

Did the Creators of the Long Count fix their 2012 cycle-ending to the Galactic Alignment?

John Major Jenkins. © June 7, 2014

At the 25:27 mark in the documentary film [2012: The Beginning](#), Dr. Michael Grofe stated that:

“John Major Jenkins has proposed that the Maya intentionally placed the end of the Long Count on December 21, 2012 because of this alignment with the galaxy.¹ I don’t think we have enough evidence to suggest that the creators of the Long Count actually intended that.”²

I believe we certainly do have enough evidence to *suggest* this possibility. And, in addition, I believe the *evidence* we can discuss makes this a *probable* proposition — more probable than the alternatives, which is the name of the game in reconstructing ancient paradigms. We can’t expect absolute proofs, and discussions with both Grofe and MacLeod indicate that they understand that “the most likely scenario” is the best we can hope for (at this point). This is a general truism not just with the controversial 2012 topic, but also with epigraphic decipherment, deducing ancient beliefs, interpreting iconography, and reconstructing mercurial aspects of ancient societies.

My discussion below compares the various scenarios and argues why an intentionally calculated placement to the alignment in 2012 is *the most likely* scenario. We certainly have enough evidence to *suggest* the possibility, which in fact Grofe already explicitly offered in 2003. I begin with Grofe’s own suggestion, based on evidence he examined on inscribed bones from Tikal, in his 2003 essay which is freely posted on *The Maya Exploration Center* research page³ (the Director of which is Dr. Ed Barnhart).

Part 1.

My review of Grofe’s essay “Calculations of the Tropical Year and Precessional Cycles: Two Bone Fragments from Tikal Burial 116,” June 2003. Posted at the *Maya Exploration Center*.

In this essay, Grofe shows his early interest in exploring evidence that indicates the ancient Maya were tracking the Tropical Year and the precession of the equinoxes. In his

¹ Of course, this a short-hand styling of the alignment and the Long Count; the Long Count doesn’t “end” in 2012. I don’t believe so and neither does Grofe, it’s just a cursory way of referring to it.

² The interview was conducted in early 2011, when Grofe may not have been fully cognizant of my arguments based on the Izapa evidence. At the suggestion of Barb MacLeod I composed a concise treatment of my Izapa work, and sent this to Grofe and MacLeod in early 2012. Michael responded within a few months, and I responded to his questions and comments in June of 2012. There were some fundamental misperceptions about the nature of the evidence, which I re-emphasized in my email response to him. Grofe has requested that I do not post his comments and my response to his critiques; my original piece his here: <http://alignment2012.com/summary-of-my-work-on-Izapa.pdf>.

³ http://www.mayaexploration.org/pdf/TikalBurial116_Grofe2003.pdf.

Introduction, Grofe writes that “The intervals indicated on these fragments reveal important connections to periods that facilitate the calculation of the true tropical year and the 26,000 year cycle of precession, both of which appear to be strongly suggested by the structure of the Long Count” (Grofe 2003:1). Grofe’s interest in identifying *the Mesoamerican methods and perspectives* in observing and calculating astronomical phenomena is shown when he notes that modern investigators are “challenged to attempt to understand a way of reckoning time which exists outside the Western tradition, often preceding and exceeding the calculations of the West” (2). Because it honors and seeks to understand Maya perspectives, such an approach can obviously produce meaningful results, in contradistinction to methods of interpretation and critique which impose non-Maya assumptions and filters.⁴

Grofe summarizes Teeple’s work in identifying Tropical Year constants in the Maya dates. By this is meant the number of days that separate two Maya dates in an inscription. The two dates are often conceptually linked in the narrative and thus it isn’t a question of randomly casting about for two dates that will exhibit a Tropical Year constant (the Tropical Year is not an even number of days; it equals approximately 365.24219 days).

Grofe discusses the incised bones found in the tomb of Tikal’s ruler Hasaw Chan K’awil, noting that “Two of these bones contain information which may help us to understand how the Maya and their predecessors were able to perform such an accurate calculation of the tropical year” (Grofe 2003:4-5). Notice he includes the “predecessors” of the Maya, meaning the denizens of the pre-Classic period during which the Long Count was created. He finds that two stated dates on the Tikal bones are separated by an interval that equals *260 days less than 52 Tropical Years*. This period is roughly close to the 52-Haab Calendar Round cycle, and the intervals seem to be concerned with calibrating relations between the 360-day Tun, the 365-day Haab, and the Tropical Year. Grofe then suggests relatively simple methods the Maya could have employed to correct for errors accumulated over larger periods of time.

