



## Multiple Morning Stars in Oral Cosmological Traditions

**Marinus Anthony van der Sluijs**

*110 West Barnes Lane, New Malden, Surrey, KT3 6LP United Kingdom  
mythopedia@hotmail.com*

---

### Abstract

The Seneca tribe of the Iroquois confederation told an astral myth involving the installation of the mortal So-son-do-wah and his lover Gěn-deñ-wit-hă into the morning sky. While the relation of the latter to the morning star has never been in doubt, the astronomical identity of So-son-do-wah has remained unclear. It is argued that the recognition of *two* morning stars, as familiar also from the Pawnee and the Blackfoot nations, offers a solution to this question. The notion of multiple morning stars also clarifies some supposedly “confused” observations of Jupiter and Venus. And the attribution of a mythical “erratic” prehistory to the morning star finds a counterpart in the mythologies of, for example, the Pawnee and the Greek Phaethon.

### Keywords

cosmology, astronomy, morning star, Venus, archaeoastronomy, star lore

### Meeting So-son-do-wah

Myths and other traditions worldwide are awash with references to phenomena seen in the sky, but for modern researchers it is often all but impossible to be certain about the exact astronomical identities of the characters and attributes featured in these. From the Seneca tribe, one of the five nations that originally belonged to the Iroquois League in the western part of New York State, comes the story of a legendary hunter called So-son-do-wah, who was elevated into the night sky along with another “new” astral object. So-son-do-wah’s initial foray into the sky follows the widespread North American motif of a hunter’s celestial pursuit of a giant mammal, in this case an elk rather

than the more usual bear.<sup>1</sup> The exhausting chase ends when the hero's avian mount launches him onto a near-fatal free-fall, as recorded by Harriet Converse:

He was a mighty hunter, the So-son-do-wah!... O-je-a-neh-doh, the Sky Elk, more fleet in his own free fields, ever eluded the dumb arrows which sighed from So-son-do-wah's bow, until day feathered the sky with its plumes of red light, when the night bird shook So-son-do-wah from its wings back to the earth. But Dawn, pitying the sky stranger, rescued him as he was falling, and carrying him to her lodge in the east sky, created him her sentinel to guard its door. (Converse 1908:60–61)

Yet “the heart of So-son-do-wah yearned back to the earth” and once when “So-son-do-wah saw a beautiful maiden standing by a low river where she had gone in search of water,” “he gently approached her, but the wary hunters drew him back to the lodge of Dawn” (Converse 1908:61). Madly in love and concealed in the feathers of a succession of different birds, So-son-do-wah continued to pay the girl regular visits throughout the seasons, but had to return to the sky each night in order to keep watch at the lodge of Dawn. Unfortunately, the illicit tryst met a swift conclusion when, in the Autumn, So-son-do-wah called on his lover from inside the heart of a night hawk:

“She is here!” whispered So-son-do-wah from the heart of the hawk as it swooped down and, lifting her to its broad wings, bore her to the skies... When the maiden awoke, Dawn, who was standing by the door of her lodge, reproved So-son-do-wah for remaining so long on the earth, and transformed the maiden into a star. As punishment to So-son-do-wah for deserting his watch of her door, she invoked the aid of her warrior attendants who seized him and bound his arms. On his forehead they placed the new star, and in her hand a flaming torch, and should he attempt to release himself, the torch will consume him. And thus he remains So-son-do-wah, the human hunter, who yet yearns for the star which has never known him. (Converse 1908:62–63)

<sup>1</sup>) “In the Northeast, the most widespread celestial image is that of the never-ending bear hunt. The Passamaquoddy, Seneca, Delaware, and Fox all identify the BIG DIPPER as a bear and hunters, but it is the Micmac narrative that describes the hunt most carefully...” (Miller 1997:36; cf. Squier 1848:256; Alexander 1916:26, 278). For an Iroquois example, see Smith 1883:81.

### So-son-do-wah as a Morning Star

Judging by the various hints contained in this narrative, it seems sufficiently clear that the tale has an astronomical import, but the identity of the protagonists is harder to establish than one might imagine at first blush. The “lodge in the east sky” owned by the female “Dawn” must represent the morning twilight seen in the east, which is preceded in Autumn by the zodiacal light, a faint, roughly triangular glow of light seen above the horizon, that is caused by the reflection of sunlight from fine particles of meteoric dust in orbit around the sun. While it remains uncertain whether the figure of “Dawn” herself merely personified this luminous region of light or signified a particular celestial object within its confines, So-son-do-wah in his catasterised form is clearly presented as an astral body placed within the boundaries marked out by the morning twilight or the zodiacal light. As his name literally means “Great Night” or “Great Darkness” (Converse 1908:60 n.1, 35 n.1), the sun and other objects seen at daylight are disqualified, leaving only a star, a planet, or transient forms such as comets and meteors as candidates for So-son-do-wah’s astronomical identity.

A note appended to the story, apparently by Converse herself, clarifies that the Star Woman So-son-do-wah loved was the morning star: her name, *Gěn-deñ’-wit-hǎ*, means “It Brings the Day” and the Iroquois relate “that the Sun lights his council fire by the torch of the Star Woman before he appears above the horizon. This Star Woman of the Iroquois, who precedes the sun in the east sky, is the morning star of the paleface” (Converse 1908:63). But how about So-son-do-wah himself? That neither a constellation nor a particular star can have been intended for him follows from the fact that all stars except Polaris are in constant motion with respect to the eastern “location” of the dawn, completing a circle around the north pole of the sky every 24 hours and an annual cycle that is seen, for instance, in the shifting position of the signs of the zodiac with respect to the horizon at a fixed moment in the day. A stellar identification of So-son-do-wah would, therefore, violate the apparent requirement that this entity, at least during the early hours of the morning, remained within the zone of crepuscular light in the east throughout the year. The most natural interpretation of this trait is that the Seneca people envisioned So-son-do-wah, too, as a planet observed

exclusively during the hours preceding the rising of the sun — as a morning star, in other words.

