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Recovering the Lost World, A Saturnian Cosmology -- Jno Cook Chapter 18: Pyramids and Henges.

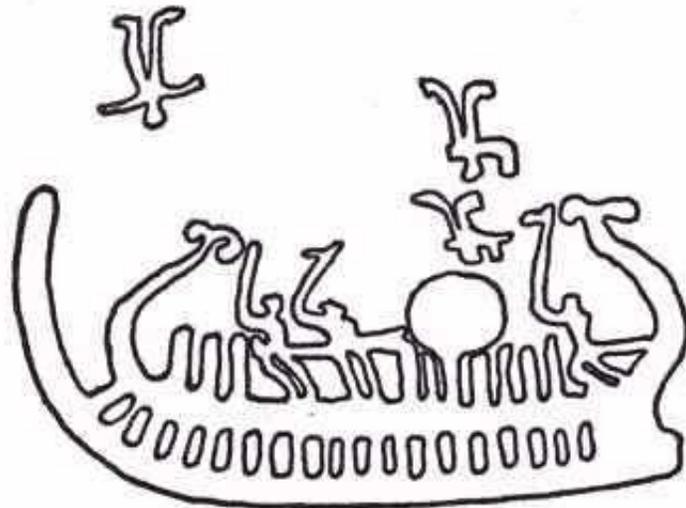


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Horus on His Mountain

This chapter starts (once more) after the flood of 3147 BC, but I will concentrate mostly on human endeavors, although the visits by Mars as Horus need to be recounted before we delve into pyramids and henges.



[Image: Bronze Age (circa 800 BC) petroglyph, Denmark. The "Sun" is carried through the sky on its ship. Note the oars. The boatmen are holding celts aloft. A figure is falling in from above (left). The other two figures are thought to be antlered elk. The composite is based on Mars and its two satellites, but is thought by others to represent Jupiter as the Midnight Sun. Source unknown.]

The first civilizations and the first kingdoms (as I have already noted) appear in Sumer and Egypt at this time -- in fact, within 100 years after the close of the "Era of the Gods." Horus (Mars) makes regular visits over a period of 300 years starting about 3067 BC. Humans start building pyramids after Horus fails to return.

When the Gods prepared to leave after 3147 BC, the "Era of Kings" starts. It starts with the devastating flood which the Mesopotamian *King List* tersely recounts as, "and then the flood swept over."

I originally used a date of 3114 BC as the end of the "Era of the Gods," but a more likely date is 3147 BC. The date of 3114 BC is the beginning of the current era (and the end of the previous era) as retrocalculated from the Maya Long Count chronology. This chronology takes no account of a number of changes in the length of the year, and is thus out of sync with solar years by some 35 years.

The date of 3147 BC, which I will use, is based on the clear intent of the Olmecs in instituting the Long Count in 747 BC. See the chapter "The Maya Calendar," for details on this.

Recovery after the flood was quick -- less than two hundred years in Northern Mesopotamia and much less time in Egypt -- and ushered in the seminal age of the civilizations of remote antiquity. In Mesopotamia and Egypt we see a development of agriculture, the scope of which goes beyond anything seen in the preceding centuries. Writing developed rapidly, and possibly independently, in the two regions. Work started on larger and larger monumental structures, culminating (400 years later) in the giant pyramids of Giza. The expansion of civilization after about 3100 BC seems to be indicated with the sudden elaboration of certain graves -- those of selected individuals, which are generally thought of as rulers by archaeologists. The age of kingdoms has started. The graves of the first pharaohs of Egypt date from the century after the flood. Elaborate graves show up in Mesopotamia at about the same time. [note 1]

Loosened from the grip of Saturn in 3147 BC, Earth and Venus were cast off on nearly identical elliptical orbits, Earth with a year of 240 days and Venus following Saturn's old orbit with a year of somewhat more than 225 days (perhaps 230 to 240 days). In aphelion (the furthest location from the Sun) the orbital path of Venus extended past the orbit of Earth, but Venus came closer to the Sun at perihelion (the closest location to the Sun) than the Earth did.

Mars and Mercury were not released until 80 years after 3147 BC, if we can assume that the very late recollections of the Egyptians, *The Contendings of Horus and Seth*, is correct. At that time Saturn had entered the first of the asteroid belt, and loosened its grip on Mars and Mercury. This late and far-distant release accounts for the very elliptical orbits which these two planets assumed, although almost nothing is known of the orbit of Mercury, except that we can assume that it was nearly identical with the orbit of Mars. Mercury thus frequently swept past the Earth, and continued to do so periodically until 686 BC.

Mercury shows up iconographically in circa 3050 BC (a date which I think is too early), depicted as the sandal carrier of the figure called Narmer on the Palette of Narmer, where Narmer clearly is Mars, that is, Horus, enveloped in a plasma stream from Saturn to Earth. Mercury, as far as we can tell (and verified by the text of the *Chilam Balam*), shows up as a constant companion to Mars. The *Chilam Balam* reads:

"With it descended Bolon Mayel [Nine Fragrances]; sweet was his mouth and the tip of his tongue. Sweet were his brains."

... where "it" is Mars, mentioned a few lines earlier.

Mercury of course, is Thoth of the Egyptians -- Hermes or Apollo of the Greeks, Mercury of the Romans. It is not the Moon, as some current mythologists think, a concept which is based on not allowing Mercury any other place in the solar system of the past except on its current orbit very close to the Sun.

Subsequent to this time period Mercury shows up again periodically, suggesting that the second nodal point of its orbit may have rotated away from Earth's orbit, to return a thousand years later (as Mars did also). Thoth seems to assume a presence again (with Mars) one- or two-hundred years before 1936 BC, where 1936 BC is the start of the time of the destruction of Sodom and Gomorrah. Mercury and Mars appear a third time throughout the 8th and 7th century BC. Mars and Mercury almost universally become identified as celestial twins. Their appearances are at approximately 1130 year intervals.

I became aware of Mercury while sorting out the details of the Maya *Chilam Balam*, where it looked as if Mercury showed up near Earth at the same time as Mars in the 8th and 7th century BC. In the *Chilam Balam* Mercury is recorded as appearing 9 times during the period when Mars also showed 9 times, as indicated by their name prefix "Bolon" (for both Mars and Mercury). At the time I was doing an analysis of the *Chilam Balam* I had already surmised that Mercury would have been one of two planets seen close to Earth in the earlier period of 3067 BC to 2700 BC (the other being Mars, of course). This defines an interval of about 1150 years. I determined the midpoint between the earliest showing in 3067 and the much later first showing in 806 BC with simple arithmetic: such an interval would remain the same for circular orbits.

It is perhaps easier to track the orbit of Mars and, in fact, at a later time it is possible to make some guesses of the orbital parameters from scarce data incorporated into the calendars of Mesoamerica, and to deduce some orbital values from the considerations developed by Patten and Windsor (in *The Mars-Earth Wars* (1996).

Mars's orbit thus initially started much further from the Sun than today (as did Mercury). At aphelion the orbit grazed the edge of the asteroid belt; at perihelion Mars periodically rode over the orbit of Earth or moved past Earth at a relatively close range. Mars first showed up close to Earth probably in circa 3067 BC (80 years after 3147 BC). As I pointed out above, the curious thing about Mercury and Mars is that both in the period directly after 3067 BC and in the 8th and 7th century BC, they show up (or seemed to show) together. [note 2]

The evidence for the orbits of the inner planets after the event of 3147 BC consists of the fact that these orbits represent the conditions most likely to allow the series of interactions which would happen over the next few millennia. See Appendix B, "The Celestial Mechanics," for additional details. Year counts and dates are developed in Appendix A, "Chronology Notes."

The *King List* reads, for the first king after the flood, that "Kingship again descended from Heaven." This was likely to be the appearance of Mars close to and above the Earth in circa 3067 BC. Mars would continue to "visit" Earth at intervals averaging 30 years as long as the inclinations of the orbits

of Earth and Mars were favorably aligned. In fact, based on data from after 806 BC, it looks like Mars passed close to Earth every 15 years, alternating a course set for the Sun with a return overflight (or close passage) in coming from the Sun 15 years later.

Some of these "visits" consisted of destructive close passes, where Mars passed close to the Earth's surface, resulting in traveling lightning strikes, hurricanes of burnt material, and seismic disturbances. We know this from the 8th and 7th century BC, earlier from the archaeological conditions at the sites of Sodom and Gomorrah, and much earlier from sparse remarks on the first history of Egypt by Manetho.

Mars would have repeatedly been sighted every year and a half over an extended period of time, since the orbits and the overpassings all manifest on a circular coordinate system. The orbital periods would not likely have changed in 2000 years, and thus the intersection of orbits would repeat on the same calendar dates. The sightings of Mars, even without electrical contact, would occur at 1.5-year intervals of 240-day years. (The synodic period of Mars at this time would have been 360 days.)

With the first appearance of Mars in 3067 BC, the Egyptian priesthood was suddenly vindicated in its belief in resurrection. The suddenness with which the concept of a life after death takes hold in Egypt after 3147 BC, is astounding, although it probably existed already, based on the assumed function and purpose of the southern ball plasmoids.

Initially a further existence among the stars and planets (the home of the Gods) was limited to the pharaoh, but by the time of the first dynasty (after circa 3050 BC) the privilege of participation had spread already to the elite of the court, and would eventually be extended to everyone.

Today, of course, the idea of a life after death is nearly universal among contemporary religions, with Theravada Buddhism and Judaism being, for example, exceptions. The concepts spread only slowly in Europe with the introduction of Christianity, although there were ideas about resurrection extant among the Celtic tribes at that time, but not among the Greeks and Romans.

The only tie to a more remote antiquity for these ideas would seem to be concepts derived from the parades of animals seen in the skies and recorded by the first Cro-Magnon in Southwestern Europe and, of course, seen and pondered upon by everyone else, and everywhere else, over the next 30,000 years. Plus, especially, the objects or beings seen traveling along the four overhead lines of electrons toward the south between 10,900 BC and 8347 BC.

... the mountain

In about 3067 BC, Horus (Mars) first appeared from some location in the ecliptic of the south sky, looming larger and larger until it was obvious that it would reach Earth. Horus was understood to be the resurrected Osiris, or (more logically) the son of Isis by Osiris, even though Osiris had been dead for some time. But he had been seen with an erect penis projecting through his mummy wrappings. He was depicted as such in statuary of the delta region as the God Min. When the worship of Osiris takes hold after the fifth dynasty, Osiris is always shown as a standing mummy and ithyphallic. [note 3]

Mars would have seemed to slow as it neared, since both Earth and Mars were at this point about the same distance from the Sun and thus traveling at nearly the same speed. As Mars reached closer to Earth a plasma stream would form between the two planets. Mars would have an unbalance of negative charge (because it came in from the region of the asteroid belt). Earth held the surplus charge, since it was a much

larger globe, and it was Earth which bolted Mars.

Because Mars is half the diameter of Earth, the stream of plasma would have looked like a conical mountain, leaving the Earth's ionosphere and converging to a smaller truncated cone on reaching the surface of Mars.

The details of the mechanics are this: the plasma stream could easily have traveled ten or twenty Earth diameters -- making the distance to Mars 80,000 to 160,000 miles (130,000 to 260,000 km). This is considerably closer than the distance to the Moon today (250,000 miles). Mars, which is twice the diameter of the Moon, would have looked like an absolutely giant sphere in the sky.

Any view of this stream of plasma in glow mode would have been severely foreshortened to people viewing this. Instead of a 100,000-mile-long stream of plasma (as a lateral view from space might reveal), it would have looked like a truncated geometric figure. Because the edges of this would have been denser, it would easily have looked like it had flat sides, and was therefore rectangular -- like a pyramid. Its shape would also have suggested a chair or a seat. The idea of a chair -- a seated God -- becomes the iconography for depiction of the Gods.

The pyramidal shape beneath Mars was the sacred mountain frequently referenced in ancient literature. Appearances of the mountain of Mars lasted a hundred years longer than Jupiter's mountain, which disappeared in about 2860 BC.

Jupiter and his green colored mantle, a plasma outpouring from its south pole, was understood to be the standing mummified figure of Osiris, and was seen receding into the night sky. The giant mountainous lower coma of Jupiter had initially appeared in 3147 BC. It disappeared in about 2860 BC, when Jupiter entered the asteroid belt -- 100 years before the visits by Mars ended.

I initially thought the cone of plasma of Mars could only have happened if Mars overrode Earth at Earth's North Pole. That was my view on things from a grand exterior perspective, and partially based on keeping the conical throne viewed in daylight. But on further reflection I realized that the cone of plasma would still be understood as a mountain even if this happened with Mars in a lateral position with respect to Earth, and even as earth kept rotating and Mars kept advancing past Earth.

Certainly the cone would show when Mars was past the shadow of Earth: in the pre-dawn sky or after dusk. When Mars moved behind the Earth in the darkness of night, the cone would probably not be seen at all, especially as Mars passed by Earth at a considerably closer distance. This would be the time of massive electric discharges -- rather than the mostly benign transfer of electrons via a glow mode plasma exchange.

The phrase "coming to sit on his mountain" for Mars/Horus would seem to have reference only to these periodic approaches. Jupiter did not "come to sit." It remained on its mountain form, day and night. When Mars passed behind Earth, its seat might have disappeared. The idea that everything goes out of control when a celestial god gets up from his seat is a concept which will remain active for a thousand years or more.

The mountain form of plasma did not start to glow at the Earth's surface, but more likely some hundreds of miles above the ionosphere, which is located about 200 to 600 miles (320 to 1000 km) above the surface of the Earth. Everywhere the cone would appear as a squat mountain with sharp edges (where the plasma was most dense), and thus approach the typical look of the later pyramids whose sides rise at

an angle of near 60 degrees from the horizontal and are constructed in rectangular shapes. When backlit by the Sun, the cone might easily have passed for a pyramidal structure. In the absence of pyramids, or any multi-story temples, it would be called a mountain. [note 4]

In addition to the infrequent very close (and damaging) passes of Mars, at other times Mars would show up near Earth, but on different calendar dates, and would pass above the Earth (but not likely below). And again, a conical plasma stream would develop as Mars passed over the Earth. The effect would be nearly the same as when Mars passed directly over the northern hemisphere of Earth, except that the cone would be seen to rotate around the North Pole of the Earth. During such visits, Mars would seem to sit for a period on the conically shaped "mountain" throne of plasma streaming from the Earth's ionosphere. [note 5]

The rotation of the Earth would make it look as if Mars rose and set, that is, moving from the northeast horizon and downward at the northwest horizon. The movement from the east to the west on a daily basis (perhaps lasting only a few days) would continue at night as the cone was lighted by the Sun from the daylight side of Earth.

