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MAMMOTH REMAINS, BURIALS, AND ART (30–15 KY AGO): ANTHROPOLOGICAL PERSPECTIVE

ABSTRACT: The aim of the paper is to widen the spectrum of sources leading to the knowledge of social aspects and symbolic dimensions of the life of mid-Upper Palaeolithic hunters. The contemporary discussion leaves everything that relates to faunal remains (including their special composition and striking depositions) entirely within the competence of natural sciences, as though the human intervention had ceased with killing and practical usage of the animal. As it is known from ethnohistorical sources, this has not been the case in any society. At the same time, in foraging societies funeral customs are never limited to primary inhumations of complete human bodies, although the contemporary archaeology considers such form as a standard funeral rite of the Upper Palaeolithic. Anything else is viewed as an anomaly requiring a special substantiation. Ethnologically speaking, exactly primary inhumations are exceptional, while both human and animal remains receive a ritualized treatment. A mass deposition from Předmostí (Př. 1–18) is deemed a tomb with complete bodies disturbed by animals; this interpretation still prevails despite its originating from a Christian view of the world in the 19th century. Some of the so-called tombs may not even be secondary inhumations of a body with grave goods, but a hoard of symbolic items with representative animal and human bones and "liturgic" artefacts (Brno 2). Many of the so-called works of art bear witness of an altered state of consciousness, characteristic for individuals aiming to communicate with the "other world", analogically to the later shamans. The crisis of the contemporary Palaeolithic archaeology is found in creating of an entirely artificial picture of people with purely technical motivation and determined by the surrounding nature. It is necessary to restore the discussion into the realm of cultural anthropology.

KEY WORDS: Gravettian – Moravia – Mammoth bones – Funeral customs – Palaeolithic art – Shamanism

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INTRODUCTION

Our knowledge of the spirituality of the Palaeolithic big-game hunters issues almost exclusively from the study of art and of funeral customs. Being completely in the hands of natural scientists, the research of animal remains continues to be largely unused, and archaeologists readily accept the findings. In my opinion, especially promising is the observation of occurrence of faunal remains within settlement structures, whether these are huts, pits with bones, or large accumulations of mammoth remains. In the text below we will mainly pay attention to these sources, although we are aware their extraction from the realm of natural sciences may result in doubts and marginalization of the author. Without any such intent, Slavomil Vencl made a major contribution to these issues in his research into an Epigravettian site with hoards of flints and mammoth bones in Stadice (Vencl 2013: 89–92, Oliva, Vencl 2021). These text develops some of the author's opinions to the mammoth remains previously published in local (Czech) books and scientific journals.

Thanks to several lucky circumstances it is just in the mid Upper Palaeolithic that we can get the best insight into the mentality and perhaps even the religious ideas of advanced Palaeolithic hunters. The first of these circumstances is the periglacial cold climate that existed at the Last glaciation maximum, a period, when massive layers of loess formed, protecting the cultural layer from erosion and also preserving skeletal finds. This is especially important in Moravia, where the Gravettian Culture is represented by an extraordinarily developed facies called the Pavlovian. Nearly all of the preceding Moravian EUP-sites are surface localities, and bones were not preserved on the stratified sites to a greater extent either. On the other hand, these exceptionally abundant sites were regretfully discovered too early, and the research turned into a pursuit of sensational artefacts and of human remains. Paradoxically, these locations yielded rich evidence for the spiritual life of man and his bodily habitus, whereas endless sources of information on his everyday life (settlement structures, living floors, distribution of finds etc.) were lost. The second of these lucky circumstances relates to the traditional epithet of this culture as the civilisation of the mammoth hunters. That is to say, we must bear in mind that mammoths occurred in the natural environments of a number of other Palaeolithic cultures without becoming objects of specialized hunting or veneration. Mammoths commonly occurred in the Central European Aurignacian (Hahn 1977: 162–163), where they are mostly represented by teeth, perhaps collected. The same can be said about the Gravettian in West-Central Europe, although during this period humans also utilised mammoth bones, mainly teeth and ribs, as a raw material for weapons (Münzel 2004: 75–80).