### Multiple Morning Stars

Yet this deduction raises two other questions. Firstly, how can So-son-do-wah and Gěn-deñ'-wit-hǎ both have been morning stars? Does the reputed placement of the latter on So-son-do-wah's forehead as a "new star" carrying "a flaming torch" imply one or two different celestial bodies? And secondly, which planet or planets embody So-son-do-wah and Gěn-deñ'-wit-hǎ as morning stars?

A single insight offers a possible solution to both queries. As Venus is the brightest natural object in the night sky after the moon, mention of the "morning star" or "evening star" in mythical and cosmological traditions of all ages is generally explained in reference to this planet. Insofar as these designations imply no more than that the planet is seen during twilight hours, however, the planets Mercury, Venus, Mars, Jupiter and Saturn all potentially qualify as "morning stars" and "evening stars." Because the two inner planets, Mercury and Venus, orbit around the sun in circles smaller than that of the earth, they always appear in close proximity to the sun from a terrestrial vantage-point, disappearing with it in the midst of the night; they are, in other words, "full-time" morning and evening stars, although they cannot always be made out against the light of the sun. Thus, while Venus is far brighter than Mercury, the latter nonetheless qualifies as another morning or evening star, that alternately appears together with Venus as a pair of morning stars or evening stars, or in the opposite phase, serving as morning star while Venus is evening star and *vice versa*. The remaining, outer planets can be observed at any time of the night and at any position on the ecliptic band between west and east. Occasionally, any of these planets may appear as a — "part-time" — morning or evening star together with Venus or Mercury. Actual confusion with Venus may occur during the phase of Venus' invisibility or when the light of Venus is drowned out entirely by that of the sun, allowing only Mars or Jupiter to be seen in its stead.

Natural philosophers in the Old World have recognised the possible concurrent observation of two morning stars since Antiquity.<sup>2</sup> A text

<sup>2</sup>) If it can be allowed that classical mythographers acknowledged the possibility of

that may have been written anytime between the 4th century BCE and the 1st century CE attributes an exposition of this to the Pythagorean teacher, Timaeus of Locri (5th century BCE), whose works exerted such a great influence on Plato:

Two others have courses equal to that of the sun, the star of Mercury and the star of Hera, which people call the star of Venus and the Lightbringer. For shepherds and all ordinary people are not wise about what concerns sacred astronomy, nor do they understand the evening and morning risings. For the same star is now the evening star, when it follows the sun at such a distance that it is not hidden by the rays of the sun; and now the morning star, when it precedes the sun and, about dawn, rises before it. Therefore, the star of Venus is often the Lightbringer because it has the same course as the sun; but this is not always so. But many of the fixed stars, as well as many of the planets, in fact any heavenly body of a certain size when it comes over the horizon before the sun, announce the coming of the day. (Timaeus, *De Natura Mundi et Animae*, 26–27 [96e–97a; 214]; tr. Tobin 1985:44–45)<sup>3</sup>

The medieval scholiast, Pseudo-Bede (12th century CE), similarly commented on the occasional joint appearance of Venus and Mercury in the matutinal sky:

These two planets are also sometimes both above the Sun or below it, or both before or after it. Thus we seem to have two Lucifers and in the same way two Hesperus's. For when Mercury precedes <the Sun>, it assumes the name Lucifer. Venus is the natural name; that is, wherever this star is, it is naturally called Venus. When it precedes the Sun in rising it is called Lucifer; when it appears when the

---

different planets serving as morning and evening stars respectively, they can in some cases be exonerated from misplaced accusations of stupidity. When Nonnus of Panopolis (5th century CE), in a poetic description of cosmic upheaval, tells that the giant Typhon dragged “first Phosphoros, then Hesperos and the crest of Atlas” from the sky (*Dionysiaca*, 1.206, tr. Rouse 1995:18–19), his translator (1995:43 note) too rashly concludes that “Nonnos did not know, or had forgotten, that the two are one and the same.” Considering that at least the planet Mars, too, could be called *vesper*, “evening star” (Isidore, *De Natura Rerum*, 3.2; 23.2,4), Nonnus may well have patterned the scene on an astrological model indicative of the supposed date of the event, in which e.g. the pair of Venus and Mars served as the twilight stars.

<sup>3</sup>) The phrases “the star of Mercury and the star of Hera... the star of Venus and the Lightbringer” translate *Herma te kai Hēras, tōn Aphroditas kai phōsphōron*, “many of the fixed stars” and “many of the planets” *polloì... tōn aplanēōn* and *polloì... tōn plazomēnōn*.

