

THE MESOAMERICAN SACRUM BONE: DOORWAY TO THE OTHERWORLD¹

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ABSTRACT

This study links body symbolism, religious experience, and visual representation through a consideration of the sacrum bone and the surrounding pelvic girdle in cosmological traditions of Mesoamerica. An argument is put forward, using ethnographic, linguistic, and iconographic evidence, that the sacrum bone was a "sacred" bone, that it played a significant part in some Prehispanic Mesoamerican iconographic and cosmological traditions as it did in some Old World cultures, that it was related to reproduction, fertility, and reincarnation, and that in Mesoamerica the sacrum represented one index of the more generalized but variously manifested "portals" or doorways permitting translocation of shamans, spirits, and deities between worlds or levels of the cosmos.

INTRODUCTION

The human body is sometimes referred to as the "sacred vessel," and various parts of the body play their parts in the observance of religious ritual, retaining through tradition different kinds of symbolic significance; whether it is hands folded in prayer or making the sign of the cross, a tongue receiving the host or pronouncing the name of a Saint, or a heart brocaded on a priestly garment or wrested from the chest of a sacrificial victim with the assistance of obsidian knives. The body, its parts and functions and its symbolism function both to manifest signals of social differentiation in culture and to interpret them, creating social structure and cosmological models underlying it (López Austin 1988; Houston *et al* 2006). The ancient Maya, like their modern descendants, attached great importance to the human skull, and even the lower jawbone of an animal alone is believed by many Indigenous Mesoamericans to be connected to the animal's spiritual essence (Foster 1945). The ritual and symbolic importance of the body and its parts is illustrated here, not with hands or hearts or jawbones, but by a case study of the cultural symbolism and ritual meanings in Mesoamerica of a less frequently considered body part, the sacrum.

In Mesoamerica the sacrum, along with closely associated bones, is apparently seen as sacred in some Indigenous societies even today, though surely less so now than in earlier times. The name "sacrum," designating the more or less flat bone with eight holes located at the base of the spine, comes directly from Latin *os sacrum*, meaning 'sacred bone'. Sugar points out that while most bone names readily reveal their origins, it has long been a mystery why the sacrum bone (*os sacrum*) should be called the "holy bone." "That it is a translation from the Greek *hieron osteon* merely pushes the inquiry back from the first Latin use in about 400 AD to the time of Hippocrates (about 400 BC)" (1987:2061). Following the trail through several explanatory hypotheses about the origins of the name sacrum, Sugar introduces evidence that the sacrum in tradition was the bone necessary for resurrection, identifying it as the "almond" or *luz* of the Hebrews and the *ajb* of the Arabs, and ultimately deriving its conceptual underpinnings from the ancient Egyptians (1987:2062-2063).

Upon finding that some Mesoamerican Indian languages also named this bone with words referring to sacredness and deity, one may well ask why societies distant from one another refer to the sacrum as a "sacred" or "holy" bone. Presumably such naming practices reflect independently, rather than through diffusion, the cultural importance of this bone, and one can suggest plausible explanations, based on observational logic, for its being termed "sacred." The word "sacred" for our purposes can be defined as "worthy of veneration, reverence, and respect on the one hand, and protected by tradition and ritual against symbolic or actual abuse on the other."

The sacrum bone is, among other things, the fulcrum of support for the human torso, and as such is well designed to take great physical stress. It is what we sit on, and by sitting we place ourselves at rest in a position that can be maintained without significant movement for long periods

of time. Perhaps more importantly from perspectives of symbolism and cultural importance, it is located next to the reproductive organs, which are of utmost significance for the species as well as the individual, and are surely of great significance in most if not all societies. In its proximal location, the sacrum could well be thought to share significant qualities with the reproductive organs, and even to transport material from the brain to those organs.

Several cultures around the world assume that the sacrum participates directly in procreation by channeling seminal fluid through the spinal column to the penis, most notably ancient Egyptians and some cultures of India. Its location on the body and the formal similarity of spinal fluid to semen provide an observational basis for these conclusions. Even Leonardo da Vinci, with such a fine grasp of human anatomy, must have made a similar assumption, for he placed in his drawing of a human male a seminal duct leading from the sacrum at the bottom of the spinal cord to the penis (Huxley 1974:64).

Sacredness of this bone is also related to a belief found in various parts of the globe that the sacrum is the "resurrection bone" from which residual raw material remaining after death a person will be reborn, presumably by attracting the spirit residing within. This notion may spring from the observation that as an especially hard bone, the sacrum resists disintegration through time, and is often among the very last visible remains of a body that has been left on the ground or that has been unearthed long after burial. A rational basis for attaching importance to the sacrum bone can thus be constructed from empirical observations and conclusions underlain by a kind of observational logic.

Evidence of human use of the sacrum goes back perhaps as much as eighteen thousand years in Mexico, to one of the earliest evidences of art in the New World; the carved sacrum of a now extinct camel-like animal, found on the banks of Lake Texcoco in the Valley of Mexico (Figure 1).²

Retrieved in 1870 from some forty feet below the surface, this artifact was worked into the form of an animal skull, perhaps representing a deer, or a dog (cf. Weaver 1981:28). One might even suppose that it was intended to represent the skull of the particular extinct camelid from which the sacrum bone was taken. Based on argument presented below, one could also contend that the choice of the sacrum bone for this depiction of an animal head or skull was quite deliberate, made precisely because it was a sacrum bone and not some other bone or material.



Figure 1 Sacrum of extinct camelid carved to represent a mammal's skull, fits the Mesoamerican notion of the sacrum as a second "skull." (photographed courtesy Instituto Nacional de Antropología e Historia, Mexico)

Consistent with ethnographically documented traditions in Mesoamerica, and with interpretations concerning sacrum associated symbolism, the sacrum's carvers may have believed it to house some spiritual essence of a hunted animal--an essence perhaps traditionally thought to be simultaneously located in an Otherworld. Ritual care for the bone would have been, among other reasons, ideologically motivated to ensure success in the hunt and favor of the gods, based on intentions of not angering the Master of Animals nor the spirits of the animals themselves, to use an analogy from some current traditions (see e.g. Foster 1945:186; Alcorn 1984:88; Parsons 1936:48; Lipp 1991:95).

In Mesoamerica today ceremonial masks are sometimes made from animal pelvic bones, and Cordry believes the camelid sacrum mentioned above was probably also used as a mask in front of the face (1980:79-80). This suggests the possibility that some Mesoamericans have noticed the resemblance between the skull and the pelvic girdle, between the head and the pelvis. More direct evidence on this point is available. During fieldwork with Tzeltal Mayans of highland Chiapas, Mexico I was told that the human body has two "skulls" (*bakeltik*) --one at the top of the spine (*bakel hol*) and one at the bottom (*bakel kub*), and that these skulls are connected by a "serpent" (*chan*) which I take to mean the spinal cord or the vertebral column (Figure 2).³ The two skulls are sacred, and ritually important because they are seen to contain the essence of a person. The most sacred points of the body are the mouth or the top of head (at the fontanel), and the base of the spine, because through these paths the soul enters and leaves the body.⁴ Related concepts have been articulated by Huastec (Teenek) Mayans to Alcorn, though without specific mention of the hip region (1984:67).

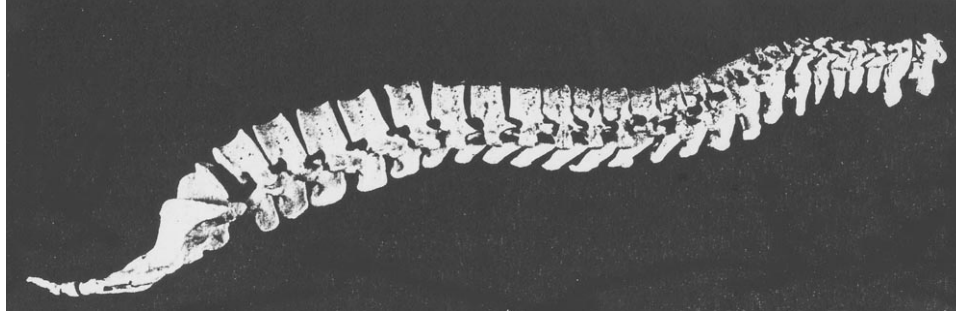


Figure 2 The spinal (vertebral) column, protecting the serpentine spinal cord within it, also resembles a serpent. (after Steele and Bramblett 1988:112)

The argument herein concerning the ritual and symbolic significance of the sacrum in parts of Mesoamerica commences with a characterization of a Mesoamerican variant of what some have called a "shamanic" worldview, including a short discussion of the human sacrum bone in its pelvic context and its place in that worldview. Next, language data are presented to demonstrate another manifestation of Mesoamerican interest in the sacrum and flanking bones. This is followed by evidence that some Precolumbian Mesoamericans shared iconographic concern with the sacrum, presented in the context of a hypothesis that this concern derives from the fact that the sacrum as a focal part of the pelvic girdle represents a metaphor for the cosmic portal linking this world with the Otherworld while emphasizing the generative or (pro)creative aspect of the life cycle, just as the jawbone as a focal part of the skull represents another metaphor for the cosmic portal, but one emphasizing the analytical or destructive aspect of the cosmic cycle. A discussion follows, developing some of the rationale behind the skulls-and-serpent metaphor for the portals-and-conduit linking cosmic domains, and showing that the place of the sacrum in Mesoamerican cosmology, imagery, and ritual finds common ground with Old World ideas on the "sacred bone." A brief conclusion summarizes the argument and its implications.

THE "SHAMANIC" WORLDVIEW

The notion of a cosmic portal, a doorway that permits translocation of shamans, spirits, and deities between worlds or levels of the cosmos, is part of a Mesoamerican cosmological tradition that can be characterized as "shamanic" in analogy with Eliade's presentation of the Siberian shamanic tradition (Eliade 1972; Langdon 1992), and which in turn has been identified by some as characteristic of the Classic Maya cosmos (Freidel, Schele, and Parker 1993; Reilly 1990, 1991).

Use of the terms "shaman", "shamanic" and "shamanism" in Mesoamerican art historical scholarship has been called into question as being too imprecise, ambiguous, and indiscriminately applied (Klein *et al* 2002; Kehoe 2000), and certainly on some occasions these words have remained poorly defined or misapplied. The term "shaman" and its derivatives, when defined however, can be useful and their use has been defended vigorously by scholars employing them (Klein *et al* 2002).⁵ They will be used in this paper on the basis of their current applicability and of a specific characterization of shamanism as the term is here used.

Given that there is no single precise definition or characterization of "shamanism" applicable to all usages, the word must properly at least be characterized, if not always defined, in any context where it is utilized. Shamanism will here be considered as pertaining to a worldview in which the cosmos and all within it is assumed to be animate, and animated by a spiritual essence and life force that is shared, and that underlies the potential for magical transformation, and further that individual body and soul are functionally separable entities under certain conditions, and capable of rejoining (c.f. Markman and Markman 1989:102). Also at the core of shamanism as considered here is the assumption that the spiritual essences (or souls) of individuals that we can call shamans are capable in certain circumstances of leaving their body and visiting an alternative reality that can be called the Otherworld in ways that would strike us in the western world as magical (Markman and Markman 1989:102)

Within this framework of shamanic thought and tradition, The Classic Maya cosmos is said to have comprised the three primary domains of the Heavens, the Earth, and the Underworld. It is supposed that these were linked through a central axis known to the Classic Maya in some venues as **waka chan**, or **waka kan** (Schele and Mathews 1998:27), glossable either as "raised up sky" or as "six snake," symbolized by a "world tree" (*Ceiba pentandra*) and sometimes depicted as a "crocodile tree," with roots in the Underworld and branches high in the Heavens. The central axis was erected in mythical time following creation of a surrounding square periphery with four sides, the corners of which as points (when taken in conjunction with the center), are symbolized as a form called a "quincunx" (Schele and Mathews 1998:27; Stross 1986). The central axis, not fixed in Euclidean space, and given the appropriate ritual activities and circumstances "could be materialized through ritual at any point in the natural and human made landscape. Most important, it was materialized in the person of the king, who brought it into existence as he stood enthralled in ecstatic visions atop his pyramid mountain" (Schele and Freidel 1990:67-8). While speculative in its detail, as might be expected, this is a description of what has been considered "state shamanism" as applied to the Classic Maya (Schele and Freidel 1990; Reilly 1990; Reilly 1991; Freidel *et al* 1993).

Preclassic Mesoamerican Olmecs, like their later neighbors the Classic Maya, apparently conceived of the connective doorway between different cosmic domains as a cave-like portal, depicting it as the open mouth of a great reptilian monster--frontally shown as a short-armed cross shape or quatrefoil, (Figure 3), and in profile as a sideways U or jaw shape (Reilly 1991) (Figure 4). These two shapes, frontal and profile views of the mouth, were to find their way into Zapotec (Figure 5) and Maya (Figure 6) iconography and to continue as representations of the portal linking the different domains through the Classic and Postclassic Maya periods. Correlating with the mouth shapes of the portals, shamanic initiation was seen as a figurative swallowing of the shaman by the reptilian earth monster, or by the vision serpent, or by the "white bone snake" (Schele and Mathews 1998:45), with similar traditions continuing to this day. The mouth and anus of the monster were represented on earth by cave entrances believed to be portals connecting different cosmic domains, the beast's intestine serving as a conduit between domains.

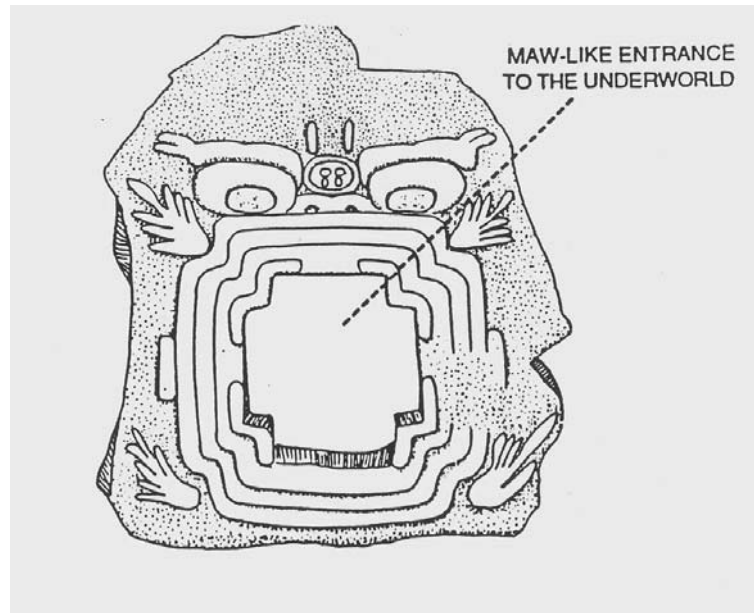


Figure 3 A Middle Formative version of the quatrefoil mouth / portal, Chalcatzingo Monument 9; frontal view, shaped like a short armed cross (drawing by F. Kent Reilly III, by permission)

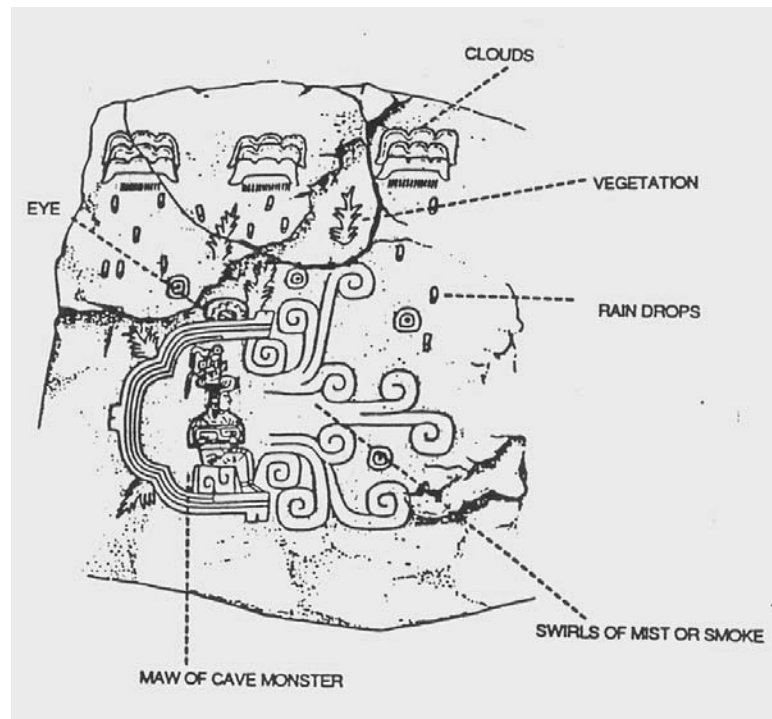


Figure 4 Chalcatzingo Relief 1; A profile view of the Middle Formative portal, shaped like a U (drawing by F. Kent Reilly III, by permission).

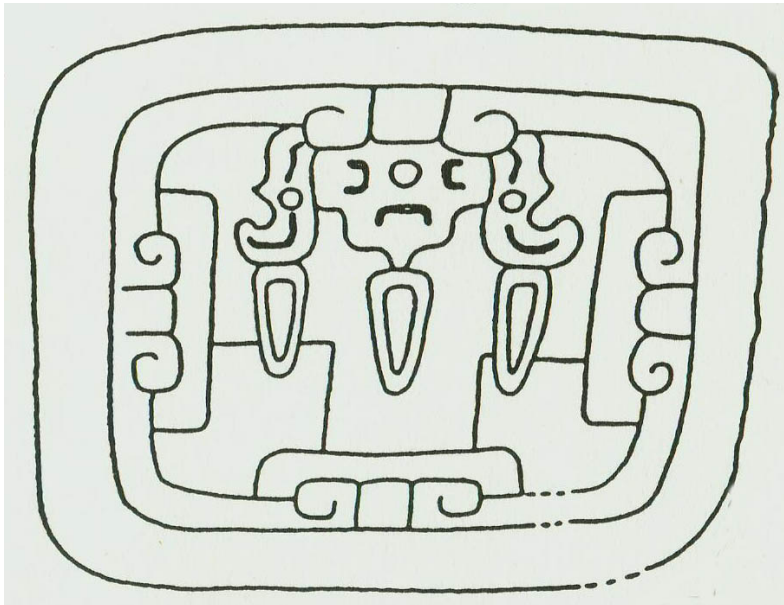


Figure 5 Portal detail from Zapotec image on stone, provenance Mound III at Monte Alban (after Urcid 2001:390, courtesy Marcus Winter).



