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The Mammoth Sonata

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Abstract: Mammoths have long been extinct, yet they seem to have left traces in cultural memory of peoples in the northern half of the northern hemisphere. As the largest and most powerful land animal encountered in those parts of the world, there can be little doubt that mammoths were integrated into the mythologies of these peoples. The present study explores this possibility and what might be reconstructed of such mythology.

The memory of the mammoth has been preserved among Siberian peoples, where the thawing of the plains sometimes still reveals its long spiral tusks. Boris Aleksandrovitch Rybakov (1994) suggests that Cudo-Yudi, the Russian dragon, found its inspiration in a distant memory of the pachyderm: the traps used to catch the animal became the Kalinov (Калинов мост ['Guelder-Rose Bridge']), its killing, a river of fire, its tusks and trunk, multiple heads. Rybakov observes that only 240 generations of storytellers have followed one another between the last mammoths of Eastern Europe and the present, which would allow the form of the mammoth to survive in cultural memory. In this essay, which borrows its structure from the musical structure of sonata, I will go further, showing not only the survival of the mammoth's shape in cultural memory, but especially of certain Palaeolithic beliefs associated with it.

Exposition

First Subject Group: The Probable Antiquity of an Evenk, Tungus and Manchu Narrative According to the Evenks (Anisimov 1951: 195–196), the Tungus (Ocharov, cited in Lot-Falck 1963: 8) and the Manchus (Wei et al. 2001: 195), the earth was once almost entirely covered with water. It was the mammoth that turned the underwater soil with its tusks, allowing the land, originally very small, to

expand, raising mountains and cliffs. A serpent crawled after the mammoth, squirming through the low spaces, and made bodies of water appear on the land behind it. The internal analysis of the Evenk, Tungus and Manchu narratives, summarized here, provides valuable information about the possible age of the tradition.

Beginning with the acts of the mammoth, raising the first land out of a primordial water through the intervention of an animal belongs to the mythological Earth-Diver tale type, Stith Thompson's (1955–1958) motif-type number A812, which is probably Palaeolithic. Several points imply a great antiquity for this tale type, mostly notably the following three:

- 1. The similarity between Eurasian and North American versions
- 2. The contrastive distribution of the tales of earth divers and the tales of emergence
- 3. Evidence of a directed pattern of distribution from Southwest Asia to North America

Regarding point 1, Earth-diver tales appear in continuous distribution in Eurasia and North America, no doubt as a result of diffusion (Hatt 1949: 15). F.H. de Charencey, comparing a Mansi and an Algonquin version of this myth, concludes that its spread from Asia to North America was undeniable and dates from ancient times (1894: 23). Based an analysis on a much broader corpus, Oscar Dähnhardt (1907: 1–89) concludes concerning the origin of the North American versions that "ihre Herkunft keineswegs mit biblischen Flutsagen auch nur das geringste zu tun hat, sondern daß sie mit den nordasiatischeu Schöpfungssagen aufs engste verwandt sind" (1907: 75) ['has nothing to do with ephemeral biblical legends, but that they are closely linked to the North Asian myths of creation']. This view is shared by Anna-Birgitta Rooth (1957: 99), Vladimir V. Napolskikh (1991; 2012) and Michael Witzel (2012: 116–117), who all support a common origin for the Eurasian and North American versions.

Regarding point 2, Yuri Berezkin (2007a) and Jean-Loïc Le Quellec (2014; 2015) independently highlight a complementary global distribution of cosmogonic myths of emerging from underground (or other enclosure) and of raising the first land from the sea. Of these, the former exhibits a distribution across more or less the southern hemisphere, while the latter's distribution more or less covers the northern hemisphere. When human migration to the Americas has been from Chukotka to Alaska, distribution across the southern hemisphere from Africa across the Asian Pacific Coast to South America suggests that cosmogonic myths of emergence from underground were carried by the earliest human migrations from The Africa. earth-diver complex's distribution complementary across northern hemisphere suggests a subsequent development that formed in Eurasia and was carried to North America in a later wave of migration sometime before the end of the Pleistocene.