Sun is setting it is called Hesperus or Vesper, and this is its name according to function. (Pseudo-Bede, *De Mundi Celestis Terrestrisque Constitutione*, 237–240; tr. Burnett 1985:38–39)

At least two indigenous North American societies, too, are known to have acknowledged the complexities concerning the identity of “morning stars.” The Skidi branch of the Pawnee, of Nebraska, renowned for its astronomical expertise, contrasted the female *cu:piritta:ka* or “White Star” in the western part of the sky with the male *u:pirikucu’* or “Big Star” in the eastern part (Von del Chamberlain 1982:48, 54–57, 232).<sup>4</sup> The former, typically rendered “Evening Star” in western literature, is universally agreed to represent Venus’ evening aspect, though the Skidi people “knew that the bright star spent part of its time in the morning sky” (Von del Chamberlain 1982:54). The latter, customarily called “Morning Star,” was carefully distinguished from “Second Morning Star,” who was white and “who assisted the Morning Star,” and from “Morning Star’s Little Brother,” who can safely be identified as the planets Jupiter and Mercury respectively (Linton 1922a:6; Fletcher 1903:11).<sup>5</sup> A much disputed question concerns the exact identity of Big Star himself, who “was said to stand on a hot bed of flint, from which the sun derived its light” (Von del Chamberlain 1982:57). The Pawnee hailed him as the most powerful of all stars, imbued with the force of life. Tahirüssawichi, a Skidi priest, commented on a sacred song announcing the advent of Big Star, as it heralds the sun:

As we sing this stanza the Morning Star comes still nearer and now we see him standing there in the heavens, a strong man shining brighter and brighter. The soft plume in his hair moves with the breath of the new day, and the ray of the sun touches it with color. As he stands there so bright, he is bringing us strength and

<sup>4</sup> Fletcher (1903:11–12) offered a different etymology of *u:pirikucu’*: “The word is made from ho-pi-rit, ‘star’; ko-ri-tu, ‘fire;’ and ku-tzu, ‘large, great, mighty’. The name signifies ‘the mighty star of fire.’”

<sup>5</sup> Von del Chamberlain 1982:90, citing one of George Dorsey’s unpublished notes: “Sometimes the Skidi speak of the second Morning-Star which, however, is relatively of much less importance. It is said to be white and brighter than Mars and is evidently Jupiter. The little brother of the true Morning-Star (Opirikuts) or Mars is said to follow him up in the sky some distance behind him to carry the Morning-Star’s sacred bundle. He never appears until near sunrise and is never seen in the evening. This star is undoubtedly Mercury...”

new life. As we look upon him he grows less bright, he is receding, going back to his dwelling place whence he came. We watch him vanishing, passing out of our sight. (Tahirüssawichi, in Fletcher 1904:129)

An important clue to Big Star's astronomical identity is his markedly red countenance:

The Morning Star is like a man; he is painted red all over; that is the color of life. He is clad in leggings and a robe is wrapped about him. On his head is a soft downy eagle's feather, painted red. This feather represents the soft, light cloud that is high in the heavens, and the red is the touch of a ray of the coming sun. The soft, downy feather is the symbol of breath and life." (Tahirüssawichi, in Fletcher 1904:129)

He is "a great warrior, painted red, carrying a club in his folded arms, and having on his head a downy feather, painted red. This was the red morning star" (Fletcher 1903:11). A second clue is given by determination of the morning star at times when a captive girl personifying White Star was ritually sacrificed to Big Star. A painstaking analysis shows that Mars, Venus, Jupiter and a comet all appear to have served as morning star on occasion of such sacrifices, yet the astronomer, Von del Chamberlain, deduced that the latter three only functioned as acceptable substitutes for Mars:

... the primary sources indicate that at least three objects might have represented the Morning Star, depending upon circumstances and needs. Mars seems the most likely candidate for the main Morning Star for the following reasons: the red color of Mars matches the frequently noted red color associated with Morning Star; the relative motions of the earth and Mars tend to keep Mars in the morning sky for a long period of time; the migration of Mars from the morning to the evening sky, together with conjunctions between Mars and Venus, reasonably explains the mythological idea of the creative partnership between the Morning and Evening Stars, and the idea is confirmed by repetition in nature; and the historic Morning Star ceremonies occurred after Mars migrated from east to west. . . . The sacrifice might be completed after Mars had completed the westward migration and when either (1) Mars had returned to the morning sky; (2) brilliant Venus appeared in the morning sky; or (3), lacking Mars or Venus, Jupiter was present in the morning sky. (Von del Chamberlain 1982:89; cf. 60, 63, 85, 232)<sup>6</sup>

<sup>6</sup> This discussion supersedes Alexander's (1916:93) casual intimation, also evinced by

A distinction between two morning stars — albeit different ones — was also made by the Blackfoot people, of southern Alberta and northern Montana, who regarded “Morning Star,” “Early Riser” or “Day Star,” names for Venus, as the father of “Young Morning Star” alias “Mistake Morning Star,” who is identified as Jupiter (McClintock 1992:523). The former was envisioned as “tall and straight and his hair was long and shining. His beautiful clothes were of soft-tanned skins, and from them came a fragrance of pine and sweet grass” (McClintock 1992:493). The latter was allegedly “born in the home of the Sun” as Star Boy, but was bullied because of the “mysterious scar” on his face, which earned him his sobriquet *Poïa* or “Scarface” (McClintock 1992:496–497). “When *Poïa* became a young man, he loved a maiden of his own tribe. She was very beautiful and the daughter of a leading chief,” but “she would not accept him as her lover, until he would remove the scar from his face.” On the advice of “an old medicine woman,” who told “that only the Sun himself could remove it,” *Poïa* journeyed to the home of the Sun God, where, “On the intercession of Morning Star, the Sun God consented to remove the scar” (McClintock 1992:497–498). Following an episode in which *Poïa* briefly returned to the earth to teach the people the secrets of the Sun Dance and other rituals, “the Sun God took him back to the sky with the girl he loved.” A miraculous transformation ensued:

When *Poïa* returned to the home of the Sun, the Sun God made him bright and beautiful, just like his father, Morning Star. In those days Morning Star and his son could be seen together in the east. Because *Poïa* appears first in the sky, the Blackfeet often mistake him for his father, and he is therefore sometimes called *Poks-o-piks-o-aks*, Mistake Morning Star. (McClintock 1992:499)

