



The Mayan Calendar

The Mayan calendar is a calendrical system that was used by the Mayan civilization of pre-Columbian Mesoamerica. The ancient Mayans invented this system of remarkable accuracy and complexity. It was considered to be one of their greatest achievements. For simplicity, the Mayan calendar system is usually referred to as “The Mayan Calendar”. This term then really refers to their system of interconnected calendrical cycles.



The Mesoamericans began writing during the mid-Pre-Classic Period. The Mayans were the first people of the New World to keep historical records. Even if writing in the New World did not originate among the Mayans, they developed and used it extensively. The Mayans wrote a mixed script, with ideographic and phonetic elements. Most of their writing survived on stelae and stone monuments on which they carved their civil events, calendars and astronomical knowledge. They also inscribed their religious and mythological beliefs on pottery.

The Pyramid of Kukulcan at Chichén Itzá, Yucatan, Mexico constructed in 1050 was built during the late Mayan period, when Toltecs from Tula became politically powerful. The pyramid was used as a calendar, four stairways, each with 91 steps and a platform at the top, making a total of 365, equivalent to the number of days in a calendar year. The Mayan calendar is a complex system of time-tracking. The calendar actually uses several different cycles or methods of keeping track of time according to astronomical or mythical events. The Mayan calendar was not the only calendar in use by the ancient Central and South Americans but, many experts consider it to be the most advanced with a clear indication of the scholarly emphasis in Mayan culture. They had kept track of all the days of the year, distributed in weeks and months, with astronomical data, such as lunar, solar cycles and with religious information such as deities and festivities.

The Julian calendar which was instituted in Rome by Julius Caesar in 46 BC. set the year's length at 365 days and added one day to the year every four years. Pope Gregory XIII modified this calendar in 1582. Even though the Gregorian calendar is a solar calendar in the sense that it doesn't take into consideration the Moon in its calculations, it does contain rules for determining religious holidays which are based on both the Sun and the Moon. The Gregorian calendar is the most popular one used today in most of the world. The Gregorian calendar is based on a fairly exact estimate, 365.2425 days, of the duration of the solar year. Historically, people have sensed the need to have a fixed point to start their time calculations.

In order to do this, generally the starting point has been determined either by a historical event, such as the birth of Jesus or by a hypothetical event such as the date of the world's creation. The Mayans seemed to have been the first to discover the need for such a date, using probably an astronomically significant or a hypothetical event they placed at 3114 BC. The Mayan calendar reflects a higher truth of consciousness, in many aspects than the now dominating Gregorian calendar or any other calendar that is currently used in the world.

At their height in the 5th to 9th centuries AD, the Mayan cities would be among the largest in the world and developed the most advanced mathematics and astronomy of their day. They were and are the carriers of a significant and irreplaceable part of the global human consciousness.

The Mayan Calendar is something profoundly different than just a system to mark off the passage of time. It's also a non-astronomically based, prophetic calendar that may help us understand the past and foresee the future. The predictions made from it are repeatedly verified. It is a calendar of the Ages that describes how the progression of the Heavens and Underworlds condition the human consciousness and thus the frames for our thoughts and actions within any certain given Age.

The Mayan Calendar provides an exact schedule for the Cosmic Plan and the unfolding of all things that come into existence. In many ways, it shines new light on the age old questions of mankind that fit into the Divine Cosmic Plan. The Mayan Calendar is a gateway to the worlds of consciousness which the majority of humanity has been blinded to through the use of false or delusory calendars. Everything that exists is an aspect of consciousness. The Mayan Calendar describes the evolution of consciousness in all of its aspects. Rather than being based on the physical movements of the earth, sun and planets, it charts the changing spiritual energies of cosmic evolution. Unlike the world's many astrological systems, the Mayan Calendar is not based on the Earth's precession or positions of stars.

The Mayan Calendar is associated with nine creation cycles, which represent nine levels of consciousness or Underworlds as symbolized by the Mayan pyramids. This pyramidal structure of consciousness development can explain things as disparate as the common origin of world religions and also that time seems to be moving faster. Time, in fact is speeding up as we transition from the materialist Planetary Underworld that still governs us to a new and Higher Frequency of Consciousness for the final Universal level of Conscious Enlightenment. The Mayan calendar is thus a spiritual device that enables a greater understanding of the nature of conscious evolution throughout human history and the concrete steps we can take to align ourselves with this cosmic evolution toward Enlightenment.

The Classical Mayan people celebrated their birthdays every 360 days, or their tzolkin days every 260 days. Their chronology, the Long Count, was not based on the physical solar year, but on spiritual cycles with an entirely different meaning. Even if the tzolkin count that was used in ancient Mesoamerica was unique in the world, we do know that all of the ancient high cultures of the world used a Holy 360-day "year" in parallel with the astronomic 365-day calendar that they used for agricultural purposes. To follow a 365-day calendar was obviously necessary for providing their means of living, but not for the prophecies. It's not very surprising that the evolution of human consciousness does not follow the 365-day year: If matter, but not consciousness, is an illusion, why then would the evolution of consciousness depend on the movements of matter, such as for instance the revolution of the earth around the sun in 365 days? Since today people in general have ceased to follow the 360-day year and have accepted the dominance of the Gregorian Calendar. Many spiritual seekers are beginning to realize the value of following a tun-based calendar as a guide to true Enlightenment.


Depending on their needs, the Mayans used different calendars or some combination of two calendars to record each event. Their Long Count calendar expires in 2012, leading some to believe that it coincides with an apocalyptic event, but most of us that are educated on the subject, know that this just represents the end of one age and the entrance into the next.

The Mayan year, beginning always on July 26 is called a tun consisting of 360 days (called kin) It was at the beginning of each new tun or katun (20 tuns) that the priests would gather to make prophecies for the coming "age." Hence the Mayan concept of "ages" was based on the tun. 5 or 6 epagomenals are called Vayeb , weeks called Uinals are 13 kin long and numbered perpetually over a span of 20 days, named in the chart down below. The months, which are 20 days long, but numbered from 0 to 19 are also listed down below and the Vayeb intercalaries (not listed) are included in this.