Regarding point 3, a statistical approach illustrates that the earth-diver concept belongs to a set of motifs that spread from Southwest Asia, probably with the establishment of the first settlement in North Eurasia (see d'Huy 2017; see also d'Huy, in this journal, pp. 73–74). In line with Napolskikh (1991; 2012), in the earliest form of the motif can be described: A person or a creature dives to the bottom of the water or into the infra-world to bring back a solid substance that will become the Earth. The type of animal doing the diving does not appear to have been important – it is found as a bird, mammal, turtle, etc. – and thus the diver could also be a mammoth.

All three elements would therefore corroborate a Palaeolithic origin of the myth, indicating that at *a minima* the earth-diver structure of the Evenk, Tungus and Manchu narrative existed in the Palaeolithic.

This brings us to the snake as a creator of rivers that follows the earth-diving mammoth. On the basis of three different databases, I have previously shown that the snake as an animal linked to water and as an originator of rivers is statistically reconstructed as having a Palaeolithic Eurasian background (d'Huy 2013a; 2016b; 2016c). The convergence of the reconstructions show that the conclusion could be very strong.

Finally, the Evenk and Tungus stories fit well with the beliefs of other North Eurasian peoples, who see the mammoth as a burrowing animal, connected to water and often able to create the world's land or shape the landscape. In Nenets and Mansi, the mammoth is referred to as the 'underground bull'. They fear this creature, which has created lakes and rivers where it has walked, and created caves and mountains where it has dug. The Nenets also think that mammoths form herds that belong to subterranean creatures, the Svixvirtya, that share characteristics with the communauty of the deceased (Lukin 2020: 112). The Yakuts conceive of the vanished pachyderm as a 'master of waters' (Ivanov 1949: 135-401). For some peoples, such as certain Uralic peoples, the mammoth is a powerful animal, travelling underground and creating tunnels in which groundwater flows (Ivanov 1949: 134).¹ The Evenks, located near Lake Baikal, conceive of the mammoth as a large horned fish living in the sea, or as a half-fish and halfterrestrial animal, with a moose's head and the tail and body of a fish (Ivanov 1949: 137). According to John Bernard Muller (1731-1738: 373, 382), the 'Ostyaks' (which, at the time, simply meant 'people of Siberia', leaving the ethno-linguistic identity uncertain) believe that its movable tusks, placed just above the eye, allow the animal to find its way through clay and mud. Throughout Siberia, the mammoth appears as an enormous quadruped that lives between two realms, and as a beast that dies as soon as it breathes (Delisle de Sales, 1797: 42; see also Mervaud 1994: 112ff.; for a similar belief in China in the 17th

century, see Pfitzenmayer 1939: 17–18). The mammoth is therefore generally considered to be a mediating animal, dwelling between the visible and the invisible, between the earth's surface and the subterranean, the terrestrial and the aquatic. This dual nature makes it seem only natural for this great creature to be attributed with the transition from a primordial ocean to the first continents. Even if the symbol of the mammoth as an underground animal could be explained by frozen corpses of the animal emerging from the ground, the coherence of the whole motif complex – the link with water, being half-terrestrial and halfaquatic, and as a shaper of the landscape suggests either a rapid spread of the tradition or the existence of a very ancient substrate, common across Eurasia.

The structure of the Evenk, Tungus and Manchu stories and their integration of the two protagonists, both connected with what is likely a Palaeolithic pan-Eurasian substrate, make it possible that the plot type could have formed a very long time ago, potentially already in the Upper Palaeolithic.

Second Subject Group: The Mammoth, a Shamanic Helping Spirit...

The present study requires supporting the age of a link between the mammoth and the snake. Evidence of this connection may be sought through a detour into local ritual, acknowledging that the boundary between ritual and myth often seems to be an artificial construction. Following A.F. Anisimov (1951), Eveline Lot-Falck (1963) observes that a Tungus shaman includes two mythic beings among his spirits: the snake Diabdar'a and a creature constituted of a male reindeer's body, a moose's antlers and a fish's tail. The latter, composite animal echoes the mammoth as the partner of the snake in the Tungus cosmogonic myth. S.V. Ivanov (1949: 152) observes that the largest and strongest animals known to the peoples of Siberia were seen as the owners of taiga, and thus the owners of animals. There can be little doubt that the mammoth held a prominent position in the mythologies of contemporary societies, while the replacement of the mammoth by the moose in Eurasia can be considered the result of the moose becoming the largest and strongest animal of taiga once the mammoth was gone (Ivanov 1949:152).