Therefore, mass-scale hunting and veneration of mammoths in the Pavlovian was more likely a matter of culturally or socially conditioned choice rather than a need for subsistence, although according to the Sr analyses the Pavlovian hunters consumed mammoths (Bocherens *et al.* 2015). Eating of their meat, however, could not have been the main reason for hunting had the Pavlovians not been hunting mammoths, they would have simply consumed meat of other animals. It was indeed very risky to pursue mammoths, and so it was a matter of great prestige to prey one.

For a hunter, the greatest danger is also the greatest challenge. From ethnological studies we know that the greatest boom in social complexity and the material cultures of hunters and gatherers that arose from this occurred in places where the largest and most dangerous animals were seasonally hunted, and where day-to-day life was more frequently interspersed with large celebrations, with allied groups attending the ceremonies (Ames 2001, Hayden 2008). This seasonal hunting, involving bands of hunters from far-flung regions (as proven by the imports of both worked and unworked flint from the south of Poland as far as Southern Moravia, Oliva 2007: 144–150, 203–205), required good knowledge of the terrain and the migrations and peculiarities of the animals, and was governed by hunting tactics and elaborate rules for dividing up the prey. One can easily imagine what an atmosphere of hectic competitiveness the preparations, the hunt itself, the dividing up of the prize, as well as the endless chattering and squabbling by the fire must have created in the community of hunters. This led to a rise in the prestige of certain individuals, not just for their hunting skills and courage, but also in social (the ability to hold a passionate discussion and settle squabbles) and religious terms (to affect hunters and animals using magic). This was obviously reflected in the artifactual sphere, mainly in the development of what we now call art. By a pure coincidence, exactly the remains of this advanced culture are found in loess sediments, in which they were preserved exceptionally well.

ACCUMULATIONS OF MAMMOTH BONES

Nowadays almost all the interpretations of the piles of mammoth bones at Palaeolithic settlements are based on the classic works of Gary Haynes (e.g. 1991). This eminent zoologist studied the life and natural demise of recent elephants in African national parks, and therefore his findings are exclusively in the realm of the natural sciences, and from an entirely different natural environment on top of that. He deals with far-between scatters of bones of elephants that perished mainly from the lack of water during exceptionally dry seasons. These remains have almost no connection with hunting or human camps. In the large river valleys of periglacial zone mammoths were never threatened by droughts.

In Gravettian, our point is to explain the presence of dense and vast concentrations of bones directly at the settlements of hunters that were traditionally considered to be nothing more than nutritional waste. Until the end of the 1970s nobody thought it striking that such large accumulations of animal bones were not found in other Central European Palaeolithic cultures, and that these hoards contained an abundance of the largest bones, which nobody would have brought from the hunting ground to the camp for purely practical reasons. In fact, at all of the analysed Gravettian sites mammoth bones represent an utmost complete spectrum of remains, although at those locations, where accumulations of bones were not studied, mammoth usually does not represent the principal species (*Table 1*). The data from Dolní Věstonice I are distorted, since they do not include the largest bone heap (Klíma 1969) that had been backfilled, and the bones were not preserved. Parts of skulls, usually molars or mandibles (Krakow-Spadzista) followed by parts of hip bones and long bones are encountered most often; these are not very useful bones but ones with the biggest dimensions (except molars), and exactly in the case of mammoths their transport to the settlement grounds required a considerable expenditure of energy. If we divide the number of bones (NISP) by the minimum number of individuals (MNI), mammoth is followed by other large animals (*Table 1*, *Figure 1*): reindeer (7× in the second place), horse (5×), and both of the big-game species occupy the 3rd place four times. Next comes wolf; fox is the last in 11 out of 14 cases, i.e. it is represented by the smallest number of bones per 1 individual. From a practical point of view, the highest

TABLE 1: Bones of most frequent animal species according to their MNI in the Gravettian sites. M, mammoth; H, horse; R, reindeer; W, wolf;, F, fox; Ha, hare; MB, mammoth bones; Sources: 1, Brugère, Fontana 2009; 2, Svoboda *et al.* 2005; 3, Svoboda *et al.* 2011; 4, Wojtal, Wilczyński 2015; 5, Nývltová *et al.* 2006; 6, Škrdla *et al.* 2008; 7, Bosh *et al.* 2020. Note: DV I, large accumulation of bones (1950, Klíma 1969) non included, Milovice I A+B, K, nombre of mammoth bones includes large undet. fragments.

