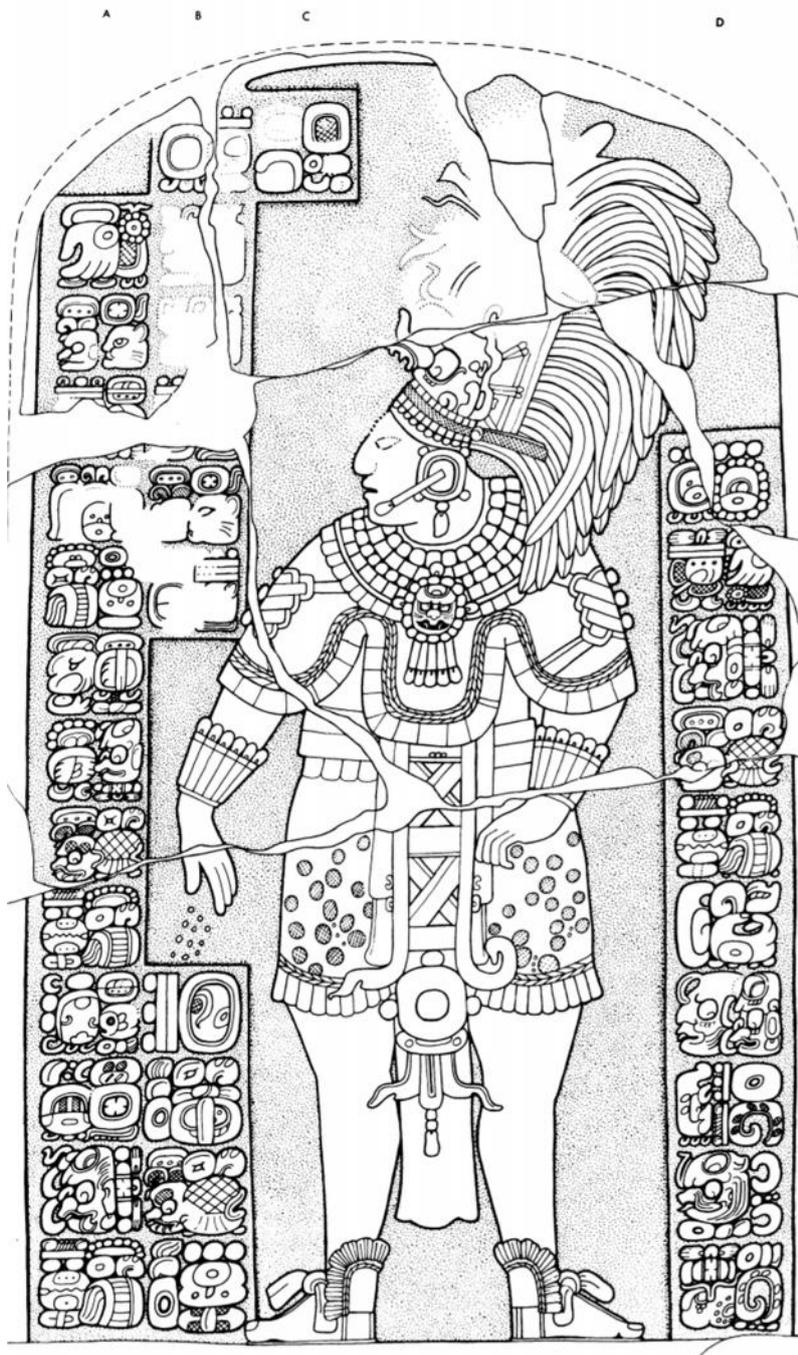


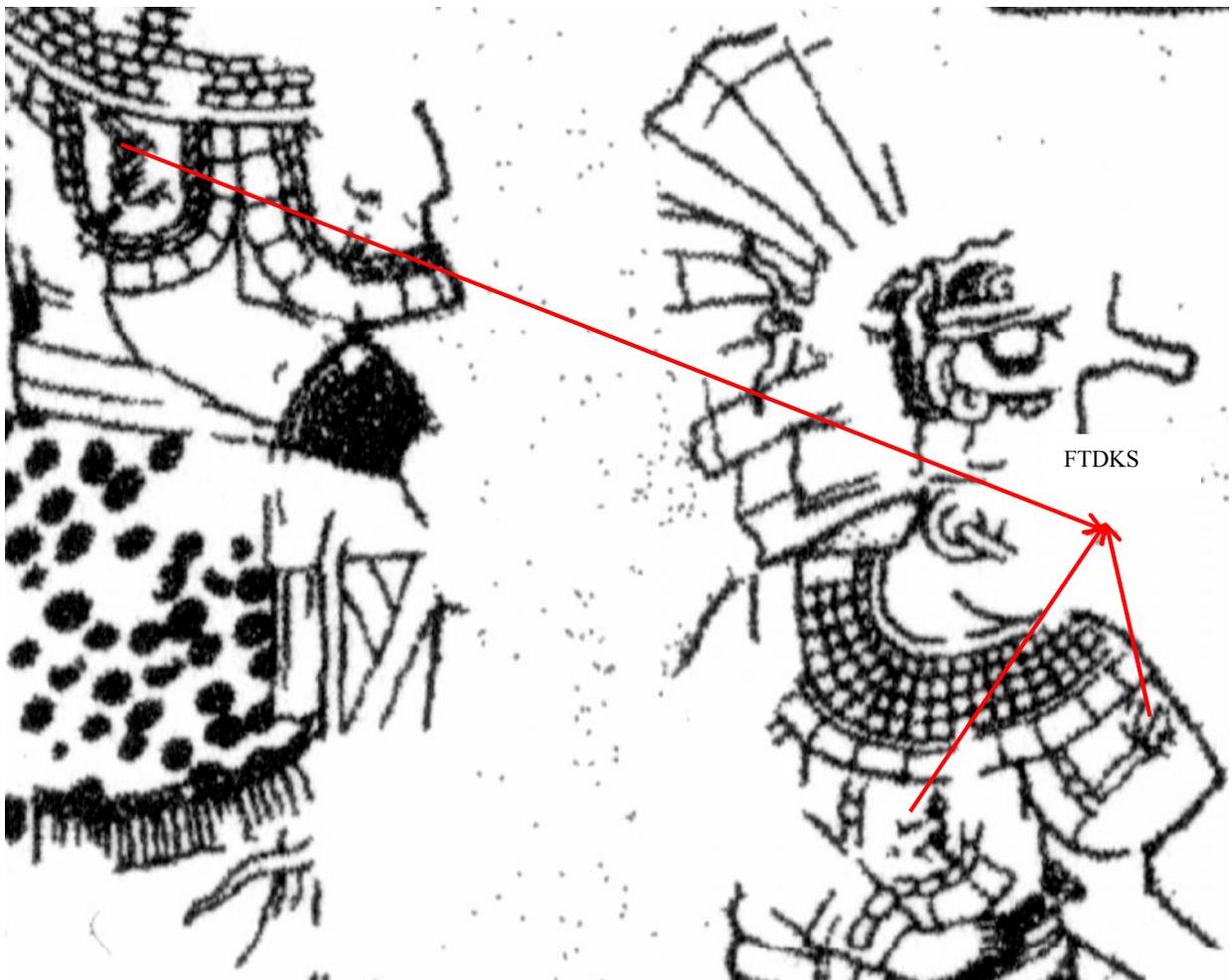
Fig.12.3: Drawing of Aguateca Stela 1 (after Graham 1967: fig.3) showing the Dos Pilas Ruler wearing a quadripartite scalloped poncho-like garment decorated with two Flat Two-Dimensional Knots. This ruler is depicted in the Period Ending hand scattering gesture. The monument commemorates a *Lajuntun* Period Ending (Graham 1967: 6, fig.3).

The site of Aguateca is proposed as having been under the control of Dos Pilas and to have functioned as its twin capital (Martin and Grube 2008: 61-62; Eberl 2007: 66). Dos Pilas rulers carried out public rituals and raised monuments at Aguateca, hence the depiction of K'awiil Chan K'inich on Aguateca Stela 1 and 5 in the act of ritually scattering drops of blood or incense at the Period Ending (Martin and Grube 2008: 61-62; Houston and Mathews 1985: 24; Eberl 2007: 67-75). Dos Pilas Panel 19 offers a window into the kind of rites which may have led up to and culminated in scattering drops. The date for this panel is given as somewhere between AD 729-740 (Martin and Grube 2008: 60-61); the breakage of this panel into pieces had damaged the glyphs recording a Long Count date. However, given that in the other three stelae a scattering event is the focal ritual (although not performed here by the ruler), it is possible that this is a Period Ending monument.



Fig 12.4: Drawing of Dos Pilas Panel 19 (after Stuart 2005: fig.112, 137) showing a bloodletting ritual overseen by Dos Pilas Ruler 3 and another lord shown holding in his hand a bloodletter which has been used to perforate the penis of a young Dos Pilas prince, understood to be K'awiil Chan K'inich, pictured on the lintel (Martin and Grube 2008:60-61). Both Ruler 3 and the lord holding the bloodletter wear quatrefoil poncho-style garments with attached FTDKs

The representation on Panel 19 depicts two individuals wearing the FTDK-decorated poncho for a scattering event. The two individuals are Ruler 3 and another person described as a ritual specialist on account of the bloodletter, which has been used to perforate the penis of the young Dos Pilas prince pictured on the lintel (Martin and Grube 2008: 60-61). The ritual specialist holding the bloodletter is shown kneeling before the prince, whose blood falls in drops similar to those shown falling from rulers' hands in scattering scenes pictured on monuments across the Maya world. The name of the individual holding the bloodletter appears in the caption above him together with a particular title which has been interpreted as 'itz'at' meaning 'artist, sage, wiseman' (Looper 2003: 17).



12.5: Detail of Dos Pilas Panel 19 showing the FTDKs worn as items attached to scalloped garments.

Stuart (Stuart 2005: 133-137) however has questioned this interpretation and notes that the title, itz'at', is commonly referred to as the banded bird title, and accompanies the names of

the Paddler Deities. The act of bloodletting, which the kneeling lord holding the bloodletter is clearly involved in, is an act which gives birth to, or plays a part in, the process of conjuring the Paddlers. Therefore the Paddlers are often shown in blood scrolls above images of rulers in the act of hand scattering (Schele and Mathews 1999: 414).Looper (2003: 17) notes that there is a powerful connection between the Paddlers and bloodletting, and he describes scattering as a common event performed before monuments. The substance scattered would have been a mixture of blood and incense. He adds that stela images illustrate the act of scattering drops of incense and blood onto incense burners, where the mixture would have provided symbolic nourishment for the supernatural beings accessed through supernatural openings located in the stela or altar (Looper 2003: 15; Love 2005: 7-15).

A final point worth noting is that a pull-over garment similar to the garment decorated with FTDKs and worn at Dos Pilas and Aguateca is worn by Maya women today. The quadripartite structure of a modern *huipil* blouse from Chichicastenango can be best appreciated when the garment is laid out flat. From the central circle or opening for the head, an embroidered design representing solar rays fans outwards. The central circle and rays represent ‘the sun in the centre of the sky (at the zenith)’ (Holsbeke and Montoya 2003: fig.4.62, 118) whilst small black circles on either side mark the points where the sun rises (east) and sets (west) (Holsbeke and Montoya 2003: fig.4.62, 118). Today, when a Maya woman inserts her head through the central opening of her *huipil*, she orients herself at the centre of the world. Standing at the centre or axis of the world she stands between heaven and the underworld (Holsbeke and Montoya 2003: 82). Similarly, the four-petal quatrefoil garment worn by the rulers represented at Dos Pilas and Aguateca possibly also orients them at the centre of the cosmos, at the Three Stone Place portal and place of Creation. This interpretation accords with the value of the quatrefoil motif as signifying the ancient Maya word ‘*ol/yohl*’ meaning ‘entrance’, ‘door’, ‘hole’ as well as the crack in the Creation turtle’s back (Schele and Mathews 1999: 414; Houston, Stuart and Taube 2006: 187-188).

The wearing of the scalloped poncho-style garment decorated with FTDKs at Aguateca was the prerogative of Dos Pilas rulers as part of Period Ending scattering events. The knots through association would have accrued meanings to do with temporal renewal experienced or materially manifested through bloodletting, scattering and contact with ancestors. The structure of the garment on which the FTDKs are displayed may have been meaningful and it

is proposed that the shape conformed to a quatrefoil. As such, the ruler wearing the garment positioned himself at the centre of a quatrefoil entrance and thereby represented himself as both a Creation centre and world axis. The relationship between Dos Pilas and Tikal is also worth bearing in mind considering the very visible display of FTDKs at Tikal. The manipulation of the FTDK at Dos Pilas may reflect the appropriation of a ritual format for Period Endings from Tikal. One question that comes to mind is whether the FTDK was a Tikal symbol exported to other sites from Tikal or was it a symbol shared by the Classic Maya more broadly?

12.2 FTDKs Displayed as Motifs on *Huipiles*

12.2a Yaxchilan Lintel 25 (Fig. 12.6)

Yaxchilan Lintel 25 is a door lintel from Temple 23 understood to be the house (*yotoot*) of Lady K'abal Xook, principal wife of the Yaxchilan ruler Itzamnaaj Bahlam III. Lintel 25 depicts Lady K'abal Xook conjuring a vision serpent from whose mouth emerges a warrior figure holding a shield and spear. Lintel 25 commemorates an accession (Martin and Grube 2008: 125); however, Tate (1992: 120) mentions that at Yaxchilan, accessions were celebrated at Period Endings and that Period Ending costume was worn for these occasions. Therefore the elaborate textile, decorated with Flat Two-Dimensional Knots inset into quatrefoils worn by the kneeling figure of Lady K'abal Xook in the context of Lintel 25, is possibly an example of a garment designed and worn for Period Endings. An important feature of Period Ending monuments at Maya sites is the display of blood insignia or symbolism; however, at Yaxchilan, the allusion to bloodletting was dropped in favor of explicit portrayal of the Period Ending bloodletting act (Tate 1992: 88-89). Therefore on Lintel 25 the vision serpent is shown coiling above a bloodletting bowl filled with bloodletting paraphernalia. The bloodletting bowl from which the vision serpent rises points to the fact that letting of blood preceded the vision itself (Tate 1992: 88-91). Bloodletting and vision scenes at Yaxchilan are associated with the emergence of ancestors from entrances represented as serpent maws. Yaxchilan Lintel 25 graphically depicts the form and content of rituals involving the letting of blood and the conjuring of ancestors.

The quatrefoil shapes which decorate the *huipil* worn by Lady K'abal Xook in Lintel 25 would have been cut out from woven lengths of cloth, creating a negative space into which Flat Two-Dimensional Knots could have been attached. This process is noted for textiles

attached to staffs (known as flapstuffs) at Yaxchilan. Flapstuffs depicted on Yaxchilan monuments show the negative shapes from the cut out quatrefoil forms (Tate 1992: 94-95) and also what appear to be twisted cords attached or inset into the cutouts (Tate 1992: fig. 45).

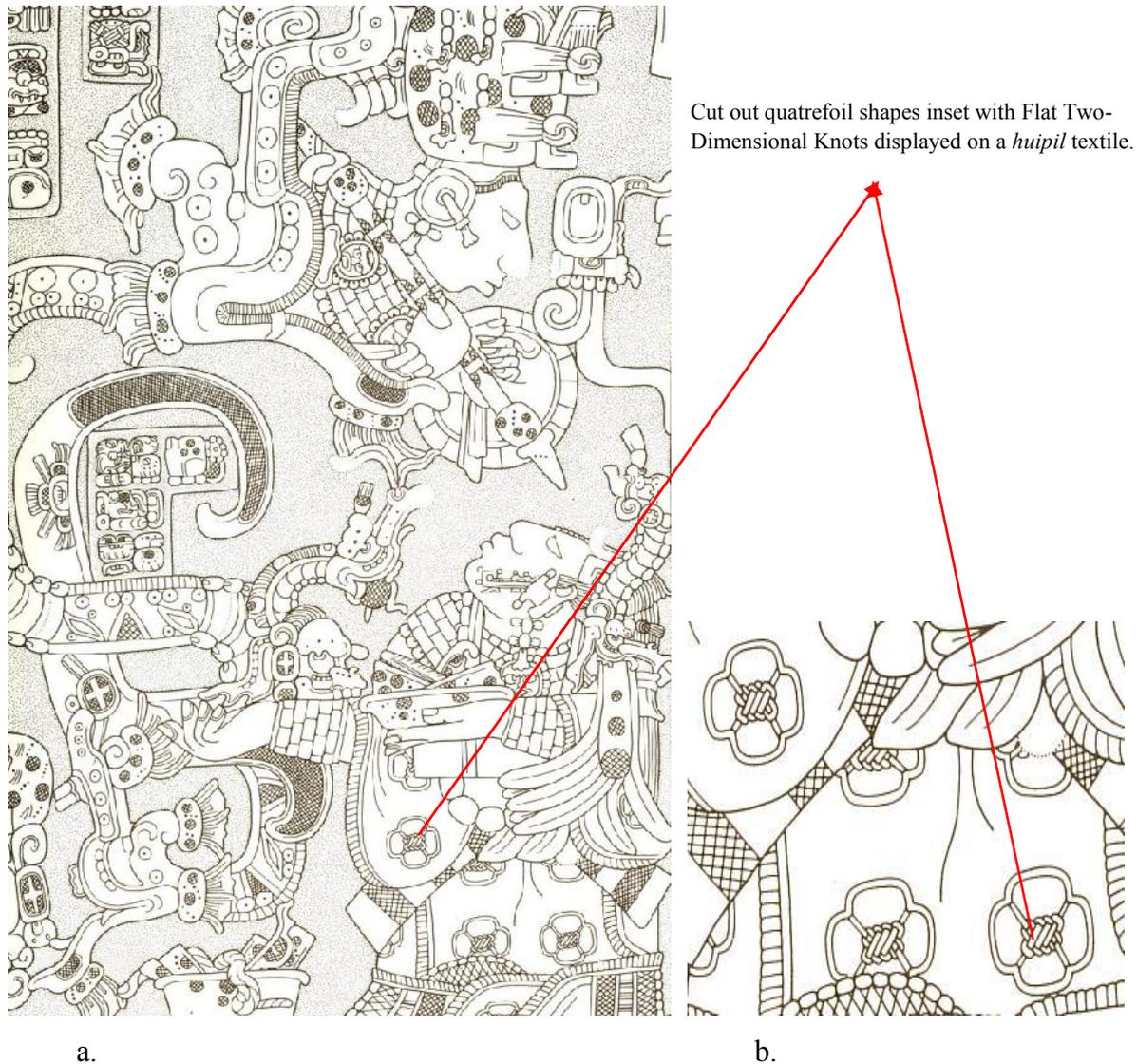


Fig.12.6: a. Drawing of Yaxchilan Lintel 25 (detail from Graham and Von Euw 1977: 3:55) showing an elaborate textile decorated with cut out quatrefoil shapes in-fixed by Flat Two-Dimensional Knots. b. Detail from Yaxchilan Lintel 25.

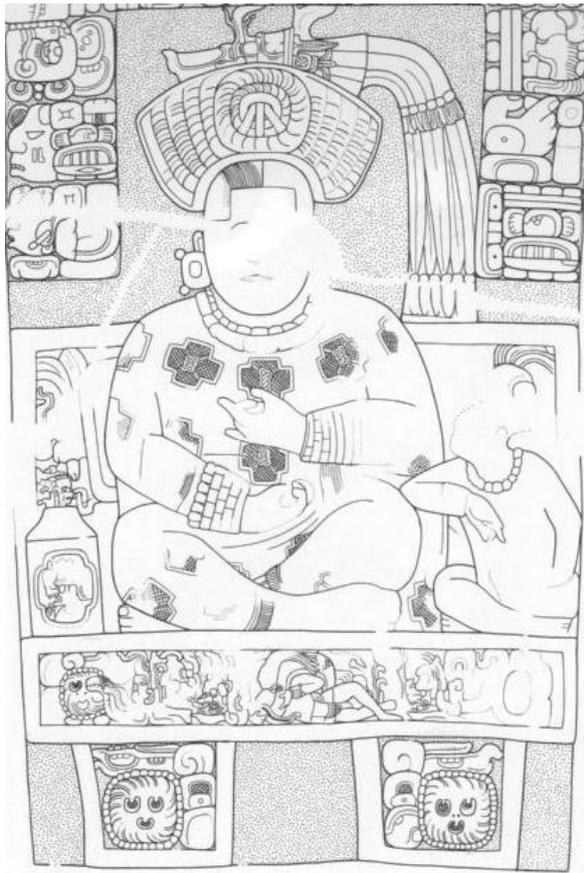
The quatrefoil as a symbol has been discussed in detail in Chapters Nine and Ten. As a sign for the opening (Josserand 2002: 137-138) at the centre of the Creation Turtle's carapace, where the three stones of Creation are set and bound, the quatrefoil demarcates the creative centre, a place of emergence of the Maize God and ancestors. The FTDK, in its marking of the centre of the Creation opening, becomes a symbol or sign for the centre and the complex meanings attributed to the centre. The display of this particular knot, the visual history of

which involves the binding of places understood as supernatural entrances, at the centre of a quatrefoil motif delivers the message in an oblique form.