connection between the composite creature and the mammoth is supported by the position of the mammoth in the Siberian shamanic system. Precious helping spirits of the shaman are some of the most powerful representatives of terrestrial and aquatic fauna - moose, bears, pikes - that, following their deaths at an extreme old age, exchange their shape for that of a (Selkup) kožar surp ['wild beast mammoth'] or (Selkup) kožar khvoli ['fish mammoth'] or a (Khanty) muv-khor ['earth bull / earth reindeer'] (Lot-Falk 1963: 116). As an underground animal, the mammoth excellently fulfils the functions of a guide during the shamanic so-called kamlenie séance, through which the lower world is engaged.

The helping spirit of the Tungus shaman moreover exhibits a strong similarity to the gigantic *kalir* reindeer-fish, which lives on the steep cliffs of the Endekit River, the river of the dead. This master of animals leads the helping spirits and lives out its existence underground (Lot-Falk 1963: 114). This is makes it all the more likely as some Siberian peoples conceive the mammoth as a chimera, uniting the characteristics of terrestrial and aquatic animals. The shamanic ritual thus seems to reduplicate the cosmogonic myth.

....Very Old and Dangerous (Codetta)

It should then be noted that the common noun *kheli* and the proper noun *kalir* both stem from a common reconstructed root **kel-/*khel-*. According to Glafira Makarevna Vasil'evitch (1949), this root produced innumerable derivatives, not only in the Ural-Altaic languages, but also in the Palaeo-Arctic and even among the Indo-European languages. The word, historically associated with the mammoth and to a lesser extent with reptiles, appears to have designated an evil creature that carried death or was linked to death, and was potentially located underwater or underground.

The wide dispersal of the root in Eurasia would seem to indicate a very remote origin, possibly Palaeolithic. This remote origin of this belief is interestingly corroborated by the preservation of similar beliefs in North America with content remarkably consistent with the meaning reconstructed by Vasil'evitch for the

*kel-/*khel- root. Similarities in the descriptions found in the respective narrative traditions are complex and largely arbitrary to the remains of mammoths that people might discover in the landscape. Therefore, these similarities cannot be considered independent products of relatively recent interpretations of bones. Identifying a corresponding mythological complex in both Eurasia and North America would thus support the theory of its great age as present in the era of the respective trans-continental migrations, most likely with continuities from encounters with living mammoths.

Development: Amerindian Parallels to Support the Reconstruction of Eurasian Symbolism

Drawing on multiple examples from across North America, William D. Strong (1934) and Mary Chandler Edmonston (1953) attempt to demonstrate that a distorted memory of the mammoth became linked to an evil entity, a destroyer of human beings, yet retaining thing entity's association with water. The connections between these creatures and mammoths have often been rightly criticized (see e.g. Lankford 1980), yet the closeness of Eurasian beliefs to some Amerindian traditions remains striking and difficult to dismiss.

Pierre François-Xavier de Charlevoix, referring to an Algonquin group, writes that:

Il court aussi parmi ces Barbares une assez plaisante tradition d'un grand Orignal, auprès duquel les autres paroissent des Fourmis. Il a, disent-ils, les jambes si hautes que huit pieds de neiges ne l'embarrassent point: sa peau est à l'épreuve de toutes sortes d'armes, & il a une manière de bras, qui lui sort de l'épaule, & dont il se sert, comme nous faisons des nôtres. Il ne manque jamais d'avoir à sa suite un grand nombre d'orignaux, qui forment sa Cour, & qui lui rendent tous les services, qu'il exige d'eux. (de Charlevoix 1744: 127.)

It also runs among these Barbarians a rather pleasant tradition of a great Moose, to which others seem like ants. Its legs are so long that eight feet of snow do not embarrass it: its skin is protected against all kinds of weapons, and it has a kind of arm, which comes out of its shoulder, and which it uses, as we do ours. It never fails to have in its wake a large number of moose, which form its Court, and which

provide it with all the services it requires of them.