	Game species NISP/MNI						MB	M	M	M	Source
	M	H	R	W	F	Ha	(NISP)	% NISP	MNI	% MNI	
Milovice I A+B	1,861	153	28	30	0	0	31,642	98.6	17	60.7	1
Milovice I K	504	15	53	12	1	0	15,625	99.3	31	77.5	1
Milovice I G	51	23	30	6	1	28	1,068	80.5	21	52.5	2
Milovice IV	65	16	32	31	18	32	130	26.9	2	6.5	3
Pavlov I Southeast	323	59	72	109	44	35	2,264	8.4	7	1.5	4
Pavlov II	179	29	18	23	3	10	179	36.4	2	5.3	4
Pavlov VI	98	30	19	11	5	1	196	52.5	1	14.3	4
Dol. Věstonice I Upper site	115	94	52	50	15	58	1,959	28.7	17	11.4	4
Dol. Věstonice II	488	22	39	46	22	29	2,439	33.5	5	2.9	4
Boršice	65	1.5	37	28	10	2	260	57.1	4	22.2	5
Spytihněv	299	9	15	0	6	0	598	64.4	2	50.0	6
Grub	51	5	1	2	0	0	407	93.5	8	50.0	7
Jaksice	56	4	21	2	1	2	111	50.5	2	18.2	4
Kraków-Spadzista	71	2	9	4	8	6	6,901	97.7	97	77.6	4

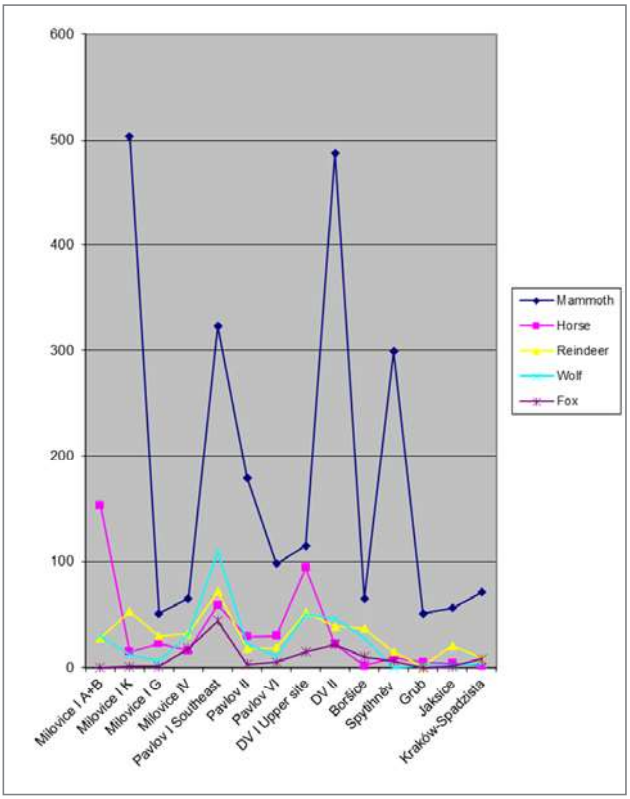

FIGURE 1: Bones of most frequent animal species according to their NISP/MNI in the Gravettian sites in the eastern part of Central Europe (see Table 1).

representation of bones of the largest animals is unnatural, since we can assume that only meat-bearing parts of the heaviest kill used to be brought to the settlement. If it is exactly the opposite, there must be a reason that goes beyond the common sense.

Deliberating on these phenomena from a purely utilitarian angle can lead to entirely absurd conclusions, that the mammoth bones brought to the site, mainly molars (with no practical use), used to be burnt there not to obstruct on the living floor. The authors conclude these were grounds with a long-term settlement, since otherwise such a maintenance would have no purpose (Bosh *et al.* 2020: 118–119). The fact that applying ethnological knowledge results in marginalization, is a sure sign of the crisis in the interpretation part of the Palaeolithic archaeology.

A great number of large and no-meat bearing mammoth bones has recently become the main argument behind the opinion that the mammoths had died at that very place and people had just come across piles of carcasses, set up a camp nearby, and for some time used the meat for food and the bones for various tools, or possibly as fuel. Subsequent variations on this idea led to the thought that the mammoths must have been hunted, although in this case obviously directly at the settlement. We can only cover a small part of the extensive discussions of these interpretations here.

