

THE ARCHAEOLOGY OF YUCATÁN

Edited by

Travis W. Stanton

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Preface

Travis W. Stanton

This volume was originally conceived to provide a forum for Mexican and foreign scholars to publish new data and interpretations on the archaeology of the northern Maya lowlands, specifically the State of Yucatán. In 2001, I helped to organize the first of two conferences aimed at fomenting collaboration between Mexican and foreign archaeologists working in the northern lowlands. With funding from the Banamex Foundation, George Bey, Traci Ardren, and Tomás Gallareta Negrón, and I organized the first conference at the Hacienda Poxilá. In 2003, we, and Aline Magnoni, held the second conference at the Hacienda Temozón. While the idea of the conference lost steam after that point, two points emerged from the sessions that stayed with me during the following years. First, it was clear that increased communication among scholars was important for grasping a better understanding of the great amount of data emerging from the State of Yucatán. There has been more salvage work conducted in this state than in any of the others throughout Mexico and the data are overwhelming. Second, because of this large amount of salvage work, archaeologists in the INAH office in Yucatán have not had the time to publish a great majority of the new information. Further, many of the forums that are easily accessible to scholars in the northern lowlands have constrictive space constraints not conducive to publishing data. With these points in mind, I asked many of the scholars who had originally participated in the two conferences, as well as others, to submit a papers that did not necessarily have to have a theoretical focus, and that could be data laden so that the raw data from many of these projects would not be confined to difficult to access reports in the Mérida and Mexico City offices. The result was a series of manuscripts on the northern lowlands, most of which focused on the State of Yucatán. Some of the papers are very data heavy, while others have a much more interpretive emphasis. Yet all of them contribute to a more complete picture of the northern lowland Maya.

Part I

The Hill Region

Chapter 1

Death and Deer Riding among the Ancient Maya of Northwest Yucatán, Mexico

Daniel Graña-Behrens

Introduction

During the 1960s when Tatiana Proskouriakoff (1960) discovered that hieroglyphic texts commemorate important life stations of a ruler, Maya studies entered into a new phase of study. Since her seminal research the biography of more than hundred rulers and their associated kingdoms – small scale or city-states each with its own emblem glyph – have been revealed and studied. Along with the vividly remembered individuals, Maya scholars have deciphered different actions like war, capture of prisoners, and commemorative rituals, among other events. These decipherments not only throw a vast light on Maya history, but also on ancient rituals and belief systems. It was not before the last decade or so, however, that the conception of death and death practices became an important focus of hieroglyphic and iconographic research (Eberl 1999, 2005; Fitzsimmons 1998, 2002, 2009; Freidel and Guenter 2006; Gillespie 2001; Graña-Behrens and Wang-Riese 2008; Houston et. al. 2005; McAnany 1995; Riese 2004; Wagner 2005). It was at this time that different death expressions, mortuary rituals, and ancestor veneration were explored and detailed. The understanding of these topics has been overwhelmingly drawn from central and southern lowland inscriptions and iconography whereas the region of Northwest Yucatán – roughly the modern states of Yucatán and Campeche – has been mostly neglected. As with studies of the calendar (Graña-Behrens 2002, 2009) and emblem glyphs (Graña-Behrens 2006) the main reason seems to be the scarce and poorly preserved monuments in the north, as well as difficulties in understanding the hieroglyphic texts due to their differences with their southern lowland counterparts (Figure 1.1). In this sense, one purpose of this paper is to remedy the existing one-sidedness concerning death practices and beliefs by throwing light also on monuments of northwest Yucatán during the Classic period (A.D. 300-1000). The other purpose is to focus on the unusual relationship between death and deer or deer riding in northwest Yucatán and other Maya regions.

The first part of the paper explores the meaning of death expressed through texts and iconography on monuments and buildings from northwest Yucatán and compares it to what is known from the greater lowlands. The second part of the paper focuses explicitly on the relationship between death and deer. It will be shown that the idea of a deer mounted by a man as displayed on a stela most probably belonging to the site of Dzehkabtún in northwest Yucatán can be connected to a myth that explains the Maya belief in regeneration and fertility through ancestor veneration.

Among the different forms of interactions between deer and humans or between deer and gods attested in the iconography of the Maya area and hinted at in among various forms of data in other parts of Mesoamerica, the context on the stela from Dzehkabtún is probably unique. In a very vivid manner the monument appears to depict a deer as a “carrier” of a deceased ruler out of the otherworld. This adventure must be undertaken before the ruler can finally enter the realm of death and be venerated as an ancestor.

Death Expressions and Iconography in Northwest Yucatán

Human burials have been reported throughout northwest Yucatán (Cobos 2005; Tiesler 1999; Welsh 1988). Only a few, however, contain hieroglyphic texts. Among those that do contain hieroglyphs is Burial 1 of Structure 42 at Dzibilchaltún, discovered a decade ago under the floor of one of the rooms (figures 1.2-1.3). Associated with the primary burial a jar had been carefully placed as a secondary burial. This jar contained the ashes of Uk’uw Chan Chaak, a local ruler who reigned in the second half of the eighth century. His name appears written on a carved deer bone (*Mazama pandora*, *yuk* in Yucatec Maya) placed inside the jar (Maldonado et. al. 2002:85-92). Although the text on the bone does not refer to his death (*expressis verbis*), it mentions a title worn by the ruler which appears occasionally on tomb inscriptions or dedication texts for the deceased elsewhere in the Maya lowlands and may refer to the burial, the construction itself, or a place in the “otherworld.” The practice of incinerating the dead and burying the ashes in a jar under the plaster floor of houses or palaces was also reported by Bishop Diego de Landa to be a common mortuary practice in northwest Yucatán (Tozzer 1941).

The commemoration of a deceased ruler on a deer bone from Dzibilchaltún may be a mere coincidence. Nonetheless, there are more burials associated with deer, either in form of a deer skull, deer bone or deer antler that accompanied the deceased along with other burial objects like polychrome pots, pyrite mirrors or conchs, throughout the Maya lowlands. At Copán for instance, both a deer and a human skull were found in association with the burial of a young woman in a stone-lined cist in the Motmot structure found beneath Structure 10L-26. The placement of the deer skull (as well as the human skull) is assumed to have occurred only after the original entombment of the woman during a “reentry” at which time the upper skeleton was disturbed and blackened by fire (Williamson 1996:173). After this event the complex

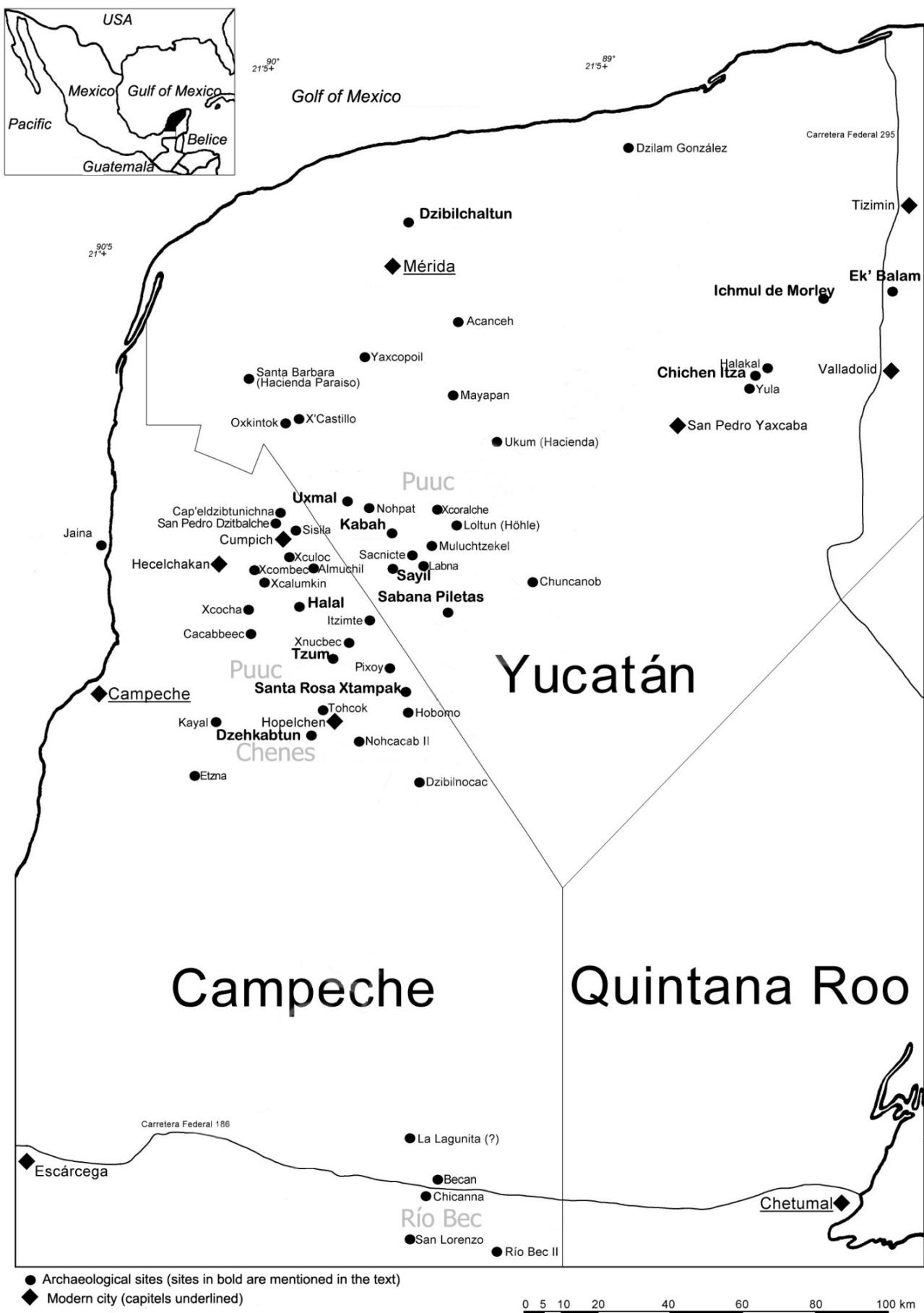


FIGURE 1.1: MAP OF NORTHWEST YUCATÁN (DRAWN BY DANIEL GRAÑA-BEHRENS).

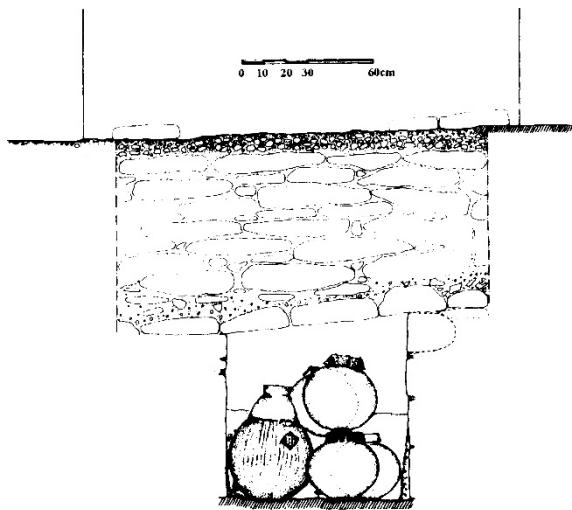


FIGURE 1.2: BURIAL 1 FROM DZIBILCHALTÚN, STR. 42 AND CARVED DEER BONE (FROM MALDONADO ET. AL. 2002:85, FIGURE 4).