---

H. Long and Irving (in Von del Chamberlain 1982:71), that Big Star connoted Venus as morning star: “After the Sun the most important of the celestial divinities among the Plains tribes is the Morning Star (Venus).” The principal identification with Mars confirms the opinions of Ralph Linton (1922b:2) and James Murie (1981:31, 41), a Skidi Pawnee of mixed blood who collaborated closely with anthropologists. Curiously, throughout the Americas, the epithet “big star” is usually applied to Venus, e.g. Miller 1997:299–302. As an analogy, the Dayak people, of Borneo, designated the planet Mars with the Malayan term *bintang timor*, “star of the east” (Hardeland 1859:67–68 s.v. “Bintang,” and 603 s.v. “Timor”; Perelaer 1870:176 n.1; Maaß 1920:42, 44; 1924:435), which is best understood as a reference to a morning star aspect.



That the contemporary Blackfeet understood the “real” and the “fake” morning star to be Venus and Jupiter, respectively, is confirmed by the fact that these two planets were in conjunction before daybreak on a day in July 1905, when an old man by the name of Brings-Down-the-Sun told the above story to anthropologist Walter McClintock, observing that “There are two bright stars that sometimes rise together, just before the sun comes up, Morning Star and Young Morning Star or Star Boy . . . I remember . . . , when I was a young man, seeing these two bright stars rising, one after the other, before the Sun. . . . For many years these stars have travelled apart. I have also seen them together in the evening sky. They went down after the sun.” On the conjunction he stated: “This summer, Morning Star and Poïa are again travelling together. I see them in the eastern sky, rising together over the prairie before dawn. Poïa comes up first. His father, Morning Star, rises soon afterwards, and then his grandfather, the Sun (McClintock 1992:498–499). Judging by the names “Morning Star” and “Young Morning Star,” the Blackfeet deemed the relation of these planets with the twilight most important, yet as they “very probably recognised them by their characteristic colours” (McClintock 1992:524), they were surely able to tell them apart throughout their entire courses.

### **So-son-do-wah and His Lover as Mercury and Venus?**

From a comparative point of view, the possibility that So-son-do-wah and the girl he loved represented two morning stars offers a plausible solution to the question of the astronomical identity of these two denizens of Dawn’s lodge in the east. But which two planets would have corresponded to these legendary ancestors in their morning aspects? As a *caveat*, some traditional societies did not primarily define morning and evening stars according to their physical identities, but according to their functional roles. An example of the latter usage of the term “evening star” comes from the Mescalero Apache, of south-central New Mexico:

At Mescalero the name for Evening Star is *suys habagal*, star coming out. Sometimes this is the same as Venus; however, the first visible star in any night sky can be, and is, called Evening Star. Therefore, *suys habagal* should be considered a generic term, as it were, for the first visible star in the evening sky. When Venus is

in the west in the early evening, the Star Coming Out or Evening Star is Venus; however, when Venus is not a star in the evening sky, then this name is applied to whichever is the first visible star in the western sky. (Farrer 1986:60–61)<sup>7</sup>

Needless to say, the Mescalero people need not have been alone in their practice of naming the planets according to function rather than physical identity.<sup>8</sup> If the Pawnee did indeed accept Mars, Venus, Jupiter and even a comet as a valid impersonation of Big Star on the day of human sacrifice, as long as Mars had completed its westward journey and been in conjunction with Venus as evening star in the western sky,<sup>9</sup> it effectively follows that the principal criterion for the timing of the sacrifice was simply that it had to be a radiant object in the eastern sky at sunrise, a “morning star” in the functional sense of the word rather than any specific planet.

If the same mindset prevailed in other cultures, various cases of “confusion” from a western point of view no longer need to be dismissed as indicative of a lack of astronomical competence. For example, the inhabitants of the Society Islands styled the evening star *Fauma*, *Paupiti*, *Tou-rua* or *Tau-rua-o-hiti-ite-a-hiahi*, “twilight-rising Taurua,” and the morning star *Fetia-ao*, “star of day,” *Horipoipoi*, “dog of the morning,” *Horopoipoi*, “forerunner of morning,” and also *Tauroa* (Montgomery 1831:288).<sup>10</sup> Assuming that these designations were proper to Venus only, Jacques Moerenhout<sup>11</sup> as well as Robert Williamson expressed

<sup>7</sup> The Mescalero also acknowledge a second evening star, who is the younger and weaker brother of the first. The two are collectively celebrated as the Twin War Gods.

<sup>8</sup> *Ginabongbearp* or “Foot of Day,” the name given to Jupiter by the Warkawarka people, of Tyrrell Creek and Lake Tyrrell, Victoria, Australia (Stanbridge 1857:138), may refer to Jupiter as a morning star. In that case, was this title exclusively used for Jupiter in its morning aspect?

<sup>9</sup> “If a sacrifice is planned, the morning sky is watched for the return of the Morning Star, and when the appropriate time comes in the ceremonial cycle, whatever suitable object (Venus, Mars, Jupiter, a comet) that has appeared becomes the symbolic Morning Star for the ceremony” (Von del Chamberlain 1982:85).

<sup>10</sup> An early missionary to Otaheite (Anonymous 1813:180) identified the evening star *Tou-rua* as Venus, but concerning the morning star recorded that “some suppose it to be a different star; others affirm it to be the same.” Ellis (1833:171) did not specify Venus at all.