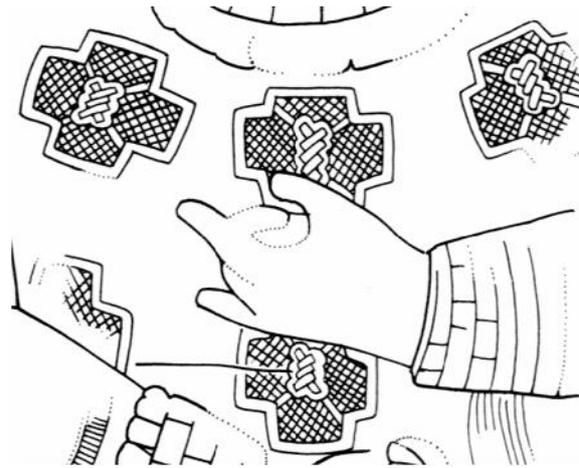
12.2b Piedras Negras Stela 3 (Fig. 12.7)

Piedras Negras Stela 3 depicts the queen, Lady K'atun Ajaw, with her three-year-old daughter seated on a throne (Martin and Grube 2008: 146-147); Lady K'atun Ajaw wears a *huipil* decorated with *k'an* cross motifs. The centre of each motif is marked by a FTDK. The *k'an* cross is described as 'a kind of X marks the spot symbol of rebirth and Creation' (Freidel, Schele and Parker 2001: 94; Kappelman 2002: 72-73; Schele 2002: 27-28; Guernsey and Love 2005: 42). This description is supported by a painting on the interior of a Late Classic bowl depicting the Maize God rising out of a crack in the Creation turtle's back marked by a *k'an* cross sign (Taube 2002: fig.10.25c). Taube however also notes that *k'an* crosses on censers identify the crosses with fire and centrality – concepts linked to the Three Stone Place Creation Hearth (Taube 2002: 312-315).

Lady K'atun Ajaw wears a bloodletter in her headdress and sits on a throne, the supporting legs of which are marked by glyphs which read 'Flower of the Black-Earth Place'. This name is believed to refer to the Five Flower Place, or Flower Mountain of Maya Creation mythology (Looper 2003: 71; Clancy 2009: 86-90). The throne is therefore possibly a Creation seat or else the inscription on the throne is telling us that this Lady is seated at the place of Creation. The stone slab which comprises the seat is carved with the image of a figure holding a vision serpent from whose maw emerges a deity resembling God K, the God of lineages and succession (Milbrath 2002: 119-142; Milbrath 1999: 230). Looper (2003: 71) concludes that it is a vision serpent like that conjured by Lady K'abal Xook (Clancy 2009: 89). Stela 3 is carved on its four sides; the image of Lady K'atun and her daughter takes up the back face of the stela. The text on one side of the stela concludes with the mention of the fourteen *K'atun* stone-binding of Lady K'atun's husband, Yo'nal Ahk II, at C17 – 18D (my reading – see Stuart and Graham 2003: fig. 9:28) in the company of the paddlers at D19-D20 (Clancy 2009: 86). The stela also commemorates the accession of the ruler, Lady K'atun's husband (Clancy 2009: 86). The fourteen *K'atun* dedicatory date of the stela (9.14.0.0.0) (Clancy 2009: 86) can be intuited by the reading of Lady K'atun Ajaw's hand sign which replicates the hand sign glyph for the Period Ending.



a.



b.

Fig. 12.7: a. Drawing of Piedras Negras Stela 3 showing Lady K'atun wearing an elaborate *huipil* decorated with *k'an* cross motifs in-fixed by FTDKs (detail of Stuart and Graham 2003: fig.9:24). b. Detail of the *huipil* worn by Lady K'atun (adapted from Stuart and Graham 2003: fig.9:26).

12.2c La Florida Stela 9 (12.8)

La Florida Stela 9 depicts a female in the act of hand scattering. Normally an act reserved for male rulers, the La Florida example of a female hand scattering is only one of three or four examples known to exist in the corpus of Maya imagery (Clancy 2009: 76). Clancy identifies hand scattering as a divination ritual 'aimed at invoking the Creation place' (Clancy 2009: 76).

The object onto which the scattering of drops is directed is a tied bundle on which another tied object, possibly a lidded dish or else two dishes placed lip to lip, is balanced. The actual knot which fastens the bindings on the dish functions in Maya hieroglyphs as a sign for accession (Tate 1992: 68; Montgomery 2002: 119); however this sign is alternately read as 'bless' (Barrera Vasquez 1980: 237; Macri and Looer 2003: 215). The hand scattering act tells us that this is a Period Ending ritual. Tate (1992: 68) observes that at Yaxchilan, women hold bundles at accessions, Period Endings and accession anniversaries of ancestral rulers and that the bundles would have contained bloodletting bowls with bloodletting

equipment. The remnants of a cloth bundle excavated at Tikal held two cache dishes placed lip to lip containing a number of items including obsidian blades, snail shells, snake skeletons and turtle shells (Tate 1992: 68).

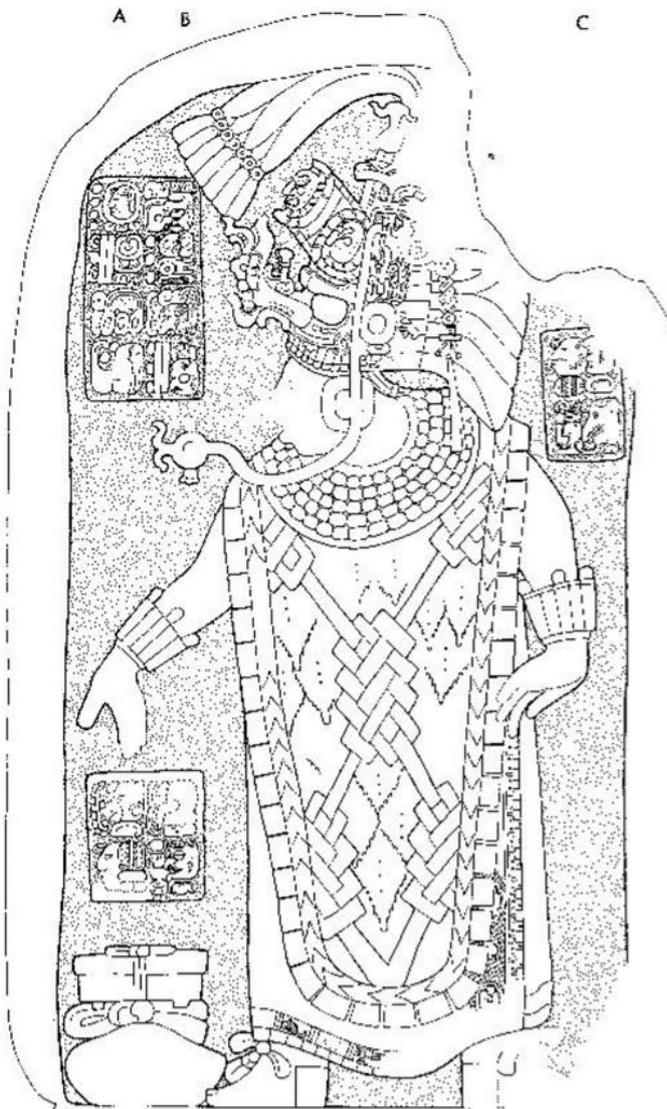


Fig. 12.8: Drawing of La Florida Stela 9 showing a royal female scattering. She wears a chasuble with large FTDKs integrated into the design (after Graham 1970: fig.9,b).

It is possible that La Florida Stela 9 commemorates an accession at the Period Ending. Stela 9 was dedicated at the end of a *K'atun* (Graham 1970: 446) and the costume worn for this Period Ending event is a chasuble decorated with very large FTDKs. The knots are connected together to form a mesh of knots and the chasuble is worn over a *huipil* decorated with quatrefoils. It is possible but not certain given the state of preservation of this monument that FTDKs were in-fixed at the centre of the quatrefoils.

Summary

Yaxchilan Panel 25, Piedras Negras Stela 3 and La Florida Stela 9 illustrate that FTDKs were important motifs on women's clothing worn for Period Ending rituals. The location of FTDKs at the centre of quatrefoils and *k'an* cross motifs identifies these motifs as constitutive of the meaning ascribed to the FTDKs. The quatrefoil motif, understood to represent an entrance connecting two worlds or realities, suggests values for the knot to do with supernatural entrances and visions involving the emergence of ancestors or supernaturals. The *k'an* cross as symbol for the centre and fire reiterates that the FTDK is a knot at the centre of Creation, at the place of the Three Stone Hearth.

The dress itself, as a ceremonial or ritual garment worn for Period Endings, links the knot to the completion of time, and to renewal, mediated in terms of a recall of Creation. The reference to the place of Creation, 'Flower of the Black-Earth Place', on the Piedras Negras Stela 3 throne as well as the representation of a vision serpent, all provide additional information on the way in which Period Endings were conceived by the Maya as junctures for recall of the past. It is possible that these temporal junctures played an important role in concepts of rule and this would account for the pattern in commemoration of accession at Period Endings. The question arises whether, like Tikal, the FTDKs worn as Period Ending costume complemented the representation or display of FTDKs in other locations, such as a fastening for bound stones. Piedras Negras Stela 3 describes the binding of a stone in the company of the Paddlers, illustrating the Creation context for the binding event. Given the findings of this research, it is within such a Creation context that I would expect FTDKs to be displayed.

12.3 FTDKs Displayed as Motifs on Loincloths

12.3a Group IV Tablet of the Slaves (Fig. 12.9)

The Tablet of the Slaves depicts the Palenque ruler K'inich Ahkal Mo' Nahb' III seated on two bound captives (Martin and Grube 2008: 173). Positioned between his parents, who are seated on deities, he is pictured receiving from a headdress from his father and from his mother a flint and shield (Martin and Grube 2008: 173). The Tablet of the Slaves was commissioned by Ahkal Mo' Nahb's military captain, Chak Suutz', who is named here as both 'lord of fire' and *sajal* (Martin and Grube 2008: 173). The tablet lists multiple military

victories for this captain (Martin and Grube 2008: 173) and it is possible that the captives on which the ruler is seated were taken during one of Chak Suutz's military campaigns.

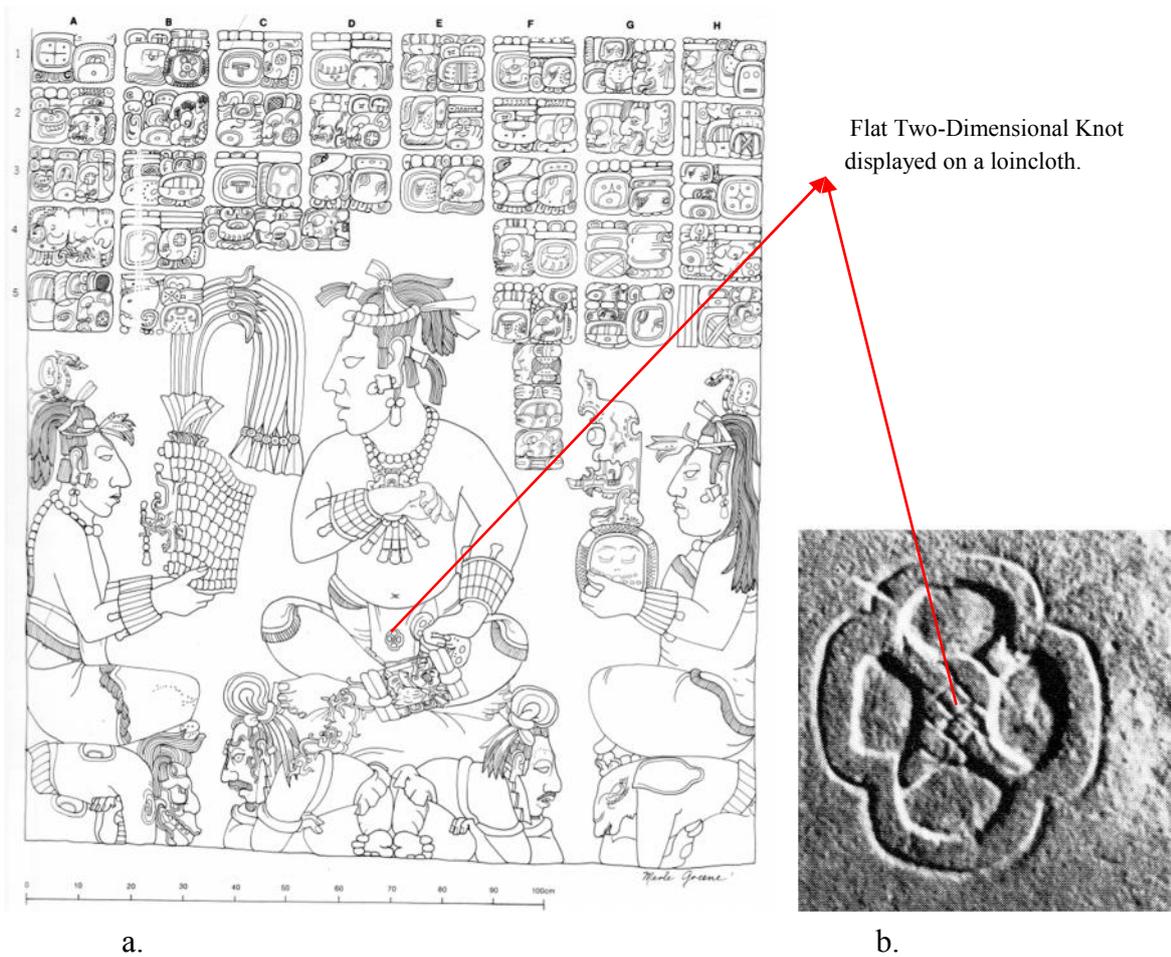


Fig. 12.9: a. Drawing of the Tablet of the Slaves showing the Palenque Ruler Ahkal Mo' Nahb' III wearing a loincloth decorated with a single quatrefoil in-fixed by a FTDK at its centre (after Greene Robertson 1991: fig.229). b. Photograph of the quatrefoil motif with inset Flat Two-Dimensional Knot represented on the Tablet of the Slaves (after Robicsek 1975: fig.184 b)

An identical arrangement of a seated ruler (K'inich K'an Joy Chitam II) receiving the drum major crown and flint shield from his parents is represented on the Palace Tablet. The Palace Tablet is a throne-back inscribed with a lengthy inscription situating 'K'an Joy Chitam II within the dynastic progress of his father and elder brother' (Martin and Grube 2008: 171). The flint and shield together appear in accession programs at Palenque (Schele 1979: 8) and intimates that the occasion for the wearing of the loin cloth decorated with a single FTDK at the centre of a quatrefoil in the context of the Tablet of the Slaves is accession. However in the Tablet of the Slaves, Ahkal Mo' Nahb III holds in his hand an incense bag (Schele 1974: fig. 16, 25, 27) and his clothing is described by Merle Greene Robertson as bloodletting attire (Greene Robertson 1991: 67), suggesting that he may have let blood and ritually scattered the

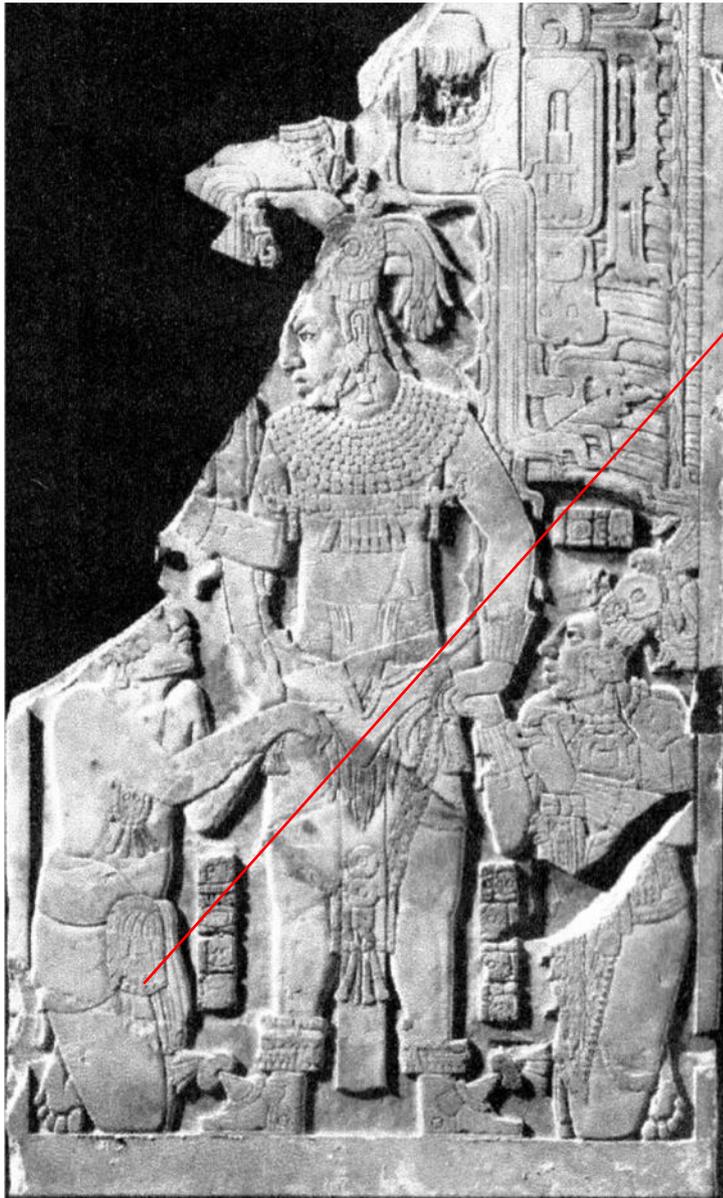
blood mixed with incense. The incense bag appears with hand scattering gestures in Maya iconography (Love 2005: 14) and given that hand scattering is read as a Period Ending sign, it is possible that the ritual depicted on the Tablet of the Slaves is a Period Ending ritual at which accession was commemorated.

12.3b Stone Panel from the Temple XIX Pier (Fig. 12.11)

On the Temple XIX Pier, the Flat Two-Dimensional Knot is displayed at the centre of quatrefoils arranged as a border design to a loincloth worn by a lord pictured kneeling beside the Palenque ruler K'inich Ahkal Mo' Nahb (Stuart 2005: fig.4, 45-57). Stuart (2005: 21), describes the ruler's 'fantastically designed costume' which similar to carnival costumes incorporates an extension (probably attached to a back-rack device), constructed as an open bird's mouth within which K'inich Ahkal Mo' Nahb stands. The lord wearing the FTDK is one of two attendant kneeling figures shown assisting the ruler. The identity of each lord is conveyed via captions associated with each figure. The caption tagged to the lord wearing the FTDK and 'who supports the lower beak of the king's costume' (Stuart 2005: 32), names him as both a junior lord and maternal uncle of the ruler (Stuart 2005: 32-33).



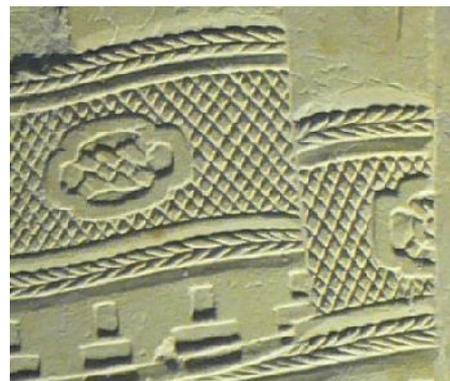
Fig. 12.10: Photograph of Palenque Temple XIX Pier showing an attendant lord holding up the lower beak of the bird costume worn by the Palenque ruler K'inich Ahkal Mo' Nahb (after Stuart 2005: 46).



a.

Flat Two-Dimensional Knots appear at the centre of quatrefoil motifs on a loincloth.

Fig. 12.11: a. Photograph of Palenque Temple XIX Pier (after Stuart 2005: fig.4). b. Detail of Palenque Temple XIX Pier showing quatrefoil motifs in-fixed by FTDKs displayed as part of the border design on the loincloth worn by the attendant kneeling to the left of K'inich Ahkal Mo' Nahb (Robinson 2011).



b.