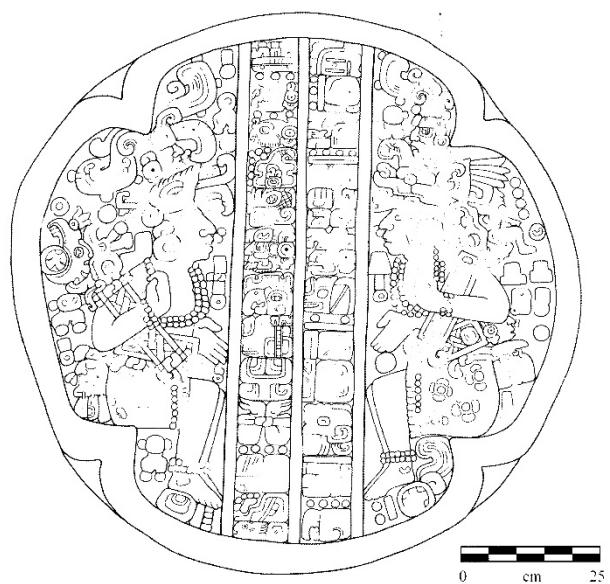


FIGURE 1.4: MOTMOT MARKER FROM COPÁN (FROM FASH ET. AL. 2004:70, FIGURE 44).

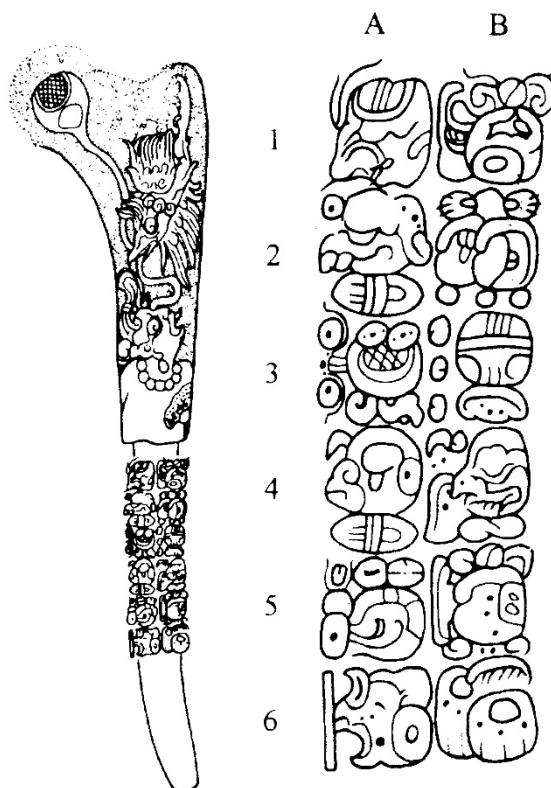


FIGURE 1.3: CARVED DEER BONE FROM DZIBILCHALTÚN BURIAL 1, (FROM MALDONADO ET. AL. 2002:89, FIGURE 6).

was sealed and an offering in the form of another deer (in this case decapitated) was placed and “positioned on top of a crocodilian skin represented by numerous scutes.” (Fash et. al. 2004:70) While the first deer skull mentioned was not further explained by the authors, the second deer offering is related to the yet not deciphered “tied deer hooves expression” as it appears on the Motmot floor marker, a round inscribed stone with a dedicatory text flanked by two images (Fash et. al. 2004:71) (Figure 1.4). Left of the text with the “tied deer hooves expression” is

the founder of the Copán dynasty K’inch Yax K’uk’ Mo’ sitting on top of a toponym (bolon ?) related to the west, the “otherworld.” He is portrayed vis-a-vis his son, the second Copán ruler, who is sitting on top of a toponym (*wuk’ ek’ k’an nal*) associated with the east, the place where dynasties and human life are reborn – a topic discussed below in reference to Stela 3 from Tzum, Campeche (Figure 1.5). Similar, yet by no means identical deer hooves expressions occur several times in relation with younger throne aspirants on inscriptions from the site of Palenque. Stuart (2005:154) suggested a reading of *k’al mayij*, “binding of the sacrifice” for this form of deer hoof sign, although it remains unclear if this event is linked to death. Besides deer skeletons and skulls, there is also evidence of the practice of depositing a deer antler inside a tomb, as it is attested from Tikal. Here the deer antler accompanies the ruler Yax Nuun Ayiin in Burial 10 underneath Structure 5D-34 (Harrison 1999:83-87). Finally, at the site of Seibal, archaeologists have reported more bones from the left side of deer than from the right side, a pattern not attested for any other animal. This unusual pattern is hardly explainable except that left side of the body and the heart are linked in Maya thought (Pohl 1990:163-164).

Besides the appearance of deer remains in human burials, there are other contexts which suggest a close but still somehow obscure relationship between death and deer. A recent find from the site of Waka’ (El Perú), Guatemala is evidence of one such context. Here a male – probably the local ruler who reigned in the seventh century A.D. – was buried with precious objects including 23 small clay figurines carefully placed in a determined order inside the tomb. One of these figurines is a couple that shows a deer standing on its hind legs while facing a kneeling male. According to the excavators these figurines are “members of the royal court standing in a circle performing a ceremony. A portly king, wearing only a loincloth and

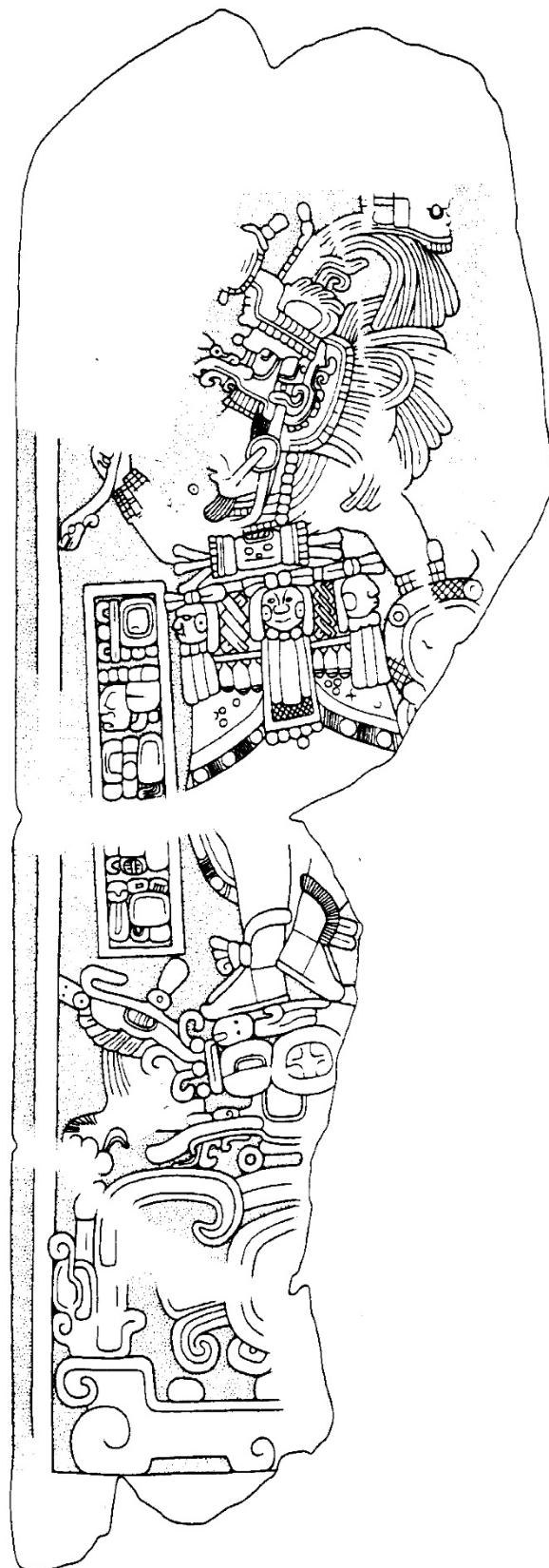


FIGURE 1.5: TZUM, STELA 3 (FROM EUW 1977:4:55-4:56). COURTESY OF THE PEABODY MUSEUM OF ARCHAEOLOGY AND ETHNOLOGY, HARVARD UNIVERSITY, 2004.15.6.8.25. (C) PRESIDENT AND FELLOWS OF HARVARD COLLEGE.

jewelry, kneels besides a deer spirit who prays over him. This king has his arms crossed over his chest, a typical



FIGURE 1.6: SANTA ROSA XTAMPAK, STELA 4 (FROM GRAÑA-BEHRENS 2009: TAFEL 132).

pose of a penitent or shaman's patient in modern Maya cultures. We think this pose means that the deer is preparing to cure him of the final affliction, death." (Freidel et al. 2010:42) Here then, as suggested by the authors, the deer is directly related to the ruler and his death albeit in a still obscure relation.

Last but not least, at the site of Río Azul, the rich tomb of a local ruler who died in the early fifth century A.D. has important mural paintings bearing on the subject. One of these paintings depicts a natural cave. On the right side



FIGURE 1.7: CLEVELAND SHELL (FROM FINAMORE AND HOUSTON 2010:114).

the mural shows the Jaguar God of the Underworld, an aspect of the Night Sun, and a calendar date in form of a Maya Initial Series. On the left side it depicts a stylized mountain with both a monkey and a deer on its top (Fitzsimmons 2009:69). Conceptually, this mountain is the so-called “flower mountain”, a place of regeneration and fertility (Taube 2004:80); examined in more detail below.

Besides the appearance of deer bones in human burials and depictions of deer in ceramic figurines or murals in burial contexts, there are other representations of deer in the Maya area that link deer to humans. One example comes from the Madrid Codex (dating to after A.D. 1000), most probably from Northwest Yucatán (Chuchiak 2004:79). On page 92d of this codex a deer is shown seated with a woman on a mat – in Mesoamerica this is a clear way of visualizing the phrases “to get married” or “be married” (Yorgey 2000). Here then, the deer is even communicating or interacting with a human, perhaps even having sexual intercourse.

Another example is attested on Stela 4 of Santa Rosa Xtampak (Campeche) (Figure 1.6). The monument, dated

to A.D. 911, appears to show the local ruler sitting on a mat or flat stone. This ruler has a kind of flower symbol in front of his mouth, clearly a sign for speech (Grana-Behrens 2009:364, 463). Above the flower appears a balloon-like silhouette with a short hieroglyphic text. It can be transcribed as *u chi*, (“the/his deer”) which would be a corruptive form of writing “deer” if one takes for granted a strict velar h presence. Other speech scroll scenes with a deer glyph attached appear on Maya and non-Maya inscriptions; for example on the San Diego Cliff (see Schele and Freidel 1990:88, Figure 2:13) and outside the Maya area on the so called Seler Monument from Xochicalco, Morelos (Seler 1960: 154, Abb. 60c). It is unclear if these associations are just a mere coincidence or, more likely, if they represent a pattern still not fully understood. Nonetheless, whatever the expression means in the particular context of the Santa Rosa Xtampak monument, it underpins the importance of the interaction between deer and humans.

