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Recovering the Lost World, A Saturnian Cosmology -- Jno Cook Chapter 13: The Creation.



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Starting from Chaos

This chapter will deal with the swirling cloud seen above the north horizon since about 9000 BC when the shadow of the Younger Dryas lifted, the egg in the sky after 4900 BC, the "creation" event of 4077 BC, and the following "Era of the Gods" which lasted to 3147 BC. Some of the material from the previous chapters (which you may have skipped) is repeated here. The dates used in this chapter are developed in more detail in Appendix A, "Notes on Chronology."

By 6000 BC farming was already widespread in Europe, Asia, and Africa, and certainly in the Levant, Mesopotamia, and Egypt, in some cases dating from 9000 BC. An amorphous white shape still stood above Earth in the north, described as "mists" and "swirling clouds." Little was remembered of this period, and thousands of years later the claim is made that, at the beginning, there were no stars and no Sun, and that the stars did not come into being until after the Gods had left, 3000 years later. It was universally held that the past before "creation" was a long period during which the skies were in chaos and featureless turmoil.

In support of a long time during which the Earth was enveloped in clouds and mists, I suggest a perusal of any of the "creation myths" from around the world. These all describe a swirling sky and specify that this condition lasted a very long time. But also a long darkness. The creation myths hold that there was, in effect, no history before the "time of creation."

See especially the work of Dwardu Cardona, in *God Star* (2006), which traces these ideas from diverse mythological sources. Cardona presents descriptions which suggest that the "chaos" consisted of a cloud-like mass floating either in the sky or on an ocean. Associated with this hovering cloud shape was a twisted column of clouds or vapor reaching down to Earth to the north horizon. Cardona notes that this "creation god" was named Hurakan in parts of Central America. He also notes that the episode of darkness and the obscuring clouds are found in a different order among the legends of

different people. This is to be expected, since alternating periods of chaos and darkness, dating back to 10,900 BC, were repeated three times. [note 1]

The placement in time of the obscuring cloud would reflect the location of Earth with respect to the lower plasma expulsion of Saturn. The previous chapter suggested that Earth would have entered the coma of Saturn in 10,900 BC, and from that time moved laterally toward being below the south pole of Saturn. As Earth entered the coma of Saturn, the view of Saturn would have been obscured. Before that time and after 4077 BC, Saturn might have been seen, or, at least, the coma surrounding Saturn would have been seen.

Even after the relocation of Earth to below Saturn, it was not ever exactly below the south pole of Saturn, that is, there was not a single line extending through the axes of rotation of Saturn and Earth. It would probably have taken thousands of years before the spin axis of Earth and Saturn might line up. The reason for this should be obvious: the angle that the central axis of a planet makes with its orbit could point anywhere in the dome of the stars. This is still true today. Thus the axes of two planets would not likely be parallel, and would not coincide. [note 2]

After 10,900 BC, Earth was apparently within the continuous lower glow mode plasma discharge of Saturn, for the later descriptions of a "swirling cloud" in the sky is frequently accompanied by the description of a stream reaching Earth, although this could just as well be the electron streamers from the southern ball plasmoids to the sphere in the north before 8347 BC. If there was an actual plasma contact to Earth, this might have been seen as a blazing fire in contact with the ocean surface in the North Atlantic. Or it could be a simple stream of plasma in glow mode (although likely with a turn to arc mode where the stream concentrated in density).

After 8347 BC the orbit of Earth had become established well below the equator of Saturn (I suspect), and had most likely progressively moved up toward Saturn's south pole. Earth remained in this sub-polar orbit for over 4000 years. A possible indication that Earth was located below Saturn after 8347 BC, is that a warm and moist period started, called the Hypsithermal, which extended through to the end of the "The Age of The Gods," 3147 BC. The improved climate was likely due to a modulation of the Earth's climate by our Sun. [note 3]

I would further suggest that it was a plasma contact from Saturn to Earth which also changed the climate favorably. It might have been intermittent, or happen annually as the column reshaped into stable forms. Or it may also have been entirely due to the warming of the northern hemisphere by the Sun at its higher angle. I do not know, and can only speculate.

But for now let me suggest that a warm and wet climate would result from the periodic (or continuous) plasma contacts with Saturn. This long period of warmth has never been equaled. A plasma arc in contact with the Northern Atlantic would produce stupendous amounts of steam, resulting in the upsteaming of water vapor and the downpour of rain and snow from above the stratosphere -- adding to the glaciation of Greenland as a result. It would produce worldwide weather conditions unlike anything experienced today. The plasma contact would change the wind direction, increase the moisture, and moderate the climate of Earth everywhere away from the contact. Much later, after the arc ceased, the climate would become colder again. This is, of course, conjecture, and completely contradicts contemporary weather theories. [note 4]

An Unexpected Flood -- 5600 BC

As I have previously pointed out, when the Earth had dropped below the equatorial level of Saturn by about 9000 BC the climatic zones of the northern hemisphere and the tropics changed location, moving north by 10 to 15 degrees of latitude. The tropic zone of Africa moved to the Southern and Central Sahara, and the dry zone moved further north. The climate in Southern Europe, North Africa, and the Middle East worsened between 9600 and 9400 BC (the end of the Younger Dryas), and again from 6200 to 5800 BC, becoming cold and dry. The cold temperatures are open to question, but the lack of rain is certain.

Much of the drop in temperature is today blamed on the release of fresh water into the North Atlantic from the melting North American glacier. The worsened climate affected farmers in the Middle East especially, for there the rains disappeared completely. Nearly all of the Levant was abandoned for periods for up to 400 years. The same drought depopulated large areas of Southern Europe. [note 5]

Along the margins of the Black Sea and its river valleys, however, farming had continued during the drought experienced in Europe and the Levant after 6200 BC, and farming and fishing had concentrated there. The Black Sea region was climatically isolated from the surrounding land areas because it formed a depression 500 feet (150 meters) below the Mediterranean sea level and the adjacent land areas, and even more so because it was ringed on three sides by mountains. The region was thus unaffected by the dry winds from the west and south. The Black Sea was also, at that time, a fresh water lake, unconnected to the Mediterranean, fed by glacial runoff from Northern Europe. The region provided fertile lands in the river valleys and deltas of the Danube, Dneister, Dnieper, and Don rivers on the north margins, and in additional river valleys on the south margins flanking the Anatolian highlands where, incidentally, grains were first domesticated. [note 6]

In circa 5600 BC, the Bosphorus cracked open and the Black Sea was flooded with a fury of Mediterranean salt water dropping 500 feet (150 meters) into the depression, a process mostly completed in a few months. It is likely that externally induced seismic activity caused the Bosphorus to open up. Possibly the gravitational forces exerted by the arrival of Earth underneath Saturn were responsible. Once started, the flooding was unexpectedly rapid, moving miles per day in the low-lying river valleys. Details of this event will be incorporated much later into the story of a worldwide flood by the farmers and fisherman of the Black Sea.

William Ryan and Walter Pitman, in *Noah's Flood* (1998), describe the evidence for the sudden flooding of the Black Sea through the Bosphorus in 5600 BC, and the diaspora of the mixed-farming (farming, hunting, fishing) people to Europe and Central Asia (as well as the spread of Indo-European languages). Europe was largely populated by these farmers fleeing the catastrophic flooding of the Black Sea. By 5400 BC they had reached as far as Paris.

Parts of the initial waves of people spread to Anatolia, the Levant, and Mesopotamia. At least, so it could be assumed. The warmer and moister climate throughout the world after 5800 BC allowed farming to return to the Middle East. This climate also opened up the sub-arctic regions for habitation: Norway, Sweden, Finland, northern Russia, Siberia, Alaska, and northern Canada. Thousands of years later, as the climatic conditions worsened again in the north, we will wonder why so many tribes appear to move south from the far north.

Those who dispersed to Central Asia return on horseback a thousand years later, as the armed Kurgan nomads and herders, and established themselves throughout Europe. After 2000 BC there were additional movements (of Indo-European speakers) from south central Asia into the Middle East (Iran and Anatolia).

The flooding of the Black Sea is well established and well dated. The secondary effect of the flood was the spread of agriculture into Europe and Central Asia with the migration of people away from the Black Sea region. Indo-European languages show up as far east as the western borders of China. An overflow of Indo-European speakers from Central Asia entered India and Persia.

Despite the title of the book by Ryan and Pitman, *Noah's Flood*, this was not Noah's flood. Noah's worldwide flood would happen in 3147 BC, although the Bible will place it in 2349 BC. The Black Sea flood will, however, be the model for many later flood tales, especially in telling how people survived in boats -- loaded, of course, with farm animals, fodder, and seed.

The Egg of Creation -- 4900 BC

By 5800 BC brighter skies had returned, although possibly the Sun was not yet seen regularly. The swirling "cloud" remained, but after 900 years, in about 4900 BC, and at a location surrounding the North Pole of Earth, a circular shape became visible through the swirling clouds, a globe ten or twenty times the diameter of the Moon. [note 7]

The notions of misted skies and of endlessly churning water overhead, which we have from almost all sources, might reflect experiences covering thousands of years.

The globe stood, inactive except for a daily rotation about the North Pole, for another 700 years. The globe looked white. This was the planet Saturn enclosed in a closely held coma of plasma in glow mode. All the tales recall that when God first emerged (700 years later), it was as a smaller object -- an egg.

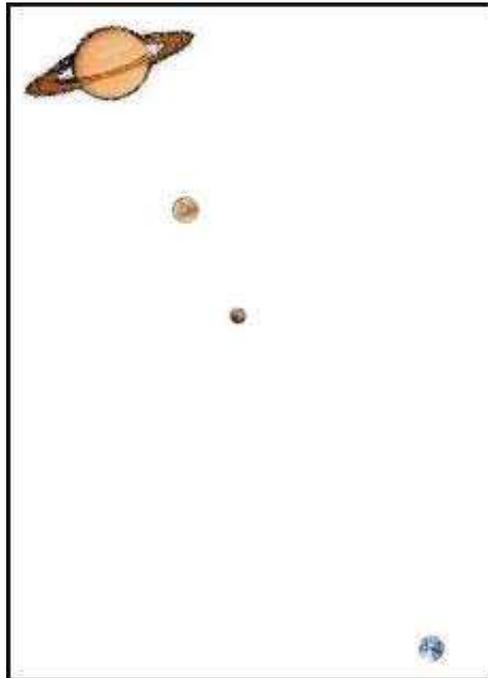
Although in some legends of creation only a globe is remembered, other sources recall the figure of a duck or a goose, having noticed the planet Uranus, which was displaced from the central axis of rotation of the Saturnian planets (as noted in the previous chapter). Uranus still looked like the head of a bird -- with a beak and with a neck seemingly connected to the globe of Saturn. Thus any number of creation legends hold that the creator god was a (white) duck or goose. The Egyptian hieroglyph for Ra, the creator God, is a duck. The sacred animal of Brahma, the Vedic creator God, is a goose. As I have noted, from about 5000 BC egg-shape designs are added to pottery decorations in Eastern Europe. [note 8]

In Greek mythology, as in Egyptian mythology, the globe is the original creator God -- Ouranus ("Father Sky") in Greece. Even before the Goose of Creation laid its egg, or before the Egg of Creation hatched, the imagery must have been understood as being alive -- even though nothing much happened for 700 years -- for it moved in a circle around the pole star on a daily basis and additionally the plasma connections would have grown and moved (and changed shape) throughout the year as Saturn moved alternately closer and more distant from the Sun on its orbit. [note 9]

The egg, the real egg, not the body of the duck or goose, might have been Mercury, enclosed in a glow mode plasma, but distinct enough from Saturn to be noticed as a smaller object seen below the duck or next to the duck. With a coma Mercury would have been 10 to 30 times its current diameter.