Positioned at the centre of the open maw, the ruler is situated within a symbolic entrance and therefore possibly in the throes of a vision. A number of features of the bird identify it with Palenque's emblem glyph. Palenque's emblem glyph is composed of an image of a bird with the lashed, hooded eyes and serrated beak similar to the bird pictured on the Temple XIX Pier. Stuart (2005: 21-23) notes the resemblance and points out that this bird emblem glyph is part of several personal names of important historical personages at Palenque. One of these personages happens to be Palenque's mythical founding ancestor who took the title *k'uhul matawiil*. The bird glyph is seen to refer to *matawiil*, a mythic location and possible alternative name for the place of Creation (Stuart 2005: 21-23; Martin and Grube 2008: 159).

Therefore the bird maw, into which K'inich Ahkal Mo' Nahb has entered could, in addition to being an emblem glyph, also refer to a place linked to beginnings (i.e. Creation) at Palenque.

That scattering and bloodletting may have taken place before the event pictured on this pier is alluded to by the incense bag which the second kneeling lord clutches in one hand (Stuart 2005: 30). This lord is named as both a 'fire lord' (a title which Stuart suggests was both militaristic and political) and keeper or guardian of books (Stuart 2005: 30-32, 123-125). However Stuart suggests that the title 'ya-ja-K'UH-HUUN-na' reading 'book keeper' could be alternatively understood as a reference to court officials who functioned as guardians and overseers of the material goods kept in palaces (Stuart 2005: 32; Jackson and Stuart 2001).



Incense bag

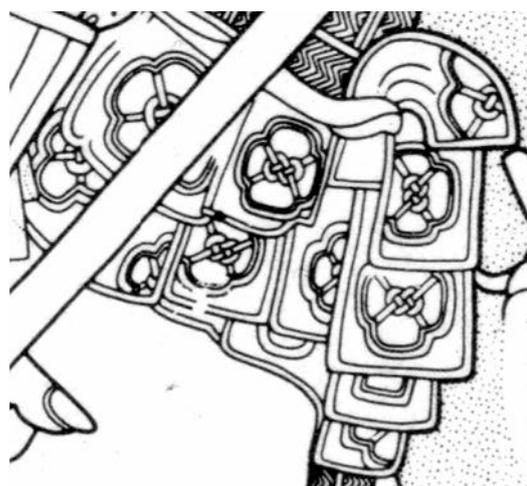
Fig.12.12: Detail of kneeling lord pictured in the act of steadying or supporting the ruler (after Stuart 2005:49).

12.3c Yaxchilan Lintel 24 (Fig. 12.13)

Yaxchilan Lintel 24 is another door lintel from Temple 23 and depicts Lady K'abal Xook pulling a thorn-studded rope through her tongue while her husband, Itzamnaaj Bahlam III, illuminates the scene with a fiery torch (Morris and Karasik 2003: 82-83; Martin and Grube 2008: 125). He wears a loin cloth decorated with quatrefoil motifs marked at the centre by FTDKs. A third lintel, Lintel 26, completes the group of three door lintels and shows Lady K'abal Xook handing a Water Lily Jaguar headdress to her husband (Schele and Miller 2006: Fig.V.2, 211). The three lintels — 24, 25 and 26 — illustrate three separate acts: the letting of blood, the conjuring of ancestors, and the presentation of a Water Lily Jaguar headdress. In earlier chapters I discuss these acts as they appear in monuments, where they are accompanied by the display of FTDKs. (At Tikal, however, the Water Lily Jaguar suit is worn by the ruler, rather than being presented to him).



a.



b.

The rope which Lady K'ab'al Xook passes through her tongue in Lintel 24 is reminiscent of the rope which bound Tikal altar stones. The ancient Maya word for 'binding' (*k'al*) as well as appearing in the phrase '*k'altuunn*' or 'stone-binding' can also be found in the phrase '*k'al mayij*' which reads, according to Stuart (2005: 154) 'binding of the sacrifice'. This binding phrase is interpreted by Stuart as referencing 'certain types of bloodletting including the passing of cords through the tongue' (Stuart 2005: 154). It would appear that the offering of blood was itself a binding act. Blood was a binding entity and the letting of blood at stone entrances, places where binding took place, and may have extended the binding metaphor negotiated through literal acts of binding of monuments or structures.

Summary

In all three monuments the display of the FTDKs conforms to a pattern. The knots are all depicted at the centre of quatrefoil motifs decorating loincloths. In the context of Palenque XIX Pier, the presentation of the FTDK at the centre of a quatrefoil motif, in a scene in which the ruler is shown entering a stylized entrance, inserts the FTDK in a dialogue which is about access to ancestors and the flowery mountain abode where they reside, represented by the temples in which the rituals took place. In the imagery of both Yaxchilan Lintel 24 and 25, it is apparent that the bloodletting and vision quest aimed at accessing important ancestors continues to be a context for wearing the FTDK. Although the dates for the three monuments are not Period Ending dates, there are clues that the carved images depict rituals which would have taken place at the Period Ending. For instance in the representation of the Palenque Group IV Tablet of the Slaves, the incense bag held by the ruler links the event to Period Ending hand scattering rites, yet the crown and shield points to accession. Similarly, in the representation of Palenque XIX Pier, one of the lords assisting the ruler clutches an incense bag to his chest, indicating that the scattering of blood and incense on a censer or fire may have preceded the vision itself. I suggest that both monuments commemorate accession at the Period Ending, or else that Period Ending rituals were integral to concepts of rule amongst the Maya and that symbols of rule were displayed at this time.

12.4 FTDKs on Footwear

12.4a Stone Panel from the Temple XIX Pier (Fig. 12.16)

Temple XIX Pier, as described above, depicts the Palenque ruler K'inich Ahkal Mo' Nahb standing within the open maw of the Palenque bird emblem glyph, a visual referent to the

matawiil Creation location. A single *k'an* cross with inset Flat Two-Dimensional Knot is depicted on the side of each sandal worn by this ruler. As is the case with the FTDKs depicted at the centre of *k'an* crosses and quatrefoils on *huipiles* and loincloths, the cord left over from the tying process touches the space between the arms or petals of the *k'an* motif forming an X. The crossed-band X shape is often shown in-fixed within quatrefoil and *k'an* cross *huipil* motifs illustrated on monumental art (Looper and Tolles 2000: Plates 3, 5, 10, 17, 28, 30). This X shape comprising crossing bands is a hieroglyphic sign with a number of related meanings.

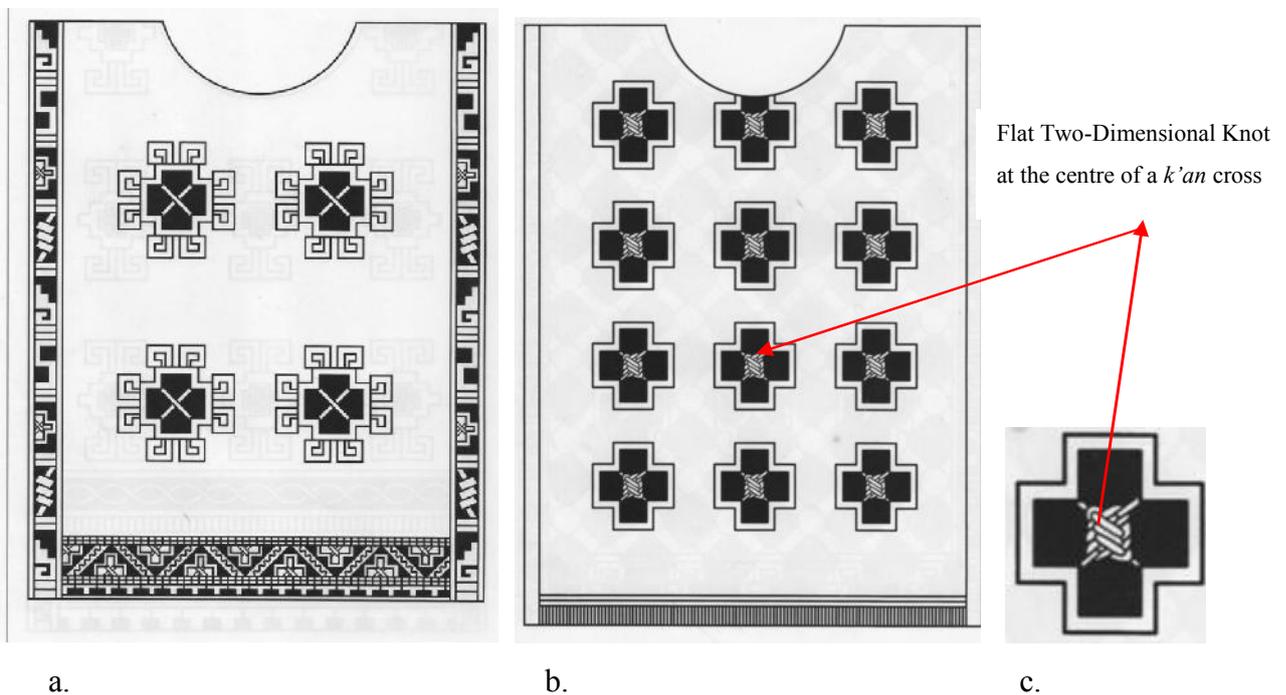


Fig. 12.14: a. Reconstruction drawing of an El Cayo *huipil* decorated with smoking *k'an* crosses in-fixed by crossed bands (after Looper and Tolles 2000: Plate 30). b. Reconstruction drawing of a *huipil* decorated with *k'an* crosses in-fixed by FTDKs depicted on Piedras Negras Stela 3 (after Looper and Tolles 2000: Plate 6). c. Detail of FTDK pictured on Piedras Negras Stela 3 (detail from Looper and Tolles 2000: Plate 6).

This X shape also appears as an in-fix in many Maya hieroglyphic main signs, such as the sign for temporal completion (Macri and Looper 2003: 226-227). On its own, the X-shaped crossed band functions as a locative transcribed as '*tan*', '*kat/k'ät*' or '*ta*', meaning 'at, on', and 'in the midst' or 'presence of' (Bricker 1986: 212; Closs 1986: 239f.; Montgomery 2002: 222; Macri and Looper 2003: 200).

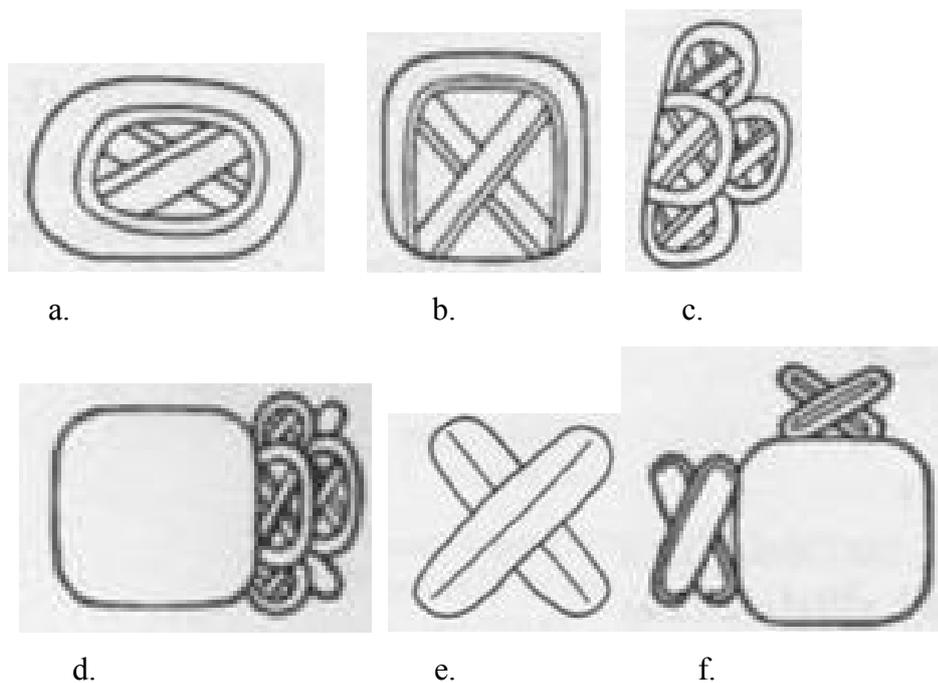


Fig. 12.15: Variations of the crossed band in glyphic contexts. a. and b. The Crossed bands as a glyph with the meaning ‘at, on, in the midst, in the presence of’ (Macri and Loooper 2003: 200). c. and d. Crossed bands as an in-fix for the main sign, meaning ‘completion of the half period’ (i.e. *Lajuntun*) (Macri and Loooper 2003: 226). e. and f. Crossed band as a main sign and as an affix to a main sign, both with the meaning ‘to manifest’ (Macri and Loooper 2003: 228).

This sign is also transcribed as ‘*jal*’ meaning ‘to manifest’ (Montgomery 2002: 106; Kettunen and Helmke 2010: 98). In instances where it functions as the word ‘manifest’, it is associated with the 4 *Ajaw* 8 *Kumk’u* Creation or Era events (Looper 2002a: 184). It is evident that the crossed bands sign has multiple embedded meanings and these are significant when trying to understand the shape and form of the FTDK in-fixed within *k’an* cross and quatrefoil textile motifs. In these instances the FTDK operates rather like a glyphic in-fix with the quatrefoil or *k’an* cross functioning as the main sign.

When the FTDK replaces the crossed band, in the context of quatrefoil or *k’an* cross motifs, I suggest that we are being given specific information about where and how this knot is situated in space and time. That it is located at the middle of, or centre of, something is clear but I also think we are being fed clues regarding the Maya concept of Creation in terms of binding and knotting.



a.



b.

Fig. 12.16: a. Photograph of stone panel from the Temple XIX Pier (Stuart 2005: fig.4). b. Photograph of the Flat Two-Dimensional Knot depicted on the sandal worn by the standing ruler from the Temple XIX Pier (Robinson 2011).

12.4b Piedras Negras Stela 8 (Fig. 12.17)

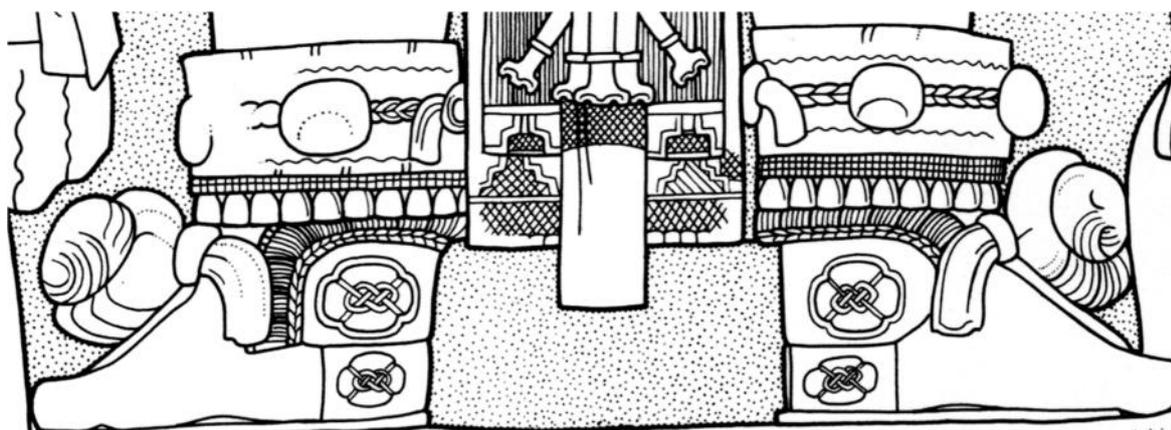
Piedras Negras Stela 8 depicts the ruler K'inich Yo'nal Ahk II in a captive taking scene. Piedras Negras Stela 8, dedicated at a *Jolajuntun*, is a Period Ending stela (Clancy 2009: 103). The Piedras Negras ruler, K'inich Yo'nal Ahk II, is pictured dressed as a warrior, flanked by two rope-bound captives. One of the captives has been identified as a *sajal* under Itzamnaaj Bahlam III, the Yaxchilan ruler pictured on Yaxchilan Lintel 46 (Martin and Grube 2008: 146-147; Clancy 2009: 108).



Fig. 12.17: a. Drawing of Piedras Negras Stela 8 (after Stuart and Graham 2003: fig. 9.44). b. Detail from Piedras Negras Stela 8 showing the Piedras Negras ruler's sandals, each displaying two quatrefoil motifs in-fixed by FTDKs (adapted from Stuart and Graham 2003: fig.9.44).

a.

b.



Yo'nal Ahk wears a Water Lily Jaguar (Clancy 2009: 107) with crowning water lily atop his headdress. Cradled in the jaguar's mouth is a sign for 'sky' (Clancy 2009: 107) reiterating that the beast is cosmic. Two FTDKs are pictured on each of his sandals and in each case the knot is located at the centre of the quatrefoil.

12.4c Yaxchilan Lintel 46 (Fig. 12.18)

Yaxchilan Lintel 46 depicts Itzamnaaj Bahlam III in warrior gear with a captive at his feet. The poor state of preservation of this lintel means that its date has been reconstructed from what glyphs remain intact or readable. Lintel 46 is one of three doorway lintels from Temple 44, a structure dubbed as Itzamnaaj Bahlam's war memorial (Martin and Grube 2008: 123-

124). In each of these lintels, Itzamnaaj Bahlam is pictured grasping the hair of a captive who kneels in submission (Tate 1992: 118). In the context of Lintel 46, a FTDK is pictured at the centre of a *k'an* cross on each sandal worn by Itzamnaaj Bahlam.



Fig. 12.18: Detail of Yaxchilan Lintel 46 showing a FTDK in-fixed at the centre of a *k'an* cross decorating a sandal worn by the Yaxchilan ruler Itzamnaaj Bahlam III (after Tate 1992: fig.12).

12.4d Naranjo Stela 40 (Fig. 12.19)

Stela 40 is attributed to the Naranjo ruler K'ahk' Tiliw Chan Chaak on the basis of style which, according to Martin and Grube, links it to the latter part of this ruler's reign (Martin and Grube 2008: 77). Only the lower portion of Naranjo Stela 40 has survived but the sandals worn by the ruler pictured on this stela and the rabbit over which he tramples are clearly visible. On each sandal is a single quatrefoil in-fixed at its centre by a FTDK. The image of a Maya ruler trampling or standing on a captive is common but the replacement of a captive by a rabbit is unusual. Wedged into the crook of each of the rabbit's front legs is a

Naranjo emblem glyph. Stone and Zender (2011: 199) interpret the rabbit as a toponym for a conquered site. Although a dependent of the Calakmul kingdom, K'ahk' Tiliw Chan Chaak's ancestry can be traced back to Tikal. He was a descendant of Tikal's exiled kings supported by Calakmul (Martin and Grube 2008: 76).

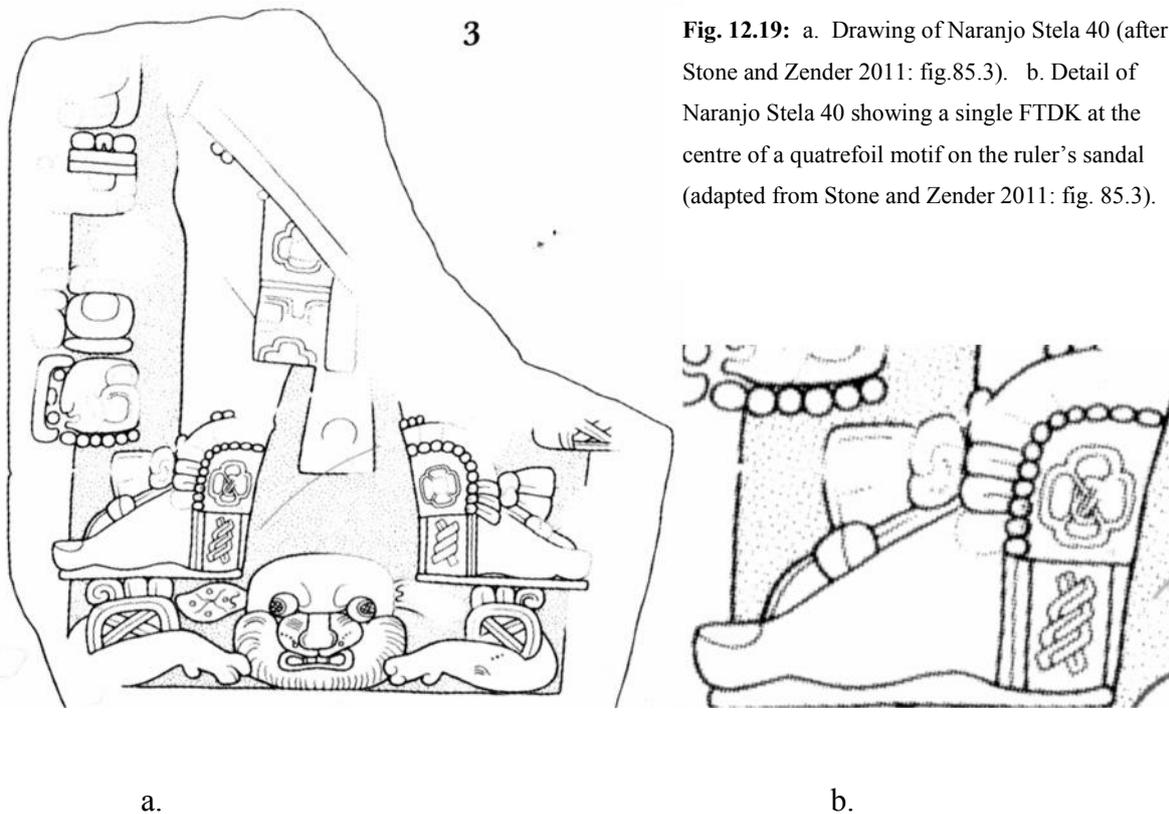


Fig. 12.19: a. Drawing of Naranjo Stela 40 (after Stone and Zender 2011: fig.85.3). b. Detail of Naranjo Stela 40 showing a single FTDK at the centre of a quatrefoil motif on the ruler's sandal (adapted from Stone and Zender 2011: fig. 85.3).

