# Thirteen Baktun: A Recalculation of the Calender End and the Length of the World Age <br> by Loren W. Jeffries ©2018 

In my book The Sacred Count ${ }^{1}$, I challenge the whole paradigm of the Maya myth, about 2012 being the end date of the ancient Maya Calendar, by showing how the error in logic and math occurred. I explain how the miscalculation in equivalency dates happened. Because modern scholars thought they understood how the ancient calendar operated, they failed to consider the days thrown out of the Day Count.

Let me explain. It is generally regarded:
$1 \mathrm{Kin}=$ One day ( actual )
1 Winal $=20$ days (actual)
1 Tun $=360$ days ( 5 days short of 365 day year, or revolution )
1 Katun $=7,200$ days ( $20 \times 360=7,200$ or 100 days short of 20 years )
1 Baktun $=144,000$ days ( $20 \times 7,200$, or 2,000 days short of 400 years )
1 Pictun $=2,880,000$ days ( $20 \times 144,000$, or 40,000 days short of 8,000 years )
And so on, continually multiplied by 20 into Calabatuns, Kinchiltuns, and Alautuns, continually multiplied by 20. We need go no further, since the calendar goes no further than 13 Baktun, or 13 x 400 years. Once the Calendar reaches 13 Baktun, all places in the Long Count revert again to zero; this represents a World Age, and the count of time goes no further. Notice also, that 5 World Ages, or 5 x 5,200 years, equals 26,000 years, or the Precession of the Equinox Cycle.

It is the constitution of 13 Baktun that has been misunderstood. Apparently early scholars in this area took these figures literally, in the sense that, in adding up the days in 13 Baktun, they have taken 144,000 days and multiplied it by 13 . Thus, $13 \times 144,000=1,872,000$ days. Then, dividing $1,872,000$ days by 365.25 , ( the number of days we know a year to be ), they arrived at the figure, 5,125 years. This would be the logic and math, by which, the current paradigm belief that a World Age equates to 5,125 years, came about.

By adding this 5,125 years to the date ( they believed to be the Beginning Date ), 4 Ahau, 8 Cumku, 3113 B.C., they arrived at 2012 Current Era.

However, there is something terribly wrong with this logic. This calculation failed to remember the days that were tossed out each year, and not entered into the count of days. Call to mind, after 18 months of 20 days each, a nineteenth month of 5 days was observed, but not entered into the Day Count. The Maya called these days Wayob; the Aztec called them Nementomi. By not counting them, they could use the even figure of 360 to represent a year.

Nonetheless, these 5 days most certainly occurred before the count of the next Tun could begin. So if we are to achieve an accurate equivalency figure of how much time that actually occurred, we must add them back into the equation. Furthermore, we need also remember that 13 days were observed and not entered into the Calendar count, once each 52 years; the New Fire ceremony. So we need to add

[^0]back into our count of days these 13 days, for each 52 years represented in our day count.
The point here is that 144,000 days, the number of days accorded to compose a Baktun, is incorrect. The number of whole days in a Baktun is 146,000 days, and that does not include the fractional days, that accrue at a rate of one quarter day per year. ( $365 \times 400=146,000$ days, plus $.25 \times 400=100$ days, or a total of 146,100 days.) In other words, 144,000 days is 2,100 days short of the actual time expired in one Baktun. If we multiply that figure ( 146,100 ) by 13 ( 13 Baktun ), we get $1,899,300$ days. Now if we divide that figure by 365.25 , we arrive at 5,200 years, and not 5,125 years.

If you compute this math correctly you get a full 5,200 years, or 75 more years than the 2012. Who did the math on this thing? This is some basic arithmetic and how the logic failed to consider that even though they called a Tun 360 days, a full year, or 365 days, is represented by that figure. Correction of this mistake is long overdue.

An easier way to think about this is; if we realize a Tun to be a full 365 days, or a full year, then a Katun ( made up of 20 tuns ) is not one day short of 20 years. Neither is a Baktun one day short of a full 400 years. ( $400 \times 13=5,200$ years ). It is beyond me how this could have been overlooked. Nonetheless, it is widely believed a World Age is comprised of 5,125 years. This error occurs from failing to recognize the resonance of the calendar's fractal nature of 3.25-6.5-13-26-52.