Creation -- 4077 BC

After the initial period of chaos, and after looking like a duck with an adjacent egg, Saturn went nova and started to blaze like a sun in 4077 BC. Saturn burst into arc mode, threw out an enormous amount of matter, and developed a corona, that is, it lit up like a sun. Initially the globe (egg) seemed to split and light up, and bright circles (rings) appeared at the periphery. The glow mode coma collapsed and disappeared suddenly, as happens in a change from glow mode to arc mode. The mass ejection formed the rings with which Saturn remained marked. Venus was expelled from Saturn and started to revolve around the planets far beyond Saturn's rings. Lightning flashed continuously from Saturn to the rings, as it also still does today.



[Image: A polar alignment of Saturn, Mercury, Mars, and Earth. The relative sizes of the planets are correct, but the distances between the planets are not. Neptune, Uranus, the plasma surrounding these, and the plasma connection to Earth are not shown. Illustration by J. Cook.]

And so the sun was born. It was much smaller than the original white coma which had surrounded Saturn.

In the 16th century Maya *Popol Vuh* the sun rises directly after the darkness of the Younger Dryas ended. To have a newly born sun dispel the darkness makes narrative sense. It is, however, not today's Sun. Even the readers of the ancient source manuscripts recognized that.

"The sun was like a person when he revealed himself. His face was hot, so he dried out the face of the earth."

Seen from Mesoamerica, the "sun" rose no more than about 20 degrees or so above the north horizon. The *Popol Vuh* continues:

"... when the sun had risen just a short distance he was like a person, and his heat was unbearable."

The sun "looked" like a person, with outstretched arms, the rings of Saturn, and a twisted leg reaching down to Earth. The text here suggests that perhaps Earth was relatively close to Saturn initially, and distanced over the next thousand years. The "Sun," as noted, rose only part way.

"Certainly it was not the same sun which we see, it is said in their old tales."

The Aztecs also had a notion that the present Sun seen in the sky was only a mirrored reflection of the actual Sun. The source for this came from the same set of ancient documents. As the *Popol Vuh* claims:

"As they put in the ancient text, 'The visible Sun is not the real one.'"

It was suddenly light during the day and during the night. This constituted the start of a period of continuous light, which some creation myths claim as following the period of darkness. Actually, of course, the considerable darkness of the Younger Dryas was separated from the period of the nova event of Saturn by almost 7000 years of gray skies and overhead chaos. It wasn't dark, but it hadn't been sunny either.

"The name of the water of chaos was Nun. It was from Nun that Ra created himself, rising up on the first piece of land -- the primeval mound (Benben) out of the water lily (lotus) blossom, born from the world egg, or as a /bnw/ bird who then found and landed on the mound."

-- Gary Fletcher, "Zep Tepi," at www.users.bigpond.com/MSN/gary_fletcher/zeptepi.html

Saturn was now seen clearly in the skies over the northern horizon, as were Venus, Mercury, and Mars, plus their satellites. Uranus would disappear behind Saturn, as Neptune had done earlier. This event was recalled throughout the world as the start of "The Age of the Gods." It was universally held that humanity was witness to this creation event. The year when Saturn lit up can be derived from the Sumerian *King List*, and from the Jewish historian Josephus -- both of which I will detail in a following chapter. [note 10]

The glow mode plasma which had encompassed Earth, now reduced to a single column in arc mode, with a bang. The change to arc mode must have caused a tremendous noise to be heard throughout the world. A late Egyptian source of the Third Kingdom relates:

"Amun initiated creation, in association with his sacred animal, the goose. He is called the Great Honker, who gave a great screech which stirred the inert cosmos into action. He is also called the Great Cackler -- the creative energy in the form of a goose which carried the cosmic egg from which all life emerged."

-- *Ogdoad of Hermopolis*, paraphrased

This is the sound of an electric arc striking, followed by the sounds of a sustained electric discharge. In one of the Egyptian creation epics (as well as a large number of other tales), God creates himself by his own spoken word. Spoken words were capable of great power for the Egyptians. John 1:1 is one of the last evocations of this notion from antiquity. [note 11]

"In the beginning was the Word, and the Word was God."

Another source depicts the creator God in coitus with Mother Earth, penetrating her "fifty times" and eventually moving away, never to lie with her again. Read that as individual arcs, which are as likely as a sustained arc discharge. (This may sum up a thousand years of celestial events.) We see this today (on a larger scale) in pulsar stars -- acting as relaxation oscillators.

David Talbott has traced the sequence of events from Egyptian iconographic and literary sources. At first only a globe shows. At some point the globe splits -- that is, a line forms horizontally across the globe. "The egg cracked," say the records, and goes on to describe the further sequence of events, involving a change in color and a differentiation of the top and bottom half. It is the primordial Yin and Yang of Chinese creation myth. [note 12]

The line which showed when "the egg split" is the first of an equatorial mass expulsion which will create the rings of Saturn. As Saturn now goes nova, the glow mode coma collapses, as I mentioned above, and a smaller sphere, the actual planet in arc mode plasma discharge, appears. Many myths clearly differentiate between the egg form and the blazing planet as if these were two Gods with differing names.

The tale of the egg which splits open along a horizontal line implies that Saturn was initially seen from an angle. With Saturn anywhere "above" the Earth in the northern hemisphere of the sky, this could happen if Earth were not located directly below Saturn, from which vantage point the rings would have looked flatter.

That Earth started out laterally to Saturn, and over an extended period of time was forced to slip lower (that is, to assume an orbit which was further below Saturn and below the orbit of Saturn), is suggested from the description provided by a number of sources. One of these is a section of the Maya *Chilam Balam* books, which notes that Uranus, initially seen above Saturn, "lowered itself into the center" of Saturn (described as a "flower") and that subsequently Saturn lit up like the Sun (see the chapter "The Chilam Balam Books"). The above description from the *Chilam Balam*, about the movement of Saturn and Uranus, represents a changing perspective due to the lateral movement of Earth under Saturn to a more central location. Uranus could, in fact, completely hide behind half the diameter of Saturn. [note 13]

This change in perspective would probably date to well after 4077 BC. It is astounding to think that the predecessors of the Maya (or Olmecs) could have records reaching back that far into prehistory, but the description which I ran across, after already having settled on the movement of Earth during this time, is visually accurate.

The description also suggests that Saturn and the attendant planets -- all five of them -- were in full view at one time, rather than shrouded in mists. But we may also be seeing an extrapolation from earlier sources. We have, at any rate, no similar sequence of events, that I am aware of, from sources in the Eastern Mediterranean. It is also possible that the Maya or Olmecs had a slightly different view of what was happening overhead, not in terms of perspective, but in terms of the occluding plasma column. This suggests that the "clouded skies" (or at least some of them at various times), were composed mainly of the plasma stream in glow mode from Saturn, and encompassed only a portion of the northern hemisphere, but were not significant below 20 degrees latitude.

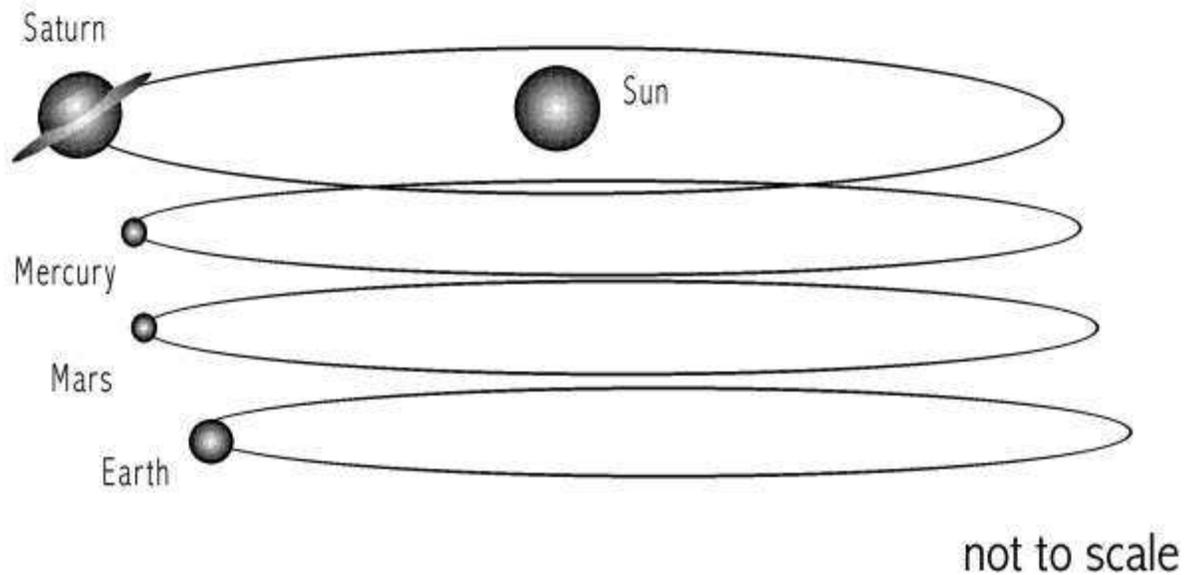
That the above description is accurate can be gleaned from additional text of the *Chilam Balam*, which continues with, "His heart was on fire; the Sun was within, and his name could be read." In transcribing information from ancient illustrated glyphic records, the copyist was confusing the illustration with what at a later time would become the glyph for "sun." ("Kin" -- a four-petal daisy form.) Additionally, because the *Chilam Balam* is obviously a radical abbreviation of events, we cannot tell if a thousand years have not lapsed between the start of a sentence and its end. (All punctuation is missing anyway.)

As Saturn lit up, a blazing ball would be seen, with Mercury and Mars in the center as much smaller orbs (but with Mercury still 10 or 20 times larger than Mars because of its coma). Mercury seemed to connect with four plasma streams to "the edges" of Saturn (the number varies over time). These were streams of plasma coming from Saturn far above Mercury and Mars, changing from dark mode to glow mode near Mercury. This continued past Mercury to land at Mars, but as a single stream in arc mode, because Mars did not have a plasmasphere of any significant size, lacking a planetary magnetic field. This last would not have been seen from Earth. This configuration of four streams landing on Mercury, looked from below like a four-petal daisy. This became the glyph for sun, "kin." Thus "his name could be read within."

