

### III. ASTRONOMICAL AND ETHNOCOSMOLOGICAL INTERPRETATION OF ARCHAEOLOGICAL AND ETHNOLOGICAL ARTEFACTS

#### TRACING THE CELESTIAL DEER – AN ANCIENT MOTIF AND ITS ASTRONOMICAL INTERPRETATION ACROSS CULTURES

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##### **Abstract**

Ancient cultures of the northern hemisphere created symbols, myths, and rituals that related deer to certain astronomical phenomena, to cosmological and cosmogonical ideas, and to hunting calendars. From their knowledge of the animal's appearance, behaviour, and phenology they derived conceptions of power, fertility, creation and renewal, life and death, and psychosomatic transformation during a shamanistic seance.

Key words: celestial deer, cosmology, cosmogony, calendar, shamanism.

##### **Introduction**

Ethnological and archaeological records show that special rituals such as the impaling of a deer (or its skin) or certain uses of the animal's antlers, skull, or shoulder blade in burials or making sacrifices, involved cosmic symbolism both among archaic and recent cultures of the northern hemisphere (Aldhouse Green 2004, p. 127-130, 173-177, 185-187; Mikhailova 2006). Symbols and myths handed down by people illustrate the features of the celestial deer<sup>1</sup> motif and its astronomical interpretation across cultures.

##### **Deer and solar symbolism**

Within both ancient and recent cultural traditions in both Eurasia and the Americas, people likened the halo of flickering beams during the rising and setting of the sun to widely branching deer antlers. Though there are also traces of lunar symbolism, the animal in general was regarded as the "herald" of the rising sun, announcing dawn and the renewal of life: It sig-

nified the cardinal direction East, the red sky, rebirth, fire, light, and cosmic power (Andritzky 1988, p. 49; Chevalier and Gheerbrant 1996, p. 920-921; Hentze 1961, p. 80-81, 92-93, 100-101; Müller 1982, p. 101). With or between his antlers or in his body, the male animal was thought to carry the sun (shown as a spiral or labyrinth pattern) across the heavens at daytime and through the nocturnal Underworld (Jacobson 1993, p. 32-33, 37). The annual course of the sun along the ecliptic, through the cardinal points, was visualised by a cross, sometimes inscribed in a circle and set between the animal's antlers, e.g. in the St. Hubertus legend, or by his four legs, signifying the solstices and equinoxes (Eliade 1990, p. 161-162; Evers 1988, p. 16-18; Müller 1956, p. 289-291, 1970, p. 214-215, 1982, p. 100; Sicard 1971, p. 254-264, 268, 279, 281). That idea led to the widespread conception of a flying, fiery, celestial and especially solar deer, moving between the cosmic strata, frequently wearing golden antlers, sometimes showing bird-shaped tips, and often equipped with bird wings, e.g. in Scythian culture (Eliade 1990, p. 58-161; Lushnikova 2002, p. 254; Martynov 1991, p. 66-69, 196-232, 268-275).

<sup>1</sup> The term "deer" is used to summarise the different species of cervidae.

## The chronobiology of deer, seasonality, and the calendar

The regularity of the deer's life cycle was vital for the calendars of ancient deer-hunters. Chronobiological research on deer shows that their movement and migration, the rut, the growth of the antlers, and calving are all triggered by the rhythm of light, and hence determined by the solar and lunar cycles (Tylor 2004, p. 68-81, 146): Thus the seasonal migration of deer takes place in the days around a Full Moon, because the higher illumination gives the animals a better chance of passing difficult areas quickly. The shedding of the antlers happens at Full Moon during the weeks around winter solstice, but they start to re-grow on average every February / March, around the Vernal Equinox. The rut, lasting about 5-6 weeks, normally happens at the time of Full Moon during the weeks around the autumn equinox. Male deer prefer to combat with each other at this time because their antlers look more prominent in the moonlight. At the same time the highly inattentive animals are much easier to hunt. After a pregnancy of about 8 ½ lunar months, including an embryonic state of rest during the winter, does preferably give birth around summer solstice in May / June at around the time of New Moon, because darkness protects the juveniles from nocturnal predators.

