

“The Astronomy of Baktun 13: December 21, 2012 AD”

John Major Jenkins

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The header for the IMS Explorer newsletter features a green and white background with a map of the Americas. On the left is a small photo of a man in a red headband. The title "IMS Explorer" is in large, bold letters. Below the title is a quote: "This December 2012 issue is dedicated to all of the living modern Maya who are celebrating the birth of the new sun. May we all be blessed with a long cycle of living in harmony with the planet and each other." To the right of the quote is a row of ten circular icons representing various Maya symbols. Further right is a cartoon illustration of a man with a large head and a mustache. At the bottom of the header, the date "December 21, 2012" and the Maya Long Count "13.0.0.0.0 • 4 Ahau 3 K'ank'in • G9" are listed, along with the affiliation "An affiliate of the Miami Science Museum".



This video was filmed by my mother, Eleanor Jenkins. On the video, I can be seen sitting with Jeanne Kurth in the audience. Ray Stewart, then president of the IMS, takes podium, does business and announcements, then introduces Jim Reed. Jim and his friend do a ceremonial mystery play (about 8 minutes), talking around the sacred fire of the emissaries of the ancient Maya knowledge, and then introduces me: “and here he is, John Major Jenkins, from Colorado.”

I adjust microphone volume; I thank Jim and the IMS and Ray Stewart. Begin:

About ten years ago I began researching the Maya Venus calendar and my book *Tzolkin* was published in 1994. Since then I've been very intrigued with an unresolved question in Maya cosmology and calendrics which has to do with the end-date of the Mayan calendar. I began wading through a vast amount of academic information and began synthesizing or putting together the pieces of a puzzle that I found to be very intriguing. And I produced a large study which is going to be published with Bear & Company next spring. I'm very happy and honored to be able to present this information to you tonight. There will be prototype copies of *Mayan Cosmogenesis 2012* available on the table out in the lounge [lobby] and I'll be available for questions and so on after the presentation.

So I'm going to be talking tonight about the Long Count calendar. This is a calendar system that was created or invented over 2000 years ago. There's a large cycle of time within this calendar system called the Great Cycle and it lasts 5,125 years. The end of this great cycle of time was fixed upon a specific date, December 21, 2012 AD, a date which looms before us. I'm also going to be talking about the Maya Creation Myth, the *Popol Vuh*, otherwise known as the Hero Twin Myth. And the third thing I'm going to be focusing on tonight is the early site of Izapa. Izapa is a ceremonial center and Izapa seems to be the place where the Long Count was invented and the Hero Twin Creation Myth was also formulated.



Now, one thing I'd like to emphasize before we start on the slide show is that mythology and astronomy go together. Mythology often describes astronomical processes. Furthermore, mythological motifs or symbols as found in Maya art often refer to a specific astronomical feature. For example, there's the Venus glyphs, there's the eclipse glyphs. Certain astronomical features often have many mythological identities. For example, the Milky Way was mythologized by the Maya as a river of stars, as well as the cosmic mother.

It is true that the Long Count calendar was invented over 2100 years ago. But the interesting thing to consider is that the end of this calendar occurs in 2012. so the Maya saw this era of 2012 as a time of great transformation.¹ So what this era may be about may be found by looking back to what the Maya had to say about this era.

This is the site of Uxmal. The Classic Maya civilization lasted from 200 AD to 900 AD and this is in the Yucatan peninsula. This is the site of Sayil, also in the Yucatan peninsula. Kabah — very ornate monster mask architecture. This is the Pyramid of Kukulcan at Chichen Itza. There's an amazing astronomical alignment involved in this pyramid. On the equinox every year a shadow is cast from the sun along the north stairway and with the serpent head at the bottom it has the effect of an undulating serpent moving down the stairway. And thousands of people visit this epiphany, if you will, every spring equinox and observes this. I've done some research into this and I've found that there's a lost aspect of this cosmology in that the serpent's tail was pointing up into the sky and in the Yucatec Maya language the word for rattle is *Tzab*. This is also the word for the Pleiades.

So, what is involved here is a conjunction of the Sun and the Pleiades *in the zenith* over the Pyramid of Kukulcan at Chichen Itza. I can't go into this material today but I would direct the interested listener to my packet of published articles that's going to be available at the end of the show.²

7:20 mark:

Tikal — this is in the Peten rainforest of northern Guatemala. The Classic Maya civilization collapsed around 900 AD for a variety of reasons. But the Maya did not just disappear. In fact, there are over six million pure-blood Maya living today in the highlands of Chiapas and Guatemala.

The Maya were scribes; they had thousands of books. They were very sophisticated in terms of their astronomy and their understanding of astronomical cycles. There are only four books left. Most of the Maya books, as you probably know, were destroyed at the time of the conquest. This is very much like what the Dresden Codex would look like, one of the four Maya books surviving. My 1994 book *Tzolkin* was about reconstructing the Maya Venus calendar.

This is an Olmec figurine. The Olmec civilization is considered to be the great mother culture of Mesoamerica. They lived about 3,000 years ago in the Gulf Coast area of Mexico and what I'd like to point out here is this symbolic motif here, this cleft head motif. It's very common in Olmec art. The meaning of this, in that corn plants are often

¹ Here I should clarify the use of the "end" term. It was common parlance to use this term, but the meaning was the end of the 13-Baktun cycle. This is clear in my reference to "transformation" — that the calendar continues into a New Sun, or Era, or cycle of 13 Baktuns. Very soon it became clear that I'd have to be more clear and consequently always tried to use "the end of the 13-Baktun cycle"; but the common usage still sometimes occurred, and professional scholars also frequently used this short-hand.