"The rings of Saturn were known also to the aborigines of America before Columbus discovered the land; this means also before the telescope was invented at the beginning of the seventeenth century. An ancient engraved wooden panel from Mexico shows the family of the planets: one of them is Saturn, easily recognizable by its rings."

"Nor were the Maoris of New Zealand ignorant of them: 'One of the great mysteries connected with Saturn is the still unanswered question of how the ancient Maoris of New Zealand knew about her rings -- for there is evidence that they did have a Saturnian ring legend long before the days of Galileo.'"

-- Immanuel Velikovsky, unpublished document, "ring.txt" at [www.varchive.org]



Although the Maoris did not arrive in New Zealand (from the Solomon Islands just below the equator) until about AD 1200, in their original homeland north of the equator they had witnessed the birth of God.

In the Maya *Chilam Balam* the equatorial rings of Saturn are seen as the petals of a flower. About Saturn (Oxlahun-ti-ku), the text reads, "The flower was his mat, the flower was his chair."

Some other sources claim that Saturn's rings (as we know them today) were generated later after a cataclysmic contact between Saturn and Jupiter. In the Isis and Osiris story they are the mummy wrapping for the body parts of Osiris gathered by Isis before his body is sent to the underworld.

In its position below Saturn, the Earth now rotated around the Sun below the Sun's equator, so that the Sun continually remained in the northern hemisphere of Earth. Seasonal variation would have been slight, the days long, and, as was recalled at a later time, "fruit ripened all year long." This period, lasting to 3147 BC, constituted what is known as "the Era of the Gods."

The Eye of Ra

Mankind is now met with a gigantic circular shape in the heavens above the North Polar region, encircled in oval rings, with a stream connecting it to Earth. The image reveals Mercury as a white iris with the darker shape of Mars as the pupil of what now looks like an eye staring down from above.



[Image: "Wedjat" -- the Eye of Ra. Source: public domain.]

An image from Egypt, called the "Eye of Ra," captures what was seen in the sky -- Saturn as an eyeball with an iris (Mercury) and pupil (Mars) and with the eyelids and eyebrow defined in almond shaped lines above and below (the rings as seen from below at a slight angle). It is a well-known image, with what looks like a triangular leaf-like form hanging from below the eye, and a feather-like swirl drawn sideways from the lower lid away from the nose, ending in a ball. The plasma discharge from the equatorial region of Saturn (or polar region), stretching away from Saturn, may have become the line of makeup drawn from the outside corner of the eye across the cheekbones in the later depictions of pharaohs and gods. [note 14]

Talbott and Thornhill suggested that the leaf-form of the Eye of Ra is Mars with a plasma discharge shaped as a sword or knife. I think, however, that most times Mars was the pupil of the eye. When Mars was close to Saturn it would visually have been reduced to a mere speck. Only after Mars started to lower toward Earth and was displaced from being centered on Saturn, would it look large enough and would it have the triangular tongue shape. The tongue is a plasma of Mars dust pointing to Earth. [note 15]

The pointed plasma outflow extending from Mars may have become the model for the celt -- the polished stone axe -- of Western Europe during the European Neolithic (after 6000 BC) and into the Bronze Age (to 1500 BC). These axes are next to useless for cutting down trees although they would hold their own as maces or bludgeons. Archaeologists call their owners the "battle-axe people," even though we have no evidence of battles. The tomahawk (sagaris) appears in the steppe region of Central Asia much later in the Bronze Age .



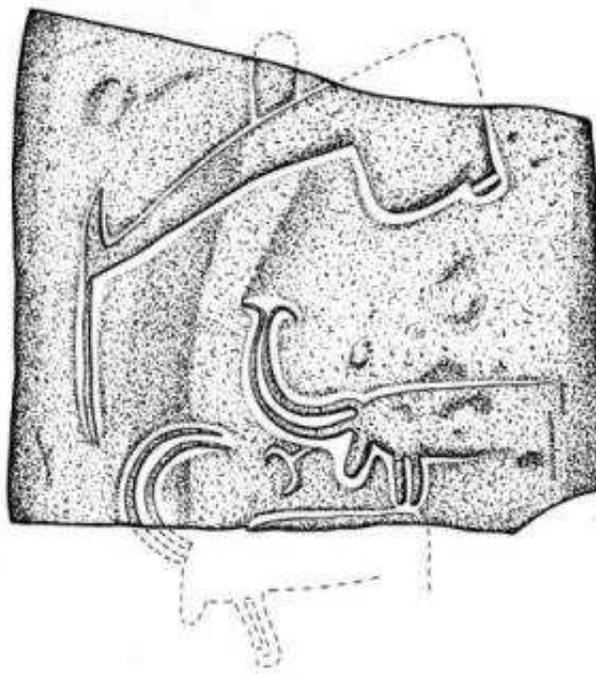
[Image: The Narmer Palette of 3050 BC, Egypt. This is a dedicatory cosmetic palette found buried beneath the floor of the temple of the Falcon at Heirakonpolis (Nekhen) in Upper Egypt. The back side is shown. This was at one time thought to represent the unification of predynastic Egypt. After ptahhotep.com.]

The stone celts became "must-have" luxury articles and an index of wealth. A thriving business in the manufacture of very pretty celts developed in late Neolithic England and the polished stone axes are often included in senseless abundance as gifts to the dead among grave goods.

The swirl and ball of the "Eye of Ra" clearly represents Venus, expelled from Saturn at the moment of creation, and still connected with a plume-like swirling plasma stream. This feather-like symbol of Venus is used for the headdress insignia of some of the Gods of Egypt -- as a feather ending in a circular shape at the top. (These might also represent the Earth's polar plumes -- the *axis mundi* -- discussed in the following chapter.)

Alternately, it will become the cobra form (the "uraeus"), always part of the crown of the pharaoh. It is also, of course, represented as the mace with which the pharaoh "smites his enemies," as in the Palette of Narmer dating from 3100 BC, and on labels to grave goods. The "enemy" obviously is Uranus. [note 16]

The image of Venus with a curved plume of plasma extending toward Saturn, also becomes depicted as an ibex with wildly spiraling horns -- at times enclosing an egg, the globe of Saturn -- seen as pottery decoration in Eastern Europe and the Levant, and much later in Scythian ornaments.



[Image: The plow and ibex, carved in a section of the 90-foot tall Grand Menhir at Carnac, 4000 to 5000 BC. The dotted portions continue on other segments of the broken menhir. Source unknown.]

The swirling Venus and its tail may also be the model for that strange Bronze Age personal ornament, the torque. Torques are composed of twisted strands of gold wire with balls at the ends. They are worn around the neck, just as Venus and its swirl of plasma encircled the head or neck of God in the skies above. We know these primarily from the European Bronze Age of circa 1500 to 800 BC. They may have had an earlier counterpart of organic material. [note 17]

The two symbols external to the eye -- Venus with its swirl and the hanging sword of Mars (or Uranus) -- also show up early in European iconography as the ibex and the plow (or celt) inscribed on pottery, but also carved on the face of the Grand Menhir at Carnac (dated at 5000 to 4000 BC). The plow more likely may have represented Ursa Minor, with the ibex representing Venus. With Saturn located away from the North Pole location (which was in Ursa Major at that time), the two would have endlessly circled around Saturn during each day and night. [note 18]

To the Egyptians the "Eye of Ra" represents the completeness at the beginning of time -- the "one-ness" at creation. The symbol first appears early in the Old Kingdom. By 1100 BC the constituent parts of the symbol (the corner of the eye, the pupil, the swirl of Venus, etc.) will come to represent a fractional notation ($1/2$, $1/4$, $1/8$, etc.) as the "parts" of the "one-ness." Egyptian mathematics of multiplication and division will remain embedded in a cumbersome fractional notation for the next two thousand years.

What did the Polar Configuration look like to the humans below? Let me first point out that conditions changed continuously, probably even on a seasonal basis. At first Saturn stood blazing like a sun in the sky above the north horizon. But this did not last. It probably diminished to a red glow, or even the aspect of a quiet and cold planet. And if at one time an arc connected Saturn with Earth via Mercury and Mars, this was substituted for with plasma in glow mode, and at various levels and with various effects.

The Polar Configuration

From the vantage point of Egypt or Mesopotamia, Saturn would have represented a blazing globe about 30 degrees up from the northern horizon, with a diameter of about 5 or 10 degrees -- ten to twenty times larger than the Moon. (At a later time, when the Earth had receded from Saturn, the globe in the sky would be much smaller.) A continuous series of eruptions could be seen rising from the edge of the globe. Surrounding the globe there were a number of rings, probably also ablaze. These rings were likely seen as ovals, crossed by lightning flashes, and interrupted by the moving shadow of Saturn. (For the first time in thousands of years the Sun was also seen.) [note 19]

Well outside the rings, to the left of Saturn and "above" (in the standardized image), a white globe hung suspended and attached to Saturn with a swirl of plasma. This was Venus, and would (with its own coma) have had a diameter visually somewhat smaller than the size of the Moon. It is possible that Venus rotated about Saturn in a synchronous orbit and in the same direction as the Earth, so that it would seem to stand still in the skies. [note 20]

Centered on Saturn was a white spot with a dark center. This was Mercury and Mars looking like the iris and pupil of the eye, but in actuality located perhaps a million miles (1,600,000 km) below Saturn and separated from each other. Impinging on Mercury were four (or more) bundles of plasma in arc or glow mode, seemingly from the edges of the Saturnian globe, but in actuality simply coming from the space further above. At times the four bundles would change to three or to five. At other times changes in the electric field surrounding Saturn (due to the Sun) would cause discontinuities in the streams, causing them to look (for example) like a swastika. At times of extreme electric discharge conditions the streams would divide into 14, 28, or even 56 bundles. (These numbers are the standard number of separate bundles of electrons associated with any arc mode plasma outpouring.)

From Mercury the plasma would have continued to Mars. Even if at glow level at Mercury, it would have formed into a tight bundle in arc mode at Mars, since Mars could not produce a plasmasphere of any size much larger than the planet's surface.

Rather than carve a gigantic hole at the top surface of Mars as would be expected of cathode marks, three things seemed to have happened. First, the initial arcing boiled off the upper ocean. With the larger ocean missing, the geographical rotational axis of Mars shifted, bringing adjacent regions to the top. There also seemed to have been enough runoff to fill the smaller ocean, named Deuteronilus.

Astronomers have recognized this last as an almost certain possibility -- there was a disappeared ocean, two, in fact, and Mars has shifted its axis of rotation by 15 degrees.

