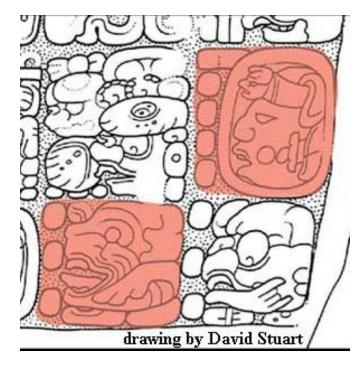
# The Astronomy of the 2012 Text from Block 5, La Corona

## John Major Jenkins. June 29, 2012

We now have a second Classic Period date reference to the 13-Baktun period ending in 2012. This one was announced on June 29, 2012, and comes from La Corona, formerly the mysterious "Site Q". The report is posted on the University of Texas website here: <a href="http://www.utexas.edu/know/2012/06/28/la-corona/">http://www.utexas.edu/know/2012/06/28/la-corona/</a>

David Stuart, epigrapher for the La Corona Project, states that the use of the 2012 date by a Calakmul king visiting La Corona in 696 AD is merely a "literary device." If this is so, then what kind of literary device is it? Narratives, books, novels, literature of all kinds, can use the "literary device". These include basic devices such as allusion,



foreshadowing, parallelism, personification, or the simple pun. More complex literary devices include constructs such as "the inciting incident" or the "false climax." The use of a given literary device assumes a track record, a precedent, an established and known function. In the example of the La Corona text, the king is relating himself to the future 13-Baktun period-ending in order to reestablish or maintain authority.

The only precedent for a use of the 13-Baktun period ending in 2012 comes from the Tortuguero Monument 6 text, dedicated some 27 years earlier. There, the effectiveness of the device involved a striking astronomical parallel

between the king's birthday and the 13-Baktun period-ending. A use of the future 20-Baktun ending by Janaab Pakal's son at Palenque had occurred just prior to 696 AD, and it involved both astronomical and calendrical parallels to the 20-Baktun ending, personally meaningful to Pakal. This rhetorical strategy of Maya kings, of asserting their divine right to rule, is in itself a device, but the method of demonstration is what is of interest here. And in relation to the use by Maya kings of future period endings of 13 or 20 Baktuns, astronomical and calendrical strategies must be considered.

With this as a basis for approaching the La Corona text as a literary device, I give special attention to the birthday of the Calakmul king who is the subject of the 2012 text at La Corona, as well as the Katun-ending date of 9.13.0.0.0 which is involved in the narrative linking to 13.0.0.0 in 2012. Luckily, we do have the birthday of Yuknoom Yich'aak K'ahk'. My approach to the text was straightforward and the results were immediately apparent.

I first noticed an interesting astronomical parallel between the conceptual anchor date of 9.13.0.0.0 and the 13.0.0.0.0 date. I posted my comment to the University of Texas page, in the "comments" section. Sent to the University of Texas website on June 29 at 1:33 pm:

"A very exciting find! Kudos to David Stuart and the team for identifying this text, and suggesting the rhetorical reason why it was used. In some ways, it is similar to what Lord Jaguar did with the 2012 date on Tortuguero Monument 6—he exploited the astronomical parallel between his birthday and the 2012 date, placing the sun at the Crossroads of the Milky Way and the ecliptic. An astronomical awareness also seems present in the La Corona text. If the rhetorical anchor was indeed the 9.13.0.0.0 date, we find that on the evening of that 13-Katun day (March 13, 692, Julian), the moon, Saturn and Mars were in close conjunction at the same Crossroads (of Milky Way and ecliptic) that the sun will occupy on 13.0.0.0 in 2012. In fact, 3 hours past midnight, the moon began occulting Saturn — it was that close! I suspect the full context of this 2012 text at La Corona will be clarified soon."

I also sent this to Facebook at 1:45 p.m. A question arose regarding the moon position. I clarified and added a second piece of data, from Yuknoom Yich'aak K'ahk's birthday astronomy, which clinches a parallel to what Lord Jaguar was doing, decades earlier, with the 2012 date<sup>2</sup>:

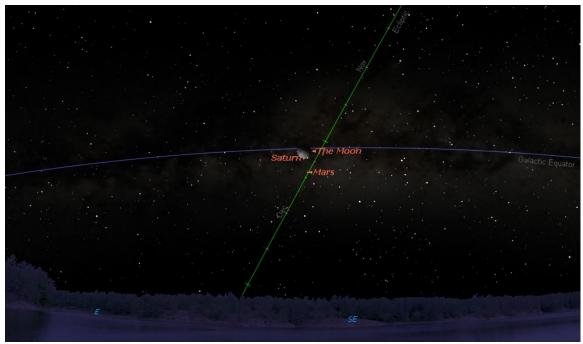
I use the 584283 correlation, and that makes 9.13.0.0.0 = March 13, 692 AD in the Julian calendar. I use the Julian because Starry Night Pro astronomy software uses the Julian. I see the moon occulting Saturn just after midnight on the night of March 13 — technically, as I mentioned, the early morning of March 14 (around 3 a.m.). The importance of this Moon-Saturn conjunction is twofold — it occurs at the Milky Way/ecliptic Crossroads (where the sun is on 13.0.0.0 in 2012, a date which this new "2012" text links to via the 9.13.0.0.0 parallel of "13"). And, secondly, Yuknoom Yich'aak K'ahk' was born on October 4, 649 AD (J) — when the moon was in conjunction with Saturn (I just discovered this — Newsflash!). So, he seems to be replicating the rhetorical strategy of Lord Jaguar from Tortuguero, in showing a cosmological link-up to 2012 via his birthday astronomy. VERY interesting..."

So, there is a lot going on in this text, but here are the basics. The Calakmul king, Yuknoom Yich'aak K'ahk', was born on 9.10.16.16.19, 3 Kawak 2 Keh (October 4, 649 AD), Julian. Interestingly, 3 Kawak is one day prior to a 4 Ajaw day in the 260-day



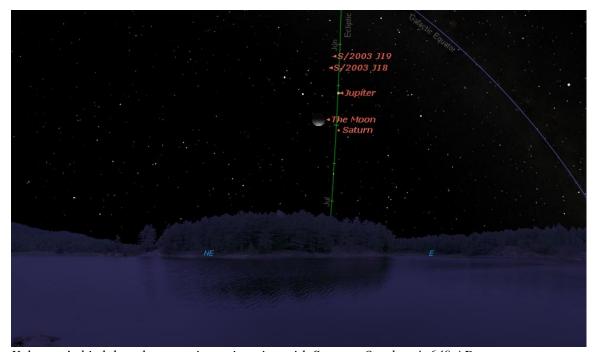
*Tzolk'in* calendar (which falls on the 13-Baktun dates, thus a close parallel). As we see from the La Corona text, Yuknoom claims the 9.13.0.0.0 period-ending (March 13, 692) as an important reference point for his rule. On the very late evening of this day we see the moon rising in conjunction with Saturn and Mars — positioned right at the Milky Way / ecliptic Crossroads in Sagittarius<sup>3</sup>:

Yuknoom Yich'aak K'ahk'



The moon in conjunction with Saturn on 9.13.0.0.0, March 13, 692 AD. The Cosmic Crossroads!

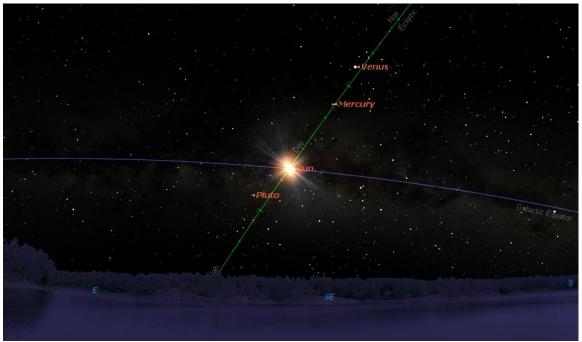
This is the same sidereal position that the sun will be located at on 13.0.0.0.0 in 2012. Just after midnight, the moon has shifted and is occulting Saturn. That would be an event that Maya astronomers would surely note. Now, returning to the king's birthday, we see that the moon was also in conjunction with Saturn on that day:



Yuknoom's birthday, the moon in conjunction with Saturn. October 4, 649 AD

This, in effect, gives Yuknoom an inborn connection with 9.13.0.0.0, linking him to the astronomy of 2012 (via the important sidereal "Crossroads" position). This rhetorical strategy is identical to what Lord Jaguar employed, in associating himself with 2012 via his inborn birthday astronomy.

The points of reference here are obvious. The cosmic Crossroads is an important fulcrum of the statements. For on 13.0.0.0 in 2012, the sun occupies that same position:



The sun at the same position, on 13.0.0.0.0 in 2012, as occupied by the moon's conjunction with Saturn on 9.13.0.0.0 (daylight removed)

This is only a preliminary note. It should be considered striking that a cursory glance at the astronomy reveals parallels that 1) echo Lord Jaguar's strategy with the 2012 date<sup>4</sup> and 2) echo the astronomy of my "2012 alignment theory." Approaching the La Corona text as a literary device begins with looking to narrative precedents in the Maya hieroglyphic corpus, resulting in a meaningful reading of the La Corona text based upon the embedded astronomical strategies typical of Maya royal rhetoric.