² I refer to my Mountain Astrologer article, published in May of 1996. an early version of this article was written expressly for the *Institute of Maya Studies*, packaged with my "Manifesto for Clarity" piece. Jim Reed distributed this at IMS events in 1996.

shown sprouting out of this place, is that this is a creation place or a birth place — and we'll be getting into the symbolism of this more as the show goes on.

Three thousand years later, not far south from where the Olmec lived, the Maya people are still living and following the ancient traditions. This is a Tzotzil Maya couple from the highlands of Chiapas.

Further south, in the highlands of Guatemala at Chichicastenango, the Maya are still performing rituals and ceremonies. This is on the stairs of the church at Chichicastenango.

The Tzutujil Maya live in twelve villages around the shores of Lake Atitlan.

In 1994 I delivered relief supplies to a Quiché Maya community. This is Diego, a friend of mine. He's a trained daykeeper. He can do readings for you and count the days for you following the ancient 260-day calendar tradition. So, Diego is following a calendar tradition that is over 3,000 years old. In other words, the count that was followed at such places like Chichen Itza, Copan, and Tikal is the same count that Diego follows today. There has been a continuous unbroken count of days.

But the calendar I'm going to talk about today is the Long Count calendar, so we're going to have a little primer on this. This is about as numerical as it's going to get.

The Long Count calendar has 5 place values. The first one is the day, and 20 days makes a Uinal; 360 days makes a Tun; 7200 days make a Katun, which is just under 20 years, and 1 Baktun is just under 400 years. Now, the 13 Baktuns is the great cycle of World Ages, the great creation cycle that was recognized in Maya cosmology and calendrics. And one great cycle lasts 5,125 years. So the end-date, or the so-called end-date, in 2012 is the end of a period of time of over 5,125 years. However, the Long Count calendar was invented about 2,100 years ago in southern Mesoamerica.

This is a typical Long Count date from the archaeological record. There are many, many dated monuments found. This is the bar-and-dot system that the Maya used; the bars are five and the dots are one. This is the glyph for the Baktun. So this is 9 Baktuns, 16 Katuns, 4 Tuns, 1 Uinal and 1 day [or Kin]. In modern notation this would be written 9.16.4.1.1. It corresponds to the date May 7th, 755 AD. The Long Count end-date, in that it's the completion of 13 Baktuns, would be written 13.0.0.0.0.

Now, I mentioned that mythology and astronomy go together. This is a Classic Period vase and it depicts an episode from the Hero Twin story, the Maya Creation story. Here we have Hunahpu, representative of the sun, shooting 7 Macaw, who is the Big Dipper, out of the cosmic tree, which is the Milky Way. So there's a lot of astronomy going on in this depiction. The Creation story of the Maya, the Hero Twin myth, describes a succession of World Ages and the deities One Hunahpu and Seven Hunahpu journey to the Underworld to do battle with the Lords of Xibalba. Unfortunately they are killed. One

Hunahpu's head is hung in the sacred calabash tree and Blood Moon, a maiden, comes along and he spits into her hand, and magically impregnates her with the Hero Twins.

Later, the Hero Twins, Hunahpu and his brother Xbalanque, are born and their mission is to facilitate the resurrection of their father. But what they must do first, before that can happen, is to do away with Seven Macaw, the vain and false ruler of the previous World Age.³

Seven Macaw is the Big Dipper; his wife is Chimalmat — she's the Little Dipper. This area of the sky is where a cosmic center is located. It's where Polaris is, or the North Celestial Pole, and the sky rotates around this spot. (Is there a ring happening in the room, or is it just me?... okay.) So, what's interesting about this is that — I think what's going on in this scenario described in the *Popol Vuh* has to do with the evolution of cosmology in Mesoamerica. The ancestors of the Mesoamerican people who migrated into the New World came from the far north of the Asian continent,⁴ they were shamanistic and a primary concern of shamanism is to identify the cosmic center and take vision journeys into the cosmic center to retrieve the cosmic knowledge and the otherworldly power of rulership.⁵

So, in the Hero Twin myth, when Seven Macaw has to be done away with, I think it has to do with how cosmology evolved. As people migrated southward into the Americas the Polestar gets lower and lower on the horizon. In other worlds, at the far northern latitudes the polar area is almost directly overhead and the stars seem to revolve around it. So, it's a very compelling cosmic center. However, at the Tropical latitudes the North Celestial Pole is very low on the horizon. So I think what was going on is that the people of Mesoamerica realized that their ancient Polar God was no longer working and they did away with him; they sought, or looked, for another cosmic center.

This is an altar from Izapa. It's from about the 1st-century BC and it shows Seven Macaw on the polar perch. Here's the bar-and-dot system. This is the bar and two dots; that's 7, and there are seven stars in the Big Dipper.

15:45 mark:

Here is another carving from Izapa, 1st-century BC, and it's very similar to the Classic Period vase that we saw. The Hero Twins Hunahpu and Xbalanque are facilitating the demise of Seven Macaw. But I'd like to point out a basic structure of this; it's very common. It's what I call the "fire drill structure". The central cosmic axis is like the fire

³ Here we see the dynamic in the Creation Myth (which I will shortly tie to the galactic alignment astronomy), which requires deity sacrifice (of Seven Macaw) before the Sun Deity (One Hunahpu), or Era, can be reborn. Thus, here we have an early expression of my long-held ideological interpretation of 2012, that *deity sacrifice is necessary for world-renewal* — echoed by John B. Carlson in publications of 2011, 2012, and 2015 (Milbrath & Dowd). See the following note for a similar occurrence.

⁴ And here we have my unprecedented model of the evolutionary movement of the Polar Center concept into the Americas, which was echoed by Clemency Coggins in her chapter in *Cosmology, Calendars, and Horizon-Based Astronomy in Ancient Mesoamerica* (2015). I exchanged letters with Coggins in 1996.