The relation between deer or deer-men and other beings is further attested from the iconography and inscription of the so called “Cleveland Shell” (Figure 1.7). This shell fragment of unknown provenance portrays a seated male with a deer headdress interacting with a shell or a snake (Finamore and Houston 2010:114; Schele and Miller 1986:155). One interpretation of the inscription is that the shell speaks directly to the person recognized in the text as deer (*chih*) saying that something labeled as “great tribute” is for him, that is for the deer (or deer-person) (Zender 2004:330, 2010:84). Another interpretation suggested here is that the one who speaks is the snake and not the shell and that the snake directly speaks to the male with the deer headdress. Here then the shell would represent the “great tribute” presented by the snake.

Such an interaction between a snake and a deer recalls different iconographic representations from the central and southern lowlands. One of these representations is the so-called “deer snake” or “deer dragon,” a fantastic serpent with cervine attributes; either deer ears or antlers that we can see sometimes represented on ceramics (for example Kerr photo K7794) (Kettunen 2005:100). The other representation is a deer with a twisted snake around its neck named Chihil Chan, “deer snake” (Grube and Nahm 1994:693). This snake is supposed to be a dreamed being and related to the so-called way figures appearing on polychrome ceramics like on vessel K1901 (Kerr 1989:126).

The hieroglyphs on the Cleveland Shell suggest that the man wearing the deer headdress has to be recognized as a “deer” itself. Taking this observation a step further, all humans wearing a deer headdress on polychrome ceramics or on monuments from over the Maya lowlands ought to be identified as deer. Further, such figures are shown in different scenes. They can be pictured sitting on a throne or bench, playing with a rubber ball, or dancing as respectively illustrated on the “Water Trough” Lintel from Chichén Itzá (Figure 1.8), on Panel 2 from Ichmul de Morley (Figure 1.9), and on Stela 4 from Sayil

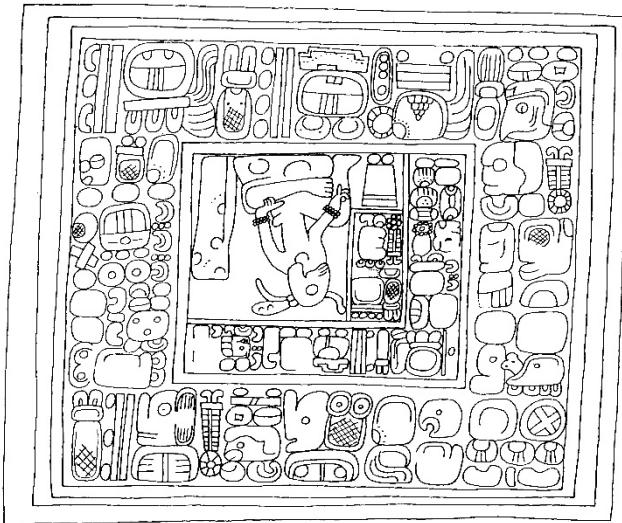


FIGURE 1.8: WATER TROUGH LINTEL FROM CHICHÉN ITZÁ
(FROM GRAÑA-BEHRENS 2009: TAFEL 44).

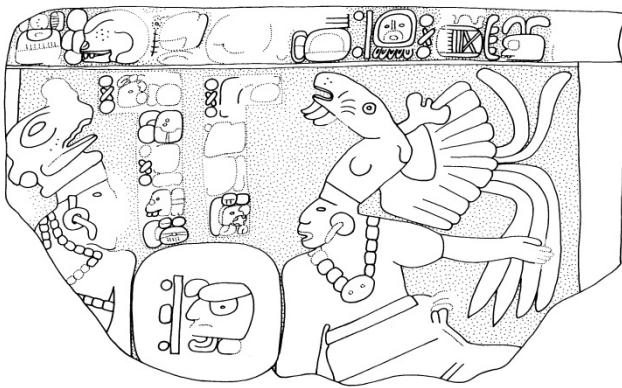


FIGURE 1.9: ICHMUL DE MORLEY, PANEL 2 (FROM GRAÑA-BEHRENS 2009: TAFEL 73).

(Figure 1.10). All these scenes suggest that the “deer-man” has a place in ritual activity, and that he might have some relationship to the concept of death. I suggest that if we take the evidence of the relationship between death and deer more seriously these data indicate that the men with deer headdress on these monuments are already dead.

With regard to the representation of death in Northwest Yucatán it is pertinent to mention the sumptuous burial of a ruler discovered in the past decade at the site of Ek' Balam. Located inside a substructure (35 Sub) of the Acropolis, the burial contained the remains of U Kit Kan Lek who reigned in the eighth century A.D. (Vargas and Castillo 2005:60). The entrance to the room where the burial was found is decorated by a giant maw similar to those known from buildings in the Chenes style (Figure 1.11). This motif, however, does not represent a serpent. Instead it resembles the jaws shown on the famous sarcophagus lid from Palenque, now interpreted as those of a fantastic centipede referred to in the associated hieroglyphic text as *wuk chapat tz'ikin kinich ajaw*, “Seven Centipede (Snake or Bird) Great Sun or Sun Lord” (Boot 2005:251; Taube 2005:409). Although the precise meaning of this fantastic creature is still unclear, it seems

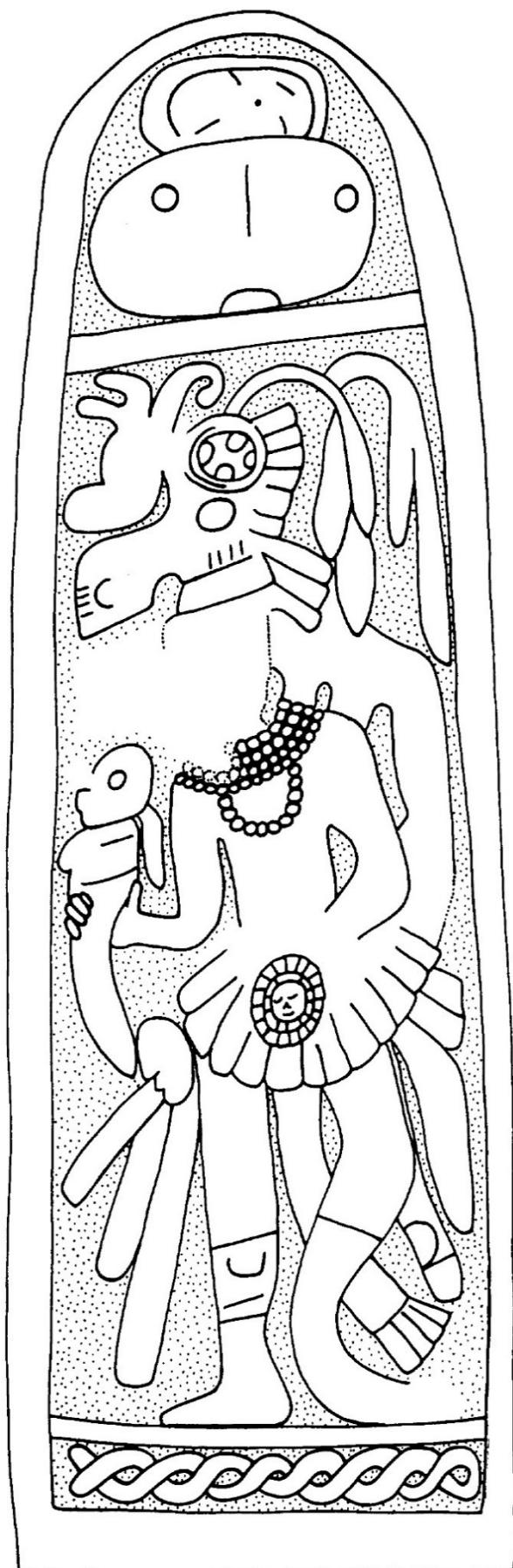


FIGURE 1.10: SAYIL, STELA 4 (GRAÑA-BEHRENS 2009: TAFEL 138).

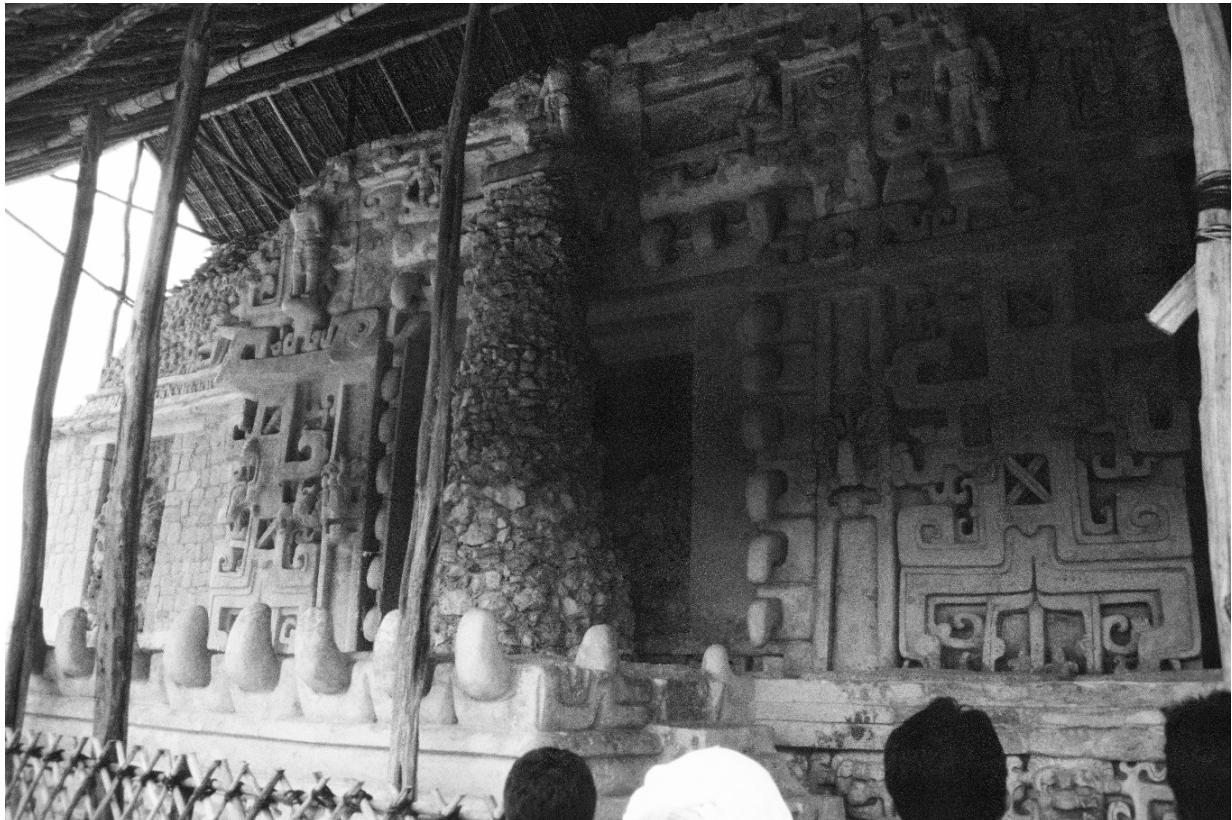


FIGURE 1.11: ENTRANCE TO EK' BALAM, TOMB 1 (PHOTO DANIEL GRAÑA-BEHRENS).