Figure 6 Detail of portal incised on a peccary skull from Tomb 1 at Copan. Courtesy of the Los Angeles County Museum of Art

The partial decipherment of the Maya script has facilitated our understanding of the Classic Maya cosmos including our ability to even name some of the portals, and it is equally important that contemporary Maya cultures maintain traditions recognizable as reflecting Precolumbian customs, including some that seemingly hearken back ultimately to Olmec times. Relevant to this study, for example, contemporary cultures identify many doorways or conduits between cosmic levels; among them locations marked by large pine crosses at sacred cave entrances and springs as well as at the tops of mountain peaks and beneath particular trees (see e.g. Vogt 1969:67, 87-90). In Classic times it is likely that the stone stelae, artificial ponds (and plazas and ballcourts), and temple pyramids represented a sacred landscape of artificial "trees," "lakes", and "mountains" respectively, having been constructed as venues for locating the portals (i.e. below or inside them). In Classic times, like today, such portals would have interfaced what we might call the natural and supernatural orders. They could be opened for communication with the supernatural world by means of specific rituals, and most significantly through blood sacrifice, conducted on the highest level of state integration by the Maya ruler (Schele and Freidel 1990:68), with a likely emphasis on the fact that the portals were viewed as mouths to be fed with sacrificial blood. Even during the Formative period, iconography tells us that Olmecs saw caves pretty much the way their present day descendants do (Freidel *et al* 1993).

In this way, and in others, the mouth is directly connected with the notion of what might be termed state shamanism; a situation in which the ruler engages in rituals that can be considered shamanic as an integral part of his official activities. A visible symbol, referring simultaneously to the portal mouth where transformation takes place and to the transformer who traverses its boundary, would clearly be an appropriate insignia of office. While the mouth, and by implication the lower jawbone, has been recognized in Mesoamerican studies for some time as a symbol of the cosmic portal (cf. Reilly 1990; Stross 1993), the pelvic girdle, and by implication its centrally located sacrum bone, has not previously been so recognized.

THE HUMAN PELVIS IN SHAMANIC WORLDVIEW

A pillar of five fused sacral vertebrae within the pelvic girdle supports and balances the human torso. This pillar, the sacrum, is attached to four more fused vertebral bones together called the coccyx, but otherwise known as the tailbone. The sacrum (or the sacrum and the coccyx together) is a pivot, a support, and a focal center in the human body. Its flanking hipbones are sometimes called *coxae*, and each *coxa* is composed of three elements--*ilium*, *ischium*, and *pubis*--that are also fused together (Steele and Bramblett 1988). It takes little imagination to see in the pelvic bones a skull, with eyes, nose, and mouth (Figure 7), whether upright or inverted; even the sacrum alone (particularly its bottom half) looks rather like a skull with protuberances and holes that could roughly mimic the major facial features (Figure 8).

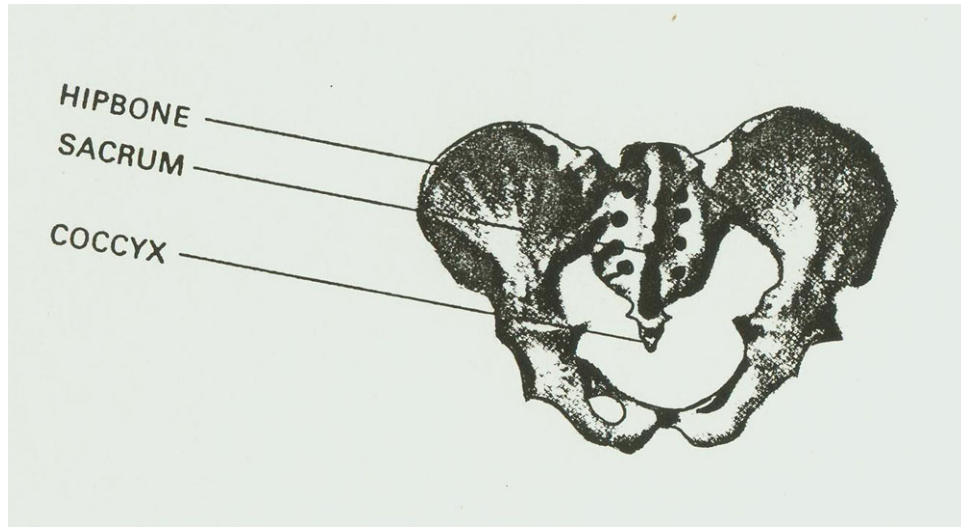


Figure 7 Human pelvis, dorsal view. (Illustration based on Nourse 1964:45)

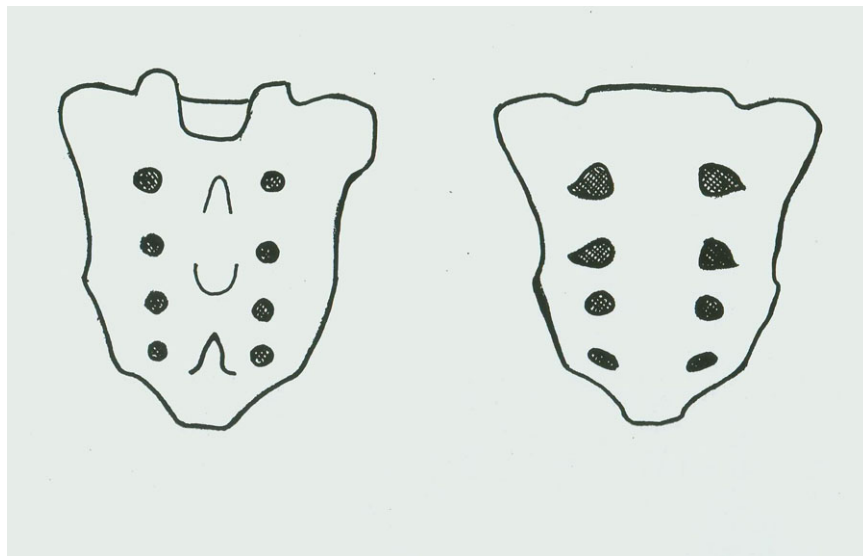


Figure 8 Human sacrum (line drawing by author, based on Nourse 1964:72)
a. dorsal view b. ventral view

Some Mayan names for pelvic bones or for the rump region suggest that the procreative area of the human body was in the past identified by Mayans as a figurative "fire" composed of the coccyx surrounded by figurative pelvic "hearthstones," three being the traditional number of stones in the Mesoamerican hearth. Two of the pelvic "hearthstones," the hipbones, are similar in form, like mirror images, while the third, the sacrum, is different. The pelvis, so closely connected to the creation of new life, somewhat resembles a skull and shares other features with the skull as discussed below. Interpreting some mentions of the skull, through words or images, as metaphorical references to the pelvis, permits aspects of Mayan oral literature and iconography to be understood in a different, fuller, and sometimes more meaningful, light.

For example, in the sacred book of the Quiché Maya, the *Popol Vuh*, a skull in a tree spits into the palm of a maiden's hand. She is thereby impregnated and gives birth to twins. If one interprets the skull and the spitting metaphorically, then the action is less mystical and more comprehensible. A Huastec Maya variant of this motif accomplishes an analogous impregnation by having a **tz'ok** bird whistle at, or in some versions, defecate into the mouth of, the virgin mother-to-be of the maize deity (Alcorn 1984:392).⁶ An example from iconography can be found in a well known scene painted on a Classic Maya plate, the Creation Plate (Schele 1992:135), where the Maize God emerges from a split in the top of a turtle shell, possibly a zoomorphic representation of the human spine (Figure 9), at the base of which is a human skull, as if to represent the original seed. Again the skull may be interpreted more metaphorically than literally; that is as the pelvic "skull."



Figure 9 Creation Plate, K1892, showing the Maize Deity emerging from a crack in the Tortoise shell, flanked by Maya Classic period versions of the "hero twins" of the Popol Vuh (from a color photograph copyright by Justin Kerr, K1892 reproduced with permission).

THE HOLY SACRUM: EVIDENCE FROM LANGUAGE

Dictionaries of Indigenous Mesoamerican languages do not often include words for sacrum or coccyx for understandable reasons, but there are a few that do, and related concepts such as Spanish *rabadilla* 'coccyx, lower extremity of vertebral column (including that of a bird)' and *rabo* 'tail, hind end' can sometimes be found when the more explicit form are not available. In those Mayan languages for which we have translations of sacrum and coccyx, the words usually relate the sacrum to notions of 'god' and 'sacred', while the coccyx is related to 'fire'. For example, Yucatec Maya has a word for sacrum, **k'ul**, which also means 'sacred' and 'holy' (Barrera Vasquez 1980). Itzá Maya has the word **k'uul** 'hip, tail bone' (Hoffling and Tesucún 1997:402), which surely derives from the Itzá root **k'u** 'sacred, holy'.

The Tojolabal Maya word for sacrum **s-bah h-wawtik** (literally "sacred image, sacred self") is based on the verb **wawtik** 'to worship, deify,' and ultimately derives from the root **waw** 'man' (Lenkersdorf 1979 (2):666; (1):395).

In Choltí Maya data limitations render uncertain what the word **xun-xun** means besides 'coccyx', but in a near linguistic relative, Chontal Maya, the root **xun** means 'trivet, the three stones of the hearth'.⁷ For the Yucatec Maya a bird's coccyx is called the "griddle of the rump" (**xamach it**), and in Chol Maya the base of a bird's tail (its rump or coccygeal region) is called simply and literally "fire" (**k'ahk**) (Aulie *et al* 1978:21).

In Tzotzil Maya **chak** means 'rump, bottom, lower end' and it also means 'red' (Laughlin 1975:108). The color red is associated with fire and heat as well as blood, the life force, and resurrection in many if not all traditions. In this connection Markman and Markman point out Alberto Ruz's "suggestion that throughout the Maya lowlands, from the earliest times red pigment was used to cover bones and offerings because red, which 'was associated with east where the sun is reborn every morning, may also have been a symbol of resurrection for men'" (1989:117). Similar practices have been found in various other parts of the world, and the observational logic underlying these practices, based on the color of blood as well as its warmth is easy to appreciate.

Bachajón Tzeltal Maya has a word **ch'uj** 'scarlet, cochineal', and this root or a homophone of it appears in the **ch'uj-te** '*cedro/Cedrella mexicana* (literally "red tree")', which in numerous other Mayan and Mixe-Zoquean languages as well as in Nahuatl <**teocuahuitl**> (Sandstrom 1991:297) is literally "sacred tree." This conflation of 'sacred', 'red', and the *cedro* tree, noted for its good scent and red color, can be found in Colonial Tzeltal **ch'u-te** '*cedro/Cedrela mexicana* (literally "sacred tree")', Yucatec **k'u-che** '*cedro/Cedrela mexicana* (literally "God tree")', Lacandón **k'uh-che** 'tropical cedar', and Kekchí **chakal-te** '*cedro*', which is probably a borrowing from Chortí **chakal-te** '*cedro* (literally "red tree")'. Chortí has another word for the *cedro*, which is **ch'ur te** <**teur te**> (literally "sacred tree"), and Chol has **ch'uh-te** '*cedro/Cedrela mexicana* (literally "sacred tree")', an alternative term for which is **chäk-te** '*cedro* (literally "red tree")' (Aulie *et al* 1996:31, 177). Chol and Chortí Maya, with their alternative terms for the *cedro*, most clearly conflate 'red' and

'sacred', and that linkage is made more significant by the connection in Tzotzil of 'red' and 'rump', and the notion of covering bones with red color to symbolize resurrection.

In Nahuatl, the language of the Aztecs, <**tzin-chocholli**> is the name for the sacrum and coccyx together (López Austin 1988:149). The **tzin** in composition references 'base' or 'buttocks' (López Austin 1988:208), and the **chocholli** part is said to be derived from Nahuatl **choloa** 'to flee, to leap' (López Austin 1988:184) or 'to run swiftly, jump' (Karttunen 1983:54), suggesting a high degree of animacy and activity. The word <**tzin-chocholli**> also refers to the bird's rump (*rabadilla de ave*), which can be viewed in the linguistic context of such other Nahuatl words <**chocholli**> 'deer hoof' [*talon o pie de venado*] and <**chochol**> 'muzzle, snout' [*boçal*] (Molina 1977:101, 22). The deer hoof is symbolic in Mesoamerica of female genitals, clearly a type of "portal," though not the bony one we are exploring, and one can recall in the meanings 'muzzle, snout', not only the fact that this is where the mouth portal is located, but also the pelvic-girdle shaped snout of the Maya "Witz Monster," the personified "sustenance mountain" within which resides maize according to several Mesoamerican traditions (cf. Schele and Miller 1986:45) (Figure 10). Forms providing more context for interpreting the <**tzin**> part of the Nahuatl word for the bird's coccyx include <**tzin-tli**> 'anus, base' which is derivationally related to <**tzinti**> 'begin, enter', a concept not unlike creation.



Figure 10 Maya version of Sustenance Mountain personified as "Witz Monster" showing the roughly pelvis shaped snout. (Drawing by Linda Schele. copyright David Schele. Courtesy Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org)

Although the word for sacrum rarely finds its way into Mesoamerican dictionaries, the examples above add up to evidence that I believe is persuasive. They show some Mayan languages to name the sacrum as "sacred" and they show the rump and coccyx as related to fire. They indicate a relationship between the rump and the color red and the notion of sacredness, and allow inferential linking of these to resurrection. They also suggest somewhat more speculatively that Nahuatl languages may have related the sacrum to female genitals by way of the deer hoof, which might be

seen as an indirect reference to the bony sacral "portal."⁸

Language data of this sort, based on languages of today and the recent past, can tell us about perceptions in earlier times that do not necessarily reflect current understandings of worldview and important concepts as identified by a contemporary speaker, just as many English speakers use the word "secretary" without realizing that it reflects the notion of keeping "secrets," or the word "sacrum" without thinking that sacredness is or ever was attached to it. Because language generally lags behind culture change, our language data has here informed us more about past worldview than about the present one. One might look long and hard at contemporary western culture without finding much evidence outside of books for a concern with the sacrum. Somewhat more productive would be looking to mythology and other ancient narratives with a practiced interpretive eye, for even in oral narrative meanings are on multiple levels and are not always obvious, as we can see from the *Popol Vuh*'s mention of Blood Woman's impregnation by a "skull." However, through information preserved in language and in narrative, particularly when in written form, we are able to determine that some Old World perceptions of the sacrum and pelvic region, if not identical, were at least similar and comparable to those in Mesoamerica, and that data from the Old World links the "holy bone" or sacrum directly to resurrection, which implies passage through at least a figurative cosmic portal or doorway between this world and the other world.

THE HOLY SACRUM: EVIDENCE FROM ICONOGRAPHY

Body parts are depicted in Mesoamerica, from earliest times to the present, often in isolation, apart from the bodies they belong to. In such cases it is clear that they are symbolically charged, iconographically significant, and surely ritually important. Images, carved, modeled, drawn and painted, depict such things as a string of hearts alternating with hands worn around the neck of an earth deity, a skull hanging from the belt of a ruler, and so on. The body parts do not always look like what they are supposed to represent, some being much more stylized than others, but given the image data to conduct some stylistic seriation it is often possible to be fairly certain in identifying some of the body parts. With some difficulty it has even been possible to suggest possible sacrum in the iconography of different parts of Mesoamerica, with a focus on the Olmec, Maya, and Zapotec regions. It is from what appears to be middle to late Preclassic iconography that the most apparent concern with the sacrum is manifested, but this is from a small and preliminary sample discussed below.

The human pelvis with its centrally located sacrum bone has not been previously discussed in studies of Precolumbian iconography. Despite its obvious importance for posture and its indexical relationship to procreation, the fact that it has been largely ignored may be at least in part a function of the fact that depictions of the pelvis have not yet been identified in Mesoamerican iconography generally.⁹ Moreover, the iconography of the skeletal pelvic area has been overlain by metaphors, linguistic and visual, deriving from the skull, so that "teeth," "mouth," "snout," and "spitting" references have focused attention on the upper end of the "serpent." Here, however, some visual images are plausibly identified as representations of the sacrum and its associated hipbones. The following images then constitute primarily visual evidence augmenting that which has already been

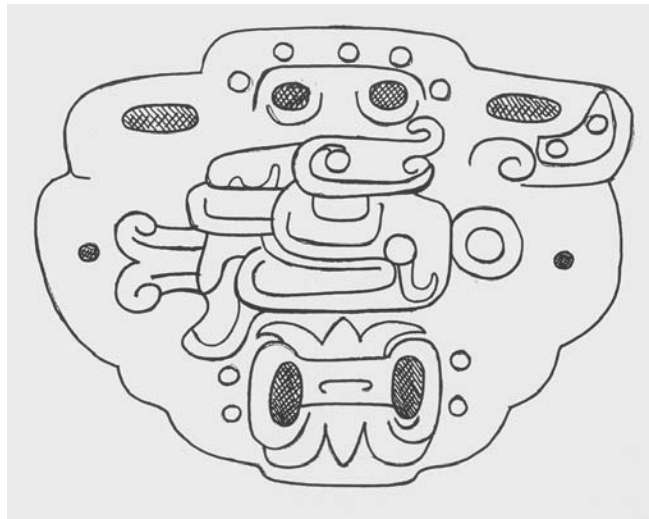
presented from languages, in order to suggest time, place and importance of the pelvis in Mesoamerican iconography.

