



## Maya

When the Spanish conquistadors set upon Mexico and the countries of Central America, they found, to their surprise, peoples whose priests had extraordinary reading and writing skills and engaged in mathematics, astronomy and calendar sciences in ways that not even the conquerors had ever heard of. So, they quickly acted and condemned their age-old knowledge, killed the priests and their students and burned almost all of their writings. It is a miracle that a few of their manuscripts are still around centuries later. From them, and some wall reliefs as well as glyphs chiseled in stone, modern-day Americanists are trying to reconstruct the ancient advanced civilizations of the Mayas, Olmecs, Toltecs, Zapotecs and many others.

### The Mayas' calendar sciences were incredibly sophisticated.

For whatever reason or purpose, they knew about the synodic (i.e. as seen from the Earth) Venus year (584 days), and they calculated the Earth year to 365.2421 days. The figure is even more precise than that used in our Gregorian calendar: 365.2424 days. Eight sun years corresponded to five Venus-sun synods. The Mayas used time spans of 400 million years in their calculations! They also left behind a Venus equation, which was to be used to calculate the return of the Gods.

In fact, the Mayas used two calendars side by side. The "Haab Calendar" consisted of 365 days - just like ours. The "Tzolkin Calendar", however, had only 260 days - a special 260-day Mayan calendar containing 20 symbols. The calendar cycle was purely ritualistic, consisting of 13 20-day segments. Both calendars ended after 18,980 days or 52 years.

They would celebrate their feasts based on that interval of 52 years. What was the purpose of the "Tzolkin Calendar" and its 260 days? It was completely useless for the seasons on this planet. Strangely: a hypothetical planet between Mars and Jupiter, where the asteroid belt is located today, would orbit the sun once every 5.2 years (1,898 days). The "Maya cycle"?



A third cycle, called "long count" by archeologists, marks the beginning of the Mayan calendar. In terms of our own calendar, this would be August 11, 3114 BC. At that time, the Mayas did not exist yet.

**So why bother to be so precise about that date? What happened on that date?**

The sun-based calendar of the Mayas assumed a year of 360 days, to which they simply added five days that were not counted. The Mayan word for year was "tun". The next unit was a katun, which was the equivalent of 20 tuns; a baktun was 20 x 20 years, that is, 400 tuns; 20 x 400 years was a pictún or 8,000 years.

They also worked with longer cycles as well: kalabtun, kinchiltun, alautun, but they find rarely use for practical applications. According to additional calculations, the different calendars would come to coincide after 374,000 years. Experts state the beginning of the Maya calendar, based on our calendar, as being 3114 BC or 3391 BC. How these "zero dates" came about, nobody knows; according to archeologists, there are no traces of advanced civilizations in Central America prior to approx. 1500 BC.

Any fixed dates, which dated back thousands of years, or precise future dates on which the calendars would coincide in a single "zero date" in spite of varying lengths were explained by the arrival or return of Gods "bestowing civilization". They were strange creatures, those Gods - led by Quetzalcoatl, also known as Kukulkan. In various pictures, they are portrayed as having trunk or tube-like extensions or as moving around in objects called "feathered serpents".

Maybe it had to do with premonitions of the ensuing "conquista", but one thing needs to be said about the priests of the Mayas: they managed to document the promise of arrival and return of the Gods for posterity in an indelible manner. The pyramid of Chichen Itza, dedicated to Kukulkan was built to illustrate the timeless message. Twice a year, during solstice, a band of light and shadow, produced by the steps, rails and the position of the pyramid, wanders up and down the steps.

God Kukulkan has visited mankind before and will return. That is the message passed down through centuries.

**Only a fantastic spectacle? Is there any truth to it? Central America is rife with mysterious and controversial finds.**

**Palenque:** This Mayan pyramid (Mexico), in the state of Chiapas, is an archeological sensation.

By mere accident, archeologist Alberto Ruz Lhuillier discovered a grave in 1952. The Temple of Inscriptions, as this pyramid has come to be known, became an archeological sensation, because its similarity to the Egyptian pyramids and their tombs could no longer be denied.

The entrance to the tomb had been sealed off with a five-ton sarcophagus lid adorned with a detailed relief, which is difficult to interpret. The dimensions of the stone slab are 3.80 x 2.20 meters; there are bands running along its edges showing glyptic characters. In the center, there is a figured representation typical of the classical Mayan style. Researchers of the Mayan civilization believe that it is a symbolic portrayal of a Mayan priest-king called Pacal (= shield), who was said to have been instrumental in establishing Palenque as an important temple center (the heyday of the metropolis lasted from about 650-800 AD). When looking at the relief, one sees a man with his knees drawn up, hunched over and lying on his back; a stucco sculpture of his head was also found in the tomb. Behind him, a cross-shaped object appears to rise, with a stylized quetzal bird sitting on its upper end.

