Appendix 2

THE MOST IMPORTANT SYMBOLS OF THE MAYA CREATION MYTH

A set of references to the basic concepts

1. ASTRONOMY IN THE CODICES

[http://members.shaw.ca/mjfinley/codex.html]

> "We found a great number of books and since they contained nothing but superstitions and falsehoods of the devil we burned them, which they took most grievously, and which gave them great pain"
>
> (Friar Diego de Landa, 1566)

Only four Maya glyph books, called codices, survive. They are painted on lime-whitened bark paper, folded accordion-style. The codices were likely produced in the *late post-Classical period* (1200-1519 AD). Some material in the codices, including astronomical tables, appears to have been copied or adapted from manuscripts of the Classical period (200 - 900 AD). The long count entry date of the *Dresden Codex* eclipse table, for example, correlates to 755 AD. This may date the original version of the table.

Unlike the Classical inscriptions, which are mainly concerned with events in the lives of kings, the codices are what Bruce Love has called "priest's handbooks." They are filled with information needed to time rituals and make auguries. Astronomical tables are an important part of at least three of the surviving codices. The codices also include pages devoted to new year rituals, and almanacs that follow the sacred round of the 260-day *tzolk'in*. There is accumulating evidence that astronomical information and cross- references to the astronomical tables are hidden in these as well.

The Dresden Codex includes:

* An eclipse table that predicts times when eclipses may occur. This sophisticated exercise in observation and computation may be the most impressive achievement of Maya astronomy.

* A Venus table that predicts the times of heliacal rise (when Venus appears as morning star) and the other apparitions of the planet. It includes a mechanism for correcting the table for reuse at later dates.

Venus astronomy was ***particularly important*** throughout ***Mesoamerica***. According to the *Manuscript of Serna*, a missionary report from Central Mexico, the natives "adored and made more sacrifices" to Venus than any other "celestial or terrestrial creatures" apart from the sun. The Grolier Codex, a recently discovered but badly damaged Maya codex, is a fragmentary Venus table. It appears to be simpler in structure than the *Dresden Codex* Venus table, and resembles what are thought to be Venus tables in the central Mexican Borgia Group Codices.

* A Mars table that records the times when Mars goes into retrograde motion. A second Mars table that tracks the planet's motion along the ecliptic has recently been identified.

The third Maya codex that unequivocally contains an astronomical table is the Paris Codex. This incomplete document includes what appears to be a Maya zodiac. Fantastic animals representing constellations along the sun's path about the sky hang from a “sky band”, which represents the ecliptic in Classical inscriptions and the codices.

The *Codex* illustrates thirteen constellations along the ecliptic (one more than the twelve in the Old World zodiac). The constellations are apparently not illustrated in the order they appear in the heavens. Instead, each illustration is separated from the next by a count of 168 days.

Although most scholars identify these pages in the *Codex* as a zodiac, some are not convinced. They agree that the *Codex* likely depicts constellations, but argue that the Maya did not conceive a "zodiac" in the Old World sense.

The Madrid Codex is perhaps the least understood of the surviving glyph books. It may have been produced after the conquest in Tayasal, a Maya kingdom that retained its independence until the end of the 17th C.

No astronomical tables have been identified with certainty in the *Madrid,* but there is astronomical symbolism. Skybands and what are likely zodiac and eclipse symbols appear in many illustrations. Pages 12-18 contain a long *tzolk'in* almanac with celestial serpents twining through it. (Serpents are often sky symbols. *Chan* means both "sky" and "snake"). This almanac has long been thought to have to do with agricultural seasons. Harvey and Victoria Bricker have recently suggested that it is an eclipse table.

2. MAYA ASTRONOMICAL GLYPHS AND SYMBOLS

[http://members.shaw.ca/mjfinley/glyphs.html]

2.1. Venus


Kukulkan (Dresden 49)

In Maya myth, Venus is the *companion* of the Sun. This no doubt reflects the fact that Venus is always close to the Sun in the sky, rising not long before sunrise as morning star or after sunset as evening star. In the Classical period (250-900 AD), Venus was associated with *Hun Ahaw*, who guided his twin *Yax Balam,* the sun, through the Underworld. *Hun Ahaw* later became *Hunaphu* in the Hero Twins myth cycle in the post-Conquest *Popul Vuh*. Translator Dennis Tedlock interprets these myths as an account of the apparitions of Venus from heliacal rise as morning star, through disappearance beneath the night time horizon, to rise again as evening star.

