THE GREEK MYTH OF PLEIADES IN THE ARCHAEOLOGY OF NATURAL DISASTERS. DECODING, DATING AND ENVIRONMENTAL INTERPRETATION

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ABSTRACT
The strong multi-symbolic archetype of the Pleiades functions as a worldwide astromythological system going back to Upper Palaeolithic Era. The Greek version of the myth seems to embody a wide range of environmental symbolism, as it incorporates various information and very archaic elements about: a) the periodicity of the solstices and the equinoxes, b) the fluctuations on the biochemical structure of Earth’s atmosphere related to the global hydro-climatic phenomenon of ENSO, c) probable past observations of brightening of a star (nova) in the cluster of Pleiades, d) the primordial elements of the mythological nucleus of Atlantis’ legend and e) the remnants of Palaeolithic ‘proto-European’ moon culture.

KEYWORDS: Pleiades, El Nio, Archaeomythology, Astromythology, Archaeo-astronomy, Ethnoastronomy

INTRODUCTION
The Archaeology of Natural Disasters (Blaikie et al. 1994; Byrne 1997; Torrence and Grattan 2002; World 2002): a) defines the identity, the impact and the dynamics of natural hazards into the evolution of human civilization (biological, ecological, environmental, socio-economic, political, technological, geographical and cultural results), b) tries to find and analyze the kinds, frequency and magnitude of natural hazards that are hidden in the
"archaeological landscapes", c) searches for their correlation to them (Blomberg et al. 2003). For instance, Stan Congrado 1991; Edge 1995; Rappenglueck 1999a, b and 1997; Blomberg et al. 2003).

A new picture of Palaeolithic events has been emerged in the analyses of scientists who try to reveal the secrets of archaeomythology. For instance, Stan Gooch diagnosed the archaic signs of the struggle between the Old Moon and the New Sun religions in Pleiades symbology. In other words, Neanderthal religion based on Moon Goddess, was replaced by the solar "masculine" deity of Cro-Magnon population. This motif travelled as psychic "kit" with Cro-Magnon, all the way into the heart of the Neolithic, and beyond (Gooch 1995).

An interesting and promising approach.

The bull as the moon is part of a cluster of images (crescents, horns, snake coils, concentric circles, U-signs, bucrania, etc.) that surround the goddess of the Neolithic Era and abstractly symbolize life, death and regeneration, thus the creative and fecund powers of nature. Therefore, the bull’s representations in sets of four are lunar notations indicating the waxing moon, the full moon, the waning moon and the new moon in its four stages, respectively. In terms of symbolic language, the "epiphany of the Goddess" would be equivalent to the resurrection and rebirth of the soul of the individual after death. The horns of the bull, later known from the famous Minoan horns of consecration, are found on or inside many of the megalithic monuments of the Neolithic Era in Western Europe. The similarity of female reproductive organs with the bull’s head is striking (Cameron 1981; Gimbutas 1982, 1989 and 1999; Mellart 1989)! In the Orphic Hymns (IX, 2), evident is the connection of Selene with the womb, sexuality and fertility, being characterized as taurus- horned waxing or waning moon (taurokeros mene).

Moreover, the ancient greek story of Pleiades astromorphosis relates this cluster to the great hunter Orion, son of Poseidon, and the goddess Artemis. Artemis represents the Moon, travels the zodiac and comes close to him but can never touch him, although from time to time she covers up the Pleiades.