Summary

FTDKs on sandals are displayed in a very particular fashion. They appear as large single knots located at the centre of two types of motifs, the *k'an* cross and the quatrefoil. The same display format is noted for *huipiles* and loincloths. In the contexts of sandals, as with other forms of clothing, there are multiple embedded meanings for this knot. Both the pinpointing of the FTDK at the centre of the *k'an* and quatrefoil sign and the depiction of the cords extending from the knot to connect with the edges of the respective sign illuminate the function of the knot as a locating mark for the centre. What this centre is can be discerned from the meaning of the two signs as the Creation fire hearth and supernatural entrance.

The acts for which FTDKs are worn in the representation of the three monuments from Piedras Negras, Yaxchilan and Naranjo are captive-taking or captive display. It is worth

noting that captives and captive taking were prominent themes associated with FTDKs depicted on altars at Tikal. The Tikal captives are understood to represent ballgame players from a defeated team. The connection between warfare and the ballgame, although documented, is still not fully understood; however, it is possible that these captives are ballgame players. The display of Water Lily Costume elements and icons in scenes where FTDKs are prominently displayed at Tikal, Palenque, and Copan illustrate a pattern in association between this beast and the knots at these sites. In the context of Piedras Negras Stela 8 a link between the two can be traced to their respective roles in Creation.

12.5 Cloth Bundle

12.5a El Cayo Pedestal 4 (Fig. 12.20)

The face of El Cayo Altar 4 depicts an El Cayo *sajal* scattering with one hand onto an altar table (Martin and Grube 2008: 150), resembling El Cayo Altar 4 itself (Clancy 2009: 117-118; Zender 2002:168), and with the other he holds an incense bag which rests on his knee. Sitting atop the altar is a censer containing four bundles of wood (or perhaps incense) and a cloth bundle tied by a stack of three knots (Zender 2002: 168).



a.

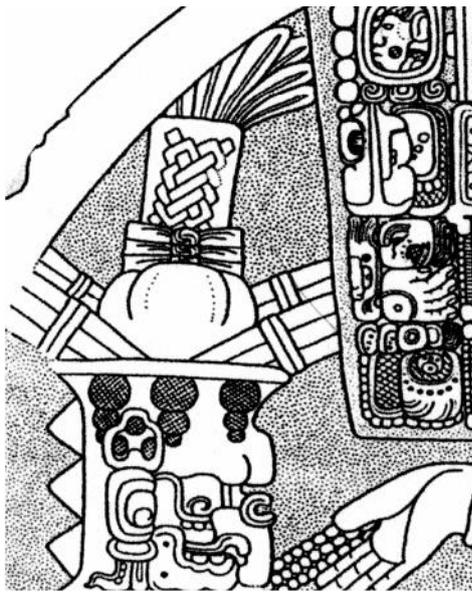


Fig. 12.20: a. Drawing of El Cayo Pedestal 4 (after Martin and Grube 2008: 150). b. Detail of drawing of El Cayo Pedestal 4 illustrating the FTDK attached to a cloth bundle (adapted from Martin and Grube 2008: 150).

On top of the knot stack, a large FTDK is displayed and above this, a spray of feathers fans outwards. El Cayo was a dependant polity of Piedras Negras and Clancy proposes that the ritual depicted on El Cayo Altar 4 is linked to the accession represented on Piedras Negras Stela 11 (Clancy 2009: 117-118). Both Altar 4 and Stela 11 are dedicated to the same *K'atun*. The text on Altar 4 narrates that a stone was bound (my reading) to commemorate the completion of fifteen *K'atuns* (Zender 2002: 168). Two Piedras Negras stelae, Stelae 11 and 14, depict the cloth bundle pictured on El Cayo Altar 4. Piedras Negras Stela 11 and 14 both depict a ruler seated within a scaffold frame at the base of which a captive, who has been sacrificed, lies chest up on an altar (Schele and Miller 2006: 112, fig. 11.4). Stela 11 was dedicated to commemorate a 15 *K'atun* Period Ending and records both the accession of the ruler on a non-Period Ending date as well as a stone-binding event (C3) at the completion of 15 *K'atuns* (Clancy 2009: fig.6.1, 116; Schele and Miller 2006:112, fig.II.4). Stela 14 was also dedicated at a Period Ending (*Lajuntun* – meaning half *K'atun*). The opened chest of the victim on both Stelae 11 and 14 provides a niche for a feathered bundle like that pictured on El Cayo Altar 4. This bundle is believed to contain the excised heart of the victim (Schele and Miller 2006: fig.II.4, 111; Clancy 2009: 116-117; Robicsek and Hales 1984: 62-64). The bundle displays both a Stack of Three Binding Knots and what appears to be a twist. However given that the bundle on El Cayo Altar 4 clearly displays a FTDK, it is possible that the Piedras Negras bundles also displayed a FTDK which has been missed, or interpreted as something else. An Epiclassic accession scene from El Tajin depicts the

scaffold ritual conventionalized at Piedras Negras. The El Tajin ruler sits within the framework of the scaffold and beside him lying across an altar is a dead captive who has presumably just been killed. That the sacrifice is an event related to the ballgame ritual is indicated by the ball set beside the scaffold (Machado 2000: 34-35). In keeping with ballgame ritual, the captive has been beheaded and his chest opened. From the body cavity, twisted intestines emulating ropes rise upwards together with two plants (Machado 2000: 34, 35, fig.43, fig.50), suggesting that his death signals a time of regeneration and new life for the ruler and his territories. It is possible that the captives represented on Piedras Negras altars as well as those pictured on Tikal altars (see Chapter Nine) were destined for similar forms of death associated with the ballgame. The El Cayo cloth bundle likewise could be linked to the ballgame sacrifice or to a particular ritual shared between the two sites and performed at the Period Ending.

Summary

The display of the FTDK at the Period Ending is a common theme in this research; however in the Altar 4 imagery, the knot is also linked to rituals pictured at Piedras Negras. The burning of the bundle together with the scattered incense grains by the El Cayo *sajal* (shown holding the incense pouch from which the handful of grains had just been taken) point to multiple acts by which the Period Ending would have been commemorated. Of these acts, hand scattering was of primary importance given the many monuments showing rulers in the act of scattering (incense or grains). Other Period Ending acts noted in this research for which FTDKs were displayed include auto-bloodletting by members of ruling lineages, death associated with the ballgame, the binding of stones, and contact with ancestors at supernatural entrances.

Chapter Thirteen: Flat Two-Dimensional Knots Displayed on Ceramics

The ceramics on which FTDKs are painted and incised conform to a particular type known as vases on account of their tall, cylindrical shape. A total of fourteen vases depict FTDKs and of these, thirteen are polychrome and one incised. Because of its durability, Polychrome pottery represents the most complete record of Classic Period Maya painting surviving today (Reents-Budet 1994: 2). The contents of these vases can be ascertained from the Primary Standard Sequence (PSS) painted on the exterior rim of the vases. The PSS comprises a dedicatory text which records, amongst other things, the function of the vase, its owner and sometimes the name of the artist (Reents-Budet 1994: 13). The function of vases is described in the PSS as '*uk'ib*', meaning 'drinking vessel'. Reents-Budet (1994: 75; Vail 2009) notes that the most common drink recorded for these vases was cacao (chocolate). The consumption of a foaming chocolate drink in palace compounds for ritual occasions is recorded on polychrome pottery (Reents-Budet 1994:7 5-78; Bey and Ringle 2011: 313). With the finest examples of polychrome pottery reserved for the higher orders of elite society (Reents-Budet 1994: 66-67), polychrome vases are classified as social currency and as 'treasured items of ideological importance to be placed with the honored dead' (Reents-Budet 1994: 27). Considered to have been an important burial artifact, polychrome vases were also exchanged as part of gift giving aimed at initiating and fostering diplomatic relations between sites (Reents-Budet 1994: 88-89).

Unlike ceramics, representation on monumental art does not show ritual foods being consumed. However there are a few exceptions, such as Piedras Negras Stela 3, which depicts a tall, lidded cylinder vase balanced on the throne beside Lady K'atun. An identical lidded cylinder vase is pictured on Piedras Negras Lintel 3. The text on this lintel narrates that the Piedras Negras ruler, known as Ruler 4, performed a dance which was followed by a nocturnal feast at which a fermented (alcoholic) cacao beverage was drunk to commemorate the first *K'atun* anniversary of Ruler 4's reign (Reents-Budet 1994: 87-88; Martin and Grube 2008: 149). The Lintel 3 scene focuses on the ruler seated on a large throne, in what appears to be a throne room, attended by groups of local lords and representatives from Yaxchilan. Heading the Yaxchilan party is the Yaxchilan interregnum ruler Yopaat Bahlam II (Martin and Grube 2008: 149). The representation of vases on monumental art depicting Period

Ending rituals identifies the motifs, such as FTDKs displayed on the vases, as being far more than decoration but part of a symbol set relevant to the occasions recorded.

Table 13.1: Table listing all occurrences of FTDKs displayed on ceramics.

Site	Locus of FTDK	Gregorian Year	Long Count
Unknown	Polychrome Vase Kerr 1117	Late Classic	
Unknown	Incised Vase Kerr 4732	Late Classic	
Honduras	Polychrome Vase Kerr 4968	Late Classic	
Honduras	Polychrome Vase Kerr 4628	Late Classic	
Honduras	Polychrome Vase Kerr 4629	Late Classic	
Unknown	Polychrome Vase Kerr 6070	Late Classic	
Campeche	Polychrome Vase Robicsek Plate 73		
Uloa-Yojoa Valley	Polychrome Vase Robicsek Figure 112d	Late Classic	
Uloa-Yojoa Valley	Polychrome Vase Robicsek Figure 113	Late Classic	
Uloa-Yojoa Valley	Polychrome Vase Robicsek Figure 112a	Late Classic	
Unknown	Polychrome Vase Robicsek Figure 256	Classic	
Unknown	Polychrome Vase Robicsek Figure 257a	Classic	
Uaxactun Region	Polychrome Vase Reents-Budet MS1268	Late Classic AD 672-830	
Unknown	Polychrome Vase Reents-Budet MS0639		

13.1 Lattice of FTDKs

13.1a Reents-Budet MS1268 Vase (Fig. 13.1)

Two vases, Robicsek Fig. 257a Vase and Reents-Budet MS1268 Vase depict a lattice of FTDKs enclosing or framing the vase. Similar arrangements of FTDKs in knot compendia illustrate the knots functioning as fringing for textiles or as netting.

As evidenced in the iconography of La Florida Stela 9, the Maya utilized this netted effect to create a decorative overlay for textiles. Reents-Budet interprets the lattice of knots painted on the MS1268 vase as ‘a complex textile design that includes both loom-woven and hand-plaited techniques’ (Reents-Budet 1994: 331). The lattice made from FTDKs is described as a macramé overlay on a herringbone weave textile. Of interest are the quatrefoil motifs infixed by *k’an* cross motifs set between the macramé knots. In the context of a tripod plate from Central Petén, three *k’an* signs painted on the inner base of the plate are interpreted by Reents-Budet (1994: 19-20, 330) as standing in for the three stones of Creation. In this

instance the *k'an* cross is linked to Creation cosmology, a reading which supports the interpretation of the *k'an* cross as a symbol for the centre as Creation hearth.



Fig. 13.1: Photograph of a cylinder vase from the Uaxactun Region, Guatemala, painted with a lattice of FTDKs. The knots frame smoking quatrefoils in-fixed by *k'an* crosses. Forming an underlay pattern for the FTDKs is a herringbone weave textile (Reents-Budet 1994: Catalog 37)

Smoke volutes

Each of the four arms which comprise the quatrefoil motifs painted on the Reents-Budet MS1268 Vase emits smoke volutes identifying it as a fiery centre. The manner in which the knots are organized around the vase is such that they function as a framework for the *k'an* signs. The idea conveyed would seem to be a binding of the centre, as supernatural entrance, hearth and fiery place.

13.1b Robicsek Figure 257a Vase (Fig. 13.2)

Robicsek Fig.257a Vase also depicts a lattice of FTDKs; however, here the knots frame the hieroglyph '*b'ah*'. The hieroglyph '*b'ah*' stands for such abstract metaphysical concepts as first, self, being, or image (Bricker et al. 1998:24; Kaufman and Norman 1984: 138; Montgomery 2002: 39). A compound of the '*b'ah*' glyph (T0501), meaning 'self or image', and the crossed band hieroglyph or sign (T0153), meaning 'to manifest', is associated with the 4 *Ajaw* 8 *Kumk'u* Creation date (Macri andLooper 2003: 181; Thompson 1991: 87-96).

Creation accounts begin with the manifesting of an image or being, understood to refer to the birth or emergence of the Maize God from the crack or entrance at the centre of the Creation Turtle's carapace (Looper 2002a: 184; Freidel, Schele and Parker 1993: 65-75).

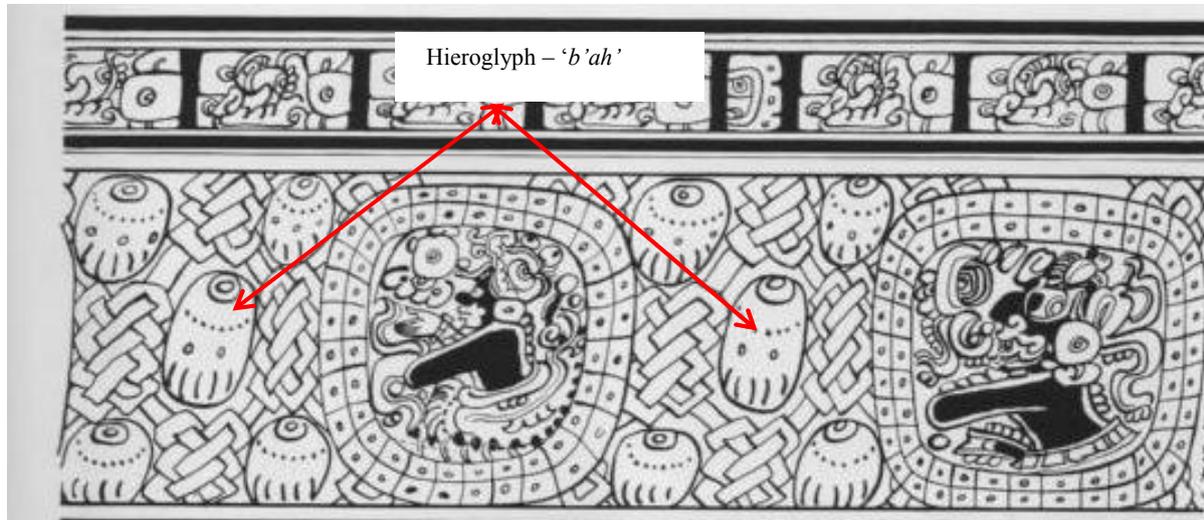


Fig. 13.2: Rollout drawing of the lattice of FTDKs painted on a polychrome vase. The knots frame *b'ah* glyphs and are overlain by two cartouches bearing seated figures (after Robicsek 1975: fig.257a).

As such the '*b'ah*' may refer to the knots or the pot as a living or self-aware entity. The introductory glyph of the PSS is transcribed '*ay-a*', alternatively '*a-ya*', meaning '(it) came into being' (Reents-Budet 1994: 111, 124, 179; Montgomery 2002: 37), supporting the idea that the pot, text, and/or image (or what the vase is meant to contain) was in some way invested with a life essence. Overlying the lattice of knots on Robicsek Fig.257a Vase are two cartouches framing seated deity figures; these cartouches may have something to do with the '*b'ah*' hieroglyph.

13.2 Single Knots

13.2a Reents-Budet MS0639 Vase (Fig. 13.3)

Reents-Budet MS0639 Vase is a polychrome vase with a herringbone weave pattern overlain by a large FTDK. Although the knot does not conform to the lattice design on the two vases discussed above, it overlies a textile and as such is another example of a FTDK represented in association with a textile pattern.



Fig. 13.3: Rollout photograph of a polychrome ceramic vase painted with an image of a FTDK flanked by water symbols (after Reents-Budet 1994: fig.2.12)

The FTDK is flanked on either side by a swirled motif with a scalloped edge. This motif is pictured in the representation of another polychrome where it is displayed as a textile motif worn by a lord within a palace setting where chocolate stands frothing in a jar (Reents-Budet 1994: 131, fig.4.23). In-fixes of dotted, scrolled or swirled motifs identify things of a watery nature such as shells (Stone and Zender 2011: 140-141, figs. 56.1, 56.2, 166-167; Reilly III 1994); therefore the FTDK is linked here to water.

Framed by a rectangular box to the side of the FTDK is an icon head with *muan* feathers; from its mouth a large fire or 'k'ak' smoke scroll curves downwards. Although a being similarly represented with *muan* feathers and smoke scroll appears on another vase and is diagnosed as a *muan*-feathered saurian (Reents-Budet 1994: 328, Catalog 29), the goggle eyes of the Reents-Budet MS0639 Vase icon head would seem to identify it as a Tlaloc figure. Tlaloc motifs belong to a group of motifs which originated at Teotihuacan (Taube 2002: 270-274). Taube notes that even 'at the end of the Late Classic Period, when Teotihuacan was no longer a major force in Mesoamerica, the Maya continued to celebrate Teotihuacan iconography and symbolism' (Taube 2002: 270). If the motif on the Reents-Budet MS0639 Vase is related to central Mexican symbolism associated with Tlaloc (god of rain and lightning), the smoke scroll attached to the head may reflect the fire/water dichotomy (rain/lightening) attributed to this deity (Miller and Taube 1997: 166).



Fig. 13.4: Photograph of a polychrome vase painted with a *mu'an* feathered saurian (after Reents-Budet 1994: fig.1.2)

13.2b Kerr 1117 Vase (Fig. 13.5)

Kerr 1117 Vase is a polychrome vase painted with two large FTDKs interspersed with two circular cartouches each containing an image of the Principal Bird Deity (Kerr Maya Vase Database No. K1117). Smoke volutes emerging from this avian deity identify it with fire and smoke.

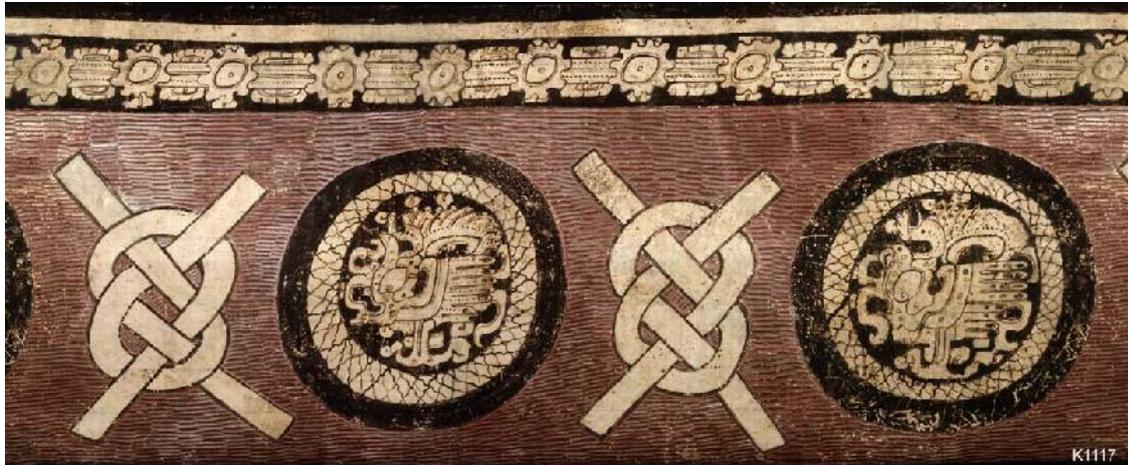


Fig. 13.5: Rollout photograph of a polychrome vase painted with two FTDKs and cartouches framing images of the Principal Bird Deity (after Kerr 1989: 60).