Sacrum Pectoral

Thousands of years after an unknown individual carved the above mentioned highland Mexican camelid sacrum to represent an animal skull (or head) for possible use as a mask, Late Preclassic artisans, likely in Guatemala, carved a rare green stone to represent what appears to be a somewhat stylized human sacrum bone (Figure 11). They fashioned the stylized sacrum from a rare blue-green quartzite with inclusions of chrysocolla, pyrite, and calcite, known locally in the Guaytan region of Guatemala as *guatemalita* (Garza-Valdes 1993:127), but also found in the Mexican state of Guerrero.¹⁰ Only 8 cm. high, the Sacrum Pectoral is 10.5 cm. long (Garza-Valdes 1991:344, plate 27; 1993). Given the size, rarity, laterally drilled suspension hole, and form of this ornament, one can infer that it was probably to serve as a pectoral ornament for a member of the local nobility. One can speculate that the ornament's makers selected the specific form of the human sacrum to signal the wearer's power by symbolizing his control over the doorway to the Otherworld where the ancestors reside, and his control over the seat of procreation, where descendants are to be found. The total of eight holes in the pectoral, four on each side, reinforces its similarity in structural description to a human sacrum.



Figure 11 a The Sacrum Pectoral from the Ahaw Collection has 8 holes in it, as does the human sacrum. Lateral suspension holes are not visible in this view. Photograph of Sacrum Pectoral (courtesy Leoncio A. Garza-Valdes)

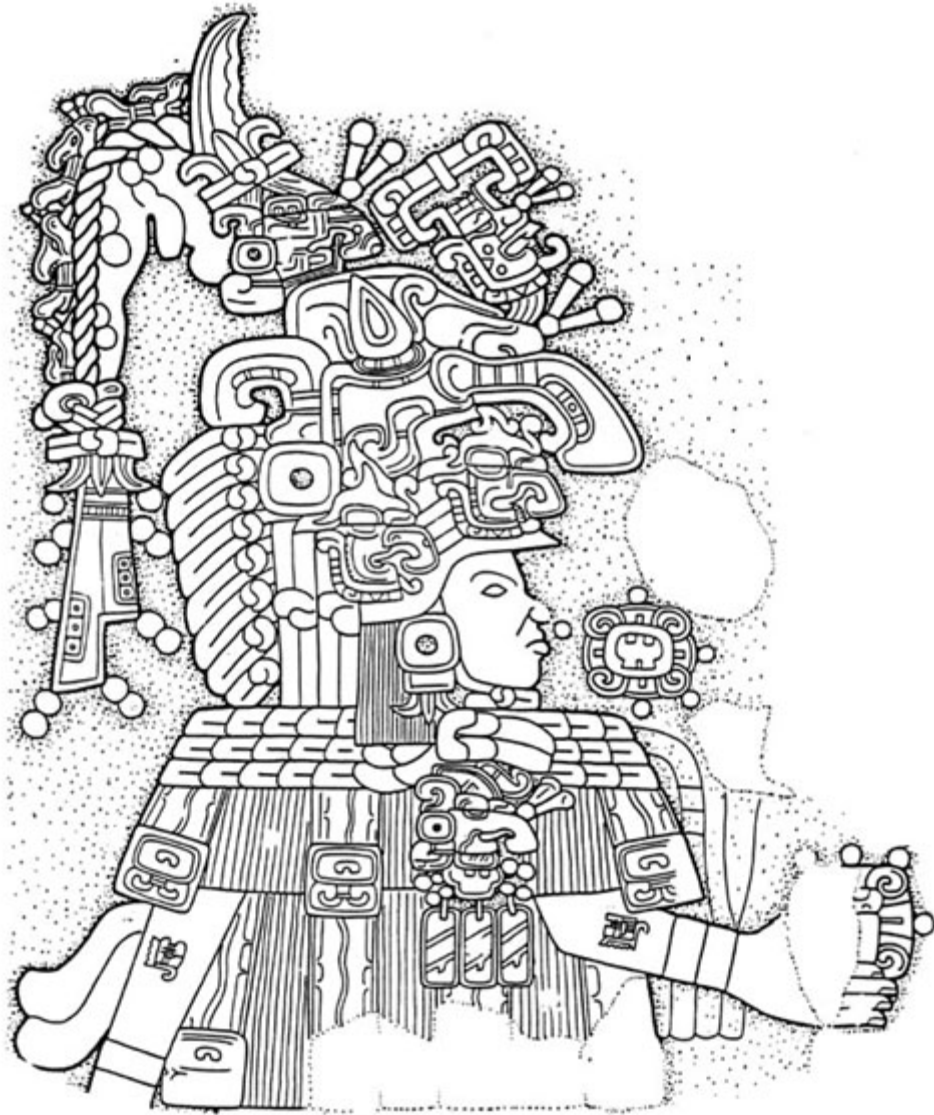


11 b Drawing of Sacrum Pectoral (by the author)

This pectoral carries in its center the image of an ophidian "deity" with a long upper lip and flame eyebrows characteristic of later Preclassic times. A similar entity that appears slightly transformed and without flame eyebrows can be found in association with T628 of the Maya script (c.f. Thompson 1962) on emblems naming a mythical ancestor place as Nine God Place (Schele and Mathews 1998:166), as well as on the ruler's genital covering loincloth on the Hauberg Stela (Figure 12). Comparable flame eyebrows, are however found on long-upper-lipped entities on the ruler's costume from La Mojarra Stela 1 (Figure 13), and Urcid has identified these La Mojarra "personification heads" as analogues of the Zapotec Glyph U (Urcid 1992 (2):205-216), the cosmic portal itself, which is manifested at Monte Alban most clearly in the "jaws of the sky." Association of this "long lipped deity" or "personification head" with the portal thus further associates the Sacrum Pectoral with the cosmic portal, as well as the sacrum proposed here to be represented by that pectoral.



Figure 12 Hauberg Stela detail illustrating profile head on front of loincloth (Drawing by Linda Schele. copyright David Schele. Courtesy Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org)



**Figure 13 La Mojarra Stela 1 illustrating profile head worn on ruler's pectoral atop a portal, and two other types of portal, in hand and before face
(Drawing by George Stuart, courtesy of the Center for Maya Research)**

The sacrum pectoral has been re-polished in modern times, but small deposits of pollen, phytoliths, and charcoal fragments that remain in crevices on its surface, while not conclusive by themselves, are at least suggestive of the authenticity of this unprovenanced artifact. Another unprovenanced late Preclassic artifact, the "silhouette" sculpture currently located at the Heye Foundation Museum of the American Indian, is reputed to have come from Santa Cruz del Quiché in highland Guatemala and to be of proto-Classic age (Adams 1977:fig. 27). It has a very similar "long lipped deity" image, also centrally located (Figure 14). Two holes at the bottom with paired tridents are very similar to correspondingly positioned holes on the Sacrum Pectoral. Wavy trident "flame" eyebrows are shared by both central figures as well.

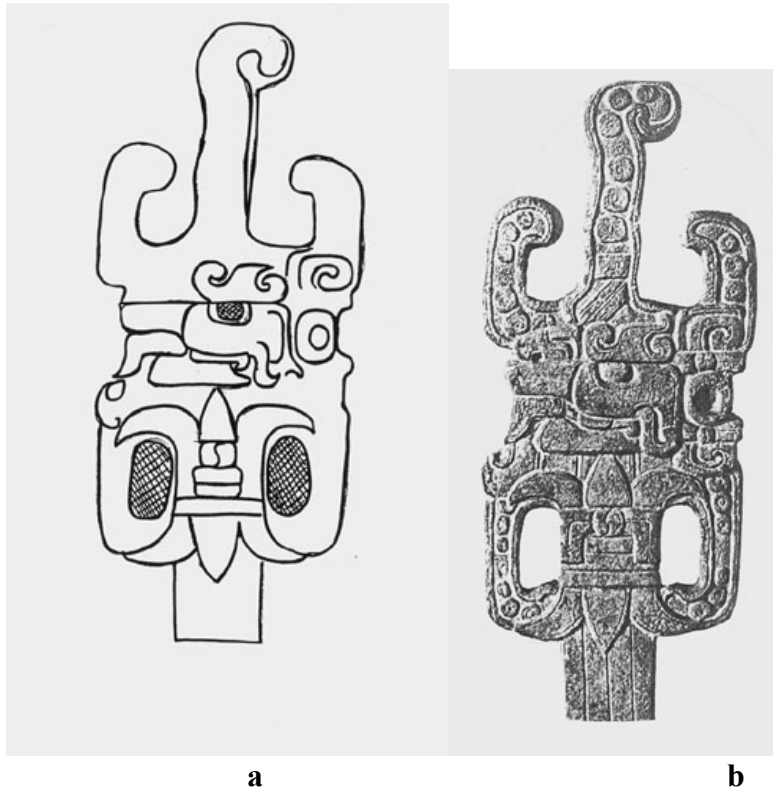


Figure 14 "Silhouette sculpture" unique to highland Guatemala showing "long lipped deity" similar to that on the Sacrum Pectoral.
a. (line drawing by author after I. Nicholson, 1967:120)
b. modified photograph after Nicholson (1967:120)

Comparison of the Sacrum Pectoral with the silhouette sculpture reveals some iconographic similarities that suggest similar time and location of manufacture. Comparison of a human pelvis with the Sacrum Pectoral reveals more striking formal resemblances between the latter two (Figure 15). While the Sacrum Pectoral's elements can be visually related to the outline of the full pelvis (sacrum, coccyx, and hipbones), the sacrum itself appears to be the basic form embellished on the Sacrum Pectoral, with its eight holes and elements of shape such as the raised top and the flattened bottom. The other pelvic elements, if present, are subordinated in size and shape on the pectoral, presumably to present the sacrum shape as dominant. While a sacrum or pelvic girdle does not obviously underlie the iconography of the silhouette sculpture from El Quiché, the resemblance between the ophidian long-lipped entities and paired tridents in both is evident, suggesting a similar provenance in time and space.

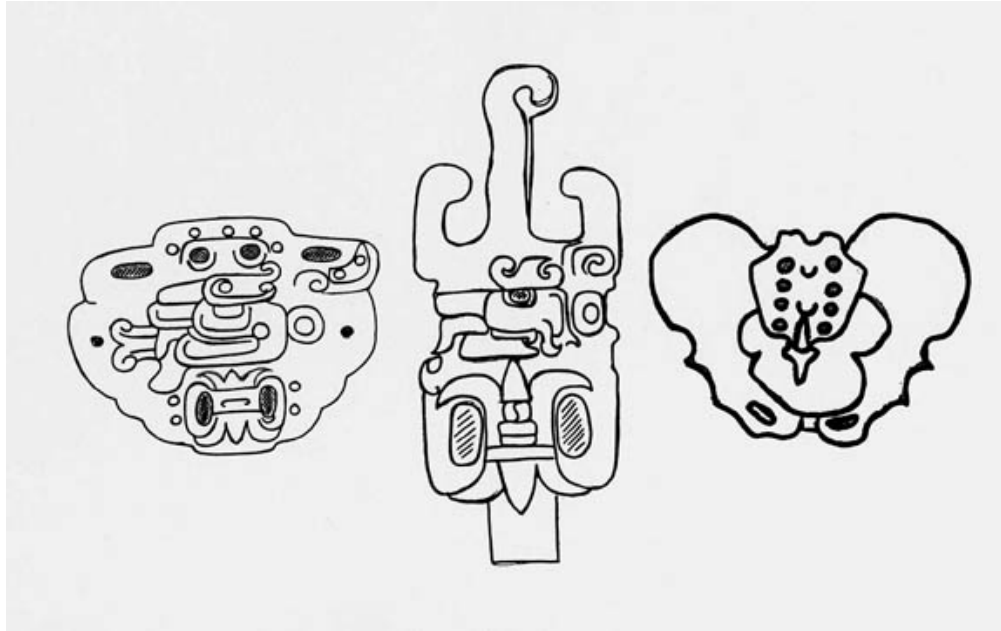


Figure 15 Comparison of Sacrum Pectoral and "Silouhette sculpture" with a human sacrum within the pelvic girdle.

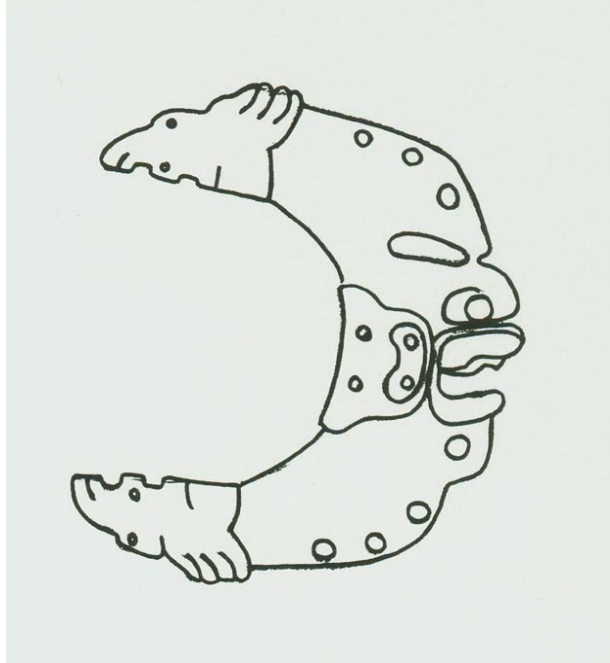
Ahaw Pectoral

Another pectoral from the same collection, named by its owner the Ahaw Pectoral, combines representation of pelvic bones, including the sacrum, with some evidence that it be interpreted to symbolize the cosmic portal. The Ahaw Pectoral's iconography has been explored by the author (Stross 1993), concluding that various elements of the pectoral refer to Olmec mythic traditions that remained unexplained until the 1990s and that provide additional evidence of its authenticity.¹¹

The Ahaw Pectoral is 19.5 cm. in height and 16.5 cm. wide (Garza-Valdes 1991:343), and composed of five separate pieces of translucent emerald green jasper. Three of the five are smaller, darker green stones that form the apices of an equilateral triangle, and appear to have counterparts on the inverted human pelvic girdle. For example, the central darker green stone of the Ahaw pectoral, the keystone, has a shape that mimics the articulated sacrum cut in half, even to the point of having four holes out of what would be eight if it were to represent a complete sacrum (Figure 16). The pectoral's other two smaller, darker stones, depicting Olmec style reptilian jaws with older type flame eyebrows, correspond in shape to the pubic ends of the hipbones and the two lighter green pieces of the Ahaw Pectoral correspond well in size and approximate shape to the ilial ends of the hipbones. Significantly, otherwise inexplicable, large scooped out areas on the back side of the larger lighter green pectoral pieces are analogous to similarly placed hollows found in human iliae (Figure 17).¹²



a.



b.

Figure 16 Ahaw Pectoral from the Ahaw Collection

- a. photograph of the Ahaw Pectoral (courtesy of Leoncio A. Garza-Valdes)
- b. drawing of Ahaw Pectoral (by author)



Figure 17 Ahaw Pectoral from the Ahaw Collection - back side showing hollows

A "string-groove" lapidary technique found on the Ahaw pectoral (Figure 18), by which the five separate pieces are articulated is rare in Mesoamerica, and to judge from published accounts, has a restricted temporal and spatial distribution, suggesting the possibility of the re-working of an heirloom piece during the late Classic in a part of Guatemala bounded roughly by the Alta Verapaz and El Quiché regions and the Middle Motagua Valley (Garza-Valdes 1991:348). Its imagery, however, follows iconographic canons of much earlier times. The face on the Ahaw Pectoral has downward slanting ovoid eyes, fleshy downturned lips, and "reptilian" heads with "flame eyebrows" at either end of the "U." These are features characteristic of Preclassic Olmec iconography. An incised earflare from a tomb in the Middle Preclassic site of La Venta, retrieved by Matthew Stirling (Drucker 1952:160), illustrates features very like those of the Ahaw Pectoral (Figure 19). Moreover, two Olmec specialists have advised the author that the "string-groove" technique is not unknown in Olmec artifacts and can be found in a few private collections. If so, then late re-manufacture of an heirloom piece is not necessarily part of the artifact's history, though it remains a possibility.



Figure 18 Disarticulated Ahaw Pectoral showing string-groove articulation

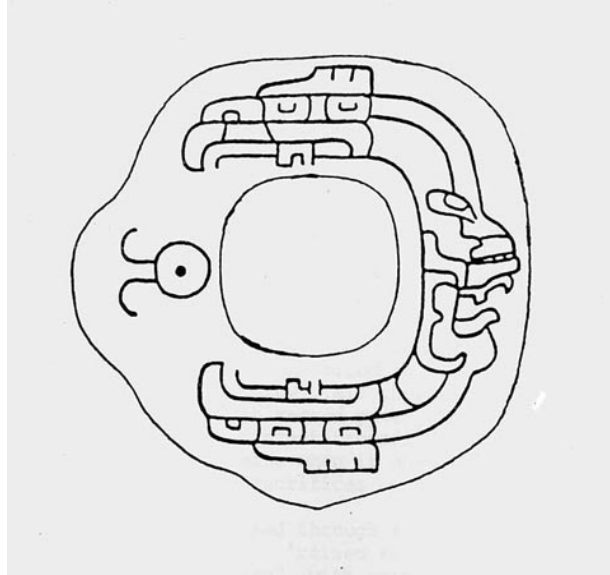


Figure 19 Incised bead from La Venta showing similar features to Ahaw Pectoral (after a drawing by Miguel Covarrubias)

The central darker keystone on the Ahaw Pectoral is shaped roughly like the Sacrum Pectoral, or at least like the bottom half of it, and in that comparative context the two pairs of holes on the keystone correspond to four of the holes on the Sacrum Pectoral, mirroring the central ones to the point that in both the bottom two are enclosed by an incised line (Figure 20). The keystone on the Ahaw Pectoral also has the "stepped" outline of early versions of Maya glyphs for "Ahaw" ('Lord') and "Yax" ('Green') (Figure 21), and the internal elements--holes and hollows--are placed consistent with a conflation of markings on these glyphs.