Grofe turns to three other dates recorded on the incised bones (Miscellaneous Text 26 from Burial 116). Here we find Grofe’s early recognition of what is now called the “3-11 Pik” formula, which Barb MacLeod has elucidated as a device used by Maya kings that effectively relate them to “stations” of time fixed by precessional calculations.⁵ The “3-11” Pik formula implies 11 Baktuns multiplied 3 times, or 33 Baktuns, and calculating from the 3114 BC Era Base we see, after this time period transpires, “the position of the Haab’ falling on the winter solstice, 132 days after the second zenith passage on August 11” (Grofe 2003: 9). In other words, the formula allows for a long-range calculation that bookends the solar zenith position within the Tropical Year (August 11, the 13-Baktun Era Base in 3114 BC) and the December solstice (the important Tropical Year station of the 13-Baktun era-ending date in 2012 AD). As Grofe summarizes: “It appears that the creators of the Long Count system, and those who

⁴ These filters can include the requirement that the Maya were employing Western astronomical concepts and methods, as asserted by Aveni (2009) and Krupp (2009) and Larsen (2011). (This is the cMd bias discussed by Gerardo Aldana.) What gets filtered out is an awareness of the indigenous Maya methods and strategies in representing and calculating astronomical phenomenon. For my responses to Aveni, Krupp, and Larsen, see Jenkins 2008, 2009a, 2009b, 2009c, 2011b, and 2012).

⁵ See MacLeod (2008). Online with her permission: <http://Alignment2012.com/3-11PikFormula.html>.

noticed the 33-B'ak'tun pattern were intending to determine when the date 4 Ahau 8 Cumku would reach the point of the winter solstice" (10).⁶

Grofe notes that "33 B'ak'tuns appears to be the relevance of 3-11-pih" (10), but this 33-B'ak'tun period is a conceptual mid-point because, as Grofe writes: "What is more interesting is the length of time being measured. 13,200 Tuns [33 B'ak'tuns] is exactly one half of a precessional cycle of 26,000 years"⁷ (10). What happens is that, over this full interval of 66 B'ak'tuns the sidereal position of the Era Base (which is also a station in the Tropical Year, being a solar zenith-passage date) will return to its original position. Grofe writes that "coordinating the long cycle of precession – the longest observable astronomical cycle – with the drift of the Haab' from the tropical year" was "apparently the intention of the creators of the calendar system" (10). As an aside, I would add that using the sidereal position of the Era Base date of a solar-zenith passage *as a Tropical Year anchor to measure precessional shifting* is conceptually equivalent to using the sidereal position of the December solstice to do the same.⁸ This all indicates the method and the ability required to position the solstice sun at the Dark Rift/Crossroads on 13.0.0.0.0 in 2012 AD.

Grofe entertains difficulties with his reconstruction, such as the fact that small calculation errors accumulate over such large periods of time. However, the errors are "certainly slight given the vast expanses of time being dealt with" (11). He notes that the solar zenith intervals implicate the 15° N latitude and therefore the sites of Izapa and Copan.⁹ Grofe offers a matter-of-fact reading of the assembled evidence:

"We also see the specific calculation of the cycle of precession within these cycles, which apparently was intended in the inception of the Long Count. The 66 B'ak'tun cycle implied in the bone fragment of Hasaw Chan K'awil accounts for an exact measurement of one precessional cycle. Curiously, this is also implied in the Long Count system of 13 B'ak'tuns, in that five cycles of 13 B'ak'tuns gives 65 B'ak'tuns, or 26,000 Tuns, exactly one B'ak'tun less than the 66 B'ak'tun cycle..." (11).