This animal can easily be considered to resemble a mammoth. The description could equally refer to the Eurasian kalir, a creature with a combative appearance and that prominently holds the position of the master of helping spirits. In Eurasia, the mammoth was also often associated with the moose (as well as with reindeer: Lukin 2020) and acquired features from this animal. Nevertheless, it remained a distinct entity that has reached a great age and dwells underwater or underground. The description of the Algonquin monster as "a great Moose" create a further connection to Siberian mythology, where the mammoth was replaced by (or reimagined through) the moose and the reindeer (Ivanov 1949: 152).

In North America, Strong presented a striking example of a man-killing monster told of among the Naskapi called Katcheetohliskw. Katcheetohliskw "was very large, had a big head, large ears and teeth, and a long nose with which he hit people. His tracks in the snow were described in [Naskapi] stories as large and round" (Strong 1934: 83-84). This again harks back to the meaning of the Eurasian root *kel-/*khel-, which associates the mammoth with danger and death. Strong's interpretation of Katcheetohliskw as referring to a mammoth has been criticized, comparing it to fabulous monsters in other North American cultures without the exaggerated ears or giant, weaponized nose (Speck 1937). possibility that the description was influenced by photographs of elephants has also been considered, but deep roots in cultural memory of the mammoth cannot be ruled out (Chandler Edmonston 1953: 18). The confusion between a creature that kills humans and a being resembling an elephant finds "too many parallels in eastern Indian folklore generally to be of recent Caucasian introduction" (Strong 1934: 84-85).

The criticisms levelled against Strong are linked to the potential of cherry-picking examples, selectively choosing only those that support an argument based on descriptive details. To avoid such criticism, I will turn from descriptions of fantastic beasts to the structures embedded in a narrative tradition widespread in North America. Narrative

patterns and the structural features organizing them can be remarkably enduring in transmission. The testimony of de Charlevoix, as well as many other accounts used as evidence in favour of cultural memory that has preserved the concept of the mammoth (Lankford 1980: 297-298), is related to the folktale about a battle against the Giant Elk / Ungulate, widely attested in North America. Stith Thompson (1929: 315n.144) identifies this type of narrative among the Salishan Kalispel, the Athabaskan Kaska, Dane-zaa, Navajo, Jicarilla and Chiricahua, the Uto-Aztecan Southern Paiute, the Yuman Mojave and one among the Kutenai (language isolate). This story tells how the hero, a young man who reaches adulthood in just a few days, faces a giant reindeer or horned animal that has been preying upon people. The hero turns into a lizard so he can get close to the beast. A burrowing animal – usually a gopher – then offers its help and digs a tunnel under the to circumvent the protection surrounding its heart. The hero then only has to pierce the creature's vital organ with an arrow. Before dying, however, the monster manages to destroy the tunnel, creating landscapes contemporary to that of the informant. (Thompson 1977: 338.) The similarities between these widespread Amerindian tales and the Evenk, Tungus and Manchu tales are manifold. The following parallels warrant consideration:

- 1. Action in these narratives only advances due to the correlation of a reptile and an animal with horns or tusks that move towards one another in North America and follow one another in Eurasia
- 2. In North America, the reptile is associated with a being that creates open spaces underground, which duplicates the pattern of the snake that creates impressions in the landscape in Eurasia
- 3. The monster, potentially associated in some cases with the mammoth, is the creator of features in the landscape; the North American narrative may be considered to invert the motif of the mammoth digging tunnels known from some Eurasian stories by destroying a tunnel and thereby shapting the landscape

The link thus established between Eurasia and North America can be strengthened. The