⁵ See my stand-alone essay "A Shaman Nation" at [The Center for 2012 Studies](#), which was written four or five months prior to my IMS presentation.

drill shaft and the two workers on either side facilitate the working of the fire drill. This is from the Dresden Codex here. So the astronomy of this is that the polar axis is fixed to the Pole Star at the top and the earth navel at the bottom. This is a very, very common mythological idea and, of course, it refers to astronomy and it's found throughout the world in such places as Egypt and India. These images are structurally the same.

The mythology revolving around this image has to do with the doctrine of World Ages. And what happens is that everything is fine, the workers are spinning the cosmic axis, but sooner or later the fire drill shaft wears out its hinge, it burns out its hinge, and it falls out of its pin in the Pole Star. This is a metaphor for an actual astronomical process called *the precession of the equinoxes*. So there's a very sophisticated astronomy going on behind this ancient mythology. We'll be getting into what this precession of the equinoxes is in a minute. It basically has to do with the fact that there isn't always a Pole Star, that the sky shifts slowly over a great period of time.

Here is an episode from the *Popol Vuh*, 1st-century BC. By the way, Izapa is the place where the Hero Twin myth first starts appearing in the archaeological record. Hunahpu is here at the bottom; here's the polar axis with Seven Macaw at the top. Here's another axis, with the caiman as the Milky Way. If Seven Macaw was false, a false and vain cosmic ruler — in other words, if the polar area was a false cosmic center — then something about the Milky Way is very interesting here and points to another cosmic center.

This slide is actually showing the sky, the full-circle view of the sky at midnight on a December solstice some 2,100 years ago. Seven Macaw is in a very strong, ascended place here and, in fact, he's very strong in the *Popol Vuh* episode in which he tears off the arm of Hunahpu. This happens before the Hero Twins actually succeed in causing his downfall. The Milky Way arches overhead. There's a part of the Milky Way that is underneath the horizon in the same way that the mouth of this upside-down caiman is below the earth panel here. There's a very significant feature of the Milky Way — it's called the Dark Rift, or the Great Cleft of the Milky Way, and it's caused by interstellar dust clouds.

The Dark Rift in the Milky Way was mythologized as a portal to the underworld by the ancient Maya. In the *Popol Vuh* it's called the Black Road and it's the road that takes One Hunahpu and Seven Hunahpu into the Underworld. It was also seen to be — well, the modern Quiché Maya, according to modern ethnographic information collected by the Tedlocks, call it the *Xibalba be*, the Road to the Underworld. So, in general it's a portal to the Underworld. One of the oldest symbols of the Underworld is the mouth of the jaguar, which again refers to the same astronomical feature. The Dark Rift splits the Milky Way in two in the rich, very dense area of the sky around where the Galactic Center is. This is an area of the sky, or an area of the Milky Way, that is very bright and very wide.

Mayan epigrapher David Kelley was able to place the three primary cycles of the Mayan calendar in this cosmogonic system around the sky [horizon] and it says something very

significant about how the Dark Rift in the Milky Way was understood by the ancient Mesoamerican skywatchers. The 9-day cycle ends at the Dark Rift; the 13-day cycle ends at the Dark Rift; and the 20-day cycle begins *and ends* at the Dark Rift. Quite simply, what this means is that *time begins and ends at the Dark Rift in the Milky Way*.

This is Mixcoatl, identified as the Milky Way, which was also seen as snake. The mouth of the snake is the Dark Rift and here we have a solar Ahau lord emerging from the mouth. So, we have astronomy in this image — the sun, the Dark Rift, and the Milky Way. This is from a pendant that was dredged from the sacred cenote at Chichen Itza around the turn of the century [ca 1900].

Caves, of course, were the terrestrial counterparts to the cave in the sky. Caves were entrance points to the Underworld where ceremonies and rituals were performed by Mayan shaman. Here is a solar face emerging from the mouth of an alligator.

Here's the cleft head motif [of the Olmec] and corn is shown sprouting from the cleft head. So, again, the cleft head was a birthplace or a creation place. Here is the glyph for Venus rising as morningstar and it's very similar, structurally, to these. What this says is that the Maya understood that the processes on the earth (agricultural sprouting or birthing) were metaphorically similar, or operating in parallel, to processes in the sky — dawning. So dawning and sprouting are metaphorically parallel images.

This is a very interesting variation on the cosmic axis idea. Again, this is the Milky Way and this time it's the Milky Way as the Great Goddess. Her head is at the bottom and her body is here. And the cleft at the top out of which emerges the First Father solar deity is her birth canal. So the Dark Rift in the Milky Way is also understood to be the birth canal of the great Milky Way goddess.

This is a carving from Izapa and it's a fascinating image. Again we have the vertical axis of the Milky Way; here's the Dark Rift. This is a hieroglyph — the upturned frog mouth hieroglyph means “to be born.” And what is born here is the First Father deity. In the *Popol Vuh* he's One Hunahpu. He's got his arms outstretched; he's performing the primal measuring act at the dawn of time. In the *Popol Vuh* one of the first things that happens is that the First Father deity performs the primal measuring act. And here you have the Four Roads or the four sky streaks emerging from behind him. So we have some astronomy going on here — the vertical axis of the Milky Way, the Crossroads of Creation, the Dark Rift in the Milky Way ... but who is One Hunahpu? What is the astronomical identity assigned to One Hunahpu by the early Izapan culture?

There's a linguistic argument involved in this⁶ but quite simply First Father is the First Solar Lord, he's the first sun. The *first sun of the year* is the December solstice sun. Linguistically and calendrically, his counterpart or his calendric name is 1 Ahau, and 1 Ahau is a primary Year Bearer in the early Izapan calendar that corresponds to the December solstice. I've got the documentation for this in my book — it's kind of a

⁶ First published in my 1995 book *The Center of Mayan Time* (Four Ahau Press).

complex synthesis of various academic [pieces of] information and it refers specially to the early calendrical system that the Izapans were using.