As a curious side note, the last item Grofe noted (that five 13-Baktun cycles roughly equal one complete precessional cycle) is a fact that Frank Waters noted in his 1975 book *Mexico Mystique*. It is a singular piece of information from Waters that I cited in my 1989 book *Journey to the Mayan Underworld*, which got me thinking about the precessional basis of the Long Count at that time. With the 3-11 Pik formula, explored

⁶ The implication for my reconstruction work is obvious (Jenkins 1998), if only that this 3-11 Pik evidence shows that the ancient Maya were utilizing the same astronomical concepts that my "2012 alignment reconstruction" requires they were. Which means that my conceptual framework for what the ancient Maya were actually thinking about is not as "far-out" as many critics have asserted. It is, however, far beyond what many critics assume the Maya were capable of. But that is an issue deriving from the knowledge base of the critics rather than with any inherent flaw in my arguments or the evidence I've assembled.

⁷ 66 Baktuns is actually 26,021 Tropical Years, but with such large periods the slight difference is moot.

⁸ Thus both the Era Base date and the Era cycle-ending date (in 3114 BC and 2012 AD) are implied as intentional artifacts of the Long Count. I've noted for almost two decades now that the three Group B solar zenith gnomons at Izapa indicate the solar zenith-passage date referential to Era Base hearthstone symbolism (thus, to 3114 BC) and the Group F ballcourt aligns to the December solstice sunrise azimuth with a solar deity rebirth and enthroning symbolism (thus to 2012 and the Maya Creation Myth).

⁹ With Izapa being the active site during the pre-Classic period when the Long Count was formulated.

not only by Grofe but also by MacLeod (2008), Looper, Grube, and others (see Grofe 2003 for discussion), we have something like a confirmation that Waters' original insight from the 1970s was on target, despite the fact that Waters has been dismissed by critics as an instigator of "2012 mythology," a "mystic" or merely a "novelist."¹⁰

Finally, Grofe concludes by reiterating how the level of astronomical knowledge evident in the Maya inscriptions may be challenging to an establishment that holds to "non-Western histories" and "Eurocentric" biases:

"...it appears highly likely that the ancient Mesoamericans devised an ingenious system with which to track and observe the cycles of nature and the cosmos. That they succeeded at this much earlier than Europeans, or even earlier civilizations in the West, may come as some surprise and a definite challenge to the Eurocentric bias against non-Western histories, traditions, and sciences. There is much more to understand regarding the operations of this system, and the meanings of this knowledge to those who recorded it. Yet, what appears in the system of the Long Count is an unparalleled understanding of the workings of the earth as it relates to the heavens, and the human realm as it relates to the entirety of time" (12-13).

The implications of Grofe's position in this 2003 essay are clear from his own words. Since MacLeod went further, in 2008, in confirming and expanding the 3-11 Pik formula I don't think that anything here can be retracted based on mistaken information.¹¹ But in 2003, "2012" and the related astronomical basis of my theory about 2012 were not on the radar for most scholars. Between 2008 and 2012 a great deal of critical mitigation has been thrown at 2012 and my efforts to discuss the related Maya astronomy.¹²

Consequently, it's possible that Grofe, given the abusive critiques that have been heaped upon anyone who suggests the Maya were aware of precession, would prefer to state some of his observations in this essay more carefully. However, his later essays indicate that he embraced and utilized the same methodological approach of this essay, and those results are even more striking and confirming of the ancient Maya awareness of the Tropical Year, the Sidereal Year, and the precession of the equinoxes.

Part 2.

Here I present more evidence that allows us to suggest that the creators of the Long Count intended to calculate and target the astronomical alignment of era-2012. Grofe appropriately ends his essay ("Measuring Deep Time: The Sidereal Year and the Tropical Year in Maya Inscriptions" Oxford IX Archaeoastronomy conference paper, IAU Vol. 7

¹⁰ "Mythology" being used as in "lie" or a "fiction"; see Whitesides & Hoopes (2012) and my corrective review of their essay (Jenkins 2014). See also Stuart (2011) for the dismissive attitude toward Waters.

¹¹ Grofe cited his 2003 essay in his "Copan Baseline" piece (SAA 2010), which is in press as of 2014.

