A Critical Review of Ev Cochrane's "The Catastrophic Fall of Phaeton" (Sunday, November 16 2014)

Beginning as a critique of Ev's presentation on Phaethon, this document also became a compilation of motifs referring to the planet Mercury (as well as the Moon), especially in light of the inner planetary events of c. -686 to -685. Though Ev has offered a reconstruction of the displacement of Mars from the Saturn Polar Configuration, in what follows will be emphasized how many times Ev's pool of data actually seems to reflect Mercury instead, as well as the ultimate groundlessness of associating the rather late Phaethon event with the much earlier collapse of the Saturn Polar Configuration.

Most if not all the questions in the review that follows are rhetorical, or intended for follow-up by me, and not directed at anyone else, per se. On the other hand, anyone who witnessed Ev's presentation or is more familiar with his publications than I am, please feel free to fill in any of the gaps in my comprehension of Ev's hypothesis.

I have mostly kept the sequence of Roger and Andrew's notes intact, though in a few instances have reverse-merged adjoining sentences in order to more effectively address particular motifs one by one.

Julian West Dec 1 2014

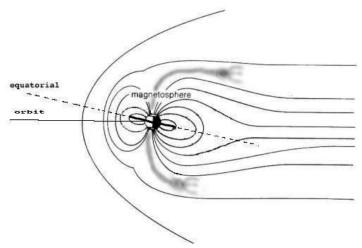
- 1) "Astronomers are unwilling to consider that the planetary orbits have changed in historical times. Ev picked the Phaethon myth to illustrate an Archetypal Hero that details changes in the orbits of the planets." (Roger, talk 3706)
- --I immediately questioned Ev's attribution of Phaethon as an "archetypal hero." In the course of parsing through the remainder of Ev's presentation below, I believe I have found Ev's source for this attribution: Gregory Nagy. Nagy consideration of Phaethon as an "archetypal hero" may have been a cue for Ev to associate Phaethon with Mars.

"[Ev] says the Phaeton myth is the clearest example we have of the planets once gone awry." (Andrew, talk 3800)

-- Did Ev actually detail changes in orbits of (which) planets (Venus, Mars, Earth)?

"Dave and Ev claim [the Phaethon event is associated] with the Saturn era based on various myths that seem to point to the polar column." (Andrew, talk 3800)

—In what follows we shall note several mythological motifs that Ev claims are representative of the Polar Column. I shall presume Ev is always and only referring to what might be called the Golden Age Polar Column or Configuration. —However, it is conceivable that polar plumes ("flow vortices") aglow in later eras may be a more likely model for the "axis mundi" referred to in traditional accounts of the Phaethon event — especially if these plumes were aglow in the wake of the Earth shock of c. -686 and/or during the solar outbursts of c. -685. Comparisons of the positions of the stars in relation to a glowing pillar may have been a clearly visible, concrete reference for mythological narratives of the stars being spun out of joint or set in new places.



A possible alternate "Axis Mundi" -- plasma plumes at the poles extending into the magnetosphere in the direction away from the Sun. (Cook, ch 17) It is conceivable that these were aglow during the unfolding of the Phaethon event c. -685.

2) "Phaethon was the son of the Sun God 'Helios." (Roger, talk 3706)

--Ev and Dave believe that Helios represents Saturn. In my notes from the opening night in Albqq, Dave claimed that Helios was Kronos. Jno at that time mentioned that this attribution was "probably correct at some point." There are classical attributions to this effect; cf. Diodorus, "the Chaldeans called Kronos (Saturn) by the name Helios, or the sun, and he explained that this was because Saturn was the most conspicuous of the planets." (II. 30. 3-4)

--Among Helios' bynames or epithets were: *Hyperion* ("high up"), *Elektor* ("beaming"), *Phaethon* ("radiant"), and *Hekatos* ("from afar"). Some of these epithets were also applied to

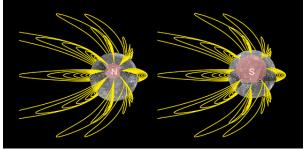
Apollo (as well as Hekate), and in fact Helios was most often identified with Apollo (who has always been recognized as Mercury, despite popular misunderstanding to the contrary). In Ovid, Phoebus Apollo is Phaethon's father.

"The early Greeks believed that the east and west elongations of Mercury represented two separate objects which they called Hermes (evening star) and Apollo (morning star). When later Greeks recognized that Mercury was one object, they designated it Hermes, the messenger of the gods and god of twilight and dawn who announced the rising of Zeus [Jupiter]." (NASA, SP-423: Atlas of Mercury, "Introduction" 1978) "In Egypt the horoscopus priests of Thebes looked across the Nile toward Karnak and recognized [the morning star] as the evil star of Set fleeing upward before Amun-Ra. ... [T]he Thebans recognized [the evening star] as Horus, the vanquisher of Set and follower of Amun-Ra [Jupiter]." (NASA, SP-424: The Voyage of Mariner 10, Ch 1 1978)

–In Homer, however, Apollo and Helios are clearly defined separate beings. In fact, the earliest certain reference to Apollo identified with Helios (interestingly enough) appears in the surviving fragments of Euripides' play *Phaethon* (fr 781 N²)! This identification became a commonplace in later philosophic texts and appears also in the writing of late pre-Socratic philosophers and Orphic poets.

--Over all, one gets the impression that Helios might have been representative of the sight of the Polar Configuration itself, including the 4 (or more) beams seen impinging on Mercury.





(*Left*) The Saturnian Polar Configuration as seen from Earth – with 8 rays impinging on Mercury (behind Mars); still from "Symbols of an Alien Sky." (*Right*) Magnetic lines of force for two views of Mercury. The polar region is four times larger in the south than in the north. (<u>NASA Messenger 2012</u>)

–However, <u>descriptions of Helios' daily journey</u> from his "golden palace in the river Okeanos," [Zodiacal Light?] and <u>5th c BC representations</u> of a beaming red coma around Helios' (or it may be Phaethon's) head are not particularly representative of the Saturnian Polar Configuration at all.

--In Ovid, Phoebus Apollo (Mercury as the Morning Star) is given as Phaethon's father (possibly equating Apollo with Helios, as Euripides did in his drama). If it is the "winged chariot" of the

Morning Star that Phaethon careens off course, then it follows that it is the fate of the Morning Star (i.e., Mercury) that Phaethon narratives are concerned with. – In what follows, we shall see that correlating myths from other cultures do indeed portray the Morning Star directly – and often give the impression that this Morning Star was rather like the Sun itself.