In the representation of Palenque's Temple of the Cross Tablet and Temple of the Foliated Cross Tablet, the Principal Bird Deity, as bird of the centre (Schele and Freidel 1992: 242, 418), is pictured at the centre of the composition at the top of the *Wakah Chan* or World Tree. Taube notes that the texts 'of both the Palenque Temple of the Cross and Quirigua Stela C state that the three green hearthstones were lifted into the sky by the *Wakah Chan* tree' (Taube 1998: 462). Therefore the place where the Principal Bird Deity stands is the Creation

hearth. In the representation painted on Kerr 1117 Vase, the relationship between the FTDKs, Principal Bird Deity and Creation hearth can be read through unpacking the symbolism of the motifs brought together in the context of this vase.

13.2c Kerr 4732 Vase (Fig. 13.6)

Kerr 4732 Vase is an incised vase with a rim text and below this a line of FTDKs. Each knot is individually arranged at the centre of a rectangular boxed space. The rim text records the date 12 *Ajaw*, 7 Pop (Kerr Maya Vase Database No. K4732). Period Endings fall on *Ajaw* dates (Stuart 1996: 166-167) therefore this date would have been linked to a completed period of time. The formal arrangement of the FTDKs in a line replicates the idea of a chain of knots, or continuity. Period Ending rituals were important events for the display of FTDKs and this vase may well have been used or commissioned for such an event.



Fig. 13.6: Rollout photograph of an incised vase decorated with a line of FTDKs set below the PSS. The knots encircle the vase replicating the chain of FTDKs which are shown binding polychrome vases (after Kerr Maya Vase Database No. K4732).

13.2d Robicsek Plate 73 Vase (Fig. 13.7)

Robicsek Plate 73 Vase is painted with a large FTDK flanked by two water birds. The neck and beak of these birds identify them as cormorants. The cormorant is one of a number of water animals, such as frogs, turtles and fishes, frequently painted on ceramic ware (Reents-Budet 1994: 244-248). In scenes painted on pottery, the cormorant is linked to supernaturals and the otherworld. Reents-Budet (1994: 244-248) surmises that this water bird may have played a role in mythic traditions of the ancient Maya which have not survived.



Fig. 13.7: Photograph of a fragment from a Campeche polychrome vase painted with a large FTDK flanked on either side by cormorants (after Robicsek 1975: Plate 73).

13.2e Robicsek Figure 256 Vase (Fig. 13.8)

Robicsek Figure 256 Vase depicts a large FTDK flanked by two seated figures wearing long snouted masks and bird headdresses. The beaks of the birds are long and tapered. Long-beaked aquatic birds are a familiar theme on polychrome vases, and cormorants in particular, identified by the bulge at the end of their beaks are well represented in the corpus of bird imagery painted on vases (Reents-Budet 1994: figs. 5.22, 6.11, 6.13, 6.14, 6.15). However the exceptionally thin tapered beak of the bird worn as a headdress on Robicsek Figure 256 Vase suggests a bird other than the cormorant. A scene painted on a polychrome vase depicts the Hero Twins aiming blowguns at long billed water birds identified as either herons or egrets (Reents-Budet 1994: fig. 6.14). The long, thin tapered shape of the bills of these birds is very similar to those on the bird headdresses, suggesting that the Robicsek Figure 256 Vase bird is most likely an aquatic bird of the heron or egret species.

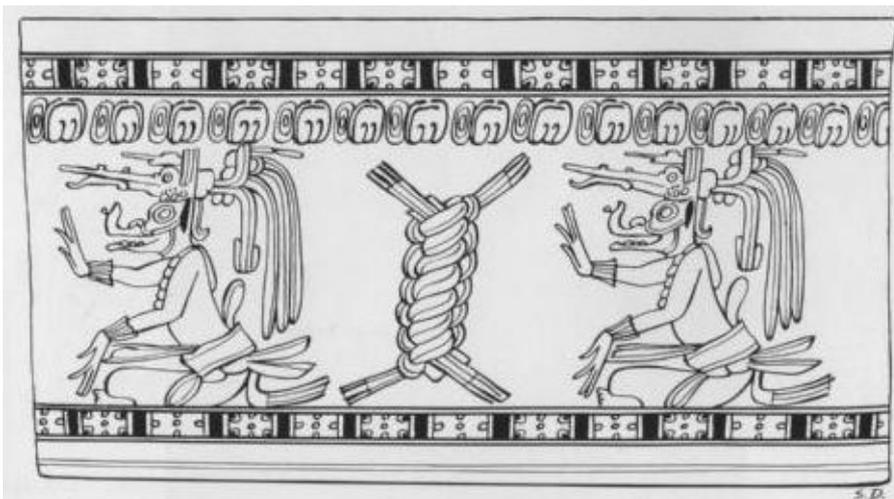


Fig. 13.8: Rollout drawing of a polychrome vase painted with an image of a FTDK flanked on either side by a lord wearing a buccal mask (after Robicsek 1975: fig. 256).

The long, upturned, snout on the mask worn by the two individuals painted on the Robicsek Figure 256 Vase is a feature of a number of Classic Period Maya deities such as God K, a God of lineage and rulership, pictured with a serpentine foot and associated with rain and lightning (Taube 1992: 69-79). Upturned snouts are attributes of Classic Period images of saurian or serpentine beings, in contradistinction to bird deities such as the Principal Bird Deity, who displays downward curving beaks (Taube 1987: 3). It is likely therefore that the individuals wearing the masks are impersonating a being with saurian qualities such as God K.

The painted image on this vase is contained within an upper and lower frame or band comprising *k'an* and *k'in* signs. The *k'in* sign as a symbol for the sun represents a flower with four petals, 'a number intrinsic to solar cosmology', where the number four invokes 'both the four world directions, established by the sun's east-west path, and the *tzolkin* date of world creation on 4 *Ajaw*' (Stone and Zender 2011: 153). The Classic Period Sun God, often depicted as marked by the *k'in* sign, is referred to in inscriptions as K'inich Ajaw. Maya rulers, as representations of the sun or *k'in*, bore the K'inich Ajaw title (Stone and Zender 2011: 153). The frame of *k'in* and *k'an* signs identifies the FTDK painted on this vase with concepts of solar rule as derived from the centre and fiery place of creation.

13.3 Continuous FTDKs

13.3a Robicsek Figure 112a. Vase (Fig. 13.9)

Six vessels depict a continuous chain of FTDKs which encircle the vases. A further vase displays FTDKs in which the cord used in tying the knot is spliced to create a knot which turns back on itself forming a continuous knot. Robicsek Figure 112a Vase is bound by a chain of FTDKs which form a wide band around the central portion of the vase in the place normally occupied by a painted scene. The same kind of knot chain is shown encircling the roof of Palenque House B and the carved Copan jade. Its arrangement on the body of the vase, in a place normally reserved for painted scenes, focuses attention on the function of the FTDK to materially enclose and bind the vase. When displayed as a working knot, the FTDK always binds objects.



Fig. 13.9: Photograph of a polychrome vase bound by a continuous chain of FTDKs (after Robicsek 1975: fig.112a).

13.3b Robicsek Figure 113 Vase (Fig. 13.10)

Robicsek Figure 113 Vase is encircled by a chain of FTDKs along the rim of the vase in exactly the location where the rim text or PSS would normally be found. In all the vases with the exception of Robicsek Figure 112a Vase, the continuous chain of knots replaces the PSS, suggesting some sort of equivalence, perhaps between the dedicatory text and the knots themselves. It is worth noting that the word *k'al* appears as part of the PSS dedicatory rim text on ceramics (Plank 2004: 14-19) where it describes the intention of the words to bind. The verb *k'al*, meaning to 'bind, fasten or enclose', is also commonly used in Classic Period dedication texts around doorways to buildings, such as those at Yaxchilan, Chichen Itza and Xkalumkin (Plank 2004: 46-47). In both cases, (i.e. around the opening of the door or bowl), the function of the text is seen to be protective, a kind of binding speech equivalent to an incantation (Plank 2004: 14-19, 46). As examples of protective binding speech, Classic Period dedicatory texts resemble the binding acts (involving performance and speech) by modern day Yucatek'an shamen (Plank 2004: 46-47).

It is possible that the Classic Period dedication texts mentioned by Plank may have been meant for recitation, perhaps accompanied by literal acts of binding (tying and knotting). These ideas reflect the sort of practices mapped out in the theory to this research (see theory), where the reciting of incantations, spells and other forms of formulaic speech has the power to bind through analogy with material knots and bindings. In these instances there is transference of qualities between domains, (i.e. from the material knot to the speech recited during tying).



Fig. 13.10: Drawing of a polychrome vase bound around the rim by a chain of FTDKs. Below the knots are two traders with staffs (after Robicsek 1975: fig.113).

In the representation of Robicsek Figure 113 Vase, the line of encircling knots creates a frame for an image of two individuals bearing loads and holding staffs in the manner of traders (Taube 1992: 92). The fire volutes or *k'ak* sign attached to one of the staffs suggests that it is a fire drill. The vessel is believed to date to the Late Classic and although fire drills are not known to be associated with merchants in particular in Classic Period representations on vases, the Late Postclassic Madrid Codex depicts two merchant Gods drilling fire on a road (Stone and Zender 2011: 130-131). This depiction of merchants could be seen to support a late date for the vase, perhaps after the time in which palace scenes with lords and rulers dominated vase painting.

13.3c Kerr 6070 Vase (Fig. 13.11)

Kerr 6070 Vase depicts a chain of FTDKs encircling the rim of the vase and below this is a scene which Kerr describes as a hunter crawling towards a head of a Water Lily Jaguar (Kerr Maya Vase Database No. K6070). The hunter is said by Kerr to hold an *atl-atl* in his mouth (Kerr Maya Vase Database No. K6070).



Fig. 13.11: Rollout photograph of a polychrome vase painted with a chain of FTDKs along the rim of the vase in the place where the PSS is normally located. Below the knot chain is an image of a hunter crawling towards a Water Lily Jaguar icon head (Kerr Maya Vase Database No. K6070).

If the object is an *atl-atl*, it is a device used by warriors to throw spears and is therefore sometimes referred to as a spear thrower (Pohl and Robinson III 2005: 65-67). Although originally believed to have been a central Mexican weapon, *atl-atls* were used in the Maya area as early as the 4th century (Martin and Grube 2008: 29-30). The representation of what may be an *atl-atl* suggests Mexican influence; however the Water Lily Jaguar is a powerful Maya icon. Similar stylized Water Lily Jaguar heads are shown in the vase below as icon heads or possibly shields hanging above pillars in a palace scene. This vase, from the Mutul de San José region of Guatemala, is dated between A.D. 672-830 (Reents-Budet 1994: 332). This vase, like the Kerr 6070 Vase is a Late Classic vase.

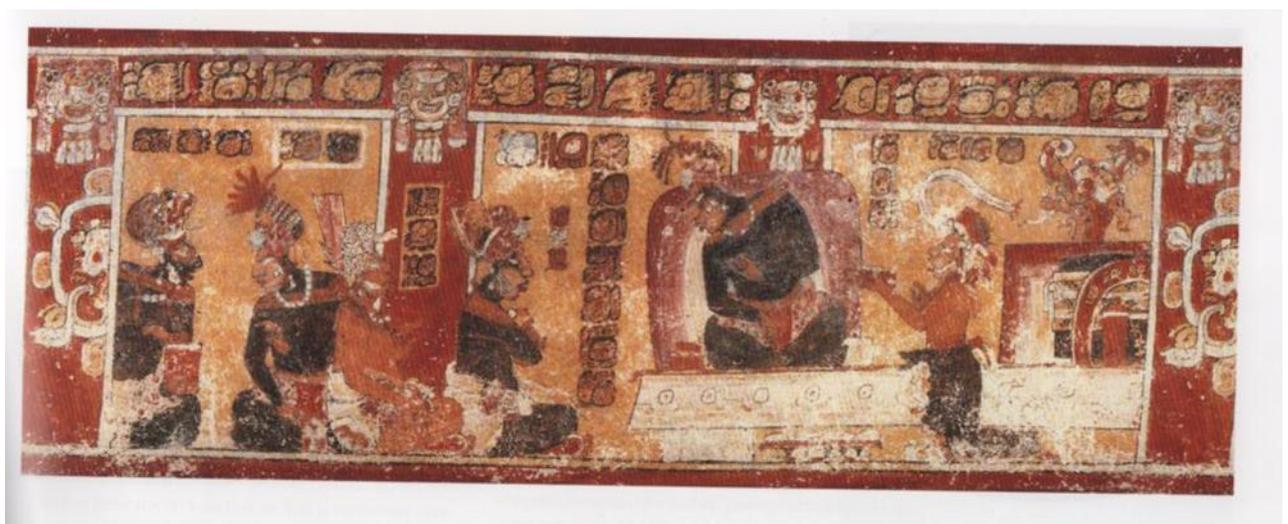


Fig. 13.12: Rollout photograph of a polychrome vase showing Water Lily Jaguar icon heads hanging like shields above piers in a palace room (Reents-Budet 1994: fig.5.12).



Fig. 13.13: Detail of Water Lily Jaguar
(detail from Reents-Budet 1994: fig.5.12).

13.3d Kerr Vases 4968, 4628, and 4629 (Figs. 13.14, 13.16, 13.17)

Kerr vases 4968, 4629, and 4628 depict almost identical scenes, and it can be argued that the style of representation reflects central Mexican influences. With regards to what is known about the provenances and dates of the vases, all three are believed to come from Honduras (Kerr Maya Vase Database Nos. K4968, K4628, and K4629) and have been dated to the Late Classic based on style (personal communication with Barbara Kerr). In two of the vases, (Kerr vases 4968 and 4629) the FTDK replaces the PSS in the form of a binding rim element. On Kerr vase 4628 the FTDK is spliced so as to create a recurring or continuous knot. The knot on this vase simulates the idea of continuity and infinity in a similar way to the chain of knots which encircles the rims of vases.

The three vases depict scenes in which an enthroned ruler is shown holding a battle standard. There is a proliferation of Water Lily Jaguar imagery in these images. In the representation of Kerr vase 4968, the ruler not only wears a Water Lily Jaguar headdress but also a Water Lily Jaguar icon head attached to his back. Before the ruler a musician dances with a rattle and flute.

The architectural style of the building in which the ruler is seated, as well as the dress of the musician point to influences from Mexico. This style of representation is a common feature in the Codex Borgia, where the roofed or covered bench/platform functions as a temple in which deities or other sacred objects are shown to reside and before which ritual acts are performed (Díaz, Rodgers and Byland 1993: Plates 18, 35, 37, 40, 45).



Fig. 13.14: Rollout photograph of a polychrome vase showing two enthroned rulers each holding a banner and wearing the Water Lily Jaguar headdress and back ornament. Before each ruler a musician with rattle and flute dances wearing a Water Lily Jaguar headdress. The scene is bound by a continuous chain of FTDKs along the rim of the vase (after Kerr Maya Database No. K4968).



Fig. 13.15: Drawing adapted from an Early Classic incised Tikal cylindrical tripod vessel showing two architectural styles; the one on the left is a Maya pyramid and the latter a Teotihuacan-style talud-tablero platform supporting a temple with seated ruler and banner (after Stone and Zender 2011: fig.38.3, 104).

The long skirts of the musicians are not recognizable as Classic Maya attire; therefore the vase seems to have been painted using a mixture of styles, some of which are more strongly ‘central Mexican’. This perhaps suggests a late date for the vessels. Postclassic Mural painting from Tulum Structure 5 shows goddesses wearing similar skirts (Miller 1982: Plate 28).

The three Kerr vases all depict a dotted circle motif as architectural detail edging the roofs of the temples. The dotted circle motifs also mark the Water Lily Jaguar. In Maya iconography, circles, marked at their centre by a dot, in-fix the interior of representations of

things derived from stone such as altars or mountains (*witz*) (Boot 2004: 4-6, figs.4-6; Clancy 2009: figs.5.8, 6.2; Schele 1998: fig.9). The generative qualities of stone in Maya thought, made explicit by the representation of maize and verdant growth which characterizes representations of stone mountains (Schele 1998: fig.9; Taylor 2002), can be gleaned from the alternative meanings of the word for 'stone', *tun/tuun*, as rain, celestial water, thunder and lightning (Dütting 1979: 186; Justeson 1984: 340; Knorozov 1999: vol.1:124). The associations of stone with water, invests the circular disks which mark stone objects with meanings to do with water. These circular motifs marked at the centre are also a feature of objects pictured in Postclassic codices, having an affinity with water (Milbrath 1999: 178, Fig.5.4g), and according to Boone and Smith are members of a Late Postclassic symbol set found on polychrome ceramics from Cholula and Oaxaca (Boone and Smith 2003: 186-193).

Given the central Mexican style of the iconography of these vases, the circular motifs could be seen as deriving perhaps from outside the Maya area, however the history of their use in Maya iconography suggests continuity in representation. Therefore although the style of the above vases may be seen as deviating from Classic Period Maya norms of representation, nevertheless aspects of the content of the symbolism clearly reference Classic Maya thought.



Fig. 13.16: Rollout photograph of a polychrome vase painted with two enthroned rulers holding banners. Two musicians play flutes and hold rattles over an offering whilst a further musician holds a flute and knotted cloth in one hand and a rattle in the other. This musician wears the Water Lily Jaguar headdress and also dances before an offering. The entire scene is bound by a continuous chain of FTDKs which take the place of the PSS (after Kerr Maya Vase Database No. K4629).



Fig. 13.17: Rollout photograph of a polychrome vase depicting musicians wearing Water Lily Jaguar headdresses whilst dancing before seated rulers. In this vase the chain of FTDKs is replaced by two FTDKs whose cord ends have been spliced to create a recurring knot (similar to a figure of eight) (after Kerr Maya Vase Database No. K4628).

13.3e Robicsek Figure 112d (Fig. 13.19)

Robicsek Figure 112 Vase depicts a musician, holding a rattle, who wears the Water Lily Jaguar headdress. The vase has been reconstructed from broken pieces and it is likely that the full scene would have included a ruler seated in a throne structure. This vase not only depicts a frame of circles marked at their centre by a dot but also the step-fret motif identified by researchers as the abstracted cleft at the centre of the Creation Mountain (Schele 1998: 496-499; Boot 2004: 5). The step-fret motif is pictured on a Classic Period Maya vase infixed with circles marked with dots (Boot 2004: fig.5). In this instance the two motifs combine to symbolize the nature of the mountain as creative and generative/ life giving (where the circles are linked to water, equated with life and generative forces).



Fig. 13.18: Detail from Kerr Vase 5166 illustrating the abstracted mountain cleft symbol known as a step-fret (Photograph by Justin Kerr).



Fig. 13.19: This Robicsek polychrome vase is painted with an image of a musician holding a rattle. A chain of FTDKs bind the rim of the vase (after Robicsek 1975: fig.112d).

In this vase the extended chain of FTDKs are directly associated with the entrance or cleft at the centre of the Creation Mountain, envisaged as a place of ancestral significance endowed with qualities both generative and life giving.

Summary

In the context of ceramics, FTDKs are limited to vases, which would have held liquids such as chocolate. Both the interment of these vases with the honored dead and the gifting of the vases as a means of establishing ties between rulers and vassals point to complex and perhaps binding relationships negotiated by these objects. The painting and decorating of high-value items intended for gift giving with knot designs is reminiscent of similar practices in Britain during the 7th to 9th centuries (Alcock 2003: 320-337). In Chapter Three I proposed that the knotted interlacements on high status British insular objects distributed as gifts were analogical to the binding relationships being established through the act of gifting. I also noted the close association of knot interlacements with writing in the context of insular scriptures pointing to a connection between interlaced knot designs and words. In instances in which the FTDK is extended to form a binding chain of knots which replaces the rim text (PSS), the knots, similar to British insular knot designs, appear to have an affinity with writing. In the context of insular objects decorated with interlace, researchers conclude that the interlacements of knots are associated with aristocratic lineage. This conclusion is drawn

on the basis of the practice of interring such objects in royal burials, but also on the basis of the association of interlacements of knots with stone monuments dedicated to British kings. Likewise, if we consider the role of Creation in negotiating concepts of origin amongst Maya royal lineages and then look at the function of the FTDK as a defining concept for Creation, experienced in terms of binding, it is clear that this knot also mediated ideas to do with lineage.

Considering that vases and elaborate textiles were both held in high esteem by the Maya, the representation of FTDKs as textile motifs on vases illuminates the considerable value which the Maya placed on the knots themselves. Similar to the items on which it is displayed, the FTDK becomes a form of social currency.