Manchus people inhabiting China are Tungusic peoples, like the Evenks. They tell that two brothers flooded the cave of a dragon who was attacking humans, threw stones at it and wounded it with a spear. While fleeing, the dragon dug a river with its claws and coloured the mountains in red. Only one brother survived. He dragged the dragon along the ground, creating elements features in the landscape (Bäcker 1988: 11–21). This tale echoes the Amerindian myth. Indeed, the enemy who persecutes humans is attacked through a hole in the ground, pierced with a weapon, his fight leads to the creation of rivers and his death to the creation of similar landscape features. Moreover, the enemy is a snake - i.e. a reptile. This feature is a reversal from the Amerindian myth, yet it allows us to recognize the Eurasian form of the myth. Reinforcing the idea that the Manchus' tale could be an intermediate form between the Eurasian and Amerindian versions, it should also be noted that, for the Manchus, snakes and mammoths worked together during the flood, some digging canyons, others creating riverbeds; it is thanks to their joint action that the water came back down (Wei et al. 2001: 195). Tales in which the mammoth and the snake are involved in the creation of the such landscape features are rooted in an old Eurasian cosmogony. It is therefore probable that they came first, and that the Amerindian version emerged through a transformation that would presumably have occurred in Asia before the migrations across the Bering Strait to North America. In addition, it should be noted that this chronology would corroborate the existence of a link between the snake and the creation of rivers, the presence of which during the Palaeolithic has been statistically demonstrated in other studies (d'Huy 2017; 2020). In this case, this simple motif appears integrated into a more complex narrative that can be traced back to the same period.

Parallels in the structural organisation of the Native Amerindian tale and its relation to the Eurasian myths are complementary to the previous examples of possible traces of the mammoth in Amerindian cultural memory, offering stronger support through their integration into a regular structure, where it

was linked to the creation of landscape features..

These comparisons find a complex of similar beliefs in cultures on either side of the Bering Strait:

- The dangerousness of the 'mammoth'
- The 'mammoth's' identification as a powerful 'animal master'
- A connection with water
- A narrative connection of the 'mammoth' and a reptile
- The 'mammoth' as a creator of landscape features

These parallels are complemented by the linguistic reconstruction of the same beliefs for a family of words with the reconstructed root *kel-/*khel-, widely spread in Eurasia, which are either present in these narratives or the corresponding semantics can be observed there. The system of elements is so complex that its established presence in both Eurasia and North American traditions suggests a genetic relation. When this relation can be considered independent of the relatively recent colonization of the Americas by Europeans, it can be assumed to have been carried in migrations from Eurasian peoples to North America in the Upper Palaeolithic.

The mammoth has associations with danger and even death on both continents. Its identification in Eurasian traditions as an underground and burrowing animal has been considered the root of interpretations of the mammoth usually as an evil being in Siberia because its subterranean kingdom touches that of death (Lot-Falck 1963: 114). In North America, the mammoth seems to have evolved into a dangerous animal that kills human beings, which could be accounted for through the same connection or development from the same underlying ideas. This leads to the question of whether the mammoth can be shown to have associations with death already in the Palaeolithic in Eurasia.

Recapitulation

First Subject Group: Review of the Elements in Favour of the Great Antiquity of the Evenk and Tungus Narratives

If we return to the Evenk, Tungus and Manchu creation myth, we must admit the following:

- 1. The structure of the tale as an earth-diver motif could be Palaeolithic
- 2. The protagonists' individual roles the mammoth as a shaper of the landscape and the snake as creator of rivers could be Palaeolithic
- 3. The pairing of the mammoth and the reptile as cosmogonic agents
- 4. The presence of a *kalir*, associated with a snake in Tungus rituals, seems connected with its etymology, reflecting an ancient link between the ophidian and the pachyderm

Accepting that complex mythological traditions found in both Eurasia and North America are most likely genetically related, and that their historical spread is contingent on a common Palaeolithic origin (and thus carried in migrations), further points are admitted:

5. Part of the mammoth mythology has spread from Eurasia to North America

Of these points, I have previously shown the overwhelming probability of points 1, 2 and 3 using a statistical approach (d'Huy 2017), while point 4 relies on the etymological study of Vasil'evitch (1949).

Second Subject Group: The Mammoth and Death: Some Archaeological Evidence
In Eurasia, a recurrent theme is the connection

In Eurasia, a recurrent theme is the connection of the mammoth and the subterranean world. This connection brings the mammoth into the proximity to the underworld, which makes the mammoth an ideal intermediary between life and death. This connection makes the beast a precious spirit helper to the Tungus shaman. As noted by Lot-Falck (1963: 116), however, the Tungus *kheli* is not a spirit of death, but he remains at the gates of the realm of the dead.