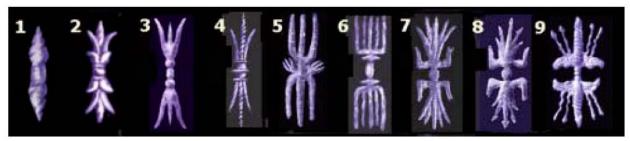


British Museum, London E466. 5th c. BC Attic red ware. "The sun-god Helios or his son Phaethon drives the four-horse chariot of the sun into the sky at dawn. He is crowned with shining aureole of the sun. Beneath his chariot the Astra Planeta (gods of the planet stars) dive into the sea, and before him Selene the Moon rides away, and Eos the Dawn chases Kephalos."

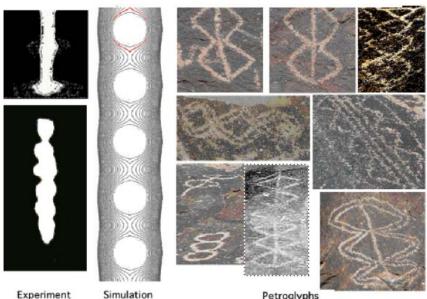
3) "[Phaethon] was killed by a Thunderbolt from Zeus." (Roger, talk 3706)

"Ev definitely mentioned a thunderbolt thrown by Zeus striking Phaethon. He cited the story from Ovid. I don't recall that Ev ever said that this Zeus was Jupiter. I rechecked my notes regarding this, and I can say pretty confidently that I never heard Ev identify Zeus as Jupiter." (Roger, talk 3823)

--Ev's own retelling would seem to indicate an electrically active Jupiter! Yet Ev seems to identify the "thunderbolt from Zeus" as synonymous with a "chain of arrows" or "ladder to heaven" instability in the north Golden Age Axis; and seem to suggest that this instability ejected Mars from the Polar Stack and, presumably, off to its current orbital ellipse? (Or at least that's what I'm gathering thus far.) –However, representations of Jupiter's thunderbolt and the "chain of arrows" and "ladder to heaven" instabilities are unmistakably three distinct phenomena.

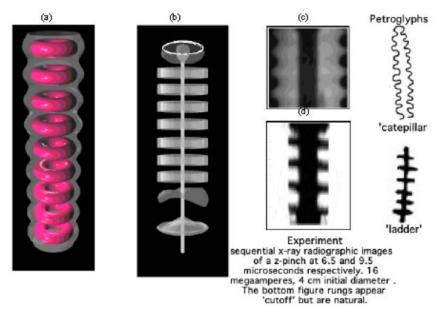


Representations of Jupiter's thunderbolt ("bundle of flame"). (Talbott & Thornhill, Thunderbolts of the Gods p53)



Experiment Simulation Petroglyphs

Plasma instabilities resembling a "chain of arrows." (Peratt, "Characteristics" (2003) p1200)



"Ladder to heaven" plasma instabilities and petroglyph depictions as found on 5 continents.

(Peratt, "Characteristics" (2003) p1202)

4) "Gregory Nagy. Book about Greek myths." (Roger, talk 3706)

--This appears be the source of Ev's attribution of Phaethon as an "archetypal hero" -- Nagy's famed *The Best of the Achaeans: Concepts of the Hero in Archaic Greek* Poetry (1979; revised 1998). (Nagy's work appears to be referenced obliquely on p 46 of Talbott and Thornhill's *Thunderbolts of the Gods*.) It is said that 10s of thousands of students have taken Nagy's class on the "Ancient Greek Hero" over the last few decades. —Nagy seems a rather mainstream / conventional source to lean on in catastrophism studies.

--Nagy's consideration of Phaethon as hero seems largely spurious. See <u>chapter 9</u> and <u>10.22</u>, etc. Nagy here appears to be extrapolating conjectures nowhere else substantiated; his identification of Phaethon as hero appears to be unique(?) (not to mention forced and contrived, IMO).

5) "Over the last 30 years, Ev has been working to reconstruct these events. There is hardly any Greek works that mention Phaethon." (Roger, talk 3706)

-- I count 15 Greek sources.

"Plato is one source." (ibid.)

"Ev also points to Plato having associated Phaeton with the age of Kronos." (Andrew, talk 3800)

--The mention of Phaethon in Plato comes from the mouth of an Egyptian priest, who claims that the Phaethon myth "really signifies a declination of the bodies moving in the heavens around the earth." It is this same Egyptian priest who regards Phaethon as "son of Helios" (who Euripides and Ovid identify with Morning Star Apollo, i.e., Mercury).

"Ovid is the most detailed and elaborate source of the Phaethon myth." (Roger, talk 3706)

--Ovid's account in *Metamorphoses* is one of at least 9 Latin sources. In Ovid, Phaethon's father is Phoebus, i.e., Apollo. Nonnus' account seems just as detailed and elaborate, however.

"Nonnus. 'There was tumult in the sky shaking'" (ibid.)

"As for Phaeton, Ev points to Nonnus with the imagery given of a bent axle on the chariot. To Ev, this is a reference to the polar column." (Andrew, talk 3800)

--Nonnus (in Greek) is one of the most belated sources we have on Phaethon, c. 5th century AD:

"There was tumult in the sky shaking the joints of the immovable universe: the very axle bent which runs through the middle of the revolving heavens [and holds the constellations in their place]. Libyan Atlas could hardly support the self-rolling firmament of stars, as he rested on his knees with bowed back under this greater burden . . . [and all the constellations and stars were thrown from their paths in complete disarray.]"

- --The reference in Nonnus appears to be referring to the axial orientation of Earth "bending" (away from the ecliptic) at a different angle of orientation than previously. This may have been coincident with another appearance of an Axis Mundi of visibly glowing polar plumes bending away from the sun. The "amber" tears of Phaethon's sisters, the Heliades (who had harnessed the 4 horses for him), become "poplar trees" very much the spitting image of an elongated polar plume. (The tails of coyotes, minks and porcupines also display the same basic characteristics.)
- -But here Ev would have us see a Golden Age Axis Mundi bending out of shape as Mars is flung away? There is nothing in any recension of the Phaethon narrative (or any other myth that I am aware of) to warrant this impression.
- --Despite Ev's reference, the axle is not described as being located on the chariot. "The axle which runs through the middle of the revolving heavens" is not otherwise referenced in Nonnus' Phaethon narrative.