People in North America and Eurasia correlated the seasons of the deer with the cardinal points of the year (Müller 1956, p. 289-291; Hentze 1961, p. 98-99, 109; Lushnikova 2002) and linked the number of points on the antlers of a royal or imperial stag to a year with 12 or 14 lunar months (Ranke-Graves 1985, p. 242-243; Müller 1956, p. 275, 280-281, 288). At the time of the rut around the autumnal equinox people organised big games, which ended up with ritual sacrifices of the deer, and often started off the new half-year from the autumnal to the vernal equinox (Lushnikova 2002). Apart from the ethnoastronomical examples there also exists archaeological evidence, for example at Ak-Baur, Russia (Marsadolov and Dmitrieva 2007, p. 74-91). In the Lascaux cave (France), dated c. 17.000 BP, rock art shows deer as they appear and behave at the start of autumn (Aujoulat 2005, p. 193-195). A bellowing old stag (in the "Axial Diverticle"), having antlers with 18 ends, indicates the rutting season. On its left an ancient wild horse in its winter fur, evidently before foaling, signals the transition from winter to spring. Below the animals, a series of 39 points divided into 2 sets (of 13 [= 6 + 1 + 6] and 26 [= 7 + 5 + 1]), makes evident a counting system based on the value 13. Further analysis (Rappenglück 2008) shows that the row of points, each spot counting 7 days, illustrates a time sequence of 13 weeks (91 days) from the summer sol-

stice (June 21) to the autumn equinox (September 23) plus 26 more weeks (182 days) to the time of the spring equinox (March 21). Thus it denotes the time interval between the rutting season of the deer around the autumn equinox and the foaling of the ancient wild horse from March to June. In all, 39 weeks (273 days: c. 10 sidereal / 9 synodic months) are depicted. This is similar to the Komi calendar, in which the Elk signifies the autumnal equinox and the year was divided into the hunting season of the elk and the bear, separated by nine months, and the pregnancy time of the elk cow (Konakov 1994; Lushnikova 2002).

For people in Eurasia and North America, the shedding of the antlers and their renewal in February / March signalled the change from autumn-winter to spring-summer (Eliade 1990, p. 162). The bloody antlers' velvet symbolized the red sky during dawn, solar fire, and recreation (Hentze 1961, p. 92-93). Having lost his antlers the animal was regarded as a supreme fertility goddess responsible for the start of a time cycle, e.g. the new day or the new (solar) year, the birth and the renewal, the change from the annual dry to the humid season, and the origin of creation.

## The cosmic tree of life and the theft of fire

People in Eurasia and North America often located the celestial deer close to the world axis, which signified the primordial origin of the cosmos. They considered the animal's widely branching antlers to be a "Cosmic Tree of Life", a symbol of the world axis and/or the Milky Way, because of their seasonal growth, shedding, and renewal, which illustrated cyclical creation. The deer fed themselves from the live-giving cosmic fluid (water, fire, light), which was thought to be stored in the world tree's crown (Chevalier and Gheerbrant 1994, p. 920-921; Jacobson 1993, p. 26, 61-63, 68, 77, 81-85; 210-211; Sicard 1971, p. 240-250, 253). During special rituals when deer were sacrificed in the spring and autumn, ancient people of Eurasia and North America erected poles, crowned by a deer's head or skin with his antlers, which were thought to represent the polar world axis (Müller 1982, p. 95-101; Eliade 1990, p. 158, 162). Additional information is given by Northern Germanic myths in the Poetic and Prose Edda, 13<sup>th</sup> c. AD (Diederichs 1984, p. 136, 153, 214-217, 237, 246, 284): In the crown of the world tree four stags were eating the buds, the blooms, and the branches, which signify the hours, the days, and the seasons in a year. In another story, a stag together with a goat browse the branches from the world tree. From the raindrops running down his giant antlers 11 or 12 big icy streams

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were formed, which were collected in a well at the bottom of the world axis, in the Underworld.

The deer, who stole the primeval fire from the centre of the world and brought it to the people, is well known in North American and Eurasian myths (Jacobson 1993, p. 242; Seiffert 1990, p. 11-14, 55, 57-58, 89-93, 98). In some stories the solar deer “danced” helically around the primordial fire, drilled by the world-axis at the celestial north pole, and ignited parts of his body, often the antlers (Rappenglück 2005, p. 159-161).

### Deer asterisms

In some traditions from North America, Middle America, and Eurasia the deer, e.g. the Fallow Deer by his white spotted summer coat, symbolized the starry sky itself (Milbrath 1999, p. 251; Müller 1956, p. 163; Sicard 1961, p. 232). People in North America and Eurasia detected a giant elk or a reindeer in northern circumpolar star-patterns, like Cassiopeia including stars in Perseus and Auriga (Koch 2001, p. 77-78) or the Big Dipper asterism (Jacobson 1993, p. 194-195; Miller 1997, p. 100-101, 108; Berezkin 2005, p. 81, 83, 87; Lushnikova 2002). Apart from these, deer asterisms have been recognized in the field of Orion or Taurus, focusing on the Hyades and Pleiades (Berezkin 2005, p. 83-85, 87-88; Miller 1997, p. 222, 225; Lushnikova 2002). In Middle America and South America, there exist traces of a deer asterism related to the Hyades and Pleiades (Milbrath 1991, p. 269, 277, 281-282; Reichel-Dolmatoff 1985).