The result of this was that religious structures were no longer oriented northwest to the apparent strike points of the arc of the previous era, but were aligned to the true geographic north, the centerpoint of the traveling mountain of Horus.

This truly was Horus, as the resurrected Osiris, coming to sit on his Earthly throne and rule Egypt. The tale of Osiris, resurrected as Horus, will stand for more than 3000 years, although it is only incorporated solidly into Egyptian religious practice after 2349 BC. By the time of the first "pyramid texts" (of 2349 BC), which quote from what will eventually be known as the *Book of the Dead*, the spells and prayers which invoke Osiris and Horus were already 700 years old and firmly established (with some dating to much earlier times). They change very little over the next 2500 years. I should also point out that, except for the very few pre-dynastic kings and one of the pharaohs of the second dynasty, all the kings or pharaohs have "Horus names." [note 6]

It can be assumed that Mars returned with some regularity, since the visits depended only on the regularity of planetary orbits and the apsidal precession of the elliptical orbits of Mars and Earth. As mentioned above, the synodic period of Mars was 360 days at this time, so that Mars would approach Earth every year and a half (the Earth's year being 240 days). The positioning of Mars over the Earth might last a few days or a week. [note 7]

One would expect that as Mars approached Earth it would be gravitationally attracted. But there is no indication that the orbit of Mars was changed at all in nearly 3000 years. Gravity between these small planets is minuscule compared to the forward momentum of orbital travel.

Patten and Windsor, in *Mars-Earth Wars*, use the concept of gravitational attraction to suggest a change in the Earth's orbit (the length of the year) and the location of the Moon. But the movement of the planets is overwhelmingly controlled by the Sun and inertia. Catastrophists researchers (Patten and Winsor included) seem to completely neglect the momentum of planets -- which keeps them from making any radical changes in their orbits.

It should be recognized also that the mass of Mars is considerable; it cannot be compared to a meteorite or other bolide which certainly will experience the Earth's gravitational attraction and change its path of travel. It is the orbital momentum of Mars (its mass times the square of its orbital speed!), which will carry it forward as if only the Sun's gravitational pull keeps it on its orbit, even when Mars was closing in on Earth.

If Mars overrode the orbit of Earth, as I have suggested, we can be certain that neither gravitational nor electric interactions would change its orbit significantly. Only the inclination of the orbits to the equator of the Sun might be effected. Considering the immense values of forward momentum involved in travel along orbits, even changes in inclination would be all but undetectable. [note 8]

It could also be suggested that there are radical variations in the number of years between close approaches of Mars, for this could be seen in the reigns of kings in Mesopotamia (at Kish) and Egypt (the first two dynasties). These last four periods which only average 30 years, but are as short as 24 years and as long as 36 years. The reign lengths are, at any rate, much too long to make sense for human kings. The ten patriarchs of the Bible born after Noah (from Shem through Abraham) were each sired when their fathers were 29, 30, 32, or 35 years old. This section of the Bible records the repeated visits of Mars as the appearance of new generations of patriarchs.

The "visits" by Horus, as seen from Earth, were thus seen as an approach of Mars from deep space, followed by a seating on the plasma mountain, a circumambulation of the Earth (visually caused by the Earth's rotation), after which Mars was headed out for the region of the Sun (or returned to the deep reaches of space). [note 9]

Every observer in Egypt, Sumer, and among the shepherd forefathers of Abraham, considered that Mars had come out of the far distant sky as a resurrection of his previous self or as a new God or person altogether. This is particularly obvious in Egypt, where apparently every new appearance of Mars/Horus was understood as a newly resurrected Horus. In Sumer, each in the series of kings is described (as Mars) as distinct personages, with distinct qualities and behavior.

It is certain that this type of thinking, which would be totally foreign to us, derived from the 2500 years of observations made in the remote past, when it was understood that all animals and humans traveled south after death, via the lines in the sky, to go to the large plasmoids. No one ever traveled north.

It seems that the "Sed festival," which required the pharaoh to race along a course and to be twice recrowned as king, might have been suggested by the behavior of Mars. Predynastic ceremonial objects (grave goods labels), dated to before 3000 BC, already suggest the Sed festival. This strongly suggests a much older tradition as the basis for the Sed festival. [note 10]

The engraved labels are recognized today because the iconography remained the same for the next 3000 years. By the third dynasty, circa 2639 BC, separate buildings and plazas were constructed for this purpose as part of the pharaoh's funeral temple, so the festival could also be performed after death.

"One of the most important elements in the heb-sed[Sed festival] was a re-enactment of the coronation. In this ceremony a procession led by a priest would enter those of the chapels surrounding the heb-sed court in which were gathered the gods of the nomes of Upper Egypt. Having obtained from each god consent to renew his kingship, the king would be conducted to the more southern of the two thrones, placed on a dais beneath a canopy, in order to be crowned

with the white crown of Upper Egypt."

-- I.E.S. Edwards *The Pyramids of Egypt* (1972).

This note by I.E.S. Edwards seems to make clear that there was no conquest of the delta by the forces of Upper Egypt. There was, instead, the permission granted to rule, or at least to represent the nomes. If indeed these ceremonies dated back to the time of the southern plasmoids, there would have been thousands of years to reach such agreements among the many independent nomes. Edwards continues:

"A similar ceremony would be repeated in the chapels of the gods of the Lower Egyptian nomes before the king ascended the northern throne to receive the red crown of Lower Egypt. The unification of the two kingdoms would be symbolized at a later stage by lacing lotus (or lily) and papyrus flowers around a stake driven in the ground."

"The significance of another ceremony in the heb-sed is not so apparent. The king, carrying a flail, would run a fixed course, accompanied by 'the priests of the souls of the Nekhen'."

The "nomes" are the separate districts of Egypt, some 20 of them in Upper Egypt and an equal number in the delta, each with their own Gods, temples, and temple administration. The "Nekhen" are the previously deceased pharaohs (called "falcons"). Notice the double enthroning, or as Edwards calls them, "coronations." I suspect the course was run between the coronations. As always, the ceremonies of the humans were those first performed by the Gods.

The previous kings -- the Nekhen -- were also Gods. They were known, into the 5th dynasty, as "the followers of Horus" (although this is not clear). More on this below.

The Palermo Stone

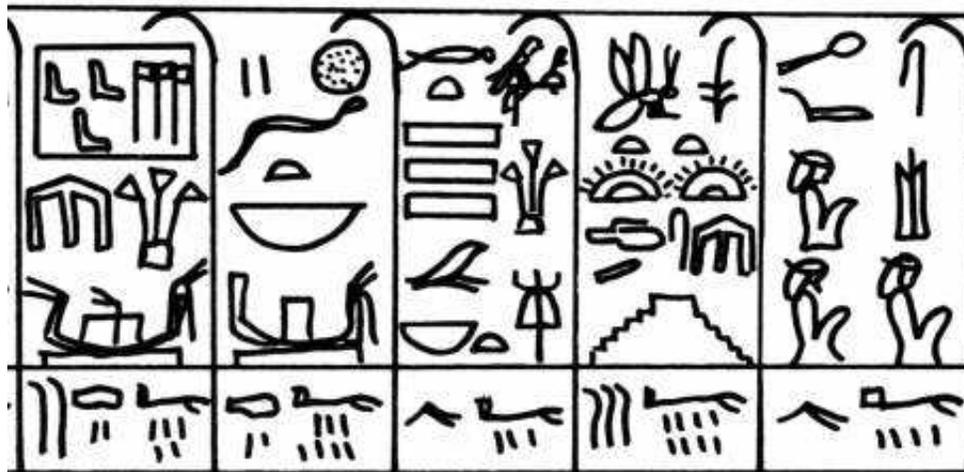
Egyptian records (the *Turin Papyrus*, and the writings of Manetho) give Horus a total life span of 300 years, which would mean that Horus would have returned 10 times between 3067 and 2770 BC, if a 30-year interval held for all of that time period. The Sumerian list of the "kings after the flood" adds up to 300 years and includes 20 "long-lived" kings up to about 2700 BC. But, counted in sets of two, these reduce to some 10 distinct pairings of periodic crossings of Earth's orbit or close approaches by an entity in the sky, which averages to 30 years, but varies by 4 to 5 years in both directions. The variation may be due to the actual lifetimes of kings or chief priests who played the role of God.

[note 11]

The orbital period of Mars as seen from Earth (its synodic period), was 360 days. I have developed this in an endnote. The Olmecs, predecessors to the Maya, apparently kept track of the regular return of Mars to the same location in the sky, and codified this into their calendar. Mars would have shown up near Earth every year and a half (years of 240 days). This implies a different orbit for Mars from that of today, although even today Earth passes by Mars every two years. But in the period directly after 3147 BC, Earth was on a considerably smaller orbit, and Mars on a larger orbit than today, and on a much more elliptical orbit, extending to the region of the asteroid belt.

Since Mars is about twice the diameter of the Moon, to appear as twice the size of the full Moon, Mars would have to approach to within 125,000 miles (200,000 km) of the Earth. Mars would show as a red disk in the south sky at night. At this distance Mars would be within the plasmasphere of Earth, and the "mountain" would form in approaching Earth and in leaving the vicinity of Earth. The cone of plasma would be seen as Mars approached Earth, and as it left, but not likely when Mars passed close to Earth on the night side.

After Earth passed Mars (or Mars passed Earth), Mars would have disappeared from view for the next few solar years.



[Image: Palermo Stone, partial record of King Den of the first dynasty, circa 2950 BC. The text reads from right to left; each block is introduced with a "year glyph," the curved line at the right edge of each year's record. The lower register records the height of the Nile at flood time. A few hieroglyphs stand for whole words; the rest represent sounds. Year names, from the right (1) Striking the bedouin. (2) Appearance of the power (king) of Upper and Lower Egypt; Sed festival. (3) Counting of the people (of the four directions). (4) Second feast of Djet. (5) Plan of a temple called "Thrones of the Gods," feast of Sokar. Section from P recto, bottom register; after Michael St. John.]

The *Palermo Stone* records the yearly appearances and visits of Mars. The *Palermo Stone* is a carved basalt block from the Fifth Dynasty (circa 2550 BC) of the Old Kingdom, unfortunately shattered and badly worn, and reduced to seven small fragments. The *Palermo Stone* records the Gods, the "Followers of Horus," and some of the pharaohs of the first five dynasties, in that order. For each of the pharaohs (on the fragments we possess) there is a catalog of years, with each year named after an important event, for example, "The Year of the Cattle Count."

There are some six distinct events which are recorded repeatedly on the fragments we have -- plus military excursions into the region adjacent to the delta, the acquisition of desirable materials like honey or lumber, the building of ships, plans for new temples, and other mundane activities. The frequently recorded events (for which years are named) are:

- "The Appearance of the King of Upper Egypt"
- "The Appearance of the King of Lower Egypt"
- "The Followers of Horus"
- "Union of the Two Lands" followed by
"The Circumambulation of the Wall"
- "The Counting of Cattle"

The "Counting of Cattle" at later dates is often recorded as "The 'nth' Counting of Cattle." The height of the Nile at flood time was also recorded for each year.

The year-names listed above should actually be translated somewhat differently, for archaeologists have rendered the original phrasing into terms more familiar to us. "The Appearance of the King of Upper Egypt" should read as "The Appearance of the King of the Upper Land" or even as "The Appearance of the Power of the Upper Land." The Egyptians called their country "The Land"; the Greeks called it "Egypt."

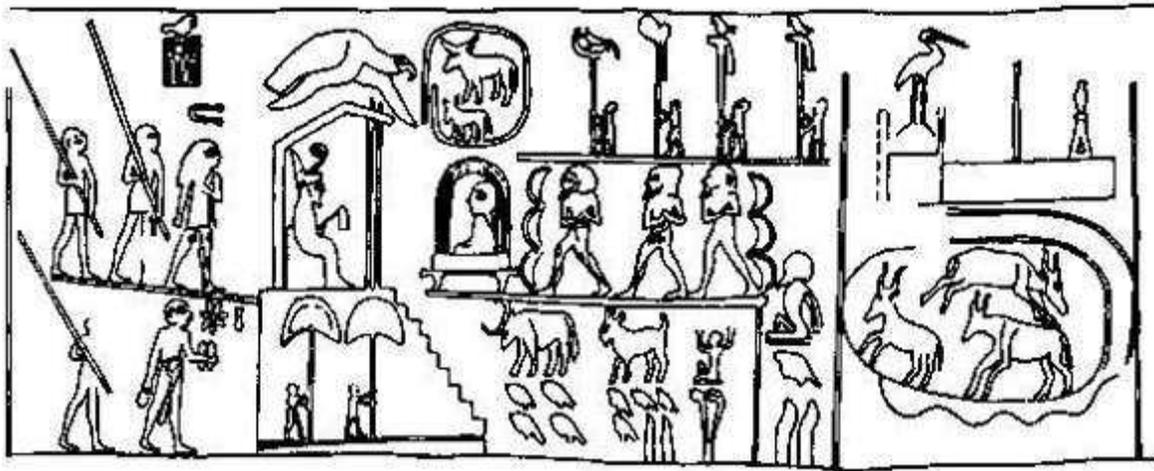
The "appearances" of the King of the Upper Land or the Lower Land happen regularly every two years, although not always at exactly two-year intervals. At times we read of both events happening in the same year. Interspersed at two-year intervals is the year-name "The Followers of Horus."

What exactly are these events? Archaeologists have suggested that the "appearances" were visitations of the pharaoh to the delta (Lower Egypt) and up river (Upper Egypt), perhaps as celebrations or as gift-giving opportunities. That is, "appearances" were made by the pharaoh to the two separate sections of the country. The pharaoh otherwise resided at Memphis, the city at the apex of the delta, and thus exactly between Upper Egypt and Lower Egypt. Memphis had been founded by the first king of the First Dynasty. Memphis controlled traffic between Lower and Upper Egypt, and in effect constituted the "unification" of Egypt.

Similarly the "Union of the Two Lands" was thought to be a celebration of peace (after another rebellion had been squashed), done with a walk (some original texts are translated to "race") around the outer walls of Memphis. Memphis had massive walls in antiquity to keep the Nile from flooding the city. Memphis was known as "White Walls."

... Sed festival

The "Union of the Two Lands" with the "Circumambulation of the Wall" is always shown as the first year-label for a pharaoh. It might be suggested that the "circumambulation" is the Sed festival. It might also be suggested (and I suspect this) that the pharaoh was replaced when Mars again showed up near Earth, and thus at 15 year intervals.



[Image: A cattle count of large and small animals, and other activities. Scene from the Narmer Macehead, circa 3050 BC. After Marshall Clagett.]

A scene depicted on the Narmer Macehead (circa 3050 BC), shows Narmer's name tag on the upper left. On the top right is a depiction of the temple at Buto in the delta (others suggest the temple at Nekhen, Hierakonpolis). Three running figures between triple lunates are suggested as representing a Sed Festival. The lunates are boundary markers.