So, One Hunahpu is the December solstice sun and this is the Dark Rift in the Milky Way. When does this alignment happen? It happens on the end-date of the Long Count calendar [cycle] and *only* on the end-date of the Long Calendar.⁷ The December solstice sun is converging with the Milky Way, specifically the part of the Milky Way where the Galactic Center is located. You'll notice that this is saucer shaped, so it's all within the possibility of visible celestial observations.⁸ This is the Dark Rift, the birth place.

Now, this pretty straightforward and it's an unrecognized aspect of Mayan cosmology. And what I'd like to point out here is that the ecliptic crosses over the Milky Way here. So we have a sacred Crossroads in the sky. Dennis Tedlock writes that Maya Creation appears to have occurred at a cosmic Crossroads.⁹

There are many crossroads in Mayan art. Here's the vertical axis of the Milky Way as the ruler and the serpent bar he's holding in his hand is the ecliptic.¹⁰ [This is the Seibal stela.]

26 minute mark:

[Here is] Pakal's sarcophagus lid from Palenque — the vertical axis of the Milky Way and the serpent bar is the ecliptic. Linda Schele, in fact, in *Maya Cosmos*, made the specific identification of this as the crossing-point of the Milky Way and ecliptic.

[Here is the] Crossroads, [and the] cleft of creation. Madrid codex.

The Yucatec Maya have a ceremonial practice of erecting poles which are the four cosmic corners, and if you were to see this from above it would be like the cosmic crossroads.¹¹ In the center is the *u hol glorya*, the Glory Hole. This is the ceremonial offering hole in the center of the sky.

[Here is] another version of the cosmological conduit. Now, remember that Maya kings were shamans and one of their obligations as kings was to journey into the center of the cosmos and retrieve the otherworldly power of rulership, to dispense into their local kingdom. So this is the hole in the sky and it's at the center of the crossroads.

⁷ By this, I don't mean only on December 21, 2012. Similar to the clarification of the colloquial usage discussed in footnote 1, here the reference is intended to be to the *era* of 2012. I soon came to adopt the term "era-2012" to avoid misunderstandings.

⁸ Of course, the solar alignment with this spot cannot itself be "observed." But the *targets* for the *precessional calculation* can be observed — i.e., the Dark Rift and the nuclear bulge of the Galactic Center.

⁹ In the *Parabola* interview (1993); also I believe he said something to that effect in the updated end-notes to his *Popol Vuh* translation (1996).

¹⁰ This comes from Schele (1993). Van Stone tried to claim this insight in his 2011 *IAU* article.

¹¹ That is, the Quincunx symbol that leads to the idea of a central *fifth* direction, and *five* World Ages.

Maya kings, when they sat on their throne, were symbolically occupying the cosmic center. When they sat on their throne and performed rituals, they were journeying into the cosmic center. This is a throne from Izapa, 1st-century BC.

So, when they were making these vision journeys they were actually making a time journey as well, to the [2012] end-date, because that's where the cosmic center is and that's *when* the First Father solstice sun deity occupies his throne in the cosmic center.

Our galaxy is spiral shaped and when we see it arching overhead in the sky it would look somewhat similar to this. One of the ways that the Maya were able to identify the center of the Milky Way was because there's a visible bulge there. This [here] is similar to the Dark Rift phenomenon caused by interstellar dust.

Okay, here's Izapa Stela 11 again. I want to compare this with Stela C from Tres Zapotes. It's structurally very similar. You have the First Father deity, the Crossroads, and the cleft of creation in the [head of the] Cauac Monster. These are both from the 1st-century BC. This one has [one of] the earliest Long Count dates carved on the back, corresponding to 32 BC.

Izapa was the primary ceremonial center in the 1st-century BC, during the time in which the Long Count starts appearing in the archaeological record. Maya scholars such as Vincent Malmström and Michael Coe believe that the Izapan civilization created the Long Count calendar. Sites to the south of Izapa such as Abaj Takalik [now Takalik Abaj] and El Baúl have Cycle 7 monuments. These are Long Count dates in the 7th Baktun, the very earliest Long Count dates. There's one up here at Chiapa de Corzo and one up here at Tres Zapotes.

This is a Baktun 7 — see the 7 here? — monument from Abaj Takalik.¹²

This is the 32 BC date on the opposite side of the carving that we saw earlier.

Well, you never know what you're going to find wandering around the jungles of Central America! This is a cartoon done by epigrapher Barbara MacLeod. I met her at the 1995 Austin Hieroglyphic Conference and traded her a copy of my book [*The Center of Mayan Time*] for this [graphic novel she wrote and drew] in the early 1980s, called *The Chronicles of Xibalba*.

Not all of the Long Count dates found in the archaeological record are historical. Some of them are Creation Monuments. This is a Creation Monument from Quirigua and it's 13.0.0.0.0. So, it's talking about the Creation Day. The texts of these kind of monuments typically say something like “when 13 Baktun are completed, the image is made to appear.” And this is the image that I believe is made to appear on the 13.0.0.0.0 date.¹³ [Image of Galactic Alignment here.]

¹² 1st-century BC? Should be the early 1st-century AD.