The next series of contacts created a half dozen fulgamite lightning blisters, which are today called volcanoes, even though they are hundreds of times larger than any volcanoes on Earth, and none has ever produced a lava flow. Certainly these are very strange volcanoes for a planet of only 1/10th the mass of Earth.

Mesoamerican depictions of Mars, although composed of glyphic signs and symbols, recognize the smaller and remaining ocean as a mirror worn by Mars on his forehead. He is also depicted with a torch -- a clear indication that the upper ocean of Mars was sublimating water vapor to space in the 8th and 7th century BC.

The last condition, apparently exhibited during the "Age of the Gods" -- that is, before 3147 BC -- was for a plasma stream in glow mode to simply pass by Mars, probably using clouds of electrified dust. This is graphically demonstrated with the Egyptian White Crown and Red Crown, which represent Mars enclosed in a glow mode plasma stream. The plasma stream continued from below Mars to Earth. The iconography of this condition was explored and presented at the Kronia Conference of 2001 by Talbott and Thornhill.

Originally, and early in the sequence of events after 4077 BC, when Saturn went nova, the plasma stream probably left the lower half of Mars as sporadic discrete arcs, resulting in blistering the lower hemisphere of Mars with thousands on thousands of craters.

On approaching Earth the stream of plasma would have coalesced to a single column or a twisted intertwined column by the Earth's magnetic field, and struck the North Atlantic at the location of the north magnetic pole, where it would have thrown up a stupendous bank of water vapor. The plasma stream thus looked like the stem of a plant, rooted in the Earth, atop a mountain (of steam), with Saturn on top looking like a sunflower.

Periodic changes in the electric conditions exterior to Saturn would cause various discontinuities in the plasma stream, so that at times the stem on which the flower of Saturn was mounted would seem to grow leaves in sets of two at the left and right of the stem. These are flattened toroids, and a common plasma stream discontinuity.

On nearing Earth the stream took a bend to land at the north magnetic pole. The location of the contact point with Earth would remain unmoved for any point of view on Earth, but the portion located 20 or 30 Earth diameters above the Earth, plus all of the stem up to and including Saturn (and its planets), must have looked like it was constantly moving in the wind. The stream looked also like a river connecting Saturn to Earth. Vedic sources call it a swizzle stick, stirring up creation.

The whole apparition, initially separated from Earth by maybe a few million miles (four times as far as the Moon is from Earth today), but eventually at a distance of 3 million miles (5,000,000 km), looked much closer than it was in reality, especially because Saturn was seen relatively low on the horizon. Details of Saturn and Mars could be clearly seen. The satellites of Saturn could be distinguished and seen traveling around the planet, and were counted by a number of peoples as the Gods occupying the upper land while the Saturnian globe was recast as the "land" of the Gods.

The satellites of Mars also could be seen, even though they were quite small, but not until Mars approached Earth (as will be related in the next chapter).

Petroglyphs

The plasma stream connection between Saturn and Earth represented the most impressive display because it showed the most variability and often reshaped itself into geometric patterns, looking like a leafed tree or a puffy beard. I doubt if the stick figure man appeared as part of the northern plasma streams. Neither the *Chilam Balam* nor the *Younger Edda* have references to giants outside of very remote antiquity.

The plasma connection to the Earth looked like a stream of water, entwined snakes, rotating twisted ropes (Birkeland currents), or a circle of bright columns (in arc mode), although this last depended on viewing from a select perspective in northwestern Europe. In the nature of a plasma stream, it was always alive, always changing, although it could be expected that the various forms would take months to form. As the flow of current varied, it assumed many different shapes, looking at times like a stairway or even a set of stepped arrowheads.

The "stairway" form and the related "arrowhead" form have been observed in experimental discharges (lasting only milliseconds) but can reliably be scaled up in size and extended to much longer periods of time. The images show up in myths (and in petroglyphs) on all the continents. The plasma stream connected to Earth at the magnetic pole, not at the geographical North Pole. Where the plasma stream touched Earth a gigantic cloudbank arose in the North Atlantic and enormous auroras played at the edges. Thus it looked like a tree rooted on a mountain at the Earth, but swayed away from this location further away from Earth. [note 21]

The differing shapes were due to instabilities lasting for months and were probably only infrequently identical. The instabilities were caused by the changing response of Saturn to the Sun's electric field as Saturn moved closer to the Sun and further away again over the year. (Saturn and the Earth were most likely on elliptical orbits.) The plasma stream from Saturn probably represented 1,000 million amperes and may have delivered fifty trillion kilowatts per second for 7000 years. [note 22]

A plasma instability is a deformation of the plasma stream, which otherwise has the simple form of a conduit. In arc mode the conduit might consist of a circular bundle of continuous electric arcs. An instability looks like a shockwave traveling through the bundles, deforming the stream into a series of stacked toroids or a number of other forms.

An instability results from a change in the current level being carried by the plasma stream. This would occur as Saturn moved further away from the Sun and back, as would happen on an elliptical orbit around the Sun. In the case of the southern "Peratt Column" plasma stream, an instability might last for months (as suggested by Peratt). Certainly this gave the petroglyph artists plenty of time to execute a design.

The millions of petroglyphs -- some of very complex shapes -- throughout the world, initially carved after 10,900 BC to depict the southern Peratt Column, might have been augmented with the views of the plasma column in the north. Or not. The new entity in the north did not require a vantage point high up on a cliff face. Unlike the southern plasmoids which were difficult to see above the equator, and kept disappearing below the horizon, the northern apparition was easily seen by almost everyone -- at least north of 10 degrees south latitude. As a result far fewer petroglyphs can be attributed to a northerly view. There would have been little reason to draw pictures to bring back what had disappeared.

Petroglyphs have a remarkable identity over such diverse areas as the Southwestern United States, Northern Europe, Saharan Africa, Asia, and Australia. Although the rock carvings had long been identified with the plasma discharge of Saturn by Talbott and others, the involvement of Anthony Peratt with the Saturnians of Thunderbolts.info eventually allowed clear identification of the images. Peratt's team has, since his first contact with the Saturnians, investigated some 4,000,000 petroglyphs from worldwide sources and claims about half of the petroglyphs do not represent any known imagery except plasma instabilities.

We should be able to distinguish between the plasma contact in arc mode and in glow mode. The contact with Earth probably started in glow mode, and seems to have lasted a very long time. Only after 4077 BC would the column have switched to arc mode. The circular pattern of 56 columns of the electron beams are replicated in the construction of henges in England near the contact point with the north magnetic pole.

We have no idea of how long the arc of 4077 BC lasted, although it may have been hundreds of years. Perhaps the current density decreased progressively over time as the electrostatic depletion of Earth increased in time and Earth relocated further from Saturn. As the current density decreased, at some point the plasma stream switched from arc mode to glow mode. The Maya *Book of Chilam Balam*, written in Colonial times, notes the order of events:

"Then it was that fire descended, then the rope descended, then rocks and trees descended."

In low-level arc mode and high-level glow mode it took the form of a twisted rope. The "rocks and trees" are plasma stream instabilities of the displays in glow mode.

High-density plasma streams tend to separate out into 28 or 56 bundles (this is even seen at galactic levels). In higher-amperage arc mode a section of the stream can take the shape of lighted bundles arranged in a circle, especially noted in the construction of henges of northwestern Europe, which consistently replicate the 56 bundles in their designs. The builders were located close to the earthly contact point, and had a point of view which looked directly up along the axial alignment of the plasma stream as it bent away from the north magnetic pole. The same count of 56 separate bundles of the arc are represented in petroglyphs worldwide. Once you catch sight of the core of the electron beams in arc mode, anything beyond disappears from view. It is the 56 brilliant dots which then become the apparent source of the plasma -- rather than a view of Saturn.

The arc to Earth might also have extinguished and restarted again, with a sustained connection in glow mode during the intermediate intervals. I'll suggest in a later chapter that the re-ignition of the plasma in arc mode was understood in Mesopotamia as the heavenly assignment of new rulers of Earth.

A common view from locations on Earth far removed from the North Atlantic contact point, show the shape assumed by the plasma stream as a shaft with a series of seven or nine disks, initiated as toroids (doughnut-shaped rings) which flattened out and turned up at their outer edges.

These are the leaves of the tree on which Saturn was mounted. The "tree" form shows up in early Mesopotamian seals and sculptures, as the "pillar of heaven" or the leafed "tree of heaven" surmounted with a globe. These were also the seven heavens of the Bible and Chinese mythology and the *djed* pillar of Egypt (with only three disks). The steps to heaven are reflected in the design of

stepped pyramids in Egypt, Mesopotamia, and Mesoamerica, and in Chinese pagodas. However, the look of the Absu or Duat, with its seven rings (as seen at about 30 degrees north latitude), and periodically looking like seven stair steps in the east and in the west, when the shadow of the Earth extended across all of the Absu, might represent a more solid basis for the "stairs to heaven." [note 23]

The interpretation of the display in the sky in antiquity depended in part on the viewing perspective of people at differing latitudes on Earth, and how close they were to the termination of the plasma stream where it made contact with Earth. But there were many common elements. It is the snake which will gnaw at the roots of the tree to bring down Valhalla, and the snake which nests in the Sumerian Goddess Inanna's Huluppu tree. It is the entwined serpent-necked animals of the Palette of Narmer (called "serpopards"). It is the Peach tree of Chinese mythology, seen in the northwest.

To the people living much further north than the Mediterranean, the contact of the plasma stream near Earth would have looked different. The Eddas describe the plasma stream as the bridge Bifrost between Earth (Midgard) and the "Other World" (Asgard). North of the plasma contact point in the Atlantic, the stream would have looked like an arch spanning the heavens from a location in the southwest to Saturn seen almost directly overhead.

Some Norse legends call the stream an "inverted tree" with the roots at the top and branching near the Earth. This is very probable because, on hitting the cloudbank above the contact point, or perhaps even on hitting the atmosphere, the plasma stream might have broken up into separate strings -- not unlike lightning. [note 24]

The plasma stream from the heavens was accompanied by endless celestial noise as the Earth's atmosphere and crust produced a calliope of sounds in feedback to vibrations from the column. "The Gods taught us music," people will later declare. Chinese legends hold that music derives from thunder.

The Egyptians used the distinctly different shapes assumed by the plasma column as the shapes of a number of hieroglyphs. These are first seen on pottery fragments before 3000 BC (identified as such by Talbot). [note 25]

As Talbot has pointed out, the "bowling pin" shape of the White Crown of Upper Egypt and the Red Crown of Lower Egypt were suggested also by the descent of Mars within a plasma stream in glow mode (discussed in the next chapter). Both shapes represent the pharaoh's head as Mars, with the widened bulbous plasma stream crowning his head, especially prominent where it widened to surround Mars. The White Crown is the stream in daylight, with Mars hidden completely in the white glow-level plasma which is lit from the front by the Sun. The Red Crown is Mars seen at night, with the sunlight from behind making the red globe visible. As the Sun shines from an angle, a shadow falls on the column. This is the peculiar cutout in the Red Crown.