The association between FTDKs, quatrefoils and *k'an* cross motifs on Reents-Budet Vase MS1268 is a pattern noted for the textiles recorded on monuments. In the case of the Reents-Budet vase, however, the FTDKs fasten cords around quatrefoil motifs with *k'ak* affixes, establishing both the fire hearth connection for the knot and its function to bind the hearth. Robicsek Fig.257a Vase illustrates FTDKs binding cords around the hieroglyph '*b'ah*', a format which at first sight may appear to be an anomaly, given the absence of another example of a FTDK and '*b'ah*' hieroglyph in either the monument or ceramic corpus. However the '*b'ah*' glyph may describe the otherworldly quality of these knots as binding the centre (envisaged alternately as a World Tree, supernatural entrance and Three Stone Hearth Place) understood by the Maya as animated, alive or self-aware. The '*b'ah*' glyph in standing in for the quatrefoil or *k'an* cross as symbol for the centre identifies the centre as creative, alive, self-aware or living.

Although there is much continuity in the display format of the knot as both a lattice of knots (evocative of the La Florida textile) or as a continuous band of knots which functions to bind vases (i.e. evocative of their role in binding buildings and monuments) there are also discontinuities. In the representation of several of the vases there is evidence of influences in the form of a central Mexican symbol set. Central Mexican influences, however they came to the Maya area, can also be witnessed in the style of architecture, clothing, and deities such as Tlaloc. This may reflect changes which take place in the Late Classic to Postclassic divide. However notwithstanding these changes the connection of the FTDK to Creation is maintained.

Chapter Fourteen: Diachronic Analysis of the FTDK

In this chapter, I arrange FTDK representations chronologically with the intention of tracing or capturing the movement of the FTDK between sites over time. This gives a very different perspective of the FTDK and adds to the information gathered in previous chapters where I look at the objects on which the FTDK is attached or displayed and the meanings which the knots accrue through association. I also pinpoint those sites showing the most substantial interaction with, or longest display history of the FTDK. By substantial, I refer to instances where the FTDK is directly displayed over monuments or architecture and consequently achieves a presence and visibility which suggests significances beyond the mundane or above its use as a decorative motif (as on textiles). This does not mean that the display of FTDKs on textiles or even ceramics is not significant but rather that the intentionality behind its display is different. In the sections below I will attempt to address this difference.

Given the evidence so far (Chapters Six to Thirteen), it is clear that FTDKs are not equally distributed throughout the Maya area. There are reasons why FTDKs were displayed at certain centers yet not others, and this may have to do with the political undercurrents of the Classic Period and the effect this had at those centers. FTDK motifs are not self-volitional; being subject to manipulation, it can be surmised that FTDKs are used by certain groups for certain purposes at different times. Therefore the distribution of insignia or symbols such as the FTDK should be seen as intentional rather than coincidental. This is the guiding principle behind my decision to take a last look at the FTDK over time and space.

This chapter deals with all known Classic Period representations of FTDKs; however, I am aware that in the future more knot representations may surface. I see the work on capturing and recording FTDKs to be an ongoing project. At the end of this chapter I also present the conclusion to this research.

14.1 Early Classic - 250-593

14.1a The FTDK - A Tikal Symbol

During the Early Classic period, three Maya sites display representations of FTDKs, these are Tikal (Stelae 9, 13 and Altars 3, 13 and 19), Río Azul (Tomb 1 mural) and Copan (jadeite bar

pendant). The FTDK is first represented on Tikal Altar 13 in A.D.292. At this time Tikal is believed to have functioned as the centre or capital of an independent polity (Sharer and Traxler 2006: 310). In other words it was a significant city both in size and power and exercised hegemonic control over a number of dependent polities. The representation of FTDKs on Altar 13 shows the knot as a working or functional knot acting to fasten cords around the side of Altar 13, rather than as a standalone or freestanding item. The date for this altar is based on its pairing with Stela 29 (dated to AD 292) (Jones and Satterthwaite 1982: 61). This stela ‘provides our first sight of a Tikal *Ajaw* – a richly garbed figure bearing regalia which would remain essentially unchanged for the next 600 years’ (Martin and Grube 2008: 26). One particularly important item of regalia displayed by Maya kings throughout the Classic Period, the Double Headed Serpent Bar, is held by the Stela 29 ruler (Clancy 1994: 7-8). The coupling of a pre-eminent symbol of rule (the double headed serpent bar held by the Stela 29 ruler), with the display of the Tikal Emblem Glyph within the stela representation (Sharer and Traxler 2006: 310), links the ruler to his material symbols of rule and perhaps to what we would call a kingdom, which in turn links rule to place.

Stela 29 bears the earliest Long Count date known from the Maya lowlands as well as sets the precedent for representations of Maya rulers in the Early and Late Classic Periods (Martin and Grube 2008: 26, 27). If Altar 13 was, as Jones and Satterthwaite suggest, originally paired with Stela 29, then this is important in that the knot and its function to bind stone altars is linked to the first emergence of a tradition in documentation of Maya Kings in text and image at Tikal. Therefore the FTDK is an integral part of the symbols of rule as they appeared at Tikal in the Early Classic. The first appearance of FTDKs at Tikal is closely linked to the emergence of a visual format in conceptualizing kingship at this site.

At around A.D. 385 Río Azul is conquered by Tikal and 32 years after this event the FTDK is displayed on the walls of Río Azul Tomb 1. Inscriptions on the tomb wall narrate that the occupant was a lineage member of Tikal’s ruling dynasty (Hammond 2000: 217). The FTDKs painted on the Río Azul Tomb 1 walls are associated with a dated inscription which is not a Period Ending date but rather the date on which the burial took place or the date of death of the tomb’s occupant (Acuña 2007:15). At Tikal, an Early Classic tomb known as Burial 48 is similarly painted with floral motifs and bears a Long Count date recording the tomb’s completion a year after the death of its occupant (Martin and Grube 2008: 36),

therefore it might be the case that the Río Azul Tomb 1 date in fact records the date of the tomb's completion.

The FTDK next appears on a jadeite bar pendant interred in a Copan burial. The individual buried with the jadeite bar pendant is believed to have come from Tikal and has since been identified as K'inich Yax K'uk' Mo', a Copan ruler and founder of the Copan dynasty who ruled between A.D. 426 and 437 (Sharer and Traxler 2006: 333-342; Sharer 2003b: 347-351; Martin and Grube 2008: 192-193). Even without the glyphic information, the presence of the FTDK at Tikal, Río Azul and Copan hints at some sort of relationship among these three individuals. All the evidence taken together suggests strongly that displaying the FTDK was limited to elite individuals, such as rulers, who could claim descent from the Tikal founding lineage.

Finally, towards the end of the Early Classic, the FTDK appears on an altar at El Palmar. Given the proposal that the FTDK was a motif displayed by individuals descended from Tikal's founding lineage, the El Palmar Altar 1 FTDK could be interpreted as a sign of Tikal's presence at this site. The close proximity of this site, some 15 kilometres to the west of Tikal (Doyle 2012: 361) would support such a claim. However it is worth noting that the El Palmar altar is dated to the Terminal Early Classic, just before the onset of the hiatus at Tikal. The hiatus and its significance is expanded upon in the subsequent section dealing with the Late Classic. It is sufficient to note here that a similar arrangement of FTDKs on a Late Classic Zacpeten Altar, bearing an inscription which documented lineal ties to Tikal, also coincided with a period in Tikal's history where this site had lost its place as a leading power in the region. Whether the appropriation of a Tikal dynastic motif by the El Palmar ruling house likewise has to do with underlying political upheaval, cannot be explored here. However, based on the Zacpeten scenario, it is possible that the display of the FTDK at El Palmar both advertised lineage connections to Tikal and authenticated claims to power as Tikal's successors.

Time

At Tikal, in the context of altars and as an item worn around the neck by rulers impersonating fire deities, the FTDK is linked to acts such as the binding of stones and drilling of fire, which take place at Period Endings (see Chapter Six). Looper (2003: 10-11) notes that

Period Endings are anniversaries of Maya Creation. Hence the binding of stone altars and the drilling of fire can be seen as reenactments by rulers of acts originally performed by Creation deities at the beginning of time (Looper 2003: 10-15). He explains that the ‘connection between monuments and cosmogenesis was articulated through the use of the Long Count calendar’ first appearing at Tikal in the context of Stela 29. The Long Count calendar explicitly referenced Creation mythology, as it was used in hieroglyphic texts to count the number of days elapsed since the date of Creation, which was August 13, 3114 B.C., according to the classic-period sources’ (Looper 2003: 10). However given that stelae were erected to commemorate the *K’atun* Period Ending (twenty year periods) and its division into quarters also known as *Hotuns* (five year periods) (Looper 2003: 10) suggests particular relevance of the *K’atun* within the context of Creation. In the Early Classic the FTDK is sensitive to time, both in terms of when it is displayed and the acts for which it is displayed.

14.2 Late to Terminal Classic – A.D. 593 – 900/1000

14.2a The FTDK – A Symbol at Tikal and Palenque

Between A.D. 650 and A.D.700 the FTDK is represented at three sites – Tikal (Altar 18, Temple I Lintel 3), Palenque (House E, Temple of the Cross Lintel, Temple of the Cross East Jamb, Temple of the Foliated Cross Lintel and Temple of the Sun Lintel), and Yaxchilan (Lintel 25). Whereas in the Early Classic, Tikal was the only site to display the FTDK on multiple monuments, at the start of the Late Classic we find the FTDK prominently displayed on architecture and monuments at Palenque, and monuments at Tikal, suggesting that this knot now serves as insignia of rule and rulers at both sites. The earliest Late Classic dates for the FTDK are A.D. 660 (c.a.) at Palenque, and A.D. 681 at Yaxchilan. The A.D. 660 and A.D. 681 dates correspond to the latter part of the Hiatus period in Maya history. The Hiatus is a time when a number of Maya sites are known to have ceased to erect monuments; a phenomenon believed to be linked to repercussions from the fall of Teotihuacan. The Hiatus period lasted between A.D.562 and A.D. 692; at Tikal during this time ‘not a single dated monument – or even a potential fragment of one – has been identified’ (Martin and Grube 2008:40). Although attributed to the fall of Teotihuacan, the hiatus at Tikal also coincides with Tikal’s defeat by Calakmul. That the Hiatus was not experienced uniformly as a time of decline is exemplified by evidence from a number of sites, such as Caracol, 75 kilometers southeast of Tikal, which is known to have prospered at this time under the patronage of

Calakmul (Witschey and Brown 2012: 313-314; Martin and Grube 2008: 40, 88-90); also, Lamanai has a glyphic record during this time (Pendergast 1988).

The long period of time between the last known representation of the FTDK on Tikal Altar 3 in A.D. 488/495, and its display on the façade of Palenque House B and Yaxchilan Lintel 25, can partially be understood in terms of the Hiatus; and certainly, at Tikal it is exactly at the end of the Hiatus Period in A.D. 692 that we see the FTDK first being represented again on Altar 18 (style dated to A.D. 692) and Temple I Lintel 3 (A.D. 695/697).

The FTDK displayed on the façade of House B, a structure dedicated circa A.D. 660 (Martin and Grube 2008: 163-164), by one of the most well-known Late Classic rulers - K'inich Janaab Pakal I, marks the end of the Hiatus. The binding of Palenque's House B roof by a chain of FTDKs, whilst recalling the material or functional use of the knot as a fastening for bindings around stone altars at Tikal, additionally serves to connect binding to rule, expressed in terms of seating and enthronement at Creation Mountain (see Chapters Nine and Ten).

That an Early Classic Tikal symbol should be displayed by Palenque's ruling lineage on House B, a structure which together with its annex, House E, mapped out concepts of rule, suggests that in the interim between the Early and Late Classic there were changes in the configuration of power, almost certainly a reflection of the vacuum created by Teotihuacan's collapse. With this in mind it is worth noting that around the time when Pakal is constructing House B, Tikal is attacked by Calakmul and Tikal's ruler, Nuun Ujol Chaak, is forced to flee, taking shelter at Palenque where he is believed to have stayed for at least two years (Glassman and Anaya 2011: 137). It is known that Palenque was an important ally of Tikal throughout the Late Classic and this is believed to reflect marriage alliances between the two sites (Glassman and Anaya 2011: 137). However it is also proposed that a 'dynastic element similar to the commissioning of a founder of a line of kings as at Copan may have played into the equation' (Glassman and Anaya 2011: 137).

After its display on Palenque's House B, the FTDK appears at Yaxchilan on Lintel 25 commemorating an accession. It is the first time the knot is worn by a queen, having up to this point only been worn by male rulers. The form in which it is worn, as a textile motif, reflects the sex of the wearer – weaving being a female occupation and one which was intimately associated with royal female identity (Houston and Stuart 2001: 64-77; McAnany

and Plank 2001: 94-96;). In the representation of Lintel 25 the FTDK is not attached to male symbols of rule, rather the knot is displayed on a textile, one role of which in Maya society was as payment (gifting and tribute); textiles also served as burial accompaniments (Dacus 2005: 4-11; Miralbés de Polanco and Knoke de Arathoon 2003: 49; Houston and Stuart 2001: 64; Looper and Tolles 2000: 12). It is the first sign that the FTDK may have been part of, or integrated within a social exchange network. This is an idea which I will return to later when I look at FTDKs displayed on ceramics. The display of the FTDK as a textile motif loses the knot its status as a primary symbol of state and may denote a lesser appropriation of the FTDK at Yaxchilan. This suggests interactions with the FTDK at Yaxchilán different to those politicized at Palenque.

Following its display on Yaxchilan Lintel 25, the FTDK next reappears back at Palenque now under new rulership following the death of Pakal. On acceding to the throne, Pakal's eldest son K'inich Kan Bahlam II begins construction on the Group of the Cross structures which he dedicates in A.D. 692 (Martin and Grube 2008: 169). In the representation of the three tablets housed within the Group of the Cross structures Kan Bahlam II memorializes his father, shown wearing the FTDK around his neck, in the fashion of Tikal's Early Classic rulers (i.e. pictured on Tikal Stela 9 and 13). In the Temple of the Sun Tablet and the Temple of the Cross East Jamb, Creation deities associated with the origins of kingship at Creation similarly wear the FTDK around their necks in the Tikal fashion. The wearing of the FTDK by Creation deities associated with the origins of kingship and by the ancestral ruler, Pakal, intimate that the FTDK at Palenque is linked to taking office and rule, both ideas already established in the Early Classic at Tikal. It is also very clear that concepts of rule for the Palenque Maya as elsewhere, was powerfully embedded in the story of Creation. This story first appropriated by Palenque's earliest kings, is recalled and relived by subsequent rulers in ritual re-enactments which work to situate them in a chain of connectedness.

In the representation of the Temple of the Sun Tablet, the FTDK although not directly attached to the Jaguar Throne pictured at the centre of the composition, is nevertheless linked to the throne via the two Creation deities who wear the knots around their necks and are shown holding up the throne. The link between this knot and enthronement is also expressed at Tikal at this time. Similar to Palenque, Tikal is also under the rulership of a new king, Jasaw Chan K'awiil I who is pictured on Tikal Temple I Lintel 3 seated on a jaguar skin covered portable throne decorated with FTDKs (Martin and Grube 2008: 44-45). At both

sites the identity of the throne is intimately connected with that of the Water Lily Jaguar. That both rulers at Palenque and Tikal choose to emphasize the FTDK in the context of personal statements of rule visualized in terms of a Jaguar Throne, within five years of each other suggests that the FTDK has been appropriated by both sites where it had similar meanings.

Time

We know that the reckoning of time was important to the display of the FTDK because a number of the monuments which display representations of FTDKs were dedicated at Period Endings or else display motifs or rituals which suggest a Period Ending context. Tikal Temple I Lintel 3, Palenque Temple of the Sun Tablet and Palenque Temple of the Foliated Cross Tablet were all dedicated at Period Endings. However the true picture with regards to the value of time in the display of the FTDK is obscured by the fact that two monuments are style dated (Tikal Altar 18 and Palenque Temple of the Cross East Jamb); also, the date for Palenque House E is approximated. In addition two further monuments, Palenque Temple of the Cross Tablet and Yaxchilan Lintel 25, are linked to non-Period Ending dates. Although the Temple of the Cross Tablet bears a non-Period Ending date, the blood gushing from a bloodletter held by Pakal is marked by quadripartite completions signs indicating a bloodletting ritual which took place at the Period Ending. Yaxchilan Lintel 25, though not a Period Ending monument pictures bloodletting an act known to have taken place at Period Endings; also the costume worn for this event as illustrated on Lintel 25 is diagnosed as Period Ending. Taken together the evidence for the proposal that FTDKs were displayed at Period Ending celebrations is strong but not conclusive.

14.2b The FTDK – A Symbol at Tikal and Copan

It is during the 8th century that we see the greatest number of FTDK representations distributed amongst the greatest number of sites. These sites comprise Copan (Stela J and Structure 22A), Yaxchilan (Lintel 24 and Lintel 46), Piedras Negras (Stela 3 and Stela 8), Palenque (Tablet of the Slaves, Temple XIX Pier), Dos Pilas (Panel 19, Stela 5), Aguateca (Stela 1 and Stela 5), La Florida (Stela 9), El Cayo (Altar 4), and Tikal (Structure 10 Lintel, Temple IV Lintel 2).

As has been illustrated in the previous sections, the display of the FTDK in the context of monumental art at Tikal extends from the Early Classic right through to the Late Classic and

as such isolates this site as having a singular longstanding relationship with this knot. The same cannot be said of any other site so far and simply based on the display history of the FTDK through time I think it feasible to suggest that this knot is most closely affiliated with Tikal and its lineage. Although the FTDK appears on an item of lapidary art at Copan during the Early Classic and reappears again at this site in the Late Classic in the context of monumental art, this knot does not have the same kind of presence as at Tikal where it is consistently associated with groups of monuments dated to the Early and Late Classic. With this in mind I believe that the distribution of the FTDK between A.D. 700 and A.D. 750 may well have something to do with events at Tikal. It is therefore worth noting that just before A.D. 700, Tikal under the direction of the ruler Jasaw Chan K'awiil I effects a victory over Calakmul, an event described by Martin and Grube as a 'turning point, sparking off the decline of Calakmul's wider hegemony and Tikal's rebirth as a militant power' (Martin and Grube 2008: 44; Jones 2003: 207-208). This victory is followed by clashes with sites affiliated to Calakmul such as Dos Pilas and Naranjo (Martine and Grube 2008: 46) both of which later display FTDKs in the context of textiles. Intriguingly a set of 37 bone items found as part of the grave offerings interred with Jasaw Chan K'awiil I bear inscriptions which offer insight into Tikal's network of contacts. Amongst the inscriptions is a list of the death-dates of foreign nobility, one of which happens to be the Dos Pilas ruler Itzamnaaj K'awiil who died on October 726. Other bones within the set make mention to Palenque and Copan (Martin and Grube 2008: 47).

With the death of Jasaw Chan K'awiil I, his son Yik'in Chan K'awiil accedes in A.D. 734 and continues the work of his father in establishing hegemonic control over outlying sites. His first monument, Stela 21, pictures him in the Period Ending ritual gesture of hand scattering. Its paired altar displays an image of a bound and trussed Calakmul captive, possibly the Calakmul ruler, as it is exactly at this time that a change of rule takes place at Calakmul. The strike against Calakmul is followed by more military campaigns by Tikal and we hear of a Naranjo ruler being taken prisoner (Martin and Grube 2008: 48-50). Therefore the years between A.D. 700 and A.D. 750 sees Tikal back in power and exerting its influence often through acts of aggression. The increase in number of FTDK representations coincides with a time when Tikal is experiencing a return to its former Early Classic greatness and is actively pursuing an expansionist agenda. It is possible that the great increase in number and distribution of FTDKs during this period reflects Tikal activity, both diplomatic but also aggressive.

It is against the backdrop of a newly invigorated Tikal that the FTDK makes an appearance at Copan on Stela J, dated to A.D. 702. This date is interesting because it also coincides with the death of the Palenque ruler K'inich Kan Bahlam II (Martin and Grube 2008: 170) who as we know reserved a special place for the display of FTDK in the sculpted panels housed within his Cross Group of structures. The number of FTDK representations and their association with important deities, rulers and symbols of power, as well as their display within the heart or inner sanctum of the three structures he commissioned tells us that this knot was of particular significance to K'inich Kan Bahlam II and his reign. Yet after K'inich Kan Bahlam's death, the FTDK at Palenque only appears on a deified censer stand and on two monuments where it is pictured as a rather inconspicuous textile motif easily overlooked by the untrained eye. It is as if the importance of the FTDK at Palenque has waned with the death of K'inich Kan Bahlam II - at which time the FTDK as a symbol passes over to the Copan dynasty where it is displayed for the first time in monumental form on Stela J. It will be another forty years before it is next displayed at Copan on Structure 22A (A.D. 746) where it achieves a level of prominence unequaled in the display history of this knot. It is possible that during the first half of the 8th century Copan takes the place of Palenque in negotiating a 'special' relationship with Tikal, observed through its appropriation and display of the FTDK, which in the Early Classic had been primarily linked to Tikal.