The Venus table in the post-Classical *Dresden Codex* (c. 1200 AD) begins with heliacal rise of the planet on the date 1 (*hun*) *Ahaw* in the sacred almanac known as the *tzolk'in*. But the post-Classical deity most closely associated with Venus is Kukulkan, the Maya counterpart of the Aztec/Toltec culture hero Quetzelcoatl. He is illustrated in the *Dresden Codex* Venus table. However, the table actually includes a whole pantheon of Venus deities. *Kulkukan* is portrayed as only one of four Lords of Venus at heliacal rise. There are also four Lords of Venus as morning star, and Venus Lords for each of the other apparitions of the planet. **More about the Dresden Codex Venus table and Venus deities**

Mesoamerican deities are *more amorphous* than the gods of *Greek* and *Roman* myth. All were likely conceived as manifestations of *itz* or *ch'ul,* the sacred stuff that animates the world. Each deity appears to have had *multiple aspects*, which *over-lapped* with those of *others*. The multiple Venus gods are perhaps typical. Another example, also from Venus mythology, is the confusing identity of GI, one of the deities of the Paleneque triad. GI is likely equivalent to *Hun Ahaw,* but his glyph resembles *Chak*, the Rain God. This is perhaps not surprising since *Chak* has other associations with Venus.

2.2. Mars

Mars does not figure prominently in Maya myth. No god can be identified as the "Mars God." However, the *Dresden Codex* contains a table tracking the motion of Mars. The illustrations in the table show a strange animal hanging from a sky-band. Dubbed the "Mars Beast" by scholars, it is likely a peccary. The beast's name glyph appears in the text of the table as a stylized head with a curved snout.

Mars is also represented, but as a human figure, in the murals at Bonampak.

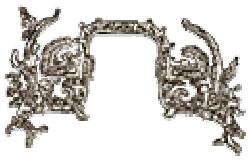
2.3. The Maya Zodiac

In both inscriptions and glyph books, celestial bodies are often shown suspended from a "sky band." Each element in the band is a glyph with astronomical significance, though all of them have not been deciphered. The sky band represents the ecliptic, the path of the sun, moon, and planets through the heavens against the background of stars.

In European astronomy, star groups along the ecliptic mark the 12 constellations of the Zodiac. The *Paris Codex* includes a Maya zodiac, divided into 13 constellations. The constellations are represented by fantastic beasts suspended from sky bands. Unfortunately, the manuscript is damaged, so identification of the constellations is difficult.

Fig. 1. Turtle (*ak*) and "3 stones" (*Ox Tun*) hang from sun signs and sky band (from Madrid Codex). The 3 stones and turtle represent bright stars in Orion. The "3 stones of Creation" are an important symbol in Maya creation myths.

Fig. 2. The Ecliptic is also represented by the two-headed "Cosmic Monster". The *front head* may have deer ears or hooves, and is *almost always* marked with the *Venus* glyph. The rear head usually has a fleshless jaw, and is almost always marked with a *k'in* (Sun) sign. The monster's body is either a *sky band* or *reptile*. As a two-headed snake, it appears as the "serpent bar", an emblem of royal authority carried by rulers.



Serpent symbols: In Maya languages, *chan* (sky) and *kan* (serpent) are homonyms. Thus snakes or snake-bodied creatures are often sky symbols.

Fig. 3. Serpent bar representing the ecliptic forms the cross-piece of the Palenque "cross" or World Tree

2.4. The Milky Way

Fig. 4. Palenque "cross"
Larger image

The World Tree is the most pervasive Maya symbol of the creation and ordering of the world. It is the axis of the Earth-Sky. Through the centre of the "cross" runs a serpent bar, representing the ecliptic. (Its roots lie in the Underworld, Xibalba, and its top reaches into the heavens. In the post-Conquest *Books of Chilam Balam*, it is named *Yax Imix Che*, (first or green ceiba tree), "raised in the middle of the world." It is named in the Temple of the Cross at Palenque as the *Wakah Chan*, the "raised up sky."
L. Schele discovered that the World Tree is a literal depiction of the heavens as well as an abstract symbol. Her investigations, vividly recounted in *Maya Cosmos,* led her to the conclusion that the Milky Way is the World Tree … [http://members.shaw.ca/mjfinley/mainmaya.html].