¹³ Here I've made a quick leap, assuming that the 3114 BC and 2012 AD dates were like-in-kind events, both being Era Creation events. This observation, or assumption, is rather commonsense, but can also be

Now, what is so special about this alignment? Well for one thing it's a very rare alignment in the precessional cycle. It only happens once every 26,000 years.¹⁴ Precession is an astronomical phenomenon that's caused by the slow wobbling of the earth on its axis.¹⁵ Typically, in Western astrology, it's recognized as the vernal equinox moving slowly backwards in relation to the ecliptic constellations, and we are supposedly entering the Age of Aquarius. But Western astrology does not recognize the Milky Way as a marker for precessional phenomenon. The Maya did. The Maya astronomers did recognize the Milky Way and the Galactic Center as a significant zero point in the precessional cycle.¹⁶ And specifically, when the December solstice sun converges with the Galactic Center, which is occurring in the era of 2012,¹⁷ that was thought to be a great World Age shift.

So, in 6000 BC the winter solstice sun was over here; 4000 BC it's here, 2000 BC it's here. Around the time of Christ it's here, and in 2012 it's here. There's been a slow convergence happening as a result of the precession of the equinoxes.

And this is what the early skywatchers of Izapa would have seen around 2,100 years ago. About two hours before sunrise on the December solstice they would see the Milky Way starting to rise, arching overhead, the great galactic bulge here with the Dark Rift, which is a very significance creation place, or birth-canal place, if you will. And the rays of the dawning December solstice sun begin to brighten the sky. There's a 30° separation here [2,100 years ago] but it's quite apparent that they were aware that these two things were converging in the sky.

Another way to look at it is here. The Olmec were very astronomically sophisticated and there's no reason to believe that star knowledge was not passed down for hundreds and hundreds of years to enable the early skywatchers to track precession. In fact, the scholars who are most qualified on whether the early skywatchers could have detected and

argued in various ways. It was adopted, or independently deduced, by Carl Callaway in his articles of 2011 and 2012, and Barb MacLeod cited him for his "proposal." This third example, following the Carlson and Coggins items noted in footnotes 3 and 4, shows another key idea about 2012 — that of a like-in-kind relationship between 3114 and 2012 — that I first articulated long ago, being adopted by a scholar who lately published on what 2012 meant to the ancient Maya.

¹⁴ Again, one "era" of alignment is meant, roughly 1980 to 2016 (or more specifically, according to astronomer Patrick Wallace's calculations, 1975 to 2021). In a forthcoming publication I'll be exploring the curious coincidence of the Jupiter-Saturn Trigon Era shift, falling precisely on December 21, 2020, eight years after the 13.0.0.0 date. It appears that the Trigon doctrine of the Islamic Neoplatonists, the Ikwan al-safa, can be extrapolated into modern times to target the 2020 Trigon shift, which would logically follow from the one they recognized occurring in 1047 AD (a few months before the birth of Omar Khayyam). Continuing my interest in ancient World Age cosmologies, Callatay's book will be indispensable.

¹⁵ This explanation for precession is what I've always believed. I've never sided with Cruttenden's binary star theory, despite what is reported on my Wikipedia author page. I now suspect that something else *may* cause precession (an idea I broached in my 2002 book *Galactic Alignment*) which involves the varying strength of the electromagnetic field emanating from the Galactic Center. This attempts to explain certain anomalies, such as the fact that the Earth's distance from the Galactic Center is roughly 26,000 light years.

¹⁶ For my use of "Zero Point", see the "Shaman Nation" essay cited in footnote 5.

¹⁷ I was even being careful in this presentation — "era of 2012" soon became standardized as "era-2012."

calibrated precession consider it par for the course. Archaeoastronomer Anthony Aveni writes:

“Ancient astronomers could easily detect the long-term precessional motion by witnessing changes in *the time of year* at which the bright stars underwent heliacal rising... Through myth and legend the earliest skywatchers transmitted their consciousness of the passage of the vernal equinox along the zodiac from constellation to constellation” (1980:103).

Gordon Brotherston, another well-known Maya scholar, writes:

“From a practical point of view, a culture as ancient, numerate and chronologically sophisticated as that of Mesoamerica is more likely than not to have detected and then measured the phenomenon of precession” (1982:129).

So the idea that the ancient skywatchers became aware of precession and in fact calibrated it is not as controversial as it may seem.¹⁸



When I was intensely engaged in this research, moving through the academic literature and finding support for this theory, I thought that Izapa was a very intriguing place but I thought that this carving [Stela 11] was probably the best and only candidate that portrays the end-date alignment. But I was wrong. In looking more closely at the monuments of Izapa I found a great deal of evidence in the iconography [and archaeoastronomy] that supports this theory.

¹⁸ But in the hot-potato ego-politics of 2012, this became an attacked notion, even by Aveni himself.

Izapa was a pre-Maya site and its heyday was around the 1st-century BC. There are many monument groups, and the ballcourt is up here. The primary orientation of the site is to Tacana volcano to the north. The secondary axis of orientation is southeastward towards the December solstice horizon.

One thing about Izapa that is very intriguing is that when archaeologists started doing their work in the 1960s, the monuments were found as they were left roughly 1,900 years ago. This is Stela 11 and it faces the rising point of the sun along the December solstice horizon. So it's not unlikely that what's portrayed on this monument depicts what was observed over the December solstice horizon.

This is the ballcourt. There are some fascinating monuments in the ballcourt here. The ballcourt is oriented toward the December solstice horizon.¹⁹ There's a monument here, Stela 67, that we'll look at; Stela 60 is here, and the ballcourt group is here. The Mayan ballgame is a Mystery Play and it has to do with [the idea that] when the ball goes into the goalring, the game is over, so to speak. I did some research into the symbolism of the ballgame and it has to do with the rebirth of the sun. I wrote an essay called "The Cosmic Symbolism of the Mayan Ballgame" and it's available in the packet of materials that's out on the table. What we can say about this is that the ballgame was a Mystery Play to facilitate the movement of the gameball into the goalring. This is First Father, arms outstretched, sitting in the middle of the canoe, which is the Milky Way. Linda Schele identified the Milky Way canoe on bones from Tikal.