FIGURE 1.12: THE BERLIN VASE, COURTESY OF STAATLICHE MUSEEN ZU BERLIN, PREUSSIISCHER KULTURBESITZ, ETHNOLOGISCHES MUSEUM (PHOTO BY CLAUDIA OBRONKI).

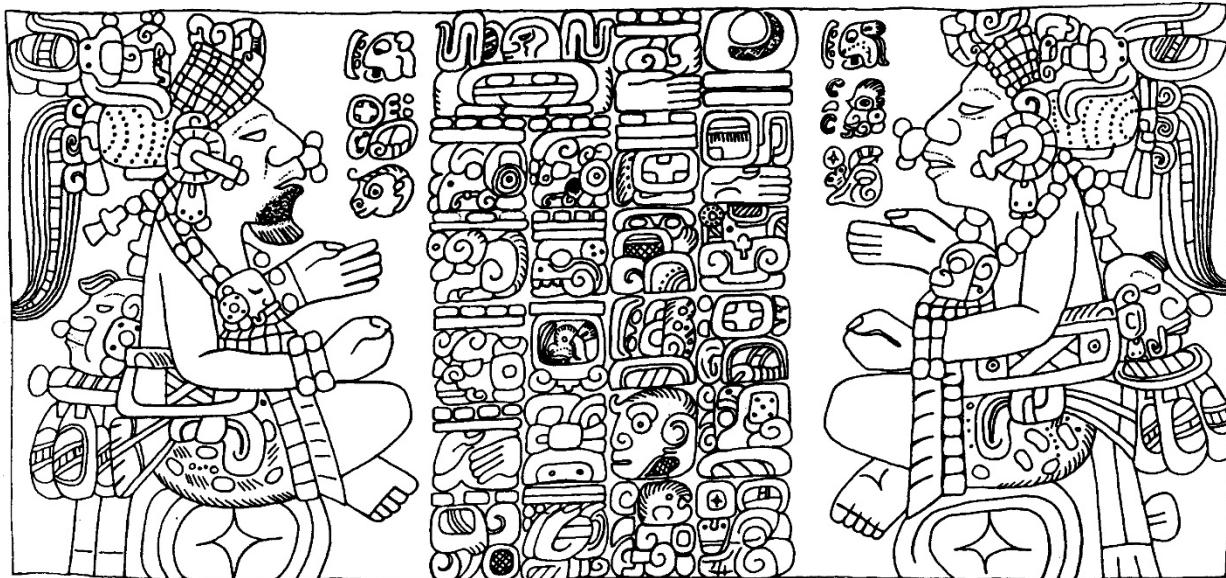


FIGURE 1.13: LINTEL FROM A TOMB AT AKÉ (FROM MAYER 1987: PLATE 39).

that it refers less to an object or animal and more to an important location in the otherworld. The same location appears also on a looted lintel from the site of La Pasadita (Mayer 1995:82-83, plates 264-265). Here the ruler from the nearby site of Yaxchilán oversees a fire drilling ceremony (Grube 2000:102). Apparently this event happened at night and was accompanied by a religious specialist from the powerful site of Calakmul.

The famous Early Classic Berlin vase (of unknown provenance, but supposedly from Motul de San José or a nearby site) is another example where a centipede appears in conjunction with an otherworld location (Figure 1.12). Here, the centipede frames a solar cartouche with the face of the Sun God (K'inich Ajaw) in the middle. This cartouche appears directly above a dead person, a ruler from an ancient site of the Itzá – perhaps Motul de San José – resting on a wooden platform and dressed in a funerary garment tied by nine knots carefully arranged around his body. Behind the solar cartouche appears what has been interpreted as “flower mountain”, the place previously mentioned to be associated with regeneration and fertility (Taube 2004:80). It is the same mountain associated with the deer and monkey in the Río Azul tomb. On the Berlin vessel, however, the expression *ch'a/k'a* (Thompson sign number 93) is visible in the middle portion of the mountain. The sign itself is flanked by two maize symbols whose meaning in conjunction with the flower mountain has not been satisfactorily explained until now (compare Grube and Gaida 2006:121). Here, I suggest that this expression may mean “to remember” or “to record”; as *ch'a(h)* or *k'a(h)* is glossed in most Maya languages. This meaning would fit well with the practice of ancestor veneration. That the combination of “flower mountain” and the *ch'a/k'a* expression is by no mean accidental is confirmed in a text on a lintel that was used for decorating the tomb of a ruler from Aké, a site near Bonampak (Mayer 1987:Plate 39) (Figure 1.13). In the same manner of the Motmot Marker

from Copán, the Aké lintel offers a similar arrangement between text and iconography. On the left side of the lintel, the dead ruler of the site of Aké appears – portrayed with a beard as sign of his status as ancestor. On the right side sits his grandchild, the actual ruler (Eberl 2005:147). The text between the two rulers starts with an Initial Series date of A.D. 521 and continues with a dedication phrase where the *ch'a/k'a* expression appears with a logogram that most probably stands for “flower mountain” (D3). The text after the initial date states (D2-D6) *k'al-? u pakab tun ch'a/k'a-* “flower mountain”, “bounded (by ropes) is the lintel-stone (at) remember/flower place” and is followed by *u waybil ka k'an buut maax yanabil ya-? ake ajaw*, “this is the sleeping place of (the deceased ruler) Ka K'an Buut Maax, grandfather of the (actual ruler) Ya-?, ruler of Aké.”

The same toponym, *wuk ek' k'an nal*, reported from the Motmot Marker of Copán is also seen on Stela 3 from the site of Tzum, Campeche. On the front side of this broken and only partially preserved monument the local ruler is portrayed in a dance position on the maw of a giant centipede associated with the *wuk ek' k'an nal* expression. The combination of centipede's maw and this toponym suggests that in reality this is the place where the centipede itself is located; the place where dead kings passed power to successors, usually their sons. In contrast, as we have seen, the binding ceremony of nine knots happened at “flower mountain.” Thus, different places textually mentioned or iconographically displayed on these and other monuments from northwest Yucatán and the central and southern lowlands highlight different aspects of the same story: the theme of resurrection.

Taking the previous observations of death iconography together, it seems that the centipede location was not only important for the Maya of the central and southern lowlands, but also in northwest Yucatán. Further, it seems that the centipede location was a hot place where

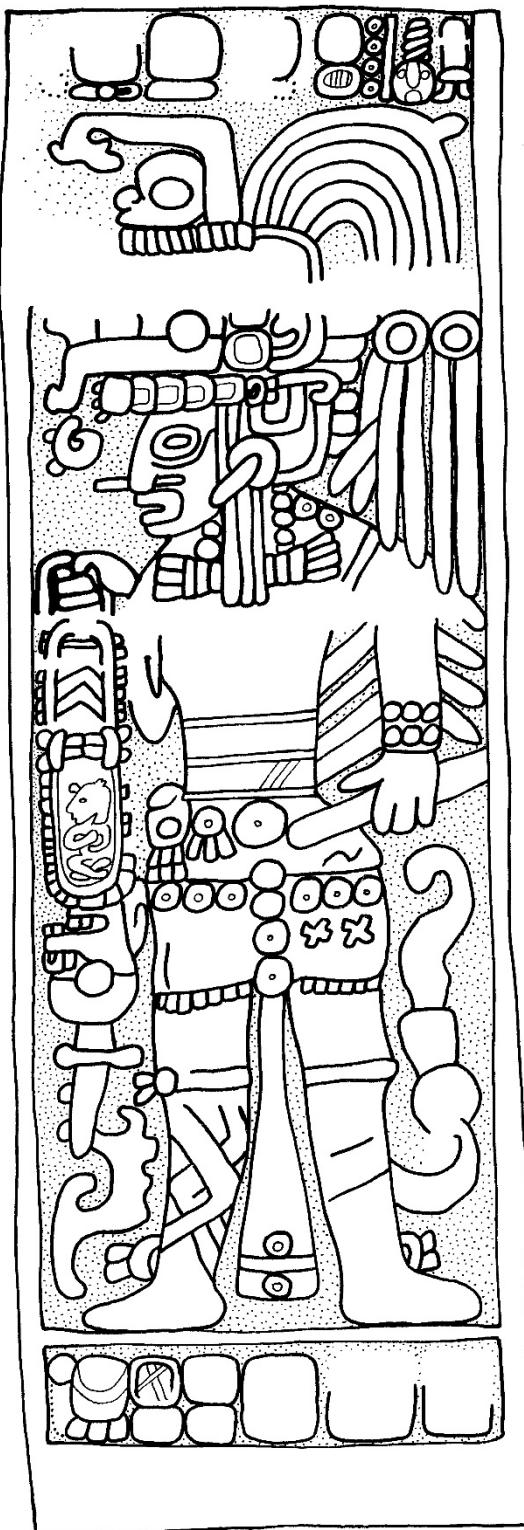


FIGURE 1.14: SCULPTURED DOORWAY FROM ACROPOLIS AT HALAL (DRAWING BY DANIEL GRAÑA-BEHRENS).

the Sun God (K'inich Ajaw) ruled, to which the soul of the deceased traveled, and to which each Maya community or kingdom ignited its local fire or New Year fire. In contrast, the location of the “flower mountain” seems to be more likely a place where ancestors were venerated; this is where remembering occurred as ritual practice. In sum, these places are very important for the conversion of dead rulers

into ancestors and for their later commemoration. As has been shown by other scholars, however, such places are not the only ones related to death mentioned in the inscriptions (Eberl 2005:71-73). So we still need to elaborate more on these places and gain a better picture how, and if at all, these can be integrated in a single conception of death and ancestor veneration.

In northwest Yucatán, the notion of death can be grasped more vividly from the text on a sculptured doorway from the second story of the Acropolis at Halal, Yucatán (Pollock 1980:549-552) (Figure 1.14). The inscription is dated to the end of the Classic period based on a date of A.D. 932 from a lintel associated with the building (Graña-Behrens 2009:399, 455). The sculptured doorway portrays a person who is probably the local ruler, fully dressed and wearing a huge feathered headdress with the mask of the rain god Chaak. In one of his hands he holds a knife while in the other he carries an incense bag adorned by a human skull and a knife. Although most of the inscription is eroded or illegible, the final text block (block L) clearly contains the title *bolon tz'ak(bu) ajaw* which has several meanings, among them “nine-knotted lord” which has been related to the funerary garment tied by nine knots on the Berlin vase (Wagner 2005:39). According to previous studies, the title with the mat sign is worn exclusively by the deceased of high rank throughout the Maya lowlands and is related to mortuary rituals referring to an unclear quality of the dead person (Wagner 2005:29).

One interesting feature here is that the sign or logogram for *tz'ak* is a symbolized mat instead of the usual sign T573. The same mat sign appears more as an iconographic feature in northwest Yucatán in the form of ropes; twisted nine times on a capstone from Xcochkaax, Campeche, nine times on a round stone monument from Sisilá, Campeche, and on Stela 4 at Sayil (Figure 1.10). Moreover, this mat sign also adorns the walls of the tomb in Río Azul, flanking the Jaguar God of the underworld and “flower mountain.”