Poles carried by four figures at the top are supposedly the standards of four of the nomes of Lower Egypt (actually, there are 20 nomes in the Delta region). From other sources these are thought to be the "Followers of Horus" instead. I feel that they much more likely represent the four cardinal directions, discussed in the previous chapter.

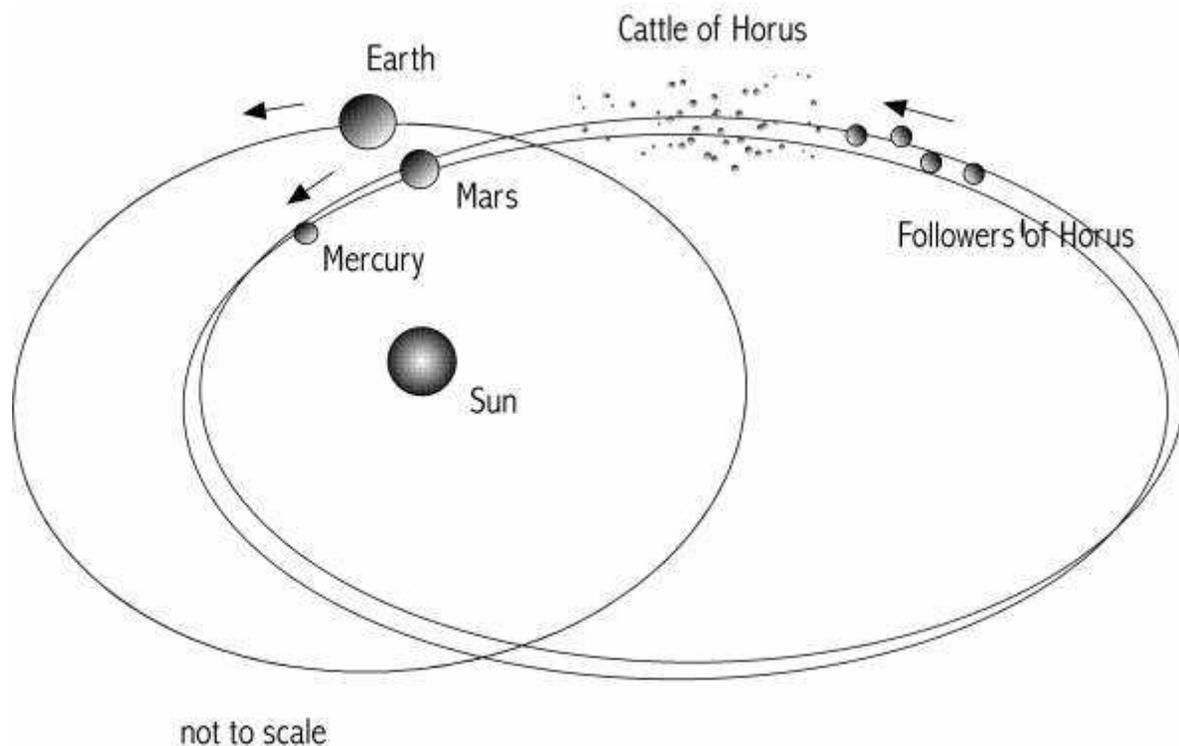
Two of the four standards depict the hawk of the east and the hawk of the west. The third standard, the stomach or placenta sign "lugal" (the Mesopotamian glyph for "king"), signifies "the south" (and thus the earlier ball plasmoids), and the fourth standard, a jackal on a plow, signified "the north," representing the constellation Ursa Minor. The east and west standards each seem to have a vertical banner like a flag attached. This occurs also in Sumerian iconography: two standards with banners attached and animals on top (in the case of Mesopotamia these are small lions). The same flags are attached to the standards as shown on the Palette of Narmer.

Animal counts are shown at the bottom. The seated figure with his arms up in the air denotes a "million." The "Cattle Count" has drawn archaeologists' remarks to the effect that this must be a complete fiction, based on the actual numbers listed on some predynastic objects, like the macehead described above, showing, for example, 400,000 cattle, 1,422,000 goats, and 120,000 bound captives. 1,822,000 herd animals are depicted. This exceeds what the population of Egypt, estimated at between 500,000 and 800,000, could have managed or supported. Similarly, 122,000 captives would have represented twenty percent of the estimated population of Egypt. The rounded numbers of the count suggest estimates rather than actual counts. But I think we are not dealing with animals and captives here.

... the Followers of Horus

Lastly (on the Palermo Stone) we have the "Followers of Horus." Most modern text books simply avoid mention of the "Followers of Horus" for no one can even imagine what that year-name could mean. What I will suggest is that these entries record celestial displays of close followers of Mars. It is an assembly consisting of the Maruts, the Trojan followers of Mars (identified also in Vedic documents). What I am suggesting thus, is that Mars, in addition to being followed (and maybe preceded) by a huge cloud of debris consisting of millions of rock fragments of asteroids, was followed by a number of larger asteroids. [note 12]

Later descriptions in the 8th century BC suggest that Mars was still accompanied by hundreds or thousands of asteroid-like bodies. We have only limited clues that these existed, and no indication of the number, the sizes, or the exact location with respect to the planet. And, located some distance away along the orbit of Mars, there followed some six larger asteroids, identified in Vedic sources as the six Maruts; seven when counted with Mars. These six are still following Mars, and have been detected. [note 13]



Horus and his Cattle and the Followers of Horus

Gary Gilligan, in *An Ancient World in Chaos* (2008), has demonstrated that, with very few exceptions, the hundreds of battles that Egypt fought over a 3000-year period, always led by the Pharaoh and always won by the Egyptians, never happened on Earth, but were observed to have happened in the skies. He points out the complete lack of archaeological evidence for any (or for most) battles. For example, at the Battle of Kadesh in circa 1287 BC, probably the most famous battle of antiquity, 20,000

Egyptians engaged 40,000 Hittites. Yet not one bone or war artifact has been found despite the inscriptions by Rameses II telling of tens of thousands of dead soldiers. Gilligan claims that Kadesh itself also has not been found.

Similarly, notes Gilligan, at Megiddo some 34 battles were fought, including 14 by Tuthmose III. "Yet," Gilligan writes, "no corroboratory archaeological evidence exists." The battles were fought entirely above the Earth. Thutmose III is traditionally placed in 1479 BC to 1425 BC. Velikovsky places him in the tenth century BC, after Solomon. [note 14]

"To put this into some kind of context, Megiddo is a location where hundreds of thousands of soldiers engaged in numerous battles over a period of 3,000 years -- thousands of chariots, battle axes, spears, bows and arrows, the carnage, dead soldiers, etc, etc, and yet no archaeological evidence remains to corroborate them as ever taking place -- nothing. We have an abundance of written documentation but -- NO CRIME SCENE! This despite the fact that archaeologists have been digging there for decades."

-- Gary Gilligan [www.gks.uk.com]

Gilligan is using standard chronology, or none at all. Velikovsky places Thutmose III 500 years later, and has Megiddo as the site of a peaceful capitulation of Jerusalem by its king, Rehoboam. Jerusalem is one of the mysterious cities named Kadesh, which means "sacred place".

Eva Danelius, in "Did Thutmose III Despoil the Temple in Jerusalem?" in *Chronology & Catastrophism Review* (1977/78), also claims that Megiddo was never sacked, and that the goal of Thutmose III was to reach Jerusalem. Which he did.

The battle of Megiddo was designed as an overwhelming show of force by Thutmose III, who traveled up the coast road to Megiddo where the king of Jerusalem and all the kings of the other principalities of Israel were holed up. This is what Dale F. Murphie claims, writing in "After 200 Years It's Time to Get Serious About Dynasty XVIII and Thutmose III" in *Aeon* (1998).

Danelius also explains why Judah was called "God's land" by the Egyptians, and why Thutmose III took extraordinary religious protective measures in passing through this region. As Danelius relates, the stones which had fallen on Joshua's enemies 500 years before Thutmose III, are in fact still known today and can be identified.

When Mars and the asteroid swarm neared Earth, a parade of objects would move from west to east past Earth (the celestial direction), but seen daily or nightly as moving east to west -- first the Followers of Horus, then the dead prisoners, followed by the cattle, large and small, and finally Horus himself, followed by his sandal-carrier, Mercury. This is the order depicted on the top register of the "Palette of Narmer" of circa 3050 BC. The cattle are not shown and the Followers of Horus are on the reverse side. If any action by the Gods would suggest a procession to us humans, it would have been this parade. A parade of animals had been recorded before in Egypt, before the first kings, on cosmetic palettes, knife handles, and combs. [note 15]

It seems reasonable to suggest that Mars was not only accompanied by asteroids after 3067 BC, but this was still so in 800 to 700 BC. The suggestion comes from predynastic Egyptian palettes and engraved objects, the record of the Palermo Stone, and from later descriptions of Mars, even though these date to after 800 BC -- 2000 years later. Immanuel Velikovsky, in *Worlds in Collision* (1950),

collected many Vedic and Biblical recollections of Mars and its companions in the 8th century BC -- the "Maruts" of India are the "hosts of the Lord" of the Bible.

Horus (Mars) is listed in the genealogy of the Gods as the "second Horus." The first Horus (also Mars, but before 3147 BC) is known as "Horus of the Gods." Mars would have been recognized at close quarters by its pockmarked lower surface and smooth upper half, an upper ocean which lasted into the 8th century BC, and certainly by its red face. The 5000-mile (8000-km) scar came after 800 BC, I suspect.

The cratered surface of Mars, which extends across the lower half and crosses its equator at an angle (today), may have been the model for the distinctive dress of priests, shamans, and kings in Asia, Egypt, Africa, and Mesoamerica. The wearing of spotted leopard or jaguar skins -- over the shoulder -- is certainly a feature of later history. Although Hercules of Greek mythology wore a lion's skin. The "distinctive dress" of the pharaohs depicted on predynastic ceremonial mace heads may represent an animal skin worn over the shoulder, as does the pharaoh depicted in the Sed Festival sculpture at Djoser's pyramid complex, built in 2650 BC, and thus 100 years after Mars had last come close. At later dates in Egypt, however, only priests wore leopard skins. The African leopard was all but driven to extinction in antiquity, and is still a threatened species today.

What is less suggestive of an imitation of Mars is the "flail" carried by the pharaoh in running the course of the Sed Festival. Archaeologists call the hand-held object a "flail" because that is what it looks like. Why this object needed to be carried while running is unknown. Because the flail appears already in the Narmer Macehead (dated to circa 3050 BC), where it is held by a mummified figure, well before Mars first shows up, it could be suggested that the flail is a heteromac or bramble bush -- the "sweeping devices" identified with the overhead lines of electrons at the time of the southern plasmoids, and last seen thousands of years earlier. [note 16]

If Mars was released when Saturn had already entered the asteroid belt, as I have assumed, Mars probably could have swept innumerable asteroids along into the new orbit around the Sun. Jupiter seems to have done this also, for there are thousands of asteroids in Jupiter's orbit. These asteroids are known as the "Greeks" and the "Trojans." The first "Trojan" asteroid of Mars was discovered in 1994. Six are known today. [note 17]

... Maruts

Cardona, in an essay titled "Indra" (*Aeon* 1982), mentions that the original Indian sources list the Maruts as seven. Add Mars (whose name is derived from Marut) to the six Martian Trojans known today, and we end up with seven also. This is a marked change from Velikovsky, who thought the Maruts were comets following Mars, and others, even Alfred de Grazia, who all but reduces the Maruts to the moons of Mars:

"It is famous that Mars is accompanied by two small moons. With the Vedas in mind, we can call them the Maruts, but the Maruts were many bodies. Jerry Ziegler and Donald Patten, among others, have found numbers of references to and descriptions of the behavior of the late principal Maruts, unmistakably the satellites Demos and Phobos, Rout and Terror, which, although not seen by modern observers until Hall's report of 1887, were well known to the ancients of many countries."

-- Alfred de Grazia, *The Iron Age of Mars* (2009)

It is unlikely that all the companion asteroids of Mars would have relocated to the same 60 degree nodal points of the orbit of Mars during the first 300 years. In fact, from the records of the near passes of Mars some 2000 years later (in the 8th century BC), it seems that at least some of the cattle and companions of Mars still remained close to the planet at that time. During the predynastic times of Egypt (and perhaps during the first and second dynasty) the count, as mentioned above, ran into numbers over a million for the cattle. The "Followers of Horus" are likely much larger asteroids. They count only to six (Vedic sources), and still exist today.

It is always possible that the "Followers of Horus" are represented by the four standards shown carried in the predynastic Palette of Narmer and the Macehead of Narmer. One later depiction adds one additional standard. (I would suggest that the fifth standard represents Jupiter, identified in Mesoamerica as the green fifth tree of the center.) Comparing the predynastic maceheads to much later fifth dynasty (after 2500 BC) inscriptions, N. B. Millett wrote in 1990:

"From the fragments of a similar scene from the Abu Gurab sun-temple we know that the four standards [together] represent 'the followers of Horus, the gods, the souls [of the city of] Pe [Buto],' that is to say, the ancestral kings of Lower Egypt.

-- N. B. Millett, "The Narmer Macehead and Related Objects" *Journal of the American Research Center in Egypt* (1990). [note 18]

But another predynastic mace head, attributed to a king Scorpion, shows seven standards (with animal figures at the tops) each with a bird hung by the neck.

... Hercules

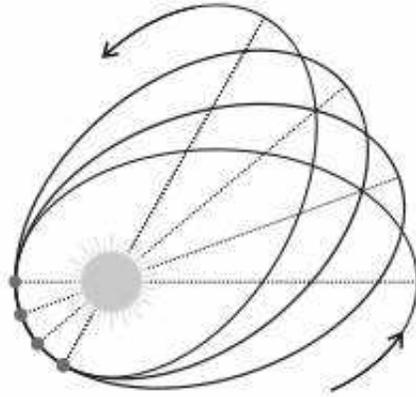
The heroics of Mars are recorded as the ten labors of Hercules by the Greeks, although reduced to narratives only after 600 BC. But in their origins these adventures certainly reflect the ten visits between 3067 and 2700 BC. Hercules is almost always herding cattle, stealing herds of cattle, retrieving stolen cattle or horses, or gathering armies to attack some region of Greece. Similar travel tales exist in India (Indra), and much earlier in Mesopotamia (Eridu and Gilgamesh). The travels of Mars become the literary model for the quest sagas of later ages. The dramatic travels of Hercules were repeated with the nine close contacts by Mars in the 8th and 7th century BC. It is probably these last appearances which form the core of the tales of Hercules dating from late antiquity. [note 19]

Whatever happened in the skies was duplicated on Earth. However, even after the celestial events no longer occurred (by around 2700 BC), the ceremonies continue on Earth. This makes it difficult to separate the celestial events from the ceremonies instituted by the priesthood and the pharaohs. In the meantime, Egypt might have instituted earthly cattle counts, for these start to appear every other year by the fourth or fifth dynasty. The Sed Ceremony remains celebrated at odd intervals far into the future.