¹² There are exceptions, including Gelfer (2011), the *MEC-FACEBOOK Discussion* (see Jenkins 2011), and Grofe's and MacLeod's essays. But the efforts of critics who seem to be ideologically opposed to reconstructing the deeper levels of ancient Maya astronomical knowledge have gone hand-in-glove with a vapid mass media and pop marketplace that repeatedly portrayed 2012 as a doomsday and my own "solstice-galaxy" alignment reconstruction as a doomsday device (see, e.g, Ron Miller's *Is the End of the World Near?*, Lerner 2011), despite my endless efforts to invite rational dialogue and clarify.

no. 278, released July 2011)¹³ without exploring the deeper implications of his findings, which he writes relate to politics, astrology, and cosmology. It is appropriate because these areas require arguments, speculation, and informed surmising. Such work is necessary, and does not rely on the “random guessing” type of speculation, for there are other sets of evidence that can be integrated into the overall methodology. For example, the question of whether or not the 13-Baktun period-ending in 2012 was intentionally placed by the creators of the Long Count can be explored through three different lines of argument.

First: Given the solstice placement of the 13-Baktun period-ending according to the 584283 correlation, and given the very close factual congruence of the solstice sun’s position with the Crossroads of the Milky Way & the ecliptic (one of the locations alluded to in Grofe’s analysis), we are confronted with accepting a highly improbable double coincidence, if we want to maintain the assumption that the creators of the Long Count circa 50 BC (during Izapa’s heyday), DID NOT intend to locate the end of the 13th Baktun on December 21, 2012. The argument concludes that *intention is more likely*. This is a simple argument, one that is compelling by way of the sheer unlikelihood of the only other alternative (a double coincidence).

It should be pointed out here that the 20th Baktun ending exploited by K’an Bahlam at Palenque, in amplifying his father’s status, is first and foremost calendrical, not astronomical. It is thus not something explicitly and empirically embedded into the structure of the Long Count, as is the galactic alignment that is coordinated with the 13th-Baktun period ending. The astronomical aspect of the Palenque usage, discovered by Grofe, which is part of the Temple of the Inscriptions narrative, connects the sidereal position of the sun on Pakal’s death date with the 20th Baktun anniversary of his accession AND with the calculated date of September 4, 1588 AD (referenced with its Tzolkin-Haab position prior to the future 12th Baktun ending). These machinations are impressive yet are clearly contrived after-the-fact, as if demonstrating an astronomical association was important to Pakal, but they are dependent upon the purely calendrical 80th Calendar Round anniversary. I’ve suggested that Pakal was imitating and co-opting Lord Jaguar’s life-strategies. That Pakal’s death date may have been manipulated to serve this purpose is suggested by the fact that his death date in the 260-day calendar is the same as Lord Jaguar’s death date (6 Etnab). Lord Jaguar died just over four years before Pakal. (Etnab, Flint Knife, suggests perhaps an intentionally timed auto-sacrifice.)

Given that Lord Jaguar’s Monument 6 was dedicated in 669 AD, long before the rhetorical narratives about Pakal’s divinity were constructed by his son, K’an Bahlam, I have suggested that *a co-opting of Lord Jaguar’s calendrical and astronomical strategy of amplifying his status* occurred at Palenque. The threat for Pakal’s dynasty would understandably derive from the need of the region to reassert its power and status, after the defeats by Calakmul around the time that both Pakal and Lord Jaguar were born (early 7th century). An additional threat posed by Lord Jaguar’s rivalry may come from Pakal not having a direct lineage to the earlier dynasty of Palenque, namely Ahkal Mo’

¹³ https://www.academia.edu/3894959/Measuring_Deep_Time_The_Sidereal_Year_and_the_Tropical_Year_in_Maya_Inscriptions

Naab, and the possibility that Lord Jaguar *did* have a direct male lineage.¹⁴ Yet another threat may have come from the possibility that Lord Jaguar achieved a highly effective rhetorical statement, with TRT Monument 6, regarding his inborn association with Creation Mythos astronomy connected to 2012, *the power and efficacy of which springs from 2012 being a real artifact of the ancient calendar tradition.*