The City on the Horizon

During the time of the arc mode connection with Earth, where the arc met the salt water of the North Atlantic, water was turned to steam in large quantities. This mass of steam must have risen up well past the stratosphere (helped perhaps by the tidal pull of Saturn at the pole) and been forced to spread away as more steam and clouds were generated beneath it. Here it cooled and fell back as snow.

But the cloudbank composed of water vapor was of much smaller dimension than the "cloudbank" seen as a mountain by people in Egypt, Sumer, and China. This other "cloudbank," seen from afar, was a dome of plasma -- the bell-shaped bottom portion assumed by the plasma stream under certain instability conditions.

One of the semi-stable forms of the plasma stream is a series of three toroids. The center toroid flattens out to become just a cross bar. The top and bottom toroid develop bell shapes, facing up and down. This chalice form becomes the Holy Grail of Arthurian tales. The lower portion would have looked like a steep bell-shaped mountain and would have been seen from very far away.

This plasma "cloudbank" or "world mountain" may be seen today in the stupas of India or the "omphalos" (a "navel" connecting Earth to heaven) of Delphi and other sacred locations in antiquity. The plasma dome at the horizon likely rose up thousands of miles. Eventually the giant aurora or vaporous plasma might have covered perhaps 30 degrees of the circumference of the Earth. It would have been visible from 10,000 miles (16,000 km) away -- nearly half the circumference of the Earth. [note 26]

The upper portion, when seen in outline, where the edges of the plasma was most dense, will be recognized as the *Ankh* held by the pharaohs, or as the cartouche of Egyptian hieroglyphics, and as a similar device held by the God depicted in Sumerian seals. There are other later sources for this image, however. [note 27]

Along the edges of the cloud bank or auroras, fluted areas must have developed, as is typical of auroras, and would show in relief in sunlight. Such a continuously generated figure standing up to the high heavens, surrounding the strike point of the arc, must have looked like the walled cities described in Sumer, and the primordial mound of creation described by the Egyptians. Numerous records recall the "cloudbank," as it built up and broadened, as the City of the Gods. In later ages it is claimed that the Gods showed mankind how to build walled cities and temple enclosures. [note 28]

"The great gods created the structure of Unug, the handiwork of the gods, and of E-ana, the house lowered down from heaven. You watch over the great rampart, the rampart which An founded," (one manuscript has instead: *"its great rampart, a cloudbank resting on the earth"*), and continues, *"the majestic residence which An established."*

-- *Gilgamesh and Aga*, Sumerian, circa 2800 BC

The quotation above is from one of the Gilgamesh sagas. The "majestic residence" described here is actually the E-ana, the name of the temple of An at Uruk. "An" is the primary creation God. A connection is here made between the founding of the celestial city *before* the flood of 3147 BC to the city walls of Uruk (Unug), built 300 years *after* the flood -- as if they were interchangeable. The address, "You watch," is in reference to Gilgamesh waiting, at the city walls of Uruk, for the approach of King Aga of the city of Kish.

Mastabas in Egypt and China, with their exterior buttresses or regular indentations, recall the giant mountainous shape near the pole. In Egypt this kind of wall, enclosing pyramids and temple compounds, is today called the "palace wall facade." Even common house walls in Iran during this period have regular exterior recesses which seem to have no structural function. [note 29]

China also records a giant mountain in the northwest which supported the Celestial Peach Tree. In China the "cloudbank" is also interpreted as the shell of a tortoise which supports Earth -- where "Earth" is understood as Heaven. Central and South America see the plasma "cloudbank" as a mountain of caves -- from which the first humans came. [note 30]

Along the coast of Western Europe, the bell-shaped plasma instability might have been only a slight mist to the tribes looking out on the North Atlantic, and only the much smaller water vapor cloudbank, composed of steam from the sea, would have been seen. The Western Europeans had a clear view of this local mass of expanding steam clouds, and above-ground megalithic "barrow graves" are built after 3800 BC in imitation of the furrowed water vapor shape at the northwestern horizon. Beside the overall shape of a pudding, the grave barrows of Ireland and England frequently also have regular indentations at the exterior edges. Barrow graves proliferated along the Irish and English coasts, and are found from Portugal through Scandinavia. Fewer are found further east into Europe. The cloudbank of water vapor certainly was seen as an apparition of substance -- the fortress of *Ys* floating on the ocean, as was later recalled by the coastal people. The earlier huge barrow graves, dating to 4000 BC, uncrenelated and oriented north-south, probably recall the ball plasmoids seen in the far south toward which all the traffic on the electron beams was moving. [note 31]

Endnotes

Note 1 --

"Hurakan," is the name in Central America for the Peratt column ball plasmoids in the south. This becomes clear from the *Popol Vuh* and other Mesoamerican sources. *God Star* was published in 2006, a year before Peratt's revelation of the plasmoids seen in the south.
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Note 2 --

The fact that at the earliest time after 4077 BC Saturn in effect reappeared out of the northern ocean on a daily basis is mostly confirmed from the name "Heart of Sea, Heart of Lake" in the *Popol Vuh*. The northern ocean might be the Caribbean, as seen from northern South America, or the Pacific as seen from Ecuador, at a time before the predecessors of the Olmecs had migrated to Central America. See the chapter "The Popol Vuh." The "lake," at any rate, is as likely the rings of Saturn, seen from below or at an angle. These were not likely seen in direct sunlight, but only when backlit at night. Saturn itself also would disappear in the day (as does the unlighted face of the Moon today) except for the lighted crescent.
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Note 3 --

The Hypsithermal, a period of warmer climate throughout the world from about 9000 BC to 2500 BC, is subdivided into additional smaller periods. The "climatic optimum" from about 5800 BC to 3000 BC is one of these periods. Because the Earth's orbit was at that time placed entirely below the level of the Sun, the inclination of the Earth's axis to the Sun added to the improved climate in the northern hemisphere.
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Note 4 --

Traditional thinking is that cold winds sweeping off the continental glaciers (like the North American Laurentide Ice Sheet) condensed water vapor to rains on meeting the warmer zone south of the glaciers (as in England and Europe). This is an attempt to explain the unexpectedly temperate climate south of the glaciers. But cold winds do not carry moisture.

Traditional geological and climatological estimates are based on contemporary conditions, and do not consider an alternate orbit for Earth, with the Sun at a different angle, or the effects of a plasma contact. The overall operation of a global weather system under the condition of a multi-billion ampere arc in the North Atlantic is outside of our current experience.

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Note 5 --

The two worsenings of climate in the Middle East (where we have reasonable records) suggest that the plasma contact with Saturn was not continuous, but was interrupted during these periods. Only after 5800 BC does the plasma contact remain, eventually going to arc mode. On the other hand, the northward relocation of the dry zone north of the tropics would be enough to account for the radical change in climate in the Middle East (as well as Southern Europe).

A change in the location of a climatic zone probably might take a hundred years before having an effect which would be noticed by archaeologists.

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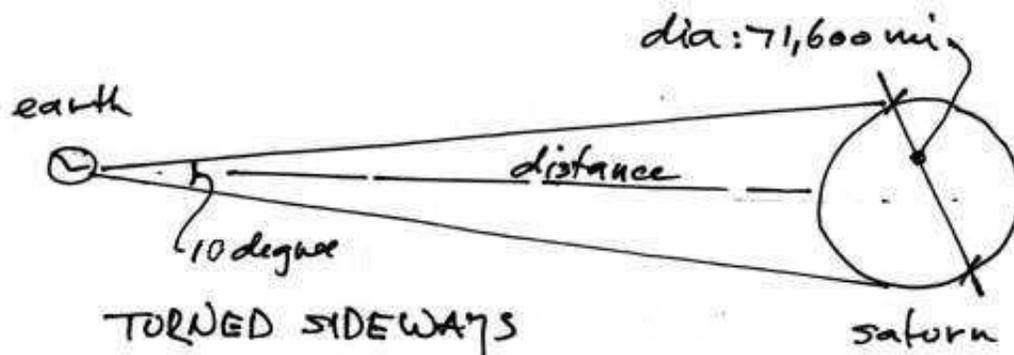
Note 6 --

The cultivation of grain apparently spread through all of the Black Sea basin during the period of 6200 to 5600 BC. After 5600 BC, it was the Black Sea basin which becomes the source of the spread of agriculture to Eastern Europe and, within another 200 years, to Western Europe.

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Note 7 --

In terms of an image, if the globe of Saturn subtended 10 degrees in the sky (a measure sourced from Talbott, perhaps from his analysis of the perspective of some images), it would be located at a distance of $(71600) * \cos(10) / \sin(10) = 406,064 \text{ miles (654,000 km)}$. This seems much too close with the possibility of destructive tectonic results -- such as the Black Sea flood of 5600 BC where the Bosphorus opened up. For comparison, the distance to the Moon is $(2160) * \cos(.5) / \sin(.5) = 247,511 \text{ miles (398,000 km)}$.



[Image: distance to Saturn, based on a 10-degree angle of view. Illustration by J. Cook.]

These calculations are based on Saturn being the same diameter as today, and there is little reason to suggest a change in size. Ten degrees is 20 times the diameter of the Moon today -- equivalent to two hand spans at arm's length. Thus the "globe above," would have been immense.

But the initial circular shape most likely was the coma of Saturn, which would have been much larger than the physical size of Saturn. Using a multiplier of 20, the distance between Earth and Saturn would be $20 * (71600) * \cos(10) / \sin(10) = 8,121,000$ miles (13,000,000 km).

My later estimates of the distance between Saturn and Earth (in "bare" form, as in arc mode discharge) are 2.83 and 2.75 million miles (both developed in Appendix B, "The Celestial Mechanics"). This would represent a subtended angle of 1.5 degrees (for the actual planet), still three times the width of the Moon today.

At any rate, seen from any latitude north of the equator, Saturn would appear on a location in the sky surrounding the Pole Star. The amount Saturn might be off from this exact location of the pole star, as seen at various latitudes, would be slight if the axis of the two planets coincided. But as has been stated previously, the spin axes of Saturn and Earth would not have had any reason to be aligned initially, and would only subsequently become closer aligned. Thus the apparition could be seen from perhaps 10 or 15 degrees of latitude below the Earth's equator because it rotated around the position of the Earth's polar axis. The "day" would thus also have been determined by the apparent circling of the giant orb about the North Pole. This movement, especially after Saturn went nova, is described in Mesoamerican Michoacan creation myths. Mexicans still play a football game with a flaming ball.

"The ancient sun was a huge celestial orb batted about by the dark, unpredictable powers of the cosmos"

-- Bernardino Verastique *Michoacan and Eden* (2000)

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Note 8 --

The egg designs could be Jupiter when Saturn's orbit fell inside Jupiter's. Jupiter, in fact, seen lighted by the Sun, but seen from below, would have looked oval shaped.