<sup>11</sup> “...ils donnaient souvent les mêmes noms de *fauma* et d'*horipoipoi* à Jupiter” (Moerenhout 1837:181).

some surprise that these people applied the same names to Jupiter: “The planets Venus and Jupiter seem to have been confused with each other, either by the natives or by writers or both. . . . There seems to have been some confusion in identifying the morning and evening stars with both Venus and Jupiter” (Williamson 1933:122–3). A similar “mistake” was common on Mangaia, one of the Cook Islands, concerning the morning star or *Tamatanui*, “the eye of Tanē,” which was venerated as *Tanē-kio* or “Tanē the chirper”: “Venus, as the *morning* star, was called *Tamatanui*, *i. e. the eye of Tane*. The *evening* star was regarded as a different planet. [sic! MAS] being known as *Takurua-rau*. Jupiter was often mistaken for the morning star” (Gill 1876:44). “Sometimes the morning star is lauded as ‘*the eye of Tanē*’; at other times Jupiter, by mistake for Venus, attained this distinction.”<sup>12</sup> But rather than blaming these people for a “mistake,” these anthropologists might have more clearly acknowledged that Jupiter *does* sometimes appear as a morning star, the indigenous designations meaning “morning star” rather than a “Graecocentric” definition of “Venus” or “Jupiter” as a specific planet *per se*. Bafflement is absent in one of the earliest reports of this nomenclature, written on 10 January 1822: “The morning star (whether Jupiter or Venus) was called *Horo poi poi*, or *Tauroa*” (Montgomery 1831:288). In fact, the solution to the “confusion” was already embedded in one of Williamson’s own sources, according to which these Polynesians “connaissaient Mars, Vénus et Jupiter, mais non pas comme planètes, les confondant avec les autres étoiles, et ne le distinguent que par leur nuance et l’époque de leur lever” (Moerenhout 1837:181). Apparently, variations on *Tangaroa* — such as *Tauroa* — referred to the planet Venus in both of its aspects, while *Horopoipoi* or *Horipoipoi* as well as *Tanē-kio* indicated any morning star, whether Venus or Jupiter, and *Fauma* and *Paupiti* any evening star, whether Venus or Jupiter.

A similar situation obtains among the Khoikhoi, of southwestern Africa, who are accused of “confusing” the planets Jupiter and Venus.<sup>13</sup> Among these people, Venus or *//kχa.nus* was called *\*ai!gūns*, “forerunner,”

<sup>12</sup> Gill 1880:38; regarding “the planet ‘Anui, Tanē’s eye’, *i. e.*, the morning star”, 1880:28. “Jupiter was often mistaken for the morning star, the mistake being between Venus and Jupiter” (Williamson 1933:132).

<sup>13</sup> “Jupiter... by the Khoikhoi was sometimes confused with Venus...” (Walker 1996:312).

or *\*aogura//hā.b*, “the star at whose rising men run away (from illicit sexual intercourse),” as morning star and *\*!u.i!kχo.eb*, “evening fugitive,” as evening star. “Der Jupiter ist den Hottentotten ebenfalls bekannt. Sie identifizieren ihn zuweilen mit der Venus, indem sie sagen, daß dieser Stern im Laufe der Wochen wie der Mond durch den Himmel wandere” (Schultze 1907:367–8; cf. Schapera 1930:414). That this “identification” was of a different nature than mere confusion is suggested by the relative sophistication of planet lore among these people; not only did they recognise the morning and evening aspects of Venus as belonging to the same celestial body,<sup>14</sup> but they also correctly distinguished Venus from Mercury, called *//go.a/ga.1miros* or “day-breaker,” whose visibility was aided by the comparatively short duration of the twilight this close to the equator.<sup>15</sup> As Jupiter was characterised by a different name — *\*//a.egu/ga1mirob* or ‘middle star’ — when observed in the central part of the sky instead of the east or the west (Schultze 1907:368; cf. Wischnewski 1915:60), the Khoikhoi clearly could only have “confused” Jupiter with Venus in a deliberate fashion, namely in respect of the shared morning aspects of these planets.

Returning to the Iroquois, if they had a similar attitude to planets as the Mescalero people, the question whether So-son-do-wah was the morning aspect of Venus or Mercury may have been simply irrelevant, the essence being that he and his catasterised lover are only seen during twilight hours. However, a closer look at the myth suggests a precise identification with specific planets in this case. The attachment of the female “star” to So-son-do-wah’s “forehead” is best understood as an anthropomorphic indication of the tantalisingly close proximity of the two bodies, the upshot of the story being that the fateful paramours were never allowed either to stray far from each other or to remain together in a close embrace. This precludes the identification of one partner as Jupiter or Mars, who do, at times, appear in optically close

<sup>14</sup> “Die Venus ist auch am Abend (*!u.ib*) nicht zu übersehen; sie wird vom Hottentotten als dasselbe Gestirn wie der Morgenstern erkannt” (Schultze 1907:367).

<sup>15</sup> “Der Reisende im Namaland, der im Freien nächtigt, dem der Merkur von keiner langen Dämmerung wie in unseren Breiten überlichtet oder vom Morgennebel verschleiert wird, kennt die beiden Vorboten der aufgehenden Sonne und ihre Stellung zu einander” (Schultze 1907:366). The Khoikhoi do not observe Mercury as evening star.

conjunction with Venus, but often move well away from the east. Instead, the pair of Mercury and Venus quite neatly fit the bill. The antics of the two inner planets conform remarkably well to the Tantalus-like picture painted of So-son-do-wah and Gěn-deń'-wit-hă — forever close and yet forever beyond each other's grasp within the liminal zone demarcated by the light of dawn or the zodiacal light.