Time is reckoned in units of 20. Thus 20 tun make a katun, 20 katun make a baktun, 20 baktun make a pictun, 20 pictun make a calabtun, 20 calabtun make a kinchiltun, and 20 kinchiltun make an Alautun, which latter amounts to 163,040,000 years. The present cycle began in the year 3114 B.C. and ends in 2012 A.D. It is the final part of a 26,000 year cycle (a zodiacal age) and (according to José Argüelles) June 20, 1986 was "10 Ben, 9 Kayeb, 12.18.14.18.9, meaning baktun 12, katun 18, year 14, vinal 18, day 9 and kin 1862599 (number of days elapsed from the initiation point of the Great Cycle)."The "Harmonic Convergence" of 1987 was the beginning of the end of the last five years of the Hell cycle. 1992 is the beginning of the final 20-year countdown to the completion of the 26,000 year galactic cycle. (The time it takes the sun to circle the Pleiades). One of the stars in the Pleiades is called "Maya." It is also interesting to note that 1992 was the year that we left the 3rd dimension and entered into the 4th dimension.

Everything in the Cosmos is related, and the same is true for the calendrical cycles that the Mayans were using to describe its evolution and changing energies. The various calendrical cycles of the Mayans are related much as the cogs on the cogwheels in a machine. In principle, this is not very different from the Gregorian way of counting time, where not only the date in the month changes every day, but also the weekday. In the same way, as the day sign changes in the sacred Mayan 260-day calendar, so does the number of that day and its place in the longer Heavens and Underworlds. A given day is hence defined with symbols that belong to many different calendars or counts. What makes the Mayan calendar fundamentally different from other calendars in existence is that its various symbols are reflective of the evolution of consciousness in the cosmos.

The life of the Mayans revolved around the concept of time. Priests were consulted on civil, agricultural and religious matters. Their advice would be derived from readings of the sacred calendars. Time was of such importance that children were even named after the date on which they were born. In order to decipher these different calendars, you'll first need a brief lesson in Mayan math. The Mayans created their own math system. It used only three symbols - a shell-shaped glyph for zero, a dot for one and a bar for five to represent units from zero to 19.

0	1	2	3	4
	•	••	•••	••••
5	6	7	8	9
=====	•	••	•••	••••
10	11	12	13	14
=====	•	••	•••	••••
15	16	17	18	19
=====	•	••	•••	••••

For instance, the number 13 was represented as three dots and two bars. One dot equalled one unit, while one bar equalled five units. A shell symbol signified zero. In a system similar to the one we use now, the Mayans used place values to designate large numbers. However, the similarities between math systems end there. Mayan's place values are vertical, whereas ours are horizontal. For instance, we write the number 27 horizontally, the number two, then the number seven to the right of it. The Mayans, however, would write 27 vertically, their symbol for seven (a line representing five units with two dots over it) would be on the bottom and the symbol for 20 (a dot on the line above) would be directly over it. The same applies for other numbers, like 29.

Numbers held great significance in the Mayan culture. For example, the number 20 signifies the number of digits a person has, 10 fingers and 10 toes. The number 13 refers to the major joints in the human body where it's believed disease and illness enter and attack: one neck, two shoulders, two elbows, two wrists, two hips, two knees and two ankles. The number 13 also represented the levels of heaven where sacred lords ruled the Earth. It's these two numbers, 20 and 13, that are used to make up the Tzolkin calendar, the first calendar used by

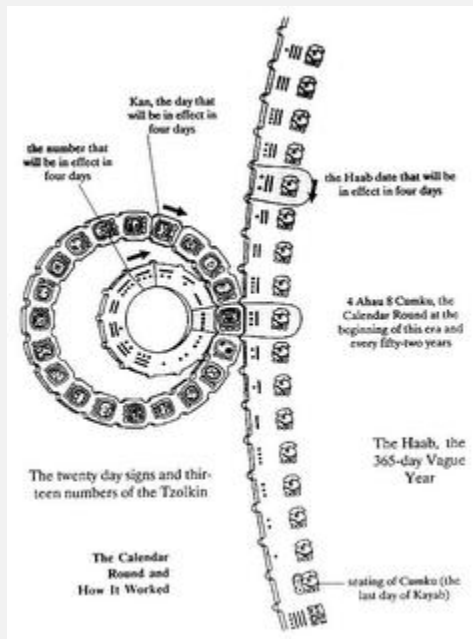
the Mayans. Zero was an advanced concept in those days, something that the Romans were not aware of. Yet the Mayans were comfortable enough with it to use a shell as its symbol. They discovered and used the zero as well as a vigesimal positioning system, similar to the decimal positioning system we use today. The Mayans also used metrical calculation and place numeration, which were very clever for a culture that didn't use the wheel. Although they had many calendars, they marked the passage of time with three cycles that ran in parallel.

The Mayan calendar uses three different dating systems in parallel, the Long Count, the Tzolkin (divine calendar), and the Haab (civil calendar). Of these, only the Haab has a direct relationship to the length of the year.

A typical Mayan date looks like this: 12.18.16.2.6, 3 Cimi 4 Zotz.

12.18.16.2.6 is the Long Count date.

3 Cimi is the Tzolkin date - 4 Zotz is the Haab date.



The essentials of the Mayan calendric system are based upon a system which had been in common use throughout the region, dating back to at least the 6th century BC. It shares many aspects with calendars employed by other earlier Mesoamerican civilizations, such as the Zapotec and Olmec, also later ones such as the Mixtec and Aztec calendars. The Mayan calendar was adopted by the other Mesoamerican nations, such as the Aztecs and the Toltec, which adopted the mechanics of the calendar unaltered but changed the names of the days of the week and the months.