Naturally, the “nine-knotted lord” title from Halal recalls the already mentioned practice of dressing and binding a deceased ruler as shown on the Berlin vase. Here then, I argue that through dressing and binding, the deceased received important sacred knowledge from ancestors or transmitted such knowledge to the people who performed the ritual. Ethnographic fieldwork by Stanzione (2003) among the Tzutujil of Santiago Atitlan, Guatemala demonstrates the practice of dressing and binding a deity or hero called Mam (vulgarly referred to as MaXimón) with new clothes the night before Holy Friday. Through this activity this being is recreated exactly five days after he was symbolically dismembered on Palm Sunday. This is why Mam is called MaXimón, “he, the knotted one.” “[H]e is tied with knots, chikich'ojnximona, on the inside to hold himself together as well as on the outside to be fixed to a dahlia tree post and adorned with cuttings of the wild mountain dahlia flower.” (Stanzione 2003:54-55). Moreover, shortly before his ‘sacrifice,’ he is carried

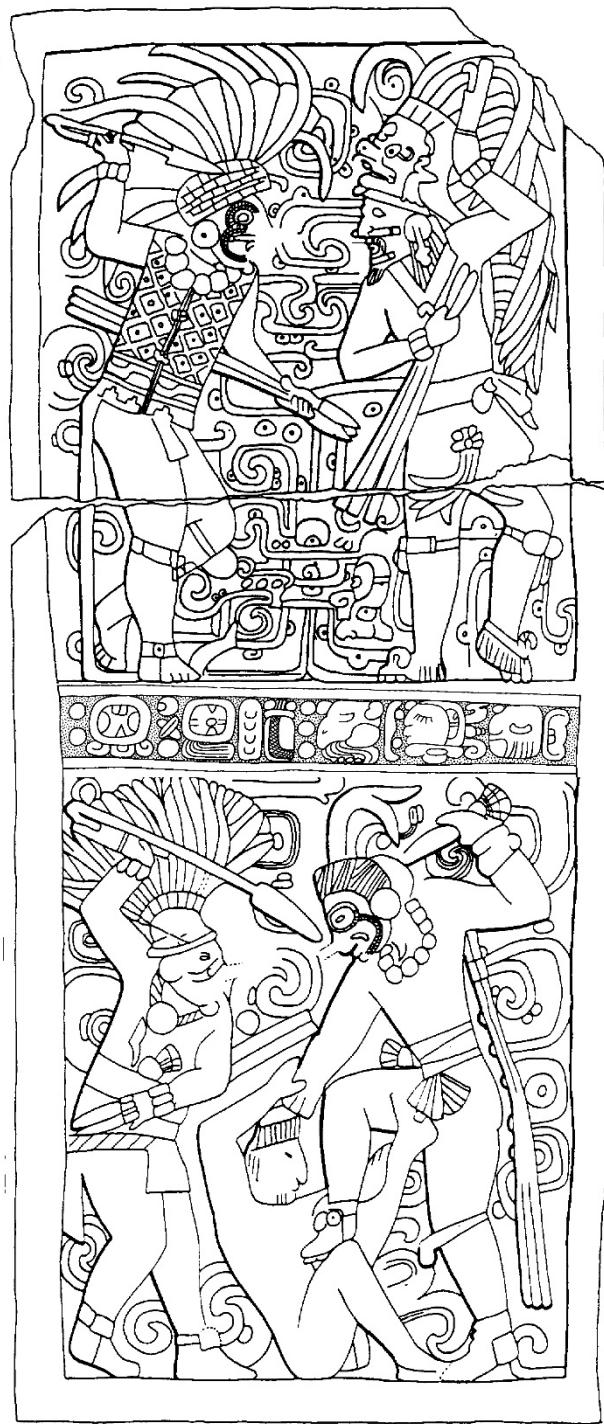


FIGURE 1.15: HIEROGLYPHIC JAMB FROM STRUCTURE 2C6 AT KABAH (FROM GRAÑA-BEHRENS 2009: TAFEL 87).

about as a ‘king.’ Hence, the Tzutujil priest who performs the act of binding and knotting Mam receives sacred knowledge throughout this ritual and “learns through the act of destruction and re-creation how to bind the soul to matter and then bring that created being back to life.” (Stanzione 2003:260). I argue that this is what is depicted on the Berlin vase by the act of binding.

Further, Stuart (2009:322) has recently demonstrated that the inscription placed on top of a round altar from Zacpetén, Guatemala and adorned by four mats on the

edge of the altar refers to the rebirth of a ruler out of a well. This well is the place *wuk ek’k'an nal* already mentioned from the stela from Tzum and appears hieroglyphically in the middle of the Zacpetén altar, which also refers to an event which probably occurred on the winter solstice. Stuart’s argument for rebirth can be supported by adding that the four mats equally distributed around the text on the altar are nothing else than the iconographic representation of *bolon tz'ak(bu)*, the title for rulers recreated by the act of binding of nine knots as shown on the Berlin vase, and also recalling the mat signs on the Río Azul tomb, the previously mentioned capstones, and Sayil Stela 4.

Taking into account the ethnographic data from the Tzutujil, the Berlin vase, and monuments like the doorway at Halal, I suggest that the title “nine-knotted lord” should be associated with the concepts of sacrifice and regeneration. These lords were recreated by the act of binding, their souls receiving new bodies – a necessary precondition for their later veneration. Thus, the “nine-knotted lord” title on the doorway inscription at Halal suggests that the ruler was already dead, although on the monument he is portrayed as living. This means that the monument had a commemorative character given that the deceased was venerated in the building or section of the building housing the inscription. This practice is paralleled at Chichén Itzá where it has been suggested that some buildings with hieroglyphic inscriptions served as sanctuaries to commemorate ancestors rather than residences of high status families (García 2001:420).

There are two other contexts where the title *bolon tz'ak(bu)* appears in Yucatán. One is from Ek’ Balam on Mural B of Room 29-Sub, situated in the same structure where the famous king U Kit Kan Lek was buried (see Vargas de la Peña y Castillo Borges, this volume). In a still obscure portion of the text, the title is associated with a nobleman (*ajaw*) and is preceded by the sign for “ballgame” (Lacadena 2004). The other context is from the recently discovered and investigated site of Sabana Piletas, Campeche (Merk 2011:172-173). Here, on a very large monument, classified as a hieroglyphic stairway with more than one hundred inscribed blocks, the title belongs to a nobleman (*ajaw*) who is associated with a ballcourt (Grube and Pallan 2011:253-254). Although both of these contexts are still not very well understood, it seems clear now that they refer to noblemen who have already died. Thus, they are venerated as gods in the same way as the king of Halal.

The close relationship of the title of the nine knots to the ballgame might be explained by the fact that ballgames were played in the otherworld by gods; hence by those who reached the status of god after the binding and knotting ritual. Moreover, the ballgame might have been the medium by which communication continued with the deceased. For example, Ichmul de Morley Panel 2 (Figure 1.9) shows two dead kings playing ball – one of them wearing a tapir headdress while the other sports a deer headdress. This can be surmised by the fact that the rubber ball does not carry the common glyph for the

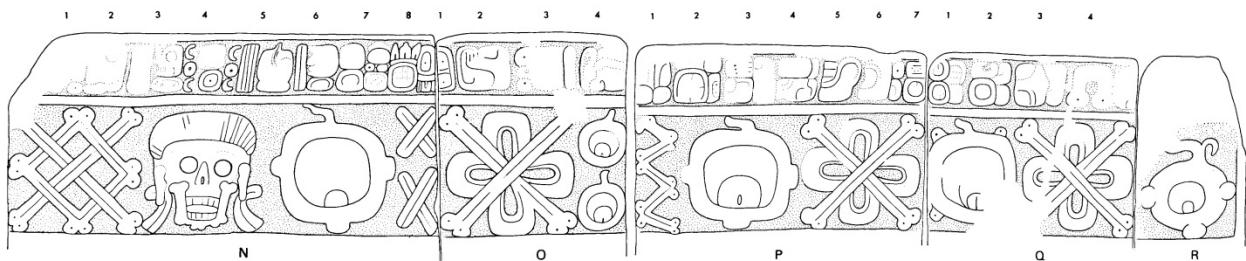


FIGURE 1.16: MONUMENT 3 OF THE CEMETERY GROUP AT UXMAL (FROM GRAÑA-BEHRENS 2009:158).

dimension of the ball, but instead contains the name of the god of the animals. Hence, one wonders whether the deified rulers are playing with a ball that itself is the manifestation of a god (e.g., the god of the animals).

Finally, another illustrative example of the concept of death referenced in inscriptions from northwest Yucatan comes from Room 21 of Structure 2C6 at Kabah (Pollock 1980:183-197) (Figure 1.15). The doorway to this room contains two carved doorjambs. The northern doorjamb shows a war scene with fully armed warriors capturing or killing an enemy. The scene is divided into two registers separated by a hieroglyphic text that starts with a calendar date between A.D. 807 and 911 (Graña-Behrens 2009:413, 457). Next to the date is the statement *u kimi chan*, probably “his dying (the) captive,” probably referring to the scene in the lower part of the doorjamb where an individual is pushed to the ground and apparently stabbed to death by a warrior wielding a knife. The verbal form *kim* “to die,” one of the most common expressions denoting the act of dying in the Maya lowlands (Eberl 2005:41-42), is used here. Across the lowlands it is either written syllabically, as at Kabah, or in form of a logogram showing a human skull with the eyes ripped out of it. Although the direct killing of enemies in battle among the Maya seems not to have been the usual practice, in this case it was an important event.

Besides the aforementioned symbols and expressions that can be linked directly to death in northwest Yucatán, there are other symbols from the region that may have a relation to death, although their precise meaning is still open for discussion. For example, bones, skulls, and eyeballs on monuments such as the four platforms in front of Structure 11L-8 in the so-called Cemetery Group of Uxmal may be related to death (Graham 1992:4:121-4:133; Pollock 1980:220-230) (Figure 1.16). Each of these platforms contains sculptured blocks showing one of the aforementioned symbols, as well as a badly preserved hieroglyphic text.

There has been a recent interest in the treatment of bodies during mortuary rituals (Miller 2007:171). It is clear that body treatment of ancestors or the preparation of trophies of captured and sacrificed enemies required places, where the slicing, “peeling” or opening of bones must have taken place (cf. Fitzsimmons 2011: 54-57, Tiesler 2007: 17-28). Although there is no direct textual evidence that the group at Uxmal, or a similar one at Nohpat (a site in

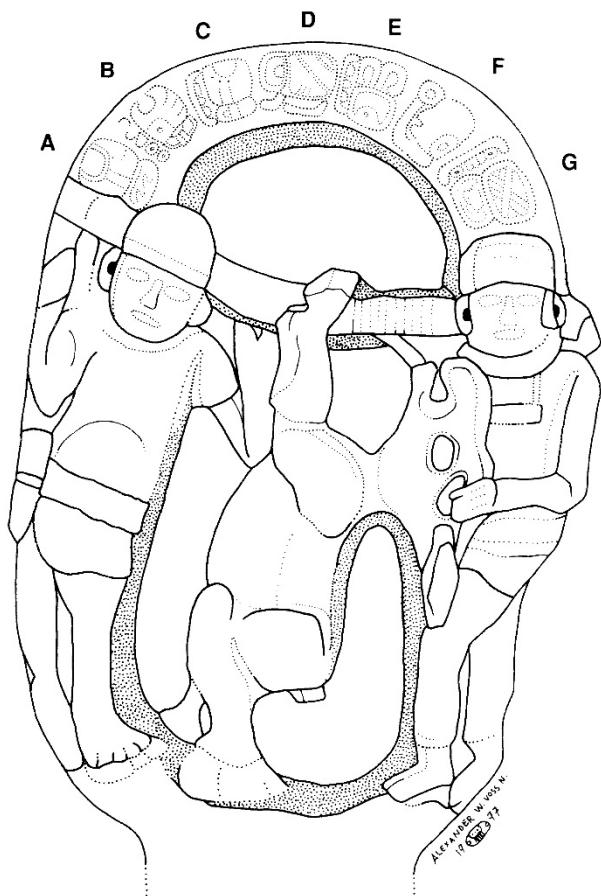


FIGURE 1.17: STELA FROM TABI (FROM VOSS AND KREMER 1998:74).

the Uxmal region), was used as such a place, the careful arrangement of bone, skull, and eyeball signs, however, may indicate that either mortuary practices or sacrifice rituals may have been indeed performed here.