Here are the simple, yet logical, steps that convert the smallest piece of this equation into its harmonic resolution. The smallest piece of this time fractal is the one quarter day attached to each year. For a Calendar Round ( 52 years) :

$$
\begin{aligned}
& .25 \text { [day] x } 4=1 \text { [whole day] } \\
& 1 \text { [day] x } 365=365 \text { [days], or one year } \\
& 365 \times 4=1,460 \text { [days], or } 4 \text { years } \\
& 1,460 \times 13=18,980 \text { [whole days in } 52 \text { years] } \\
& 18,980+13 \text { [days] }=18,993 \text { [days], or the exact time expired in } 52 \text { years, a Calendar Round }
\end{aligned}
$$

Notice the factors employed here; 4 ( for the 4 years required to factor this quarter day into a whole number. 365 , of course, is the number of whole days in a year, or one revolution around the sun . 13 is the number of whole days which accrue over the period of 52 years, which must be added back in to the day count ( if we are to achieve an accurate equivalency date ). By my count, we have used 1,4 , 13 and 365 , and it is clear how these numbers enter into the equation.

Let's now calculate, in the same fashion as we illustrated the structuring of a Calendar Round, the fashioning of a World Age, which occurs to be one hundred Calendar Rounds, or 5,200 years ( the current paradigm thinks a World Age equates to 5,125 years, but I explain this), or in the terminology of the Long Count, Thirteen Baktun ( $13 \times 400$ years ).
.25 (day) x $4=1$ (whole day)
$1 \times 5$ (days) $=5$ (days )
$5 \times 13=65$ (days )
$65 \times 4=260$ (days, or one Sacred Count)
$260 \times 5=1,300$ ( days )
$1,300 \times 4=5,200$ (days )
5,200 (days) x $365=5,200$ years
$5,200$ years $=$ a World Age ( 13 Baktun, or $13 \times 400$ years $=5,200$ years $)$ Or, in other words, we have taken , 25 day, factored it 7 times ( by $4,5 \& 365$ ), and rendered it into A World Age.

Now, let us take .25 day and factor it into 26,000 years, or a Precession of the Equinox Cycle.

$$
\begin{aligned}
& .25 \times 13=3.25 \text { (days ) } \\
& 3.25 \times 4=13 \text { (days ) } \\
& 13 \times 5=65 \text { ( days ) } \\
& 65 \times 4=260 \text { (days ) } \\
& 260 \times 4=1040 \text { (days) } \\
& 1040 \times 5=5,200 \text { (days) } \\
& 5200 \times 5=26,000 \text { (days) } \\
& 26,000 \text { (days }) \times 365=26,000 \text { ( years ), or One Precession of the Equinox Cycle }
\end{aligned}
$$

Now it seems inconceivable that we might convert one quarter day into 26,000 years, in six simple arithmetical steps, but there it is: The Great and Venerable Mechanism of the Universe .

In the same way that Earth's invisible quarter day resolves into 13 whole days in 52 years, or a Calendar Round, Venus' tiny fraction of .08 (day lost in each Synodical Cycle), resolves into exactly 260 whole days in 5,200 years. In this fashion the Sacred Count has been recalibrated, or the inaccuracy of the fraction has been perfectly resolved.

This is what is meant by saying these periods of time "resonate", or achieve resolution. In other words a World Age is the time it takes the missing . 08 day in the Venus Synodical Cycle to "harmonize" perfectly into 260 days, thus putting the Sacred Count in perfect accord with celestial accuracy. Venus does 32.5 cycles in the time that Earth does 52 Revolutions; thus, $32.5 \times .08=2.6$ days. Now there are 100 , 52 year Calendar Rounds in a World Age, or 5,200 years, so, $100 \times 2.6=260$ whole days. So, in 5,200 years, the Venus fraction has achieved an entire Sacred Count, and thus recalibrated the accruing fraction into exactly the number of days to coincide with the beginning of another Sacred Count Cycle, and the dangling inaccuracy of the fraction has disappeared.


Were we to draw these time cycles as sound waves, and overlay them, we would see Venus' Synodical Cycles and Earth's Revolution Cycles' wave-signs marry-up, or coincide, at the same points, in a 5 to 8 relationship; at 5 Venus Syn. Cycles and 8 Earth Revolutions, the sign-waves would cross the axis at the same points ( at 2,920 days and 5,840 days, and each 5 to 8 position along the time axis ). This convergence is one of whole days.

The convergences that occur at 52 and 5,200 years, also resolves the fractional days, or, in terms of harmony, not only would the whole days resolve at the same point, but the fractional portions would
resolve at the same point ; thus making this a super harmonic point, where the sound wave would perfectly resolve, a super harmonic resolution. It brings to mind...." A secret chord that David played that pleased the Lord". [ Song lyric from Leonard Cohen ]

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For additional information on Maya calendrics see:
Interpretation of a Mixtec Codex: "The Smoking Mirror Codex"
https://www.youtube.com/watch?v=R3N22zIjwX4


[^0]:    1 Jeffries, Loren W. The Sacred Count, The Fractal Calendar of Ancient Mesoamerica, 2016
    (Calculations vetted by Dario Covi, Ph.D., Professor Emeritus, University of Louisville and Richard Clark, Ph.D., Congressional Science Advisory Board

