

Dating the Construction of the Izapan Ballcourt, and Corrections on the Study of Astronomy in the Izapan Ballcourt

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Summary: First, there is no hard evidence that dates *the construction* of the Izapan ballcourt to the Classic Period or post-Classic Period, as insinuated by the Brigham Young University (BYU) archaeologists who studied the site. Rather, the C-14 dates that were taken from Mound 125a, which “adjoins” the ballcourt, are in fact pre-Classic and Middle pre-Classic. Clarifications of statements made by the BYU archaeologists are provided, and their assumptions about the original function of the ballcourt are questioned. Second, misleading statements and citations that don’t check out by one Maya scholar are corrected, regarding the history of the study of astronomy in the Izapan ballcourt. Third, one example of academic omission in citing my earlier published work on Izapan iconography and astronomy is discussed, and corrected.

Some overdue clarification is needed, in regard to: 1) the age and function of the Izapan ballcourt; 2) who has studied the astronomical alignments in the ballcourt. The need for this re-appraisal came up when a professional archaeologist, who does not want me to use his name, called into question my published statements that I was the first to identify and study astronomical alignments in the Group F ballcourt at Izapa. He called my attention to a published statement by Prudence Rice (2007:113), which turns out to be unsupported by the citation she offers. I will address this below.

The two primary points of original discovery that I claim are archaeo-astronomical. First, I was the first to publish the fact that the ballcourt is aligned to the December solstice sunrise, having independently decoded the fact from the BYU maps. Field trips to the site absolutely confirmed it. Such an observation was never stated or illustrated in any of the BYU publications on Izapa, including Garth Norman’s 1980 Master’s thesis. I noted the solstice sunrise alignment of the ballcourt in 1995, published it in my 1996 monograph called *Izapa Cosmos*, and again in my widely disseminated 1998 book *Maya Cosmogenesis 2012*. My self-published version of this book was offered to scholars in 1997, including Anthony Aveni, and it was sold at the Institute of Maya Studies in Miami, in August 1997. Second, I noticed that the Big Dipper constellation rose directly over Tacana volcano, and during Izapa’s heyday its rising after sundown was keyed to the December solstice. In reference to the Izapan ballcourt monuments, M.M. 4 is a pillar monument that had a crouching figure on it facing Tacana volcano to the north. This specific fact was noted in one of the BYU books, but it was associated only with the *geographical orientation* to Tacana peak, NOT to *the astronomy* of the Big Dipper rising over that peak, which I first noticed and published in *Izapa Cosmos* (1996).

The Age and Function of the Izapan Ballcourt

Here, I will assess the evidence for the era *of the construction* of the Izapan ballcourt. As one might expect, this is best determined from Carbon 14 analysis of samples from the ballcourt. BYU published all of its Carbon 14 dates (Lowe et. al, 1982, Table 7.1, page

117). The ballcourt, delineated by Mounds 126 and 128, with Mound 128 in the east, WAS NOT assessed. As the BYU archaeologists note, the ballcourt is “adjoining” the northeast end of a very large mound, Mound 125. The northern section of this mound is labeled as Mound 125a. There are six flat uncarved stones, identified as viewing seats for the ballgame, immediately behind the large throne situated on the west end of the ballcourt. A stairway was excavated going up the mound just to the south of these stones. These six stone seats are physically located on Mound 125a, but conceptually belong to the ballcourt. Although no C-14 tests were done in the ballcourt, at least four C-14 dates were taken from Mound 125a. The BYU archaeologists state that they did not reach a clear neutral level as they excavated, and therefore the earliest C-14 date probably doesn’t represent the first, earliest, construction level. Two of the “accepted” test dates from Mound 125a date as far back as 140 BC (I-1653) and 40 BC (I-4548). In Table 7.1 on page 117 (Lowe et. al 1982), there are also two additional C-14 dates from Mound 125a, but they are flagged, without explanation, as “unacceptable.” These dates range from 820 BC – 260 BC (I-1214) and from 730 BC – 180 BC (I-1217). The close proximity and of Mound 125a to the Izapan ballcourt is easily seen in the photograph in Fig 13.5 on page 230 of Lowe et. al (1982).