Death and Deer Riding on a Stela from Dzehkabtún

The deer is a common forest animal in northwest Yucatán. It was so common during the contact period that according to Bishop Landa the local people referred to the region in the sixteenth century as the “land of turkey and deer.” Further, it in this portion of the peninsula that we see two of the most unusual monuments across the Maya lowlands; both dated to the end of the Classic period and containing deer iconography. The first



FIGURE 1.18: STELA PRESUMED TO BE FROM DZEHKABTÚN (DRAWING BY DANIEL GRAÑA-BEHRENS).

monument, the so-called stela from Tabi, Yucatán, portrays two men carrying a pole over their shoulders from which hangs a deer (Figure 1.17).

The hieroglyphic text from this three dimensional sculpture explains the iconography and reveals that the deer is the prey of the hunters (Voss and Kremer 1998:77). Thus, the monument vividly refers to the importance of the deer hunting for the Maya, a prominent topic in the Madrid Codex in the so-called deer-hunting and deer-trapping almanacs (Colas 2006; Vail 1997). The other monument with a prominent deer association is a stela discovered some time ago at Crucero San Luis, but is said to be from Dzehkabtún (Benavides 1994:37; Mayer 1995:51, Plates 196-198) (Figure 1.18). Due to this uncertainty, some

scholars prefer not to include the monument into the corpus of monuments from Dzehkabtún, although recognizing some similarity between this monument and those directly attested from Dzehkabtún (Grube 2009:27). The monument was temporally housed at the DIF in Hopelchen (where the author visited it) and is now on exhibition at the Museo de Baluarte in the city of Campeche.

This monument is a stela carved on its front and sides. While the sides contain only hieroglyphs in a single row, the front displays both text and iconography. The text on the front is placed in a single row along the edge of the stela. This text is separated into two parts by a mat symbol on the top of the monument similar to the one used in the title “nine-knotted lord” on the Halal doorjamb. The

iconography shows a man adorned by a huge headdress with the mask of the rain god Chaak and who holds a spear with a zick-zack frame in one hand and feathered shield in the other one. Below this man – who might portray a ruler or other high ranking person – is a two-headed stepped element that can be identified as a stylized representation of a cave and a huge deer with antlers that somehow sits on the ground while it is mounted by a scantily clothed man. The deer itself – which despite its antlers cannot be identified as a doe or bull – seems to be alive, although it is skeletonized in some parts.

The texts on both sides are almost identical, although not completely readable due to some badly preserved hieroglyphs. They refer to the erection of the monument and to a person named Waxak Pet Ajaw, “Eight Pet Lord”, a specific title (with a variable number) which occurs on other inscriptions from northwest Yucatán and the central and southern lowlands (Pallan 2009:182). The text on the front is poorly preserved and highly difficult to understand. At the moment only a few text blocks to the right of the mat symbol can be identified with some certainty. The text begins with the standard initial expression known from ceramic vessels. It can be read as *alay*, “there is” followed by *k’alaj [tun]*, “the stone was bounded”, by which a special ritual consisting of tying the monument with ropes and making it bundle-like (Stuart 1996:154-156) is referenced. As with the texts on the sides of the monument, the text on the monument’s face refers to the erection of the stela itself. The starting point of the next phrase could be a reference to a ruler taking the throne as the text continues with the phrase *u chumlaw ti ajawle*, “he was seated in rulership.” The reading is still tentative, however; the unusual *chumlaw* expression is particularly problematic. The rest of the text to the right of the mat symbol as well as the entire text to the left are unreadable. Despite these limitations, several conclusions can be drawn from the monument in terms of understanding death among the ancient Maya and regarding the interaction between humans and deer in the iconography.

First, the stela was erected only after the death of a high-ranking person, most probably the local ruler either of Dzehkabtún or the site to which the monument originally belonged. The reason for this argument is twofold. Most obvious is the fact that the mat symbol which divides the text might function as a *pars pro toto* for the ritual dressing and binding of deceased rulers as was mentioned earlier in reference to the Berlin vase. Additionally, the cave symbol either indicates that the high ranking man himself is going to perform a ritual inside a cave or that the scene in the upper part of the stela is separated from the deer riding scene by the cave in space and time. Taking the meaning of the aforementioned mat symbol as evidence for a dressing and binding ritual by which the ruler was deified and venerated, the second option seems more likely to me at this time.

Second, the person riding the deer is most likely the deceased ruler from the upper scene. Although the person riding the deer is not elaborately dressed – he only wears a

loincloth – there is a myth still narrated among the highland Maya of Guatemala that may explain this lack of clothing. In the myth called “Tulan and the Other Side of the Sea” by Sachse and Christenson (2005:10) a man is resurrected from the otherworld after being swallowed by a fish near the shore. This man escapes or at least emerges out of the fish in another world where it is forbidden to eat maize. This is the world of the gods who survive on the aroma of plants and flowers. After the man plays tricks on the inhabitants of this world – causing their death – he finally escapes by riding a deer that he tricks the gods into giving him. Here then, I suggest that this journey may have resulted in a relative lack of clothing as depicted on the Dzehkabtún stela.

Although Sachse and Christenson (2005:14) argue that this myth has no parallel from the Classic period, the stela from Dzehkabtún suggests the contrary; that a similar story may have existed referencing the drama death and its resurrection for rulers. Moreover, this Tzutujil story is plausibly connected to the resurrection of the Maize God. Sachse and Christenson (2005:16) state that the deer can be explained as “means by which resurrection is feasible – the deer being the substitute representation of Tohil, the creator of rain, fire and sustenance himself.”

There are other details of this story that coincide well with the overall function of the Dzehkabtún stela. For example, the partially skeletonized deer on the stela might be viewed evidence that the animal was formerly owned by the lords of the otherworld as in the story. The context on the stela would suggest then that the escape from the underworld occurred before the binding and knotting ritual. At least it makes little sense to perform the ritual before knowing of the successful return of the deceased from this dangerous journey. Thus, the deceased’s journey to the otherworld and his escape by riding a deer might be one of several challenges a dead person (or ruler) had to pass before he, or his soul, passed to a final resting place. Such a journey as a preamble to death is not so far-fetched if one remembers that in Mesoamerica as well as among many other cultures the dead are believed to reach their final resting or dwelling place through travel and adventure (in Mesoamerica this could even be accomplished by crossing the nine different levels of the underworld). In contrast to these kinds of journeys where the outcome depends on skills and luck of the dead person himself, there are other types of journeys where the living are solely responsible for the outcome of the dead person’s journey. One of these journeys was recently described by Weiss-Krejci (2011:42). She suggests that the reburial of bones of a woman during the Classic period (narrated on Tikal Altar 5) was a necessary precondition for that woman to “move” successfully out of the underworld (where the first type of journey ended) to a new place, perhaps the “flower mountain” (e.g., the place of final regeneration and fertility). So it seems clear that the dead somehow “escaped the underworld to someplace else.” (Fitzsimmons 2009:53)

The scene on the Dzehkabtún stela might reveal more about such journeys, however. Although the deer on the

stela is more likely just a carrier for the deceased, this animal has two other connotations in Mesoamerica, the first of which is associated with death. According to Bishop Landa (1986:21) the Cocom (or Kokom), who formerly ruled at Mayapán, interpreted large deer appearing in the countryside as a bad omen and as a sign that Maya religion would be ending soon. The relation between deer and death also plays an important role in the iconography of certain ancient Maya vessels where a woman is sometimes depicted approaching the elderly god of the forest, Wuk Sip, who apparently seems to be dying, on a deer (e.g., K1182). Additionally, the modern Maya of Belize tell a story about a farmer who took a beautiful girl as his wife. In reality this girl was a doe in human form who had the intention to kill the farmer with the help of her other deer relatives (Thompson 1930:172-175). Finally, the highland Maya of Guatemala commemorate their death on the day keej (deer) (Bunzel 1981:338-339; Tedlock 1982:113).

The second important connotation relates deer with tricksters, which in turn may have something to do with their appearance in death scenes. This connotation is clear in the Popol Vuh where the hero twins milpa was destroyed several times during the night by deer and other animals (Christenson 2003:149). In another part of the Popol Vuh the K'iche were ordered by their lineage god Tohil to show other nations only deer bundles as substitute for their true god, reflecting another kind of trickery (Christenson 2003:234-235). This section of the Popol Vuh recalls the so-called "humming bird myth," a story told throughout the Maya highlands, in which a hero tries to cheat the Earth Lord by covering himself with a deerskin to seduce the Earth Lord's daughter (Braakhuis 2001:394-395). Deer bundles as camouflage are repeated in other contexts such as the Madrid Codex where on page 18c Itzamnaaj hides himself under a deerskin. Thus, besides being a destructive force related to death, deer were also considered to be animals used in trickery.

There are other deer riding references from ethnographic, Postclassic, and Classic contexts. For example, the modern Tzotzil believe that their Earth Lord, Yahwal Balamil, lives in a cave, reigns over thunder and lightning, and rides a deer (Vogt 1969:302; Vogt and Stuart 2005:164). Moreover, the Tzotzil Earth Lord or Mountain Gods have livestock, considered to be the two deer species *yaxal chij* (*Odocoileus virginianus*) and *tzajal chij* (*Mazama americana*), analogous to cattle and goat respectively (Köhler 2007:141). Among the Kanjobales and Tojolabales – two highland Maya groups – the "Lord of Animals" in his aspect as "Lord of Games" rides a deer (Braakhuis 2001:402). Further, page 45c of the Dresden Codex illustrates how the rain god Chaak rides a deer.

There are also several Classic period polychrome vessels that reference deer riding. On one vessel (K8622) Itzamnaaj, the god of writing and knowledge, rides both a deer and a tapir. Here the deer riding scene is separated from the tapir riding scene by a large symbol that could be either a stela or a carved block. This monument seems to exhibit eyes

and is adorned by paper strips and six knotted ropes or cloth strips. Two larger glyphs at the bottom indicate that this monument is probably located in the otherworld. On the right side, where Itzamnaaj rides the deer, is the glyph for "sun." On the left side, where Itzamnaaj rides the tapir, is the glyph for "sky." While the overall meaning of this vessel is still open, it is clear that deer and tapir riding form part of an important yet not understood ritual performed by Itzamnaaj.