There is an obvious problem for both mythology and modeled artifacts, namely the fact that there are no references to the fact that the image of the duck or goose may have turned during the course of a day -- so that an upside down duck would show at some point. This can only suggest that the Earth and Saturn rotated at the same speed, probably the 24-hour day we experience today or something close to it. That the day of Earth remained mostly the same for 8000 years can be suspected from the fact that the orbit of Earth never changed radically.

To suggest that the day of Saturn changed from 24 hours to 11 hours after 3147 BC, when Saturn moved to a far greater orbit around the Sun, is also not unreasonable if this is understood as an exchange of spin momentum for orbital momentum.

The rotation of Saturn around itself has nothing to do with how it would be viewed from Earth located below its south pole, since Saturn is a sphere, and differential rotation would not affect the view from Earth. What we are concerned with here is the fact that, to have the apparition constantly look like a duck or a goose, Uranus would have to be visually seen above Saturn.

Last, considering the distance between Earth and Saturn, Uranus would not have disappeared behind Saturn for any part of Earth's daily rotation -- at least not during the first few thousand years. The view also would not change significantly with different latitudes of Earth.

There are actually some indications that Uranus might have been seen in different locations with respect to the globe of Saturn. The Egyptian Palette of Narmer (circa 3050 BC) depicts Uranus as a long-haired captive on the lower right from the pharaoh (who represents Saturn and Horus). The Egyptian icon called the "Eye of Ra" is another image which seems to place Uranus "below" Saturn. See the text for details.

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Note 9 --

"How things look," or what they seemed to look like, is an abstract mental concept, strongly influenced by habit, and thus by cultural transmission. Once an identification is made, it will remain, despite changes. Cultural transmission of "what things look like" can be seen in the concept of what is seen in the face of the Moon. China and Mesoamerica hold that the Moon represents an image of a rabbit holding a book. Western Europe takes it to be the face of a person.

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Note 10 --

The "mythology" of Mesopotamia is similar to that of Egypt, India, China, and Mesoamerica, plus hundreds of other nations and peoples. The hundreds of additional stories, retellings, and legends from around the world all consistently include the same elements.

From India:

"As stated in the Puranas, there was only water all over at the dawn of creation. This water gradually began to circumambulate in a circular motion, which in turn produced bubbling foams. Besides, one kind of white element emanated from the water out of which the creator created an egg. This egg bisects into two parts and the Brahmma appeared out of this egg from where the name Brahmanda or the Universe is derived. One part of this broken egg constituted the earth and the other space. According to the Purana, the tiny parts that scattered all over at the time of bursting of the egg produced rains."

Following is a paraphrase of part of the first verse of the Finnish *Kalevala*, transcribed from verbal recollections and ballads in the 18th and 19th century AD.

"Ilmatar, the virgin of the air, leaves the loneliness of the sky and moves down to the sea, where the wind impregnates her. She drifts upon the waters for 700 years."

*Overburdened now the maiden
Cannot rise above the surface;
Seven hundred years she wandered*

*Thus she swam as water-mother,
Toward the east, and also southward,
Toward the west, and also northward;*

"... pregnant but unable to give birth. A duck flies by and lays several [seven] eggs on Ilmatar's upraised knee. As the bird sits brooding in the nest, the heat makes Ilmatar jerk her knee, and the eggs begin to change. One breaks open and the lower half becomes the earth, the upper part becomes the sky, the yolk becomes the Sun, and the white becomes the Moon."

The two halves of the egg are used in the same way in the Indian Puranas and the Finnish *Kalevala*. Ilmatar's pregnancy results in a son who will initiate creation. It is also clear that the initial lines retell the travels of Saturn from the overhead skies "down" to the ocean in the vicinity of the Big Bear.

The rotation of Ilmatar in the ocean is in a clockwise direction -- east, south, west, north. This would be as seen from below the pole star. However, the stars near the pole star rotate (or seem to rotate) in the opposite direction. As seen from anywhere on Earth, with the Earth rotating to the east, Saturn would be seen following the same path as the fixed stars about the North Pole star -- counterclockwise. Ilmatar would be rotating counterclockwise only if "south" meant the direction "up" and over.

The *Kalevala* has Ilmatar wandering of 700 years, which I also derived from the Mesopotamian King list (see a following chapter).

People more than ten degrees in latitude below the equator would not have seen the birth of the "Sun," but would certainly have experienced the light. Michael Witzel, in "Vala and Iwato, The Myth of the Hidden Sun in India, Japan, and Beyond" at the *Electronic Journal of Vedic Studies* Volume 12 (2005), notes for the myths of the birth of the Sun:

"The myth relates the disappearance of the sun (or the deity of the sun) in a cave or some other enclosure, and its re-appearance (often as Dawn) after the intervention of a group of gods (and others), creating (or restoring) light and prosperity to the world."

"It is found in various forms in Vedic Indian, Greek, Japanese, Ainu, Amerindian and South-East Asian sources, and in an aberrant version even with the Hawaiians."

"... in the light of the theory of a Eurasian (Laurasian) mythology, its distribution is significant. The myth is found precisely in the areas labeled as Laurasian, irrespective of geographical distance from the pole or equator, but not in Australia and sub Saharan Africa. Also, the structure of this myth is very similar in all the versions mentioned above."

Witzel mentions that the Inca, although living below the equator, participated in this Eurasian myth.
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Note 11 --

The goose form seen in the sky, which was seen as a body with a neck and head, occurs in the fairy tale of the Golden Goose. The bird of creation is universally understood to be a duck or a goose because the coma was white.

From Hindu myths we have the following, quoted by Kelley L. Ross, and with his added comments:

"The eternal ones, Brahmâ, Hari, and Shambhu approached him, each mounted on his own vehicle: [The sacred animals of the Gods] the bull Nandi for Shiva, the eagle Garuda for Vis.n.u, and a goose for Brahmâ.

-- Wendy Doniger O'Flaherty *Hindu Myths* (1975)

Ross notes, "There is a more dignified vehicle for Brahmâ, however, the lotus." Kelley L. Ross, at [www.friesian.com]. The lotus will be recognized as the outpouring of an equatorial disk, which constitute the rings of Saturn. The same lotus is the seat of the "Companions of Osiris," the four large satellites of Saturn, in Egyptian funeral practices.

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Note 12 --

In Talbott's imagery, the rings of Saturn are missing and Venus is placed below Saturn, between Saturn and Mars. See David Talbott, *Symbols of an Alien Sky* (program for a slide presentation, 1997).

[return to text]

Note 13 --

With Earth directly below Saturn, Uranus would disappear from view, since it has a diameter of 51,000 km, and Saturn's radius, half of which would hide Uranus, is 60,000 km. It just fits.

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Note 14 --

The Eye of Ra is the only image of which I am aware that actually attempts to represent some sort of extension of the rings, or beyond the rings, into the space away from the Sun. The rings could not take this shape, however, since the rings could not be altered without rapidly being lost. The "eye" -- and later a removed and traveling eye -- is a constant in both Egyptian and Chinese sources, and elsewhere.

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Note 15 --

A circle with a dot (or small circle) in the center (representing the darker Mars in front of the globe of Saturn) was the hieroglyph for "sun" in Egypt (the God Ra) and the glyph for "sun" in China, and is still in use today as the symbol for the Sun in astronomy. The Maya use a four-petaled flower as the glyph for Sun -- a larger circle with a small circle at the center. The edges of the petals represent four (or more) streams of electrons in arc mode to Saturn from Mercury, but seeming to converge from Saturn to Mercury.

A later depiction of Mars, among the Aztecs, shows Mars with its tongue extended down from the jaw (as, for example, in the center of the giant "calendar stone"). This is probably a correct depiction of a plasma flow (of positively charged dust) which extended only some distance below Mars. The *Chilam Balam* likewise records Mars in this manner:

"Then it was that the word of Bolon Dzacab [Mars] descended to the tip of his tongue."

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Note 16 --

There are obviously problems with the iconography of the Eye of Ra, for the rotation of Venus around Saturn will change direction depending on whether a left or right eye is depicted. Shown as a right eye, Saturn would appear to be rotating correctly in a clockwise direction as seen from below. The right eye of Ra is thus probably the original. But in both cases Venus is seen rotating about itself in a direction opposite to the rotation of Saturn. The tradition is that the Eye of Ra is the left eye.

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Note 17 --

The description of a figure called the "Ancient of Days" in the *Zohar* of the literature of the *Kabbalah* (13th century AD) is obviously derived from the Saturnian polar imagery. It is a head, or multiple heads (skulls), with or within a strong light source, a beard, no body, but with testicles and a penis which exudes some magical liquid equated to the dew source of manna during the time of Moses. There is also "a strong right arm," which has to represent Venus with its swirl connection to Saturn and seen on the left. The "strong right arm" also suggests that Venus was stationary as seen from Earth, that is, it revolved around Saturn in an Earth day.

The *Kabbalah* dates from about 200 BC and is a mystical reaction to the more staid mainstream theology of Israel since 500 BC. The *Zohar* was written in Spain in the 13th century AD, in badly done Aramaic (including Spanish words). Although possibly based on the Egyptian image of the Eye

of Ra, it more likely represents a Celtic oral tradition.
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Note 18 --

The images of a plow and ibex also occur on ivory talismans found in Northern Mesopotamia and dated to shortly after 3147 BC.

If the Grand Menhir dates as far back as 5000 BC, then Saturn would have gone nova earlier than my estimate of 4077 BC. Its main breakage point of the Grand Menhir is one third up from the ground, typical of a cantilevered upright beam. The bottom section was shoved in the opposite direction. One section was removed and used in antiquity in the construction of a giant mound nearby. Some hold that it was purposely toppled.



[Image: Grand Menhir of Carnac. After megalithia.com.]

The Maya *Chilam Balam* reads, "First the fire, then the rope," but gives no indication of dates. After the "rope" (a plasma stream in glow mode) changed to dark mode (as can be suspected) nothing would be seen, and in fact the shape of Saturn, except for the crescent lit by the Sun, would disappear almost entirely when seen against the daytime sky. At night, seen from the night-side of Earth, its outline would be fully lighted by the Sun, plus a rotating crescent.
[return to text]

Note 19 --

By 3147 BC Saturn subtended an arc of only about 5 degrees, if we go by the later depiction of the White Crown of Egypt, which looks like a bowling pin, with Mars (enclosed in a glow mode plasma) forming the wider part of the crown and Saturn forming the upper knob. The calculated distances between the planets in 3147 BC suggests the same (see Appendix B).
[return to text]

Note 20 --

The Maya *Popol Vuh* has a different reading on the two planets seen with Saturn, seen much earlier, calling Venus and Uranus a mattock and hoe. These are placed in the ground by Hunahpu and Xbalanque when they arrive to cultivate their "garden patch." They also place an axe in a tree trunk. From my later text:

The gardening implements proceed to cultivate the ground by themselves while the boys go hunting. ... As I have pointed out, this implies a rotation, or at least a rocking of the Saturnian polar configuration as seen from Earth -- not the rotation of the planet itself, but the rotation of Saturn about the North Pole, so that Venus, the stone, and Uranus, the wood, would also rotate. These two might easily pass for a mattock and hoe.