The "Upper Land" becomes equated with the Nile river valley south of the delta (up river), just as the "Lower Land" becomes the land of the Nile delta. This reflects the flow of the river Nile. But another location of the "Upper Land" is revealed in a striking statement for year 2 of the Palermo Stone record for the pharaoh Djoser of the third dynasty (2667 to 2648 BC), which reads, "Passing of the

Upper Egypt King by the two Pillars." The King of Upper Egypt (the Upper Land) is Mars on its orbit on the ecliptic, in this instance at a time of year when the ecliptic dipped below the upper edges of the Absu. The pillars which are passed by the King of the Upper Land are the sides of the gates to the Underworld seen at night in the south, the left and right edges of the shadow of Earth cast upon the Absu at the time of the equinox.

Another interpretation of this is to assume that the "pillars" are the east and west plumes. These are frequently depicted on Mesopotamian cylinder seals as the doorposts on which the gates of heaven hinged.



[Image: The relocation of the orbit of Earth or Mars about the Sun due to apsidal precession of the second nodal point (perihelion precession). Illustration after Wikipedia, public domain.]

Certainly by circa 2700 BC, it is over. Mars no longer visits Earth. Likely the normal precession of the orbits of Mars and Earth caused them to diverge from each other so that the inclination of the two orbits was no longer coincident. The precession of an orbit is the slow rotation of the second node of an elliptical orbit around the Sun.

Orbits are ellipses, and have two centerpoints, called nodes (or focusses). One node of an orbit is always located at the Sun. The second node of the elliptical orbit is located away from the Sun, and slowly relocates in a circle around the Sun. That's orbital precession -- apsidal precession. Today the precession of the Earth's second node takes an estimated 112,000 years to revolve once around the Sun, so that the orbit today moves only a quarter-minute of a degree per year. With both the Earth and Mars on considerably more elliptical orbits 5000 years ago, precession apparently was much greater than today.

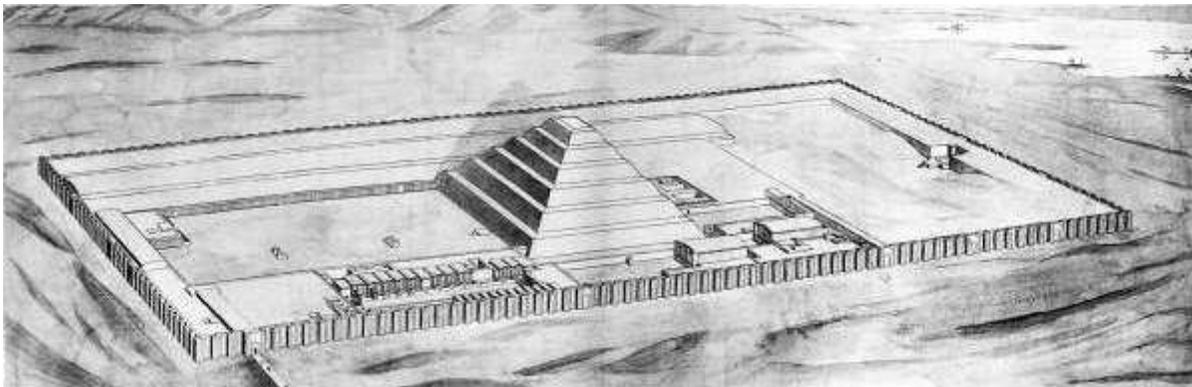
After 2770 BC, when Mars no longer comes close to Earth, humans start attempts to induce the return of the God. The graves of the pharaohs change from mastabas to pyramids in the likeness of Horus's mountain.

The Pyramids of Egypt

The first step-pyramid is built by Djoser (3rd dynasty, circa 2667 -- 2648 BC) at Saqqara. The pyramid is surrounded by an astoundingly beautiful and complex set of outbuildings and courts. Half of the buildings are fake or present only façades, a good indication of the status of intent -- rather than action -- in the theology of Egypt at that time.

The pyramid of Djoser is totally different from the earlier mastabas. Djoser's pyramid is aligned north-south, facing the center of the travels of Mars/Horus about the North Pole of Earth after 3070 BC, unlike the earlier mastabas which were aligned to the northwest -- the strike point of the plasma stream from Saturn before 3147 BC.

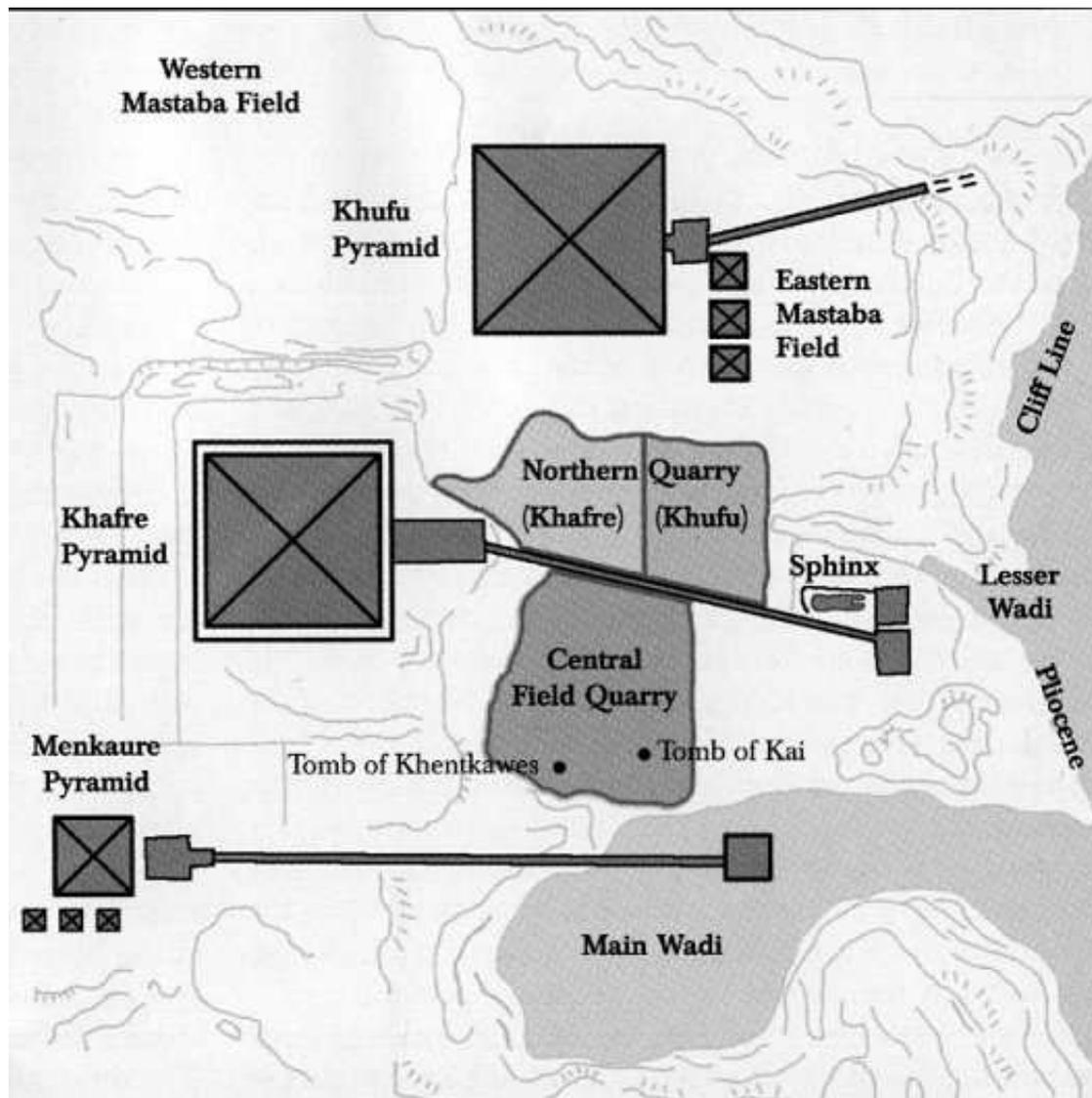
I should also note that this building is not an imitation of the mountain form of Jupiter (which at any rate was much steeper), for Jupiter was at this time in the asteroid belt (for a period of about 390 years, circa 2914 BC to 2527 BC), and the giant outpouring at the bottom of Jupiter had been replaced with a horizontal plasma -- the bottom line of the "shen" symbol. Jupiter thus had shrunk to a much smaller size already 200 years before Mars stopped coming.



[Image: Pyramid of Djoser, circa 2655 BC. Public domain.]

Two (three?) additional step-pyramids are constructed before Seneferu (4th dynasty, circa 2613 -- 2589 BC) builds the first true pyramids, one at Meidum and two at Dahshur. The three Seneferu pyramids together exceed the immediately following pyramids of Giza in volume.

Seneferu's direct successors build the three pyramids at the plateau of Giza (between circa 2590 and 2500 BC). This was the largest single construction project ever undertaken in the world, and reflects the extraordinary efforts by the pharaohs to restore previous conditions. The Giza pyramids have fascinated visitors for over 4500 years. The location at the apex of the Nile delta, the surrounding level plateau raised above the countryside with the river sliding past below, and the rectilinear placement of the three pyramids, together are a major design feat. The location and design speak of uncommon power and majesty, reiterated by the sheer size of the structures.



[Image: Giza pyramids. After Colin Reader.]

The Giza pyramids are cenotaphs, that is, empty "fake" graves, and it is absolutely amazing to consider the astounding amount of effort which went into graves which were meant to remain empty from the first moment of their design. We need to look for a significance beyond the simple political pressure to have separate graves for the pharaohs in Upper Egypt and Lower Egypt. [note 20]

The size of the three Giza pyramids and their relationship to each other have caused no end of speculation. Newton awaited measurements of the base of the main pyramid before publication of his theory of gravity -- on the assumption that the base would be a significant fraction of the Earth's diameter. This was based on a belief in "the wisdom of the ancients," still current in the 17th century AD. A contemporary theory equates the three pyramids with the three stars in the belt of Orion. Aside from the fact that Orion has no relationship to anything in Egypt, they do not correspond in placement. A more reasonable recent suggestion has been that they represent (in order) the planets

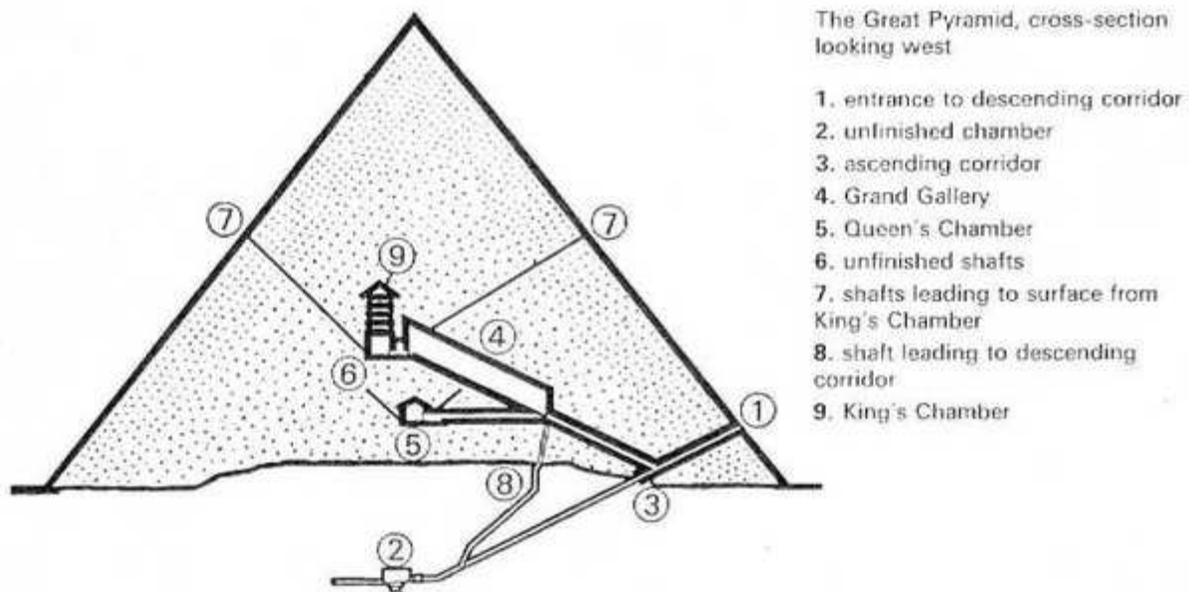
Earth, Venus, and Mars. This was then "proven" with inscribed circles, sight lines, and various geometrical manipulations. [note 21]

I think that the pyramids most likely represent, in order from north to south, the graves of Ra (or Amun), Osiris, and Horus. That is, the planet Saturn as originally seen at the North Pole, Jupiter as Osiris the son of Ra seen as the green mantled form which was understood as the mummified God receding into the south skies, and Mars as Horus, the reincarnated Osiris.

Horus (Mars) had failed to return after about 2750 BC. Dead also was the original deity at the polar location, Saturn. Osiris (Jupiter) had also long been dead. Perhaps it was enough to have these planets appear in the south as pinpoints of light at best to be considered dead.

At the time of the construction of the Giza pyramids Jupiter was seen again in the night skies of the south, however. The pharaohs of the fourth dynasty added "Son of Ra" to their long names, for Jupiter had moved out of the asteroid belt after 350 years (circa 2590 BC, at the start of the building efforts) and again had a large lower plasma outpouring.

