The Maya Calendar Conundrum

John Major Jenkins. November 13, 2012

Here is a mathematical problem that I've been scratching my head over for many years. It seems to require some kind of "equivalency formula" but I don't now how to state it. It is very strange because it involves two different reference-frames which the 13-Baktun cycle of the Maya Long Count calendar links together. It is almost like trying to express a mixed metaphor in mathematical terms.

Still, I can't shake the feeling that if we could crack this, it would provide a window into how the Maya believed in the integration of different domains of reality which are currently seen to be separate. Much like the "mass and energy" equivalency formulated by Einstein in his famous $E = MC^2$ equation. So, here it is:

The 13-Baktun cycle of the Long Count is 1,872,000 days long. This equals 5,125.366 Tropical Years (of 365.2422 days each).

It is believed that the Long Count tracks the precession of the equinoxes. For example, 5 of the 13-Baktun "great cycles" = 25,627 years, fairly close to the modern estimate of the precession cycle (25,757 years).

- Precession shifts the equinox and solstice positions of the sun at the rate <u>of ONE DEGREE in 71.5 YEARS</u>.

- During the 13-Baktun cycle of roughly 5,125 years, precession has shifted the equinoxes and solstice positions of the sun <u>a total of 71.68 DEGREES</u>.

71.5 years and 71.68 degrees. We can see here a very close equivalency between ***the number of degrees of precession shift during a 13-Baktun period, compared to the number of years in one degree of precessional shift.***

The sentence above is a mind-twister, but it does accurately express an equivalency, which seems embedded into the 13-Baktun cycle of the Long Count. Now, I don't know what this really means or how to express it mathematically. Calculus might be helpful? To explore the unknown formula, we could possibly simplify and use whole numbers, 72 x 5 = 360; 26000 / 5 = 5200, etc. Two different contexts are linked in a mirroring, one being the a number of years and one being degrees of motion. Is it just a happy coincidence of numbers? Or an indication of a deeper interweaving of time and space, of *rate of motion* and *distance covered*, that we cannot grok, but that the Maya did? It has to do with a linked relationship between the solar year (the earth's orbit around the sun) and the rate of precessional shifting (the earth's slow wobble).

And, possibly, does it also involve the earth & solstice sun's alignment to the Crossroads of Milky Way and ecliptic in the Galactic Center (the galactic alignment in era-2012), as some kind of regulating agent?

You are now entering …. The Twilight Zone!!!   (don't go mad trying to figure it out)