This Monument, Stela 60, is really eroded but it shows Hunaphu as a victorious ballplayer standing over a completely demised Seven Macaw. So the old Polar God is dead.

If you stood in the center of the Milky Way ballcourt at Izapa and looked toward the December solstice rising point some 2,100 years ago — the message here is that the Polar God is dead, the ball goes into the goalring, and the game is over. The ball is the December solstice sun and the goalring is the Dark Rift.

On the other side of the ballcourt is this throne arrangement here And again the symbolism here is supporting the interpretation that the skywatchers were actually looking at what was happening in the sky over the December solstice. When a king shaman sat on the throne he was a magician; he was symbolically birthing into the local space-time the energies and frequencies of the cosmic center. So he was symbolically a birther and this is a common birth image here. The solar head is emerging from the birth canal.²⁰ And of course this is what is going to be going on up here [in the sky over the

¹⁹ This key discovery of mine, central to my reconstruction work on what 2012 meant to the ancient Maya, is almost always overlooked or ignored by my scholarly critics. Only Aveni alluded to my recognition of it, but in the context of him incorrectly stating the Izapa ballcourt's orientation! (Aveni 2009).

²⁰ This paragraph and the previous paragraph explicate the "deity sacrifice and era rebirth" (or world-renewal) concept that comprises one-half of my two-part reconstruction of how the creators of the 2012 calendar thought about 2012.

sunrise horizon]. Here's the gameball and the goalring and here's the serpent's mouth with the Ahau face in it. So there's a complex of symbolic iconographic forms here that are reinforcing the same interpretation that the December solstice sun is going to be conjuncting the Dark Rift in the Milky Way, here at the Galactic Center up here.²¹

This is, kind of, I want to say, *a lost galactic cosmology*. It has to do with the evolution of the cosmology from a polar-oriented cosmology of the Neolithic ancestors to the galactic-oriented cosmology that was formulated at Izapa.

This [Stela 19] is an abstract representation of the male principle with the phallic breach cloth and this [Stela 20] is a representation of the cosmic mother principle, the cleft of creation and the vertical "slot" of creation. So, what is indicated here is that the alignment of 2012 was thought of as, kind of, a cosmic insemination that would lead to the rebirth of the world. And, of course, the Galactic Center is sort of like the womb or the creation place of the Great Mother who is the Milky Way.

Stela 11 — I didn't get into some of these monuments. This [Stela 6] is the galactic toad, the *bufo* toad and the shamans used the secretions of the *bufo* toad to facilitate their vision journeys.²²

So this is the big picture of the cosmology that was formulated at Izapa. It's pretty straightforward. The iconography of Izapa and the context of Izapa — in that it was the place where the Long Count was created as well where the Creation Myth was formulated some 2,100 years ago — strongly suggests that something really profound and amazing was going on at the early site of Izapa.

[I now read from my work]:

“The ancient skywatchers of Mesoamerica discovered and calibrated precession over 2,000 years ago. Izapa was the origin place of the Long Count and the Creation Myth. The doctrine of World Ages and the discovery of precession go together. The Hero Twin myth was an esoteric World Age doctrine arising from the discovery of precession. The new Hero Twin myth displaced 7 Macaw, the old Polar God, and instated One Hunahpu and his rebirth in the Galactic Center as the symbol of creation. Ancient Mesoamerican skywatchers went from the polar oriented cosmology of their Neolithic ancestors to the galaxy-oriented cosmology evident in the 2012 end date. At Izapa, the ancient shamanistic concern with finding the cosmic center achieved its ultimate goal with the identification of the Galactic Center as the true place of creation.”²³

[Slide time-sequence here (I run through a sequence of slides as I speak)]:

²¹ And here's the other part of my two-part reconstruction (the astronomical part).

²² I deduced this independently and later discovered an obscure Mexican journal article, in Spanish, that suggested this psychedelic toad identification.

²³ From my 1997 edition of *Maya Cosmogogenesis 2012*, which was being sold during my IMS talk.

Around the time of Christ, 2000 years ago, the December solstice sun was pretty far from its home in the Galactic Center ... Things were pretty primitive.

Moving closer, 2000 years later or so, things are getting a little more complex. What's happening here is that, as this alignment culminates, something's happening on this planet. Is it just a coincidence that we are, in fact, undergoing an incredible transformation in our modern era? The interesting thing to think about here is that, 2000 years ago, when this calendar was created, the people who created that calendar and were projecting forward to this alignment *believed that it was going to be an era of great transformation*, and they said this 2000 years ago. Well, this isn't just some kind of visionary prophecy, it's actually based in the scientific fact of the astronomical convergence in 2012.

Did the ancient Maya know something that modern science does not recognize as having any causative effects on human civilization? These are the questions that we need to ponder.²⁴

Could it be that the ancient Maya, and the creators of the Long Count and the Hero Twin Creation Myth, were privy to a cosmological knowledge that we are just beginning to understand?

The alignment in 2012 looms before us. As the Maya believed, it's going to be a time a great transformation. In fact, we are already in a time of great transformation. Perhaps it is how we respond to this that will determine what the future looks like.²⁵

Thank you very much. I announce my "prototype book" and packet of articles available for sale. I guess we have a few minutes for questions.

Q&A (7 minutes):

Q: Previous Era ending 5000 years ago?

A: My answer is unclear --- I meant that 2012 was thought to be, like 3114 BC, a Creation Day or cosmogenesis. Creation Myth episodes can refer to the 2012 astronomy.

Q: You're saying the Long Count was backtracked from 2012?

A: I mention Edmonson, pre-Classic origin.

Q: What's suppose to happen – a major event?