Only the Haab has a direct relationship to the length of the year. The most commonly understood Mayan calendar is called the Tzolkin. This calendar divides a year or cycle into twenty sections of thirteen days, each with an associated spiritual figure. The year is 260 days, some believe it is related to the length of pregnancy, the length of time between planting crops and harvesting, or, more than likely, that it is due to the importance of the numbers 13 and 20 in Mayan culture. The ancient Mayans were outstanding astronomers and sought to relate the planetary cycles, such as those of Venus, Mercury and Jupiter to their sacred 260-day calendar. They did not regard the Sacred Calendar as based on any astronomical cycle. Instead, the Mayans were interested in how the astronomical cycles were related to the Sacred

Calendar. This they regarded as the most basic rhythm of the cosmos that had been given to them by the gods.

















The Mayan calendar is a window into an ancient world, one that Western authorities long and mistakenly believed was a primitive and barbaric place. As investigations into early Mesoamerican culture have continued, archaeologists and anthropologists continue to turn up evidence of highly advanced societies that rivalled or surpassed their Western contemporaries. The complexity of the Mayan calendar tells experts quite a bit about their culture, for example, that they were astronomers. It also suggests an awareness of societal longevity; the Long Count clearly shows that the Mayans knew they would be around for a while. Pre-Columbian Mesoamerica remains shrouded in mystery, no matter how many temples are discovered or artefacts are found.

The Tzolkin

The tzolkin is the name for the Mayan Sacred Round or 260-day calendar. It's broken down into 20 day increments referred to as "solar tribes". Each day is assigned a different astrological sign. Additionally, each day is assigned a "sacred number" between 1 and 13 that correlates to the cycle of the moon and imparts even more characteristics to each sign's personality traits. The days/signs and numbers work together like cogs in a machine to create 260 distinct character combinations. The word tzolkin means "the distribution of the days". The tzolkin calendar combines twenty day names with the thirteen numbers of the trecena cycle to produce 260 unique days. It is used to determine the time of religious and ceremonial events and for divination. Each successive day is numbered from 1 up to 13 and then starting again at 1. Separately from this, every day is given a name in sequence from a list of 20 day names. Some systems started the count with 1 Imix', followed by 2 Ik', 3 Ak'b'al, etc. up to 13 B'en. The trecena day numbers then start again at 1 while the named-day sequence continues onwards, so the next days in the sequence are 1 Ix, 2 Men, 3 K'ib', 4 Kab'an, 5 Etz'nab', 6 Kawak, and 7 Ajaw. With all twenty named days used, these now began to repeat the cycle while the number sequence continues, so the next day after 7 Ajaw is 8 Imix'. The repetition of these interlocking 13- and 20-day cycles therefore takes 260 days to complete (that is, for every possible combination of number/named day to occur once). It works in a similar manner to our named days of the week and their date within each month. So you might have 5-Chikchan (like our Sunday the 5th) followed by 6-Kimi (as we would have Monday the 6th). Their use of the vigesimal (base 20) numbering system probably relates to fingers and toes. The 13 nicely fits the growth phase of the moon which isn't visible when new and appears full for two days on end, thus appearing to have a 13 day growth cycle. Mayan astrology is based on the Mayan Calendar rather than the Gregorian Calendar that guides western astrology.

The calendar that we are most concerned with for astrological purposes is the Tzolkin. Also referred to as the Sacred Round, the Tzolkin (pronounced zol-keen or chol-kin) calendar is a perpetual calendar system. It's not based on the movement of the planetary systems, but rather on the intangible energy of the cosmos and the greater evolution of creation. The Mayans believed that in order to have harmony in your life, you had to understand and align yourself with this universal energy.

It's easy to see the significance the Mayans put in the Tzolkin Calendar. For example, they believed that the date of your birth determines the characteristics you'll show in your personality, much like some people believe your astrological sign does today. Holy men also schedule certain events throughout the year based on the Tzolkin Calendar. At the beginning of each

Imix	Waterlily	
Ik'	Wind	
Ak'b'al	Night	
K'an	Corn	
Chikchan	Snake	
Kimi	Death Head	
Manik'	Hand	
Lamat	Venus	
Muluk	Water	
Ok	Dog	
Chuwen	Frog	
Eb'	Skull	
B'en	Corn Stalk	
Ix	Jaguar	
Men	Eagle	
K'ib'	Shell	
Kab'an	Earth	
Etz'nab'	Flint	
Kawak	Storm Cloud	
Ahaw	Lord	

uinal (period of 20 days), a shaman would count forward to determine when religious and ceremonial events would occur. He would then select the dates that would be the most prosperous or luckiest for the community.

The Tzolkin was linked to the milpa, a system used by the Mayans to cultivate corn. The main reason for this is the importance corn cultivation had for this culture, since it was the only cereal they domesticated. The current Mayan system for corn cultivation is basically the same that has been used for 3000 years. Its main activities are to fell the big trees, burn them along with the weeds and their seeds, plant the corn, then weed the plants as they grow. When the ears are mature the stalks are bent and the corn is left to dry in the field. It is then harvested and after a few years, the corn field is moved to a new location. This practice of slash and burn agriculture has been called la milpa, which is an Aztec word for "corn field". This activity is still very important to today's Mayan population who continue to perform it in the same manner as their forefathers. As the Mayan population grew, the need for more food became indispensable and the attempts to obtain a more abundant crop started. This was done mainly by selecting different corn varieties and by carefully coordinating the dates of cultivation with the rain cycle. The time count used for corn cultivation must have been based on the initial Mayan numeration which consisted of the number of fingers on both hands and feet or the number 20, a kal. The observation that 13 kal (260 days) were needed from the choosing of the location for the milpa until the burning of the felled forest patch and equal number of kal elapsed from the planting, through the growth and harvest until the corn was stored, gave origin to the first Mayan Calendar.