Isis was not represented with a grave, for the planet Venus clearly still stood in the skies at that time. The first two pyramids were faced in brilliant white limestone. The third pyramid is smaller and has the lower half faced in very roughly cut unpolished red granite -- all three appropriate for Saturn as Ra, Jupiter as Osiris, and the red planet Mars as Horus, even to the point of duplicating the roughly cratered southern hemisphere of Mars. [note 22]

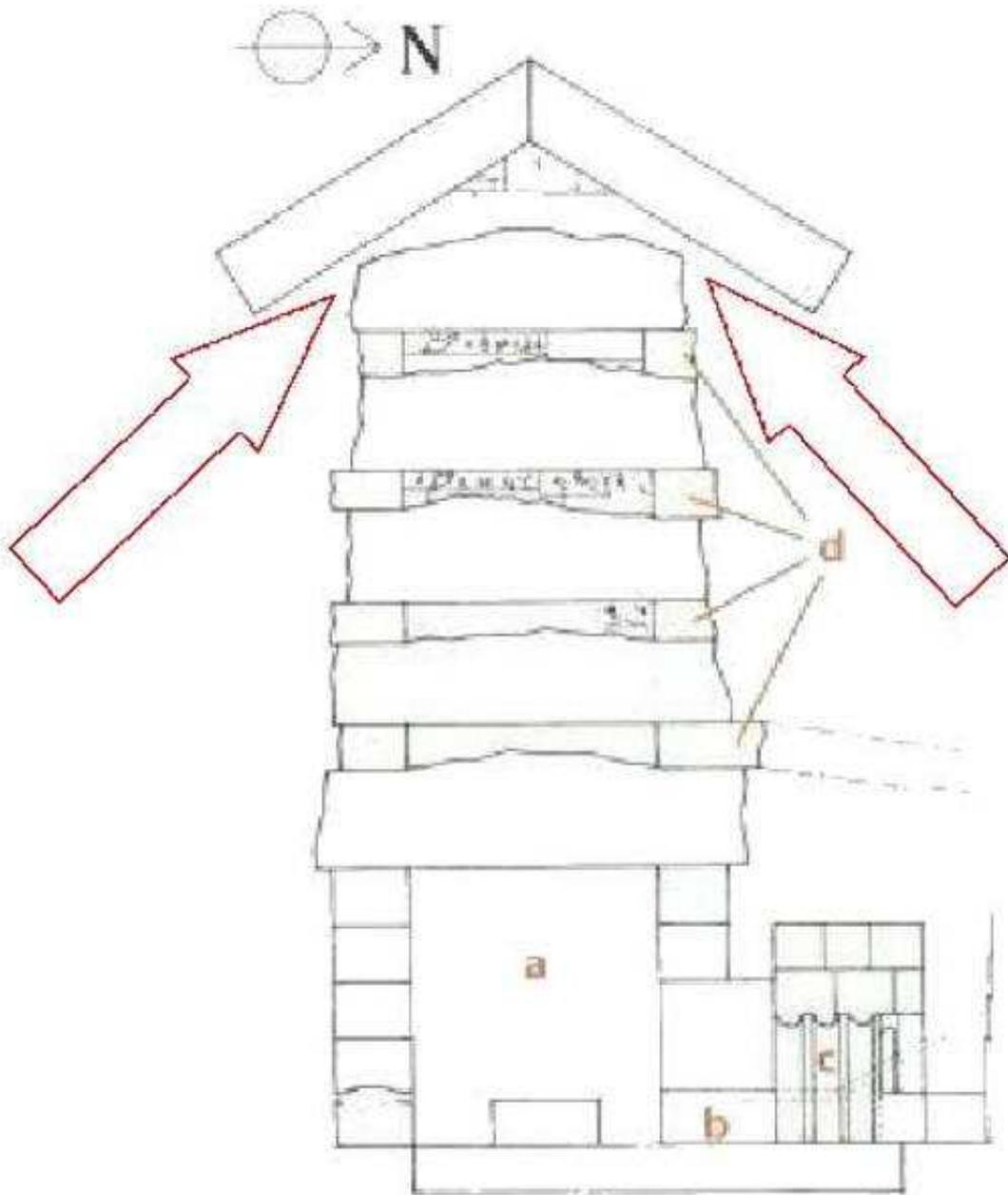


[Image: Section through the pyramid of Khufu (Cheops) at Giza. After I. E. S. Edwards.]

These pyramids are religious concepts about the death of the Gods expressed visually and brought within the provisional responsibility of mankind. Egypt was providing the graves for the dead Gods.

The pyramids are staggered because each had to face north. The second pyramid is smaller than the first, but sits on a rise in the plateau, making it nearly the same height as the first, appropriate for Osiris as the son of Ra. The third pyramid is considerably smaller. This is the new youth, Horus, as the resurrected Osiris. The addition of a gold plated cap to the first pyramid, which archaeologists presumed existed, would likewise be befitting to the earlier fiery condition of Ra after Saturn went nova.

The whole of the elaborate grand passage rising within the Great Pyramid (Khufu's), rising at a slope of 26 degrees, and never duplicated in any other pyramid, represents (I believe) the plasma stream connection, with the multiple roofs above the "King's Chamber" (at the top level) reproducing Saturn and the upper rings surrounding it. The upper chamber and the sarcophagus are of red granite duplicating the later looks of Saturn. The symbolism of the lower "Queen's Chamber" likely was meant to represent Mercury in its location below Saturn.



[Image: Unloaded roof beam slabs above Khufu's burial chamber. Anthony Sakovich writes "the arrows point to the spaces: This area of 'non-contact' is precisely what we need to show that the force is being totally and completely transferred away from the roof of the King's burial chamber ... and also right over the top of the Grand Gallery." After Anthony Sakovich.]

The multiple roof beams of granite blocks above the upper "King's Chamber" have no structural advantage, despite the fact that this "reason" has been repeatedly recopied from one source to another. The weight supposedly resting on the upper "King's Chamber" (200 feet of stone) is much less than the weight bearing on the much lower "Queen's Chamber" (300 feet of stone) which uses only a single set of peaked slabs for its roof (thus shaped like a house roof). The use of peaked or corbeled roofs had been in use in the pyramid at Meidum, and in the two pyramids by Seneferu at Dashur (each supporting 300 to 400 feet of stone above the roof).

Structurally, peaked slabs or a corbeled roof would have made much more sense for the King's chamber. In fact, above the five flat blocks of the "King's Chamber" is a set of peaked slabs, structurally unconnected to the flat slabs below them. [note 23]

Thus all the construction at the Giza plateau comes together in the final product, based on an initial grand design, and not as three pharaohs competing for national resources and building progressively smaller pyramids as the original impetus faded over the course of 80 years. [note 24]

Colin Reader has suggested that the construction of the three Giza pyramids show a design which encompasses all three pyramids from the very start.

"Under the conventional chronological scheme 'Khafre's causeway' [leading to the second pyramid] did not exist at the time of Khufu's [Cheops] quarrying [for the first pyramid]. If this had been the case, why was the extent of the quarrying limited by a feature (the causeway) which was only conceived in Khafre's reign?"

"The conventional sequence of development requires us to accept that Khufu's workmen went to the trouble of opening up a second quarry, leaving an intact limestone ridge -- which we now know as Khafre's causeway -- between the two quarries. Why did they not simply extend the northern quarry southwards by removing the linear body of limestone which, at the time, served no apparent purpose?"

"The positioning of the two quarries clearly suggests that, like the excavation of the Sphinx and the construction of the Sphinx Temple, the alignment of 'Khafre's causeway' was established some time before Khufu's work at Giza. Under this revised sequence of development, interpretation of the spatial relationship between the causeway and Khufu's quarries becomes quite straightforward, with the existing causeway limiting the extent of the later quarrying work."

-- Colin Reader, "Giza Before the Fourth Dynasty" *JACF* (2002)

This may be the only hint at a complete plan, outside of the final results. The Giza pyramids are the only grouping of graves in Egypt with a unitary design. Reader also suggests that the Sphinx may date from the first or second dynasty, that is, it preexisted the building of Khafre's causeway and his mortuary temple. In fact, the walls of the mortuary temple of Khafre are wedged into the enclosing wall of the Sphinx temple. There is additional evidence also.

He suggests dating the Sphinx construction to the first or second dynasty. I would suggest a date after the start of the second dynasty, because this was the time directly after Jupiter, as the Midnight Sun, disappeared from view. In about 2859 BC Jupiter entered the main region of the asteroid belt (at

about 2 AU) and its size and coma were reduced significantly. The first dynasty ended in 2890 BC.

This suggests that it was not a civil crisis or political developments which caused the change of dynasties, but a religious crisis. This will be seen over and over again, except for the much later period of the New Kingdom, and even for this later period we have established religious crises. [note 25]

The only reason to have the Sphinx facing directly east is in relation to the Sun. This would make sense if Giza represented the northernmost travel of the Sun -- that is, its solstitial latitude. Giza had already been a cemetery during the first and second dynasty, and perhaps for the same reasons.

Thus it is possible to suggest that the Sphinx was constructed to face the rising Sun at solstice, when the current real Sun replaced Jupiter after 2860 BC. That calls for a summer solstice sunrise at 30 degrees north latitude, the location of the Giza pyramids and the Sphinx. But that would happen only if the inclination of the Earth's axis was 25 or 26 degrees. Assuming the disappearance of Jupiter as the Midnight Sun near the end of the first dynasty (and its visual shrinkage), it could be suggested that the Sphinx was constructed after the end of the first dynasty as a beacon to watch for Ra's (Jupiter) return. Since this is the maximum northerly displacement of the ecliptic from the equator, it is also the maximum northerly location of the rising of any of the planets, and especially a slow moving planet.

If the inclination was 25 or 26 degrees, so that the Sun would rise directly east at Giza at the solstice, then the equinoxial path, where the Sun traveled from east to west on a path directly overhead, would have been experienced at 25 or 26 degrees north latitude, at Nekhen (Hierakonpolis) (at 25 degrees north latitude). Nekhen was the primary "religious and political capital of Upper Egypt at the end of the Predynastic period (c. 3200-3100 BC) and probably also during the Early Dynastic Period," reads Wikipedia.

The significance of the giant Giza pyramids is now easy to understand. The Gods of old now lie in state in Egypt at the apex of the Nile delta, the very entrance to Upper Egypt -- as determined by the travels of the Sun. Upper Egypt had become the home of the dead Gods. This should not be seen as a symbolic representation. These structures were intended as the actual graves for the actual Gods. Nothing less could be so important. [note 26]

The pharaohs after Khufu added "Re" to their names. At that time Re, as Jupiter, was blazing again as the Midnight Sun after a 300-year absence. Jupiter had exited from the asteroid belt in circa 2527 BC and again stood in the night skies with a coma three times the size of the Moon and a gigantic plasma mountain. It had happened shortly before Khufu took the throne. All subsequent pharaohs use "Re" or "son of Re" as part of their name also. This may have been understood as another religious crisis for Egypt. But as likely it would look like the ghost or reincarnation of Re was giving his blessing to the construction efforts.

Expectations of the return of the Gods last for thousands of years. The much later 300-foot-high temple of Marduk at Babylon (built prior to 1800 BC, expanded in circa 700 BC, rebuilt in 680 BC) was called "Etemenanki" which transliterates as "The Temple [House] of the Receiving Platform between Heaven and Earth" (Jaynes). The living quarters of the God had been replaced with a landing pad.

A constant in all the construction (especially later in Mesoamerica) is the need to periodically enlarge existing monuments or build new ones, like Horus had rebuilt his mountain 10 times, and to be always ready for the next coming of the God, who never again appeared after 2700 BC -- at least not for some 1100 years.

Barrows after 3100 BC

After about 3000 BC the barrows and henges of Western Europe seem to take on a new meaning among the coastal tribes of Brittany, England, and Ireland. The barrows and henges start proliferating again, with concentrations in Brittany and England completely out of proportion to any need for interments or meeting places. As an extreme example, there are single village locations in Brittany with hundreds of barrows.

As I have pointed out before, it may be an error to call these constructions "grave barrows." None of the early examples seem to have had anything to do with the dead. Only after 3000 BC are some converted to ossuaries. Even most of the late barrows are seldom used for interments.

The barrows, especially, are associated with a people who are thought to be newcomers to the region, as is demonstrated by new forms of pottery and tools which show up. The coastal lands had been scoured clear of life with the flood of 3147 BC, but repopulated within the next hundred years. The extant barrows, henges, and causeways must have been an amazing sight. These gigantic structures, some of which had already been in place for thousands of years, would certainly have represented an ancient order of power to the new tribes who had recently migrated into the region. I suspect that new constructions soon became the expression of status and power among individual clans.

Certainly the repeated overflights by Mars after 3000 BC must have been reason enough to reactivate the monuments which had stood idle for over a hundred years and to build new ones. And perhaps those earlier regular visits of Mars were also seen as conferring authority on the local clan chiefs, similar to what occurred in Mesopotamia and Egypt during this period.

What we are certainly seeing after 3000 BC is the ability of leaders and chiefs to muster greater resources to accomplish the additional new constructions. This might be the result of an increase in population density due to a more settled way of life based on farming rather than hunting.

Seen as part of the aggrandizement of individual clans and their leaders, the profusion of these later barrows is more easily explained, even if there were also overt religious purposes. This would explain the later fake burrows which have a doorway but no interior. There was a shifting in alignments also, from a west-north-west direction (the earlier orientations to the strike point of the plasma) to a north-south direction (the center of the movements of Mars on his visits, and the center of the rotating sky).

I would not suggest such mundane motives for these constructions were it not for the documented experience at Easter Island. Easter Islanders did not stop carving the 800 giant statues of their ancestors until they had cut down the last tree needed to move the statues. Nearly 400 were never completed or placed as a result. In Easter Island the "form" remained fixed, like the form of the barrows and henges. [note 28]

There are many other examples of this type of compulsive and repetitive construction. The Yucatan Maya stelae come to mind, as do the temple pyramids which start to appear in Mesoamerican villages with great frequency. Other examples are the mounds of the Ohio Hopewell culture and the gothic cathedral craze of 12th-century Western Europe.

In some of these examples, the evidence for religious motivation is more obvious. Henry Adams attributes the construction of the gothic cathedrals to a desperate longing for hope in the face of a repressive religious atmosphere. Religious motives, like the guarantee of a leader's intercession with the Gods, were very likely the reason behind any of these obsessive constructions of the past which became region-wide cult practices. If religiously based, the design for the construction would have been mandated by sacred forms, which would have remained inviolate even if their original purposes were forgotten. The empty barrows and the passage graves, where the side rooms are no longer in pairs, both seem to be examples where the form has been retained after the original vision had been lost. [note 29]

Religious motivation most certainly underlies the building of barrows also. It is possible that the Celts of this time period considered the barrows as a means of transport to the land -- paradise -- which had stood in the sky overhead only a few hundred years earlier, or as a way of warding off the capricious Gods. These late barrows were constructed during the 300-year period when Mars (Horus of the Egyptians) regularly overflowed the Earth. [note 30]

New henges were built after 3000 BC also, up to maybe as late as 2300 BC. Many of the 100 henges of England are wood henges, all built after 3000 BC, involving hundreds of tree trunks, often replaced by standing stones at a later date. The circular form is retained and often expanded to many concentric circles.