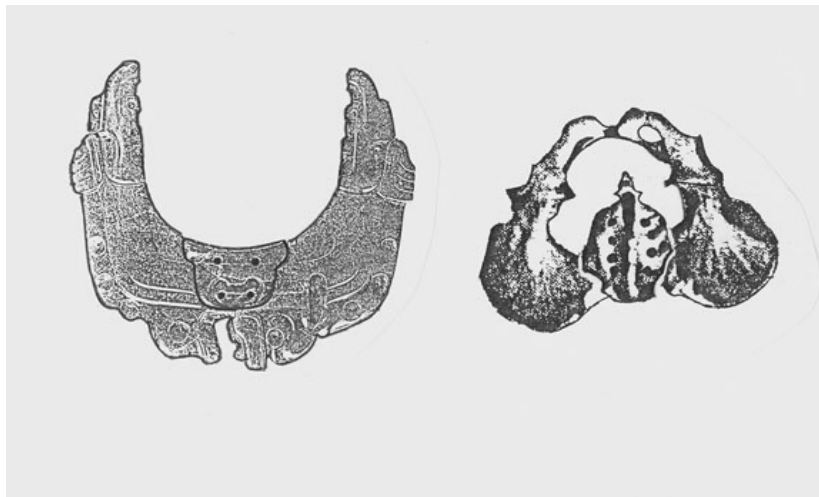


Figure 20 Comparison of Ahaw Pectoral's keystone sacrum with human sacrum within their respective pelvic contexts.

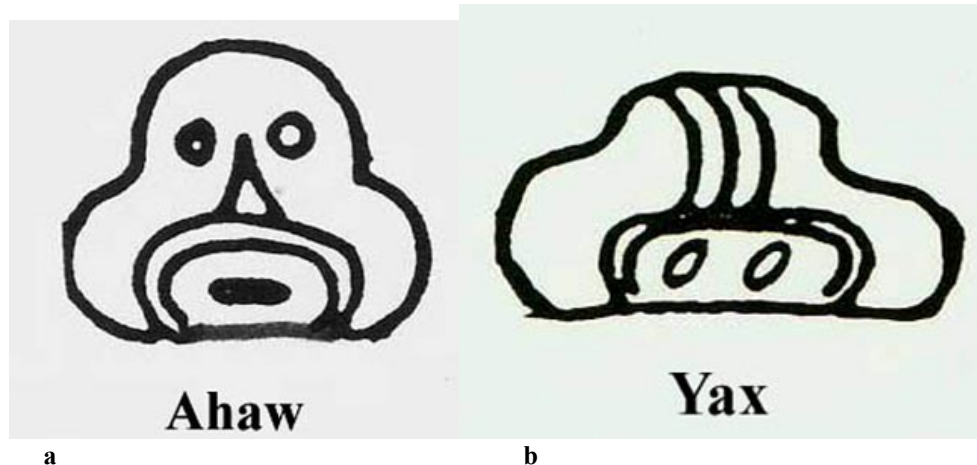


Figure 21 Ahaw and Yax glyphs
a. "Ahaw" glyph (from Palenque House E east-west wall)
b. "Yax" glyph (from Palenque House E east-west wall)

Regardless of whether or not a case can be made for the glyph manufacturers to have consciously incorporated Classic Maya Ahaw and Yax glyph motifs into the keystone of the Ahaw Pectoral by conflating their internal details (surely unlikely if the pectoral is of Late Preclassic manufacture), the appropriateness of the "Yax" (Green) and "Ahaw" (Lord) glyphs for the central keystone on a Maya ruler's pectoral should not be overlooked, and is therefore noted here. Green is the color not only of the pectoral itself, but also of the "center" in Maya color directional symbolism, the center being where the portal is located (Freidel *et al* 1993; Sullivan 1988; Roe 1982). And the Maya ruler is the *ahaw* 'lord', who places himself symbolically and ceremonially in the very center of the universe as the pivot around which all things turn (Schele and Freidel 1990:138).¹³ As the 20th and final day in the 20 day Maya "month" (the *veintena*), the day named Ahaw is also the foundation on which the following month is seated, so that the day Ahaw ('Lord') is the pivot of the *veintena* calendar cycle which for the Maya is a major part of determining one's destiny. In like manner the sacrum is the pivot and focal center in the human body.¹⁴

If the human body can be said to have "portals" or loci of transformative power where the body's interior is connected with the external world, and perhaps also with the Otherworld, the sacrum in the pelvic girdle is likely one of these, while the jawbone in the skull constitutes the other.

The Ahaw Pectoral can be viewed as corresponding to the pelvic girdle, including its keystone corresponding to the sacrum proper. The pectoral would then be an icon representing the cosmic portal. On the microcosmic level of the human body, it might have represented, to the pectoral's makers, the doorway by which the soul could leave the body, while at the same time it might well have been a doorway through which the soul of an offspring could enter the offspring's body. In a larger sense, one could speculate that it might also have represented the doorway to the fertile underworld of creation.

I have elsewhere provided evidence that the Ahaw Pectoral represents the cosmic portal leading to the Underworld on the earthly level (Stross 1993), primarily by comparing it with a Maya glyph (T769a), the "hole" sign (Figure 22), that becomes a bony serpent mouth in iconographic settings (Stuart 2005:73), for the earthly portal that connects this world with the Underworld and that represents meanings close to 'hole, cavity, opening' (Stuart 2005:74). For some the glyph is interpreted to represent a logographic value of **way** meaning 'sleep,' 'animal familiar,' and 'transforming shaman' (Montgomery 2002:266; Freidel *et al* 1993:190-192), all of which relate to separation of soul from body and transformation or transubstantiation.

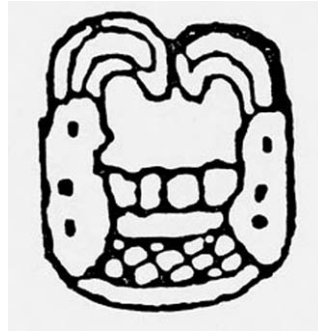


Figure 22 The "Hole"glyph.

Elsewhere too, I have stated my opinion that the Ahaw Pectoral can represent the cosmic portal on a heavenly or astronomical level, because the face on the Ahaw pectoral is an anthropomorphized image of the sky when the Milky Way is gathered along the southern and eastern edges of the sky to form a heavenly version of the great **way** hole or "portal to the Otherworld," the Yucatec **hol Gloria** (Freidel *et al* 1993:51), as it must have been recognized by the Classic Mayans, and before them by the Olmecs (Stross 1993; cf. Freidel *et al* 1993:88). Since the earthly and heavenly portals may be seen as conceptual projections from the archetypal microcosm of the human body, it is not surprising that the one pectoral could have elements pertaining to these different levels simultaneously.

The Coccyx Pendant

A small unprovenanced, but apparently Classic Maya pendant found in the Ahaw collection is in all three dimensions precisely the size and shape of the human coccyx. On it is carved a representation of a human figure (Figure 23). This Coccyx Pendant, of apple green kosmochloric jadeite, has a laterally drilled hole for suspension, not visible in a frontal view. The top half shows a head framed by rolled hair, circular earspools and arms held in the "crab-claw" position of Maya rulers who usually cradle a serpent bar in this position. Below this upper head, a second head occupies what should be the hip region, visually illustrating the notion of the body having an upper and a lower "skull". The lower head, manifested in the structural position of the sacrum, has a pronounced elongated chin that is simultaneously of the appropriate shape and position to be the

coccyx of the "sacrum" (in this case the "sacrum" is the second skull that is visually manifested as a head). In other words, a little knob at the bottom of the pendant represents a miniature version of the whole pendant, which itself represents a coccyx. The shape and iconography of the Coccyx Pendant constitute strong evidence for the hypothesis suggesting Mesoamerican concern with the sacrum, and the notion of two "skulls"; and it suggests also the importance of the coccyx to the Maya during the Classic period.



Figure 23 Coccyx Pendant of apple green kosmochloric jadeite, carved to show one head on top of the other,

the size and shape of a human tailbone, from the Ahaw Collection.

- a. Color photo of the Coccyx Pendant (photo by L.A. Garza-Valdes).
- b. Drawing of the Coccyx Pendant (by author)

A Maya lord K'inich Janaab' Pakal who ruled Palenque from 615 to 683 CE (Martin and Grube 2000:162), was buried in a sarcophagus with several items of jade on, in, or near parts of his body. For example his right hand held a small jade cube and his right held a small jade sphere. Exactly at the bottom of his sacrum, where his coccyx should be, was found a carved jade figure of what is likely a representation of the maize god, the size and shape of a coccyx (Schele and Mathews 1998:126). Maize is referred to as "jade" on ritual occasions (Roys 1967:107; Thompson 1970:351,

Taube 1996:42), and while an ear of maize in several Mayan languages is called **nal** or a similar reflex of Proto-Mayan ***nhal**, Tzeltal Maya refer to semen as **nal**. This suggests a possible reproductive and crop fertility interpretation for Pakal's jade coccyx (Figure 24).

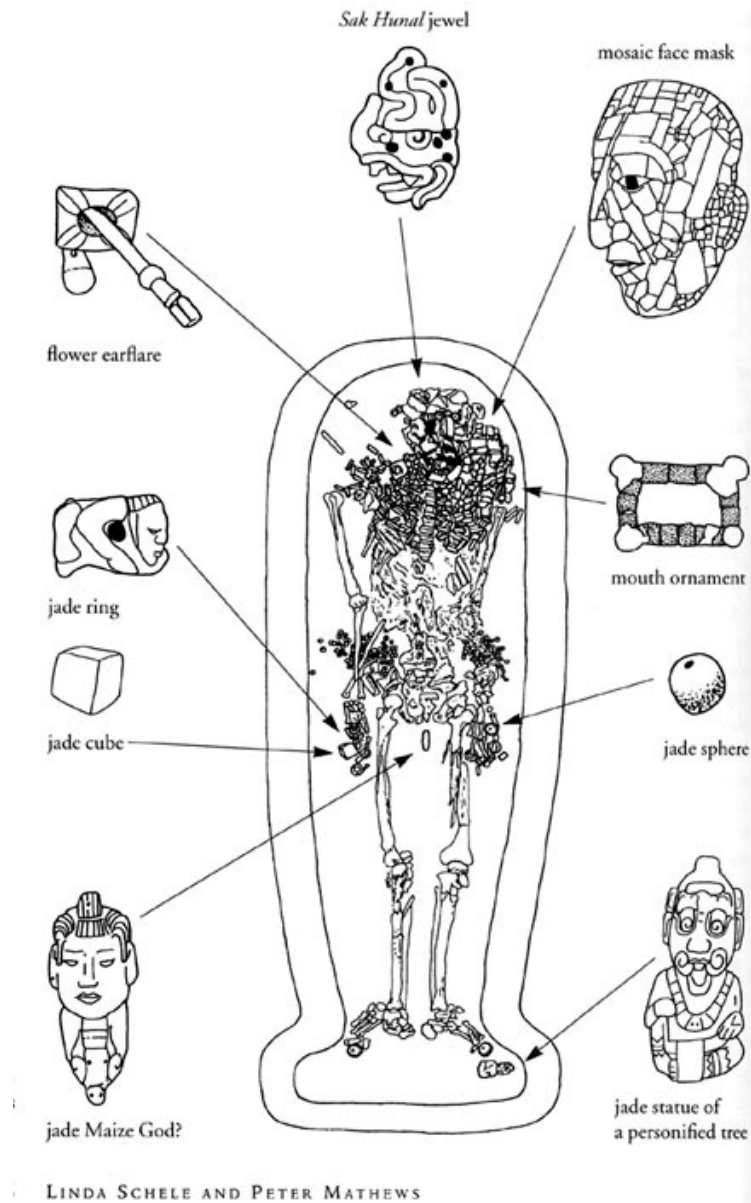


Figure 24 Pakal's body and its accoutrements (drawing by Linda Schele, from Schele & Mathews 1998:126)

Frederick Starr has written of other native Mesoamerican traditions that connect the coccyx

with sexuality, noting in this connection that in Mexico the coccyx is sought by prostitutes in the belief that men's power (sexuality) is lodged therein (1899:100). It is appropriate here to recall that some of today's Maya call the coccyx bone the "fire," recalling another of the Mesoamerican metaphors for the cosmic portal, i.e. fire. Not to dwell on this metaphor, it is worth mentioning at least that a fire is a superior transformer of materials (making the milpa fertile, creating edible food for people, etc.), that not infrequently individuals referred to in the literature as shamans demonstrate their control over fire in one way or another (as for example by placing hot embers in their mouth), that the three hearthstones characteristic of indigenous Mesoamerican homes enclose the fire and establish the center of the house, and that of course fire is clearly another sort of portal or gatekeeper between worlds.

The Blood Glyph

A glyph of the Maya script, number T628 of Thompson's catalog (1962), once thought to be a variant form of the number 20 (Schele and Miller 1986:52), and later identified as a key element referencing an ancestral location known as "Nine God Place" (Schele and Mathews 1998:166), but currently interpreted to mean 'blood' (Stuart 2005:68,76), somewhat resembles a deer's sacrum according to William Harrison (private communication 1988), but the iconographic origins of this glyph and its iconic counterparts are here proposed to involve a human sacrum, with flanking hipbones (Figure 25). It occurs as an icon on an emblem referencing "Nine God Place" from a looted cache plate likely from the Tikal area, and also on Copan's Stela D (Schele and Mathews 1998:166). In both instances the glyph sits on the head of a long-lipped ophidian zoomorph similar to that found on the Sacrum Pectoral discussed above, but in Classic Maya style rather than the Late Preclassic style of the Sacrum Pectoral. From the cleft on top of the "blood" glyph emerges maize foliation and maize ears (Figure 26).

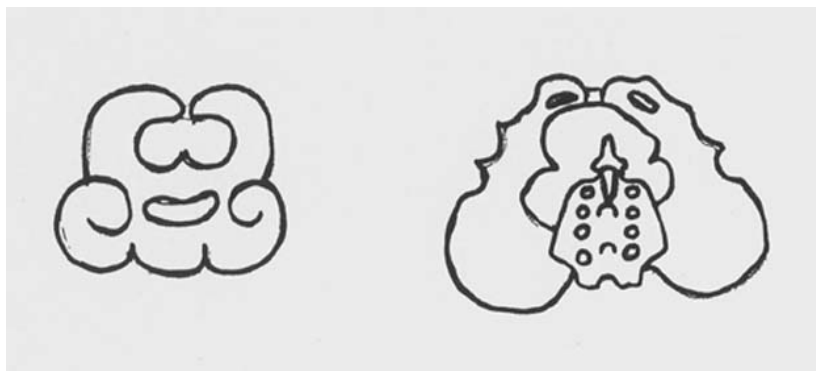


Figure 25 The "blood" glyph (T628, T629) compared with the inverted pelvic bones

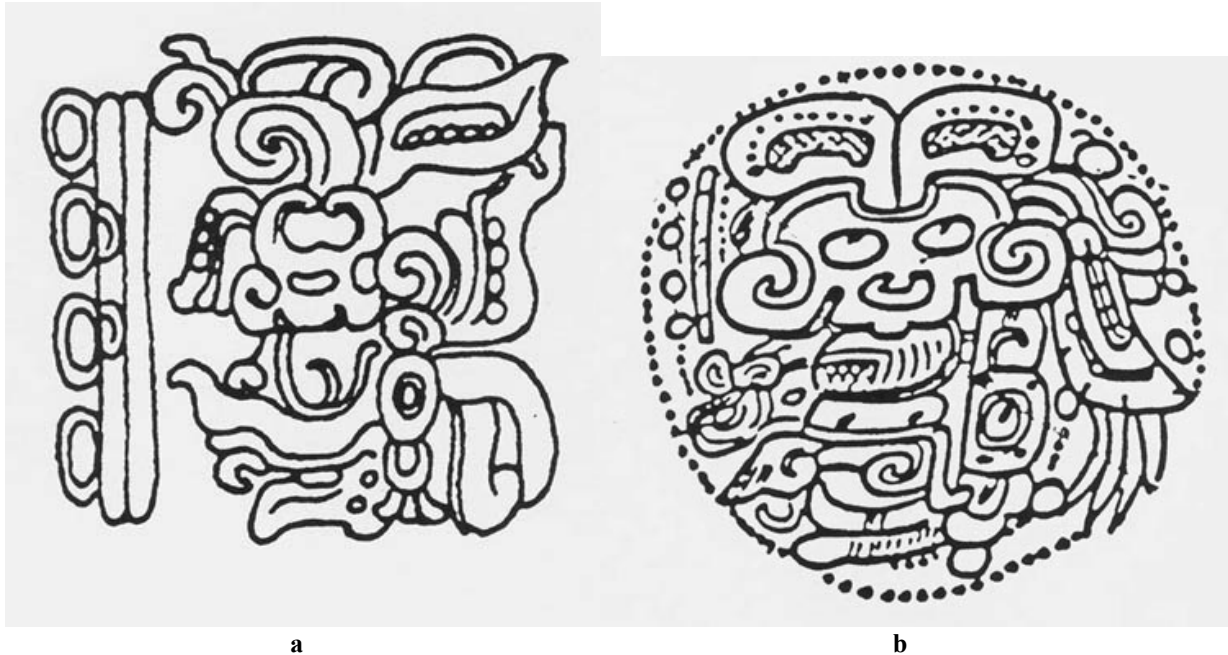


Figure 26 Two examples of the Nine God Place emblem.