The connection between the mammoth and death inverts the motif of the mammoth giving life to the earth's surface and shaping the landscape, transforming these into the motif of the mammoth taking life underground and creating tunnels. The latter motif may be very old. If we accept that the structural principles governing the construction of myths already existed in Palaeolithic Eurasia,² as shown by Claude Lévi-Strauss, whose *Mythologiques* (1964–1971) demonstrate that these principles already existed during the first settlement of the Americas, we can admit that the link

between the mammoth's connection to death on the one hand and Evenk, Tungus and Manchu creation myths on the other hand can be considered to trace from that time. Connections of the mammoth with death and the underworld are found in the archaeological record. Mammoth bones, especially shoulder blades, have been found in many tombs of Palaeolithic Central and North Europe, sometimes constituting their walls (Roussel Versini 2004: 44). Mammoth bones were carefully placed on the bodies of the deceased in the graves of Brno II, Kostiendy and Predmosti, which is a potential sign of belief in the protective powers of a 'Great Mammoth' (Lister & Bahn 1995: 110). In Austria, a child's grave was covered with a mammoth scapula (Einwögerer et al. 2006). Even if the mythology behind these acts remains opaque, they indicate a clear connection between the mammoth and what happens to humans at death.

On the basis of the preceding discussion, an evolution of the symbolism of the mammoth can be proposed: the mammoth first became associated with the underground world, then (or at the same time) with death, before symbolizing the dangerousness of the beings with which it was associated.

The deep roots of 'the danger of the mammoth' discussed here further suggests that the mammoth may have played the role of a dangerous 'master' or 'mistress of animals' in the Palaeolithic. There are two notable arguments for this.

First, the distribution of the motif of the 'master of animals' (Eurasia, Africa, the Americas) and its connection to the world of hunting points to a potential Palaeolithic origin (Le Quellec & Sergent 2017: 749).

Second, the dissemination and analysis of so-called 'Polyphemus' stories, wherein animals are stolen from their dangerous owners, would seem to support the idea that the master of animals was dangerous (d'Huy 2013b; 2014; 2019; 2020). The great age of this myth is based on a large body of evidence. Berezkin (2007b) has shown that the spread of the motif of a man going to the home of a monstrous animal master or shepherd and, threatened with death, is only able to escape the master's wrath by covering himself with an

animal skin or hiding under an animal, is limited to Eurasia and North America. According to Berezkin, this complex tale can be explained by a Palaeolithic migration from Asia to the New World (see also Le Quellec 2019). Korotayev and Khaltourina's statistical approach (2011) connects this motif with a story of how game was once concentrated in one place, before being released by an individual and dispersed throughout the world. Their examples illustrate a clustering that connects northern Eurasia and northern North America. Finally, the phylogenetic approach, based on three different corpora, corroborates the existence of a Palaeolithic belief in a master of animals imprisoning wild animals only to be liberated by a hunter, a Eurasian belief that spread from Southwest Asia to North America via North Eurasia during the Palaeolithic (d'Huy 2013b; 2014; 2019).

A potential link between the myth of Polyphemus and the mammoth might perhaps be even closer. When we look at the massive skull of a mammoth, we can observe that at the level of the eye sockets there is a vast central hole, suggesting that the animal had only one eye. At a time when mammoths were already extinct, this observation could have inspired the idea of extinct, cyclopean giants the among Mediterranean peoples, as in their versions of Polyphemus tale (Mayor 2000). A Paleolithic identification of the mammoth as a master of animals, if it were proven, could explain the appearance of the Cyclops, while reinforcing the hypothesis of a symbolic continuity between the Paleolithic and more contemporary periods. The physical aspect of the antagonist would have only needed to evolve by a simple shift from images of the animal's exteriority to its skeleton, while preserving its main defining features that link it to danger, death and dominion over animals.

Arial and statistical approaches therefore suggest the Palaeolithic existence of dangerous creatures, including the mammoth, who were also masters of animals, holding and releasing game. Accordingly, shamanism is conceived even now in Eurasia as a principle of exchange within an alliance between animal masters and human beings. This principle would explain the dangerousness of animal masters. A principle of one life for one life places the risk

of death over the one who obtains imprisoned animals, which would indeed be a counterpart to the game given by the animal master and killed by the hunter (Hamayon 1990). This hypothesis of dangerous masters of beasts could explain the dominance of dangerous animals in Aurignacian rock art (Clottes 1995).