The World Tree symbolizes the Milky Way. On the night of August 13, the date of creation, the Milky Way stands erect at dawn, running through the zenith from north to south. It becomes the axis of the heavens, the raised up sky. See "Raising the Sky: The Maya Creation Myth and the Milky Way"

Wakah Chan: The glyph Linda Schele identified as the name of the World Tree/Milky Way in the inscription in the Palenque Temple of the Cross is *Wakah Chan,* "raised up sky." The main element is the most commonly encountered glyph for *chan*, "sky." The prefix is the number six, which is pronounced *wak* in Mayan languages. The affix above the main glyph is *ah*, a verbal affix commonly encountered in the Maya script.

2.5. The 4- and 8-pointed Crosses in the World Trees

World Quarters: Colours and Directions
[http://members.shaw.ca/mjfinley/glyphs.html]

The Maya World Tree rose in the centre of the Earth-Sky. About this centre, the cosmos was divided into four quarters, each oriented to one of the cardinal points, and each associated with its own sacred tree and colour. Each quarter is divided in turn, creating eight partitions of the world. The trees at the cardinal points support the sky, a role also assigned in some accounts to deities known as *Bakabs, Pawahtuns,* or C*haks*.

East is the direction of sunrise, associated with red, the colour of dawn. West is the direction of sunset; its colour is black. North is white. The colour of the south is yellow. Green is the colour of the centre, of the green ceiba tree, representing the great World Tree itself, raised in the centre of the cosmos.

Codex Fejérváry-Mayer
[http://en.wikipedia.org/wiki/Codex_Fejervary-Mayer]

The **Codex Fejérváry-Mayer** is an Aztec Codex of central Mexico. It is one of the rare pre-Hispanic manuscripts that have survived the Spanish conquest of Mexico. As a typical calendar codex *tonalamatl* dealing with the sacred Aztec calendar -- the tonalpohualli -- it is grouped in the Codex Borgia group. Its elaboration is typically pre-Columbian: it is made on deerskin parchment folded accordion-style into 23 pages. It measures 16.2 centimetres by 17.2 centimetres and is 3.85 metres long.
The earliest history of the codex is unknown. It is named after Gabriel Fejérváry (1780–1851), a Hungarian collector, and Joseph Mayer (1803–1886), an English antiquarian who bought the codex from Fejérváry. In 2004 Maarten Jansen and Gabina Aurora Pérez Jiménez proposed that it be given the indigenous name **Codex Tezcatlipoca**, from the Nahuatl name of the god Tezcatlipoca, although it is not certain that its creators were Nahuas. It is currently kept in the Merseyside Museum in Liverpool, England

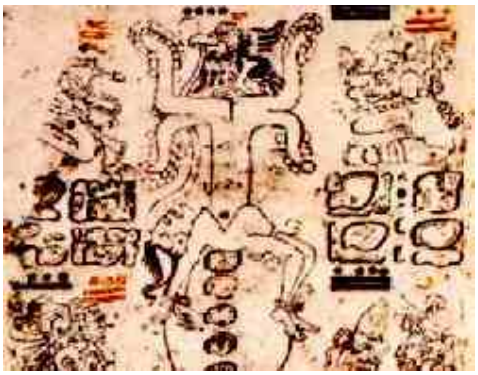


Fig. 5. Depicts the world tree emerging from the sacrificed body of the maize god.
The glyphs at the left name him [http://members.shaw.ca/mjfinley/codex.html]

2.6. Maya and Aztec World Ages

Maya calendar
[http://en.wikipedia.org/wiki/Maya_Calendar]

In Maya Long count system *a.b.c.d.e.f* the weights of the orders (*a* to *f*) are different:

Table of Long Count units

Days	Long Count periods	Long Count	Solar years	Tuns
1	= 1 K'in			
20	= 20 K'in	= 1 Winal		
360	= 18 Winal	= 1 Tun	~ 1	1
7 200	= 20 Tun	= 1 K'atun	~ 20	20
144 000	= 20 K'atun	= 1 B'ak'tun	~ 395	400

This means that the *after the date* 12.19.19.17.19 *follows* 1.0.0.0.0.0, because the next date for 0.0.0.0.19 is 0.0.0.1.0 (20 Kins make 1 Winal), the next date for 0.0.0.17.19 is 0.0.1.0.0 (18 Winals a Tun), the next date for 0.0.19.17.19 is 0.1.0.0.0 (20 Tuns a Katun), the next date for 0.19.19.17.19 is 1.0.0.0.0 (20 Katuns a Baktun), and therefore the next date for 12.19.19.17.19 is 1.0.0.0.0.0 (13 Baktuns a Long Count period).