- a. Example from Stela D, Copan (Schele and Mathews 1998:166, Fig. 4.13)
(Drawing by Linda Schele. copyright David Schele. Courtesy Foundation for the Advancement of Mesoamerican Studies, Inc., www.famsi.org)
- b. Example from the Early Classic in the Tikal region, actual provenance unknown (After Schele and Miller 1986:fig. 42)

The "Nine God Place" emblem of Classic Maya iconography, "with a personified ophidian Nine God," is paired with another place emblem, the Uc-Ek-Kan emblem. Where the former has a number nine written next to the head with a bar and four dots, the latter has the number seven written next to it with a bar and two dots, and so might alternatively be called "Seven God Place." The "Seven God Place" emblem has for its main icon a "Kan cross" which, like the short-armed cross or quatrefoil mentioned above (cf. Schele and Mathews 1998:144, Fig. 4.13b), can be understood as a cosmic portal (Figure 27). The "Nine God Place" emblem has a corresponding icon that I interpret as a sacrum, so both can be understood as representing cosmic portals, the one associated with seven representing the upper skull and its associated mouth (or jaws), while the one associated with nine represents the lower "skull" and its associated pelvis (or sacrum). Both also have maize vegetation and maize ears emerging from the tops of their respective "portals." In the sense that the two emblems and their portals can be related to the two "skulls" of the body, the skulls are connected to one another by a spinal column. Equally one might say that the two doorways are connected by a conduit. Since the emblems are both accompanied by long upper-lipped ophidian entities, it is possible that this entity or deity may be a more general "personification" of the spinal conduit, which is inherently serpent-like, and also that the emblem itself—whether seven or nine—determines which of the two ends of the spine --or heads at the ends of the spine--is being referenced. Significantly, Harrison has shown that the 7 and the 9 associated with the Seven God Place and Nine God Place emblem pair, (Schele and Mathews 1998:166), implies an 8, which can

refer to the Maya ruler himself, fulfilling the role of maize deity, as on Stela D at Copan (1990). The significance of this observation will be more apparent when discussed below.



Figure 27 Seven God Place emblem with "Kan Cross" portal. Compare the "Kan Cross" here with the seated shaman's pectoral of Figure 31. (after Linda Schele drawing, Schele and Miller 1986:53)

The 'two skulls connected by the spine' as a concept has an important analog in the double headed serpent bar that is the most important scepter of Maya kings and a symbol of rulership for the Maya (cf. Schele and Miller 1986:121), and also an analogue in the Celestial Monster (also called Bicephalic Monster, or Cosmic Monster), which significantly is usually depicted with its rear head "hanging upside down in relation to the front head" (Schele and Freidel 1990:408). This inversion of the rear head could be seen as evidence that the pelvic "skull" is often seen as an inverted skull. That is to say, when inverted it looked more like a skull to the Maya.

Uaxactun Stucco Façade

A stucco Façade from Group H at Waxactun shows two heads, one on top of the other (Figure 28). The lower mask is supposed to represent the Mountain of Creation, and the upper to represent the human-made Snake Mountain (Schele 1995:109). If we think of the lower and upper masks as representing the lower and upper "skulls" of the human body, we will notice the appropriateness of the assignments. The lower mask is located in what is said to be the watery

underworld and the head in the center, while not necessarily ophidian, is at least shown in profile. The upper mask, located in this world, and representing an artificial mountain, shows a frontal view of the central head. The assignment of creation to the lower mask is also in keeping with the role of the lower "skull" as discussed below. And finally, the lower mask is larger than the upper mask, just as the pelvis is larger than the skull.

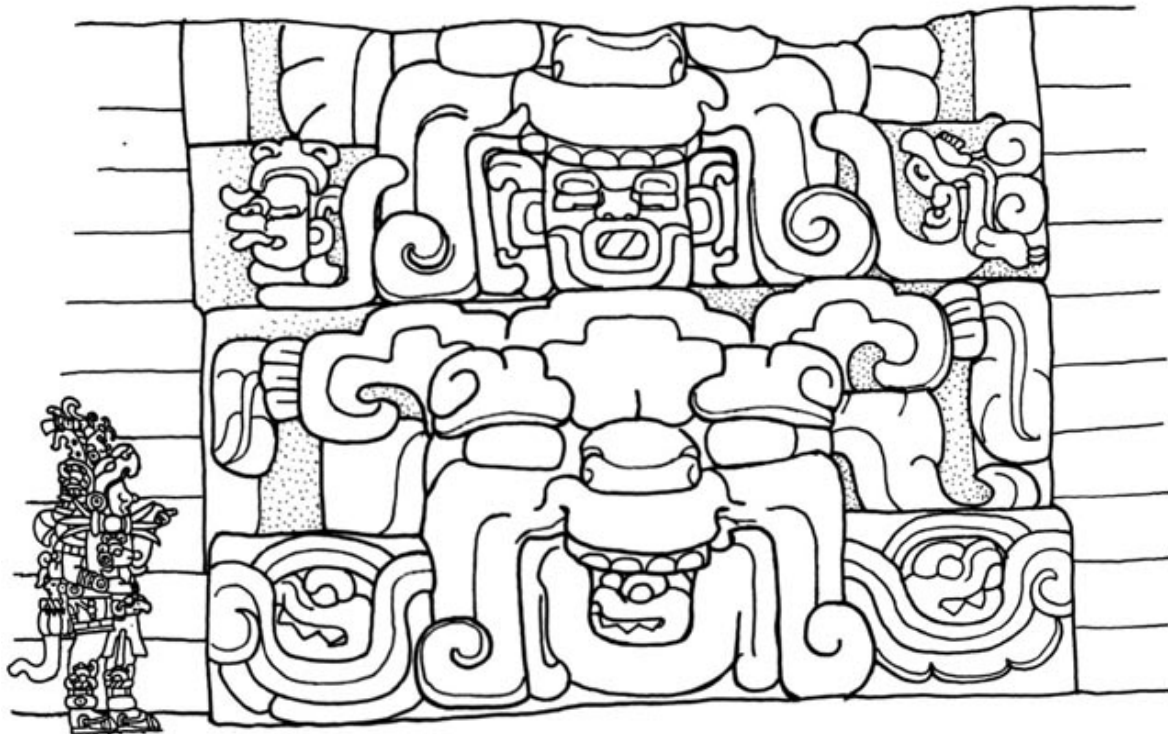


Figure 28 Two Masks on stucco façade of group H at Waxaktun / Uaxactun.
(Drawing by Linda Schele. copyright David Schele. Courtesy Foundation for
the Advancement of Mesoamerican Studies, Inc., www.famsi.org)

Double Merlon

Kent Reilly has identified, as an Olmec symbol for the portal between cosmic levels, a geometric design called the "double merlon" found in Middle Preclassic iconography (Reilly 1990:21-22; 1994:131-132; Tate 2001:142), and he has proposed that "the puzzling geometric shape of the double merlon is in fact a cross-sectional rendering of one of the walled and enclosed courts or sunken patios that form important architectural units at Middle Formative Period sites" (1991:157-8), which like the Classic Maya plaza, can be seen as a portal. A dorsal view of the superior articular process on the sacrum is proposed here as a prototype for the portal that is indexed by the double merlon motif (Figure 29), a proposal that is both consistent with the identification of the sacrum as representative of a portal to the Otherworld, and that independently supports the identification of the squared cleft shape of the double merlon through similarity of form. In addition

to the shape similarity, it may be recalled that the spinal column rises upward from the squared cleft (the superior articular process) as if it were a tree or snake emerging from the portal.

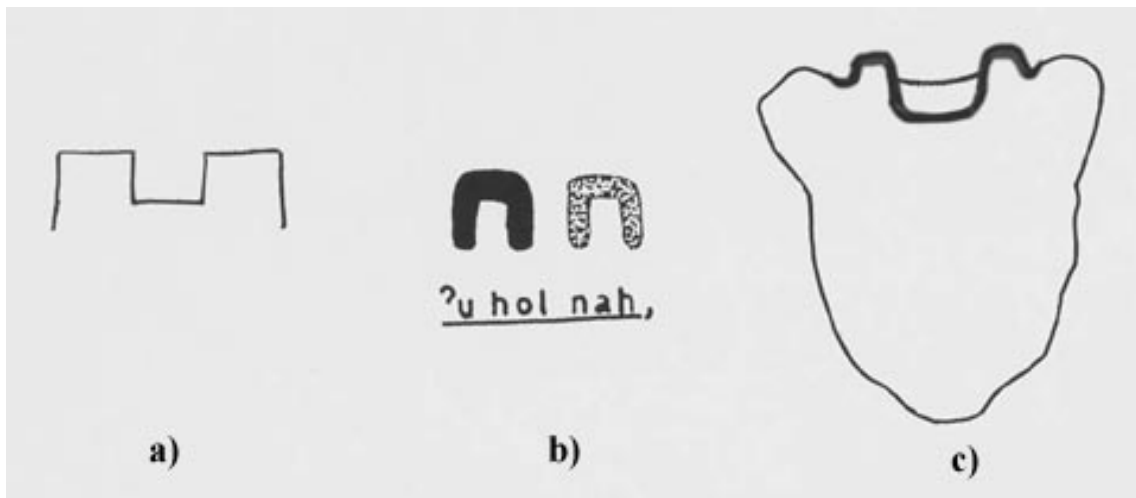


Figure 29 Double Merlon compared with Lacandon symbol of a door and with dorsal view of sacrum

- a. double merlon
- b. Lacandon "door of a house" symbol (after Bruce 1968:144)
- c. top part of sacrum (dorsal view)

The double merlon design is not limited to Olmec times, but occurs in Maya, Mixtec, and Aztec iconography and can even be found in some contemporary Maya imagery consistent with an interpretation of this iconographic motif as a portal or doorway. For example, and possibly as a modern reflection of it, a modern Lacandón Maya sign system includes a double merlon image to represent a house doorway, even though their actual doorways look nothing like the image (Bruce 1968:144). The double merlon also occurs on examples of the Lacandón "god pot," a censer with the head of a deity on the rim--inscribed in the clay in such a way as to frame the deity head, so that the head thrusts up through the cleft in the center of the two protuberances, precisely where a "portal" interpretation is plausible.¹⁵

The double merlon also appears on a Tzotzil ritual mask known as the *Sak-Hol* ("White Head") mask (Cordry 1980:93, 117), recalling above mention of the sacrum and the mask (Figure 30). Here, too, a "portal" interpretation can be plausibly made, and as with the other double merlons, it is on a part-for-whole basis as illustrated by the dorsal view of the sacrum top, which is where the "double merlon" is located (see Figure 29).

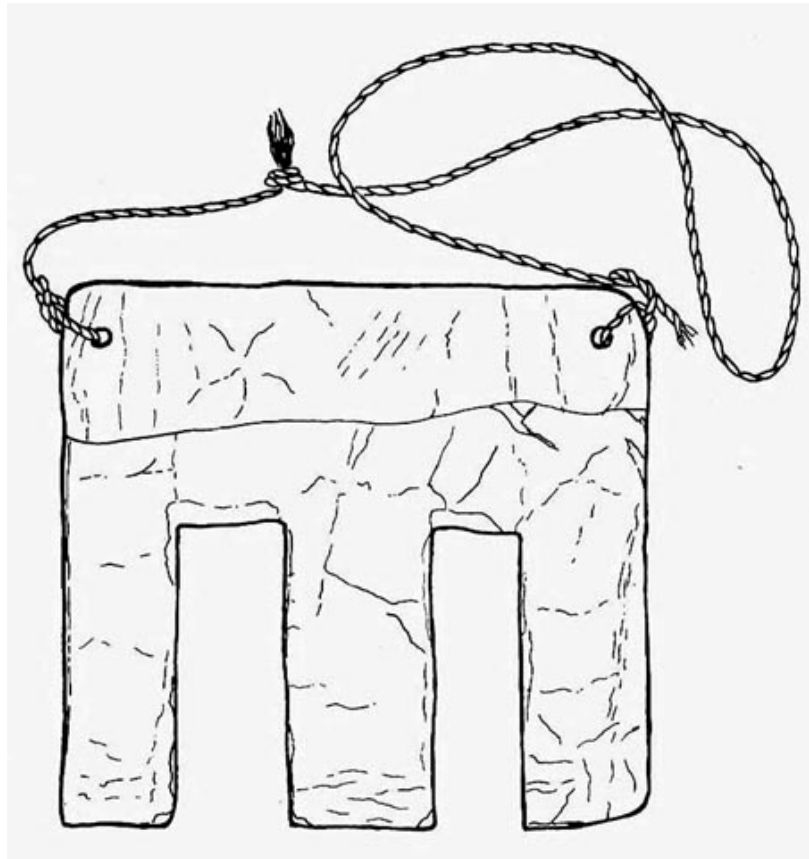


Figure 30 Tzotzil Sak Hol ('White Head') mask. (after Cordry 1980:93)

Zapotec Portal

An inscribed stone found in a wall of Mound III of Monte Alban in Oaxaca, Mexico (Winter 1989:33; Urcid 2001:390) bears an image (Figure 31), referred to as a "framed glyph," that has been identified as an early Zapotec representative of the cosmic portal that elsewhere in Mesoamerica is frequently of quatrefoil shape and depicted in terms of a mouth metaphor (Stross 1996). At the top center, this rectangular Zapotec portal from Late Preclassic Oaxaca depicts what is here interpreted as a stepped sacrum bone and flanking hipbones, from each of which hangs a pendant of sacred substance discussed elsewhere as representing maize ears or jade as metaphorical maize ears (Stross 1996; cf. Taube 1996).

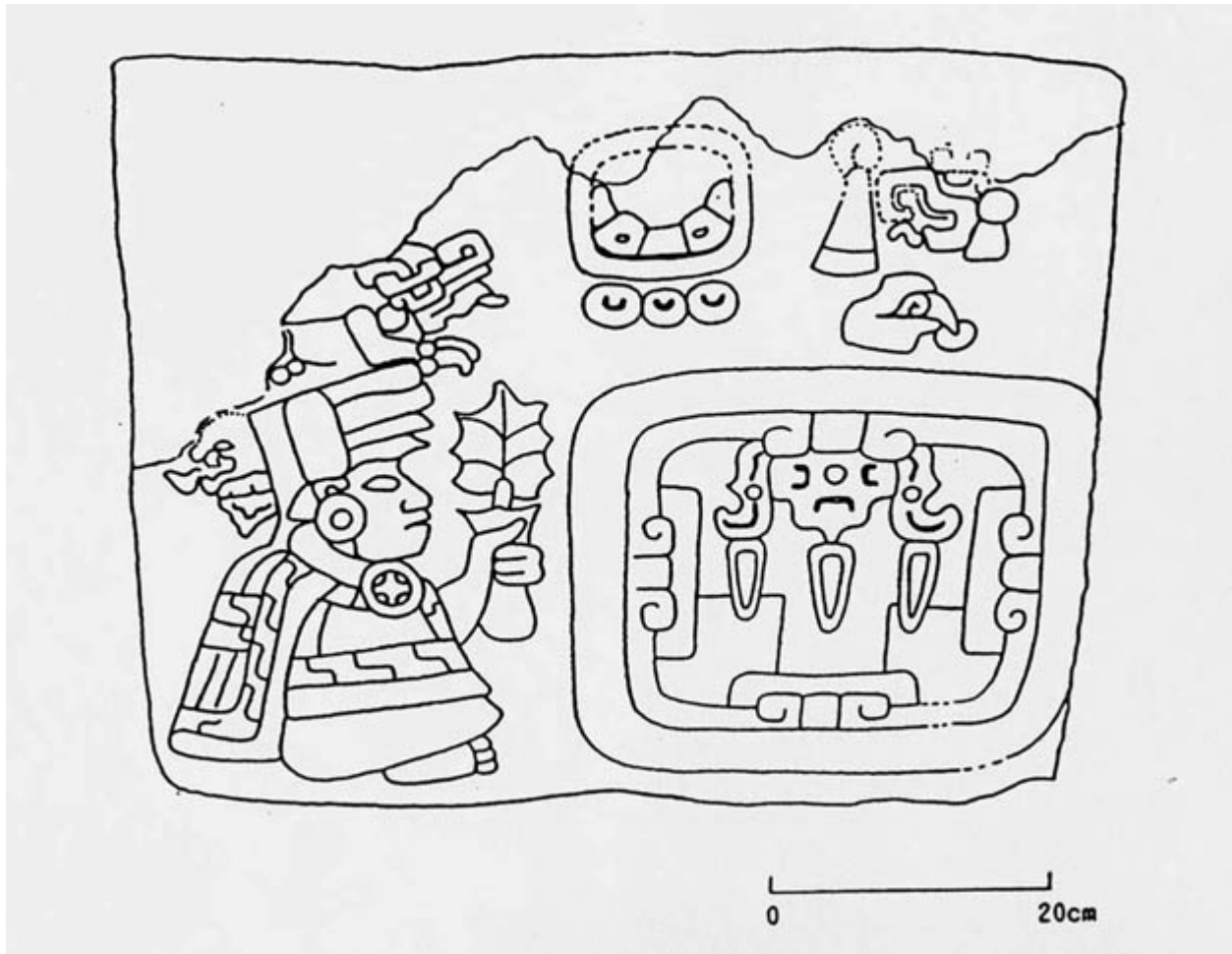


Figure 31 Zapotec image on stone from Mound III at Monte Alban.
(after Urcid 2001:390, Drawing courtesy Marcus Winter).