While the 20th Baktun ending was very possibly *not* an intended artifact of the system, Pakal and K'an Bahlam exploited it effectively as counter-propaganda to Lord Jaguar's claims. We should acknowledge two things: Pakal was not as effective in asserting powerful victories in the region as Lord Jaguar was. The first recorded efforts of Pakal come around the 9.11.0.0 date in 652 AD, which followed directly after Lord Jaguar's four spectacular war victories in the 640s. Second, Lord Jaguar's impressive biographical monument, TRT Monument 6, was dedicated in 669 AD, at least a decade before the inscriptions at Palenque were commissioned. It is reasonable to suspect, given the ambitious assertions of Lord Jaguar, that Pakal and his son would want to construct an even more glorious legacy-narrative. But they couldn't use 2012; Lord Jaguar had already claimed it. In fact, [it would be best to ignore that date](#) and construct rhetorical strategies around something bigger — why not the 20th-Baktun period ending? The effectiveness of that date lies in the coincidental congruence of it with Pakal's accession date (within 8 days anyway). If that didn't work, they could have found something else at 40 Baktuns, 65 Baktuns, or whatever worked. The astronomical item of congruence prior to the 12th Baktun identified by Grofe could have been contrived and presented as an additional supportive circumstance that was noticed by the calendar priests, mimicking Lord Jaguar's own astronomically-based claim. (Actually, Lord Jaguar's narrative also contains calendrical and numerological parallels.)¹⁵

Second: In my reconstructed Izapan Calendar Round (Jenkins 1996, 1998), we can find a nice calendrical congruence between the CR and the LC in reference to the period-ending date in 2012, but not the zero date in 3114 BC. With a basic transform (of dropping zero counting and shifting the year-bearer system used) back-generated from the Tikal CR, the hypothetical Izapan CR allows for December 21, 2012 (13.0.0.0) to fall on 4 Ahau 1 Kankin (not 3 Kankin). This could be seen as evidence (along with the solstice position) for a future projection rather than a back projection. The 8 Cumku Haab position of the 3114 BC date cannot be made to conform in a reconstructed hypothetical Izapan Calendar Round. The need for this consideration derives from the Tikal CR not being attested until almost 300 AD, and the idea that the LC may have been designed to be congruent with an original CR system. If so, it only works if the period ending in 2012 was the anchor for the system. The heliacal rise of the Pleiades on the equinox ca. 3114 BC is a rather vague parameter that cannot be reduced to the level of accuracy exhibited by the 2012 date's placement of the solstice sun on the galactic equator, for which we have a roughly 40-year window.

¹⁴ Lord Jaguar cites a lineage founding rite in 510 AD with a visiting lord named Ahkal K'uk who may very well be the Palenque king Ahkal Mo' Naab (ruled 501 to 524 AD). An even earlier founding rite, in the 4th century AD and linked to Lord Jaguar's era, is cited by Lord Jaguar, which seems to indicate that Palenque and Tortuguero share the same dynastic origin.

¹⁵ See Figure 1 in Part 2 of [my essay in 2012: Decoding the Countercultural Apocalypse](#) (2011, ed. Joseph Gelfer) and [my Society for American Archaeology presentation of April 2010.](#)

Third: evidence from Izapa. The ballcourt alignment points to December 21. The Group B pillar gnomon alignments and the 15° N latitude evoke the August 11-13 solar zenith passage. I've discussed this many times over the years it counters the assertions by critics that "there are no dates at Izapa." It is found in my 1998 book *Maya Cosmogenesis 2012*, which is dismissed by most critics as completely worthless and filled with nonsense. Those scholars who see any value in it are largely mute due to having been warned, either explicitly or tacitly. At Izapa, the archaeoastronomical and iconographic references to the World Age doctrine of the Creation Myth provides for the recognition of a 13-Baktun period between 3114 BC and 2012 AD. Perhaps some day critics will honestly and accurately treat my work at Izapa.

In all of this, it is interesting to note that my interpretations of Izapa astronomy, regarding how the purported creators of the Long Count thought about 2012, is clearly reflected in the Classic Period text from Tortuguero that contains the 2012 date.¹⁶ My work on Izapa astronomy led to my "2012 alignment thesis," however, that occurred before I was aware of the TRT monument's 2012 reference. I must be a good guesser or a psychic or just plain lucky, or perhaps my work had simply identified the same astronomical complex of ideas that later manifest at Tortuguero. A purely evidence-based argument for intention exists in the use, at Izapa, of the solar zenith-passage dates (one of which is the LC Era Base date, August 11-13) and the December 21 solstice azimuth (in the Group F ball court). I was the first to publish the observation that the ballcourt aligns with the December solstice sunrise azimuth, and Maya scholars resist acknowledging my contribution.¹⁷