Comments by the BYU archaeologists suggest that they believe the ballcourt was occupied and used much later, into the post-Classic. They deduced that many of the monuments in the ballcourt appear to have been relocated there from elsewhere, the *assumption being that such an adaptation would not preserve the original function or meaning of the ballcourt*. We will see, however, that the placements and iconography of the ballcourt monuments clearly reiterate what the original intention of the ballcourt must have been – a place of ritual mystery play expressing solar deity rebirth. This is none other than an expression of the Hero Twin / ballgame mythology, known in its later recorded form as the *Popol Vuh*, the Maya Creation Myth. It appears to be true that ritual activity in the Izapan ballcourt continued through the Classic Period. But such a situation does not identify the actual construction date of the ballcourt, nor does it necessarily obscure the original paradigm of “solar deity rebirth” that the ballcourt’s solstice alignment signifies, and that the ballgame itself universally symbolizes. Such a meaning is embedded in the ballcourt’s structural orientation, and must therefore have originated concurrently with its date of construction. Because of the lack of C-14 dates from within the ballcourt, we don’t have conclusive proof for a date or origin, and the late-Classic and post-Classic dating of the BYU archaeologists is likewise unsubstantiated. It is conjecture unsupported by hard evidence. But we do have Middle pre-Classic dates from the nearby Mound 125s, which is “adjoining” the ballcourt and in fact shares space with some of the ballcourt-related artifacts. This is the only clue to the dating of the ballcourt’s origins.

Nevertheless, we find an unusually strong assertion from the BYU archaeologists about a much later function and dating of the ballcourt. After assessing several of the ballcourt’s throne, stelae, and various miscellaneous monuments, on page 233 they write “All of these small miscellaneous monuments suggest a ritual placement prior to abandonment of the ballcourt rather than any arrangement actually connected with the ballgame.” The critical distinction in their thinking here is the difference between “ritual placement” and “actual ballgame.” Their assumption seems to be that the game was originally played in the court, and later degenerated into mere ritual motifs and repetitions unconnected with the ballgame. Such a view is odd on two fronts. First, why

would monuments be intentionally moved to and arranged in the ballcourt that had nothing to do with the ballgame? Second, it is obvious that the Izapan ballcourt is ill-suited to being an actual functioning game court. There are no goal rings attached to walls, for example, and the north and west slope of the court's walls is so shallow that the ball would not roll down back into the center field. As with other courts throughout the Maya world, most notably the Great Ballcourt from Chichen Itza, the Izapan ballcourt was probably intended, from the very get-go, as a ritual field for the enactment of the Mystery Play of the Creation Myth / Hero Twin Myth. And that Creation Myth, like the ballgame itself, is about *solar deity rebirth*. Since the ballcourt aligns with the December solstice sunrise azimuth, and that solar position evokes the death/rebirth of the sun god, it is likely that the monuments as found *in situ* reflect the original intended ritual meaning of the ballcourt.

The assumption of the BYU scholars that the ballcourt was taken over "later" for ritual purposes unconnected with its original function, is highly dubious. Instead, a continuity of function is demonstrated by Throne 2 and by Stela 67, both of which depict solar deity rebirth. Consistent with the Hero Twin myth, this rebirth is conditional upon the demise of the Seven Macaw bird deity. It is thus not surprising that Stela 89 in the ballcourt shows the bird in flight from a Hero Twin, and Stela 60 on the east end of the ballcourt (opposite the throne) depicts the demise of the bird deity at the hands of a Hero Twin. So, the surviving iconographic complexes preserve a coherent message about an old deity's sacrifice as the precursor to rebirth or solar deity renewal, and this narrative is obviously an early version of the Hero Twin/Seven Macaw/One Hunahpu narrative in the much later *Popol Vuh*. No surprise here, since the main events of the Hero Twin myth occur in the underworld ballcourt, with the underworld Lords of Darkness. Nevertheless, the BYU archaeologists conclude, with a certainty not at all supported by the archaeoastronomy, the iconography, or C-14 evidence, that: "We may suppose with considerable justification that the ballcourt was used for ball games during the late Classic building in Group F, and that the monuments arranged around its extremities as excavated represent Early Postclassic shrine functions only."