--Furthermore, earlier in Nonnus' *Dionysiaca* (38. 90 ff.), Phaethon "made a clever imitation of the Morning Star round like a wheel, out of a bunch of white flowers, and fixed it in front of his spokeswheeled wagon." –This is remarkably similar to traditional depictions of the Morning Star amongst native Americans (and seems to be identical to the image of spoke-like rays impinging on Mercury in the Polar Stack).

-In my notes from Sunday in Albqq, Dave mentioned Apollo as the "axle of the sun wheel," inferring this was Mars. --But Apollo was Mercury! Jno at that time wrote: "Apollo was located between Saturn and Mars, connected to both with plasma stream(s). Image of an axle."

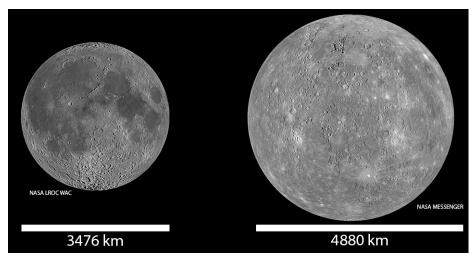
6) "Who is Phaethon? Venus? Meteor? Sun? Scholars: van Neecha. Kugler." (Roger, talk 3706)

- -- Are Venus, a meteor or the Sun suggested identities of Phaethon amongst scholars?
- --I don't know who van Neecha is. --Kugler is Franz Xavier Kugler, *The Sibylline Battle of the Stars and Phaethon Seen as Natural History*. Jno's reconstruction also mentions this source. -- Did Ev reference the Sibylline Oracles (a Greek source)? -- I have a pdf of Kugler in the original German, have never located an English copy.

7) "Eeny, meeny, miny, moe slide. Venus by allegory. From the world's top authority: Cosmic theme: the challenge to world order." (Roger, talk 3706)

- --Huh? --Regarding Venus. A few (Greek) Phaethon myths mention Aphrodite; these renditions, however, do NOT reference the same Phaethon driving a chariot or being struck by Zeus. -- I do not know of any single rendition of the catastrophic Phaethon which also references him as lover of Aphrodite. In fact, most mythographers regard these as two different Phaethons altogether. However, Rens van der Sluijs, in <u>"On the Wings of Love,"</u> attempts to argue that these two Phaethons are indeed one and the same. (Ev may be following Rens' cue, here.)
- --Conventionally, there are at least 7 separate identifications for the use of Phaethon as a name or epithet in Greek myth. Aside from (1) the catastrophic Phaethon and (2) Phaethon son of Eos (who was sister of Helios) and lover of Aphrodite, there was also (3) Helios, (4) a horse of Eos, (5) Auriga the charioteer, (6) Saturn and (7) Jupiter; all were referred to as *Phaethon* ("radiant").
- --Aphrodite may be more directly denotative of Earth's Moon, rather than archaic Venus. Lucian has Phaethon as [a] "sun king" at war with the Moon. Lucian's text (2nd c. AD Greek) is satire, but is also notable for descriptions of interplanetary warfare. Phaethon narratives from

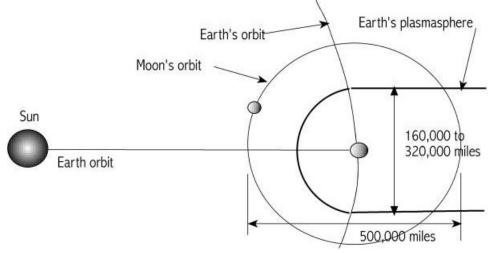
other parts of the world also regard their Phaethon figure as having some type of relation with the Moon (see more below).



Comparison of the Moon and Mercury.

--Alternatively, a presumed close association between Venus and Mercury might have been interpretively inferred c. -685 and thereafter, on account of both maintaining orbits entirely within the orbit of Earth from that era forward. In this fashion, events involving Mercury c. -686 to -685 might actually fit descriptions of both the catastrophic Phaethon and Aphrodite's paramour Phaethon.

--"Challenge to world order" (or "order of the ages") seems to be an accurate enough description of the Phaethon event as, for example, Jno has modeled it c. -685 — with the solar outbursts and the bolt from Jupiter, resulting in a new axial orientation for Earth, and the beginning of the precessional wobble (caused by Moon (Aphrodite) passing in and out of Earth's now smaller plasmasphere).



Path of the Moon during a month; showing travel outside of the Earth's plasmasphere. (Cook, ch 25 n10)

–What observational evidence did Ev mention in support of his late 3rd millennium BC conjecture?

8) "Allegory or Fantasy? Egyptian sources. Pyramid Texts." (Roger, talk 3706)

- --Neither allegory nor fantasy? An allegory usually serves to illustrate an immaterial and/or abstract moral or meaning (spiritual, sociological, psychological, whatever). Are there are any appropriate literary terms for a narrative description meant to convey memories of a concrete cosmological event? (I suppose that might be how I define "myth" itself.) -- Clearly literature is saturated with hints and reflections of traditional mythologies, but to treat myth as literature, per se, seems to put the cart before the horse, so to speak. This seems to be Nagy's approach. However, interpreting myths simply as allegories has proven to be a misleading and deeply flawed approach for some 2500 or more years now.
- --Egyptian sources of the Phaethon myth? Ok, to be fair, the mention of Phaethon in Plato does indeed come from the mouth of an Egyptian priest, who claims that the Phaethon myth "really signifies a declination of the bodies moving in the heavens around the earth." The same priest says that Phaethon "was not able to drive [the four steeds] in the path of his father" i.e., the "chariot" of the Morning Star was not seen to maintain its wonted (orbital) path?
- --The *Pyramid Texts* as source of Phaethon? -- Descriptions of multiple planets in the 3rd m BC are likely extant in the *Pyramid Texts*, but a reference to the Phaethon event? Where? The *Pyramid Texts* are rather likely some 2000 years too early.
- 9) "The Comparative Method. Bruce Lincoln. Reconstruct the prototypes behind the images." (Roger, talk 3706)
- -- Comparative Method, as in historical linguistics, or just as a general term?
- --<u>Bruce Lincoln</u> is Professor of the History of Religions, U of Chicago Divinity School again, a very conventional authority for Ev's catastrophist conjectures!
- 10) "New World (Bella Coola). Same story told in the northwest US. Chain of Arrows. 'Henceforth you shall be the mink.' Clues: The little boy builds a ladder to heaven." (Roger, talk 3706)