I cannot place the axe, unless that is Mars.

[return to text]

Note 21 --

The plasma connection would show as twisted ropes only in low-level glow mode. As the current increases on approaching arc level, the plasma starts to look more like a solid column. In arc mode the column would divide up into a circle of 28 or 56 separate very bright streams, at times arranged as two concentric circles of these bundles.

Anthony Peratt, in "Characteristics for the Occurrence of a High-Current, Z-Pinch Aurora as recorded in Antiquity," (Institute of Electrical and Electronics Engineers, *Transactions on Plasma Science*, December 2003), discusses the large number of petroglyphs found worldwide. For the casual reader, this is high obfuscation typical of journal papers. Most of the tie to reality is with respect to current auroral phenomena. Peratt divides the plasma stream up into three sections, and discusses two of them. The lower section, where contact would have been made to Earth, is not discussed.

In a second paper, "Characteristics for the Occurrence of a High-Current Z-Pinch Aurora as Recorded in Antiquity Part II: Directionality and Source" in *IEEE Transactions on Plasma Science* (August 2007), Peratt gives the fact that half of the petroglyphs which can be identified were created in locations with an unobstructed view of the south. A suggestion is made that the aurora should have encircled the magnetic pole, but it did not. From his research he also concludes that nothing like the south polar plasma column was seen in the north -- or at least it did not require access to high cliffs to make a record. A view of the southern ball plasmoids required a view past the equatorial bulge of the Earth. See the chapter "The Peratt Column."

After the Peratt Column disappeared in the south in 8347 BC, a new column started up from the north, which went to arc mode in 4077 BC (my estimate, based on Josephus). This second column would be subject to most of the same changes in form that the Peratt Column in the south had experienced, but there would be no need to climb cliffs to get a complete view.

[return to text]

Note 22 --

Current flow in electricity is measured as **amperage** and represents the amount of electricity which moves from one location to another (like the amount of water flowing in a pipe or out of a faucet), and actually can be counted as the movement of electrically charged particles. If no particles (like, for

example, electrons) move, or if they cannot move, there is no current. **Voltage** is the pressure behind the flow of current (like water pressure in a pipe). It is the difference in voltage from one location to another that causes the current flow.

The total amount of electricity delivered per unit time is measured in **watts** or kilowatts (1000 watts). This can be found by multiplying the voltage difference by the amperage, $w = v * a$. The total energy delivered is found by multiplying the wattage by time, and typically expressed as, for example, **watt-hours** or **kilowatt-hours**.

There is very little information in Peratt's article to allow a sense of the magnitude of the electric discharge of the "stupendous" plasma stream. He mentions that amperage of an auroral display scales to brightness, and suggests a level of 5 lamberts as a minimum for the former plasma stream. The auroras currently brighten only to 0.05 lamberts, at an estimated amperage of 5 to 10 million amperes.

Since Peratt speaks of a minimum brightness of 5 lamberts for the plasma stream, we could estimate the current flow of the plasma stream by scaling up. This would result in a current flow of 500 to 1,000 million amperes. I will use the figure of 1,000 million amperes. (In a later paper Peratt mentions "giga-amp" auroras. My estimate of 1,000 million amperes is one giga-amp.)

We have no idea what voltage difference drove the flow. At an estimated voltage difference of 300,000 volts between Earth and the ionosphere, the auroral display today delivers up to about 3 billion kilowatts ($(300,000 \times 10 \text{ exp } 7)/1000$).

The Sun today is estimated to present a potential difference of 100 billion volts to the surrounding exterior space. However, V. Bailey calculated 100 million trillion volts -- $100 \times 10 \text{ exp } 18$ volt -- in *Nature* (1961). If we assume that the potential difference with respect to deep space is proportional to the volume of a planet, then Saturn might have been at 58 million volts. That would not be an unlikely figure to use, and leads to an estimate of 58 thousand trillion watts ($58 \times 10 \text{ exp } 15$ watt). The Sun puts out an estimated $4 \times 10 \text{ exp } 26$ watts -- a lot more. (Juergens, *Pensée* circa 1972). (Another source estimates the Sun at $3.8 \times 10 \text{ exp } 20$ watt.)

The world's annual use of electricity today is 17.8 thousand trillion watt-hours ($17.8 \times 10 \text{ exp } 15$ watt-hours), which is only the smallest fraction of the output of the Sun (from the *CIA World Factbook*, estimate for 2008).

Where did all that energy go? If the Earth had no atmosphere or oceans, the energy of the plasma stream would have scoured the surface, loosening the bonds of molecules making up the rocky surface, ionizing them, and electrostatically launching them into space. But the Earth's surface is buffered with an atmosphere and oceans. The energy would have gone to altering the molecular (atomic) constituents of the atmosphere and ocean water, but probably mainly ended up electrostatically charging the Earth's atmosphere and ionosphere. Soon the surplus would have flowed out to the space surrounding the Earth, for it is doubtful if the Earth could have remained the end terminal of the plasma flow.

Saturn did not, even over 7000 years, discharge itself completely to the Earth (or the other planets). The discharge happened later, when Saturn met up with the giant planet Jupiter, 100 times the diameter of Earth, and three times the mass of Saturn. "Discharge" is a misnomer; actually the process is one of charge equalization, a reduction in the voltage of Saturn to match conditions in the space near the Sun.

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Note 23 --

The geometry of plasma instabilities tends to certain numerical repetitions, as with the 9 toroidal flattenings of the column (which become seven when the top and bottom disappear from view), and the 28 and 56 exterior bundles of plasma surrounding the column.

The "Tree of Heaven" on Mesopotamian seals has never been identified as a botanical species.

It should be pointed out that the Chinese pagodas, like the stupas of India, are originally Buddhist architectural forms. The pagoda form was introduced into China after 200 BC.
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Note 24 --

The plasma currently impinging on the poles of the outer planets (not Mars which has no atmosphere) and Venus produces a depression in the atmosphere, looking like the caldera of a volcano. It is thus likely that the arc to Earth struck directly through to the ocean surface by means of a similar hole in the Earth's cloudbank and into the ocean.

There are no volcano-like cloud banks surrounding these depressions for the planets with heavy atmospheres, for the plasma streams are in low level -- dark mode. For the Earth, in the past, with a plasma stream in arc mode, there would certainly have been a cone at the periphery of the arc's impingement at an ocean, consisting of rising water vapor.
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Note 25 --

The trigrams of the Chinese *I Ching* (the *Book of Changes* used for telling fortunes) seem to derive from the sight of the rings of Saturn seen from below. The shadow of Saturn would be cast by the Sun alternately on parts of the bottom and the top rings -- which would change throughout the day and seasonally.

The diagrams were taken from a nearby tribe by the Chou dynasty, and texts were assigned in the 8th century BC, although the practice of fortune telling clearly dates from the Shang dynasty a thousand years earlier. All the trigrams are identified as landscape elements -- sky, lake, lightning (sun), thunder, wind, rain, mountain, and earth -- as if we are watching a land above the Earth.

About its own origins, the *I Ching* reads:

"Anciently, when the rule of all under heaven was in the hands of P'ao-hsî, looking up he contemplated the brilliant forms exhibited in the sky; and looking down surveyed the patterns shown on the earth. ... On this he devised the eight lineal figures of three lines each."

-- James Legge, translator, *The I Ching* (1882).

P'ao-hsî is the first legendary emperor.
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Note 26 --

Depictions of the "world navel" (at various locations in antiquity) each represented the center of the Earth with a dome-shaped rock, at times with an entwined snake, perhaps representing a twisted Birkeland plasma stream. Each was considered to have been attached -- at one time -- to a placenta in the sky with a twisted umbilical cord.

The inflow of plasma at the poles of Saturn and Venus (today) is seen to bore a hole in the cloud cover, however. We would expect similar phenomena for the Earth. The point of electric contact was the conducting salt sea. The cloud dome of steam contained no salt and represented a much higher resistivity to the plasma flow. This argues against a plasma stream "snake" slithering down the exterior of the dome of the world navel.

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Note 27 --

A cartouche is a shape made up of a rectangle with rounded corners, looking like rope which is tied or twisted at the bottom. It is a graphic form used to record the names of pharaohs. The name is written in hieroglyphics inside the cartouche shape. The cartouche first came into use with Huni, the last king of the third dynasty, before 2613 BC. It likely represents the "shen" form of Jupiter, a disk on a bar, actually a plasma outpouring from the south pole of Jupiter which diverted left and right to the objects and dust of the asteroid belt. I have estimated in another chapter that this probably ended around 2690 BC, some decades before Huni.

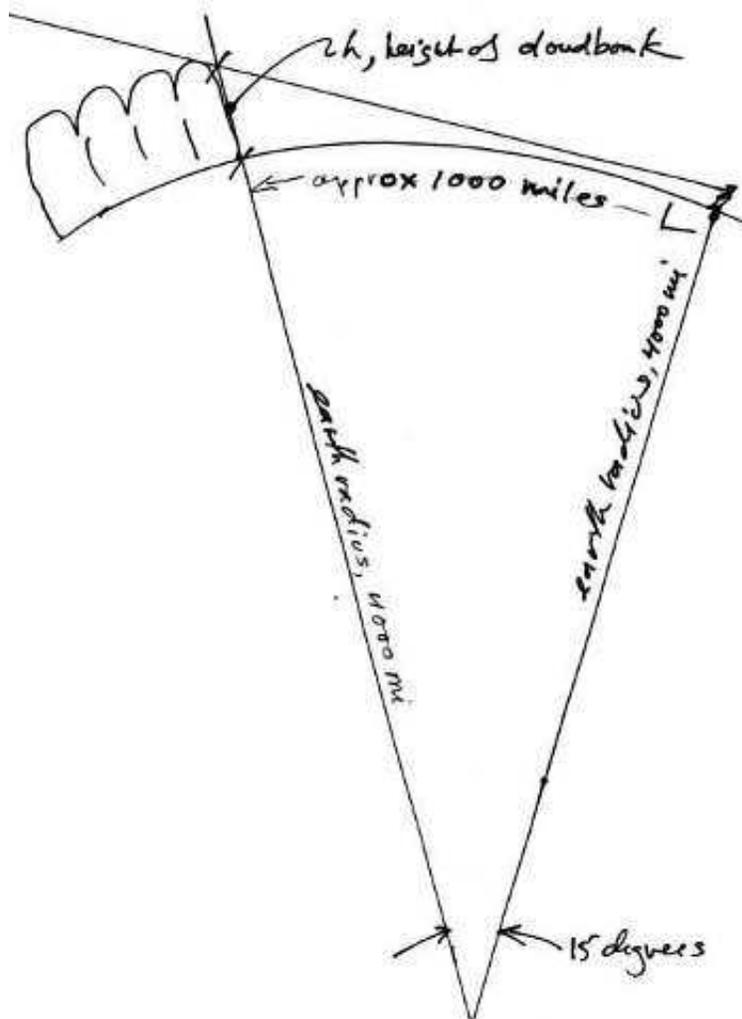
The "Was Scepter," another device often depicted as being held by the pharaoh (representing his authority), looks like a putting iron with a two-tined fork at the other end, or, as someone once suggested, a "municipal water shut-off key." After seeing some of Peratt's plasma instabilities, it seems to represent the same image as the curious *Kokopelli* (a Hopi word) petroglyph figure otherwise known as "the flute player."