Other Classic period vessels show a young woman riding a deer. On one aforementioned vessel a woman approaches the aged and presumably dying god of the forest, Wuk Sip, by a deer. On another scene from the same vessel this god has intercourse with this or another woman (Hellmuth 1992:70f.). Another vessel (K1182) from Altar de Sacrificios, Burial 96 illustrates a similar scene. On this vessel the "God of the Forest" is depicted again as a dying person, while several women either approach or escape the scene by riding deer. Finally, on a different polychrome plate (K3069) a young woman rides a deer.

There have been widely distinct interpretations of these scenes of young woman riding a deer. Riese (2004:147) has suggested that the deer riding refers to the journey into the realm of the death. Thus, this riding of a deer parallels the journey of a king – in the guise of the Maize God – into the realm of death by canoe as depicted on carved bones at Tikal (Eberl 2005:69; Kremer 1999). A second interpretation is that the deer-riding woman scene – often accompanied by another woman who shows her breasts to a deer – has to do with attracting the deer and that a hunter's wife is integral to his success (Braakhuis 2001:393). The hunter's father-in-law is analogous to the "Owner of the Game", a figure to whom the hunter enters into service after death (Braakhuis 2001:394). In the already mentioned "Hummingbird Myth" a hero tries to seduce the daughter of the Earth Lord. As the Earth Lord refuses to give his daughter to the hero, he tries to deceive the Earth Lord by covering himself with a deerskin and afterwards, as the deerskin fails, by using the feathers of a hummingbird. The hero and the Earth Lord's daughter are in the process of becoming the sun and moon, but are punished by her father (Braakhuis 2001:394-395; Chinchilla 2010:46). A variant of this myth portrays the deer as the carrier of the bride to the groom, who is the sun (Braakhuis 2001:402).

Conclusion

References to death in inscriptions and iconography in northwest Yucatán are seldom compared to their counterparts in the central and southern lowlands. Yet in general terms they are not necessarily different. Otherworld locations like "flower mountain" or the manifestation of the centipede are equally attested in both areas as is the "nine-knotted lord" title which I argue transformed a deceased ruler into a god to be venerated. What does this mean for the overall comprehension of death among the ancient Maya? Was there a common belief system during the Classic regarding the concept of death despite the fact

that the Maya of northwest Yucatán preferred to distinguish themselves from the greater lowlands through different calendar conventions, hieroglyphic and architectural styles, and less public political statements?

The answers to these questions are not easy, although the data point to a shared conception of death. Yet the fact that the inscriptions and iconography of northwest Yucatán are in some ways different than their southern counterparts suggests that we should take care to think that this conception was the same. Nevertheless, the data from northwest Yucatán gives us some insight into this topic.

First, the Maya apparently assigned different functions to locations of the otherworld where the deceased passed. One of these places is “flower mountain”, a place of regeneration and fertility where ancestor veneration occurred. This place may have been reified in architecture by the Maya as mortuary temples. Another location is the “maw of the centipede”, a place probably reserved for people who died of natural causes. It is a hot place associated with the Sun God where the soul of the dead is grasped or caught by a centipede. The centipede (the “maw”) itself is located at *wuk' ek' k'an nal*, a third place, probably reserved for rulers or people from the high nobility from where they are reborn. This place seems to be of extreme political importance as a ruler of Yaxchilán ignited the New Fire here. It could be a mythical place with direct link to earthly affairs; a place where the sacred history of lineages and dynasties started, something well known from Mixtec area (cf., Jansen and Pérez 2007:44). Again, as we can see, this mythical place has its architectonical expression as attested from the royal tomb at Ek' Balam.

Finally, several important events happened before the deceased reached “flower mountain” and “centipede maw.” These events suggest that a certain protocol had to be followed for the deceased to have a successful journey in the otherworld. One of these events was the apparent escape on a deer from some still obscure part of the otherworld, an event that I argue is depicted on the Dzehkabtún stela. The ritual placement of deer bones or skulls in burials and the appearance of a deer on vessels with the dying Lord of the Animals further support the idea that this animal was essential for the completion of otherworld journey.

The other identifiable event, the ritual of binding and knotting of the deceased, recorded vividly on the Berlin vase and alluded to by the “nine-knotted lord” title, appears to have been the most important. Analogous to the knotting and binding of MaXimón in highland Guatemala (Stanzione 2003) this event appears to have deified a deceased ruler to make them appropriate for veneration for the ancient Maya. Following this argument, certain buildings in northwest Yucatán, like the one mentioned from Halal, might have been served less as a royal palace or a space for the living as a place for commemorating and venerating dead kings as gods (e.g., ancestor houses or shrines).

References cited

- Benavides, Antonio
1994 Bilimkok y Dzehkabtún, Campeche: dos estelas tardías. *Boletín de la Escuela de Ciencias Antropológicas de la Universidad de Yucatán* 115:33-41.
- Boot, Eric
2005 *Continuity and Change in Text and Image at Chichén Itzá, Yucatán, Mexico: A Study of the Inscriptions, Iconography, and Architecture at a Late Classic to Early Postclassic Maya Site*. CNWS, Leiden.
- Braakhuis, H. Edwin M.
2001 The Way of All Flesh: Sexual Implications of the Maya Hunt. *Anthropos* 96:391-409.
- Bunzel, Ruth
1952 *Chichicastenango: A Guatemalan Village*. University of Washington Press, Seattle.
- Chinchilla, Oswaldo
2010 Of Birds and Insects: The Hummingbird Myth in Ancient Mesoamerica. *Ancient Mesoamerica* 21:45-61.
- Christenson, Allen J.
2003 *Popol Vuh: The Sacred Book of the Maya*. O Books, New York.
- Colas, Pierre
2006 The Hunting Scenes in the Madrid Codex: Planner for Hunting Rituals. In *Sacred Books, Sacred Languages: Two Thousand Years of Ritual and Religious Maya Literature*, edited by R. Valencia Rivera and G. Le Fort, pp. 81-92. Acta Mesoamericana 18. Anton Saurwein, Markt Schwaben.
- Chuchiak, John
2004 Papal Bulls, Extirpators, and the Madrid Codex: The Content and Probable Provenience of the M.56 Patch. In *The Madrid Codex: New Approaches to Understanding an Ancient Maya Manuscript*, edited by G. Vail and A. Aveni, pp. 57-88. University Press of Colorado, Boulder.
- Cobos, Rafael
2005 Prácticas funerarias en las tierras bajas mayas del norte. In *Antropología de la eternidad: la muerte en la cultura maya*, edited by A. Ciudad Ruiz, M. Humberto Ruz, and M.J. Iglesias Ponce de León, pp. 35-48. Universidad Nacional Autónoma de México, D.F.
- Eberl, Markus
1999 *Tod und Begräbnis in der klassischen Maya-Kultur*. Unveröffentlichte Magisterarbeit. Universität Bonn, Bonn.
- 2005 *Muerte, entierro y ascensión. Ritos funerarios entre los antiguos mayas*. Universidad Autónoma de Yucatán, Mérida.
- Euw, Eric
1977 *Itzimte, Pixoy, Tzum*. Corpus of Maya Hieroglyphic Inscriptions. Volume 3, Part 1. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge.

- Fash, William L., Barbara W. Fash, and Karla Davis-Salazar
 2004 Understanding Early Classic Copan: A Classic Maya Center and Its Investigation. In *Understanding Early Classic Copan*, edited by E.E. Bell, M.A. Canuto, and R.J. Sharer, pp. 65-83. University of Pennsylvania Museum of Archaeology and Anthropology, Philadelphia.
- Finamore, Daniel, and Stephen D. Houston (editors)
 2010 *Fiery Pool: The Maya and the Mythic Sea*. Yale University Press, New Haven.
- Fitzsimmons, James L.
 1998 Classic Maya Mortuary Anniversaries at Piedras Negras, Guatemala. *Ancient Mesoamerica* 9:271-278.
- 2002 *Death and the Maya: Language and Archaeology in Classic Maya Mortuary Ceremonialism*. Ph.D. dissertation, Department of Anthropology, Harvard University. University Microfilms, Ann Arbor.
- 2009 *Death and the Classic Maya Kings*. University of Texas Press, Austin.
- 2011 Perspectives on Death and Transformation in Ancient Maya Society. In *Living with the Dead—Mortuary Ritual in Mesoamerica*, edited by J.L. Fitzsimmons and I. Shimada, pp. 53-77. University of Arizona Press, Tucson.
- Freidel, David A., and Stanley P. Guenter
 2006 Soul Bundle Caches, Tombs, and Cenotaphs: Creating the Places of Resurrection and Accession in Maya Kingship. In *Sacred Bundles: Ritual Acts of Wrapping and Binding in Mesoamerica*, edited by J. Guernsey and K.F. Reilly, pp. 59-79. Boundary and Archaeology Research Center, Bernardsville, North Carolina.
- Freidel, David A., Michelle Rich, and F. Kent Reilly III
 2010 Resurrecting the Maize King. *Archaeology* 63(5):42-45.
- García Campillo, José Miguel
 2001 Santuarios urbanos. Casas para los antepasados en Chichén Itzá. In *Reconstruyendo la ciudad maya: el urbanismo en las sociedades antiguas*, edited by A. Ciudad Ruiz, M.J. Iglesias Ponce de León, and M. Martínez, pp. 403-423. Sociedad Española de Estudios Mayas, Madrid.
- Gillespie, Susan D.
 2001 Personhood, Agency, and Mortuary Ritual: A Case Study from the Ancient Maya. *Journal of Anthropological Archaeology* 20:73-112.
- Graham, Ian
 1992 *Uxmal*. Corpus of Maya Hieroglyphic Inscriptions, Volume 4, Part 2. Peabody Museum of Archaeology and Ethnology. Harvard University, Cambridge.
- Graña-Behrens, Daniel
 2002 No solo los *k'atuno'ob*: el redescubrimiento de la cuenta de los *tuno'ob* y su tradición a través de las fuentes escritas desde el clásico precolombino hasta el Siglo XVII colonial. In *La organización social entre los mayas: memoria de la Tercera Mesa Redonda de Palenque, Volumen 1*, edited by V. Tiesler, R. Cobos, and M. Greene, pp. 159-191. Instituto Nacional de Antropología e Historia, México, D.F.
- 2006 Emblem Glyphs and Political Organization in Northwestern Yucatan in the Classic Period (A.D. 300-1000). *Ancient Mesoamerica* 17:105-123.
- 2009 *Die Maya-Inschriften aus Nordwestyukatan, Mexiko. Kalenderangaben, Chronologie und kulturgeschichtliche Interpretation*, 2 Bände. Südwestdeutscher Verlag für Hochschulschriften, Saarbrücken.
- Graña-Behrens, Daniel, and Xiaobing Wang-Riese
 2008 Ancestors in Maya and Shang Chinese Inscriptions. *Paideuma* 54:129-149.
- Grube, Nikolai
 2000 Fire Rituals in the Context of Classic Maya Initial Series. In *The Sacred and the Profane: Architecture and Identity in the Maya Lowlands*, edited by P.R. Colas, K. Delvendahñ, M. Kuhnert, and A. Schubart, pp. 93-110. Markt Schwaben: Anton Saurwein.
- 2009 Los monumentos esculpidos de Dzehkabtún, Campeche: epigrafía e iconografía. In *Los Investigadores de la Cultura Maya* 18, tomo 2, pp. 27-39. Universidad Autónoma de Campeche, Campeche.
- Grube, Nikolai, and Maria Gaida
 2006 *Die Maya: Schrift und Kunst*. DuMont, Berlin.
- Grube, Nikolai, and Werner Nahm
 1994 A Census of Xibalba: A Complete Inventory of Way Characters on Maya Ceramics. In *The Maya Vase Book: A Corpus of Rollout Photographs of Maya Vases, Volume 4*, edited by J. Kerr, pp. 686-715. Kerr Associates, New York.
- Grube, Nikolai, and Carlos Pallan
 2011 The Hieroglyphic Stairway of Sabana Piletas, Campeche. In *The Long Silence. Sabana Piletas and Its Neighbours*, edited by M. Stephan, pp. 251-262. Acta Mesoamericana Volume 21. Anton Saurwein, Markt Schwaben.
- Harrison, Peter D.
 1999 *The Lords of Tikal: Rulers of an Ancient Maya City*. Thames and Hudson, London.
- Hellmuth, Nicholas M.
 1992 The Magic of Middle American Culture before 1492: In *Commemoration of the 500th Anniversary of the Arrival of Columbus in America*. Leonardo Patterson.
- Houston, Stephen, Héctor Escobedo, Andrew Scherer, Mark Child, and James Fitzsimmons
 2005 Classic Maya Death at Piedras Negras, Guatemala. In *Antropología de la eternidad: la muerte en la cultura maya*, edited by A. Ciudad Ruiz, M. Humberto Ruz, and M.J. Iglesias Ponce de León, pp. 113-143. Universidad Nacional Autónoma de México, D.F.
- Jansen, Maarten, and Gabina A. Pérez Jiménez
 2007 *Encounter with the Plumed Serpent*. University Press of Colorado, Boulder.