One Tzolkin cycle was related to the preparation of the land and a second Tzolkin cycle was directly related to the growing and harvesting of the corn. From a religious point of view, this 13 kal time period gave place first to the deification of number 13 and second, to the creation of the thirteen day time period called Oxlahunkin which then became the base of the Tzolkin calendar and thus a 260 day milpa cycle ended up being made of 20 thirteen day periods.

In addition to its role as a contact to the ancestors, the Mayans used the calendar for celebrating significant energy shifts. At these times, the shaman kings would make prophecies about the time ahead in the new energy. A base of knowledge had been created as to how the energies would shift according to the calendar. The Tzolkin date is a combination of two "week" lengths. While our calendar uses a single week of seven days, the Mayan Calendar used two different lengths of week:

- * a numbered week of 13 days, the days were numbered from 1 to 13
- * a named week of 20 days, in which the names of the days were:

<<< Mayan Day Names & Approximate Meanings

As the named week is 20 days and the smallest Long Count digit is 20 days, there is synchrony between the two; if, for example, the last digit of today's Long Count is 0, today must be Ahaw; if it is 6, it must be Kimi. Since the numbered and the named week were both "weeks," each of their name/number changes daily. Therefore, the day after 3 Kimi is not 4 Kimi, but 4 Manik, and the day after that, 5 Lamat. The next time Kimi rolls around, 20 days later, it will be 10 Kimi instead of 3 Kimi. The next 3 Kimi will not occur until 260 (or 13 x 20) days have passed. This 260-day cycle also had good-luck or bad-luck associations connected with each day, and for this reason, it became known as the "divinatory year."

The Haab

In addition to the Tzolkin cycle, a connected solar cycle called the Haab was used which was practical for agricultural purposes even though it doesn't have a set starting point in the solar year. Despite its myriad of functions, the Tzolkin calendar still couldn't measure a solar year, the time it takes for the sun to make a complete cycle. The Mayans needed a more accurate calendar to track the length of time that we regard as a full year. Hence, the development of the Haab. This agricultural calendar divided the year into 18 months with 20 days each, and an additional five unnamed days at the end of the year (a period of apprehension and bad luck named Uayeb).

Pop	Mat	
Wo'	??	
Sip	??	
Sotz'	Bat	
Sek	??	
Xul	Dog	
Yaxk'in'	New Sun	
Mol	Water	
Ch'en	Black ??	
Yax	Green ??	
Zak'	White ??	
Keh	Red ??	
Mak	??	
K'ank'in	??	
Muwan'	Owl	
Pax	??	
K'ayab	Turtle	
Kumk'u	??	
Wayeb'		

The calendars were used in conjunction, so that any specific day identified by both the Tzolkin and Haab methods would only occur once in a 52 year cycle. Instead of counting the years in number, this conjunction is believed to have been used as an accurate description of a date. The civil calendar or Haab of 365 days is often referred to as the Vague Year. The difference of one fourth of a day in regard to the astronomical calendar makes a periodical correction necessary. Within this calendar runs the Tun year, 360 days long, which was used for calendric calculations. This calendar's primary purpose was to keep track of the seasons, for seasonal and solar events would occur on roughly the same day of each year.

The Mayans were aware of the annual quarter day discrepancy, but never did anything about it. This meant that the seasons moved with respect to the calendar year by a quarter day each year, so that the calendar months named after particular seasons no longer corresponded to these seasons after a few centuries. The Haab is equivalent to the wandering 365-day year of the ancient Egyptians.

These two independently running calendars coincide every 52 years. The Tzolkin and the Haab ran concurrently, like intermeshed cog-wheels, and to return to any given date, 52 years or 18,980 days, would have to elapse (because both 365×52 and $260 \times 73 = 18,980$). In other words, the Tzolkin would make 73 revolutions and the Haab 52, so that every 52 calendar years of 365 days one would return to the same date. A complete date in this 52-year cycle might be, for example, 2 1k 0 Pop (2 1k being the position of the day in the Tzolkin, 0 Pop the position in the Haab). Fifty-two years would pass before another 2 1k 0 Pop date returned. It is estimated that the Haab was first used around 550 BC with a starting point of the winter solstice.

The Haab month names are known today by their corresponding names in colonial-era Yukatek Maya, as transcribed by 16th century sources. Phonemic analyses of Haab glyph names in pre-Columbian Mayan inscriptions have demonstrated that the names for these twenty-day periods varied considerably from region to region and from period to period, reflecting differences in the base languages and usage in the Classic and Post classic eras predating their recording by Spanish sources.

<<< Month Names and Approximate Meanings

Each day in the Haab calendar was identified by a day number in the month followed by the name of the month. Day numbers began with a glyph translated as the "seating of" a named month, which is usually regarded as day 0 of that month, although a minority treat it as day 20 of the month preceding the named month. In the latter case, the seating of Pop is day 5 of Wayeb. For the majority, the first day of the year was 0 Pop (the seating of Pop). This was followed by 1 Pop, 2 Pop as far as 19 Pop then 0 Wo, 1 Wo and so on.

In contrast to the Tzolkin dates, the Haab month names changed every 20 days instead of daily; so the day after 4 Zotz would be 5 Zotz, followed by 6 Zotz ... up to 19 Zotz, which is followed by 0 Tzec. The days of the month were numbered from 0 to 19. This use of a 0th day of the month in a civil calendar is unique to the Mayan system. The years of the Haab calendar are not counted. The smallest number that can be divided evenly by 260 and 365 is 18,980, or 365×52 ; this was known as the Calendar Round. If a day is, for example, "4 Ahau 8 Cumku," the next day falling on "4 Ahau 8 Cumku" would be 18,980 days or about 52 years later.