The remains of mammoths, accompanied by artifacts, are either found within the settlement itself, amongst what are assumed to have been huts (Dolní Věstonice I, Milovice G – *Figure 2*, Předmostí, less notably Pavlov I , II, VI, Dolní Věstonice II, Milovice IV, Boršice and Spytihněv), or in the form of large accumulations very close to settlements (Dolní Věstonice I – *Figure 3*, Milovice – northern sectors – *Figure 4*, in places also evidently at Předmostí: Maška 1894, a smaller deposit also in Dolní Věstonice II). Numerous sizeable mammoth remains have also been found in caves (Vogelherd, Weinberghöhle, Mamutowa). These remains have always been rearranged somewhat, with no anatomical cohesion (altogether at most there tend to be a few vertebrae or ribs) and basically there are no examples where the bones of individual specimens have been found lying next to one another. The absence of groups of bones from individual animals in the accumulation at Spadzista street is explained as being due to gelifluction (the seasonal freeze-thaw action upon waterlogging topsoils which induces downslope movement), human factors, the activity of predators, and trampling of other mammoths (Kalicki *et al.* 2007: 21). With the exception of the human factor, all these would have dispersed the bones, while here we need to explain how they came to be accumulated together like this. These circumstances preclude both the alternative idea that the mammoths died a natural death right by the settlement as well as the theory that the mammoths were hunted right where their bones were "deposited". The pachyderms would have had to keep coming into where the people lived, sometimes directly between the fireplace and the huts, where they would have faced the threat of being killed. We will therefore have to assume that the hypothesis that the mammoth bones were taken to the settlement is true. Of course, there is the question of why this was done. In Kraków–Spadzista the greatest number of specimens (according to the latest figures, approximately 86, Wojtal 2007: 128) comprise mandibles, molars, atlases, sesamoid bones and caudal vertebrae, together with numerous fragments of pelvises, scapulae and skulls, while limb and paw bones which would have yielded much more

