

FEATURE II

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December 22, 2012: It Happened

In November, NASA launched a web site entitled, "Beyond 2012: Why the World Won't End,"¹ to dispel widespread urban legends of an ancient Maya prophecy that the winter solstice of 2012 (December 21, 2012) marks the end of the world. NASA is not alone: the Russian and French governments have also taken action to dismiss end-of-days panic.² So did you lose sleep over the impending end of the world? Planned a blow-out party for that night, which conveniently landed on a Friday? Hopefully you had your painkiller of choice ready for the hangover you suffered on December 22nd. People who actually know something about ancient Maya prophecies—namely archaeologists, art historians, anthropologists, and living Maya people themselves—enjoyed the day, like any other.

Apocalyptic predictions aside, there is actually an interesting and rare event occurring in the ancient Maya calendar on December 21st. It's called a Baktun ending date, a calendrical moment roughly analogous to the beginning of a century in our own calendar. Baktuns, however, end every 394.52 years rather than every 100 years. Given that the last time anyone gave a flying leap about a Baktun ending was A.D. 830, it would probably startle the Maya kings of old to know that their long-dead calendar system has found new life among the foreigners from across the sea.

The December 21, 2012, Baktun ending date wasn't just any Baktun ending date. It was special and for this reason has been merged with a modern example of the apocalyptic frenzies that have recurred in Western literature and philosophy since the dawn of Christianity.³ To understand this unlikely convergence of an ancient Native American calendar system with apocalyptic views ultimately derived from Near Eastern religions, it is necessary to delve into the esoteric realms of epigraphy (the study of ancient writing systems), mathematics, and calendrics (the reckoning of time). The fact that urban mythologizers have done exactly that is almost as surprising as the fact that the two traditions have been melded together at all.

The Maya calendar isn't technically Maya. It is more accurately known as the Mesoamerican Long Count Calendar, and it was just one of several calendars used by the Maya and their neighbors in ancient Mexico and Central America. The Long Count was used largely by rulers to record historical and astronomical events, kind of like putting Roman numerals on a building cornerstone. The Long Count operates something

like our own annual calendar in that it represents a continual count of days from a fixed point in the past. Our A.D./B.C. system was developed in the A.D. 500's and perpetually counts forward from a hypothetical date for the birth of Jesus Christ: January 1, 1.⁴ The Maya Long Count counts forward from a similarly important moment known to scholars as the Era Day, which falls on August 13, 3114 B.C., in our own system.

On precisely December 21, 2012, a total of 1,872,000 days (5,128.77 years) will have passed since the Era Day: a long time, but it doesn't immediately stand out as unusual until you consider Maya mathematics. The Maya counted in increments of 20 (vigesimal system) rather than our more-familiar increments of 10 (decimal system). So while we get excited about units of 100 (10 x 10) and 1000 (10 x 100), the Maya thought units of 400 (20 x 20) and 8000 (20 x 400) were pretty neat. The problem we and the Maya both face is that our solar system doesn't operate in increments of either 10 or 20: the earth revolves around the sun in 365.242375 days. That is an inconvenient number for anyone trying to count on 10 fingers and/or 10 toes. Our extraordinarily unwieldy solution merges a 12-month lunar calendar and a repeating count of numbered days that are inconveniently not divisible by 10 and a continuous count of individual 365-day solar years (the A.D. year count). To get to an exact date in our system, you have to know the lunar month and day as well as the individual year.

While the Maya used repeating weeks and months like ours in addition to the Long Count, that information wasn't

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