The **Long Count** date 0.0.0.0.0 corresponds to **Proleptic Gregorian Calendar Date** August 11, 3114 BCE, whereas the next **Long Count** date 0.0.0.0.0 (the end of the 13th b'ak'tun) comes to December 21, 2012 CE

(or 1.0.0.0.0.0 – in the extended scale of notation).

The end of the 13th b'ak'tun is conjectured to have been of great significance to the Maya, but does not necessarily mark the end of the world according to their beliefs, but a new beginning or time of re-birth. According to the *Popol Vuh*, a book compiling details of creation accounts known to the Quiché Maya of the colonial-era highlands, *we are living in the* fifth world. The *Popol Vuh* describes the *first four creations* that the gods failed in making and the creation of the successful fifth world where men were placed. The Maya believed that the fifth world *would end in catastrophe* and the sixth and final world would be created that would signal the end of mankind. However, some authors refer to Hopi and Maya mythology which define the current world as the fourth. [http://en.wikipedia.org/wiki/Fifth_World_(Native_American_mythology]

The last creation ended on a long count of 12.19.19.17.19. Another 12.19.19.17.19 will occur on December 20, 2012, and it has been discussed in many New Age articles and books that this will be the end of this creation, the next pole shift or something else entirely. However, the Maya abbreviated their long counts to just the last five vigesimal places. There was an infinite number of *larger units that were usually not shown*. Therefore, on December 21, 2012 we will have not the end of the first 13-Baktun cycle, but the end of the 5th cycle of this type, viz. the date 5.0.0.0.0.0.

The Maya Creation Myth and the Milky Way
[http://members.shaw.ca/mjfinley/mainmaya.html]

The creation myths of ***most Mesoamerican*** peoples included the idea of successive "ages" or "creations". According to the Aztec Legend of the Five Suns in the *Codex Chimalpopoca* , the world will pass through five "suns" ruled by different solar deities. The 4th sun ended when "it rained so hard the sky fell down". Quetzalcoatl and Tezcatlipoca changed themselves into trees. As the trees grew, "the sky was pushed up". Then these ***gods travelled the "White Road," the Milky Way, to meet in the heavens***.

Fig. 6. Aztec Sun Stone

In the centre of the famous Aztec sun stone is Tonatiuh, Lord of the fifth sun. The pictographs about his face represent the four previous suns, and the way each ended: By wild animals, wind, fire, and flood. The glyph above the face, 4 Olin, "earth quake", names the current sun, which will end by earth quake. According to some scholars, each "sun" lasts 100 calendar rounds (5196 years), nearly equivalent to a great cycle (13 baktuns = 5125 years) of the Maya long count.

Due to precession of the equinoxes, the equinox points slowly slip along the ecliptic, taking about 26,000 years to complete circuit. Five suns will last nearly 26,000 years. This may be evidence of knowledge of precession.

3. THE PLACES OF SYSTEMATIC MANIFESTATIONS OF MAYA COSMOGONY

3.1. The World Trees (Crosses) at Palenque

3.1.1. The World Tree at Palenque

[http://members.shaw.ca/mjfinley/palenquecross.html]

Temples of the **Cross** Group consists of three structures, the *Temple of the Cross*, *Temple of the Foliated Cross*, and *Temple of the Sun*.

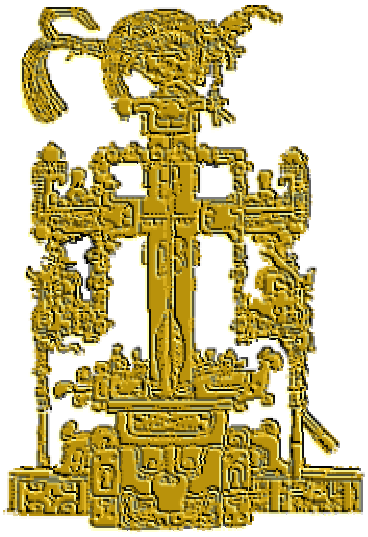
The World Tree is depicted as a symbol of the Milky Way, the Wakah Chan ("Raised-up Sky") in the Temple of the Cross. On the dates assigned to centering of the world at Creation of the present era, the Milky Way stands erect in the sky at dawn.