Thus, the tropical year positions that define the beginning and end dates of the 13-Baktun cycle (one a solar zenith passage and one a solstice) are featured at Izapa. Creation myth imagery surrounds the archaeoastronomical monuments at Izapa, indicating that Izapa cosmology associated these dates with Creation events. I have argued, and Carl Callaway recently affirms, that 3114 BC and 2012 AD are both vectors for Creation mythology themes. In my argument, this perspective derives from the "cosmic center" concept that can be associated with both August 11 (zenith) and December 21 (Crossroads). My argument also integrates the Creation Myth episodes and deities on the Izapan monuments in a way that no other Izapa researcher has done. It will certainly take some other scholar to creatively co-opt and reiterate my ideas before they are ever acknowledged. (Despite an entire concise chapter on Izapa in my 2002 book *Galactic Alignment* and three detailed essays for free on my website Alignment2012.com beginning in 2000.)

¹⁶ And the La Corona 2012 text reflects Lord Jaguar's strategy; see my three essays at *The Center for 2012 Studies* website: <http://thecenterfor2012studies.com>.

¹⁷ Van Stone avoided it in his 2010 book and points to Aveni (despite our email discussions of 2008). Aveni himself criticizes my work, based on his incorrect assumptions, and gets the Izapa ballcourt orientation wrong in his 2009 book *2012: The End of Time*. In early 2014 he declined responding to my fact-based corrections: <http://update2012.com/Review-Aveni-Izapa-ballcourt.pdf>.

Part 3.

Excerpt from my essay for the Benfer & Adkins archaeoastronomy anthology,¹⁸ taken from my write-up on my website <http://johnmajorjenkins.com>.

Here is an excerpt from an essay I wrote largely in mid-2010, and finalized in early 2012. The astronomical evidence on Tortuguero Monument 6 strongly suggests that Lord Jaguar (b. 612 AD) was aware of the alignment of the December solstice sun with the Dark Rift / Crossroads on December 21, 2012 (13.0.0.0.0). The question arises as to where this knowledge came from, and if the alignment was embedded into the structure of the Long Count when the Long Count was invented (more than 2,000 years ago). If it was not, then Lord Jaguar's astronomers must have "discovered it" accidentally, and the fact that it coordinates with a great period-ending in the calendar must be a mind-boggling accident or coincidence (which they saw fit to exploit in a classic *legitimizing* narrative of kingly power, despite it being in this scenario an unorthodox, accidental, and non-traditional artifact).

In fact, as I summarized in my essay, it would be a quadruple coincidence. If reason (aka, being reasonable) is a value, we are confronted with a choice between an accurate knowledge of precession during the pre-Classic versus an almost impossible to swallow quadruple coincidence. Actually, we know through Marion Popenoe Hatch's work that the Olmec at La Venta (ca. 1000 BC) and the inhabitants of Takalik Abaj (pre-Classic) were both adjusting for the precession of the equinoxes. So, I'm not quite sure why the idea that the creators of the Long Count knew about precession (by ca. 40 BC) is not more reasonable than defaulting to a quadruple coincidence. Such a line of logic is probably distasteful to the scholars who continue their efforts in denying that 2012 had any meaning for the ancient Maya, which explains why the publication of my essay is currently in a holding pattern [and is now officially blocked]. Here's the excerpt:

Since the early 1990s, I have offered careful definitions and discussions of this alignment process. The Milky Way's mid-line is a very precise celestial marker that astronomers call the "galactic equator." The body of the sun is one-half of a degree wide. With such basic parameters defined, the precessional shifting of the position of the solstice sun will take slightly over 36 years to fully move through the galactic equator. Astronomer Jean Meeus (1997) and Rutherford Appleton Laboratory astronomer Patrick Wallace (Jenkins 2002: 249-256; Jenkins 2009: 145-146) have both calculated the dating of the alignment process. Summarizing these calculations, and applying the duration of the sun's precessional shift through the galactic equator, I identified a minimum range for the alignment running from 1980 to 2016 AD (Jenkins 2002, 2009). In order to avoid the misconception that the alignment happens only on and precisely on December 21, 2012 (an irrational notion because precession is a very slow process), I have referred to the alignment as occurring in "era-2012" (Jenkins 1998, 2002, 2009).