"The chain of arrows, the multiple arrows shot by the mythic character made a ladder to climb, ... to Ev is an obvious mention of the polar column. ... He makes the same case with a couple of N. American myths that Frazer writes about." (Andrew, talk 3800)

- --Bella Coola/ Salish legends of boy who carried the torches of "the Sun" ("Walks Through the Heavens") does seem to be a correlative rendition of the Phaethon myth. (Nagy also mentions the Bella Coola legends in relation to Phaethon in his <u>chapter 9</u> (p 235). Nagy is quoting Franz Boas (n 44) and suggests readers compare Frazer's account of Phaethon (n 45). Frazer's account (in <u>Apollodorus 2</u> p388f.) likewise quotes from the same Boas sources as Nagy.)
- --The son of "Walks Through the Heavens" ("the Sun") has a mother who is described as having left her native village, rejecting her husband Stump, whose "hair was full of toads." She makes her way to the house of the Sun by way of a mountain which carries her up to heaven. Stump follows her, but is burned up. The woman, now living in "a corner of the house of the Sun," gives birth to a boy, Totqoaya ("Born to be the Sun"). "He was very ugly and his face was full of sores." Eventually the woman, with her son on her back, comes back to Earth by way of the Sun's eyelashes.
- -- Like Phaethon, Totqoaya is challenged by playmates to prove his paternity. The boy shoots a "chain of arrows" into the heavens, and climbs to the house of the Sun. (In some versions, his mother shakes the chain of arrows, and it becomes a rope.) The boy requests to be allowed to carry the torches of the Sun for a day, similar to how Phaethon requests to drive the blazing chariot harnessed to the fire-breathing horses of the Sun for a day. (In some variations, the Sun claims to be old and tiring, and requests his son to take his place.) Totqoaya accidentally lights all the torches at once. His mother covers the people below in order to save them, or waves her hands to keep her own house cool, and the people safe. His father casts him from the heavens, turning him into the mink. --The mink is described as a trickster/ thief figure in American mythology, and a regional analogue for coyote.
- --Might a "chain of arrows" instability describe a "burning tower" stretching from Earth to Mercury? The Bella Coola narrative describes pointed bolts aimed at "the Sun," an elongated trailing plume, and then the white-hot brightening of the arrows' target.
- -- Was Ev suggesting that Mars got bolted (by Zeus who?) out of the Polar Column, into its current orbit? –Was this some of the details of "changes in the orbits of the planets" he referenced at the beginning of this talk?

11) "Morning Star. Story from a tribe in South America. Sun had a son who had sores on his face. ... The little boy is very ugly. Magical transformation of an ugly youth to a handsome young man is an archetype." (Roger, talk 3706)

"A side mention from Ev is that many Phaeton myths have Mars with an ugly visage with sores on his face, but then after the Phaeton event, he develops a youthful countenance." (Andrew, talk 3800)

--I could not locate any details on a tribe in South America with such a narrative re the Morning Star. --Ev suggests the ugly sores on the face of the Sun's child alludes to the heroic scars of Mars. However, as Jno has recently suggested, the ugly face motif may be more germane to Mercury.

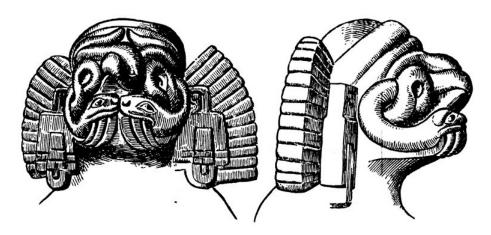
"[A]s Cardona points out, the snake-faced or intestine-faced appearance of Humbaba happens in Mesopotamia in the tale of Gilgamesh (thus after 2750 BC) and in Mesoamerica at a much later date. Humbaba is a most enigmatic planet form, and not identified by anyone. I think it is Mercury.



Humbaba (from Hamlet's Mill)

"The distortion of its atmosphere could only happen when Mercury, like Mars entered the rear of the Earth's plasmasphere. That happened 3 times, at the time of Gilgamesh, at the time of Sodom and Gomorrah, and in the 7th/8th century BC. I think it was this last instance that allowed the Olmecs to carve his face in stone." (Jno, talk 3794)

--Humbaba's Aztec equivalent is Tlaloc. This correlation was demonstrated in <u>Hamlet's Mill ch</u> <u>22</u> (which is likely Cardona's source also?).



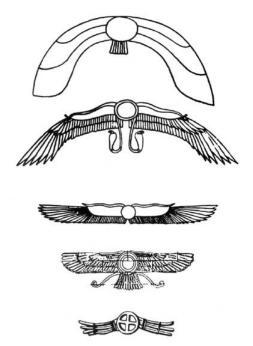
Tlaloc (from Hamlet's Mill)

"We would hazard a premature guess that ... Mercury would be the safest bet. . . . Constructed out of two serpents, Tlaloc's head represents, as it were, the caduceus of Hermes / Mercury." (Hamlet's Mill p 290)

--Some representations of Tlaloc also bears a striking resemblance to the "winged sun-disk" or motif seen worldwide (often associated with Mercury).



Fragments of a brazier depicting Tlaloc from Stage IVB of the Templo Mayor in Mexico City.



Some examples of the "winged sun-disk" motif found globally.

- --Ev's claim that "magical transformation of an ugly youth to a handsome young man" is a typical example of the Phaethon myth may only be true for certain FOVs. (For example, there is no corresponding motif in the Greek and Roman narratives of either Phaethon.
- --I have yet to locate a single Phaethon narrative that invokes a transformation of the Phaethon figure to a "handsome young man." A marginally related motif comes instead from myths of one Phaon, an "old and ugly" boatman favored by Aphrodite, who gifts him with a box of ointment that makes him appears young and beautiful. Ev's "Star-Woman" essay attempts to identify Phaon as both the Morning Star and Mars. Though not expressly stated in this essay, I have a hunch Ev would also argue that Phaon and Phaethon were one and the same.
- --There is also no corresponding motif in narratives of Humbaba or Tlaloc, either. Also, even in narratives that mention an ugly youth, there is not necessarily a transformation to a handsome young man; in the traditional Bella Coola narrative, for example, the ugly Totqoaya is transformed into a lowly mink, cursed to be hunted by man.
- 12) "Quetzalcoatl. 'When he died transformed into this star.' The old people said that he turned into the morning star. Quetzalcoatl was described as very ugly and covered with sores. *Codex Tellerano Remesis*." (Roger, talk 3706)

--Quetzalcoatl was more likely Venus – not Mars, as Ev attempts to persuade his readers (*Starf*cker* p98f). The long *twin plumes* ("coatl") of *radiant green* ("quetzal") is classic comet Venus. Even conventional Mesoamerican mythography recognizes Quetzalcoatl as Venus. Venus became ("turned into") a morning star c. -685.