In the context of Mayan narratives about shaman initiates being swallowed by serpents later to be expelled by them (see Corlett 1935:178), an interpretation of the Zapotec portal image is that it represents the open mouth of the "vision serpent" (Schele and Mathews 1998:417) ready to swallow the seated individual who is portrayed on the inscribed stone holding a leaf of the hallucinogenic *Datura* plant (Stross 1996) which will assist him in initiating the ecstatic journey. Volute fangs of the vision serpent are on four sides, and one can look directly into its frontally oriented mouth seeing all the way down its throat through the length of its straightened body to its human-like sacrum flanked by hipbones (Figure 32). Significantly, if the "hipbones" of the Zapotec portal were to be turned up by pivoting them on the fulcrum of the fangs of the serpent, the result would be strikingly similar to the Maya "hole" sign or "**way**" glyph (Figure 33), which itself appears to represent the reptilian maw as cosmic portal (Freidel *et al* 1993:190-192).

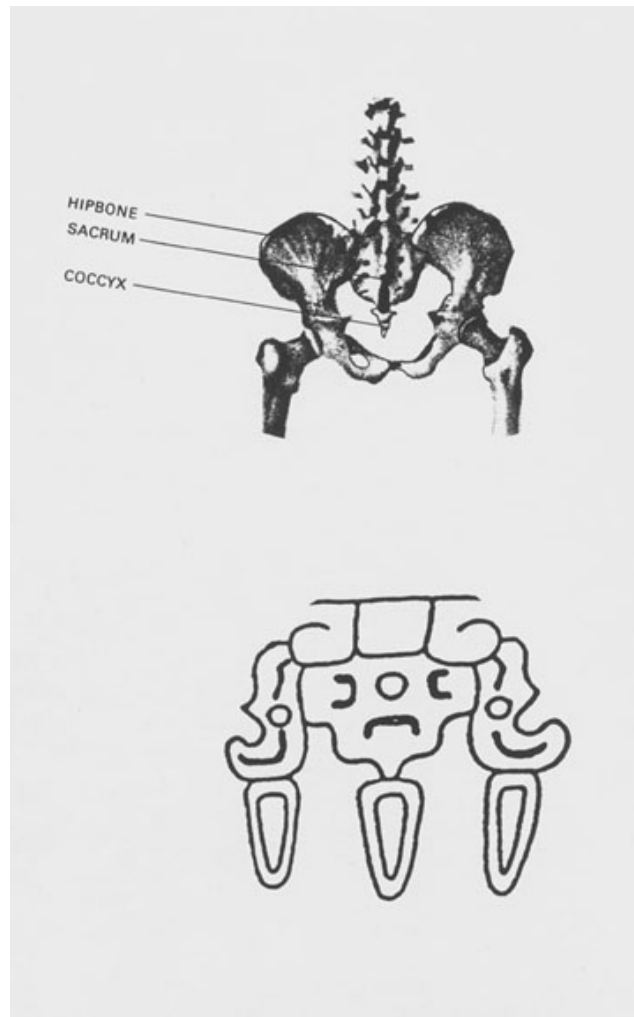


Figure 32 The Zapotec portal compared with the pelvic bones.

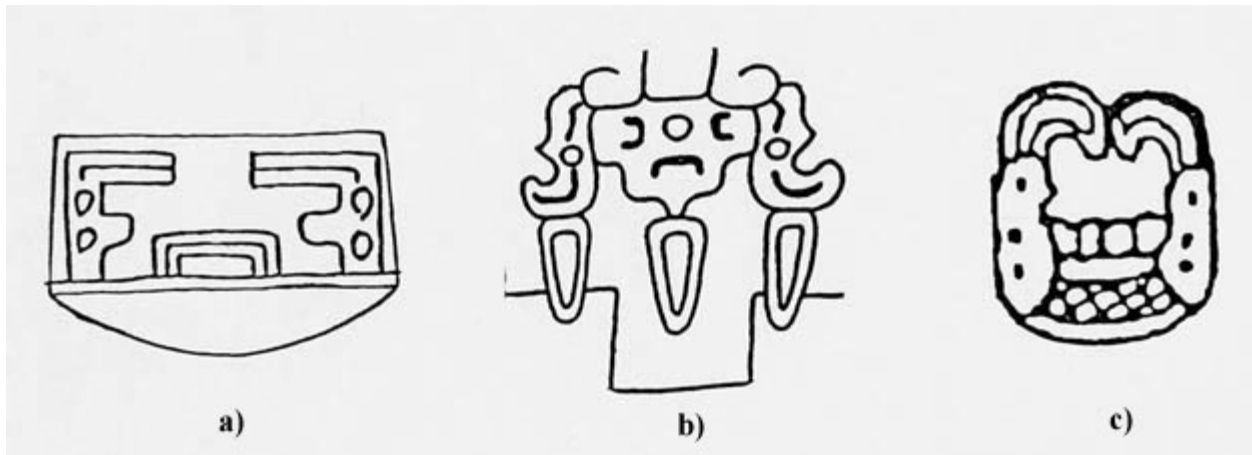


Figure 33 Olmec pelvis in the portal compared with Zapotec counterpart and with the Maya "Hole" glyph

- a) Olmec image of sacrum and pelvic girdle
- b) Zapotec image of sacrum and pelvic girdle
- c) Maya "Hole" glyph

Isthmian Portal

Along with a large hieroglyphic sign corpus of what has been identified as Isthmian script representing a Mixe-Zoquean language, La Mojarra Stela 1, which dates to near the beginning of the current millennium, has at least two instances of what are here interpreted as cosmic portals, with a possible third. In each case the central portion resembles the keystone of the Ahaw Pectoral (see Figure 13), which is here interpreted as a stylized sacrum bone. One portal is in front of the ruler's face. Another, less well preserved but larger, is displayed in the ruler's open left hand. The third is the pectoral worn on the ruler's chest, shown below a long-upper-lipped flame-eyebrowed entity, possibly a "personification head," which--allowing for the distance in space and perhaps time between it and the ones on the silhouette sculpture and the sacrum pectoral--can be seen as remarkably similar in concept.¹⁶ The pectoral below this entity exhibits strong structural similarities to the Zapotec portal within the "Vision Serpent," beginning with the focal keystone shape, flanked by an element involving circlets, each of which has a celt-like pendant dangling from it, both flanking a central pendant dangling from the keystone itself.

Summarizing to this point, words for the sacrum and associated bones indicate that the pelvic girdle and its sacrum bone were considered important in Mesoamerica, several different iconographic reflections of the pelvic girdle with its sacrum bone are here identified in Mesoamerican images, and interpreted here as references to the cosmic portal, attesting thus to the importance of these bones. Some of these may be more persuasive than others to the reader, but I am convinced that all of them are reflections of aspects of the pelvic region, the lower skull, which encloses the focal sacrum bone. In a general way it appears that awareness of the sacrum and pelvic girdle underlying the iconographic representations was more explicit and clear earlier in time. Later

reflections became less representational and those who fashioned the images were likely less aware of the origins of the icons that they were representing, suggesting that core concepts such as the relationship of the sacrum to reproduction were diminished in importance through time, altered by the never ending process of culture change.

DISCUSSION

The human body and body theory are succinctly discussed by Houston *et al* in the context of the Classic Maya noting that when it comes to organizing society, the body of the leader is of great symbolic importance. "A prime mover of social action and a privileged receptor of perception, the royal body also serves conceptually as a central axis of cosmic order" (2006:5). This implies the communicative importance of the royal body, its parts, motions, and ornamentation, and it also implies structural and conceptual replication of core concepts so that the symbolic values being communicated can be understood by all and with reference to any level. Whether or not one agrees that "if the body records core concepts of societies, it must also generate social differences and hierarchy..." (Houston *et al* 2006:6), there is little question that social differentiation exists in all societies, and it is surely the case that the body records core concepts in societies. Among the core concepts present at various times in Mesoamerica, this study has sought to identify the elaborated notion of a second "skull" located in the pelvis (and focused on the sacrum), to discover its meanings, to place it in the context of a shamanic worldview, and to find examples of its presence and meaning in Mesoamerican languages and visual representations.

One can see an almost self-correcting worldview in the essentials of shamanism as defined at the beginning of this essay; one that has been found in various regions of the world, and remnants of which have been retained in cultures through vast stretches of time. The Mesoamerican variant of this general worldview, and its regional subvariants of course all have changed with time, but they have left traces in language and visual representations that allow us to interpret something about the meanings that might have once charged them with the communicative life of social evaluation and of ritual action. We began this essay with the notion of "skulls" and the skeletal framework of the human body, so it is now time to discuss evidence mostly presented above that the lower "skull" was once a core concept in parts of Mesoamerica, and of how the concept might have fit within a larger framework of embodied core concepts, operating to explain the cosmos and to generate power for those who knew how to utilize the core concepts to their advantage. It will be useful to start with the notion of skeletonization, depicting a living individual as skeleton or part of one.

Skeletonization in visual representation is commonly seen as an attribute relating to shamans and their activities (Halifax 1982:76). A Huichol shaman was asked why he had depicted a shaman "skeletonized, with ribs, pelvis, and leg bones showing. Was he dead? 'No,' said Ramón, 'that is so that you can recognize him as a shaman'" (Furst 1978:23). Furst explains further that skeletonization in shamanic art comes from a belief that the bones are the seat and seeds of life (1978:23). Eliade's discussion of shamanism similarly includes the explanation that "to reduce oneself to the skeleton condition is equivalent to re-entering the womb of this primordial life, that is, to a complete renewal, a mystical rebirth" (1972:63), recalling Mesoamerican narratives about shamanic initiation

accomplished through being swallowed by a huge serpent and then expelled from the other end; a form of rebirth. On the level of allegory, and precisely in accord with relatively recent discoveries in Maya iconography and epigraphy, the shaman acolyte is making a journey to the Otherworld (Stross 1994a). In the Skyworld the Milky Way is on occasion seen as a serpent that swallows the souls of the recently dead just as it swallows the souls of shamans.

Also in the Skyworld the two-headed Celestial Monster of Classic Maya iconography could represent an "ecliptic snake" which takes the rising sun into its eastern mouth, to discharge it through its western mouth at sunset--the sun traveling through its body in its path across the sky (Sosa 1986; Junell and Stross 1994a), in much the same way that the sun was thought to travel through Nut's body in ancient Egypt. Note that the shaman has a strong connection with the sun (Eliade 1972), so the analogical link to the allegory is that much firmer.

For convenience one can identify a basic worldview as shamanic that posits multiple levels of existence in the cosmos and that posits portals for travel between these worlds. The portals are related symbolically to specific elements in this earthly plane of human existence, and to an *axis mundi* often made material as a world tree. The shamanic worldview further posits a geography on all levels that is not only alive but that also includes differential concentrations of power. To this it may be added that the human body is seen, if not as a separate level of the cosmos, at least as a partial template from which to project both outward to macrocosmic planes and inward from them to itself. The replication of form and meaning serves to effect partial understanding of the world and its workings and to allow some control over both.

The Skyworld is a stage on which the players and events of cosmic ordering are made visible, while the Underworld stage leaves them hidden from view. Like the Middleworld, these worlds are alive and are sources of sacred power for the shaman. Like the Middleworld, and for that matter the human body, the "landscape" of each includes special places where sacredness is concentrated, just as there are special substances (or materials), that concentrate sacredness and power. It is possible that the distinction between power and sacredness is artificial in this context. Bones, particularly the skull and sacrum, along with the serpentine spine connecting them, are concentrated essences of the individual, charged with sacred and symbolic power and functioning as the seeds of life (Furst 1978:23). They are joined by the bodily essences of energy that have at least been given nomenclatural (or categorial) form by calling them such things as blood, sperm, soul, spirit, grace, etc. Outside of the body, quartz crystals can likewise focus and concentrate power, particularly when ritually activated, as can jade, obsidian, the seeds of particular plants (such as maize), and other items. On the larger landscape, caves, springs, and the peaks of mountains similarly concentrate power, as do human made replicas of them.

One kind of power, in what might be called the "shamanic view," a particularly important kind, is the power to effect transformation; and another is the power bestowed by such transformation. Both require and imply knowledge, and both bestow it. Important elements of transformation would have to begin with fire, but water and earth and air also effect transformations as anyone who has watched a seed grow or witnessed a chemical reaction knows. Transformative elements include also blood, semen, and of course the portals and conduits between worlds, among

which the mouth and the pelvic regions must be carefully counted as especially important. The bones most clearly representing these regions can be expected to have importance at least some of the time, because they are more durable than the soft parts of the body, more fixed in shape, and thus easier to think of as permanent and real.

The sacral skull at the base of spine is more closely related to the fundamental notions of creation, birth, and procreation, while the one at the top is more obviously related to destruction, death, and decay, and hence to a basis for rebirth. If we interpret the clearly depicted skull inside the turtle image (mentioned above) on a Classic Maya ceramic vessel as an image of the sacral source from which the Maize deity is born, springing out through a crack in the top of the turtle's shell, rather than seeing the tortoise shell as a substitute for the sacrum, then the attribution of rebirth potential to the sacral "skull" is verified (see Figure 9). Robicsek and Hales reproduce another funeral vessel on which is depicted "a young male rising from a skull, an event that can only mean emergence from death to life"(1981:149). Similar conclusions can be drawn if we interpret that part of the Quiché *Popol Vuh* narrative where the skull on the tree impregnates the young Moon Goddess by spitting in her hand as referring more literally to the lower "skull" and to semen.

The Mesoamerican Quiché tree of skulls, of death and rebirth, calls to mind Old World Golgotha (also called Calvary), the hill near Jerusalem named "Skull" (Spanish *calavera*) where Adam is buried, and where Jesus (the sacrificial "lamb of God") was crucified, followed by his rebirth. In a remarkable coincidence of form and meaning, the Calvary cross is a Latin cross (often viewed as symbolic of the world tree), usually mounted atop three steps in a pyramidal shape, while the Zapotec sacrum in the portal discussed above is in the form of a three stepped inverted pyramid (see Figure 32). Calvary, "Skull hill" could be interpreted as a reference to the lower "skull" or pelvic girdle, in which reside one's ancestors (in the genetic code), as well as one's descendants, like the biblical Adam buried in "Skull hill."

The idea of a skull (such as Calvary) from which issues a tree or a person is indeed an old one, and it is one that comes naturally from examining the human body rather than from any necessarily diffused ideas. The sacrum forms the central part of a lower "skull" from the top of which emerges a spiny tree (the vertebral column) that for some Mesoamericans was metaphorically represented in nature as the spiny and sacred world tree, the *ceiba* or kapok tree. Inside the human "tree" is the spinal cord, linking the skull above to the skull below and thereby linking ingestion to elimination, destruction to creation, thought to action, and eating to sex. In the western Bible the Tree of Knowledge in the Garden of Eden is the one with the fruits that figuratively "impregnated" Eve, by taking away her innocence. The snake in this tree is a necessarily present intermediary (or mediator).

If the body can be viewed as a microcosm, then its form is either a template for or a reflection of other cosmic levels, and its form is our only guide to the appearance and operation of these other levels, incomplete as this guidance may be. The body has two ends regulating the passage between the inside the body and outside of it, and at these two ends are portals. One end has the mouth; on the other end are the anus and the water producing urethral orifice (and in females there is also the entrance to the birth canal). Concentration of power is in the bony

appurtenances surrounding these portals, and most focally these bones are the lower jaw and the sacrum (sometimes including the coccyx). On a slightly more inclusive scale, these bones are the upper skull and the lower "inverted skull."

A serpentine conduit, the spinal cord being protected by the bony vertebrae, joins the two skulls. The vertebral column, because of its durability, is where the power is presumed to be concentrated. The soft portals of the body (mouth and anus) are also joined during life by a winding serpent-like digestive tract composed of soft and perishable parts. Things come into the body through the mouth portal, where they are transformed in composition (destroyed) by the actions of the jaw. They pass through the serpent conduits in the body (spinal column, intestinal tract), and they pass out of the body, transformed in the pelvic portal (created) by the more mysterious actions of the sacrum. The male body creates new life (ultimately delivered from the sacral region, and according to some the sacrum proper). The new life is then transferred into the female womb (itself backed up by a sacrum).¹⁷

This is a process rather like maize cultivation. One plants the seed, burying it like one buries a body after death in the mouth of the earth. After the seed has been planted and the spirit of maize has passed through the cosmic portal to enter into the seed, the new plant sprout springs from the womb [the creative locus] of the earth and out through the birth canal of the earth [the creative portal] into this world to become a maize plant.

In the worldview outlined above as "shamanic," the body's form and functions can be considered our most basic guide to understanding the appearance and functioning of other cosmic levels, operating thus to generate and/or reflect them. In that way the metaphors and allegories relating the body to other elements in the world allow these elements and their combinations to be comprehended relatively easily, consistently, and with a plausible logic based on observing nature, and especially our bodies as parts of it.

For example such observational logic treats the earth as a living being, so for the Huasteca Nahuatl speakers the soil comprises its flesh, while stones are its bones and water is its blood (Sandstrom 1991:238). Vegetation is the earth's clothing (Alcorn 1984:57). This logic continues in treating the mountain as if it is a person, with analogous anatomy and physiology. The mountain has a "head" and a "foot", grass that "clothes" its body, and animals that live in the remote parts of it. It "drinks" water from the top (as rain) and the water is passed out from lower down (as springs). Similarly the water is passed down to earth from the bottom part of the heavens, and sometimes likened to urination by the sky deities (Thompson 1970:253). The earth, if likened to a human or animal body, needs to eat, and sacrificial food is placed at special places or portals [mouths of the earth]. The portals can be sacred places in the natural landscape such as particular caves, springs, mountaintops, and sacred trees. The portals can also be located on human-made miniature representations of the earth (or its parts) within the cosmos, such as altars, wayside crosses, and small temporary pits dug in the earth for placing sacrificed "food" in the center of the cornfield. Just as some seeds need to pass through a bird's intestinal tract before they can sprout, so the shaman initiate may see the need to pass through a long cave with two entrances (the earth monster's intestine) in order to be purified and empowered, as can be observed in a well known long cave in

San Luis Potosí when done by Teenek shamans. This may be conceived as being swallowed by a serpent and passed out the other end. Things like water, and spirits, etc. have to pass from one level or medium to another by means of the portals or "doorways" which are not always open, just as the animate mouth and anus are not always open. Sometimes specific activities, times, and / or rituals are required to open them. Blood appears to be a particularly useful substance in this respect, but music, dance, and chanting are frequently found in portal opening contexts. Chanting clearly comes from the upper skull (assisted by the chest), but dance can be said to reside prominently in the hips (assisted by the legs and feet).