A: My interpretation – an Era. 50 years on either side. Transformation. Science needs to look at this alignment, what it means for the earth. [Change is] accelerating.

²⁴ And I did ponder and explore this further in my book *Galactic Alignment* (2002).

²⁵ Here we see the caveat of human participation in the process that I have always advocated. I wasn't promoting a specific "prophecy" fated to come to pass — except in that the Maya understanding of cycle-dynamics envisions the inevitable emergence of the Seven Macaw archetype at the end of a historical cycle, or era. But whether human beings choose to sacrifice Seven Macaw (attachment to illusion) is an open question, subject to individual free will choice. That's my informed interpretation of the ancient Izapa cosmo-conception of 2012.

Q: Previous cycles, monkey people in the PV

A: Right, a World Age doctrine, the “transformation” idea [not a final end]

Q: Spanish accent guy. Venus?

A: My answer: 3 Katuns = 37 Venus cycles

Q. Other prophecies to 2012?

A: Many traditions, but only the Maya calendar pinpoints the empirical reason for it.

Q: Have you heard of the alignment of the planets? 11:11?

A. Oh, well, there are various books in the market place ... I mention the Venus occultation in 2004 and 2012.²⁶

Q: Spiritual Maya — you are saying some kind of spiritual change as opposed to a technological transformation?

A: “I don’t believe it’s about cataclysm ... more like a spiritual transformation”²⁷
[according to the Maya]

Ray Stewart announces the end of the presentation section, and thanks.

Note: My entire presentation, after Jim’s musical intro, goes 51 minutes: 44 minutes of the presentation and 7 minutes of Q&A.



John with his mother (left) and Jeanne Kurth. August 21, 1997

²⁶ I never pursued this item so much, but I have pointed out the analogy to the Quetzalcoatl myth. I discussed this during a talk in Denver just prior to the Venus Transit of 2004.

²⁷ Importantly, my *explicit non-doomsday perspective* enunciated here.

Slides in my IMS presentation of August 1997

Slides:

Lead slide IMS logo (from Jim)
Uxmal (my photo)
Sayil (my photo)
Kabah (my photo)
Pyramid of Kukulcan Chichen Itza (my photo) (ref to packet of published articles)
Tikal (my photo or Nat Geo scan?)
Scribes — nice image from Nat Geo
Olmec figurine, drawing, cleft head motif
Tzotzil Maya couple – from Zinacantan book
Chichi church – (my photo)
Me and the Tzutujil Maya 1990 (my photo)
Me and Diego 1994 (my photo)

The Long Count primer: number chart at the 19:00 minute mark: “The Great Cycle of World Ages”

Typical Long Count date — Annie Hunter drawing? 9.16.4.1.1 = May 7, 755 AD

Popol Vuh Classic Period Blowgunner Vase (from Tedlock)

EZCosmos — Polar Area w/ my constellation outline drawing “Evolution of cosmology in Mesoamerica.” My “migrating southward” concept.

Altar from Izapa, 7 Macaw on Polar Perch (my drawing)

Stela 2 Izapa (Hero Twins); “Fire Drill Structure”, w/ Dresden glyph (my drawings)

Two drawings (mine): Egypt and India “Fire Drill” Axis. Doctrine of World Ages, introducing the precession of the equinoxes.

Stela 25, Izapa. My drawing

Stela 25 w/ sky circle at midnight, Big Dipper and Milky Way. My drawings.

Sky circle w/ Dark Rift and St 25 tree emphasized (my drawings)

David Kelley’s MW drawing, with my numbers added. 29:00 minute mark “time begins and ends at the DR in the MW”

Mixcoatl “warrior emerging from the mouth” pendant from Chichen Itza

Olmec Cave with cloud scrolls

Corner head-mouth emblem — Uxmal or Sayil?

Three Olmec cleft examples, Venus glyph, corn-sprout metaphors, dawning and sprouting

Tamoanchan great goddess split-cleft between legs, First Father emerging. My drawing.

Izapa Stela 11, my drawing — “to be born.” First Father deity is born.

Chart: “Linguistic Transformation of First Father” as December solstice sun deity

Seasonal Quarters drawing

Back to Izapa Stela 11 slide briefly, then (drum roll....):

EZCosmos Galactic Alignment picture. Crossroads. Dark Rift.

Seibal angled serpent bar, the ecliptic

Pakal’s sarcophagus lid; the Crossroads

Crossroads, Madrid Codex

Yucatec Maya, poles, four corners, Glory Hole

Cosmological conduit picture, from Sosa?

Maya Kings, cross on Throne 1, Izapa 1st-century BC

Back to Galactic Alignment EZCosmos picture

Picture of Milky Way. “Our galaxy is spiral shaped” visible bulge.
Stela 11 compared to Stela C Tres Zapotes (inverse of earliest LC date)
Mesoamerican Map, Izapa. Coe and Malmstrom mentioned. El Baul, Takalik Cycle 7
monuments. Chiapa de Corzo.
Baktun 7 date on Takalik Abaj Stela 2
32 BC date on Stela C trees Zapotes
Barb MacLeod’s drawing Cycle 7 (humor)

Creation Date 13.0.0.0 Quirigua “the image is made to appear”
Back to EZCosmos map of GA. “This image, I believe...” GUFFAW? No.
Precession diagram, earth wobble
GA process, a,b,c,d,e movement of Dec solstice sun into alignment EZcosmos map
My graphic of what the Izapa cosmologists saw. 30 degree separation
Another way to look at it here (same image with MW stepping downward). I now give quotes
from scholars on precession: Aveni, Brotherston. 43 minute mark.