--Ev's source (in *Starf*cker* p77) for Quetzalcoatl's face being covered with sores is the highly regarded *Topiltzin Quetzalcoatl*: *The Once and Future Lord of the Toltecs* by H.B. Nicholson. I was not able to access this source via the internet. --According to other sources, however, Quetzalcoatl was emphatically not described as "ugly," per se, but rather "monstrous," with a "face ... like a huge, battered stone, a great fallen rock." This is considered a notable case in point regarding distortions of Mesoamerican myth by later European conquerors.

--Codex Tellariano-Remesis is a 16th c AD painted Aztec manuscript. A <u>depiction of Quetzalcoatl</u> from therein . . .





... in comparison to a feathered serpent on this much older Olmec figure, from La Venta.

- --But what does this have to do with Phaethon?
- For what it's worth, an Aztec god whose face was "full of sores" was Nanahuatzin (or, Nanahuatl), "who sacrificed himself in fire so that he would continue to shine on Earth." It is Nanahuatzin who, along with Tecciztecatl (elsewhere identified with the Moon), immolates himself in the sacrificial pyre at the death of the fifth sun. This appears to be the "star wars" event covered in the Sibylline Oracles; Jno identifies this as the summer of -685.

- 13) "Inca Lore. 'Father morning star'. Is said to have been the first bright object to have appeared out of the darkness." (Roger, talk 3706)
- --This seems much more likely a reference to Jupiter as "red" star of morning, appearing after the dramatically darker nights of post -3147. (Cf. Greek references to the Morning Star [Apollo] as herald of Zeus [Jupiter] and Egyptian references to the Morning Star [Set] as fleeing from Ammon-Ra [Jupiter].)
- --Ev quotes Gary Urton on p 100 of *Starf*cker*: "Papa pachapacariq ch'aska ('Father morning star'), which is said to have been the first bright object to appear in the dark primeval sky in the beginning of time." This may more likely be a reference to the ball plasmoid(s) of the Peratt Column lighting up for the first time at the close of the Younger Dryas ("the darkness"). --Ev, however, is convinced this was Mars.
- I feel like we are veering further and further away from the topic of Phaethon; how is this point about the Incas germane, exactly? --Weren't the Inca too far south to have had a clear view of the Polar Configuration, anyway? (As I understand, Ev's reconstruction of Phaethon all occurs above Earth's north pole, i.e., during / the breakup of the Polar Configuration.)
- –From my own cursory examination of southern hemisphere mythology, peoples in the south appear to have had much lore regarding the Peratt Column (c. -8347 to -4200 intermittent) and Jupiter (c.-2800 to -685 intermittent), as well as what seem to be mentions of Venus, Mars and possibly Mercury (c. -2600 to -685 intermittent). There are very plain references to a *deus otiosis* figure that may represent whatever ambience of the Polar Config the peoples below the Absu experienced.
- 14) "The Watunna. From a Stone Age people from South America. Seven arrows. They hung there in the sky. It was the ladder to heaven. This convinced Ev that Mars was a morning star. Makiritare people." (Roger, talk 3706)
- --This is covered by Ev within the same few pages of *Starf*cker* as entry 13 above. --The "ladder to heaven," in Ev's context, seems to be the Golden Age axis mundi at the north pole. Would this have even been visible to the Watunna in South America? --If a "ladder of chained arrows to heaven" was visible from South America, wouldn't it have had to be extending away from Earth somewhere within the tropics to be seen as a "ladder"?
- --On page 101, *ibid.*, Ev writes: "fundamentally identical reports of the cosmogonic primacy of the morning star ... are best understood originally referring to the planet Mars." The scanty

quotes he collects in this section are by no means obviously correlated. Ev attempts to hold datum from many different points in time and FOV as all evidence of Mars, a conjecture attested to nowhere else. More than one of his references from traditional mythology appear to have been included simply because a reference to the color red or orange appears in the narrative (sometimes quite marginally).

15) "Falling Star, or Human Condition? Quote from Ovid." (Roger, talk 3706)

- --Human condition? Was the quote from Ovid from Book 1 (89-150; 125-150 especially)? —re the supposedly degenerating nature of mankind as the Golden Age passes into Silver, Bronze, and Iron?
- --Was Ev attempting to claim that the degenerating Ages were periods of instability, until the Polar Configuration broke apart? Do Ev and Dave (cf. Cardona) essentially see the Polar Configuration as an axially aligned chain of comets, split asunder (by the influence of the Sun?) when approximately reaching 1 AU?

16) "Euripides." (Roger, talk 3706)

- --Euripides' *Phaethon* drama is largely lost, save for fragments. However, his drama may have been one of the primary sources used by Ovid and Nonnus. From wiki:
- --"Fragments of Euripides' tragedy on this subject suggest that, in his account, Phaethon survives. In reconstructing the lost play and discussing the fragments, James Diggle has discussed the treatment of the Phaethon myth (Diggle 2004)."
- --<u>Vladislav Nekliaev</u> (2012) has translated all extent fragments of Euripides' lost play into English and offered a reconstruction.
- --I believe that Phaethon also survives in Lucian's *True History* (though in Lucian's satirical recension, Phaethon is at war with the Moon. Cf. the Aztec myths of Nanahuatzin and Tecciztecatl, and other instances of Phaethon-type myths invoking a changing relationship with (and/or appearance of) the Moon.)

17) "The Meteorite Explanation." (Roger, talk 3706)

--A meteorite (bolide is perhaps what Ev meant?) is not even close to an explanation. Was Ev referencing conventional reconstructions? Or was he actually suggesting a bolide could account

for such widespread cross-cultural correlations? –Or simply making mention of bolides being described as "falling stars?"