Textiles and Ceramics

In the interim between its first appearance at Copan on Stela J and its last appearance at this site on Structure 22A, the FTDK is only displayed as textile motifs. Tikal is the single site (other than Copan) which displays the knot in contexts (Tikal Structure 10 Lintel and Temple IV Lintel 2) other than textiles during this period. The sites which display FTDKs in the context of textiles are Yaxchilan, Piedras Negras, Palenque, La Florida, El Cayo, Naranjo, Dos Pilas and Aguateca. These sites (with the exception of Naranjo) extend like a chain of beads connecting Copan and Palenque along an area known as the Usumacinta watershed, comprising three parallel river systems that linked the Tabasco lowlands to the upper Maya regions bordering the Southern Highlands (Canter 2007: 1-24, fig.1; Martin and Grube 2008: 10). When displayed as textile motifs on monuments at these sites, the FTDKs are shown as either on, or at the centre of, a quatrefoil; or, at the centre of a *k'an* cross. Only two monuments deviate from this pattern and these are La Florida Stela 9 and El Cayo Altar 4. In Maya monumental art, textiles such as *huipiles* are worn for rituals involving auto-

bloodletting (Looper and Tolles 2000: 11). Blood offering and indeed the flow of blood are represented in many different ways: through the act itself of letting blood, in the display of the instruments involved, or through the imagery of a large snake or serpent that is believed to be a metaphor for the conjuring of supernatural beings through the burned offering (Looper and Tolles 2000: 11; Joralemon 1974; Stuart 1984; Joyce et al.1991). Looper and Tolles note that not only was cloth used to absorb blood, but that strips of cloth were threaded through the ears of captives to signal their immanent death. It is not surprising therefore that the flow of blood is a theme which runs through the scenes in which the FTDK is worn as a textile motif. In these scenes, the flow of blood is represented through the display of bloodletting paraphernalia (Yaxchilan Lintel 25, Piedras Negras Stela 3, Dos Pilas Panel 19), conjuration of serpents (Yaxchilan Lintel 25 and Piedras Negras Stela 3), the burning of offerings (El Cayo Altar 4), the display of captives with ears pierced by cloth (Palenque Tablet of the Slaves, Piedras Negras Stela 8) and the scattering of blood mixed with maize or copal resin (Dos Pilas Stela 5, Aquateca Stela 1, Aquateca Stela 5, Dos Pilas Panel 19, La Florida Stela 9, El Cayo Altar 4). By and large the most common form of blood flow for which the FTDK is worn, in textile form, is that symbolized by the hand scattering gesture – an act reserved for Period Ending rituals.

Understanding why textiles were such important items for displaying FTDKs at these particular sites requires that we look at the representation of FTDKs on ceramics. Three ceramic vases in particular tell us something about the value of textiles decorated with FTDK motifs and these are Reents-Budet MS 1268 Vase, Robicsek Figure 257a Vase and Reents-Budet MS0639 Vase. The outer surface of Reents-Budet MS 1268 Vase and Robicsek figure 257a Vase are both painted to resemble a woven textile overlaid by a web of FTDKs designed to wrap around the vase. A similar textile overlaid by a web or network of FTDKs appears on La Florida Stela 9 which shows a queen in the act of handscattering. Reents-Budet MS 1268 Vase comes from the Uaxactun area. Uaxactun is described as a Tikal dependency and the two sites are linked by family and other ties (Martin and Grube 2008: 21, 30). The understanding that ceramic vases were highly charged items which passed between sites as part of a network of gift giving aimed at strengthening and maintaining ties of loyalty (Reents-Budet 1994: 88-89), together with the knowledge that the FTDK was most likely a Tikal symbol, could support an interpretation of the Reents-Budet MS 1268 Vase as a gift from Tikal to Uaxactun. Inserted as an idea within the gifting of Reents-Budet MS 1268 Vase is an overt reference to textiles, which through association with the vase, accrues social

meanings on a par with the vase itself. Unlike monuments and buildings, which because they are fixed within the landscape, are markers of place (sites as lineage seats), textiles and vases by dint of their portability or mobility, are easily exchangeable and therefore perfect markers for social interplay. Sites such as Tikal, Palenque and Copan which appropriate the FTDK as an item which functions to bind or directly overlay monuments and buildings are advertising a very different set of relationships with the FTDK to those sites whose interaction with FTDKs is confined to textiles. Sites which display the FTDK in the context of textiles are possibly signaling information on the extended influence and presence of those sites where the FTDK is linked to place (such as Tikal, Palenque and Copan) in their sociopolitical world.

None of the vases which display FTDKs can be traced to a particular site. The provenance of six are listed as unknown, however a number of the vases come from the Copan region (three from Honduras and three from the Uloa-Yojoa valley) which could suggest social interplays (family ties and/or diplomatic connections) between Copan and surroundings sites. If we look at the sites at which the FTDK is displayed in textile form, these cluster between the three sites at which the FTDK is linked to place/dynasty — Tikal, Palenque and Copan. A number of these southern sites such as Dos Pilas and Naranjo were founded by Tikal but yet are conquered by Calakmul and then reconquered by Tikal (Martin and Grube 2008: 56-67, 70-83).

Time

Six of the thirteen monuments (Dos Pilas Panel 19 and Stela 5, La Florida Stela 9, El Cayo Altar 4, Aguateca Stela 1 and 5) which display FTDKs as textile motifs depict the signature Period Ending gesture which comprises an open hand shown in profile releasing a scattering of drops or grains. Another two monuments were dedicated at the Period Ending (Piedras Negras Stela 3 and 8); a further is undated (Naranjo Stela 40) and four bear non-Period Ending dates. Two of the four non-Period Ending monuments are Yaxchilan monuments (Yaxchilan Lintels 25 and 46) and two are from Palenque (Palenque Tablet of the Slaves and Palenque Temple XIX Pier). Understanding whether a Yaxchilan monument is a Period Ending monument is complicated by the fact that a number of Yaxchilan monuments ‘bear not the dedicatory dates on which monuments were completed, but instead refer to the earlier events that these commemorate’ (Helmke 2010: 5). That Yaxchilan monuments do not record Period Ending dates has been noted by Thompson as irregular. He reasons that these

Yaxchilan monuments may have been paired with altars or other monuments now destroyed which were inscribed with Distance Numbers (a count of days between dates) that would have carried the opening date forward to the Period Ending which the monument served to commemorate (Thompson 2008: 42). Mathews also notes discrepancies in the dates recorded on Yaxchilan monuments (Mathews 1988: 329-337). Although the problem of the discrepancies or irregularities in the Yaxchilan dates cannot be fully considered here, it is possible that Yaxchilan Lintels 25 and 46 although not bearing a Period Ending date nevertheless depicts a Period Ending ritual for which the FTDK is displayed in textile form.

Tikal Structure 10 Lintel and Temple IV Lintel 2 as well as Copan Stela J and Structure 22A were all dedicated at Period Endings. Copan Stela J, a monument whose entire face is carved into the form of a FTDK, in particular lays out the value of time to the meaning of the FTDK by inscribing into the knot information regarding consecutive Period Endings. Therefore Stela J ‘connects the Period Ending of the stela, 9.13.10.0.0, to rituals completed by Yax K’uk’ Mo’, the founder of Copan’s dynasty, on the end of the *Bak’tun* (9.0.0.0.0), 266 years earlier. Waxaklajuun Ubaah K’awiil then recorded the accession of his father and linked both these events to his own accession, thus tying his authority and the character of the royal precinct to both the founder and his own father’ (Schele and Mathews 1998: 136-137). In the context of the FTDK carved into the stela face, tying and binding belongs to the category of Period Ending acts but it also recalls lineal connections. On the basis of the above evidence it can be said that the display of the FTDK is timed to the Period Ending.

14.2c The FTDK – A Symbol at Tikal, Zacpetén and Chichen Itza

In the years between A.D. 750 and A.D. 900 ten sites display representations of FTDKs. These are Tikal (Temple III Lintel 2, Altar 7 and 10), Aguateca (Stela 7), Palenque (Stone Censer Stand), Zacpeten (Altar 1), Chichen Itza (Jade from the Cenote of Sacrifice, Temple of the Owls Piers), Seibal (Stela 1), Itzimte (Stela 12), El Baul Monument 50, Bilbao Monuments 3 and 18, and El Castillo Monument 1. The dates for the Cotzumalhuapa monuments are approximate (A.D. 600/650 – 900/1000 [Chinchilla Mazariegos 2001; Sharer 1994: 424-427; Witschey and Brown 212: 108-111]); however I have inserted them here because they bear certain Mexicanized traits (such as speech scrolls), different to the ‘Teotihuacan-style revivals of earlier times’ (Martin and Grube 2008: 227), which date them to the latter part of the Late Classic rather than the early part (Milbrath 1999: 82-83).

The first dated monument on which FTDKs are displayed is Tikal Altar 10, dedicated in A.D. 771 by the ruler Yax Nuun Ahiin II whose legacy includes the construction of the two Twin Pyramid Complexes known as Q and R. Yax Nuun Ahiin built Twin Pyramid Complex Q to mark the end of the 17th *K'atun* in A.D. 771 and Altar 10, commissioned for this great commemorative event, was set up together with its paired stela, Stela 22, in an enclosure within Complex Q (Martin and Grube 2008: 51). Almost forty years pass before we see the FTDK displayed at Tikal again in the context of Altar 7. Under the direction of the ruler Dark Sun, Altar 7 together with its paired stela (Stela 24) is set up on the stairway axis of Tikal Temple III to mark the 19th *K'atun* Period Ending in A.D. 810. Temple III Lintel 2, style dated to A.D. 810 and attributed to Dark Sun, was possibly also dedicated at the 19th *K'atun* Ending (Martin and Grube 2008: 52-53). In the time between the dedication of Tikal Altar 10 and the dedication of Altar 7, two sites display FTDKs in the context of monumental art; these are Aguateca (Stela 7) and a stone censer from Palenque. Aguateca Stela 7 displays the FTDK in the context of a textile whilst the Palenque stone censer, sculpted in the form of an aged deity displays the FTDK as an item of costume worn around the neck.

Martin and Grube note that Tikal Stela 24/Altar 7 were 'not erected in the traditional twin-pyramid group but instead stood at the foot of Temple III' (Martin and Grube 2008: 52). That Dark Sun did not construct a twin-pyramid complex to commemorate the 19th *K'atun* suggests that Tikal did not have the resources to embark on such a vast monumental enterprise. This proposal is supported by the fact that Temple III was the last great pyramid to be built, suggesting that Tikal was facing adversity. The nature of this adversity is touched upon by Martin and Grube who describe the beginning of the 9th century as a time of crisis when carved monuments and records of dynastic activities and/or people disappear and population numbers in cities and known centres plummet (Martin and Grube 2008: 52).

The A.D. 810 date commemorated at Tikal with the setting up of Altar 7 is very important because it marks the 19th *K'atun* (9.19.0.0.0), meaning that the next *K'atun* or twenty year period will see the end of the 9th *Bak'tun* and the beginning of the 10th *Bak'tun* (10.0.0.0.0). This new *Bak'tun* in A.D. 830 went unrecorded at Tikal and sees the commencement of 'a 60-year hiatus that seems to mark the end of any cohesive central authority at the city' (Martin and Grube 2008: 53). However, although Tikal does not record this *Bak'tun*, a nearby site, Zacpeten, previously a client state of Tikal, raises an altar which in true Tikal fashion displays FTDKs. The only available record of Zacpeten Altar 1 is a drawing of the

altar's face showing four FTDKs; however this altar is also described as having representations of FTDKs on its sides suggesting perhaps that it belonged to the Tikal tradition of altar stones bound with cords fastened by FTDKs. If, as proposed here, the FTDK is a symbol for Tikal's founding lineage, then the knots on this altar alert us to potential ties with Tikal, most likely (given the FTDKs history in both the Classic and Late Classic) lineal; and if Nikolai Grube is correct in his interpretation of the glyphs on Altar 1, then this altar clearly records the nature of these ties (Rice 2004: 161). According to Grube the altar text refers back in time to the accession of a Zacpeten ruler in A.D. 751 (9.16.0.16.8) shortly after a *K'atun 13 Ajaw*. Of interest is that the inscription also tells us that this Zacpeten ruler was the son of the Tikal ruler Yik'in Chan K'awiil (Rice 2004: 161; Martin and Grube 2008: 53). Therefore in the context of Altar 1, the Zacpeten ruling house not only records its lineal ties to Tikal but also visually politicizes this by displaying a powerful Tikal symbol, the FTDK, in a form which was only ever used by Tikal itself, to bind stone altars. Tikal at this time is a shadow of itself and a number of what were once vassal states to Tikal exhibit or use the Tikal emblem glyph, each setting itself up as an independent polity (Martin and Grube 2008: 53).

At the time that Zacpeten is celebrating the seating of the *Bak'tun* in A.D. 830, at Seibal (a site whose revival at the beginning of the Late Classic is attributed to Tikal [Martin and Grube 2008: 227]), a new regime is being established. Seibal Stela 11 describes the inception of this regime in terms of an arrival of a lord named Aj Bolon Haabtal. Described as a dynastic re-foundation, his arrival spells a time of growth evidenced by a flurry of monument-raising at a time when almost all the 'major dynasties had fallen' (Martin and Grube 2008: 227). In A.D. 869, Seibal dedicates Stela 1, which depicts the ruler wearing a FTDK as a headdress element. We know that Seibal's contacts with Tikal continue into the 9th century because Seibal Stela 10 records the Tikal ruler Jewel K'awiil as witnessing the A.D. 849 *K'atun Ending* (10.1.0.0.0) at Seibal in the company of rulers from Calakmul and Motul de San José (Martin and Grube 2008: 227; Martin 2003: 34). This is the only known record of Jewel K'awiil (Martin and Grube 2008: 53). That the two onetime warring rulers of Calakmul and Tikal are now attending a *K'atun Ending* event at Seibal suggests that they are now vassals of the Seibal ruler.

The Seibal Stela 1 ruler wears his name glyph in his headdress in keeping with the Maya convention of wearing items denoting title and rank on headwear. The location of the FTDK

below the name glyph possibly identifies this knot as similarly functioning to convey personal information. At the same time that Seibal raises Stela 1 to mark the 2nd *K'atun* Ending of A.D. 869, Tikal raises its very last monument, Stela 11 (Martin and Grube 2008: 53).

The name glyph on the Seibal Stela 1 headdress has relevancies beyond being a marker of name or title, and this is because it also gives us clues regarding the political landscape at this time. The Seibal Stela 1 headdress name-glyph dubbed 'knife wing' has been used as evidence for political and lineal ties to Chichen Itza. Not only is the knife wing title recorded in Chichen Itza inscriptions (Kowalski 1989: 173-174), but also the FTDK is illustrated in representation at this site. At Chichen Itza the FTDK is an important insignia of rule carved into the piers of the Temple of the Owls, a structure dated to circa A.D. 870 (Schmidt 2011: 143). The approximate date of the Temple of the Owls does not rule out the possibility that the Seibal Stela 1 FTDK and the FTDKs on the Temple of the Owl piers were contemporaneous. On the Temple of the Owls Piers, FTDKs flank an image of a cacao tree which grows from the body of the Maize God. The Maize God as cacao tree is a theme painted on ceramic vases of both the Early and Late Classic periods and refers to a particular sequence of events within the Maya Creation epic in which the Maize God suffers decapitation in the Underworld and is resurrected as a maize tree which grows different kinds of fruit including cacao. This magical tree is taken by God L, the God of trade, and placed outside his palace. The understanding that the iconography on the Temple of the Owls piers retells the story of the Maize God's regeneration as a cacao tree has encouraged an interpretation of the structure as God L's palace (Stone and Zender 2011: 212, 213, 218, 219).

Sometimes instead of the cacao tree growing from the Maize God's body, the head of the Maize God is pictured growing from the stem of the cacao tree; in this scenario the head substitutes for a cacao pod (Stone and Zender 2011: fig.95.2), a substitution which features in Cotzumalhuapa art. In Cotzumalhuapa art, human heads are depicted fused with cacao pods that are shown growing from the tree or its branches (Braakhuis 2009: 3). Although the heads are said to be from individuals who were killed in the ballgame, which involved decapitation (Fox 1987: 248; Baquedano and Graulich 1993: 167-169; Carlson 1991: 50), it is possible that the basis for the symbolism derives from the decapitation of the Maize God in the underworld. The display of FTDKs at Cotzumalhuapa and Chichen Itza suggests that in

the Late to Terminal Classic the knots had taken on new meanings to do with the sagas of the Maize God. It should be noted that in the Terminal Classic, Chichen Itza, Seibal, and sites from the Cozumalhuapa region all display Mexican traits (Martin and Grube 2008: 226-227; Taube 1994: 228) attributed to incursions by Mexicanized Maya from the Gulf Coast (Sharer 1994: 406, 426, 427). If both the Cotzumalhuapa and Chichen Itza FTDKs are seen as late developments (post A.D. 850) then it can be proposed that the FTDK survives as an important iconographic symbol long after the disintegration of the main Classic Period Maya sites of the Central Lowlands. The Creation Story, the Flower World and rule are still very much primary concepts associated with the FTDK, however the knots connection with cacao iconography is new. As a measure of value, cacao brings into play ideas to do with trade and exchange, values already noted for the Late Classic where the knot is worn by God L, the Classic Period Maya Merchant God. However the focusing on cacao imagery without the intermediary of God L isolates value and exchange as existing separate to the royal merchant deity and prototype ruler.

Time

Between A.D. 750 and A.D. 900, eleven monuments display FTDKs, five of which bear Dedicatory Dates. The dates for the remainder of the monuments are approximate. Therefore Tikal Altar 10, Aguateca Stela 7, and Tikal Altar 7 were dedicated at the 17th, 18th, 19th *K'atun* Ending respectively, whilst Zacpeten Altar 1 bears a *Bak'tun* 10 Dedicatory Date. No monuments displaying FTDKs appear to have been dedicated at the 1st *K'atun* Ending of *Bak'tun* 10; however Seibal Stela 1 dedicated at the 2nd *K'atun* Ending displays a FTDK. Therefore between A.D. 771 to A.D. 869, monuments displaying FTDKs are linked to the *K'atun* and its passage.

As has been demonstrated throughout this work, FTDKs are not just displayed on monuments dedicated at the completion of the *K'atun* and its subdivisions but are also worn for Period Ending acts which include the drilling of fire, the scattering of blood mixed with maize and incense, and the binding of stones. Furthermore, at Tikal a number of the bound altars are set up at Twin Pyramid structures built for the commemoration of the *K'atun*.

The reason why this knot, an item linked to rulership at Tikal, was displayed at the Period Ending may have to do with the way in which the passage of time intersected with rule. There is evidence that the ancient Maya subscribed to a model of governance based on the

K'atun Cycle. During the Classic Period, the rise and fall of different Maya sites in tandem with the cycling of the *K'atun* is noted by Chase (Chase 1991: 32-36). The repetition of cycles of time measured in terms of thirteen cycling *K'atuns* (thirteen twenty year periods) equates to the *K'atun* Cycle. This great time cycle comprised thirteen smaller units of time measured in *K'atuns* is described by Chase as controlling 'the fate of dynasties in the major cities of Classic Period times and continued to do so in the Postclassic right down to the fall of Mayapan (Chase 1991: 32)'. Measuring 256 years, the *K'atun* Cycle is also known as the May cycle (Rice 2004: xv).

Chase isolates the date 8.7.0.0.0, 8 *Ajaw* as a start date for the institution of the *K'atun* Cycle (i.e. a temporal map designed around a circle divided into thirteen parts, where each part is equivalent to one *K'atun*) (Chase 1991: 34-36). A cycling of 13 successive *K'atuns* from this date saw the completion of the first *K'atun* Cycle on the date 9.0.0.0.0, 8 *Ajaw* (Chase 1991: 34). The passage of the thirteen *K'atuns* of the first cycle sees a movement from the Late Preclassic to the Early Classic. During this first *K'atun* Cycle, few sites exhibit the full ceremonial complex. Individuals from the Tikal ruling lineage are seen as being involved in the organization and maintenance of the *K'atun* Cycle (Chase 1991: 34). However by the completion of the first cycle and the start of the second *K'atun* Cycle (i.e. 9.0.0.0.0, 8 *Ajaw*), sites such as Yaxchilan and Copan appear on the scene exhibiting newly developed core ceremonial features including *K'atun*-related monuments, temples and palace structures (Chase 1991: 34-36). Tikal is seen as being involved in the dynastic affairs of these sites as well as having considerable influence over them. Other sites such as Quirigua, Piedras Negras, Altar de Sacrificios, Oxkintok, Calakmul, Naranjo, and Caracol also start to exhibit full core ceremonial complexes (Chase 1991: 34-35). Chase terms these sites as first expansion sites. As the *K'atuns* of this second *K'atun* Cycle turn, new power relations emerge, some hostile to Tikal. At this point Tikal is seen as losing its central role in the maintenance of the *K'atun* Cycle. This is experienced as a cessation of monument erection, construction and rich burials at Tikal. Coinciding with the stagnation at Tikal is the rise of Caracol, whose rulers establish a pattern in erecting giant *Ajaw* altars to commemorate the passage of the *K'atun* (Chase 1991: 35, 36). With the maturing of this second *K'atun* Cycle between 9.8.0.0.0 and 9.9.0.0.0, sites such as Tonina, Pusilha, Palenque and Coba show increased activity and expand. These sites represent secondary expansion sites. However by the completion of the second cycle and the commencement of the third on 9.13.0.0.0, 8 *Ajaw*,

Tikal is back in power and is responsible for the demise of Caracol as evidenced by the desecration of its monuments (Chase 1991: 32-36).