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Note 28 --

The information below is from elements developed in following chapters, and is used here to estimate the height of the cloudbank, both the water vapor clouds and the dome of plasma or aurora seen from further away.

The sight lines for the aurora or plasma dome as seen from Egypt (based on the orientation of mastabas and the first pyramids), China -- or more likely Mongolia -- (based on the recorded location of "the mountain at the center of the Earth"), and Ireland (based on the orientation of grave mounds) all intersect in the Atlantic somewhere near Southern Greenland and south of Iceland. In Northeastern Siberia the "world mountain" is held to be located directly east. This also leads directly to the North Atlantic. Mesoamerican monuments only date from after 2000 BC, and have nothing to do with the polar plasma column.



[Image: height of cloudbank seen from 1000 miles away. Illustration by J. Cook.]

... Height of the Water Vapor Cloudbank

I doubt if the actual water vapor cloudbank exceeded 15 degrees (in width) of the circumference of the Earth in diameter, which is an arc with a length of 1000 miles (1600 km). And I doubt if the cloudbank extended more than a few degrees above the horizon. I am basing this on descriptions of the walled fortress of *Ys* seen by the European coastal peoples, that is, I am assuming the walled city floating on ocean water would not have subtended such a large angle as to make it appear significantly different from a city or fortress, so that, for example, it would not have been identified as a mountain or island.

It is interesting to make some estimates of how high this cloudbank might have been. Placed in the North Atlantic towards Southern Greenland, at about 30 degrees longitude and 60 degrees latitude, this would be 800 miles (1300 km) from England and the coast of France, and about 1200 miles (1930 km) from Portugal. I'll use one thousand miles as an average of the distance between the edge

of the cloudbank and the location of England and France. This represents about 15 degrees of the Earth's circumference.

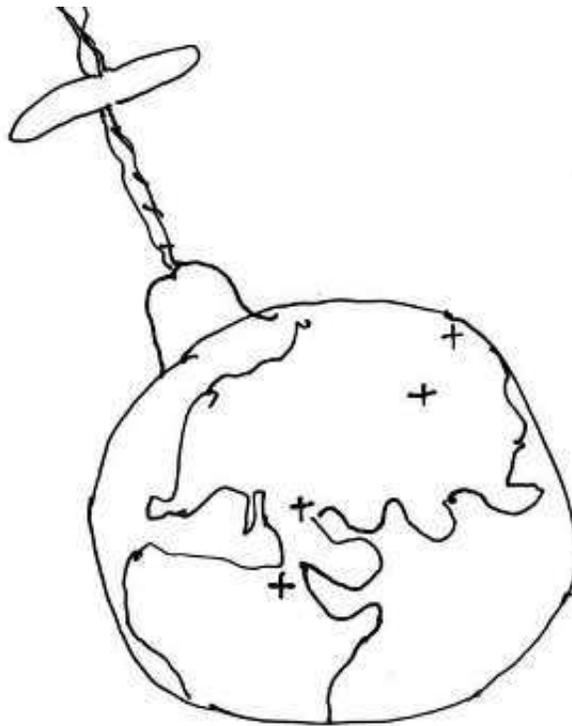
To be just barely visible above the horizon, we can start with the sightline tangent to the Earth at the viewing location (normal to the radius of the Earth) extended to the top of the cloudbank. This is a right triangle whose two legs are an Earth radius at the viewing location and the sightline. The hypotenuse is the radius of the Earth plus the height of the cloudbank.

The height can be found from $\cos(\theta) = r/(r+h)$, where r is the radius of Earth. To subtend 15 degrees the apparition would have been:

$$4000/\cos(15) - 4000 = 141 \text{ miles high.}$$

To be seen above the horizon, the cloudbank would have to be higher than this. The angle above the horizon can be found from $\tan(\theta) = \text{height}/\text{distance}$. The distance in this case is the sightline, which is the base of the right triangle we were using: $b = \sqrt{(r+h)^2 - r^2} = 1071 \text{ miles.}$

An extra 20 miles in height would show the cloudbank at one degree above the horizon -- using $\arctan(20/1071)$ for a distance of 1071 miles to the location of the cloudbank. Twenty additional miles added to 141 miles is very high, considering that the stratosphere is currently only 40 miles high.



[Image: The inverted plasma dome seen from other locations (+) on Earth. Illustration by J. Cook.]

This height produces an image which has a 25 to 1 ratio of width to height (for an assumed width of 15 degrees of Earth circumference). This may be too low as an image of a fortified castle. One degree above the horizon would show the cloudbank at a height of twice the diameter of the Moon.

... Height of the Plasma Dome

In Northern Egypt, Sumer, Siberia, Mongolia, and Olmec Veracruz, the aurora or plasma dome was seen instead. Each of these locations is about 60 degrees of Earth circumference from the contact point of the arc.

Allowing 15 degrees as the radius of the aurora, each of the far locations needs to subtend only 45 degrees of the Earth's circumference in order to see the top of the aurora. I am here only making estimates for what would be the lower portion of a complete three-toroid disturbed plasma flow.

The two legs and the hypotenuse of the right triangle are defined as above, but the sight line is only extended to the edge of the aurora. As above, the height would be found from $\cos(\theta) = r/(r+h)$. For a 15-degree radius (30 degrees diameter) the apparition would only have to be:

$$4000/\cos(45)-4000 = 1656 \text{ miles high (2666 km).}$$

Certainly exceedingly high, but not at all unlikely, especially since we are looking at the inverted cup-like lower toroid which represents the lower quarter to lower third of a 250,000 miles to 500,000 miles long plasma stream (and possibly two or three million miles).

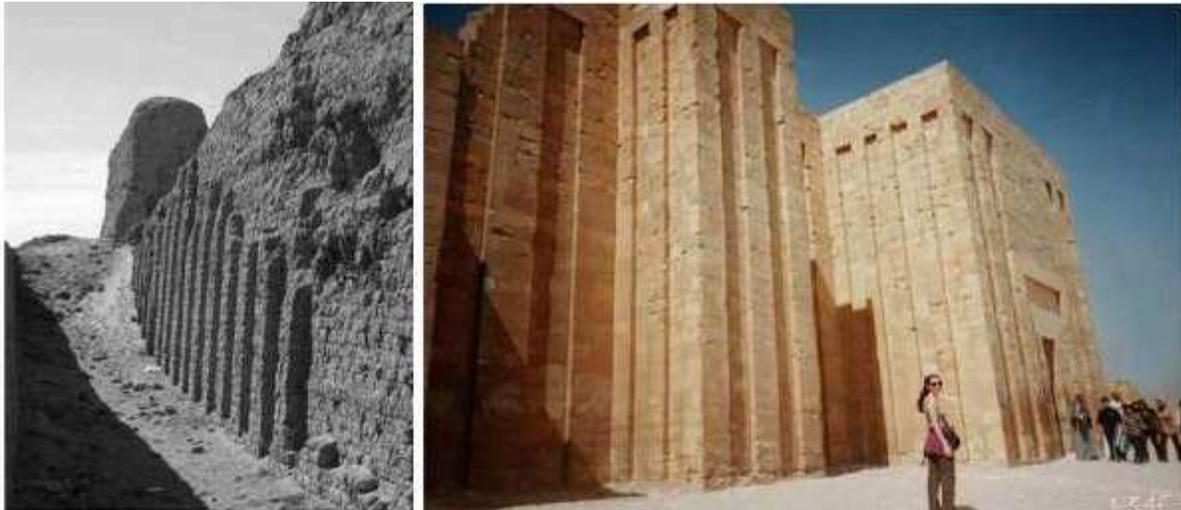
If the "serpopards" shown on the Palette of Narmer (circa 3050 BC, Egypt and elsewhere) represent the demise of the twisted polar column in 3147 BC, as I will elsewhere suggest, it would represent an upwelling of plasma surrounding the strike point of the plasma stream from Saturn (in glow mode) which at that time would have reached high enough to be seen from Egypt, and represented as the body of a long necked animal. That would suggest an inverted plasma discontinuity reaching over 3000 or 4000 miles (4800 or 6400 km) above Earth.

Likewise, to be seen from Guatemala, at 20 degrees latitude, the dome would have to extend a minimum of 1200 miles up from the ocean. To look like a mountain or mountains, as described in Book 11 of the *Chilam Balam*, we could add another 1000 miles.

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Note 29 --

Mohenjo-Daro and Harappa in the Indus valley both have elevated platforms with crenellated walls on the west side of the city. These are most likely temple platforms. The founding of both cities are dated, with some uncertainty, to after 3000 BC.



[Image: Left: Temple wall from the predynastic temple at Heirakonpolis (circa 3050 BC). After interactive.archaeology.org. Right: Enclosing wall to the compound of Djoser's pyramid (circa 2655 BC). After Francesco Raffaele.]

The buttressed mound appears in China during the Chou dynasty, after 1000 BC, but is modeled after Central Asian forms of burials. That Central or Eastern Asia could have seen a buttressed mound seems unusual. It would suggest that the cloud dome was much higher than would be suspected.
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Note 30 --

When the Incas construct a mythology of their tribe in AD 1200, they insist that their ancestors first appeared from some local caves, as did many of the Mesoamerican tribes at earlier dates.

The "tortoise" is also, at least in Mesoamerica, the interpretation of the southern ball plasmoids first seen in 10,900 BC.
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Note 31 --

Celtic legends describe the fortress of Ys. The city was walled, with brass gates or walls, floated on oceanic waters, and sank at the end of the "Era of the Gods" when the plasma stream ceased. There are dozens of variations on this theme, with the city under various names, with details matching aspects of the Polar Configuration. The Celts were the people of the west coast of Europe after 700 BC, after their invasion from Central Europe. The expansion of the Celts out of the Hallstatt region north of the Alps started in 400 BC. The Celts brought a warfare-based society, iron weapons, horses, chariots, and extensive weaving experience.
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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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