Henges after 3000 BC

I should highlight the giant Avebury henge, one of the largest in the world, which was started soon after 3000 BC (other dating suggests 2600 BC), and is located directly north of Silbury hill. Avebury henge clearly represented Saturn, complete with a causeway extending southeast (with a number of bends) and ending in a much smaller henge, known today as the "Sanctuary." The Sanctuary is reminiscent of the Egyptian valley temples (the mortuary) located at the southeast end of a pyramid's causeway. [note 31]

If the purpose of the original henges was to imitate, commemorate, or ward off the plasma column seen above the Earth, then, in the absence of the plasma stream after 3100 BC, a new purpose has to be assumed for their continued construction. It would not be unrealistic to assume a religious purpose. These new constructions, in effect, are temples, although not in the manner of the Eastern Mediterranean, where temples are understood as a "house" of the God.

Stonehenge might serve as an example of how the basic form is retained even if many aspects of the earlier design are changed or neglected. Stonehenge is the most studied henge of antiquity. It is also anomalous in being unlike the earlier forms of henges and in that no other henge had as much time and effort dedicated to it -- 1500 years of building and remodeling. [note 32]

In the final design, Stonehenge is aligned (it is thought) to the midsummer sunrise -- the current summer solstice, although it is off by 3 degrees. And it did not align with the solstice of 4000 years ago either. I also seriously doubt if Stonehenge was ever intended as a celestial observatory for determining aspects of the calendar, especially for agricultural use, as others have claimed. That is just a stupid notion. Farmers know when the soil is ready for planting and don't use calendars. They also do not need to be notified of eclipses and, even less, to know the location of stars. Neither of these have anything to do with plantings or harvests. The only thing that makes sense is for the site to have been used in religious festivals.



[Image: Stonehenge, looking southwest. After sciencenews.org.]

But the obsession of the British with assigning astronomical features to Stonehenge, as also to many other megalithic monuments, is the direct result of the astounding advances made in astronomy in the late 1700s and early 1800s, especially in England, and specifically by William Herschel and Caroline Herschel. If this had been another era, other uses would have been ascribed to the megalithic monuments.

The earliest structure built at Stonehenge, dating from before 2900 BC (some claim 3100 BC), was a circle of 56 postholes (for wooden posts) with a surrounding ditch and embankment. The original 56 "postholes" are three feet (a meter) in diameter. These are not posts, these are holes for the trunks of full sized mature trees. It was thought at one time that these "postholes" might have contained the blue stones, rather than wooden posts. This would make much more sense in terms of initiating the construction, especially if this was done after 2900 BC.



[Image: Stonehenge. After *sciencenews.org*.]

The embankment was built inside the ditch. Every previous henge has the bank located outside the ditch. This already suggests a disconnection of the first builders from earlier forms and purposes, and suggests a late start. At this time there was also no causeway. The 56 posts were removed and the holes were backfilled with chalk (which is what the subsurface at Stonehenge consists of) in 2400 BC, when the stone construction started. Eighty "blue stone" blocks were transported from 250 miles (400 km) away, each weighing up to 4 tons. The blocks are not all from the same source.

The construction was then delayed 200 years (after 2350 BC), and taken up again (involving additional remodeling) about 2100 BC, when most of the blue stone blocks were removed and replaced by much larger local sandstone blocks (weighing up to 50 tons). There was additional remodeling in about 1600 BC. The bluestones were apparently moved to a woodhenge (called Bluehenge), the terminal of the road leading out of Stonehenge, and located on the river Avon. After 1500 BC all construction activity had stopped at Stonehenge.

Stonehenge is the only henge using capped stones. This is the most impressive feature of the site (plus the size of the stones). The ring of capped stones was constructed with the later larger stones. These large stones were dressed, which has suggested a Mediterranean influence to some, but stones used for other projects in the same region were roughly dressed or carved as much as 2000 years earlier -- long before the first use of dressed stone construction in the Eastern Mediterranean region. Stonehenge had a causeway added during one of the late reworkings of the site when 19 of the blue stones were also returned or repositioned.

Stonehenge kept the form alive for thousands of years, but the ideas were fractured. It is too small of a circle compared to earlier henges. The bank was built on the wrong side of the ditch. The ditch was never seriously excavated; it is shallow, and debris, left behind in the ditch, marks it as not being considered a serious part of the structure. The causeway was added late and, while the causeways of

all earlier henges are on the southeast side of the circles, the causeway of Stonehenge leads off from the northeast opening in the circle. Appropriately, it includes a bend (actually, two bends) in the path. The idea is there, but the assembly instructions are a little muddled. The causeway actually runs east for a much longer distance, then turns southeast to meet the Avon river. The effect is to suggest a processional, rather than a design to point to the midsummer sunrise. At the end of the causeway (at the river Avon) was a smaller henge ("Bluehenge") where the bluestones were at one time located.

In the end, after 2000 years of changes, Stonehenge might have functioned as a monument to the Sun -- but, over its long period of use, the dedication changes from the creator Sun, Saturn, to the Midnight Sun, Jupiter, and eventually to our current Sun, but not until after 685 BC. More on those topics in a later chapter. Since more and more interments are being found nearby, it is currently suggested that Stonehenge was simply a temple dedicated to the dead. That is the first sound idea in 300 years of archaeological considerations and speculations.

Endnotes

Note 1 --

The same intense agricultural practice appears in China, the Andes, Mesoamerica, Southeast Asia, and West Africa -- all at about the same time. It might be simplistic to note, but it was likely that in all of these cases it was the farmers who first recovered from the flood disaster of 3147 BC. Farming became the core for any further development of civilization and population expansion. About the sudden rise of these farming communities, William Mullen in 1994 noted:

"What these civilizations are all simultaneously emerging from, will ... be the largest question before historians of early mankind."

-- William Mullen "Cenocatastrophism" *Kronia Symposium* (1994)

There are problems with the statement "the graves of kings." Egyptian graves are identified by labels on grave goods, and it is assumed that the names on the labels correspond to kings with the same names (almost not a single body and very few goods have survived grave robbery in antiquity). Mesopotamian "royal" graves, as, for example, those excavated by Sir Leonard Woolley at Ur in 1928-29, have no identification with known names from the Sumerian *King List*. H. W. E. Saggs, in *Babylonians* (2000), writes:

"The richness of the contents of the tombs led Woolley to conclude that they were royal. This assumption received a degree of support from names inscribed on some of the objects, a few of which can be linked to kings of Ur of the Early Dynastic period [a broad range of 2900 - 2371 BC]. No burial, however, is directly identified with a royal name, and in one case the name of a known king occurs in the burial chamber of a female corpse. It is therefore possible that the royal names did not identify the persons buried but were there because royal persons had made dedications at some ritual vital to Ur."

Gunner Heinsohn, at the 2009 Conference on Quantavolution (Kandersteg, Switzerland), presented a paper on "The Scythian Kurgans and the 'Royal Tombs of Ur'," which convincingly identifies the "Royal Tombs" as kurgans of the 8th and 7th century BC.

So where are the kings of Ur buried? I would assume that there existed leaders and priests of Ur, but that the "kings" of the *King List* were celestial. This probably holds for Egypt also.
[return to text]

Note 2 --

To have Horus (Mars) first appear in circa 3067 BC, that is, to take the Egyptian *Contending of Horus and Seth* at face value, resolves a number of discrepancies in the list of the Kings of Kish, and matches the better dated archaeological records for the first dynasty of Egypt. See Appendix A, "Chronology Notes."
[return to text]

Note 3 --

The Egyptians recognized that Mars had been seen before, and distinguish this incarnation from the previous appearances of Mars, before 3147 BC, by calling the previous Mars "Horus of the gods" or "this first Horus." The Maya *Chilam Balam* makes exactly the same distinction.

I have to point out that Jupiter (Osiris) with his erect penis was probably remembered as if it happened yesterday by a people who could not place events in perspective in the past, except as rather meaningless narrative sequences.
[return to text]

Note 4 --

When pyramids start to be built, they are uniformly squat structures -- throughout the world. If these had been meant to represent the "mountain" seen underneath Jupiter, they would have been very steep. Jupiter dropped its steep mountain shape in about 2860, some 100 years before Mars no longer appeared near Earth. In fact, when Jupiter exits the asteroid belt in about 2550 BC and assumes a "mountain" shape again, steep pyramidal structures start to be built in Egypt. This happened during the initial years of the 5th Egyptian dynasty.
[return to text]

Note 5 --

The mastabas and first few pyramids of Egypt continue to face northwest until shortly before the construction at Giza. With the pyramids of Seneferu and Giza (constructed after Mars no longer visited Earth), and all the following pyramids constructed over the next thousand years, every structure is aligned with the geographic north. The exception was a period late during the 5th dynasty, when Egypt experienced another religious crisis, and a few pyramids were built with their long axis aligned northeast to southwest, perhaps reflecting the supposed location of the Underworld -- the location to which the door on the Duat would move every day, or the location of the older southern plasmoids.

Amazingly, the rectangular plan, the rise at about 60 degrees, the alignment with the north-south Earth axis, and the dates of the start of construction, are almost universally identical throughout the world. There are very few exceptions.

[return to text]

Note 6 --

David Talbott had difficulty explaining the iconography of a mountain, for he assumed the moving mountain to be part of the original display caused by Saturn during the "Era of the Gods." But it is not. Removed from the image in the sky before 3147 BC, and assigned to the 300-year period of the visits by Horus after 3067 BC, it is easily explained.

The cone of plasma extending to Mars could be seen with ease from below the equator and, in effect, becomes some of the first definitive celestial displays for people living in these regions (besides the view of the collapse of the Saturnian system in 3147 BC).

This can be verified from the earliest iconography of South America. One instance is the image of the "Staff God" which appears early in Peru. It consists of a globe-like face (or body) which carries a staff in each hand, held vertically. The two staffs are likely the edges of the conical plasma stream to Mars, where it appeared most dense. The Staff God was originally female. The image of this apparition as a God will be reinforced with the later appearances of Mars in the 8th and 7th century BC. Although most of the images of the Staff God are dated to 500 BC, a version has been found on a gourd dated to circa 2200 BC, at Norte Chico in Peru.

The Staff God is also known as the Smiling God, as opposed to more ferocious looking deities, with a round face, short body, and snakes for its hair, belt, skirt, and anklets. But in this form it more likely represents the "happy face" seen in the southern ball plasmoid after 10,900 BC. South of the obscuring equatorial rings, people would have had an unobstructed view of this. In this case the two staffs, which vary from condor-headed spear throwers (Tiwanaku) to shorter objects like beakers, may be an abbreviated version of the overhead lines of electrons, just as the single face is doing duty for three ball plasmoids. And he is also known as the Thunder God (probably meaning lightning) like the names of the southern gods in the *Popol Vuh*.

Egyptian images also show the pharaoh with two staffs, but these are today thought to represent the two kingdoms: the shepherd's crook of Upper Egypt, the grain flail of the delta. I am more inclined to have the crook stand for "time," as it also does duty as the year glyph, representing the plasma plume rising from one or both poles. The pharaoh was expected to live an afterlife of millions of years. He owned time.

The flail, which appears early in depictions of the Sed festival, is likely related to the brooms and sweepers noted by other people as moving along the overhead electron beams after 10,900 BC.

The identities of the Gods shift over time, and especially during the confusion of the end of the "Era of the Gods" in 3147 BC. Before 3147 BC, to the Egyptians, Saturn was Ra ("the Sun"). After 3147 BC, Saturn might first have been identified as Osiris, and Jupiter at first as Seth, and later as Osiris, to eventually be known as Ra or Re ("the Sun").

Late in the "Era of the Gods" Venus was possibly already identified as Isis. But after 3147 BC Lower Egypt calls her Neith, which is actually the well-established southern plasmoid of an earlier time, and only later as Isis. Hathor seems to be a southern version of Isis, but with differing qualities. And then there is Nephthys, who might be the sister of Isis, or be Isis herself.

Mars returns as Horus. "Horus" is the title of any leading God also. After circa 2600 BC Jupiter will become the main God, as the Midnight Sun, and be called Re ("the Sun"). His worship may have been instituted in Heliopolis (the city of On) soon after 3100 BC.

The first extensive "pyramid texts" date from 2345 BC. There are earlier snippets of casket markings. The main concern of the pyramid texts is to establish the worship of Osiris.

The pharaohs which we only know by Horus names extend only to about 2680 BC, through the First and Second Dynasty.

[return to text]

Note 7 --

The frequency is based on the synodic period of the orbits of Earth and Mars, which will be developed later in this chapter.

It can be assumed that the apsidal precession of the orbits of the inner planets was much greater (happened sooner) at a time where minor gravitational effects had not yet aligned the orbits into a resonant pattern which slowed the apsidal precessional rates to their current periods -- about 112,000 years for Earth, 43,000 years for Mars. See Appendix B, "Celestial Mechanics."

[return to text]

Note 8 --

Donald W. Patten and Samuel R. Windsor, in *The Mars-Earth Wars* (1996), have suggested a 720-day orbital period for Mars (at the time when the Earth's year was 360 days). I have verified the 720-day orbital period of Mars from some very arcane information among Maya calendar measures. See the chapter "The Maya Calendar." But additionally, the use of a 720-day orbital period has worked correctly when applied to different situations over a 3000 year time span. It can be assumed that the period of Mars after 3100 BC remained the same until 747 BC, and perhaps even later.

A 720-day orbital period for Mars places Mars and Earth (for an Earth orbital period of 240 days) in a 3:1 relationship. The synodical period of Mars would be (using a 240-day year): $(720 * 240) / (720 - 240) = 360$ days. Mars would show up near Earth every $720 / (720 - 240) = 1.5$ years.

Patten details how he arrived at the 720-day period for Mars with the help of Ronald Hatch, in "The 108-year Cyclicism of the Ancient Catastrophes," in *Aeon* (1990).

[return to text]

Note 9 --

This assumes an orbit for Mars with perihelion close to the Sun, and a crossing of Earth's orbit at somewhat of an obtuse angle. If that was the case, then the apparent rotation of Mars around the pole would only be seen for a day or so, since the orbital speed of Mars would increase after crossing Earth's orbit, and chances are that the planet would be lost from sight as the Earth fell behind in its orbital travel.
[return to text]

Note 10 --

The Sed festival may have celebrated an investiture of the pharaoh in the manner of the approach of Mars (Horus) with Earth, or it could have reflected a vastly more ancient tradition. In another chapter I have proposed that the Sed festival may date to the era of the southern ball plasmoid. Although there are Egyptian references to the effect that the festival was held at 30-year intervals (which would seem to relate to the return visits of Mars), nothing indicates that this was strictly observed.
[return to text]

Note 11 --

The Sumerian *King List* for the Kings of Kish seems to record both the travel of Mars and the sightings of Mercury, separated by 10 to 15 years. The period from one visit by Mars to the next varies between 35 and 25 years. See Appendix A, "Chronology," for details.

The indeterminate reigns of the pharaohs of the First and Second Dynasties of Egypt, which include very long reigns and very short reigns, and includes pharaohs only known by a very few inscriptions of serekhs (name tags), may reflect a similar process of naming chief priests or leaders after appearances of these two planets. The two dynasties extend over the same time span as the kings of Kish, and include some 17 to 20 pharaohs, similar to the number of kings in Kish.