Symbol of Kukulkan (Kukumatz, or Quetzalcoatl to the Toltecs = "feathered serpent"), the "creator of civilization".

The tomb, the person buried there, the monolithic stone slab and the glyphs remain mysteries. Who can decipher the message of the tomb? For decades, there has been a lot of possible interpretations. Many of them are related to astronomy. Is it just a stylized representation of "space travel"?



Links to astronomy of a different sort, but equally thought-provoking, can be found in Teotihuacán near Mexico City and its pyramids, providing clear proof that Central America had been under the "firm control of the Gods" even before the Mayas. The celestial beings Tecciztecatl and Nanahuatzin are said to have become the Sun and Moon at that legendary place.

The Sun Pyramid of this ancient city measures 63 meters in height, with an area of 222 x 225 meters and a volume of more than one million cubic meters. It was not built in several stages, but all at once; other pyramids of this site include the Moon Pyramid and the Quetzalcoatl Pyramid, known for its abundant façade ornaments. Nobody knows anything about the priest-architects that had masterminded the construction of Teotihuacán.

The only thing we do know is that Teotihuacán was the oldest civilization on the Mexican plateau and that construction must have begun at around 1000 BC. And that was even before ancient Rome came into existence. Rome is said to have been founded around 753 BC. In far-away Egypt, the 21st dynasty was in power, Greece saw the birth of its classical Gods, and, according to the Old Testament, a boy called David had just slain the giant Goliath.

A stately avenue runs from north to south: three kilometers long and 40 meters wide. It is called 'Camino de los Muertos' (Street of the Dead).

A magnificent avenue lined with pyramids and temple platforms to the left and right. To the north, the avenue has a gradient of 30 meters, which creates the optical illusion that it leads straight to the skies.

Even today, anyone standing at the bottom of the street will see an endless staircase with even steps that seem to merge with the Moon Pyramid after three kilometers. On the other hand, if you look down from the Moon Pyramid, you will only see a straight street - all the steps seem to have vanished mysteriously. According to the official doctrine, the city planners of Teotihuacán were stone-age people.

Every modern-day surveyor can tell you a thing or two about how difficult it is to survey a stretch of land of three kilometers where, every few meters, six steps and a flat platform are supposed to be followed by another six steps and a platform, with the alternation of steps and platforms culminating, at the end of the ascending stretch, in a giant pyramid - and all that needs to be highly precise, down to every centimeter. And: not one step, platform or gap in between was allowed to deviate from the standard. Does that sound like the stone age? This surely cannot be the answer to all those questions.

At the international congress of Americanists in Mexico in 1974, Mr. Hugh Harleston presented a paper that caused a lot of confusion among experts. Harleston had been looking for a uniform measurement in Teotihuacán that could have been applied to all buildings alike.

He discovered it and found it to be equivalent to 1,059 meters. He called it "Hunab", a Mayan name, which translates as "unit". It was the yardstick of Teotihuacán that could be applied to all buildings and measured lengths of Teotihucán. For example, the Quetzalcoatl, Sun and Moon pyramids

measure heights of exactly 21, 42 and 63 "units"; in other words, their proportions to each other were 1:2:3;

Mr. Harleston used a computer for his calculations. The data thus computed gave rise to sheer despair. The truncated pyramids around the citadel, he found, revealed the average orbit data of the planets Mercury, Venus, Earth and Mars. The average distance to the sun was given as 96 "units". Mercury, Venus and Mars were at the right distance of 36, 72 and 144, respectively. Right behind the citadel, there is a small stream that the architects of Teotihuacán integrated into a man-made canal. They led this canal through below the Street of the Dead. With 288 "units", it marks the exact distance from the asteroid belt, which is located between Mars and Jupiter. Like in a stream, thousands of rocks and debris are floating through the asteroid belt.

520 "units" from the median of the citadel (all the distances were measured from there), the foundation of an unknown temple was discovered. This was the equivalent of the distance from Jupiter. Another 945 "units" farther on, there is another temple today, again, only its foundation remains. This structure symbolized Saturn.

Finally, 1,845 "units" on, at the end of the Street of the Dead, the center of the Moon pyramid coincides precisely with the orbit data of Uranus.