### The cosmic hunt and the celestial deer

Ancient people of Eurasia and the Americas created myths, artwork, and rituals dealing with the chasing of a deer across the sky by one or more hunters, mostly along the Milky Way, which illustrated the deer’s and hunter’s tracks (Baldick 2000, p. 141, 153-158; Santillana and Von Dechend 1993, p. 226; Eliade 1990, p. 143-154; Miller 1997, p. 100-101, 149-150, 199; Lushnikova 2002; Berezkin 2005, p. 83-88; Jacobson 1993, p. 26, 194-197; Miller and Taube 1993, p. 75; Roe 2005, p. 218, 222; Johnson 1990, p. 234-235): The deer is thought to have stolen the sun either at the autumnal equinox or the winter solstice. To restore fire and light, a carnivore such as a lion or a bear killed the herbivore deer. The sun is returned at the vernal equinox or summer solstice. After the cosmic hunt, the body parts of the celestial deer (and sometimes the hunter, too) were scattered off over the starry sky as constellations (De Santillana and Von Dechend 1993, p. 226; Eliade 1990, p. 163; Lushnikova 2002). The cosmic hunt seems to

be partially a reflection of an antagonism between the cyclical change of day and night, of the spring-summer and autumn-winter seasons, of constellations dominating the upper and lower cosmic strata, of death and life, and of gender polarity and social dichotomy (Jacobson 1993, p. 195, 212-213, 244-245; Konakov 1994; Lushnikova 2002).

### The cosmic deer and the shaman’s trance

Deer like to eat hallucinogenic plants, e.g. Peyote in Middle America or the fly agaric (*amanita muscaria*) in Eurasia (Andritzky 1988, p. 60-61, 159-164; Evers 1988, p. 157-159; Hentze 1961, p. 83; Mikhailova 2006; Torres 1995): Looking at an intoxicated “dreaming” deer, early man considered the animal to know curative, poisonous, aphrodisiac, and hallucinogenic plants. From this he derived the idea of the sacred celestial deer, which acts as a spirit helper and safely guides a shaman (or also a dead person) on his way through alternative states of consciousness, imagined as different spatio-temporal, transcendent worlds. Shamans considered hallucinogenic plants to have a “fiery”, “hot” and “solar” nature, which they related to the cosmic deer, and in particular to his antlers (Viesca Treviño et al. 1996, p. 194-195). For them, the spirit animal near or at top of the world axis symbolized the highest states of trance. People of the Northern Hemisphere believed that the cosmic deer at the centre of the world was responsible for the fertilising power of water (rain, rainbow), light, fire and the growth of important plants (crops, hallucinogens): Thus they associated the deer spirit, as a primeval ancestor, with the origin of creation (Sachse and Allen 2005, p.15) and shamans, dressed as half man, half deer, tried to get in contact with the cosmic power offered by him (Andritzky 1988, p. 60-61; Jacobson 1993, p. 174-175, 211; Mikhailova 2006).

Symbolism, myths, and rituals associated with the celestial deer are an important part of the cosmovisions of hunter-gatherer cultures. Further analysis could help to decode principles of those archaic world-views.

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## DANGIŠKOJO ELNIO PĖDSAKAIS – ARHAJIŠKAS MOTYVAS IR JO ASTRONOMINĖ INTERPRETACIJA ĮVAIRIOSE KULTŪROSE

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Santrauka

Prieš tūkstantmetį Šiaurės pusrutulio kultūros išplėtojo simbolių, mitų ir ritualų sistemą, siejančią elnią su konkrečiais astronominiais reiškiniais, kosmologinėmis, kosmogoninėmis ir šamanizmo idėjomis bei senovės medžiotojų kalendoriais. Straipsnyje išryškinti dangiškojo elnio motyvai (soliarinė simbolika, gyvybės medis, ugnies vagystė, kosminė medžioklė) ir jo astronominė interpretacija (asterizmas, kalendorius) įvairiose kultūrose, remiantis biologine elnio elgsena ir išvaizda.

Vertė Algirdas Girininkas

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