18) "These traditions were preserved for 3,000 to 5,000 years." (Roger, talk 3706)

- -- 3000 to 5000 years before the present? Or before being committed to text, c. -300 &f.?
- If the former (3-5k before present), then Ev is suggesting the Phaethon event (which in his omnivorous reconstruction is synonymous with the breakup of the Polar Configuration, it seems) occurred c. -3000 to -1000? –If the latter (c. -300), then Ev appears to be suggesting c. -5300 to -3300?
- -- I'm guessing he meant something like -3000 to -1000, as his (and Dave's) only publically mentioned projected date for the breakup event is c. -2200 (which would be somewhere near the middle of an all too ambiguous "3 to 5000 year ago" range).

19) "Skidi. Carried around a stone whose origin was from Mars." (Roger, talk 3706)

--Cf. Ev's <u>"Creation Amongst the Pawnee Skidi"</u> was later reworked into the opening chapter of Starf*cker. Ev's source is Ralph Linton, <u>"The origin of the Pawnee Morning Star Sacrifice,"</u>
American Anthropologist (New Series) Vol 28, No 3 (July 1926), pp 457–466:

"The sacrifice was performed only in years when Mars was morning star and usually originated in a dream in which the Morning Star appeared to some man and directed him to capture a suitable victim."

--I cannot find any information at all on when Mars is conventionally seen as a morning star. I understand that sometime between c. -3067 and c. -689 Mars may have had an aphelion inside of Earth's orbit, and thus may then have periodically risen as a morning star. (I do not believe that is the sense that Linton intended, however, nor does it seem what Ev intends, either.) What might Linton have been referring to? —Linton only mentions this once, in passing; bibliographic entries 1-5 may reference his mention of Mars (I have not researched them yet). In fact, entry 5 is Linton's own "The Sacrifice to the Morning Star by the Skidi Pawnee" (p 2-3; this article has no bibliographic references):

"The actual time of the performance of the sacrifice is not fully known, but it seems to have been made in the late spring or summer of years when Mars was morning star. It was usually made as the result of a dream or vision in which the Morning Star appeared to some warrior and demanded it, but it might also be made as a result of some sign in the star itself, as when it appeared especially bright, or in years when there was a comet in the sky. It might also be performed without any direct intervention of the Morning Star, if some warrior had captured a suitable victim."

- --Interestingly, Jupiter is conventionally seen as a morning star prior to opposition with the sun. This is still true to this day. What a sight Jupiter would have been when its coma was still lit!
- --Linton appears to be the *only* source on the Pawnee Skidi Morning Star (human sacrifice) ritual that stipulates Mars as the morning star being imitated or revered. In several other analyses of said ritual, Venus is regarded as the morning star in question!
- --In Linton's text, Morning Star "told the people that he gave them bows and arrows with which to kill animals . . . As he had given them fire sticks the animal should be placed on the fire so that the smoke might ascend to the beings in the heavens. In these sacrifices by fire the blaze and smoke carry the prayers to the above...."
- -- It is Apollo (Mercury) who is widely known for his archery -- not Mars. -- Cf. myths of Totqoaya and other "sons of the Sun," who shoot a "chain of arrows" into the sky in order to reach the Sun.
- --Odin (Mercury) likewise was "lord of the wild hunt." "Hunter" seems to be an apt way to discriminate Mercury against the "Warrior" Mars; Mercury is likewise often the "(High) Priest" to Mars as "King." The Pawnee Morning Star here also plays the role of a sort of priest or hierophant, recommending sacrifice to "the beings in the heavens."
- -In some representations of the "winged-sun-disk," an archer is depicted with a bow:



Detail from a relief in the throne hall of Assurnasirpal (c. -883 to -859).

- --In addition to the archery and hunting correlations, in many parts of the world, human sacrifice was performed in imitative honor of Mercury; sacrifices in imitative honor of Odin are a salient example. Cf. Heinsohn's *The Creation of the Gods*.
- --I have no data on the Skidi (or anyone for that matter) carrying around a stone (believed to have come) from Mars.

20) "Cheyenne." (Roger, talk 3706)

-- Not sure what Ev's exact reference was, but in the above mentioned Linton article ("The origin of ...;" note again that this article is quoted in Ev's *Starf*cker*), on page 462 is a reference to the Cheyenne, among others:

"Human sacrifices are also recorded among the Iroquois and Nipissing and among the Cheyenne at the time of the Sun Dance."

- --The Cheyenne also have lore regarding the morning star, who they also call "Falling Star" or "the Brightest Star." --The <u>Cheyenne narrative</u> includes mention of "a certain kind of white turnip with a great green top." Brightest Star warns his wife, First Girl, against digging this root. First Girl reached Brightest Star by way of a tree that kept growing taller into the heavens (akin to the "chain of arrows" motif in other myths). She was originally trying to get to the porcupine stuck in the top of the tree. --Porcupine may be regional analogue akin to coyote or mink.
- --A <u>Blackfoot narrative</u> of the morning star also references "a large turnip growing near the home of Spider Man." In this narrative, it was Spider Man's "web that had brought her [Soatsaki, "Feather Woman"] from the earth to the Sun's lodge." Feather Woman, who bears Morning Star's (Apisuahts) child, Star Boy, is warned against digging the turnip by Sun and Moon. Her son, Star Boy, has a wound on his face, and is nicknamed Poia, "Scarface."

21) "Falling Star. Crow Indians. A baby named Fallen Star survives the death of his mother in a fall." (Roger, talk 3706)

--I cannot corroborate a Crow Indian myth about "Falling Star" or "Fallen Star." ("Falling Star" appears to be the name from Cheyenne narratives, not Crow?) A search for Ev's references to Crow Indians in print turned up only one example, in an essay called "The Great Star," where it is asserted that the Crow, among other N American tribes, used an image of the Morning Star (or, Great Star) prominently as a sacred symbol. Ev gives a reference to T. McCleary, *The Stars We Know: Crow Indian Astronomy and Lifeways* (Prospect Heights, 1997), p 35.

--McCleary's chapter 3, beginning on p 31, contains an image of a 4-rayed star ("represented by a cross or by four elongated triangles," McCleary 35), such as seen in imagery of the polar configuration. Sometimes there is a circle indicated in the center of the 4 rays, but there is no red or darker colored center in any representations of Morning Star amongst N American tribes. The 4 rays are often surrounded by a circle, and all representations I've seen are circular objects; sometimes the circle that rings the 4 rays is simply the outer edge of the object (drum, pouch, etc.).