In the Temple of the Foliated Cross, the World Tree is the *Na Te K'an* ("First Precious Tree"), a symbol of the sky-raising Maize God *Hun-Nal-Ye.*

The Temple of Sun is decorated with a "Sun Shield" that may symbolize the birth of the sun.

3.1.2. The World Tree and the Serpent

[http://members.shaw.ca/mjfinley/mainmaya.html]



a) Temple of the Cross (Palenque)

b) Temple of the Foliated Cross (Palenque)

Fig. 7. World Trees in the Temple of the Cross and the Temple of the Foliated Cross

More about World Tree symbols at Palenque

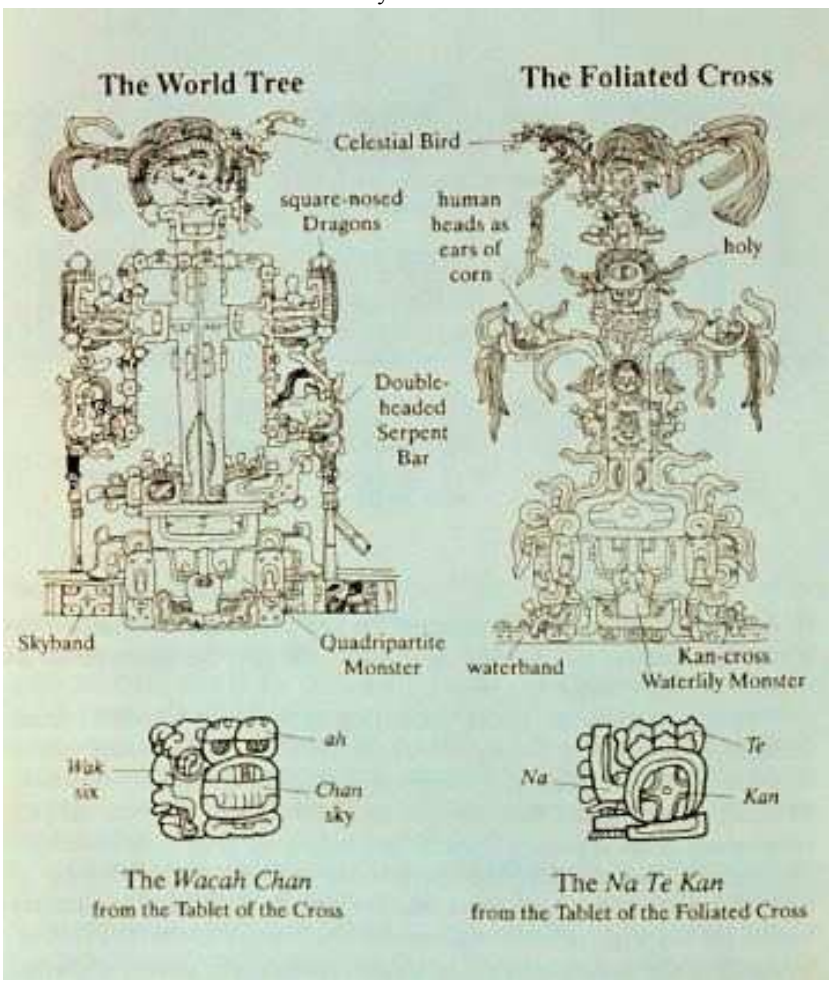


Fig. 8. Comparison of World Trees in the Temple of the Cross and the Temple of the Foliated Cross [Schele, Maya Cosmos. Credit to: http://members.shaw.ca/mjfinley/palenquecross.html]

3.2. The Stelae at Izapa

3.2.1. Izapa [www.utexas.edu/ftp/cofa/a_ah/dir/precol/izapa.htm]

The site of Izapa is located along the Pacific coastal piedmont of Chiapas in a location that sat at the juncture between Mixe-Zoquean-speaking peoples to the West and Mayan-speaking peoples to the East. Although there is evidence of occupation at the site during the Early Formative, the site reached its height during the Late Formative period (300 BC - AD 250). The site is ***most famous*** for the many stelae that were erected in combination with carved and plain altars. These were placed within large quadrangular plazas that were bounded by pyramidal mounds.