Despite confused assessments offered by NASA astronomers (Morrison 2009; see summary in Jenkins 2009: 230-235) and a general distortion of the entire topic of 2012 astronomy in areas of academic treatment as well as in the popular marketplace (see Jenkins 2009: 99-113, 245-260; 2011d), the so-called "galactic alignment" under question is, properly

¹⁸ The debacle surrounding the blocking of the publication of my article by one reviewer (while it was considered worthy of publishing by at least six other scholars) is revealing of the contempt and animosity for my presence in the 2012 discussion, despite *being a pioneer of it* and my earlier interpretations being echoed and explored (much later) by professional Maya scholars.

understood: 1) a fact of astronomy and 2) occurs within a temporal range that includes the 13th *Bak'tun* period ending of December 21, 2012. Some critics (Krupp 2009, Larsen 2011) have suggested that the slight discrepancy between the actual year of the alignment (precisely defined) and the 2012 period-ending date of the Maya (a difference of some 14 years), is a problem for my reconstruction. However, such a critique requires that the ancient Maya astronomers could have made an absolutely precise calculation in the precession of the equinoxes projecting forward over 2,000 years (the earliest Long Count date known is from Chiapa de Corzo, dating to 36 BC). I've anticipated these critiques in treatments published long ago (Jenkins 1998) and reiterated recently (Jenkins 2009; 2011d; 2012; see also response to critics at Update2012.com).

In regard to Bahlam Ajaw [Lord Jaguar], the future alignment on 13.0.0.0 and its parallel to his birth date astronomy **was either an extraordinary, albeit useful, coincidence or the 2012 alignment was an already ancient knowledge.** Was the fact of the alignment of the solstice sun and the Milky Way in era-2012 *intentionally* embedded into the structure of the Long Count at its inception? How is it that the 2012 alignment factors so nicely into so many Maya concepts, dates, and traditions? We may want to entertain coincidence, but then **we have a striking convergence of four unrelated lines of coincidence: 1) The date of the 13-Bak'tun period ending in 2012, which 2) coincidentally falls on a solstice which also 3) coincidentally happens within a narrow "alignment zone" of precession and 4) occurs at sidereal features (the Crossroads and the dark rift) that are central to the Maya Creation Mythology.** The congruence of the solstice sun's alignment with the Crossroads on 13.0.0.0 in the Long Count suggests either **an incredibly unlikely quadruple coincidence that was accidentally noticed by the Tortuguero astronomers, or that the alignment's association with the 2012 period ending was embedded into the structure of the Long Count when that calendar was devised in the pre-Classic period (Jenkins 1995, 1998, 2010).**

(The bold-face was added for emphasis.) Also from my website, a concise write-up and comparison of the two options:

Intentional Embedding or Quadruple Coincidence?

Posted on [July 31, 2013](#) by [admin](#)

Parsing out the two scenarios (see previous post [above] for the context).

Scenario number 1. The astronomers and scribes associated with the court of Lord Jaguar are working to craft his rhetoric of power. All kings need this. He is a reformer and within months of his accession to rulership in 644 AD he launched his first war campaign. He then proceeded to kick butt at lightning speed over the next five years, vanquishing four regional kingdoms. He restored the region to a semblance of its former glory, before the two wars that decimated neighboring Palenque decades earlier. In these victories, Lord Jaguar defined himself as a transformational agent, a vehicle of power and renewal. His persona was not unlike the Hero Twins who vanquished the Lords of the Underworld to pave the way for a new Era with the resurrection of their father, One Hunahpu. And in late 649, Lord Jaguar was bestowed with a priestly honor as he reframed his role as king, embracing the duties of sacrificial priest while performing a version of the Creation Myth.

By 669 AD a Katun had elapsed since his year of victory. He was approaching his 57th year and it was time for his reign and his victories to be documented in a powerful rhetorical statement. His rhetoricians knew that they must try to relate his personal life to the larger framework of the Creation Mythos. They considered his accession date, his birthday, and other circumstances of his personal identity. They noticed that when he was born the sun was positioned at the Crossroad of the Milky Way and the ecliptic, at the entrance to the Dark Rift. They saw this as significant, because those features just happened to be part of the ancient Creation Myth.