### **“Morning Star” Traditions as Myths of Catasterism**

Although the hypothesis that So-son-do-wah and Gěn-deń'-wit-hă represented Venus and Mercury seen simultaneously goes some way towards an illumination of the myth, it does not account for the phases of temporary invisibility and evening star which Venus and Mercury both go through. Bearing in mind that, this far north, Mercury is very hard to detect at any given time anyway and contemplating the possibility that the Seneca people may also have allowed to view the evening stars as manifestations of So-son-do-wah and Gěn-deń'-wit-hă,<sup>16</sup> it is probably best not to demand too much precision from aetiological myths of this type. At any rate, while the proposed hypothesis helps to clarify the astronomical identity the Seneca assigned to these two mythical characters, it certainly does not throw much light on the actual origins of the narrative content of the myth. In order to “explain” the motifs of So-son-do-wah's repeated journeys between heaven and earth in the form of a bird, including his final ascent, one will have to take account of the worldwide mythical motif of *catasterism* as a whole, for tales of legendary ancestors and heroes departing from earth so as to be transformed into a star or planet abound on every inhabited continent. The need for such an assessment becomes all the more pressing in view of some striking parallels observed in the astral mythologies of otherwise unrelated cultures. For instance, the theme of So-son-do-wah's forced employment in a “lodge” of the goddess of dawn forms a remarkably close analogue to the Greek passage about the demigod Phaethon in Hesiod's *Theogony* (8th or 7th century BCE):

<sup>16</sup> In the creation myth, “Hah-gweh-da-ět-găh set Darkness in the west sky, to drive the Sun down behind it”, “Darkness” being So-son-do-wah, (Converse 1908:35 and note 1).

And Eos bare to Tithonus brazen-crested Memnon, king of the Ethiopians, and the Lord Emathion. And to Cephalus she bare a splendid son, strong Phaëthon, a man like the gods, whom, when he was a young boy in the tender flower of glorious youth with childish thoughts, laughter-loving Aphrodite seized and caught up and made a keeper of her shrine by night, a divine spirit. (Hesiod, *Theogony*, 984–991, tr. Evelyn-White 1959:152–153)

If it may be granted that this Phaëthon was identical to the son of Helios of the same name, So-son-do-wah's near-lethal plunge from the sky can be compared to Phaëthon's tragic fall from the chariot of his father, which precipitated cosmic conflagration — especially if, as I have argued elsewhere, Phaëthon's fall from heaven directly preceded his transformation into a star or planet at the hands of Aphrodite in the original, full version of the myth (van der Sluijs 2008).<sup>17</sup> While Aphrodite in this capacity corresponds to the planet Venus rather than the Dawn, the classicist, Gregory Nagy, has convincingly argued that *Ēōs*, “dawn” and Aphrodite were functionally equivalent manifestations of the same goddess in the prototype of the story.<sup>18</sup> Although it would be irresponsible to suggest a historical relationship of some sort between the myths of Phaëthon and So-son-do-wah, the analogy does inspire the thought that the same or a similar transient astronomical event in the morning sky has been independently framed in these otherwise unrelated reports of a youthful mortal interloper on approach of the pole being “domesticated” as a morning star in association with a female lover or matron.

A substream of the classical tradition depicted Phaëthon's fall, arguably preceding his abduction by Aphrodite, as the passage of a comet or a meteor.<sup>19</sup> In view of this tendency, it is noteworthy that the Pawnee

<sup>17</sup> More speculative parallels can be found. E.g., Ovid's wording (*Metamorphoses*, 2. 74–75, 129–136, 171–181, 295–297; cf. Seneca, *Hercules Oetaeus*, 675–681; *Medea*, 599–602; *Phaedra*, 1090–1092) suggests that Phaëthon's chariot was headed for the north pole of heaven when the accident transpired, while So-son-do-wah's pursuit of the Sky Elk compares to the widespread North American motif of the chase of the bear that turns into the circumpolar constellation of Ursa Major or Ursa Minor.

<sup>18</sup> “. . . the Hesiodic tradition seems to have split the earlier fused roles of mother and consort and divided them between Eos and Aphrodite respectively. This way, the theme of incest could be neatly obviated” (Nagy 1990:248–9; cf. Nagy 1979:200–1).

<sup>19</sup> “But Phaëthon, fire ravaging his ruddy hair, is hurled headlong and falls with a long trail through the air, as sometimes a star from the clear heavens, although it does not

would apparently accept the appearance of a comet in the morning sky as a valid manifestation of Big Star accepting the sacrifice of a maiden; Dorsey observed that “the great comet of 1882 was believed by the Skidi to be the Morning-Star, who is spoken of as Opriiskisku, the Downy-Feather-Star, who was traveling from the north back to the east in a hurry” (Dorsey, in Von del Chamberlain 1982:60 note 2). In addition, “It was said that Morning Star originated from a meteor, and that as he traveled he carried a fireball either in his bundle or in his moccasins.”<sup>20</sup> Perhaps it is not too far-fetched to assume that the “flaming torch” in Gën-deñ-wit-hă’s hand, So-son-do-wah’s free-fall and the tail feathers of the birds So-son-do-wah employed on his descents originally referred to similar “meteoric” features associated with mythical morning star figures. The common thread in such traditions about the morning star from different parts of the world then appears to be the transfiguration of a comet or a striking meteor in the morning sky into a “morning star,” whatever natural phenomenon may have provoked this impression.<sup>21</sup>

---

fall, still seems to fall” (Ovid, *Metamorphoses*, 2. 320, tr. Miller 1925:82–3); compare Proclus, *In Platonis Timaeum Commentarius*, 1. 2. 109. 16–31; John Malalas, *Chronographia*, 1. 3 (7); Tzetzes, *Chiliades*, 4. 367–388. The account of Valerius Flaccus (*Argonautica*, 5. 471–478 (429–432)) suggests a meteorite.