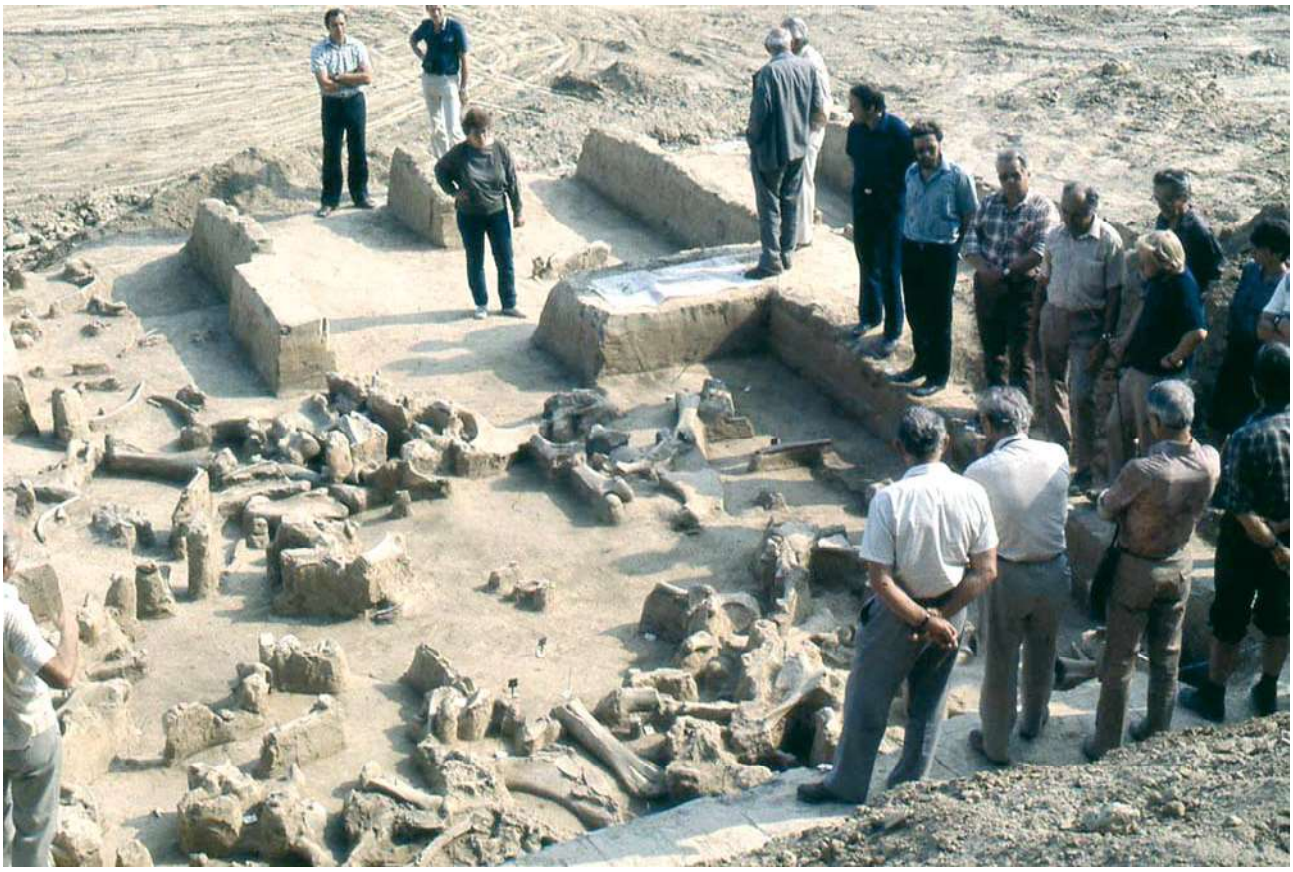

FIGURE 2: Milovice I/G (Břeclav distr.), foundation of a circular hut of mammoth bones.

meat are many times rarer. In the southern passage of the Mamutowa Cave near Kraków, settled in the Late Gravettian, J. Zawisza (1878) came across a cluster of mammoth bones consisting of a pelvis, several tusks (including one large complete specimen), a humerus, two tibias and a number of complete ribs. There are many similar examples. Apart from serving as building material in dwellings in Milovice G and perhaps also Kraków (mandibles), all these large bones were unused. It is highly unlikely that they were carried to the settlement purely as fuel, for building purposes, or as a raw material. Amassing such disproportionately large supplies of raw materials and stinking fuel would have been completely impractical and we are aware of no similar analogies from other Palaeolithic or subrecent hunting cultures. However, what is absurd from a practical point of view may be acceptable for symbolic reasons.

The Pavlovian burials in Moravia were usually equipped with large mammoth bones (Dolní Věstonice 3 – *Figure 5*, DV 4, Pavlov 1, Brno 2, secondary deposition of human bones in Předmostí). The "grave" scapulae from Dolní Věstonice, Pavlov and Předmostí were carved with irregular scratches (*Figure 6*), a feature not found on other shoulder blades. The twin child burial in Krems–Wachtberg was also covered by a mammoth scapula, supported by a piece of tusk (Einwögerer 2005). The burial at Brno 2 contained many mammoth bones and a whole skull of woolly rhinoceros. In Kostienki up Don mammoth bones accompany three out of every four burials (Praslov, Rogačev 1982). They were also used to form a quadratic grave containing human bones in Kostienki II (Boriskovski 1963, Oliva 2009: Fig. 5).

Further food for thought comes in the structured depositions of mammoth bones found mainly in Eastern Europe. Not only Soviet archaeologists think of them in primarily materialistic terms; in the same spirit they interpreted round structures as huts, smaller pits as meat caches, and less carefully arranged

FIGURE 3: Dolní Věstonice I, a trench through the largest accumulation of mammoth bones (Klíma 1963).

accumulations as stocks of raw material and fuel, or as cooking waste. This view clearly also suits the ecological/economic paradigm of contemporary Palaeolithic archaeology.