Although there were only 365 days in the Haab year, the Mayans were aware that a year is slightly longer than 365 days. In fact, many of the month-names are associated with the seasons. Yaxkin, for example, means "new or strong sun" and, at the beginning of the Long Count.¹ Yaxkin was the day after the winter solstice, when the sun starts to shine for a longer period of time and higher in the sky. When the Long Count was put into motion, it was started at 7.13.0.0.0, and 0 Yaxkin corresponded with Midwinter Day, as it did at 13.0.0.0.0 back in 3114 B.C.E. The available evidence indicates that the Mayans estimated that a 365-day year precessed through all the seasons twice in 7.13.0.0.0 or 1,101,600 days. We can therefore derive a value for the Mayan estimate of the year by dividing 1,101,600 by 365, subtracting 2, and taking that number and dividing 1,101,600 by the result, which gives us an answer of 365.242036 days, which is slightly more accurate than the 365.2425 days of the Gregorian Calendar. The Mayans estimated that a 365-day year precessed through all the seasons twice in 7.13.0.0.0 days. These numbers are only accurate to 2-3 digits.

The Haab Calendar is very similar to the Gregorian Calendar that we use today. It's based on the cycle of the sun and was used for agricultural, economic and accounting activities. Much like the Tzolkin calendar, it's also comprised of uinals (periods of 20 days) and each day has its own hieroglyph and number. However, instead of using 13 uinals for 260 days, the Haab calendar has 18 uinals, giving it 360 days. Mayan astronomers noticed that 360 days wasn't enough time for the sun to make it through a full solar cycle. They argued that the calendar should follow the cycle as closely as possible for accuracy. But Mayan mathematicians disagreed. They wanted to keep things simple, in increments of 20, just like their math system. The astronomers and mathematicians finally agreed on the 18 uinals, with five "nameless days" called the wayeb.

The Wayeb

The five nameless days at the end of the calendar, called Wayeb (uayeb), were considered to be unlucky and dangerous. During Wayeb, portals between the mortal realm and the Underworld dissolved. It was known as "days without names" or "days without souls". The Mayans believed the gods rested during that time, leaving the Earth unprotected.

The Mayans performed ceremonies and rituals during the wayeb, hoping that the gods would return once again. These were observed as days of prayer and mourning. Fires were extinguished and the population refrained from eating hot food. People avoided leaving their houses and washing or combing their hair. Anyone born on those days was "doomed to a miserable life. To the eighteen regular months the Mayans appended this special five-day month called Wayeb. Thus the days were counted: One Imix, Zero Pohp, Two Ik, One Pohp. When reaching the thirteenth day, the next day was Thirteen Ben, Twelve Pohp; then One Ix, Thirteen Pohp, Two Men, Fourteen Pohp. After Seven Ahaw, Nineteen Pohp, the next day was Eight Imix, Zero Wo.

Calendar Round

The Mayans usually described a date by specifying its position in both the Tzolkin and the Haab calendars, this alignment of the Sacred Round and the Vague Year generates the joint cycle called the Calendar Round. While this calendar was longer than the Tzolkin, the Mayans wanted to create a calendar that would record even more time. For this reason, the Tzolkin and Haab calendars were combined to form the Calendar Round. In the Calendar Round, the 260 days of the Tzolkin calendar are paired with the 360 days and five nameless days (Wayeb) of the Haab calendar. The two calendars are matched the same way the Tzolkin day names and numbers are. This gives the Calendar Round 18,980 unique days, a time period of around 52 years. At the time, the Calendar Round was the longest calendar in Mesoamerica. Contemporary historians, however, wished to record Mayan history for generations to come. To accomplish that, they needed a calendar that would take them through hundreds, even thousands, of years. In these two wheels, the smallest with 260 teeth has on each one the name of the 260 days of the Tzolkin year and the largest with 365 teeth has in their interstice the names of each of the positions of the Haab year. Since the Haab year always begins on a date 0 Pop and the Tzolkin year can only begin in a day called Ik, Manik, Eb or Caban, when 2 Ik is placed in conjunction with 0 Pop and wheel A is rotated clockwise wheel B will rotate counter clockwise and the name of the Tzolkin day that corresponds to each Haab position falls into place. Neither the Tzolkin nor the Haab system numbered the years. The combination of a Tzolkin date and a Haab date was enough to identify a date to most people's satisfaction, as such a combination did not occur again for another 52 years, above general life expectancy.

The end of the Calendar Round was a period of public panic, unrest and bad luck among the Mayans, as they waited in expectation to see if the gods would grant them another cycle of 52 years. It was expected that the world would end at the completion of a 52-year cycle. At this time, among the Mexicans in the Valley of Mexico, all fires were extinguished, pregnant women were locked up lest they be turned into wild animals. Children were pinched to keep them awake so that they would not turn into mice. All pottery was broken in preparation for the end of the world. In the event that the gods decided to grant man another 52 years of life on earth, however, a night time ceremony was held in which the populace followed the priests through the darkness over a causeway to the top of an old extinct volcano that rises abruptly from the floor of the basin of Mexico, known today as the Hill of the Star, the hill above Ixtapalapa. There, with all eyes on the stars, they awaited the passage of the Pleiades across the centre of the heavens, which would announce the continuation of the world for another 52 years. When the precise moment came, a victim was quickly sacrificed. This was known as the New Fire Ceremony among the Mexicans. This same completion and renewal of each 52-year cycle was recognized by all Mesoamericans. When the Pleiades crossed the horizon on 4 Ahau 8 Cumku, they knew the world had been granted another 52-year extension.

Some time afterwards the Mayans started to notice the time it took the Sun to complete its yearly cycle and the length of it was established in 28 thirteen-day periods which added up to 364 days, a length that did not adjust exactly to the cycle. We suppose that the astronomers and the mathematicians had different opinions and while the former held up that the exact measure of the cycle should be used the latter insisted in having a time period as close as possible to the real one that would make calculations simple, that is, a multiple of 20. Finally they agreed to create a 360 day year for calendric calculations they called the Tun. In this calendar, the Wayeb were placed just before the beginning of the astronomical year. The Tzolkin and the Haab were then coordinated and this gave place to the calendar round.