- Kettunen, Harry
 2005 Snakes, Centipedes, Snakepedes, and Centiserpents: Conflation of Liminal Species in Maya Iconography and Ethnozoology. *Wayeb Notes* 9:1-42.
- Kerr, Justin
 1989 The Maya Vase Book: A Corpus of Rollout Photography of Maya Vases. Volume 1. Kerr Associates, New York.
- Kremer, Jürgen
 1999 Sobre los huesos de Tikal. *Arqueología Mexicana* VI(36):2-4.
- Köhler, Ulrich
 2007 Los dioses de los cerros entre los Tzotziles en su contexto interétnico. *Estudios de Cultura Maya* 30:139-152.
- Lacandena García-Gallo, Alfonso
 2004 *The Glyptic Corpus from Ek' Balam, Yucatán, México*. Report Submitted to the Foundation for the Advancement of Mesoamerican Research, Crystal River, FL.
- Maldonado Cárdenas, Rubén, Alexander Voss, and Angel Góngora Sales
 2002 Kalom Uk'u, Señor de Dzibilchaltún. In *La organización social entre los mayas: memoria de la Tercera Mesa Redonda de Palenque, Volumen 1*, edited by V. Tiesler, R. Cobos, and M. Greene, pp. 79-100. Instituto Nacional de Antropología e Historia, México, D.F.
- Mayer, Karl Herbert
 1987 *Maya Monuments IV: Sculptures of Unknown Provenance in Middle America, Supplement 1*. Von Flemming, Berlin.
- 1995 *Maya Monuments VII: Sculptures of Unknown Provenance in Middle America, Supplement 4*. Academic Publishers, Graz.
- McAnany, Patricia A.
 1995 *Living with the Ancestors*. The University of Texas Press, Austin.
- Merk, Stephan
 2011 The Catalog of Ruins. In *The Long Silence: Sabana Piletas and Its Neighbours*, edited by S. Merk, pp. 17-242. Acta Mesoamericana, Volume 21. Anton Saurwein, Markt Schwaben.
- Miller, Virginia
 2007 Skeletons, Skulls, and Bones in the Art of Chichen Itza. In *New Perspectives on Human Sacrifice and Ritual Body Treatments in Ancient Maya Society*, edited by V. Tiesler and A. Cucina, pp. 165-189. Springer, New York.
- Pallan, Carlos
 2009 *Secuencia dinástica, glifos-emblemas y topónimos en las inscripciones jeroglíficas de Edzná, Campeche (600-900 d.C.): implicaciones históricas*. Universidad Nacional Autónoma de México, Mexico, D.F.
- Pohl, Mary D.
 1990 The Ethnozoology of the Maya: Faunal Remains from Five Sites in Petén, Guatemala. In *Excavations at Seibal. Department of Petén, Guatemala, Number* 3, edited by G.R. Willey, pp. 143-174. Memoirs of the Peabody Museum of Archaeology and Ethnology. Harvard University, Cambridge
- Pollock, H.E.D.
 1980 *The Puuc: An Architectural Survey of the Hill Country of Yucatan and Northern Campeche*. Memoirs of the Peabody Museum, Vol. 19. Harvard University, Cambridge.
- Proskouriakoff, Tatiana
 1960 Historical Implications of a Pattern of Dates at Piedras Negras, Guatemala. *American Antiquity* 25:454-475.
- Riese, Berthold
 2004 Die Maya und der Tod. *Archiv für Religionsgeschichte* 6:135-158.
- Sachse, Frauke, and Allen Christenson
 2005 *Tulan and the Other Side of the Sea: Unraveling a Metaphorical Concept from Colonial Guatemalan Highland Sources*. Mesoweb Publications: www.mesoweb.com/articles/tulan/Tulan.pdf.
- Schele, Linda, and David A. Freidel
 1990 *A Forest of Kings: The Untold Story of the Ancient Maya*. Quill, New York.
- Schele, Linda, and Mary Ellen Miller
 1986 *The Blood of Kings: Dynasty and Ritual in Maya Art*. Kimball Art Museum, Fort Worth.
- Seler, Eduard
 1960 Die Ruinen von Xochicalco. In *Gesammelte Abhandlungen zur Amerikanischen Sprach- und Altertumskunde, Band 2*, pp. 128-167. Akademische Druck- und Verlagsanstalt, Graz.
- Stanzione, Vincent
 2003 *Rituals of Sacrifice: Walking the Face of the Earth on the Sacred Path of the Sun, A Journey Through the Tz'utujil Maya World of Santiago Atitlan*. University of New Mexico, Albuquerque.
- Stuart, David
 1996 A Consideration of Stelae in Ancient Maya Ritual and Representation. *RES* 29/30:149-171.
- 2005 *The Inscriptions from Temple XIX at Palenque*. The Pre-Columbian Art Research Institute, San Francisco.
- 2009 The Symbolism of Zacpetén Altar 1. In *The Kowoj: Identity, Migrations, and Geopolitics in Late Postclassic Petén, Guatemala*, edited by P. M. Rice and D. S. Rice, pp. 317-326. University Press of Colorado, Boulder.
- Taube, Karl
 2004 Flower Mountain: Concepts of Life, Beauty, and Paradise among the Classic Maya. *RES* 45:69-97.
- 2005 Maws of Heaven and Hell: The Symbolism of the Centipede and Serpent in Classic Maya Religion. In *Antropología de la eternidad: la muerte en la cultura maya*, edited by A. Ciudad Ruiz, M. Humberto Ruz, and M.J. Iglesias Ponce de León, pp. 405-442. Universidad Nacional Autónoma de México, D.F.
- Tedlock, Barbara
 1982 *Time and the Highland Maya*. University of New Mexico, Albuquerque.

- Thompson, J. Eric S.
- 1930 *Ethnology of the Mayas of Southern and Central British Honduras*. Field Museum of Natural History, Pub. 274, Anthropological Series Vol. XVII, No. 2. Field Museum of Natural History, Chicago.
- Tiesler, Vera
- 1999 Rasgos bioculturales entre los antiguos mayas. Aspectos arqueológicos y sociales. Unpublished Ph.D. thesis, Facultad de Filosofía y Letras, Universidad Autónoma de México, Mexico, D.F.
- 2007 Funerary or Nonfunerary? New References in Identifying Ancient Maya Sacrificial and Postsacrificial Behaviors from Human Assemblages. In *New Perspectives on Human Sacrifice and Ritual Body Treatments in Ancient Maya Society*, edited by V. Tiesler and A. Cucina, pp. 14-44. Springer, New York.
- Tozzer, Alfred M.
- 1941 *Landa's Relación de Las Cosas de Yucatán*. Papers of the Peabody Museum of American Archaeology and Ethnology, Paper 18. Harvard University, Cambridge.
- Vail, Gabrielle
- 1997 The Deer-Trapping Almanacs in the Madrid Codex. In *Papers on the Madrid Codex*, edited by V.R. Bricker and G. Vail, pp. 73-110. Middle American Research Institute. Publication 64. Tulane University, New Orleans.
- Vargas de la Peña, Leticia, and Víctor Castillo Borges
- 2005 Hallazgos recientes en Ek' Balam. *Arqueología Mexicana* 76:56-63.
- Vogt, Evon Z.
- 1969 *Zinacantan: A Maya Community in the Highlands of Chiapas*. Harvard University Press, Cambridge.
- Vogt, Evon Z., and David Stuart
- 2005 Some Notes on Ritual Caves Among the Ancient and Modern Maya. In *In the Maw of the Earth Monster: Mesoamerican Ritual Cave Use*, edited by J.E. Brady and K.M. Prufer, pp. 155-185. University of Texas Press, Austin.
- Voss, Alexander W., and H. Jürgen Kremer
- 1998 La Estela de Tabi: un monumento a la cacería. *Mexicon* 20:74-79.
- Wagner, Elisabeth
- 2005 Nudos, bultos, muertos y semillas: algunas observaciones en torno al titulos *bolon tz'ak(bu) ajaw*. *Ketzalcalli* 1:28-47.
- Weiss-Krejci, Estela
- 2011 The Role of Dead Bodies in Late Classic Maya Polities: Cross-Cultural Reflections on the Meaning of Tikal Altar 5. In *Living with the Dead-Mortuary Ritual in Mesoamerica*, edited by J. Fitzsimmons and I. Shimada, pp. 17-52. The University of Arizona Press, Tucson.
- Welsh, W.B.M.
- 1988 *An Analysis of Classic Lowland Maya Burials*. BAR International Series 409. British Archaeological Reports, Oxford.
- Williamson, Richard
- 1996 Excavations, Interpretations, and Implications of the Earliest Structures Beneath Structure 10L-6 at Copan, Honduras. In *Eighth Palenque Round Table, 1993, Vol. X*, edited by M. Macri and J. McHargue, pp. 169-175. Pre-Columbian Art Research Institute, San Francisco.
- Yorgey, Suzanna
- 2000 The Life Cycle of the Family: A Comparative Analysis of Marriage and Birth Almanacs of Central Mexican and Maya Codices. *Human Mosaic* 33(1):33-49.
- Zender, Marc U.
- 2004 A Study of Classic Maya Priesthood. Unpublished Ph.D. dissertation, Department of Archaeology, University of Calgary, Calgary.
- 2010 The Music of Shells. In *Fiery Pool: The Maya and the Mythic Sea*, edited by D. Finamore and S.D. Houston, pp. 83-85. Yale University Press, New Haven.