In June of 2010 I was honored to visit Izapa with BYU archaeologist and investigator Garth Norman. Seeking clarification on these points, I later emailed him about my query. He responded by directing me to this quote (above). Such an assertion goes along nicely with the general view of Norman and Lowe et al that Groups A and B to the south of Group F represent an earlier phase of the building program at Izapa. To a certain extent this is probably generally accurate, but why were the C-14 dates from Mound 125a, going back as far as 820 BC, deemed "unacceptable"? And why do the "acceptable" pre-Classic Mound 125a dates of 140 BC and 40 BC NOT factor into the strongly asserted statement above? The post-Classic dating of the placement of the monuments is a conjecture, fitting a preconceived model of developmental process at Izapa. As is usually the case, however, the real situation is much more complicated than the linear developmental scenarios surmised by scholars. In fact, stylistically the key stelae and the throne used in the Izapan ballcourt date to the pre-Classic period.

We may not be able to reconstruct for certain what motivated the various phases of construction, use, and reuse, but we should note that the ballcourt monuments were never ritually destroyed. The area seems to have been preserved and used as a ritual site, perhaps an initiation center (Jenkins 1996, 1998) for many hundreds of years, up into the

Classic Period and post-Classic. Would such an honor be bestowed on a message that broke with tradition? It's clear that there was no break with the original paradigm of the Izapan ballcourt, since the surviving iconographic message reiterates the traditional meaning of the ballgame and reflects the solstice sunrise alignment embedded into the ballcourt, from its construction date.

Note: I published my discovery of the ballcourt's alignment to the December solstice sunrise azimuth in my 1996 monograph *Izapa Cosmos*. It was then elaborated in my 1998 book *Maya Cosmogenesis 2012* (1998). It also can be found in several of my articles produced in the late 1990s. All of these references were published before Aveni & Hartung's 2000 publication of the same thing. It is likely that scholars will prefer to cite Aveni & Hartung (2000) for this, and ignore the prior and much more detailed analysis I have offered in my work, which unlike the Aveni & Hartung piece incorporates and discusses the iconography of the monuments in the ballcourt.

Who Has Studied Astronomy in the Izapan Ballcourt?

Prudence Rice affirms a "Middle pre-Classic origins" for the Group F complex (Rice: 2007: 113). This was probably derived from the C-14 dates in Lowe et. al (1982), discussed above. Oddly, however, Rice incorrectly ascribes to Lowe et. al credit for the idea that the ballcourt was an "observatory complex." This is the phrase that Rice uses in quotation marks, ostensibly quoting Lowe et. al and explicitly citing to "Lowe, Lee, and Martínez 1982:224-245, fig. 13.1" (Rice 2007:113). **The rather large problem with this statement is that NOWHERE in the pages or figure cited does the phrase "observatory complex" occur.** Lest critics think I'm splitting semantic hairs, I invite anyone to read the 22 pages cited by Rice. The content of those pages have nothing to do with astronomy, nor do they discuss the Group F ballcourt complex as having anything to do with astronomy or being an observatory of any kind. This is not surprising, because the BYU scholars did not notice the ballcourt's alignment to the December solstice sunrise. This fact was first published by me in 1996 (*Izapa Cosmos*, Four Ahau Press). There have been essays on Izapa on my Alignment2012.com website since 2000. The current (October 2011) entry for Izapa on Wikipedia is incomplete, contains errors, and does not mention astronomy in the ballcourt. Oddly, it suggests that there may not even be ballcourts at Izapa.

A little side note here. When I informed my archaeological critic about Rice's error, who had brought Rice's words to my attention as a way to call into question my own claim on Group F astronomy, he simply replied "I don't buy it." I asked him which one of the facts and fact-based corrections he "didn't buy." His response was evasive, saying that "the context was anyway ambiguous." I attempted to get some clarification as to what he might possibly mean by that, but he refused to respond. When I later told him I was writing a corrective report to Rice's statements, he asked that I not use his name. I suppose he was unwilling to have the world know that he refuses to acknowledge evidence and fact-based corrections to his colleagues.