The transformative fire of life, clearly one type of cosmic portal, is contained in the Mesoamerican house within a "three-piece set" of hearthstones that can also be seen reflected in the sky as the hearthstones of creation within the constellation that we know as Orion, and within which burns the cosmic "flame" that is identifiable as the Orion Nebula, or M42 (Freidel *et al* 1993:79; Stross 1994b, 2006). These hearthstones are an integral part of the original creation, and they continue to do their job of maintenance and transformation. We have seen above how the notion of fire has been metaphorically transferred to the creative bones of the pelvis, and specifically the coccyx, by speakers of some Mayan languages.

The Seven God Place and Nine God Place emblems mentioned above in connection with ophidian vertebral gods are proposed here to represent the emblems personifying guardians of the top front [jaw, Kan Cross glyph = mouth] and bottom rear [sacrum, "Blood" glyph = anus/birth-canal] portals respectively. A plausible hypothesis derives their associated numbers from the numbers of vertebrae associated with these ends of the portal. Seven neck or cervical vertebrae on the top and nine sacral-coccygeal vertebrae on the bottom, correspond in number very nicely with the number seven that is generally associated in Mesoamerica with the Middleworld and with the number nine generally associated with the underworld and levels of the underworld. The number eight is associated generally with the maize deity in Mesoamerica, and thus with maize, and therefore one would expect maize to be viewed as related closely to the portal linking this world to the Underworld, as can be seen on the Seven and Nine God Place emblems.

In between these seven and nine vertebrae there are seventeen more vertebrae in most people, but a few individuals have only sixteen more. Since shamans are often believed to be missing a bone in their body (or in some cases to possess an extra bone), one could speculate that the archetypal shamanic skeleton might have sixteen vertebrae between the seven cervical and the nine fused sacral and coccygeal vertebrae, and that eight vertebrae might be associated with each of these ends, for a total of sixteen middle vertebrae. Since the Maya God of maize rules the number eight, these two sets of eight vertebrae can plausibly be seen to represent, then, a twinned ear of maize, a particularly sacred and auspicious occurrence in Mesoamerica. Table 1 schematizes this information.

TABLE 1 Transformation Zones

	FOCAL REFERENT	EXTENDED REFERENT	NUMBER OF VERTEBRAE	REALM
Portal 1	Jawbone	Skull	7 Neck Vertebrae	Middleworld
Conduit	Spinal Cord	Spinal Column	8 + 8 Intermediate Vertebrae	Conduit
Portal 2	Sacrum	Pelvis (Inverted Skull)	9 Sacral/Coccygeal Vertebrae	Underworld

The maize ear seen emerging from the sacrum shaped "blood" glyph (T628) in the context of the place emblem Nine God Place, although not obviously shown as twinned, reminds us that the Seven God Place and Nine God Place emblems are guardians of the portals (alternatively describable as "labeled doors"), and that one of the most important things passing through the portals is maize, whether as food and fertilizer in the case of the body's microcosm or as the spirit of maize going back and forth from the Skyworld to the Underworld. Either literally or metaphorically, depending on which cosmic level is being considered, the sacrum is where the fire burns in the center, and where the corn comes out. It is thus fitting that the Chol Maya word **na'al** means 'maize spirit' and **nal** means 'ear of maize', while in Tzeltal Maya **nal** means 'semen.'

The Old World

Language and iconographic evidence strongly suggests that the sacrum bone was an important bone indeed in Mesoamerica, relating to sacredness, to resurrection, and to fire. The importance attached to this bone and its immediate neighbors is not limited to Mesoamerica. From ancient Egypt to ancient India and elsewhere, there is abundant evidence that the bones at the base of the spine, including especially the sacrum, were seen as sacred.

The ancient Egyptians, according to Budge (1978:914), called the sacrum bone <**tchet**> (now more often spelled <**djed**>), and this is the name for the backbone of Osiris as well as the name for an amulet supposed to endow the wearer with the permanence and stability of the backbone of Osiris. This name for the sacrum is better known as the name for the "pillar of four capitals" that was identified with Osiris, his backbone, and also the tree in which he was entombed. Budge amplifies an explanation for this combination of meanings:

Many peoples and tribes in Africa have been in the habit of preserving carefully a bone belonging to the body of some great or beloved ancestor, and there can be little doubt that the <**djed**> is a conventional representation of a part of the backbone of Osiris, namely the *sacrum* bone, which on account of its proximity to the sperm bag, was regarded as the most important member of his body (1960:319)

Schwabe *et al*, in a study of the iconographic and conceptual origins of the Ankh hieroglyph in ancient Egypt, document attestations to an Egyptian belief that the "marrow of the vertebrae was the source of sperm and therefore of continuing life" (1982:449), to Egyptian perceptions of the snake as vertebrae (1982:450), to the Egyptian belief that in conception the male furnished the fetus' bones and the female its flesh (1982:452),¹⁸ and to ancient Egyptian statements relating incense and ears of "corn"--not maize, but another staple grain--to the spinal cord and to the marrow that issued from the backbone of Osiris (1982:449).

Schwabe *et al* quote passages from ancient Egyptian literature indicating that the "king" is a serpent, the "Bull" of the nine major Egyptian deities known as the Ennead (Nine), and that the "king" swallowed his seven *uraei* (snakes) so that they would become his seven neck vertebrae (1982:450). Perceptively they note as significant both the number seven that is related to the neck (or cervical) vertebrae, and the number nine (Egyptian <*ps'd*>'nine') that is the same as the word for 'back' (also Egyptian <*ps'd*>), speculating that the Egyptian Ennead of deities might be part of the "sperm-spine" set of motifs (1982:450). They do not make explicit the fact that the sacrum, composed of five fused bones, and the coccyx composed of four bones, together yield nine bones. Schwabe *et al* add that:

similar beliefs about sperm, bones and the spine were current in the Greek world...Plato characterized sperm as "a soft flow from the spine" and opined that the gods had made a connection from the spinal "marrow" (spinal cord) to the urethra of the penis through which the sperm could exit (1982:453)

In India, concern with the spinal column is very ancient, and apparently it continues today. Even now, the flagstaff as the center of the yearly temple festival represents not only the cosmic pillar, but also specifically the human spinal column. The "raising of the flag in the temple symbolically re-enacts the rise of the *kundalini* up the spinal column...Thus the thirty-three divisions of the flagstaff are like the vertebrae of the human spine" (Sahi 1980:79). The serpent, inseparable from the human spine, the vital energy of man, the navel of the cosmos, and the tree of life, is the foundation of the universe (Sahi 1980:161). This description of the role of the serpent is just as appropriate for Mesoamerica. It is, after all, a serpent spinal column that separates the two skulls of the human body, that of the head and that of the pelvis.

CONCLUSION

It has been maintained here that the human sacrum and to a lesser degree its neighboring hipbones participated in Mesoamerican iconographic traditions as well as in Old World cosmological conceptions. As these parts of the human body do not exist in isolation, some pains have been taken to put them in context, relating them to each other, to the head with its mouth, to the spinal column that links the two "skulls," to the body as a whole, and to some of the functions of the

body in society. As an index of the cosmic portal in Mesoamerica the sacrum would likely have represented an image of great power, not only in its symbolic control of the passage of energy and entities between worlds or levels of the cosmos, but also because of its ambiguity, its transformational capabilities, and its ability as a symbol to adapt to changing cultural traditions. Taking its essential form from the pelvic "skull," the sacral design could be modified to incorporate reference to zoomorphs, to personified deities, to other body parts, or to natural phenomena, and on any cosmological level desired; or simultaneously on multiple levels. The evidence for seeing the pelvic "skull"--and its most holy part, the sacrum--as an archetypal image for indexing one manifestation of this portal, has included ethnographic data, linguistic forms and their meanings, and selected Mesoamerican images of the portal, including in particular those that are suggested to represent the sacrum or hipbones. Not surprisingly earlier graphic reflections appear to be more direct and likely reflect a greater conscious awareness by the artists of the prototype that is being represented in their works.

Mesoamerican ideas about and concern with the sacrum and hipbones are similar to those of some peoples of the Old World. These similarities demonstrate an understandable, logical and quite sensible conceptual concern with body parts and their functions, along with the desire to identify and manipulate these parts and ritually powerful (sanctified) images of them in order to organize the social world and signal meanings within it. Furthermore the concern with body parts and their functions reflects a desire to attain some measure of control in an orderly world that seems to operate in terms of structurally and conceptually replicated macrocosms and microcosms. It is no wonder that peoples all over the world describe similar body parts in similar contexts when their forms and functions are generally available to be seen and contemplated in terms of what I would call observational logic. Diffusion is no more a necessary explanation for the widespread view of the sacrum as holy than it is for the worldwide existence of the related phenomenon of "shamanism," although by the same reasoning it also cannot be ruled out *a priori* in any given context as operative in the spread, acceptance, or preservation of these phenomena.

REFERENCES CITED

- Adams, Richard E.W.
1977 *Prehistoric Mesoamerica*. Boston: Little Brown and Co.
- Alcorn, Janis
1984 *Huastec Maya Ethnobotany*. Austin: University of Texas Press.
- Aulie, Wilbur and Evelyn Aulie
1978 *Diccionario Ch'ol - Español, Español - Chol*. Mexico City: Summer Institute of Linguistics.
- Barrera-Vasquez, Alfredo
1980 *Diccionario Cordemex Maya-Español / Español-Maya*. Merida.
- Bruce, Roberto D.
1968 *Gramática del Lacandón*. Mexico City: I.N.A.H.

- Budge, E.A. Wallis
 1960 *The Book of the Dead*. New Hyde Park: University books.
 1978 *An Egyptian Hieroglyphic Dictionary*, 2 Vols., New York: Dover Publications
- Calderon, Eustorjio
 1908 *Estudios Linguisticos II, Las Lenguas De Oluta, Sayula, Texistepec El Istmo De Tehuantepec En Mexico*. Guatemala.
- Campbell, Joseph
 1974 *The Mythic Image*. Princeton: Princeton University Press.
- Caso, Alfonso
 1965 Zapotec writing and calendar. in R. Wauchope, (ed.), *Handbook of Middle American Indians*, Vol. 3, p. 934.
- Cordry, Donald
 1980 *Mexican Masks*. Austin: University of Texas Press.
- Corlett, William T.
 1935 *The Medicine-Man of the American Indian and his Cultural Background*. Baltimore: Charles C. Thomas.
- Covarrubias, Miguel
 1954 *The Eagle, The Jaguar and the Serpent: Indian Art of the Americas*. New York: Alfred A. Knopf.
- Drucker, Philip
 1952 *La Venta, Tabasco: A Study of Olmec Ceramics and Art*. Washington D.C.: Smithsonian Insitution, Bureau of American Ethnology, Bulletin 153.
- Edmonson, Munro S.
 1965 *Quiche-English Dictionary*. New Orleans: Middle American Research Institute, Tulane University, Publication 30.
- Eliade, Mircea
 1972 *Shamanism: Archaic Techniques of Ecstasy*. Princeton: Princeton University Press.
- Foster, George
 1945 *Sierra Popoluca Folklore and Beliefs*. University of California Publications in Archaeology and Ethnology 42(2):177-250.
- Freidel, David, Schele, Linda, and Joy Parker
 1993 *Maya Cosmos*. New York: William Morrow and Company, Inc.
- Furst, Peter T.
 1978 The art of "being Huichol." in K. Berrin (ed.), *Art of the Huichol Indians*. New York: Harry N. Abrams, Inc.
- Garza-Valdes, Leoncio A.
 1991 Technology and weathering of Mesoamerican jades as guides to authenticity. in P.B. Vandiver, J.R. Druzik and G. Wheeler (eds.) *Materials Issues in Art and Archaeology II*, pp. 321-357.
 1993 Mesoamerican jade, surface changes caused by natural weathering. in F.W. Lange (ed.), *Precolumbian Jade: New Geological and Cultural Interpretations*. Salt Lake City: University of Utah Press, pp 121-132.
- Garza-Valdes, Leoncio A. and G. R. Walters
 1985 Chromium chalcedony: the Mesoamerican emerald. *Society of American*

- Archaeology* 50:79.
- Garza-Valdes, Leoncio A. and Brian Stross
 1992 Rock varnish on a pre-Columbian green jasper from the tropical rain forest (the Ahaw Pectoral). *in* P.B. Vandiver, J.R. Druzik, G. Wheeler and I.C. Freestone (eds.), *Materials Issues in Art and Archaeology III*, 891-900.
- Guthrie, Jill (ed.)
 1995 *The Olmec World: Ritual and Rulership*. Princeton: The Art Museum, Princeton University
- Halifax, Joan
 1982 *Shaman: The Wounded Healer*. London: Thames and Hudson.
- Harrison, William F.
 1990 The role of gods 7 and 9 in the iconography and epigraphy of Stela D at Copan. *U-Mut Maya* 3:25-38.
- Hoffling, Charles Andrew and Félix Fernando Tesucún
 1997 *Itzaj Maya – Spanish – English Dictionary*. Salt Lake City: University of Utah Press.
- Houston, Stephen, Stuart, David and Karl Taube
 2006 *The Memory of Bones: Body, Being, and Experience Among the Classic Maya*. Austin: University of Texas Press.
- Huxley, Francis.
 1974 *The Way of the Sacred*. New York: Doubleday and Co.
- Junell, Cathy and Brian Stross
 1994 The deer as western sun. *U-Mut Maya* 5:239:246.
- Karttunen, Frances
 1983 *An Analytical Dictionary of Nahuatl*. Austin: University of Texas Press.
- Kaufman, T. and W. Norman
 1985 An outline of Proto-Cholan phonology, morphology and vocabulary. In *Phoneticism in Mayan Hieroglyphic Writing*, edited J. Justeson and L. Campbell, 77-166. Albany: Institute for Mesoamerican Studies State University of New York
- Kehoe, Alice
 2000 *Shamans and Religion: An Anthropological Exploration in Critical Thinking*. New York: Waveland Press.
- Klein, Cecelia F. Guzmán, Eulogio, Mandell, Elisa C., and Maya Stanfield-Mazzi.
 2002 The role of shamanism in Mesoamerican art: a reassessment. *Current Anthropology* 43(3):383-414
- Larsen, Ramón
 1955 *Vocabulario Huasteco*. Mexico: Instituto Lingüístico de Verano.
- Langdon, E. Jean Matteson and Gerhard Baer
 1992 *Portals of Power: Shamanism in South America*. Albuquerque: University of New Mexico Press.
 1954 *Vocabulario Huasteco*. Mexico City: Summer Institute of Linguistics.
- Laufer, Berthold
 1974 *Jade: A Study in Chinese Archaeology and Religion*. New York: Dover Publications.

- Lenkersdorf, Carlos
 1979 *B'omak'umal tojol ab'al - kastiya*. (2 volumes). Mexico City: Editorial Nuestro Tiempo.
- Lipp, Frank J.
 1991 *The Mixe of Oaxaca: Religion, Ritual, and Healing*. Austin: U. of Texas Press.
- López Austin, Alfredo
 1988 *The Human Body and Ideology*. Salt Lake City. University of Utah Press.
- Markman, Roberta H. and Peter T. Markman
 1989 *Masks of the Spirit: Image and Metaphor in Mesoamerica*. Berkeley: University Of California Press.
- Martin, Simon and Nicolai Grube
 2000 *Chronicle of the Maya Kings and Queens*. New York: Thames and Hudson.
- Molina, Fray Alonso de
 1977 *Vocabulario en Lengua Castellana y Mexicana y Castellana*. (2nd Edition, Facsimile). Mexico City: Editorial Porrúa.
- Morris, Walter
 1988 *Living Maya*. New York: Harry N. Abrams.
- Nicholson, Irene
 1967 *Mexican and Central American Mythology*. New York: Paul Hamlyn.
- Nourse, Alan
 1964 *The Body*. New York: Time Incorporated.
- Parsons, Elsie Clews
 1936 *Mitla: Town of Souls*. Chicago: University of Chicago Press.
- Reilly III, F. Kent
 1990 Cosmos and rulership: the function of Olmec-style symbols in formative period Mesoamerica. *Visible Language* 24:22.
 1991 Olmec iconographic influences on the symbols of Maya rulership: an examination of possible sources. *in* Virginia M. Fields (ed.), *Sixth Palenque Round Table*, 1986. Norman: University of Oklahoma Press. pp. 151-166.
 1994 Enclosed ritual spaces and the watery underworld in Formative period architecture: new observations on the function of La Venta Complex A. *in* M.G. Robertson and V.M. Fields (eds.) *Seventh Palenque Round Table*, 1989. San Francisco: Pre-Columbian Art Research Institute 125-136.
- Robicsek, Francis and Donald M. Hales
 1981 *The Maya Book of the Dead: The Ceramic Codex*. Charlottesville: University of Virginia Art Museum.
- Roe, Peter G.
 1992 *The Cosmic Zygote: Cosmology in the Amazon Basin*. New Brunswick, N.J.: Rutgers University Press.
- Roys, Ralph L.
 1967 *The Book of Chilam Balam of Chumayel*. University of Oklahoma Press, Norman.
- Sahi, Jyoti
 1980 *The Child and the Serpent*. London: Routledge and Kegan Paul, Ltd.
- Sandstrom, Alan R.