It is clear from later records that Mercury becomes prominent in the skies at some interval measured in a thousand years. This could be suggested from the fact that "Mercury" becomes a popular personal name at various times. This last happened in the 8th and 7th century BC. Because there is an interaction of Mercury with Earth in 686 BC, I believe that until then Mercury remained on an orbit reaching far past the Earth's orbit to the edge of the asteroid belt, just like Mars.
[return to text]

Note 12 --

Although I have already proposed that the asteroids in the company of Mars could have been extracted from the edge of the asteroid belt, it remains mostly unexplained how this was accomplished. The cloud of debris could have preexisted, but it would be highly improbable that Mars would have gone into orbit at the center (or even near) such a cloud of rock fragments. Only Tom Van Flandern's suggestion of a gravitational sphere of influence for planets makes sense here.

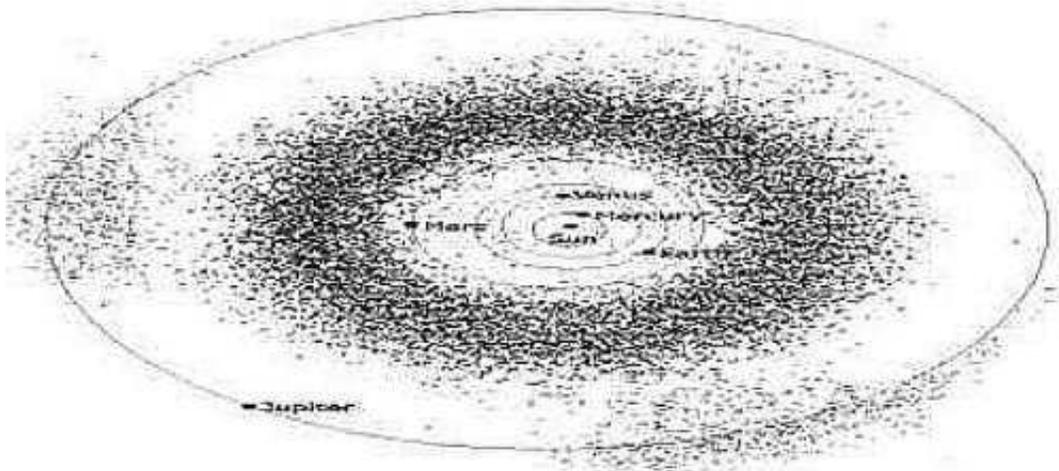
Except for Followers of Horus (Mars), of which six have been found to date, the "cattle" seem to have disappeared, or just cannot be seen today. Patten and Windsor in *The Mars-Earth Wars* (1996) also suggest that the orbit of Mars would have to extend into the asteroid belt, and thus the Followers of Horus were picked up as satellites.

To account for why Mars would have been expelled away from Saturn at the asteroid belt, it can easily be suggested that, on entering the asteroid belt, Saturn would have significantly reduced its coma, as we will see Jupiter clearly do also at a later date. That would have abandoned Mars and Mercury to the gravitational forces of the Sun, so that they would immediately have started on an orbit with the Sun as one of its centers (focus).

[return to text]

Note 13 --

Asteroids in the orbit of Jupiter, shown at an angle to the planetary orbits. Since these are rendered as dots, the asteroids look like they make up a considerable mass. This is not so, since the total mass of all the asteroids is less than three percent of the mass of our Moon. The clusters of asteroids preceding and following Jupiter (called the "Greeks" and "Trojans") are clearly seen to occupy a very wide section of interplanetary space. The same could be suggested for an asteroid cluster associated with Mars. The asteroid belt occupies a doughnut-shaped space in the Solar System, from about 2 AU to 3.5 AU.



[Image: Asteroids in the orbit of Jupiter. Illustration by J. Cook.]

[return to text]

Note 14 --

Not that there were not some actual battles or, more likely, skirmishes, especially after about 750 BC, which the Egyptians consistently lost -- to the Assyrians, the Persians, the Greeks.

"The visual depiction of Egypt's enemies and their role became so prevalent that it is difficult to distinguish in the archaeological and textual sources between purely ritualistic and rhetorical references to foreigners and genuine historical records. Repeatedly, we find examples of battles, and king's smiting enemies that in fact, did not take place, but were mere copies of earlier scenes." -- [www.touregypt.net/featurestories/enemies.htm]

In Mesopotamia one of the fictional invaders seem to be the "Gutium hordes" which overran the Akkadian empire, although we have no clear dates or locations for the Gutium hordes, nor do we know where they came from, or what language they spoke.

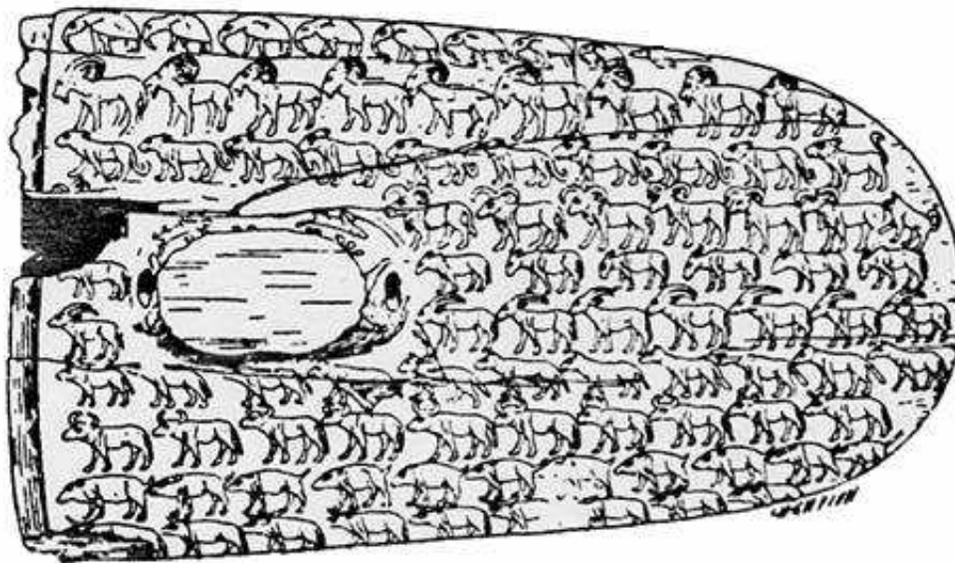
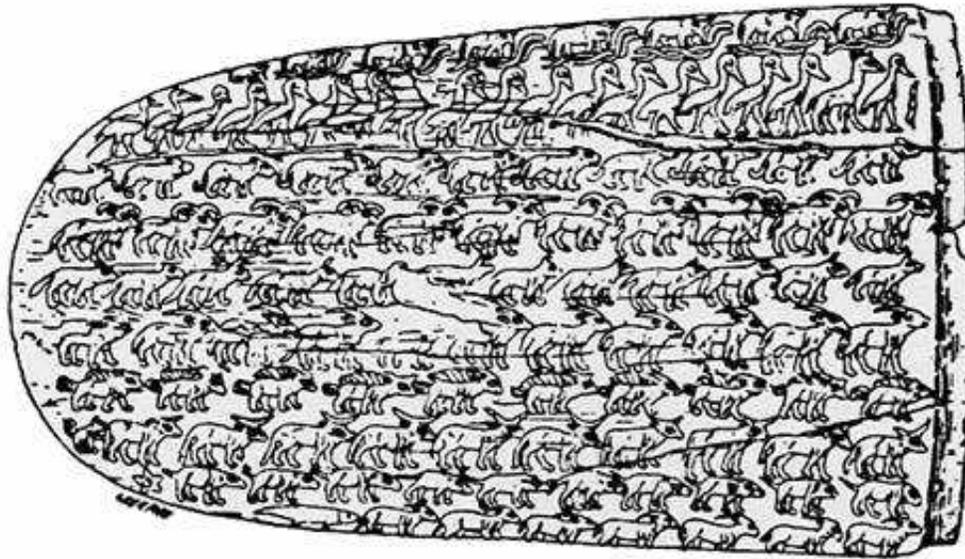
[return to text]

Note 15 --

An earlier cosmetic palette, the "Two Dog Palette," shows a wild scattering of floating animals -- deer, antelope, cattle, giraffe, lion, a long-nosed jackal with human arms and legs, and a four-legged flying griffin, plus two large dogs. Only the dogs are matched left and right.

Another early palette, the partial "Vultures Palette," shows bound prisoners, birds, and dead men floating toward the right. A lion gnaws at a fallen prisoner while one human steps on the neck of another. Interestingly, two of the four standards which are being carried before the pharaoh on the Palette of Narmer, and were thought to represent four of the nomes of lower Egypt, are here shown on a fragment, not carried, but with arms extending from the poles to hold the bound arms of two prisoners. Prisoners are identified by the fact that their elbows are tied together behind their backs.

Because these herds of animals (there are many engraved knife handles and combs totally littered with parades of animals) and prisoners occur before Horus first shows up, it would seem that the asteroid swarm (or some of these) were independent of Horus. This would account for the fact that the "cattle counts" are recorded separately from the passage of Horus. To have dead bodies (of humans) floating in the sky is reminiscent of the herds of dead animals depicted in Southwestern European caves.



[Image: predynastic ivory knife handle. The order of species depicted and their deportment, as with elephants standing on snakes (top of first knife handle), is almost invariant during this period, and thus largely formalized. After Francesco Raffaele.]

[return to text]

Note 16 --

The earlier suggestion identifying Geb as the Peratt plasmoid of the south (see the chapter "Saturn and Archaeology") has additional consequences. Jane Sellers, in *The Death of Gods in Ancient Egypt* (1992), describes the Sed Festival of the Egyptians, from Ptolemaic sources (300 to 40 BC). Sellers

writes:

"When the king reappears [after exiting from a chapel] he is wearing a kilt; in his right hand is the usual flail scepter and in his left is an object resembling a small Scroll. ... The king runs with this and displays it [the scroll] to all, proclaiming it was given to him by Osiris in the presence of the god Geb."

She adds a quotation from texts of the temple of Edfu (from Henri Frankfort, *Ancient Egyptian Religion*, 1948):

"I have run holding the Secret of the Two Partners[which is the name of the scroll]. The Will [another title]that my father has given me before Geb. I have passed through the land and touched the four sides of it. I traverse it as I desire."

"Touching the four sides" is suggestive of the "survey of the world" as related in the *Chilam Balam*, especially if this ceremony, almost inexplicably, involves the God Geb, who, as I have suggested, is likely to be the southern plasmoid. The institution of the Sed Festival would then date from remote antiquity. It might jokingly (or not) be suggested that the "Secret of the Two Partners," which is also called the "House Document," is a land deed. Who are the Two Partners?

The flail scepter is normally understood as a grain flail. A second matching scepter, which appears in association with the pharaohs at a later time, is the shepherd's crook. The obvious implication is that these are symbols representing the commerce of Upper and Lower Egypt, which were more or less divided into agriculture and animal husbandry. But it seems more appropriate to the grandeur of a pharaoh if the flail was the sweeping device (the bramble bushes or heteromacs) for the overhead lines of blazing electrons of the Peratt polar column of 10,900 BC to 8347 BC, and that the crook is the polar plasma plume, which, although first seen in 3147 BC (as related by the sculptures at Palenque in the Yucatan), was not added until much later. The shepherd's crook is the symbol for "years," as in the phrase "Osiris of a million years," found in the *Book of the Dead*.
[return to text]

Note 17 --

The asteroids are located at 60 degrees in front of and behind Jupiter (an angle measured from the Sun) because at this location the forces due to the gravitational attraction of Jupiter and the Sun are balanced. Located anywhere else along Jupiter's orbit, the asteroids would be disturbed gravitationally, and move into an elliptical orbit away from the orbit of Jupiter. The stable orbital positions at 60 degrees apply to any planet.
[return to text]

Note 18 --

Despite the definitive statement by Millett, I still feel that it is more likely that the four standards represent the "trees" of the cardinal directions -- the polar and equatorial plasma plumes.

But since the fifth standard apparently appears after 2490 BC, it might be the appearance of Jupiter on a slimmed down lower plasma outpouring, and much longer than the earlier apparition. Jupiter at this time was much further away from Earth. The steeply peaked shape of the sun-temples recalls this

shape also. The fifth standard was found carved at the base of a sun-temple. This fifth standard is thus likely entirely equivalent to the fifth directional tree of the *Chilam Balam*, which appears only once, and is associated with Jupiter as the "green tree of the center."

Additionally, it could be suggested that the city of Pe in the delta is actually Saturn above the North Pole before 3147 BC. Apparently Pe was occupied for 500 years in predynastic times, but was only a small village during the Old Kingdom and the Middle Kingdom, even though the Egyptians during these times referred to Pe as if it was still a major religious site and capital of the delta region. The inscription quoted by Millett is dated to early in the fifth dynasty, 2490 to 2445 BC.

[return to text]

Note 19 --

Apollodorus (AD 100) makes the ten labors of Hercules into 12 labors matched to the signs of the zodiac, starting with Leo. Note that all of the labors involve travel. Hercules is constantly on the move. This more likely represents the doings of Mars in the era of 806 BC to 687 BC, when Mars made nine appearances.

Gilgamesh, in later renditions of the *Epic of Gilgamesh* (from Assurbanipal's library, thus before 612 BC), likewise travels through the signs of the zodiac in his adventures. But note that there are ten adventures originally, not nine.

[return to text]

Note 20 --

The mastaba graves of the Horus pharaohs of the first and second dynasty at Abydos are apparently cenotaphs (that is, empty graves), with the alternate (real) burials at Saqqara. Abydos was also the city of Osiris, and his "grave" became a site of pilgrimages in later antiquity. If then the graves at Abydos start with the grave of Osiris, followed by a dozen graves of Horus, it might be suggested that the Egyptians *pro forma* provided graves for the deity which the pharaoh represented (or, in their thinking, "was").

It is thought today that there was political pressure for two graves, because the pharaoh was King of Upper Egypt and Lower Egypt, and thus needed to be buried once in the south and once in the north. But this has the ring of an inappropriate imposition of contemporary political philosophy.

Despite the design of the Giza pyramids as cenotaphs, the queen and officials of the court of Khufu were all assigned graves at carefully placed locations (as mastabas) surrounding the pyramid of Khufu. The real grave of Khufu has not been located.

[return to text]

Note 21 --

On the placement of the pyramids in the manner of the stars in the belt of Orion, see Robert Bauval and Adrian Gilbert *The Orion Mystery* (1994). This is a good theory gone wrong. Orion has nothing to do with Egyptian religion, and basing a whole book on the alignment of one air shaft seems ludicrous. Additionally, as I have pointed out in another chapter, the sky has changed since the pyramids were built.