Garth Norman was the astronomy guy at BYU. His 1980 Master's thesis from BYU analyzed random azimuth alignments between stelae in Groups A and B, but he did not even mention Group F, for its astronomy or anything else. Likewise, Julia Guernsey

Kappleman's 2006 book on Izapa, which is often cited as the most comprehensive book on Izapa, barely mentions the Group F ballcourt. Rice's book goes into some detail about astronomy at Izapa, but her suggestion that Lowe et. al considered the ballcourt to be an "observatory complex" is incorrect, and is not even remotely alluded to in the pages she cites. Such an assertion detracts from the fact that my published work (1996, 1998) was the first to examine Group F for its embedded astronomical alignments.



Another item in Rice's book jumped out at me. On pages 117-118, she correctly notes that Stela 11 in Group B "faces east toward the winter-solstice sunrise." She summarizes the published interpretations of Izapa Stela 11, including the views of Milbrath, Lowe et. al, Norman, and Laughton. Only Norman's source precedes 1995, when my interpretations of Stela 11 were first published. Norman (1976) suggests the certainly incorrect idea that Stela 11 depicts *the descent of a sky deity into the underworld in the west*. I pointed out in my 1995 book, *The Center of Mayan Time*, that Stela 11 faces the December solstice sunrise and thus the figure on it, who bears a star or sun symbol on its nose, likely represents that event. I also pointed out that the four upward-bursting streaks behind the figure were like the four sky-streaks associated with the year-bearer opossums noted by Dennis Tedlock, and thus the figure was probably akin to a year-bearer, a time-period initiator. That the December solstice sun might analogically represent a calendrical year-bearer was also discussed in my book. Furthermore, I noted that the "upturned mouth" of the frog on Stela 11, out of which the solar deity is rising or being born, is clearly an early iconographic form of the "to be born" hieroglyph associated with birth and accession to rulership (citing D. Kelley 1976).

Rice states that Clemency Coggins, in a 1996 publication, "comes closest when she says that it [Stela 11] represents the ascent of the sun from the jaws of crocodilian earth." Rice then writes:

I believe the scene represents dawn and the birth of the sun as described in the Popol Vuh ... the "old man" (an opossum) makes four dark streaks along the horizon, heralding the rising of the sun. The four streaks stand for the yearbearers that correspond to the first days of the solar year (Rice 2007:118).

It's odd she didn't mention the solstice criterion. In any case, her 2007 statement (echoing Coggins 1996), occurred in the literature much later than my 1995 proposal and analysis. Furthermore, my analysis marshals a larger set of evidence, and therefore goes beyond a simple "solar year rebirth" interpretation. In fact, my 1995 analysis of Stela 11 included the parallel image of Stela 67 in the middle of Group F ballcourt and led me to identify the resurrecting figures as One Hunahpu (in this specific Izapan context symbolizing the December solstice sun) and the jaguar-toad's mouth as the portal to the underworld (referential to the dark rift in the Milky Way). Stela 11 was thus the original basis of my identification of the solstice sun's alignment with the dark rift/Crossroads (the era-2012 "galactic alignment") at Izapa, which was slightly later augmented by evidence from the ballcourt alignment and over a dozen ballcourt monuments. Stela 25

never served this purpose for me, as Aveni (2009 and elsewhere) has mistakenly asserted and used as the basis of his critique of my work.

So, these are a few of the corrections to Rice (2007) that should help us understand Izapan archaeoastronomy more clearly and more thoroughly, and the priority that my independent research and published writings have on several key issues that, unfortunately, are now getting echoed without credit by other investigators. This occurs despite my best efforts to communicate with, invite dialogue, and inform scholars since about my work since the early 1990s. If my ideas and interpretations were deemed unworthy to engage with, then why are those ideas now beginning to be reiterated by scholars, who are finally starting to address the same evidence that I explored two decades ago?

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