<sup>20</sup> “The Morning Star and flint were both associated with meteorites... These beliefs... indicate a Skidi awareness of the entire range of phenomena associated with meteorite fall, from the brilliant fireball to the fragments striking the ground” (Von del Chamberlain 1982:57, cf. 65–6, 245). On Huahine, in the Society Islands, the god Tanē, too, whose cult was subsequently transferred to Mangaia, was claimed to have “a very long tail, like a boy’s kite,” which the missionaries, Daniel Tyerman and George Bennett, interpreted as meteoric or cometary (Montgomery 1831:266, 283).

<sup>21</sup> The comet-like plasma tails of either Venus or Mercury may offer a tentative solution to the quandary posed by such ethnic accounts of morning stars displaying short-lived erratic behaviour. The “induced magnetotail,” consisting of “comet-like tail rays extending downstream of Venus” (Grünwaldt *et alii* 1997:1166) was first detected by NASA’s Pioneer Venus Orbiter in the late 1970s. With the help of data obtained by Europe’s Solar and Heliospheric Observatory (SOHO) Satellite in 1997, “Venus tail rays have been identified in the solar wind some 45 million km downstream of Venus” (Grünwaldt *et alii* 1997:1166), “more than 600 times as far as anyone realised” thus far and “almost far enough to tickle the Earth when the two planets are in line with the Sun” (Hecht 1997). “In this sense Venus can be likened to a comet, which has an induced magnetotail of similar origin” (Luhmann & Russell 1997:907). And in May–June 2007, scientists at Boston University confirmed the existence of a “sodium tail”

## Acknowledgements

Without the unceasing support of the Mainwaring Archive Foundation this article could not have been completed. To Ev Cochrane I am extremely grateful for first comparing So-son-do-wah to Phaethon. I also thank Don Scott and Jeff Baumgardner for answering questions, Anthony Aveni and Peter James for their comments, and Keith Hutchison for supplying me with Stanbridge's article.

## References

- Alexander, H. Burr. 1916. *North American*. (The Mythology of All Races, vol. 10 of 13.) New York: Cooper Square.
- Anonymous. 1813. "Mission to Otaheite; Extracts from the Journals of the Missionaries." *Transactions of the Missionary Society* 3:177–195.
- Baumgardner, J., J. Wilson & M. Mendillo 2008. "Imaging the Sources and Full Extent of the Sodium Tail of the Planet Mercury." *Geophysical Research Letters* 35.
- Burnett, Ch. (tr.). 1985. *Pseudo-Bede: De Mundi Celestis Terrestrisque Constitutione; A Treatise on the Universe and the Soul*. (Warburg Institute Surveys and Texts, 10.) London: Warburg Institute.

---

or "a tail of escaping Na atoms" streaming away from Mercury, which was described as "a robust anti-sunward structure" of an "extraordinary length" analogous to similar tails streaming away from comets and the moon, with an estimated angular length of 3,400,000 kilometers or circa 1,400 times the radius of the planet (Baumgardner *et alii* 2008). With an aperture instrument configured as a coronagraph, the appendage "was easily seen against the twilight and the resonantly scattered sodium light from the Earth's mesosphere." The intensity and morphology of these tails depend directly on the condition of the solar wind, much like the auroras produced in the earth's ionosphere: "As is well known in cometary science, the spatial variability of a tail is determined by episodic changes in gas and dust source rates for neutral tails and/or by temporal changes in the solar wind for plasma tails" (Baumgardner *et alii* 2008). In addition, "the solar wind interacts directly" with Venus' induced magnetotail, too (Luhmann & Russell 1997:906): "the solar wind interacts directly with the planetary atmosphere and ionosphere much as with a cometary coma... The tail rays would not, however, be expected to remain in a fixed geometry relative to Venus because variations in the direction of the solar wind must cause the tail rays to flap around..." (Grünwaldt *et alii* 1997:1163, 1166; cf. Luhmann & Russell 1997:907). For this reason, it is conceivable that the glowing plasma tails of Mercury and Venus will increase considerably in brightness at times of extreme solar storms, when the solar wind is more pronounced.