Mesoamerican Long Count Calendar

For periods longer than 52 years, an additional calendar method was developed called the Long Count. A different form of calendar that was used to track longer periods of time, and for the inscription of calendar dates (identifying when one event occurred in relation to others). The Long Count is based upon the number of elapsed days since a mythological starting-point.

By its linear nature, the Long Count was capable of being extended to refer to any date far into the future (or past). This calendar involved the use of a positional notation system, in which each position signified an increasing multiple of the number of days. The Mayan numeral system was essentially vigesimal (i.e., base-20), and each unit of a given position represented 20 times the unit of the position which preceded it. An important exception was made for the second-order place value, which instead represented 18×20 , or 360 days, more closely approximating the solar year than would $20 \times 20 = 400$ days. It should be noted however that the cycles of the Long Count are independent of the solar year. Many Mayan Long Count inscriptions are supplemented by a Lunar Series, which provides information on the lunar phase and position of the Moon in a half-yearly cycle of lunations.

A 584-day Venus cycle was also maintained, which tracked the heliacal risings of Venus as the morning and evening stars. Many events in this cycle were seen as being astrologically inauspicious and baleful. Occasionally, warfare was astrologically timed to coincide with stages in this cycle.

With the development of the place-notational Long Count calendar (believed to have been inherited from other Mesoamerican cultures), the Mayans had an elegant system with which events could be recorded in a linear relationship to one another, and also with respect to the calendar ("linear time") itself. In theory, this system could readily be extended to delineate any length of time desired, by simply adding to the number of higher-order place markers used (and thereby generating an ever-increasing sequence of day-multiples, each day in the sequence uniquely identified by its Long Count number). In practice, most Mayan Long Count inscriptions confine themselves to noting only the first five coefficients in this system (a baktun-count), since this was more than adequate to express any historical or current date (20 baktuns cover 7,885 solar years). Even so, example inscriptions exist which noted or implied lengthier sequences, indicating that the Mayans well understood a linear (past-present-future) conception of time. This is often found carved on Mayan monuments.

A typical Mayan date looks like this:

12.18.16.2.6, 3 Cimi 4 Zotz

4 Zotz is the Haab date.

3 Cimi is the Tzolkin date.

12.18.16.2.6 is the Long Count date.

The basic unit is the kin (day) is the last component of the Long Count.

The kin, tun, and katun are numbered from 0 to 19.

The unial are numbered from 0 to 17.

The baktun are numbered from 1 to 13.

The Long Count is a great cycle of 13 baktuns (roughly 5,126 years), where the use of 13 may again represent the growth of the moon from new to full. The current cycle began on 13.0.0.0.0 4 Ahau 8 Cumku which correlates to Aug. 13, 3114 BC.

The Mayans used special glyphs to indicate time periods, the kin represented one day. Winal are periods of 20-days which we now call a month. The Tun was a year of 360 days and the Katun was a time period of 20 years of 360 days each. As we will see later, the Katun ending was a special time period celebrated by the Mayans. It has its parallel in the modern world, the period of time which we call a decade. The Mayans also counted 400-year periods called Baktuns. The Mayans used these time periods in a special day count which is now called the Long count.

Today a typical long count date is written thus: 9.14.12.2.17.

This represents 9 baktuns, 14 katuns, 12 tuns, 2 winal and 17 kins.

Table of Long Count Units

Days= Long Count period Long Count period Approx solar years

1 = 1 K'in

20 = 20 K'in = 1 Winal 0.0548

360 = 18 Winal = 1 Tun 0.985

7,200 = 20 Tun = 1 K'atun 19.7

144,000 = 20 K'atun = 1 B'ak'tun 394.3

Although they are not part of the Long Count, the Mayans had calculated larger time spans that were rarely used:

1 pictun = 20 baktun = 2,880,000 days = approx. 7885 years

1 calabtun = 20 pictun = 57,600,000 days = approx. 158,000 years

1 kinchiltun = 20 calabtun = 1,152,000,000 days = approx. 3 million years

1 alautun = 20 kinchiltun = 23,040,000,000 days = approx. 63 million years

Since the Long Count dates are unambiguous, the Long Count was particularly well suited to use on monuments. The monumental inscriptions would not only include the 5 digits of the Long Count, but would also include the two tzolkin characters followed by the two haab characters. December 21, 2012 is the first day of the 14th baktun therefore it marks the entrance into the New Age.

Logically, the first date in the Long Count should be 0.0.0.0.0, but as the baktun (the first component) are numbered from 1 to 13 rather than 0 to 12, this first date is actually written 13.0.0.0.0.

The authorities disagree on what 13.0.0.0.0 corresponds to in our calendar. Here's three possible equivalences:

13.0.0.0.0 = 8 Sep 3114 BC (Julian) = 13 Aug 3114 BC (Gregorian)

13.0.0.0.0 = 6 Sep 3114 BC (Julian) = 11 Aug 3114 BC (Gregorian)

13.0.0.0.0 = 11 Nov 3374 BC (Julian) = 15 Oct 3374 BC (Gregorian)

Assuming one of the first two equivalences, the Long Count will again reach 13.0.0.0.0 on 21 or 23 December AD 2012 . The date 13.0.0.0.0 may have been the Mayans idea of the date of the creation of the world.

To find the Long Count date that corresponds with any Gregorian date, you'll need to count the days from the beginning of the last Great Cycle, but determining when the last cycle began and matching that up to a Gregorian date is quite a feat. English anthropologist Sir Eric Thompson looked to the Spanish Inquisition to calculate the Mayan-to-Gregorian date conversion, known as the Thompson Correlation.