# Appendix 1: Sidereal Year and Tropical Year Relationships Between 9.13.0.0.0 and 13.0.0.0.0

This is a purely theoretical treatment which nevertheless shows how easy it would have been for the Maya to use the relationship between 9.13.0.0.0 and 13.0.0.0.0 to calculate both the Tropical Year (365.2422) and the Sidereal Year (365.25636).

First, 9.13.0.0.0 is 7200 days away from 9.14.0.0.0. On 9.14.0.0.0, the sun was positioned at the Crossroads — the same sidereal position of the sun on 13.0.0.0.0 in 2012. There is thus a Sidereal Year commensuration between those two dates:

$$13.0.0.0.0 - 9.14.0.0.0 = 475200$$
 days  $/ 365.25636 = 1301.00404$ 

The interval is accurate to 1 day. So, to get to this figure one would take a Distance Number of 482400 days (3.7.0.0.0) between 9.13.0.0.0 and 13.0.0.0.0 and subtract 1 katun (7200 days). Thus, 3.6.0.0.0 gives 1301 Sidereal Years.

The Tropical Year calculation is slightly more involved. The Long Count date 9.13.0.0.0 (March 13, 692, J) is 6 days short of the Vernal Equinox. Noting the equinox is a fairly easy affair, and the discrepancy could be noted and incorporated into the calculation. As such, there are 1320.75 Tropical Years, plus 6 days, between 9.13.0.0.0 and 13.0.0.0.0. The .75 (three-quarters) of a year could have been multiplied out by  $\underline{4}$  to reach the whole number of days that are evenly divisible by the Tropical Year:

$$482400 \times 4 = 1929600$$

But now you have to subtract 6 x 4 to account for the discrepancy:

$$1929600 - (6 \times 4) = 1929576$$

Divide this number of days by the Tropical Year (365.2422), and you get 5283.00399. The remainder in this figure reveals an accuracy to 1 day of a Tropical Year.

This operation requires, of course, that the ancient Maya already knew that 13.0.0.0.0 was a December solstice and that the sun was positioned at the Crossroads of the Milky Way and the ecliptic on 13.0.0.0.0. The relationship between 9.13.0.0.0 and 13.0.0.0 might merely have been used as a test for accuracy of their already known calculations.

#### Appendix 2:

### Eclipse Associated with Yuknoom's Visit on January 29, 696 AD

There was a near-total solar eclipse over La Corona on February 8. This was no doubt observed by the Maya, and it suggests that astronomical motivations were at work in the recording of the text. Remember, the 696 date had to be reconstructed, as it occurred in the broken upper left portion of the block. So, unfortunately, we don't know if an eclipse was explicitly mentioned. The text alludes to the carving of a stone upon Yuknoom's arrival, probably the Block 5 text itself. This suggests an extended visit after his arrival on January 29. Considering that Yuknoom was in exile after his defeat the previous year, he probably stayed on for some time. This eclipse was probably known from the eclipse almanacs, and they awaiting the moment as a sign of his continuing power.

#### **Notes:**

1. See my essay presented to the *Society for American Archaeology* in 2010, posted online at *The Center for 2012 Studies*: <a href="http://thecenterfor2012studies.com">http://thecenterfor2012studies.com</a>.

- 2. See the additional essays on the Tortuguero monuments at *The Center for 2012 Studies*. http://thecenterfor2012studies.com.
- 3. Regarding the Saturn-moon conjunctions discussed here, the requirement that explicit mentioning of astronomical events in the text is probably misplaced, because the dates themselves represent those events. It serves as a hieratic baffle, eliminating those who don't have the almanacs at hand from understanding the deeper esoteric content of the text. As evidence of this, we can look at the lunar events clearly indicated by the dates (but not explicitly mentioned in the text) in the stucco inscriptions from the pier within temple XIX Palenque: <a href="http://thecenterfor2012studies.com/sun-moon-crossroads.pdf">http://thecenterfor2012studies.com/sun-moon-crossroads.pdf</a>
- 4. For related research into the astronomy of Tortuguero Monument 6, see essays at <u>The Center for 2012 Studies</u>.

Astronomy program used: Starry Night Pro. V. 6.4.3