The Pleidian cycle also involves the planet Venus. The Pleiades is in many languages are associated with bird-names. Some scholars take the bird on the bull’s back in ancient coins of Eretria, Dicaea, and Thurii for the associated constellation of the Pleiades (Stechert in Allen 1899). In ancient Greek mythology, Aphrodite was the daughter of Zeus and the woodland goddess Dione. Dione was associated with the ancient oracular cult at Dodona, presided over by seven high priestesses or peleiadai, meaning "pigeons" or "doves" (e.g. Herodotus, II.55-57; Sophocles Trachiniae, 171 and 472; Pausanias, X.12.10). In the Homeric Hymns to Selene (XXXII, 1) the goddess of Moon is characterized as long-winged (tamyisperos), indicating her passage, like a bird, through the sky (Hesiod, Works and Days, 210).
These cirrus clouds cause the Pleiades to become visible in the southern hemisphere skies in June. If archaeometeorological observations made during which thin cirrus clouds appear very high in the skies over the Andes in June, the farmers have observed the Pleiades, which become visible in the critical months of December through February. However, if the Pleiades look dim, planting is delayed until November. Every two to seven years along comes the hydro-climatic phenomenon known as El Nino, during which the upper waters escaped were by which the male waters from the sky met the female waters which issued forth from the ground (Frazer 1918, I, 143-4). The holes in the sky by which the upper waters escaped were made by God when he removed stars out of Heaven’s atmosphere related to the global hydro-climatic phenomenon of ENSO, a) the fluctuations on the biochemical structure of Earth’s atmosphere related to the global hydro-climatic phenomenon of ENSO, b) some extra events of deluge related to the Pleiades (either as source of the event, or as an astronomical correlation) that gave them a chthonian and malignant character and c) the periodicity of the hydro-climatic phenomena (e.g. ENSO and NAO) with their peaks and falls in their dual cycles (Pleiades, Hyades and Poseidon = mild and wet/Sirius, Orion = hot and dry). Furthermore, floods and earthquakes (with Poseidon, their representing god) are the earthen witnesses of destructive sky events.

In the tablets of Linear B’ script from Pylos, Peleia is also referred (PY tn 316) among other deities. Peleia is related to Poseidon, protector god of Pylos, and the sacred trinity of the female goddesses: Minoan/Mycenaean deity of Doves (pe-re-*82), Iphimeidea (i-pe-me-de-ja) and Difia (di-u-ja, di-wi-ja). The ceremonies of sanctification were held in their altars (e.g. pe-re-*82-jo = altar of Peleia ). For Peleia, the offerings included a golden cup and a woman.

The deity pe-re*82 has been correlated with Pherephassa (*Persa), namely Persephone in Mycenaean Greek, but this view is not widely accepted (Palmer 1963, 20 / 27 / 103 &263; Chadwick 1987). Iphimeidea was a princess of Thessalian origin, one of the love mates of Poseidon and mother of the giants Otos and Ephialtes (Odyssey, XI 305. Apollodorus The Library, 1.53. Hyginus Fabulae, 28. Ovidius Metamorphoses, 6.117). In fact, she was also a chthonian deity who was celebrated in boocotic Anthedona, Naxos and Karia, probable area of origin. Finally, Difia was a deity of Pamphylia or the female alternative of Zeus, later known as Dione (see sacred peleiai of Dodona). Finally, since the Homeric epos, the "Pelasgian" god Poseidon was related to the planet Saturn (Wood 1991).

According to the ancient Greek mythology, Pleiades were the seven daughters of the Titan Atlas and Pleione-an Oceanid nymph, half-sisters of the Hyades and, perhaps, half-sisters of the Hesperides. The Pleiadian and Atlantean mating was also mentioned by Greek historian Diodorus (III.60. 1-5) who claimed that Celaino and Alycno, two of the seven Pleiadian sisters, had mated with Poseidon, King of Atlantis and their offspring populated Atlantis. Aeschylus (fr. 172 [312]), the Greek writer, attributes their transformation to stars ("phantoms of the night") as an escape from grief at their father’s burden of carrying the world on his head and his hands.

C. Danger and Disaster

Ancient myths, legends and prophecies from around the world tell frightening tales of how humanity has suffered through destruction by fire and flood (La Violette 1997). These stories of catastrophe are so extreme and pervasive, that till recently we tended to discount them as imaginative exaggerations. There are, indeed, too many traditions connecting the Pleiades, with some kind of catastrophe to be overlooked. When people talk about seasonality and Pleiades, they often refer to food, hunger and destruction also.