Events that occurred during the Inquisition were recorded on both the Mayan Long Count Calendar and the Gregorian Calendar. Scholars then gathered dates that matched on both calendars and compared them to the Dresden Codex, one of four Mayan documents that survived the Inquisition. This codex confirmed the date long thought by Thompson to be the beginning of the current Great Cycle (Aug. 13, 3114 B.C.)

The codices that survived the Spanish conquest and the burning of documents by Bishop Diego de Landa, at Mani, Yucatán, México are used today to corroborate the calculations written in those codices and to calculate the dates of the Mayan stelae and lintels. This initiates on the date the Sun passes perpendicularly through the zenith, a day between the 24 - 26 of July each year. It's calculated to be 365.2420 days long and was used to fix the position of the solstices, the equinoxes, the synodic revolutions of the planets in our solar system, the eclipse nodes and other celestial phenomena. This calendar must have been the base of reference used by the Mayan astronomers/priests for their astronomical calculations which were made with a minimum of 4 decimals.

In recent years, as the conclusion of the Long Count calendar approaches on Dec. 12, 2012, doomsday theorists have predicted the worst. That Gregorian date is denoted as 13.0.0.0.0 on the Long Count, signalling the end of the current Great Cycle. However, Mayan scholars and natives dismiss the apocalyptic theories, noting that end of the calendar would be regarded as a time of celebration, much like modern-day New Year festivities. There are also no Mayan inscriptions or writings that predict the end of the world when the Great Cycle concludes. For the first time in around 25,800 years, the sun will align with the centre of the Milky Way galaxy.

Lunar Series

A lunar series generally is written as five glyphs that provide information about the current lunation, the number of the lunation in a series of six, the current ruling lunar deity and the length of the current lunation. The Mayans counted the number of days in the current lunation. They started with zero on the first night they saw the thin crescent moon.

The Mayans counted the lunation in a cycle of six, numbered zero through 5. Each one was ruled by one of the six Lunar Deities. This was written as two glyphs: a glyph for the completed lunation in the lunar count with a coefficient of 0 through 5 and a glyph for the lunar deity that ruled the current lunation. The Quirigua Stela E (9.17.0.0.0) is lunar deity 2 and that most other inscriptions use this same moon number. It's an interesting date because it was a Katun completion and a solar eclipse was visible in the Mayan area two days later on the first unlucky day of Wayeb. The length of the lunar month is 29.53059 days so if you count the number of days in a lunation it will be either 29 or 30 days. The Mayans wrote whether the lunar month was 29 or 30 days as two glyphs: a glyph for lunation length followed by either a glyph made up of a moon glyph over a bundle with a suffix of 19 for a 29 day lunation or a moon glyph with a suffix of 10 for a 30 day lunation.

Short Count

In the kingdoms of Post classic Yucatán, the linear Long Count notation fell into disuse and gave way to a cyclical Short Count of 13 katuns (or 260 tuns), in which each katun was named after its concluding day, Ahau (Lord). 1 Imix was selected as the recurrent 'first day' of the cycle, corresponding to 1 Cipactli in the Aztec day count. The cycle was counted from katun 11 Ahau to katun 13 Ahau, with the coefficients of the katuns' concluding days running in the order 11 – 9 – 7 – 5 – 3 – 1 – 12 – 10 – 8 – 6 – 4 – 2 – 13 Ahau (since a division of 20×360 days by 13 falls 2 days short). The concluding day 13 Ahau was followed by the re-entering first day 1 Imix.

Venus Cycle

Another important calendar for the Mayans was the Venus cycle. The Mayan kings had skilled astronomers, who could calculate the Venus cycle with great accuracy. There are six pages in the Post classic Dresden Codex devoted to the accurate calculation of the heliacal rising of Venus.

The Mayans were able to achieve such accuracy by careful observation over many years. There are various theories as to why the Venus cycle was especially important for the Mayans, including the belief that it was associated with war and used it to divine good times (called electional astrology) for coronations and war. Mayan rulers planned for wars to begin when Venus rose.

Sacred Geometry and the Mayan Calendar

The Mayan calendar is a portal to intuition. The ancient Mayan civilization is revered for the way that its members lived in balance with nature and the cosmos. From all the evidence left by the Mayans, their architecture, land forming, irrigation works, massive landscaping and their surviving books, we can see that they paid attention to their intuition for more than three thousand years. With Mayan help, we now have a method for discerning what Creation has intended, and continues to intend, day by day, epic by epic. Over the last 16.4 billion years, Creation has followed a particular repeating pattern of 13 different intentions. These intentions have brought about various physical effects and events in Creation, and have molded all human history.

The pattern displayed by the Mayan calendar is built upon a particular ratio, 13 : 20. These proportions are the true basis of all sacred geometry. This is in no way an exact number system, but a general pattern that Creation naturally follows. Our consciousness is based on this ratio. For example, the concepts of past, present and future; male, female and child; being, doing and having; body, mind and spirit; start, change and stop; gain, loss and status quo-this ratio permeates everything we experience. All the proportions of your body are laid out in the ratio of one-third to two-thirds; the ratio of land mass to surface covered with water on our very planet is one-third land, two-thirds water - everything in our experience is set up on the ratio, or the relationship, of one-third to two-thirds. Thirteen is very nearly two-thirds of 20. The Fibonacci sequence (0, 1, 1, 2, 3, 5, 8, 13, 21, etc.) closely follows the Mayan calendar ratios.

The Mayans had a very clear understanding that all Creation is divided by the number 13. The Mayan priests and kings had a system of time-keeping for each day. A day was equally divided into 13 sections that we would call hours. Each section was divided into 13 segments that we would call minutes, which were further divided by 13 to create "seconds." Each second was further divided by 13, and divided again and again to infinity. So, each and every moment experienced by a Mayan was divided infinitely by the number 13. It is the primary task of Consciousness to become aware of or divide and individuate each and every single particle of creation. When you are operating at a relatively heightened level of consciousness, you are able to see the differences between people, objects and events more easily than when your consciousness is operating at a lower frequency, and things look pretty much the same-or even like just one big mess! The calendar is a 260-day pattern of repeating intentions and aspects throughout all Creation. It is made up of 13 columns and 20 rows of different energies.