Themes from several of the stelae recall those from Middle Formative monuments. For example, Izapa Stela 5 the largest and most complex stela at the site, depicts an enormous World Tree that bisects the composition. The tree stretches from a watery basal layer at the bottom to a celestial band at the top. A series of mythic and quasi-historical scenes appear on either side of the tree, while the bodies of two zoomorphic beasts frame the scene on either side.

The quadrangular plaza of Group B was the focus of ritual activity by 300 BC. While the Group B plaza contains many stela-altar combinations, it is most famous for its triadic arrangement of pillars. Each of the three pillars, measuring about 130 cm tall, holds a stone sphere that is about 70 cm in diameter.

The triadic arrangement of the pillars was the earthly equivalent of the Three Hearthstones of Creation, which were also reflected in the night sky in the three stars in the belt of the constellation Orion.

3.2.2. Izapan Cosmos [http://edj.net/mc2012/ballcourt-schematic-and-description.html]

3.2.2.1. The basic concept of his work [J.M. Jenkins A Brief Summary of the Monuments in the Izapan Ballcourt http://alignment2012.com] the author specifies as follows:

"The monuments in the Izapan ballcourt encode a knowledge of the solstice-galaxy alignment of era-2012, and that alignment was the intended target anchor for the end of the 13-baktun cycle and thus the placement of the Long Count in real time.

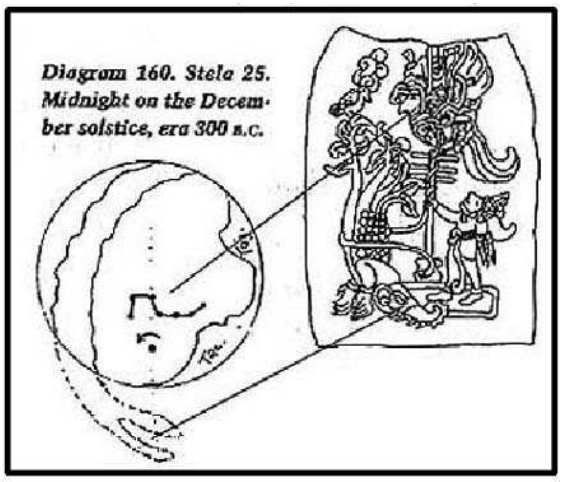
I am very interested in having a dialogue with progressive Mayan scholars on my reconstruction of Izapan cosmology, as this synthesis of the accepted data is straightforward. The assemblage of different lines of evidence, all converging on the same conclusion, seems to me to eliminate coincidence as a viable alternate explanation for the integrative continuity of these symbol complexes. Please share your thoughts".

Note. Ballcourts were a focal point of ceremonial centers, from the Maya city-state of Copan, Honduras, to the Hohokam site of Snaketown, in Phoenix, Arizona [www.mnh.si.edu/anthro/maya/mayaprint.html].

3.2.2.2. The Ancient Symbols in the Stelae of Izapa

Stela 25

Izapa's heyday occurred between 300 BC and AD 50. Its monuments contain recognizable scenes from Maya Creation mythology— adventures of the Hero Twins, their father, and their triumph over Seven Macaw. These themes were later incorporated into the Quiché *Popol Vuh*. I have already suggested that Stela 25 from Izapa embodies a dialectic between two parts of the sky – the Big Dipper polar region and the "head" of the Milky Way monster near Sagittarius:



a) The Big Dipper vs. The Milky Way

b) Fragment (Crocodile)

Fig. 9. Stela 25

Stela 25 (Fig. 8.a) also contains a recognizable *Popol Vuh* episode, in which Hunahpu's arm is torn off by Seven Macaw. Since Seven Macaw is identified with the Big Dipper of the polar region, I suggested (1996, 1998) that the "fall" of Seven Macaw involved the demise of an old cosmological system centered upon the polar region. The shamanistic concern with knowing where the center of the sky is located is central to understanding this "cosmological shift." The shift, after Seven Macaw was done away with, was to an opposite orientation, as revealed in the diagram above. The dialectic sets the head of the alligator ((Fig. 8.b – Credit to: http://members.shaw.ca/mjfinley/mainmaya.html) in opposition to Seven Macaw. This "alligator-head" is the location of another cosmological "center of the sky" – it is the location of the center of our Milky Way galaxy. (Note: I am omitting arguments and citations that can be found exhaustively documented in my book *Maya Cosmogenesis 2012*). Generally, this monument—as well as many others from Izapa; e.g., Stela 11— indicate an interest in the Milky Way, the dark-rift in the Milky Way (the mouth is the dark-rift), and the Big Dipper.