If Chase is right about the inception of the *K'atun* Cycle in 8.7.0.0.0, then the first depiction of the FTDK on Tikal Altar 13 coincides roughly midway in the cycle (i.e. just after the 12th *K'atun*). Why this should be cannot be answered here, other than to say that the introduction of the FTDK occurs in tandem with the inception in the Maya area of a particular format of royal portraiture which remains constant for six centuries, not just at Tikal but at sites across the Maya world. If the Altar 13 FTDKs can be seen to reflect the agency of the ruler as binder of stones, then the first representation of this knot on Altar 13, together with the representation of the ruler on its paired stela, Stela 29, marks the inception of a concept of the ruler as an embodiment of time, where time is measured by the *K'atun*.Looper notes that the Maya calendar is structured in such a way that each Period Ending falls on the day *Ajaw*, a day name which also denotes the kings's political office 'therefore when a king commissioned a stela in his own image, his identity became conflated with' (Looper 2003: 11) a cycle of time. In other words rule and time are for the first time unified in the body of the ruler and manifested through the acts which he carries out such as the binding of stones, the scattering of drops and the drilling of fire.

Summary

Early Classic

During the Early Classic Period the FTDK functioned as a symbol primarily associated with the rulers of Tikal. The FTDK may have been exported from Tikal to the two centers of Río Azul and Copan which would account for its representation in tombs at these sites occupied by members of Tikal's ruling lineage. The strong link between Tikal and this knot can be ascertained from the fact that the FTDK is exclusively represented on multiple altars and stelae at this site during the Early Classic, and that Tikal is the first Maya site to display a representation of a FTDK.

I think it is significant that the FTDK disappears from the record during the Early Classic at a time when Tikal's influence is known to have waned and reappears in the Late Classic at the time when Tikal is beginning to regain its power. This could support the idea that the FTDK's display was linked to the power and prestige held by Tikal rulers; therefore during

the period when Tikal is conquered or under Calakmul's thumb, FTDK's cease to be displayed.

Late Classic

By the beginning of the Late Classic we find the FTDK prominently displayed on architecture and monuments at Palenque and monuments at Tikal suggesting that this knot now serves as a symbol of rule at both sites. I think a combination of politics (understood in term of the consolidation and sharing of tribute networks) and lineal ties with Tikal could account for the display of this knot on multiple monuments and an important building at Palenque. The display of the FTDK on or in association with a throne at Tikal and Palenque is new and clearly locates the value of the FTDK within the area of rule and seating. In the first part of the Late Classic, the FTDK is primarily associated with two Maya royal houses at Tikal and Palenque. However the Palenque display of the FTDK does not last and the knot passes into the hands of the Copan ruling house. The reasons underlying the mutual sharing of the FTDK at Tikal and Copan may have to do with the fact that Copan was founded by a Tikal lineage member; however politics and strategic alliance building, in response to Tikal's nemesis, Calakmul may also have something to do with the display of the FTDK at Copan as well as its display at sites located with the Usumacinta area.

The incidence of FTDKs at the three main sites of Tikal, Palenque and Copan and the 'in-between sites' of the Usumacinta region during the Late Classic defines a territory to the south of Tikal as opposed to its north; the territory north of Tikal is dominated by Tikal's arch rival, Calakmul. If we look at the sites at which the FTDK is displayed in textile form, these cluster among the three sites at which the FTDK is linked to place (i.e. pictured on monuments and architecture representing Creation locations) — Tikal, Palenque and Copan. A number of these southern sites such as Dos Pilas and Naranjo, who trace ancestry to Tikal, are conquered by Calakmul and then reconquered by Tikal. The clustering of FTDK representation in the territories to the south of Tikal may well reflect family and diplomatic ties between Tikal and these sites but also map the extent of Tikal's network of allies/conquests.

The fact that Tikal continues to display FTDKs as part of stone-binding events throughout most of the Late Classic, an act with great time depth and one associated with Tikal's heyday, points to the continuation of important ritual Period Ending traditions to do with kingship at

this site. Therefore the transference to Zacpeten of the function of the FTDK to bind altars at Period Endings suggests that in the context of Altar 1, Zacpeten is recording much more than its lineal ties to Tikal. It is possible that Zacpeten is recording its new role as Tikal's successor. The appropriation of the FTDK in a form pioneered at Tikal points to changes in the configuration of power within the Maya political landscape. This is born out when this knot is taken up by mexicanized Maya of the southern highland sites of Bilbao, El Baul and El Castillo as well as other mexicanized Maya groups at Chichen Itza. The appropriation of an important Tikal symbol by the Chichen Itza lineage charts the transference of power from the Central Lowlands to the Northern Lowlands.

Chapter Fifteen: Conclusion

The Flat Two Dimensional Knot was a primary symbol for Tikal's agency in a network of governance and power that extended to city states along the Usumacinta watershed to Palenque, and as far as Copan. This system of governance was modeled on the passage of the *K'atun* cycles. Therefore, the FTDK and its meanings are inextricably related to time and its completion, where time is the very substance of rule. Through recourse to the FTDK, its material properties, and the things which 'host' the knot, it is possible to begin to map out how this system of governance may have worked and what its primary symbols and offices of state were.

15.1 The Three Stone Hearth

The analyses set out in the preceding chapters comprise evidence for the proposal that the items which Robicsek identifies as symbols for mats (in which the mat is said to function as a royal seat) are in fact knots. Rather than being a symbol for something else, the knots are entities in their own right, functioning as intended: to bind, fasten and tie. Through the agency of rulers as binders, these Flat Two Dimensional Knots acquire meaning in the context of ancient Maya kingship, itself experienced through acts of binding and tying. Amongst binding acts, the binding of the Three Stone Hearth was paramount. I propose that it is here, in the context of the binding of the hearth, that the FTDK derives much of its meaning. I further propose that references to this binding act can be found in hieroglyphic inscriptions where it is qualified as a binding of stones (*k'altuunn*).

The recognition that altars functioned as Three Stone Hearth places isolates the FTDKs — shown as fastenings for cords which bind altars at Tikal, or else overlying ropes which bind Tikal altars — as knots whose ritual function, as well as meaning, has to do with the binding of the hearth. Where stelae paired with such altars bear references to stone-binding, the 'stone-binding' phrase should be seen as referring to the bound altar.

The binding of the Three Stone Hearth would have involved an actual act of binding performed by rulers, an act memorialized in representation carved in stone. I have shown that, for the ancient Maya, the hearth was metaphoric of multiple concepts. The complexity of the Three Stone Hearth as a concept is evidenced in the different ways by which it is

represented. Sometimes the three stones of the hearth are worn by rulers as a headdress element, or represented as a feature of the Creation Mountain. Alternatively the triple stone glyph for ‘altar’, as well as the picturing of altars in Maya representation as supported by three stones, indicates that these monuments were conceived of as Three Stone Hearths. The Jaguar Throne, at which the first stone of creation was set, is yet another reference to the Creation hearth. Each metamorphosis of the hearth reflects one or a number of its qualities, such as centrality, temporal renewal, ancestral seat, or creative opening/entrance from which things are brought into being. Of the things which are born of the hearth, one in particular is of singular importance, and that is the sun. The sun as the archetypal ruler is accorded the title *mah k’ina* or great sun, an epithet carried by the sun’s namesake, the earthly ruler.

In a number of instances in which the FTDK is represented on monuments, it is associated with concepts of rule which draw on the sun and the sun’s movement. Therefore in the Río Azul Tomb 1 painting, large FTDKs are integral parts of a scene which recalls the death and rebirth of the ruler in terms of the journey of the sun as it emerges out of the earth, up through Flower Mountain and into the celestial world. Similarly, the representation of the sun’s journey in terms of a path, in the Temple of the Sun Tablet, tells us that the Jaguar Throne pictured at the centre of the scene is the seat of earthly rule, where rule is measured by the passage of the sun. The movement of the sun as it traverses the sky is both a measure of time and rule. Therefore the fastening of cords with FTDKs around the hearth set at Creation Mountain, a place from where the sun is born each morning, is as much about the binding of time as it is about rule.

Given the values which the ancient Maya attributed to the hearth, it is clear that it was more than a fire pit. The hearth is a concept which encompasses time (measured by the movement of the sun) and space (above and below and the four quarters or directions – also measured by the movement of the sun [Šprajc 2009: 311]). The movement of the sun maps out a model of rule which is temporal. The existence of such a model during the Classic Period, conceptualized by the *K’atun* Cycle, is noted by Chase (see Chapter Fourteen), who posits a special role for Tikal in its organization. The function of FTDKs as fastenings for bindings around the hearth, a place whose many meanings and values structured concepts of rule, informs us that this knot is implicated in acts which defined rule.

Dynasty

A vital observation with regard to the FTDK is that not all sites displayed this knot; yet the Creation story and three stone hearth as a narrative of genesis is believed to have been shared by highland and lowland Maya communities. The restricted distribution of the FTDK suggests that it was not a part of the repertoire of symbols associated with Creation at all Maya sites. Therefore it can be surmised that the FTDK is doing more than fastening cords around symbolic hearths – the knot is also identifying certain sites or certain people as sharing in something which others are not. The nature of this ‘thing’ which is being shared can be grasped by observing the spatial and temporal distribution of the knot through time and space.

I have shown in Chapter Fourteen that during both the Early and Late Classic periods, the FTDK is consistently associated with Tikal; a pattern which is not reproduced at any other site within the Maya area. In addition, because a number of the sites which displayed the knot in the Early and Late Classic were founded by members of the Tikal ruling lineage, I have proposed that the knot may have functioned as a marker for lineages with blood ties to the Tikal ruling house. It is possible that Tikal functioned as a kind of Tollan or place of origin for a line of sacred kings (see Chapter One). The foundation of new kingdoms from Tikal’s own sacred line means that Tikal may have served as a place of investiture to which lineage heads returned to receive the rights and symbols of rule. The knot may have functioned as a symbol for Tikal’s ruling bloodline.

Even with the demise of Tikal, I suggest that the FTDK continues to identify ruling houses linked to Tikal through bloodline. For example, the inscriptions on Zacpeten Altar 1 inform us that the ruler who dedicated the altar was descended from the Tikal line of kings. In addition, the imagery in which the FTDK is embedded in the context of Zacpeten Altar 1 categorically tells us about the value of time to the meaning of this knot; therefore not only was the monument dedicated at a Period Ending, but each of the four petals which comprise the *K’atun* completion sign carved into the face or top of Zacpeten Altar 1 is substituted by a FTDK. Similarly at Tikal, the display of FTDKs in groups of four on the sides of altars possibly reflects the organization of the *K’atun* into four parts. That a knot affiliated with lineage at Tikal should function as a fastening for the hearth suggests that the hearth was important to ideas of lineage. This proposal is born out in the function of the hearth as a place from which the sun, as original ancestor and prototype ruler, first emerges.

The proposition that the FTDK functioned as a marker for Tikal's lineage becomes more tenuous with the advancement of the Terminal Classic. This is especially so at the Cotzumalhuapa sites of the Guatemalan highlands. Nevertheless, in the context of Cotzumalhuapa art, the display of the FTDK in scenes involving ballplayers, or its display as a fastening for cords around a supernatural entrance (as hearth), reflects continuity in associations noted for the Late Classic. It is on the basis of the interpretation of what I perceive as meaningful associations between FTDKs and the items on which this knot is displayed during the Early to Late Classic, that I am able to also suggest continuities in meaning at Seibal and Chichen Itza in the Late to Terminal Classic.

The Cords of Time

That FTDKs are displayed primarily on monuments which are dedicated at the completion of the *K'atun* and its divisions, or else pictured as items worn for Period Ending acts such as hand scattering, firmly locates this knot within the kind of temporal model of rule sketched out by the *K'atun* Cycle. The function of FTDKs as fastenings for cords around stones, a reference to the binding of the hearth at the Period Ending, would have played an important part in structuring and linking time to rule. The deep significance of time to the act of binding can be better appreciated when one considers how the path taken by the sun, the ecliptic, is sometimes pictured as a serpentine cord or celestial rope, which functions as a binding medium. In the representation of Stela 12 from Late Preclassic Izapa, such celestial serpentine cords function as the binding material from which a large FTDK is tied, and again in the Late Classic we find the FTDK tied from serpentine cords (known in the Postclassic as the *Kusansum*) in the representation of El Baul Monument 50. The FTDK worn as a headdress element by the Seibal ruler Knife-Wing, pictured on Stela 1, is also tied from two serpentine cords. As cords of the *Kusansum*, the very material from which the knot is tied is analogous to time. This proposal is supported by the representation on the façade of Copan Structure 22A where the glyphs reading '*Ajaw*' above three FTDKs act like name tags which tell us about the equivalence between time, rule and knotting/binding.

Sometimes blood takes the form of serpentine ropes, and as Stuart notes, the letting of blood was also perceived by the Maya as a binding act. The equivalence between blood (i.e. lineage) and ropes or the equivalence between ropes/cords and the ecliptic (i.e. time) informs us that the binding of the hearth was a metaphor for multiple things. Both the rope which

binds the hearth and the hearth itself is replete with metaphorical values associated with rule, highlighting the stream of ideas within which the FTDK is located. These ideas intimate or forewarn us that this knot is likely to be working in ways both material and conceptual.

Mapping Rule

I propose that the material properties or workings of the FTDK, model difficult-to-grasp concepts by which kingship was apprehended amongst the Maya. The conceptualizing of rule through analogy with the properties of the hearth as supernatural entrance, where the past in the form of ancestral kings headed by the sun, as first king, is connected to the present (as living ruler), can best be grasped through recourse to the FTDK. We see this at Palenque where a continuous FTDK binds House B, a structure recognized as a Creation Mountain at which the three stones of Creation were set. Each Palenque king can be likened to one knot within a series of knots (or kings). Another way in which the FTDK maps out rule can be appreciated in the manipulation of the FTDK to form a net of knots as seen on Reents-Budet MS 1268 Vase. The FTDKs are connected together to form a spread or network of rulers, each linked to the other by ties which I suggest are lineage ties. By visualizing rule in terms of a net, it is possible to map territories or kingdoms not as segregated entities but as parts of a connected whole. In addition, the locating of signs for the centre, as hearth, between each set of four knots provides yet another model for understanding the binding of the hearth as central to lineage and descent (where descent entails time).

15.2 The People and Things on Which the FTDK is Displayed, Tell us about the Hearth and the Deeper Significance of its Binding

Thrones

That FTDKs appear on or in association with thrones at the sites of Tikal, Palenque and Copan tell us that the hearth and the binding of the hearth had value in the context of seating. At all three sites the thrones bear jaguar attributes which identify them with the Water Lily Jaguar. As Lord (*Ajaw*) of the three stone hearth and a symbol of male lineage, the Water Lily Jaguar invests the throne with a masculine power as well as informs us about the particular office of the person who takes up this seat (i.e. Lord of the Three Stone Hearth). When seated on the Jaguar Throne, the ruler is in effect centered in the hearth and I suggest this is why FTDKs are pictured on Tikal thrones. The knots state that the throne is a hearth throne and that the binding of the hearth in effect binds the throne. Conflated with the hearth,

the ruler is connected to a line of descent, a concept which additionally draws meaning from the movement of the sun, as original or ancestral ruler.

FTDKs displayed on thrones pictured in lintels at Tikal, dedicated by more than one king, point to historical continuity between the FTDK and seating at Tikal. This is in contrast to Palenque and Copan, where the FTDK associated with a throne is pictured on a monument or building attributed to a single ruler. If as proposed, the FTDK was a symbol for Tikal and its lineage, then the display of FTDKs at Palenque and Copan suggest strong ties with Tikal within the lifetime of a particular historical ruler. The implication is that these are blood ties, but it is also possible that the FTDK in association with the Jaguar Throne at Palenque and Copan is commemorating more than blood links to Tikal. It may be that these two sites appropriated roles in the organization of the *K'atun* Cycle equivalent to that performed by Tikal. This appropriation could have occurred at a time when Tikal was recovering from clashes with Calakmul.

The Person of the Ruler: Looped around the Neck

In Early Classic Tikal, the holding of fire drills together with the wearing of the FTDK around the neck by the ruler K'an Chitam was part of the costume worn by royal fire lords. The title of fire lord identified the holder as performing acts such as fire drilling and the binding of the hearth. That the office of fire lord had political and martial overtones has been proposed by Stuart (2005: 31, 123-125). The only historical ruler outside Tikal to be pictured wearing the FTDK around the neck, Tikal-style (other than fire deities at Palenque), was Pakal. The tablet which pictures Pakal wearing the FTDK also shows the FTDK worn around the neck by Creation Fire Deities who hold up a cosmic version of the Jaguar Throne. The smoke-capped *Ajaw* sign, an attribute of the Water Lily Jaguar pictured above the jaguar head inset into the throne and worn on the jaguar skin cloak of the Creation deity and God of trade, God L, can be read in a number of ways. First it tells us that the throne and God L are a single unit. In other words, the Jaguar Throne is the seat of God L, and therefore the ruler who accedes to this throne does so in the name of God L. It also tells us that this is a throne of male lineage. Finally, because God L is a royal trader suggests that this throne is a seat of a ruler with strong trading privileges. Through recourse to Temple of the Sun Tablet we can therefore interpret the function of the Tikal Jaguar Thrones, as well as the kinds of offices to which a ruler accedes to when taking up this throne.

Textiles and Ceramics

The value of both textiles and ceramics as high-status items, burial and tribute goods, as well as objects used to negotiate strategic relationships through gifting, defines a landscape comprising an array of social interactions. The display of FTDKs on textiles and ceramics reveals a complex web of social relations by which royal city states were linked to Tikal. It would seem that the FTDK was being consumed as part of an elite exchange network. Where textiles are concerned, that the nature of what is being consumed has to do with lineage can be gleaned by the rituals for which the textiles were displayed and which have to do with the letting of blood and the conjuring of ancestors.

Monuments and Architecture

In the representation of Cotzumalhuapa monuments, the tying of FTDKs takes place against the setting of the ballgame. That the tying of FTDKs had ballgame links is also suggested at Tikal, where bound captives, identified as ballplayers, are pictured on altars encircled by ropes and cords fastened by FTDKs. The substitution of cacao pods (used as currency by the Maya) for decapitated heads in the Cotzumalhuapa imagery illustrates that the ballgame had to do with commercial activity. The binding of stone monuments was possibly a post-ballgame act. The ballgame may have been less a sport than an act associated with war played for extremely high stakes by rulers and supporting elites. Winning, as celebrated in the ballgame, brought with it such privileges as seating the *K'atun*, and with this may have come economic advantages such as tribute and titles. The ballgame therefore performs a very important role in celebrating the cycling of the 13 *K'atuns* which comprise the *K'atun* Cycle. Overseeing the working of the cycling *K'atuns* is Tikal, a place associated with the origins of the cycle itself.

To conclude, the evidence suggests that the FTDK had strong associations with acts and symbols that legitimated rule. Restricted to certain people and sites with lineage ties to Tikal, the FTDK was an important symbol displayed for Period Ending rituals aimed at invoking the ancestral past. In the Late to Terminal Classic, with the demise of Tikal as a major power, the FTDK continues to be displayed in contexts which recall its display in the Early and Late Classic periods. It is possible that the FTDKs' core meanings, to do with the duality of time and ancestral origins (lineage/bloodline), continued to be valid in the Terminal Classic at sites such as Chichen Itza, suggesting an appropriation of models of rule based on the cycling of

the *K'atun*. It is possible that in the Late to Terminal Classic divide, Chichen Itza replaces Tikal as the new Tollan.

The Classic Period data on the FTDK presented above will prove vital in facilitating future investigations of this knot in the Terminal to Postclassic divide. As a source for comparative analysis, the Classic Period data can now work to shed light on the use of the FTDK in the Postclassic, at sites such as Santa Rita in Belize.

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