- Converse, H. M. 1908. *Myths and Legends of the New York State Iroquois*. (New York State Museum: Museum Bulletin 125.) Albany, NY: University of the State of New York.
- Ellis, W. 1833. *Polynesian Researches during a Residence of Nearly Eight Years in the Society and Sandwich Islands*. Vol. 3; 2nd ed. London: Fisher, Son & Jackson.
- Evelyn-White, H. G. (tr.) 1959. *Hesiod; Homeric Hymns; Epic Cycle; Homerica*. (Loeb Classical Library, 57.) Cambridge, MA: Harvard University Press.
- Farrer, C. R. 1986. "Mescalero Apache Terminology for Venus." *Archaeoastronomy* 9:1–4, 59–61.
- Fletcher, A. C. 1903. "Pawnee Star Lore." *The Journal of American Folk-Lore* 16:10–15.
- . 1904. *The Hako: A Pawnee Ceremony*. (Annual Report of the Bureau of American Ethnology to the Secretary of the Smithsonian Institution, 22 [1900–1901].) Washington D.C.
- Gill, W. W. 1876. *Myths and Songs from the South Pacific*. London: Henry S. King.
- . 1880. *Historical Sketches of Savage Life in Polynesia; With Illustrative Clan Songs*. Wellington: George Didsbury.
- Grünwaldt, H., M. Neugebauer, M. Hilchenbach *et alii*. 1997. "Venus Tail Ray Observation Near Earth." *Geophysical Research Letters* 24/10: 1163–1166.
- Hardeland, Au. (ed.). 1859. *Dajacksch-Deutsches Wörterbuch*. Amsterdam: Frederik Muller.
- Hecht, J. 1997. "Planet's Tail of the Unexpected." *New Scientist* 2084:18.
- Linton, R. 1922a. *The Thunder Ceremony of the Pawnee*. Chicago: Field Museum of Natural History.
- . 1922b. *The Sacrifice to the Morning Star by the Skidi Pawnee*. Chicago: Field Museum of Natural History.
- Luhmann, J. G. & Ch. T. Russell. 1997. "Venus: Magnetic Field and Magnetosphere." in J. H. Shirley & Rh. W. Fairbridge (eds.), *Encyclopedia of Planetary Sciences* (Encyclopedia of Earth Sciences Series.) London: Chapman & Hall, 905–907.
- Maaß, A. 1920. "Sterne und Sternbilder im malaiischen Archipel." *Zeitschrift für Ethnologie* 52:38–63.
- . 1924. "Sternkunde und Sterndeuterei im malaiischen Archipel." *Tijdschrift voor Taal-, Land- en Volkenkunde* 64:1–172, 347–460, 618–670.
- McClintock, W. 1992 [1910]. *The Old North Trail or Life, Legends and Religion of the Blackfeet Indians*. Lincoln: University of Nebraska Press.
- Miller, D. S. 1997. *Stars of the First People; Native American Star Myths and Constellations*. Boulder, CO: Pruett.
- Miller, F. J. (tr.) 1925 [1916]. *Ovid; Metamorphoses*. (1 of 8; Loeb Classical Library, 42.) London: William Heinemann.
- Moerenhout, J.-A. 1837. *Voyages aux Îles du Grand Océan, Contenant des Documents Nouveaux sur la Géographie Physique et Politique, la Langue, la Littérature, la Religion, les Mœurs, les Usages et les Coutumes de leurs Habitans; et des Considérations Générales sur leur Commerce, leur Histoire et leur Gouvernement, Depuis les Temps les plus Reculés jusqu'à nos Jours*. Vol. 2; Paris: Arthus Bertrand.

- Montgomery, J. (ed.) 1831. *Journal of Voyages and Travels by the Rev. Daniel Tyerman and George Bennet, Esq. Deputed from the London Missionary Society, to Visit their Various Stations in the South Sea Islands, China, India, &c., Between the Years 1821 and 1829*. Vol. 1; London: Frederick Westley.
- Murie, J. R. 1981. *Ceremonies of the Pawnee. I: The Skiri*. (Smithsonian Contributions to Anthropology 27.) Washington: Smithsonian Institution Press.
- Nagy, G. 1979. *The Best of the Achaeans; Concepts of the Hero in Archaic Greek Poetry*. Baltimore: Johns Hopkins University Press.
- . 1990. *Greek Mythology and Poetics*. (Myth and Poetics, 2.) Ithaca: Cornell University Press.
- Perelaer, M. T. H. 1870. *Ethnographische Beschrijving der Dajaks*. Zalt-Bommel: Joh. Noman.
- Rouse, W. H. D. (tr.). 1995 [1940]. *Nonnos: Dionysiaca*. 3 vols. (Vol. 1; Loeb Classical Library, 344.) Cambridge, MA: Harvard University Press.
- Schapera, I. 1930. *The Khoisan Peoples of South Africa; Bushmen and Hottentots*. London: George Routledge & Sons.
- Schultze, L. 1907. *Aus Namaland und Kalahari; Bericht an die Kgl. Preuss. Akademie der Wissenschaften zu Berlin über eine Forschungsreise im westlichen und zentralen Südafrika, ausgeführt in den Jahren 1903–1905*. Jena: Gustav Fischer.
- Smith, E. A. 1883. "Myths of the Iroquois." *Second Annual Report of the Bureau of Ethnology to the Secretary of the Smithsonian Institution, 1880–1881*, 51–116.
- Squier, E. G. 1848. "Ne-She-Kay-Be-Nais, or the 'Lone Bird'; An Ojibway Legend." *The American Review: A Whig Journal Devoted to Politics and Literature*, New Series 2.3 (8):255–259.
- Stanbridge, W. E. 1857. "On the Astronomy and Mythology of the Aborigines of Victoria." *Transactions of the Philosophical Institute of Victoria*, 2:137–140.
- Tobin, Th. H. (tr.). 1985. *Timaios of Locri: On the Nature of the World and the Soul*. (Texts and Translations 26; Graeco-Roman Religion Series 8.) Chico, CA: Scholars Press.
- van der Sluijs, M. A. 2008. "On the Wings of Love." *Journal of Ancient Near Eastern Religions* 8.2:219–251.
- Von del Chamberlain. 1982. *When Stars Came Down to Earth: Cosmology of the Skidi Pawnee Indians of North America*. (Ballena Press Anthropological Papers, 26.) Los Altos, CA: Ballena Press.
- Walker, Ch. (ed.) 1996. *Astronomy before the Telescope*. London: British Museum.
- Williamson, R. W. 1933. *Religious and Cosmic Beliefs of Central Polynesia*. Vol. 1; Cambridge: Cambridge University Press.
- Wischniewski, J. 1915. *Afrikaner und Himmelserscheinungen; Ein Beitrag zur Völkerkunde der Neger und hellfarbigen Südafrikaner*. Leipzig: R. Noste.