In fact, there is the Ostris-Saturn legend in Egypt. The great and beloved god Ostris is drowned by the devil god, Seth, who then cuts his body into pieces and scatters its fragments. These fragments were the Pleiades worshipped on the day of Saturn’s death (de Grazia 1981).

Saturn (Khima) is connected with the Pleiades. For one thing their names are often confused, as in the King James and other versions of the Bible where Khima is translated as "Pleiades" instead of as "Saturn" (Cardona 1978). In the ancient world, the Pleiades are connected with the Flood of Noah (de Grazia 1983). According to Jewish folklore, the third Deluge happened when the male waters from the sky met the female waters which issued forth from the ground (Frazer 1918, I, 143-4). The holes in the sky by which the upper waters escaped were made by God when he removed stars out of the constellation of the Pleiades (Ginzberg 1909, I, 162). Some scholars, calculating back from Biblical references, hypothesize that the Universal Deluge of Noah was caused by a near passing astral body at 2800 B.C. (Patten 1966; Patten et al. 1973). Sanskrit literature of ancient and medieval India is rich in information about environmental sciences. (Iyengar 2004).

In several texts a natural event is mentioned, referring to a nova or brightening of a star in the cluster of Pleiades ( Eggelin 1963; Velankar 1963; Griffith internet edition. Mahabharata internet edition). There is also a story about a strange fire associated with this cluster. For example, there are several different versions of the same celestial event
places in the world. and Harappa, the area was one of the richest great river. In those days of Mohenjo-Daro was once a very fertile plain traversed by this now an arid area known as the Thar Desert, Schoff internet edition). The whole plain, an arid area known as the Thar Desert, was once a very fertile plain traversed by this great river. In those days of Mohenjo-Daro and Harappa, the area was one of the richest places in the world.

A first statement on the dating for these celestial phenomena would declare the attempt impossible. Nevertheless, some details of the texts have provided the modern scientists with methodological tools. Renowned scholars, planetarium softwares and astronomical calculations date the observation of nova to c. 2500-3000 BC or even earlier. During that time in the geographical coordinates of India, Pleiades were exactly at the vernal equinoctial point on their heliacal rising. The impact crater and the falling meteors of births, destruction and rebirths. According to the Aztecs mythology and ritual, this cycle couldn't continue for ever; there would only be five ages or "Suns" each of them having its own name, sign and ruling divinity.

The Aztec Legend of the Five Suns has survived in pictographs painted or carved on stone, in texts of ancient Mexico and scattered oral traditions kept by the distant descendants of the Aztecs. The primary source for Aztec mythology is the Codex Chimalpococa. The first sun is known as Four Water, the second as Four Jaguar, the third as Four Rain, the fourth as Four Wind and the final fifth as Four Movement. This world, our world, will be destroyed by earthquakes. Five was for the Aztecs a sacred number, based on the five directions. These directions were the four cardinal points plus the centre. The centre was understood to be the star cluster of the Pleiades.

CONCLUSIONS
Ancient disasters under ancient skies. An appealing challenge for any scientist. Environmental changes involve a complex interplay of physical, chemical and biological processes of the Earth. A multi-disciplinary approach is necessary for studying past disasters, because humanities and social sciences have a very important role to play. Therefore, archaeologically discovered traces that indicate past disasters, contribute to a broader understanding of such phenomena.

On the other hand, Astromythology as science of the past finds a very strong and tempting field of research in the cluster of Pleiades. This is a case of transporting memory through superpositioned layers that contain sets of facts, elements, symbols, sectors and matrices travelled all over the world. As earlier mentioned, we met the thought-provoking ancient myth of Pleiades in light of various scientific and theoretical perspectives, paying tribute to the enduring legacy of ancient Greece. We also tried to identify the key attributes of natural disasters and social resilience imprinted on the mythology of circum-Mediterranean areas. The cross-cultural study of cosmic cataclysmic cycles along with memorial significance of the pleiadean rites provided both a deeper analysis and more dynamic visual presentation. The discovery of numerous ways of interpretation related to ancient periodicities and catastrophes opens a new doorway to the understanding of the collective cultural memory of humanity.

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