Front cover of Crow Indian hoop bundle painted with representation of the Morning Star, c. 1850. (McCleary 35)

--McCleary also informs us (p35) that, in Crow tradition, "the significance of the Morning Star is also . . . evoked by the manner in which the hide of the drum is tied to the cast iron kettle that forms the drum's body. The seven-yard rope that fastens the leather drumhead to the kettle is laced in such a way as to produce a seven-pointed star on the bottom of the drum. Most Crow elders say this 'rope star' represents the Morning Star." (Interestingly, in Nonnus' account of Phaethon, Helios "placed the golden helmet on Phaethon's head and crowned him with his own fire, winding the seven rays like strings upon his hair.")

- --McCleary conveys that amongst the Crow, Morning Star (Ihkaleaxe, "Bright Star") is referred to as the Old Woman's Grandson; the Old Woman is regarded as the Moon. In the traditional Crow narrative, Morning Star "raids the Moon's garden." (McCleary 37)
- --The Crow retain a myth similar to the Cheyenne, regarding a young woman who attempts to retrieve a porcupine from a tree. In the Crow version, she similarly climbs higher and higher up an elongating tree, until she reaches the abode of Morning Star. In the Crow version, however, the woman is warned against "turning over the buffalo droppings" (McCleary 37); note again that Cheyenne and Blackfoot versions mention a turnip being uprooted (i.e., "turned over").

-<u>Buffalo droppings</u> are <u>quite characteristic</u>. Might they be considered to bear a resemblance to representations of Humbaba and Tlaloc (i.e., distortion of Mercury's atmosphere when intersected with Earth's plasmatail)?

22) "The Milky Way. From Aristotle. Ev's interpretation: a catastrophe occurred and the Milky Way was formed. This has nothing to do with Venus." (Roger, talk 3706)

--Aristotle, Meteorology 1.8: "Let us now explain the origin, cause, and nature of the milky way. And ... let us begin by discussing the statements of others on the subject. -- (1) Of the so-called Pythagoreans some say that this is the path of one of the stars that fell from heaven at the time of Phaethon's downfall. Others say that the sun used once to move in this circle and that this region was scorched or met with some other affection of this kind, because of the sun and its motion. -- But it is absurd not to see that if this were the reason the circle of the Zodiac ought to be affected in the same way, and indeed more so than that of the milky way, since not the sun only but all the planets move in it. We can see the whole of this circle [the Zodiac] (half of it being visible at any time of the night), but it shows no signs of any such affection except where a part of it touches the circle of the milky way."

- -- Ev believes that a catastrophe formed the Milky Way? --Or that that was the Pythagorean interpretation (at least as recorded by Aristotle; I'm not sure there is any other extant source for this lore other than Aristotle (?). –This has nothing to do with Venus huh?
- --The constellation Auriga, the charioteer, representative of how "father Zeus fixed Phaethon" in the sky, is located completely within the stream of the Milky Way.

23) "Navajo Coyote story." (Roger, talk 3706)

--Coyote is the trickster figure par excellence; mink and porcupine mentioned above may be regional analogues. Interestingly, there is a Navajo Coyote story also involving the Milky Way:

"Black God (Haashch'eezhini) was also busy making the other constellations by carefully ordering the stars in the sky when Coyote became impatient and blew the remaining stars from a blanket or pouch into the sky, forming the Milky Way."

--Could this conceal the memory of a changing axial orientation c. -685, and thus a relocation of the Milky Way as seen from ground (i.e., the "order" of the stars in the sky)?

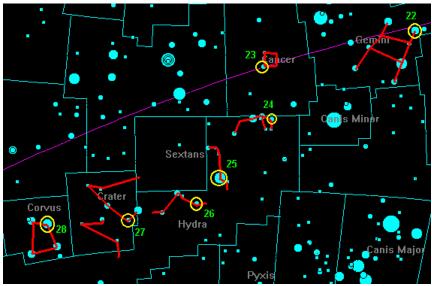
24) "Chinese sources describe Mars as a red phoenix-like bird." (Roger, talk 3706)

--The <u>Chinese Vermillion Bird</u> of the South (Zhu Que), who is "very selective in what it eats and where it perches," is indeed traditionally associated with Mars, who is also known as "Fire Star." Zuh Que is often conflated with the Chinese phoenix, Fenghuang (who appears to be a representation of the Peratt Column).



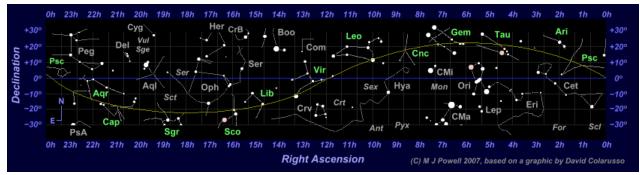
The Vermilion Bird on the gates of a Han Dynasty mausoleum complex.

--The Vermillion Bird has 7 "moon stations," which pass through a portion of the ecliptic in the constellations Gemini and Cancer, as well as portions of the constellations Canis Minor, Sextans, Hydra, Crater and Corvus.



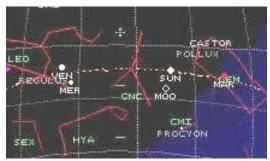
The 7 Moon Stations of the Vermillion Bird. Moon Stations are connected by red lines. Key stars are circled in yellow.

--In Ovid, Phaethon is warned by Helios about the path of the ecliptic, i.e., the "beasts" of the Zodiac: "Wild beasts lie in wait and shapes of fear!"



The apparent path of the Sun through the Zodiac constellations (the ecliptic, i.e., the plane of Earth's orbital ellipse).