Izapa Stela 11 slide (again). I reflect on discoveries.
Map of Izapa, monument groups (BYU)
Group B map BYU, with monument drawings. Stela 11 faces the Dec solstice sunrise
Ballcourt image (BYU). The ballcourt is oriented to the December solstice sunrise horizon. Stela
67, throne, Maya ballgame is a mystery play. Rebirth of sun “Cosmic symbolism of the Maya
ballgame” article – in packet of materials for sale
Stela 67 drawing. First Father in the MW canoe.
Stela 60. Hunahpu as victorious ballplayer
My drawing within the MW ballcourt at Izapa
My other drawing of ballcourt, with Throne 2 and related monuments.
“Lost Galactic Cosmology” – third drawing with monuments and male-female principles.
Mention of Galactic Toad, shamanism. This is the big picture.

49 minute mark. I now read (from something I wrote — from *MC2012* probably; about a
minute).
EZCosmos; far away solstice sun position; 5000 BC
Camels, ancient times
Closer image; convergence happening. 2000 BC
More complicated world, growth of civilization
Closer convergence 50 AD
Modern era superhighways. Nice summary here, “great era of transformation”
EZCosmos GA – present day (era-2012)
Modern world images
Modern world
Daykeeper image
Palenque at night with lights in window
Izapa Stela 11, “could it be that the ancient Maya...”
GA alignment again, EZCosmos. “The alignment in 2012 looms before us... Perhaps it is how we
respond to this that will determine what the future looks like.” That’s it, thank you. Q&A.
52:45 clapping. I announce my “prototype book” and packet of articles available. (Is this the
\$6 packet? I have it somewhere.)

73 slides

Notes:

VHS copy dubbed and audio simultaneously recorded on the Olympus mini-recorder, from Mom's better quality VHS tape, on December 15, 2014. There is another video recording that Jim did (labeled "JmajorJ"). [Promo announcements from the IMS newsletter, Vol 26, No. 8](#). I did a radio interview just prior to my talk, on August 19, with Jim Reed, at a local radio station. The audiotape of this radio interview is on file.

There are photos from this trip. It was shortly after my Grandma Alice died at age 91. My Mom came for it and we visited local places with a cousin and friend from Highland Street, Jeanne Kurth (who had retired to Florida).

Footnotes added to transcript, with minor editing, June 18, 2015.



John with the shape-shifting Jim Reed. August 21, 1997

IMS announcement of my presentation, August 1997 newsletter (Vol. 26, No. 8):

INSTITUTE OF MAYA STUDIES

AN AFFILIATE OF THE MIAMI MUSEUM OF SCIENCE

NEWSLETTER



Michael West, Editor

Volume 26 * Number 8 * August 20, 1997

Mayatravel@AOL.com

ARCHAEOLOGISTS IN PERIL Australian Maya epigrapher and professor from the University of Calgary Peter Mathews, found himself, several INAH archaeologists, graduate students and Chol Maya helpers in peril recently while attempting to find a safe home for a recently excavated two ton altar that was being threatened as a target for looting at the Chiapan site of El Cayo. A site north of Yaxchilan near the Usumacinta River. While attempting to relocate the altar the troupe was confronted by angry villagers from several communities surrounding the work site. They were beaten, robbed and held as hostages. After several harrowing exchanges with their captors they were forced to flee for their very lives.

A MESSAGE FROM PETER MATHEWS

Peter Mathews and colleagues faxed the following statement from Mexico, and asked that it be posted on Aztlan:

About three weeks ago, we entered El Cayo and visited the adjacent Chol Maya community of El Desempego to explore the possibility of continuing our fieldwork there. We had spent two summers excavating at El Cayo, in 1992 and 1993, and in 1993 we found a beautiful carved stone altar, dating to ca. A.D. 750.

The villagers of El Desempego said that it would be fine for us to continue our work, but they also said that an attempt to loot the altar had been made some time earlier. They had reported this to the Community Council of the Lacandon Region, who in turn reported it to Mexico's National Institute of Archaeology and History (INAH). This fact changed our plans somewhat, for the security of the altar became a high priority. We sounded out the villagers of El Desempego about moving the altar to a more secure location. They said that they thought this should be done.

Continued . . .

GENERAL MEETING WITH JOHN MAJOR JENKINS

Join John Jenkins with his interpretation of the Maya Long Count End Date of December 21st, 2012. Author of *Tzolkin*, he will explore the astronomical meaning behind the impending arrival of Baktun 13. August 20 at 8:00 p.m.

Donation for non-members: \$5

AUGUST SECTION MEETINGS

August 6 - 8:00 p.m. Board of Directors Meeting.

August 13 - 8:00 p.m. Travel. Join Anne Stewart with a visit to the San Diego Museum of Man as she presents the monuments of Quirigua made from earlier casts. Scott Allen will compare how they have held up to the elements on site.

August 27 - 8:00 p.m. Art & Archaeology. Join Victor Wiggert to Aquateca & Yaxchilan and the rivers that connect them.

Section Meetings donation for non-members: \$2

Readers of the Newsletter will notice a slow metamorphosis taking shape. We are learning a little bit each month on how to make this desktop publishing program bend to our wishes. As editor, I want to thank the contributors who help make the Newsletter a reality each month. ED.

Institute of Maya Studies

3280 South Miami Avenue * Miami, FL 33129

The NEWSLETTER is a monthly publication of the Institute of Maya Studies, a non-profit organization affiliated with the Miami Museum of Science, whose intent is to educate the public on pre-Columbian cultures of the Americas, with emphasis on the study of the Maya. For inquiries concerning membership or newsletter subscriptions, see listing inside.

The announcement cites my previous book, *Tzolkin: Visionary Perspectives and Calendar Studies* (1992, BSRF 1994). One contribution in that book was an analysis of the calendar correlation issue, providing a critique of Lounsbury's 584285 correlation.