If one were to extend a straight line from the Street of the Dead, it would reach the peak of Cerro Gordo right behind. Here, too, the remnants of a small temple and a tower have been found, resting on old foundations. The circle arc of 2,880 and 3,780 "units" marks the average distances from Neptune and Pluto.

The Street of the Dead in Teotihuacán was thus shown to be a miniaturized model of our solar system. It is remarkable, though, that the great Sun Pyramid is not part of this system - it is not located on the straight axis, but is off to the side of the stately avenue.

The Mayas' worshipping of the Gods, as well as that of other Central American people, is also reflected in the figured representations. Were they humans, disguised as Gods, representations of actual events or simply figments of somebody's imagination?

A few kilometers from a small village called Santa Lucia Cotzumalguapa, in the jungle of Guatemala, stone sculptures have been found dating back to Mayan times. One of these steles, artifact number 27, has received worldwide recognition: it represents, according to archeologists, a ball player. 2.54 meters tall and 1.47 meters wide, it shows a person wearing a helmet and tight overalls. On its back, the figure has a tank, like the oxygen tank of a scuba diver or astronaut - a trunk-like tube is connected to the helmet through which the figure exhales air; the mouthpiece of the helmet is portrayed as the jaws of a jaguar. It remains a mystery how that ball player could have survived the sacred ritual dressed in such attire.

The interpretation of the hose as the tail of an opossum that the victor of the ball game carries around his neck shows the additional difficulty of Americanists when interpreting representations that are based on technological relics.

1,950 meters above sea level, approx. 5 kilometers west of the city of Oaxaca de Juarez, we find one of the most famous archeological sites in Mexico: Monte Alban. The site, located on a plateau 400 meters high, dates back to between 700 BC and 300 AD. It was built by the Zapotecs, later replaced by the Mixtecs and Aztecs.

Even today, Monte Alban still boasts well-preserved temples and pyramids, which also house tombs. Archeologists have come up with many different explanations for the representations of Gods in various reliefs, whose most striking feature is that they have elephant trunk like hoses attached to them.

- Why would people create a sophisticated calendar system when their calendar starts on a - seemingly - fictitious date? What was the purpose of all those calculations and astronomical knowledge that, as far as we know, served no practical or cultural purposes for these civilizations?
- What motivated them to document for "all eternity" and to such precise degree their calendar sciences and cyclical "visits from the Gods" in stone and by means of pyramids, the best example of which is the pyramid of Chichen Itza? Teotihuacán - the impressive city of pyramids in the heart of Mexico. It is actually so ancient that not even the Aztecs knew anything about its architects. In terms of their dimensions, these pyramids are only matched by those of Gizeh. Were they supposed to represent the solar system?
- Ancient astronomical and calendar-related knowledge has been preserved not only in stone, but also through cultural means. Today as a tourist attraction the four Voladores, or "flying humans", are demonstrating living mythology: tethered to a pole, they circle it thirteen times.  $4 \times 13 = 52$ , the sacred number of the Mayas, representing the time interval for which the Gods had announced their return.
- How we can interpret one of the most crucial and surprising archeological finds? The stone slab on the tomb of Palenque shows king Pacal in an object that has been at the center of innumerable attempts at interpretation. These range from symbolic sacrifice to the well-known explanation of the space traveler. The most recent translation of the glyphs surrounding the image by scholars of Mayan civilization speaks of Pacal's ascent to the Milky Way. Who was that Mayan king, Pacal? What do mythology, the Popul Vuh or Chilam Balam tell us about the relationship between man and Gods as well as about space travels? Would we be able to find the "Palenque motif", with the same shape and representation of Pacal's "vehicle", in other parts of the world too?
- Finding an answer to the question as to who those strange Gods shown in reliefs and wall paintings of temples really were seems to require a "miracle": In Monte Alban, above from Oaxaca, these beings are portrayed as having strange trunks like elephants. The stele of El Baul, Guatemala, is adorned with a tube-like object extending from the helmet of what is believed to be a ball player to a tank on his back. Miraculous beings and worlds - and mysteries abound!
- At the Olmec park "La Venta" near Villahermosa (Mexico), we find a three-meter stele that shows a being descending down to earth. Equipped with a perfect helmet, with its feet towards the clouds and its arms stretched out ready to embrace the people of Earth. Absolutely magnificent!
- An archeological sensation is the crystal skull of Lubaantum in Belize. Assuming that it is authentic artifact, then we will have to accept the fact that it is a work of art that today's craftsmen and industry have no reasonable answer for. Experts confirm that no known method existed in those times that could have produced this object.



***Maya - the land of "question marks"***