Both the Fibonacci sequence (the base pattern of all living forms 0, 1, 1, 2, 3, 5, 8, 13, 21) and the binary sequence (the base formula for all atomic structures, and computers, of course) can be overlaid on the Mayan Calendar.

The Dreamspell / Thirteen Moon Calendar

Today there seems to be two different calendar systems that are presenting themselves as Mayan alternatives to the Gregorian Calendar. One of them is the so-called Dreamspell/Thirteen Moon Calendar and the other is the traditional Mayan Calendar system, which revolves around the Sacred Calendar that is still in use in certain parts of Guatemala. As we are approaching the Oneness Celebration and the ensuing Return of the Calendar of Quetzalcoatl it is becoming all the more important to discuss the differences between these two calendars.

In some countries, the Dreamspell Calendar is so dominating that few will even know that it differs in significant and profound ways from the traditional Mayan Calendar. This is not the least because Dreamspell teachers will often not bring up the differences, but rather portray the Dreamspell as identical with the Mayan Calendar or as a modernized version of the Mayan Calendar. On the technical level there are however some very significant differences between the Dreamspell and the traditional Mayan Calendar:

- 1]** The Dreamspell/Thirteen Moon Calendar makes jumps on certain days. One very notable such jump is at the leap day on February 29 every four years. The Traditional Sacred Calendar however never makes any jumps and is perfectly regular. It follows the uninterrupted flow of divine creation and assigns a Sacred energy of time to every day. Every day, without exception, has a sign and a number associated with it. The idea that there would be days without an energy in the Sacred Calendar seems very alien to Mayan day-keepers and it is not easy to interpret what this would mean.
- 2]** The Thirteen Moon Calendar similarly makes a jump every year on July 26. This is in contrast to the traditional Mayan way of counting moons, where the durations of months alternate between 29 and 30 days. These were followed without interruption of the Traditional Mayan Moon Calendar and was a reflection of the phases of the moon. The traditional Mayan way of counting months is synchronized with the natural female cycles of menstruation, ovulation and gestation, while this is not true for either the Dreamspell Calendar or the Gregorian Calendar. While modern doctors often claim that the female cycle is 28 days, there is extensive evidence, both mythological and modern statistical, to show that the female cycle is indeed linked to the cycle of the full moon of 29.5 days. Presumably, medicine has throughout the patriarchal era sought to deny this magical link between the female and the full moon and so a fictitious cycle of 28 days has been invented. Neither the Gregorian Calendar with its alternating numbers of days in the month, 28, 30 or 31, nor the Thirteen Moon Calendar is synchronized with the female cycles and both of them seems to deny the link between the female and the full moon.
- 3]** The Traditional Sacred Calendar of the Mayans (tzolkin) that is still in use in certain parts of Guatemala is directly linked to the long-term prophetic thirteen baktun calendar called the Long Count. Thus, on a micro scale the Traditional tzolkin reproduces the energies of time of the Long Count. The Dreamspell tzolkin count, on the other hand, which makes an interruption every four years could not have any such direct relationship to the prophetic Long Count. Since it makes jumps on the leap day it will reflect a certain flow of creation for four years only, and after a leap day it will reflect a new flow. The traditional tzolkin instead reflects one and the same ongoing creation process without interruption.
- 4]** The prophetic calendars of the Mayans are based on non-physical cycles. They are non-astronomical cycles based on the inherent creative energies of time itself. The Dreamspell/Thirteen Moon Calendar is instead built around the particular astronomical cycle of our planet around the sun of 365,25 (at the current time 365,2422) days. The Traditional Mayan Calendar system is valid for the whole universe and goes back to the so-called Big Bang about 15 billion years ago when the universe was born and no solar systems with their particular cycles even existed. This is according to modern physicists and the Mayan Calendar alike. Since the Traditional Mayan Calendar is not limited to our own planet or solar system it is not subordinated to its particular astronomical cycles, such as the solar year. It reflects a cosmic process of creation, where our own particular solar system is just a small part. In fact, the Traditional Mayan Calendar system would be equally valid on Mars or Venus or any other planet in the cosmos as it is on earth, despite the fact that the periods of revolution of these planets would be very different from ours. In this, it differs from all other calendars in the world that are geocentric and based on the parameters of our own particular planet. It thus seems that the purpose of the Dreamspell and the Mayan Calendar is very different.

While the Dreamspell Calendar aspires to present a new way of dividing the solar year into months, the traditional calendar describes an ongoing cosmic process of creation that has no interruptions. These differences between the Dreamspell/Thirteen Moon and the Mayan Calendar are too rarely pointed out and debated, with the consequence that it is not always easy for people, especially not those new to Mayan Calendrics, to make an informed choice about what calendar to choose. Yet, of course, what is important are not the technical differences, but the spiritual consequences. The Calendar of Quetzalcoatl needs to provide guidance for the path of humanity towards Enlightenment and in the upcoming turbulent times only such a calendar will serve humanity.

The aspect of the Mayan Calendar system that has survived to the present time and is still used by the modern Mayan communities in highland Guatemala and Oaxaca, Mexico is the uninterrupted use of the Sacred Calendar of 260 days. Mayan day-keepers daily pray to the Creator and perform ceremonies that honour the day signs. Among the living present day Mayans, the 260-day calendar has various roles:

- * To keep track of the energies of the day
- * To calculate birth energies of different individuals
- * To determine the celebration of holidays
- * To base healing practices on
- * For prophecy
- * For divination of individual destinies

The present day Mayans as well as many of the rest of us recognize the genius and importance of these ancient sacred calendars that were created and developed by the amazing and remarkable Mayans so long ago.



[cosmic]