Here is a comment from J.A.R. Legon, originally one of the sources for Bauval and Gilbert:

"One of the generally accepted theories of modern Egyptology has been that the ancient Egyptians identified their god Osiris with the constellation of Orion. This association has become so widely recognized that it would seem futile to dispute the conventional view, and yet a detailed study of the Pyramid Texts and some other primary sources for ancient Egyptian astronomy casts considerable doubt over the validity of the interpretation, and suggests that the equation between Osiris and the constellation of Orion has been merely a convenient make-shift adopted by scholars owing to the lack of more precise information."

-- J.A.R. Legon, "The Orion Correlation and Air-Shaft Theories," *Discussions in Egyptology* Vol. 33 (1995), 45-56.

He continues:

"I have taken the view that his theory depends on a misunderstanding of the religious and funerary beliefs of the ancient Egyptians, as expressed in the Pyramid Texts of the Old Kingdom. There is, after all, no evidence from the Pyramid Texts or elsewhere to support the idea that the successive pyramids of the Fourth Dynasty were supposed to be equated with different stars of the constellation of Orion; and I find the idea conceptually implausible in view of the fact that the successive kings of the Old Kingdom each wished to be identified with 'S3h' -- Osiris -- in the afterlife, in precisely the same terms from one reign to the next."-- J.A.R. Legon, from his web page.

Additionally, as others have pointed out, for a hundred years before Giza and for four hundred years after, the ceilings of tombs were often decorated in nothing but rows on rows of star symbols, with a complete disinterest in the actual stars and constellations. Stars were only seen as so many twinkling pinpoints in the sky. Even in later ages, the Egyptians would reverse star maps at will to fit the decor of a tomb, and render constellations as they saw fit.

H. W. E. Saggs, in *Civilization before Greece and Rome* (1989), dismisses the astronomical acumen of the Egyptians, writing:

"In view of the low level of their mathematics, it is not surprising to find that the Egyptians made very little contribution to theoretical mathematical astronomy; as far as current evidence goes, they produced no texts which deserve this description until the final centuries before the Christian era, after they had become open to Babylonian and Hellenistic influences."

[return to text]

Note 22 --

The colors do not all add up. The second pyramid should have been green or red. Green was the color of Osiris before entering the asteroid belt, and red afterward (although the date for this is uncertain).

Part of the red granite of the pyramid of Menkaure has been dressed. But it should be pointed out that only the bottom 16 courses are red granite. The top courses are missing, suggesting that the construction was left incomplete.

The best theory on how the pyramids were constructed requires that the facing was precut (at an angle) and installed with each layer of stones. The slope of the facing would support ladder-like runways used for hauling blocks up the side of the pyramid.

[return to text]

Note 23 --

I would also argue against any idea of incorporating some grand mathematical constants, like π or ϕ , despite what Herodotus was led to believe on the testimony of the priests of Sais. The mathematics of the Egyptians was crude at best. They never got π (the ratio of a circle's diameter to its circumference) closer than about 3.2 -- with the use of a series of fractions. I used $22/7$ in high school, which comes two orders closer to the correct value.

And what would the Egyptians use ϕ for? It has been suggested that the ratio of 1.6+ to 1 was used in architecture. ϕ is approximated with the ratio of the long side to the short side of the 3-4-5 triangle. It is also the ratio of the orbital (as well as the synodic) periods of Earth and Venus (today, and possibly in the past). European thinking along the notion of "the wisdom of the Ancients" has, even in this century, held that the Egyptians felt the need to pass mathematical constants on to future generations, as if we couldn't figure that out.

The deviation of the angle of the slope among pyramids as well as the angle of the access shaft speaks to rule-of-thumb construction, not mathematical constants and certainly not dead-on surveying practice. It is not at all easy to get the initial angle correct. But once it is set, it is relatively easy to excavate and finish the boring visually in an absolutely straight line over hundreds of feet. The fine details of surveying seemed not to have bothered the Egyptians, for the angles of these borings vary quite a bit, even if the actual shafts are absolutely straight.

They certainly could do surveying, for taxation depended on knowing the area of the cultivated land, and they seemed to have used the fact that the diagonal of a square area can be used as the side of a larger square which will cover twice the area. And they certainly knew the 3-4-5 triangle -- which is still used today by carpenters to square up building foundations and set walls perpendicular to each other.

It looks, in fact, as if the 3-4-5 triangle was used in the design of the slope of the Giza pyramids (and one of Seneferu's pyramids at Dashur). The Giza pyramids have a cross section of two 3-4-5 triangles set back to back with the "3" side as the base. It would be easy for stonemasons to check accuracy, for if the "5" side is held against the slope, a plumb bob along the "4" side will determine the accuracy of the facing of the exterior blocks. Using the 3-4-5 triangle as the basis for design also makes the estimates for materials easier since all measures of materials are multiples of the sum of the three sides of the 3-4-5 triangle -- the base area, perimeter, volume, and area of the facing stone.

The angle between the "5" and "3" sides is 53.1 degrees. The slope of the Giza pyramids is measured or estimated variously from 51.3 degrees (Menkaure) to 53.2 degrees (Khafre). Perhaps an inverted isosceles triangle with a base of "4" and legs of "3" and a plumb bob (or a "2-3" triangle where "3" is the hypotenuse) was used at the Bent pyramid and the Stone pyramids at Dahshur to achieve the 43.5 (43.36 actual) degree angle.

The access shaft angle of 26.5 degrees is found from a slope of 2:1. This angle has nothing to do with the elevation of the polar axis above the horizon, which is 30 degrees at the latitude of Giza. All pyramids since Seneferu used this angle, or a measure close to it.

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Note 24 --

Egypt's 3000-year repugnance for foreigners, and antipathy especially to the Asiatic nations, has to be rooted in the accomplishments of the Old Kingdom, especially the Giza pyramids. Egypt was the home of the dead Gods, and the pharaoh ruled upper and lower Egypt -- upper Heaven and lower Earth. The Sudanese were welcomed -- living in what was an extension of the Nile -- but not the Libyans.

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Note 25 --

I accept Velikovsky's suggestion of placing the monotheistic pharaoh Ahknaton in the ninth century BC (circa 850 BC). This will completely change the chronology of the New Kingdom.

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Note 26 --

Kurt Mendelssohn, in *The Riddle Of The Pyramids* (1974), addressed the three pyramids built by Seneferu, concluding from available evidence that at least two were under construction at the same time, a conclusion which goes against the thinking of Egyptologists that individual pyramids were built one at a time by individual pharaohs. It affirms, however, the conclusion reached by Colin Reader that the three pyramids at Giza were planned as one unit. Mendelssohn writes:

"We have seen that the sudden decision to change the shape of the southern pyramid at Dahshur [the Bent pyramid] resulted from the catastrophe at Meidum. The disaster, as could be proved conclusively, took place in the middle of the third construction phase at Meidum. On the other hand, the pyramid at Dahshur had reached about half of its projected height when the angle of elevation had been changed. This means that roughly 70 percent of the masonry of the Bent pyramid had already been placed in position when the previous pyramid at Meidum was still under construction. The inescapable conclusion is that the building periods of these two pyramids overlapped very considerably."

Likewise, at [www.gizapyramid.com/ernest_moyer4.htm], Ernest Moyers, in "Some Perspective on Pyramid Chronology" (2001), notes:

"... all four Great Pyramids [he includes the two pyramids at Dahshur] were part of one vast construction project. That project was carried on linearly until the last Great pyramid was built, and could not have been associated in any way with reigning kings. If we are willing to swallow all the logistical and mechanical difficulties I outlined ... to make the construction cover 100 years of time according to traditional spans, then some person or some segment of the population was able to not only conceive of the project, but also to execute it. Either this meant that a continuity of concept was maintained between generations, with full knowledge of design and methods of execution, or the genius behind the design lived an extraordinarily long life."

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Note 27 --

Seneferu's third pyramid is known as "the red pyramid." The core is a reddish limestone, although it was faced in white limestone from the Tura mountains on the east of the Nile. (Only the core shows today.) Thus originally it also had a white exterior.

The names of the two large pyramids are "The Southern Shining" and "The Shining," suggesting that, perhaps rather than built as trial versions of the Giza pyramids, these pyramids represent the three ball plasmoids of the south. No name has survived for the smaller third (red) pyramid.

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Note 28 --

For the obsessive construction of giant statues on Easter Island, Jared Diamond suggests a number of requirements. Foremost is the existence of an egalitarian elite -- petty clan chiefs -- where no one person or group had overall power. It also suggests a division of the population into separate classes -- stone masons, farmers, and chiefs or priests -- and the additional requirement of a substantial economic base, like farming, to allow for feeding those who did not farm.

Some 800 statues exist; 350 were erected. All the rest were in a state of being carved or readied for transport. The whole project was abandoned at about the time that the last trees were cut down. Before erecting the statues became the obsession, the Easter Island natives built giant platforms at the edge of the sea, which are also found at nearby islands (1200 miles, 2000 km, away). There are prototypes for the statues on other islands also. See Jared Diamond, *Collapse* (2005).

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Note 29 --

Henry Adams, *Mont Saint-Michel and Chartres* (1904).

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Note 30 --

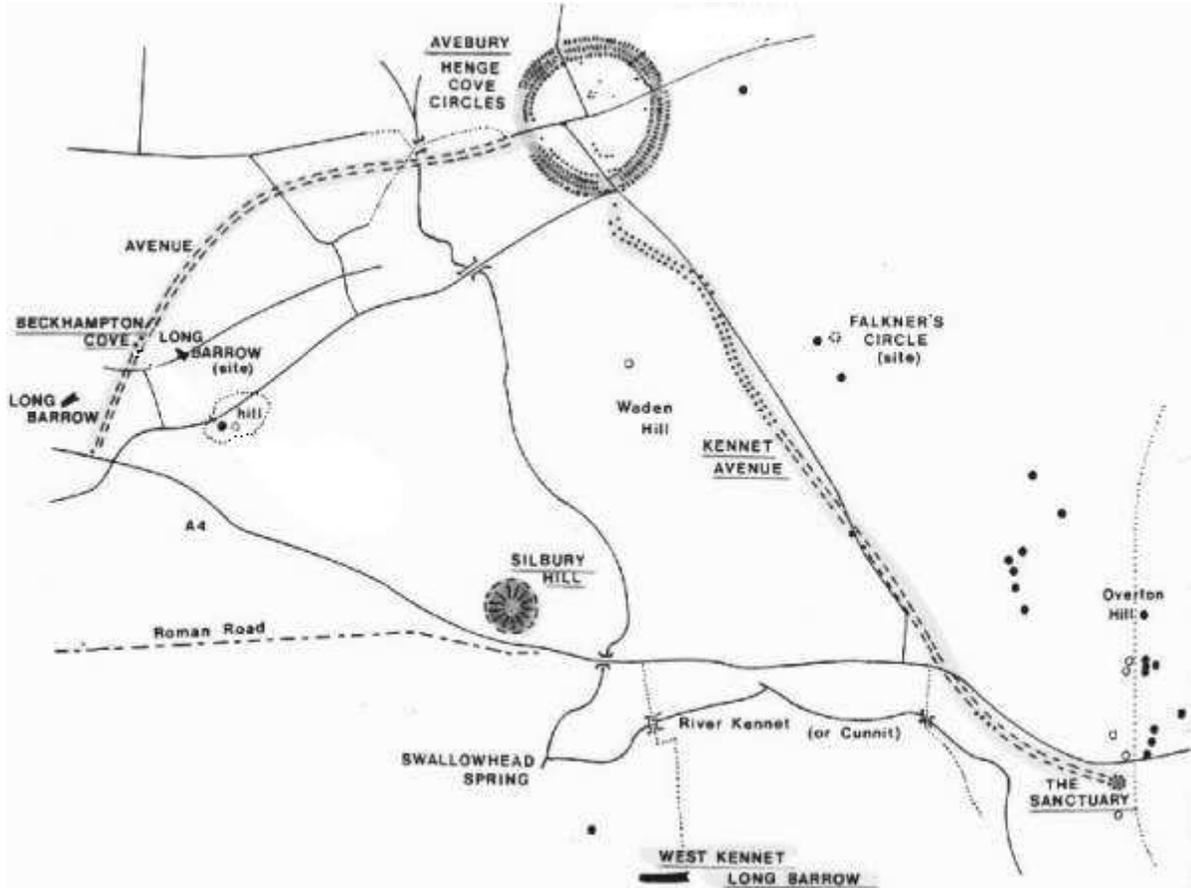
By Roman times the Celts of Western Europe firmly believe in metempsychosis, hundreds of years before anything resembling the concept of "life after death" was introduced by Christianity or its predecessor religions.

The Western Celts also clearly recall conditions of the "Era of the Gods" in the myths first recorded in medieval times (4500 years after the events). But, surprisingly, we hear nothing of barrows or henges in their recorded myths -- only tales of sacred springs and trees. Since they were very late invaders of Western Europe and the islands of England and Ireland, they had not witnessed most of the building and construction involved in the barrows, henges, and cursuses.

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Note 31 --

The purposeful rebuilding of the post structure at the "Sanctuary" is noted in *British Archeology* (February 2000). It was rebuilt up to five times, not to enlarge the structure, but to replace it with a structure of the same dimensions. With each rebuilding the posts were removed and the holes backfilled, except the last time, in circa 2300 BC.



[Image: Avebury henge and causeways, Silbury hill, the Sanctuary. After stonehenge-avebury.net.]

There is a second causeway, of about equal length, leading off from the main circle toward the southwest. It ends in nothing but two unconnected long-barrows which were built in 3600 BC, used for a thousand years, and apparently backfilled and sealed during the construction of Avebury henge. The causeway to the southwest looks like a celestial path leading to the oval structures in the southwest skies. Note the 30-degree bend.

West Kennet Long Barrow is a chambered barrow and located directly south of Avebury, south of the Kennet river. It was started in about 3700 BC. East Kennet Long Barrow, a little further south, has not been excavated.

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Note 32 --

The willingness of generations after 3000 BC to constantly remodel Stonehenge and keep its use current may be due to its limited size and central location.

The long history of constant reconstruction over the 1500-year period after 3147 BC might suggest that the building and rebuilding of the monument might have been the most important function of all, even though the actual meaning of this eludes us. This is not different from Mesoamerican monumental building practices.

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*Calculations are in Unix bc notation, where ^ denotes exponentiation; the functions a(rctangent), s(ine), and c(osine) use radians; angle conversions to radians or degrees by the divisors rad=.0174 and deg=57.2958; other functions are shown as f(); tan()=s()/c()
units: million == 1,000,000; billion == 1,000,000,000;
AU == 93,000,000 miles.*



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