- 1991 *Corn is Our Blood*. Norman: University of Oklahoma Press.
- Schele, Linda
- 1992 *Workbook for the XVIth Maya Hieroglyphic Workshop at Texas*. Austin:
- Schele, Linda and Mary Ellen Miller
- 1986 *The Blood of Kings*. Fort Worth: Kimbell Museum.
- Schele, Linda and David Freidel.
- 1990 *A Forest of Kings*. New York: William Morrow and Company.
- Schele, Linda and Peter Matthews.
1998. *The Code of Kings*.
- Schwabe, Calvin W., Adams, Joyce and Carleton T. Hodge.
- 1982 Egyptian beliefs about the bull's spine: an anatomical origin for ankh.
Anthropological Linguistics 24:445-477.
- Sosa, John R.
- 1986 Maya concepts of astronomical order. In G. Gossen (ed.), *Symbol and Meaning Beyond the Closed Community*. Albany, New York: Institute for Mesoamerican Studies, S.U.N.Y., pp. 185-196.
- Starr, Frederick
- 1899 *Catalogue of a Collection of Objects Illustrating the Folklore of Mexico*. London: Published for the Folklore Society by D. Nutt.
- Steele, D. Gentry and Bramblett, Claud A.
- 1988 *The Anatomy and Biology of the Human Skeleton*. College Station. College Station: Texas A&M University Press.
- Stross, Brian
- 1986 "Some observations on T585 (Quincunx) of the Maya script."
Anthropological Linguistics 28:283-311.
- 1993 The man in the maw: an Olmec way in the sky. *Texas Notes on Precolumbian Art, Writing, and Culture*, No. 43, pp. 1-6.
- 1994a A Mayan iconographic "literary" convention. *U-Mut Maya* 5:21-29.
- 1994b Maya creation: a shamanic perspective. *U-Mut Maya* 5:159-170
- 1996 The Mesoamerican cosmic portal: an Early Zapotec example. *Res: Anthropology and Aesthetics* 29/30:82-101.
- 2006 Maize in word and image in southern Mesoamerica, in Staller, John E., Tykot, Robert H, and Bruce F. Benz (eds.), *Histories of Maize: Multidisciplinary Approaches to the Prehistory, Linguistics, Biogeography, Domestication, and Evolution of Maize (Zea Mays L.)*, Elsevier Publishers. Chapter 42. pp. 577-598.
- Stuart, David
- 2005 *The Inscriptions From Temple XIX at Palenque*. San Francisco: The Pre-Columbian Art Research Institute.
- Sugar, Oscar
- 1987 How the sacrum got its name. *Journal of the American Medical Association* 257(15):2061-2063).
- Sullivan, Lawrence E.
- 1988 *Icanchu's Drum: An Orientation to Meaning in South American Religions*.

- New York: Macmillan Publishing Company.
- Tate, Carolyn
 2001 The politics of power and knowledge at La Venta. *in* Koontz, Reese-Taylor and Headrick (eds.) *Landscape and Power in Ancient Mesoamerica*. Boulder, CO: Wesview Press.
- Taube, Karl
 1996 The Olmec maize god: the face of corn in Formative Mesoamerica. *Res: Anthropology and Aesthetics* 29/30:39-81
- Tedlock, Dennis
 1985 *Popol Vuh*. New York. Simon and Schuster.
- Thompson, J. Eric S.
 1962 *A Catalog of Maya Hieroglyphs*. Norman: University of Oklahoma Press.
- Thompson, J. Eric S.
 1970 *Maya History and Religion*. University of Oklahoma Press, Norman.
- Urcid Serrano, Javier
 1992 *Zapotec Hieroglyphic Writing*. Washington D.C.: Dumbarton Oaks
- Vogt, Evon Z.
 1969 *Zinacantan*. Cambridge: Harvard University Press.
- Weaver, Muriel Porter
 1981 *The Aztecs, Maya, and their Predecessors*, 2nd Edition. New York: Academic Press.
- Winter, Marcus
 1989 *Oaxaca: The Archaeological Record*. Editorial Minutiae Mexicana, Mexico.

NOTES

¹ Orthography here employed for Mayan languages is for each language referenced by a subset of the standardized set of letters approved by Academia de las Lenguas Mayas de Guatemala in 1986 for transcribing. Phonemes are represented by **p t tz ch k, q' b' t' tz' ch' k'q' s x j h' m n nh l r w y i e o a u ii ee oo aa uu ĩ ẽ ö ä ü**. The orthography is a normalized phonemic one, deviating from Amerindianist practice in that **x** replaces the IPA's **š**, **j** replaces the IPA's voiceless velar fricative **x**, **nh** replaces IPA's **ŋ**, **ä** replaces the mid-central vowel called shwa, **ch** replaces alveolar affricate often written **č**, **tz** replaces IPA's dental affricate **č**, and the apostrophe represents a glottal stop or glottalization of the preceding stop. Indigenous words and phonemes are bolded rather than italicized for easier recognition. Other conventions observed in this paper include an asterisk * preceding a reconstructed word, single quotes around word meanings, angle brackets around native words spelled as in the source, and proper names capitalized in indigenous words also. In these conventions, I follow a common practice of Mayanists. Names of Mayan languages are given in their older standardized form rather than using the currently more correct spelling. An earlier draft of this paper benefited from comments by Danny Law, Randa Marhenke, Lidia Marte, and Liza Shapiro.

² Clearly there is a sampling problem with respect to art and artifacts in very early Mesoamerican societies. It is possible that the carved sacrum is a one-of-a-kind piece and that the earliest societies chose other more perishable materials for carving. Until more data is recovered, however, interpretations will have to be tentative and grounded in data currently available.

³ Pursuing verification in Spanish that indeed it was "skulls" that were meant, I asked if they could be called *cascos*, which was accepted, and then suggested a hypothetical skeleton on the path, asking if both head and hip would be *calaveras*. Yes, they could be; but *craneo* was not accepted as a term for either of the "skulls," perhaps due to individual limitations of Spanish repertory.

⁴ Several Tzeltal consultants named the heart as the most important single part of the body, and they were uncertain about how the soul residing there and in the blood entered and left the body, suggesting the top of the head and the mouth as possibilities. One consultant thought the soul would leave the body after death or during some illnesses by way of the anus.

⁵ There must always be an element of speculation and ambiguity in any interpretation of meaning with respect to historical and prehistoric materials, so terms that are imprecisely defined or not fully specified with respect to meaning would appear to be more, rather than less, appropriate for such endeavors. For example, some words like "curer" that have been proposed for use in place of "shaman" are simultaneously too broadly applicable and too narrowly definable for specific applications. Moreover they are limited in that other nominal forms that could be used to increase their utility, such as "curerism," "cureric," and cureristic," remain simply hypothetical words based on productive suffixes, and therefore sound odd.

⁶ Given the fact that several significant words in Huastec were borrowed from a Mixe-Zoquean language, it is noteworthy that the bird's name sounds very much like the Mixean word for 'spirit companion, animal familiar.'

⁷ Chol **xun** 'shrimp' (red crustaceans) and Pocomchí **xun** 'cooking pot' suggest similar concepts relating to red and fire. Compare proto-Mixean ***xun** 'beautiful, desirable' and ***xuhn** 'blood red, vermilion', noting that blood red is both seen as beautiful by many in Mesoamerica, but also that it is associated with fire. It is possible that Mayan languages owe their reflections of **xun** to a Mixean language.

⁸ It is interesting that Quiché Maya borrowed the word for 'deer' from Nahuatl <**mazát**>, including both 'deer' and 'woman's genitals' as referents (Edmonson 1965:71)

⁹ Of course if one is not looking for something it is much more difficult to find it. Contrariwise, when one is looking for something, one runs the risk of finding it in more places than it actually occurs.

¹⁰ The sacrum pectoral is part of a collection of Mesoamerican artifacts called the Ahaw Collection that is currently owned by Dr. Leoncio Garza-Valdes, who acquired it in 1955. Most of these

artifacts are unprovenanced, although pains have been taken to find evidence linking each to the sites where they were originally unearthed. While caution is warranted when dealing with any unprovenanced artifact, this does not mean that an artifact should be viewed and treated as inauthentic without evidence. It would be counterproductive to ignore valuable information that can be derived from authentic unprovenanced materials in private collections and museums, of which there are many. Naturally the value of interpretations of any artifact's meaning is completely contingent on the artifact's authenticity, and so must be regarded as provisional when full documentation of provenance is not available. Judgments of authenticity or inauthenticity must be based on evidence provided in an ethical and public forum by named individuals presenting the evidence. Anonymous gossip about artifacts not seen or studied is generally as worthless as it is common and unethical.

An additional and complex ethical question must be at least addressed concerning publishing material on unprovenanced antiquities, as it can be argued that doing so could have the effect of promoting illicit trade in antiquities and encouraging the creation of forgeries. The author subscribes to the argument in principle, but sees little evidence that it is the publication of scholarly articles that encourages the looting and illicit trade, and also little evidence that a ban on such publication would in fact end either practice, both of which are more substantially driven by other factors. Furthermore, ignoring such objects is damaging to scholarship, and mitigating circumstances, such as the length of time since an artifact was placed the collector's or the museum's hands, and the importance of the information provided by the artifact, can warrant publication. The artifacts in the Ahaw Collection were collected, assembled, and entered the U.S. well over 50 years ago, and I believe they are providing important information. It is my opinion that publication of these pieces serves the interests neither of illicit traders nor of forgers.

¹¹ Although the Ahaw Pectoral's authenticity has been privately disputed by two individuals wishing to remain anonymous (who according to Dr. Garza-Valdes had earlier tried and failed to buy the artifact from its owner for their own "fake collection"), articles published in refereed scientific journals by reputable scholars have provided evidence suggesting the Ahaw Pectoral's authenticity as well as precedent for publication (see Garza-Valdes 1991; Garza-Valdes and Walters 1985; Garza-Valdes and Stross 1992).

¹² A case can be made for the Ahaw Pectoral to correspond in its U position both to the whole sacrum (based on the eight drill holes on the bottom), and also to the right-side up pelvic girdle with the keystone as the bottom half of the sacrum, but I believe it is more accurate to see it in correspondence with an inverted pelvic girdle, the keystone as the top half of the sacrum (the bottom half with its four additional holes having been figuratively "chopped off" to allow for a smooth line at the bottom of the U shape), the two lighter and larger stones of the pectoral as the two iliae, and the two darker stones on the ends of the U as the non-ilial portions of the hipbones (i.e. the fused ischia and pubic bones).

¹³ "The center is not a purely geometric concept. Defined by a unique relationship to the sacred, multiple 'centers' of the world space exist in any cosmos or microcosm...As such, the center is not a detached abstraction but a symbolic depiction of what appears as real, essential, and knowable about

space...the center connects the earth to upper and lower levels of the universe...The earthly center mirrors the zenith center of heaven" (Sullivan 1988:137).

¹⁴ The aptness of these two glyphs "Ahaw" (Lord) and "Yax" (Green) that are conflated in the Ahaw Pectoral's keystone, is further emphasized in the glyphic names of Maya beings known as the "Headband Twins" found in painted scenes on Classic Maya ceramic ware. Glyphically named **Hun-Ahaw** ("One Lord") and **Yax-Balam** ("Green Jaguar"), they are characterized by headbands displaying the "Jester God of kings," a Classic Maya deity having serpent features (Schele and Freidel 1990:411). Simplifying this characterization to "two glyphs **Yax** and **Ahaw** that are linked by a serpent" (the serpentine Jester God), and inferring an analogical connection between the serpent and the spine in humans, the two glyphs can be seen as analogues of the skulls. But it is really the twins linked by umbilicus to the same uterus, rather than their glyphs that should be seen as analogues of the two skulls of the body. These twins, it should be noted, have been related to the "Hero Twins" of the Quiché Mayan book, the *Popol Vuh*, who were born of the maiden mentioned above, Blood Woman, who was impregnated by saliva from a skull on a tree in the Underworld, and who have been viewed as symbolizing maize and maize deities (Tedlock 1985).

Another set of Classic Maya "deity twins," referred to as GI and GIII of the Palenque Triad, resembles the Headband Twins both structurally and formally. Significantly, both sets of Classic Maya twins are related to a serpent. The Jester god, with his ophidian features (cf. Schele and Freidel 1990:411), stands in relation to the Headband Twins in much the same way as the ophidian GII of the Palenque Triad—"God K," who is always portrayed zoomorphically with ophidian features and often with a serpent replacing one leg--stands in relation to his older brothers GI and GIII. I believe that the analogy between the two sets of twins with their serpent relatives has a further analogy in the two skulls (head and pelvis) of the human body (anthropomorphic portals) which are connected by the serpent-like spinal column (zoomorphic conduit) thus constituting the prototype for both sets of anthropomorphic twins, members of each set linked by a zoomorphically portrayed serpent-like being. David Stuart has recently revised long-standing conceptions concerning the Palenque Triad (2005:158-185), so information on the Triad is not as secure as it once was.

¹⁵ Quiché Mayans in Nahualá Guatemala have ceremonial blouses known as a ***kumatz po't*** 'serpent *huipil*' or ***popa po't*** 'reed mat *huipil*' (*huipil* 'blouse') that have a U or V neck, flanked on the shoulders by serpent designs (Gregorio Tum, private communication 1992). This suggests that on some cognitive level the Quiché understand the blouse collar to symbolize the maw, and thus a place of transformation (see also Morris 1988:108); the transformation takes place when one dons the blouse, sticking the head through the central V.

¹⁶ The fact that its upper lip turns downward rather than up, suggests the possibility of a birdlike model rather than an ophidian, but identification remains uncertain. Nonetheless, it may be noted that Mesoamerican imagery records a fair number of such heads from which are suspended three jade pendants symbolizing jade, and not all of these heads depict a long-lipped entity. A bird rather than a serpent relating to the sacrum or pelvis recalls an interesting pelvic bone of a large mammal,

carved by the Tlingit of the northwest coast of North America, which has what look like birds carved at the ends, where serpents adorn the Ahaw Pectoral. The bottom of the mask resembles a skull, with two large eye sockets and carved teeth (Figure 34)

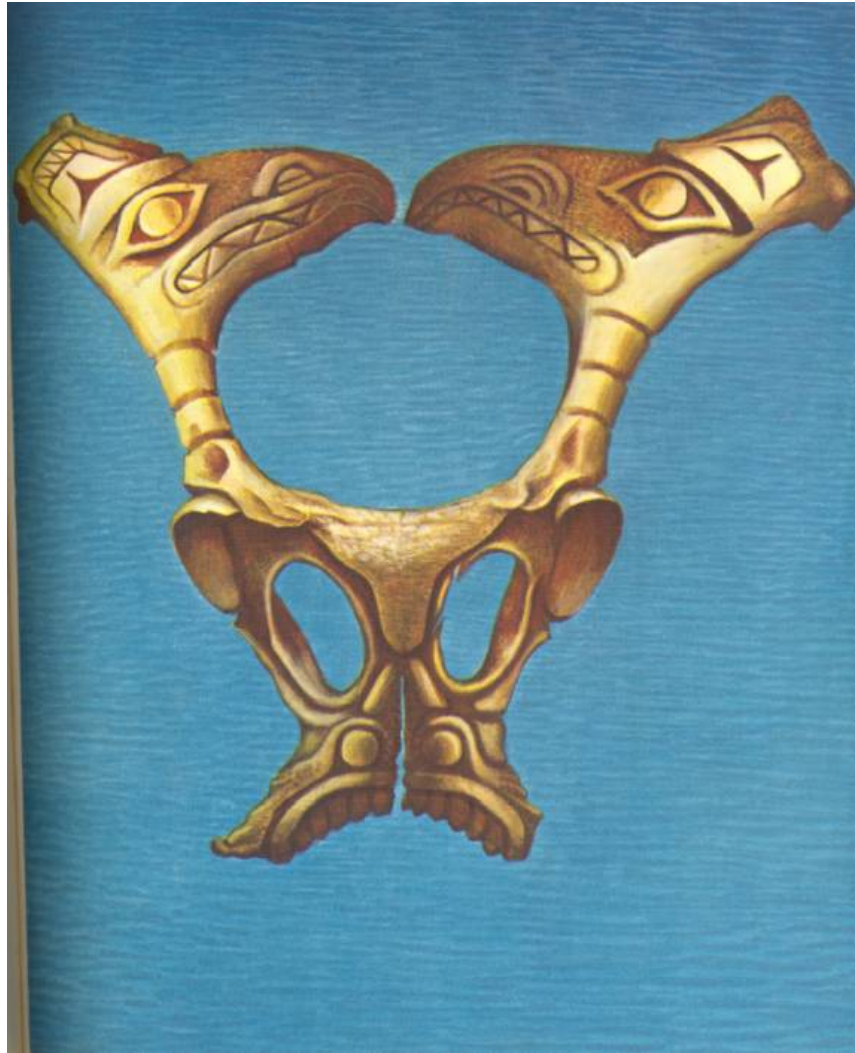


Figure 34 Tlingit mask carved from pelvic bones of a large mammal (after Covarrubias 1954:40)

¹⁷ Much that goes into the body, observational logic would dictate, is crushed into pieces in the mouth, transformed in the stomach and intestine, and exits by way of the anus, which by a continuation of the logic should itself be viewed as a portal, and surely it must be, though that has not been explored in this study, for lack of data.

¹⁸ Elaborating, they document the facts that several west and central African tribes believe that the bones of the fetus are contributed by the male, that in ancient India it was held that "the woman contributes the skin, blood and flesh, whereas the man contributes the fat, bone and marrow parts of

the fetus" (1982:453), and that similar ideas can be found in the Talmud. They explain the origin of all these beliefs as stemming from a correlation of white organs and tissues with white sperm and red organs and tissues with red menstrual blood (1982:453), and they conclude that the iconographic and conceptual origins of the very sacred Egyptian ankh, symbol of life, lie in a vertebra from the lower back of a bull.