Stela 67 (Fig. 5 of the article)

Similar to Stelae 11 and 22 (Fig. 7.a, 7.b of the article). Here, a solar lord sits in the middle of a cosmic canoe. Incised bones from Tikal reveal that celestial canoes represented the Milky Way. His outstetched arms indicate a "period ending" event. He is probably the Hero Twins' father, One Hunahpu, who is resurrected at the end of the Age, after they defeat Seven Macaw and the Lords of the Underworld. The sun located in the middle of the Milky Way canoe is compelling. Combined with the emphasis on the solstice sun via the ballcourt's orientation, and other arguments omitted here, this solar deity (One Hunahpu) is probably the December solstice sun lord. The seating declivity of canoes could easily be seen to be analogous to the Great Cleft of the Milky Way, which shares this astronomical identification with so many other mythological adumbrations. In such a scenario it becomes difficult to avoid deducing that the entire complex of carvings in the Izapan ballcourt express the alignment of the solstice sun lord with the Great Cleft in the Milky Way. Such a rare alignment occurs via precession, and it happens in the era of the 13-baktun cycle's ending date, December 21, 2012.

Stela 22 (Fig. 7.b of the article)

It has an unusual history. It was found in a discarded location in Group F, in the 1950s. A local person acquired it and recarved the surfaces, to imaginatively deepen the design. The actual lines of the authentic design were thereby obscured and mutilated. Today it stands at the entrance to the Group F ballcourt, an abstract rendition of the original artifact.

The upper portion shows the lower register of a sky band, so we know that we have reached the upper limit of the carving, and thus most of the design is preserved. Several significant things can be said. First, the image is so closely similar to Stela 67, that we should suspect that Stela 67 had iconographic motifs in the same locations of its lost sections. Second, the restored Stela 22 contains three tiers or levels of action. … With this in mind, let's highlight the three levels of Stela 22.

Level 1 contains two fish swimming in water, two masks on the far left and right sides, and a solar deity in a canoe in the middle.

This much closely parallels what we also see on Stela 67. Kappelman points out that the masks here on Stela 22 are death heads (note the white bone on cheek). The distinction then, between Stela 22 and Stela 67, is that one relates to the death or descent of the Maize God (who I emphasize is a *solar* deity, the *December solstice sun* and One Hunahpu in the Creation Myth) and the other relates to the birth or rebirth of the Maize God / December solstice sun.

The second tier [contains] what appears to be a serpent headed rope that suspends the canoe over the waters. A parallel serpent rope is on the right. …

In fact, with the bird deitiy at the third level, three levels of enthronement are probably suggested here, reinforcing my thesis that *Izapan cosmography is basically tripartite in nature,* with reference to three cosmic centers and their *three enthroned deities*. Level 3 of Stela 22 shows the sky dragon, or the so-named Principal Bird Deity that is most likely referential to Seven Macaw in the Creation Myth (the Big Dipper in the circumpolar northern sky).

3.2.2.3. The Egyptian Analogue of Izapan Stelae.

We find a similar symbology with the Egyptians. In the "Orion Mystery" by Gilbert and Bauval we find a picture of Osiris standing erect in a barque on the Milky Way river, stretching ONE hand horizontally with the ankh in his hand (Fig. 6 of the article). The ankh is held vertical and is pointing up towards the Silver Gate (Gateway of Men) according to Gilbert and Bauval. Now, Gilbert has found that the Egyptian word for star, *s'ba,* also means "door", so Osiris is holding a Star-Gate. In some depictions, Osiris is holding an ankh towards the gate, so this must be the key which unlocks the star-gate. The Silver Gate or Gateway of Men is the crossing of ecliptic and the Milky Way in between Gemini and Taurus