They continued randomly casting about for tidbits of useful rhetoric. The Long Count calendar was sometimes useful. They projected forward to look for things, to the end of the 10th Baktun, some 160 years into the future. Nothing much. So they projected to the ends of the 11th, 12th, and 20th Baktuns, and so on. Finally, they noticed something about the astronomy of the future end of the 13th Baktun. It was just a happy coincidence that the number 13 was involved. Because the astronomers had recently perfected an ability to calculate the Sidereal Year and the Tropical Year, Lord Jaguar's scribes and priests could calculate the sun's position on the future 13th Baktun ending, 13.0.0.0 in the Long Count. To their utter amazement, they noticed that the sun was positioned in the exact same position as it was one Lord Jaguar's birthday! This was a Sidereal Year calculation. Moreover, they also calculated that it would be the date of the solstice turnabout in winter. This was a Tropical Year calculation.

They wondered at the amazing coincidence of this part of the sky being involved in a rare astronomical alignment, since that part of the sky was important in their Creation Myth and yet there was absolutely no tradition about this alignment being known to the ancient creators of the Long Count. They had accidentally stumbled upon a perfect rhetoric narrative for Lord Jaguar's victories.

The Long Count had been being followed for over 700 years by this time. A 13th Baktun ending had already been written about by the priests of Copan, far to the south. But that was the previous 13th Baktun ending, some 3800 years earlier. Somehow, the Copan priests decided that a 13-Baktun period was important in the Long Count, even though there was no tradition about it. Well, "whatever", thought Lord Jaguar's priests. They may have ruminated as follows: "It is astounding that we have just accidentally discovered such a rare alignment with the new knowledge of the astronomical cycles that we have recently perfected, and that it occurs on the solstice, and at the Crossroads of our ancestor's Creation Myth, and on the future 13th Baktun ending, that also corresponds to the astronomy of Lord Jaguar's birthday. Such an astounding coincidence of many different threads must be a gift from the gods."

That was scenario number one [which I consider to be incredibly unrealistic and improbable]. **Scenario number 2** is that within the lore and ancient knowledge preserved by Lord Jaguar's priests, it was known that the future 13th Baktun would have those alignment characteristics, because the placement of that date within the structure of the Long Count was intended by the creators of the Long Count. It may be that Lord Jaguar was born close to the same alignment, and that his birthday was fudged slightly for the rhetorical narrative. Or perhaps he was born on the correct day and for that reason he was seen to be divinely selected and was preferentially nurtured to take on the needed

role of reformer. That would be the only coincidence, or near-coincidence, in this scenario, compared with four coincidences in the first scenario.

It perhaps took the eventual, and inevitable, near congruence of a king's birthday with the mythologically potent solar position of the Dark Rift / Crossroads, throughout hundreds of years of the Classic Period, for the ancient knowledge to be finally stated in a rhetorical narrative of a king and preserved for posterity. Once the cat was out of the bag, the narrative complex was used in various ways in other narratives, for example on the tablet from Palenque's Temple of the Cross (ca. 690 AD). Which scenario sounds more reasonable to you?

Conclusion

We certainly do have enough evidence to *suggest* that the ancient creators of the Long Count system intended to target *the rare alignment within the precession of the equinoxes that culminates in the years around 2012*. Furthermore, Lord Jaguar's 2012 inscription strongly suggests, thanks to Grofe's discovery of the birthday parallel, that the 7th century Maya were aware of the future alignment and used it in the Monument 6 rhetorical text. Given this, we are confronted with considering how Lord Jaguar and his associates came to know this? Was it an odd accidental discovery? If so, we have to accept an extremely unlikely quadruple coincidence of separate circumstances in order to maintain that position.

The alternative position is that the knowledge was already embedded into the Long Count at the time of its inception, many centuries earlier. This is, from a rational point of view that has fully considered the implications of the two positions on the matter, the *more likely scenario*, unless one is irrationally committed to Coincidentalism. I cannot imagine other possible explanations, although I have tried and I am open to suggestions. They will be *suggestions*, as is the suggestion that 2012 was an intentional precessional calculation. All suggestions should be rooted in the evidence, which my interpretation of Izapa cosmology is. As far as I can tell, it is the most likely possibility and I have yet to hear informed and cogent counter-arguments and alternative explanations.

Note: This is an expanded excerpt from my unpublished *Summary and Guide to the Work of Michael Grofe* (n.d., written in 2014).