We can note that images from the caves of Pech-Merle and Cussac, in France, suggest that the mammoth may have been considered as a female being. These images, dating back to the Gravettian of the Upper Palaeolithic, show mammoths covering women, suggesting an identity between the two elements (Bahn 2016: 287). Such an identity would echo the numerous figures from Central and Eastern Europe engraved in mammoth ivory, and moreover placed in long-term dwellings, themselves covered with mammoth tusks (Lorblanchet 2010: 166). The potentially feminine nature of the mammoth as a master of animals also points to beliefs that are still held in Siberia today. The alliance between human beings and societies of humans and of nature are commonly forged through a shaman, who marries a female spirit of the nourishing world (Sternberg 1925; Hamayon 1990; 2015: 86-87, 102-104). Such a belief in a mistress of animals could have existed from the beginning of Homo sapiens conquest of northern Eurasia, including Europe. Indeed, it is possible to show using a statistical method that 'Earth' was considered to be a female being or of a feminine nature from the beginning of the settlement of northern Eurasia (d'Huy 2018; 2020). The mammoth is often associated with earth, both in Eurasia and in North America.

Coda: Proposal for the Interpretation of the Cave Decorated with Rouffignac

Nearing the end of this essay, we are brought to a concluding question of whether any trace of the creation myth linking the mammoth and the serpent can be found in Palaeolithic rock art. In the Palaeolithic rock art record today, the Rouffignac cave features the highest concentration of mammoth depictions known, for which scholars have proposed various explanations. One of the most original – but also most categorical (Plassard 1999: 90) – is that of Louis-René Nougier (1984), who proposes that animals facing into the cave

symbolize death, while animals facing out of the cave symbolize life. To date, a problem at the heart these explanations is that Nougier presupposes the existence of an explanatory element (hunting magic, shamanism, etc.) in the Palaeolithic period without demonstrating its presence (Le Quellec 2017).

However, the present analysis may shed new light on the Rouffignac's rock art. Indeed, "le thème de l'association Mammouth–Serpent si particulier" ['the theme of the mammoth–snake association, so specific,'] (Barrière 1984: 164) demands comparative discussion. According to Jean Plassard:

parmi les innombrables tracés digitaux [...] certains ont fait l'objet d'un traitement spécial [et] furent tracés en deux lignes réalisées successivement. Il ne s'agit plus ici de simples 'méandres' mais bien d'une figure suggérant avec soin l'ondulation d'un serpent. Il arrive même qu'une des extrémités soit relativement globuleuse et fasse alors penser à une tête. (Plassard 1999: 62.)

among the innumerable digital outlines [...] some were subject to special treatment [and] were drawn in two lines made successively. These are no longer simple 'meandering things' but a figure that suggests the undulation of a snake well. It even happens that one of the depicted figure's extremities is relatively globular and looks like a head.

Plassard points out that, if the meandering lines are indeed similar to snakes, rather than the 'Cave of the Hundred Mammoths', Rouffignac would then be the 'cave of snakes' (Plassard 1999: 62). If Plassard's interpretation is correct, the co-presence of these two species in Rouffignac cave offers evidence that they were being linked already in the Palaeolithic. It could be explained by a creation myth related to that of the Evenks, Tungus and Manchus, the great historical depth of which seems very plausible, and an early form of this tradition could account for the co-presence of the two species.

In addition, while several techniques are used to represent other animals, snakes are systematically traced with a finger, and therefore recessed on the wall. The difference in technique mirrors the Siberian contrast between the mammoth as creator of promontories, and the

snake as creator of valleys and places where water crosses the landscape. The Rouffignac cave paintings could therefore be, in large part, a hymn to the creation of the world.

In closing, let us mention the likelihood that, following the example of recent practices in Siberia, the pachyderm appears to have been part of symbolically mapping a series of binary oppositions (land/water, high/low). Indeed, if Rouffignac cave consists of three levels – the lowest occupied by a stream – representations seem essentially concentrated around wells, allowing a person to pass from one level to another (Plassard 1999).

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Notes

- 1. Ivanov does not specify the linguistic-cultural groups to which he refers here.
- 2. See Claude Lévi-Strauss's *Mythologiques* (1964–1971), which show that these principles already existed during the first settlement of the Americas.

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