---Among these, Helios mentions "Cancer (the Crab) whose claws in counter-menace wave." In Nonnus, Helios likewise forewarns Phaethon: "I drive at the highest point of my course in Karkinos [Cancer the Crab]." --In Jno's graphic for July 22, -685, Cancer the Crab lies directly between Mercury and the Sun, along the ecliptic:



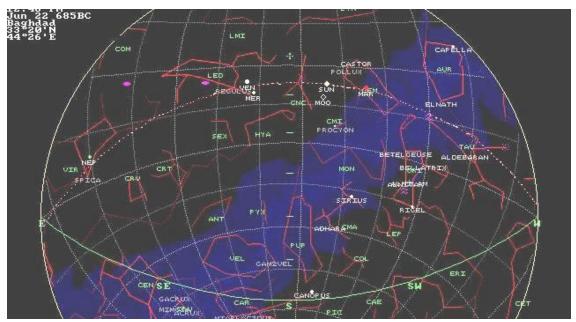
Cancer the Crab seen at "the highest point of [Helios'] course, July 22, -685.(Cook, ch 24)

--Nonnus also tells us that "father Zeus fixed Phaethon in Olympos, like a Heniokhos [Auriga the Charioteer], and bearing that name." --The constellation Auriga is commonly associated with a handful of charioteers, including legendary ruler of ancient Athens, Erichthonius, who is credited with the invention of the 4-horse chariot, in imitation of Helios' chariot. Auriga is also one of several beings in Greek mythology to be called by the name *Phaethon*. In Jno's map of July 22, -685, Auriga is just west of the Sun and Mars, in the stream of the Milky Way.



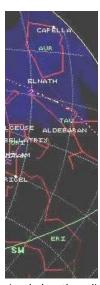
Auriga the charioteer seen west of the Sun and Mars, July 22, -685. (Cook, ch 24)

– Auriga is also anthropomorphized in Chinese astronomy as a charioteer, and the adjoining stars are regarded as aspects of his chariot, poles for the horses to be tethered to, etc. The Chinese Vermillion Bird traces its path, more or less, winding northwest through Corvus and Crater, through Sextans, Canis Minor, Cancer and Gemini, right into Auriga the charioteer. – This is, by and large, the path indicated in Jno's graphic for the locations of Venus, Mercury, Sun and Mars on July 22, -685!



Daytime sky at noon, June 22, -685. (Cook, ch 24)

– The river Eridanus was the scene of Phaethon's fall according to Ovid, Nonnus, Pliny and others. The constellation Eridanus may be seen more or less directly south of Auriga —a fitting location for the charioteer to fall (passing through the ecliptic along the way).



The river Eridanus seen south of Auriga, below the ecliptic on June 22, -685. (Cook, ch 24)

25) "Mircea Eliade." (Roger, talk 3706)

--I read Eliade ravenously in my late teens / early twenties, and own a dozen or so of his works in my own collection. I don't trust any of his interpretations, but value his recognition (and cataloguing) of cross-cultural correlations.

--In Ev's <u>"The Ladder to Heaven,"</u> he quotes from Eliade's *Patterns in Comparative Religion* regarding the Axis Mundi, a motif Eliade regularly returned to. (I suspect Rens has also absorbed lots of Eliade along his own axis mundi way.) Like Joseph Campbell's musings on the Axis, Eliade's descriptions often seem to be describing the Golden Age Polar Config – the "world tree" in the North. –This seems to be what Ev wants his audience considering – conflating it with a "chain of arrows" as well as an "ever-elongating tree."

-A visible Axis Mundi attendant upon the Phaethon event is more likely to have been Earth's own polar plumes aglow, rather than the more elaborate interplanetary axis of the older Golden Age. Earth's changing axial orientation c. -685 following shortly upon the Phaethon event is thus apropos, and may be hinted in other aspects of Phaethon narratives. --Note also the many instances in myths from a variety of cultures where a change in the appearance of the Moon occurs simultaneously or very soon after.

--Could witnesses in the southern hemisphere (literally, below the equator and the Absu) have ever had a clear enough FOV of the Polar Config Axis to remember it as a "chain of arrows" or "ladder to heaven?"

26) "Ladder to Heaven. Ladder of Heaven. It didn't exist before he built it." (Roger, talk 3706)

-A "chain of arrows" or a "ladder" do not necessarily connote a narrowing or tapering apex as we expect to be descriptive of a visible Axis extending up to Mars, Mercury (Ev and Dave's "Venus") and Saturn, such as we expect from descriptions of a "world tree" or "mountain," which appear to denote a such an apex or zenith. The "ladder to heaven" motif in myth moreover is often qualified by being made of certain materials, such as "fish vertebrae," for example.

--As seen above, "chain of arrows" and "ladder (of fish vertebrae, et al)" seem to be descriptions of Peratt instabilities seen in Earth's polar plumes set aglow by charge equilibration c. -685. The corresponding motif in the Greek and Roman Phaethon narratives would be the

"axle ... which runs through the middle of the revolving heavens [and holds the constellations in their place]." (Nonnus)

--In Ev's own "Ladder to Heaven" essay (p 3) is recounted a Tlingit myth with an interesting detail we have noted a few times before – a large bright star related in some manner to the Moon: "[O]nce upon a time, the son of a great chief absentmindedly set about shooting arrows ..."He thought, 'Now I am going to shoot that star next to the moon.' In that spot was a large and very bright one. He shot an arrow at this star and sat down to watch, when, sure enough, the star darkened. Now he began shooting at that star from the big pile of arrows ... and ... the arrows did not come back. After he had shot for some time ...at last a chain of arrows reached him."

--Is this the type of motif Ev was referring to, re "ladder to (or, of) heaven" not existing before "he" (Mars?) built it? (Cf. other narrative depictions of a "chain of arrows" built by an archer or absentminded hunter.) – A "ladder to heaven" built by Mars, per se, would rather seem to reference the descents and ascents of Mars during the Golden Age Polar Config – the rungs being stacked toroid instabilities.

-Ok, what does this have to do with Phaethon again? --This seems rather more like Ev's evermeandering musings on the Golden Age Polar Config; it's beginning to look that Ev clearly regards the Phaethon event as Mars being "shot out" of the Polar Config during the collapse? Thus, Dave and Ev allow there might have been an isolated later event during subsequent orbital adjustments, after Mars (and, presumably, "Venus" as well) was ejected from the collapsing Polar Stack? Is this what we are to understand as the essentials of their overall reconstruction?

--This appears to be much as Andrew reported recently (talk 3800):

"Everything that Tbolts mentions is related to Saturn, the polar column and the planet stack. As for Phaeton . . . It's clear that Dave and Ev claim the association with the Saturn era based on various myths that seem to point to the polar column."

27) "Mars = Phaethon" (Roger, talk 3706)

--I for one fail to see the correlations at all. It doesn't seem that Ev covered any ground he hasn't already stamped heavily in previous publications.