There are very few huts where mammoth bones were used as a real structural element. Two of the more modest examples are huts 1 and 2 in Dobraničevka, where spars were fitted into the occipital holes of upside-down skulls (Šovkopljas 1972, Jelínek 1975: Figs. 384–386). The more complex huts come from Mezin and Meziriči, although there we have reason to doubt that the structure itself was self-supporting (Jelínek, Hanzálek 1987). What cannot be denied, however, is their sheer monumentality and emphasis on making an impression. We are speaking, for example, about hut No. 1 in Meziriči, with a hundred impressively arranged mandibles, or building No. 4, where the bones of various species are arranged along several metrical axes (Gladkih *et al.* 1984, Jelínek 1975: Fig. 392). The fact that mammoth remains here were not just for use as building material is proven by the ornamented skull found by the entrance to the 1st hut in Meziriči (Pidopličko 1969: Fig. 57) or the set of large decorated bones in the hut in Mezin (Pidoplichko 1998: Pl. 8 and 60, Bibikov 1981). Such buildings probably served social and ritual purposes and are referred to metaphorically as the cathedrals of the ice age. The overwhelming majority of round structures with fireplaces, however, tend only to be surrounded by carelessly strewn bones (E.g. Dobraničevka, Complex 3, Šovkopljas 1972: Fig. 4), which often do not even form a regular circle, let alone a real construction. This category also includes the hut in Milovice (Oliva *et al.* 2009), which is the oldest building of its kind (*Figure 2*). The huts in the Ukraine were built ten thousand years later, on average. It is these unclear cases, where the practical purpose of the mammoth bones (to put weight on the walls of the building?) cannot be proven, which can be thought of as having served a symbolical, or social function – displaying as many of the remains as possible of the most prestigious animal that could be hunted. What is more, not all these round structures are huts. In Khotylevo, amidst one circle made of mammoth bones driven into the ground there was not a fireplace, but an ochre blotch, by which lay a small pit containing two figures of women next to a mammoth humerus. (Gavrilov 2008: 22, Fig. 29). Although there is a fireplace in the middle of a circle of pits in two other instances (complex 1 and 2), the space around the fireplace did not suffice for activities and sleeping (Gavrilov 2008: 22, Figs. 26 and 27, Zavernjaev 1978).

Found near the large fireplace in Timonovka II was a series of twelve mammoth skulls which again did not belong to any dwelling (Veličko *et al.* 1977: 88), two similar situations are also known from Mezin (Šovkopljas 1965). In Kiev a concentration of skulls was located close to a large fireplace (Pidopličko 1969: Fig. 8 a 9).

The link between the huts and deposits of mammoth bones are those dwellings which use mammoth remains in a very chaotic (i.e. non-architectonic) way, accompanied by large quantities of other bones which have no kind of structural significance (e.g. the huts at Yudinovo, Polikarpovič 1968: 111, Abramova 1995, or the extensive structure with its fireplace and "tomb" in Kostěnki II, Boriskovski 1963, Oliva 2009: Fig. 5).

Generally found in the vicinity of huts and other round structures of the Ukrainian Epigravettian are pits, referred to as "meat caches". According to Olga

FIGURE 4: Milovice I (Břeclav distr.), accumulation of mammoth bones in Sector B.

FIGURE 5: Dolní Věstonice I. Grave covered with flat mammoth bones, we can see skull of female DV 3. Inserted: reconstructed portrait of the buried woman (Nerudová *et al.* 2019).

Soffer in ten settlements they numbered 1–12 per locality (Soffer 1985: 255). Unlike the larger and deeper irregularly-shaped pits we know, for example, from Kostienki I and Avdievo, these are smaller and shallower (less than 1 m deep), so could not have been used as dwellings. In fact, they are not similar to the real meat caches, which for example the Eskimos have been described as using (Binford 1993), in terms of shape (they are more regular with vertical walls) or of content (*Figure 6*). No analysis has yet been carried out into the content of the pits as regards the economy of the supplies or the meat value of the bones from hunted prey. It is very impractical to store mammoth meat, even on the bone, and most of the bones had been gnawed, so there was no meat on them when they were placed into the pits (Šovkopljas 1972). In the literature I have not yet come across a situation where a pit only contained the richest meat bones of an animal that was commonly hunted, e.g. a reindeer, or the carcasses of a few hares. Yet it is this kind of find that we would most expect to come across in real meat caches.

I. G. Šovkoplias (1972, 179) has stated that the pits in Dobraničevka were so tightly packed with bones that there was no room left for meat (the same applies to Kostienki). There are even circles of pits that do not belong to any dwelling. The pits also contained an abundance of tusks, despite the fact that in some settlements mammoth ivory was hardly worked at all (e.g. Dobraničevka: Šovkopljas 1972: 186; Radomyšl: Koulakovska, Nuzhnyi 2004: 92).

In addition to the dominant large bones, practically every pit also contained other objects, such as bones from small or tiny animals or often numerous stone tools (as many as 2,278 in Mezin), fragments of bone tools and weapons, ash, ochre, etc. One pit in this locality contained three intact skulls, two mandibles, five tusks, six flat bones (pelvises, scapulae) and five

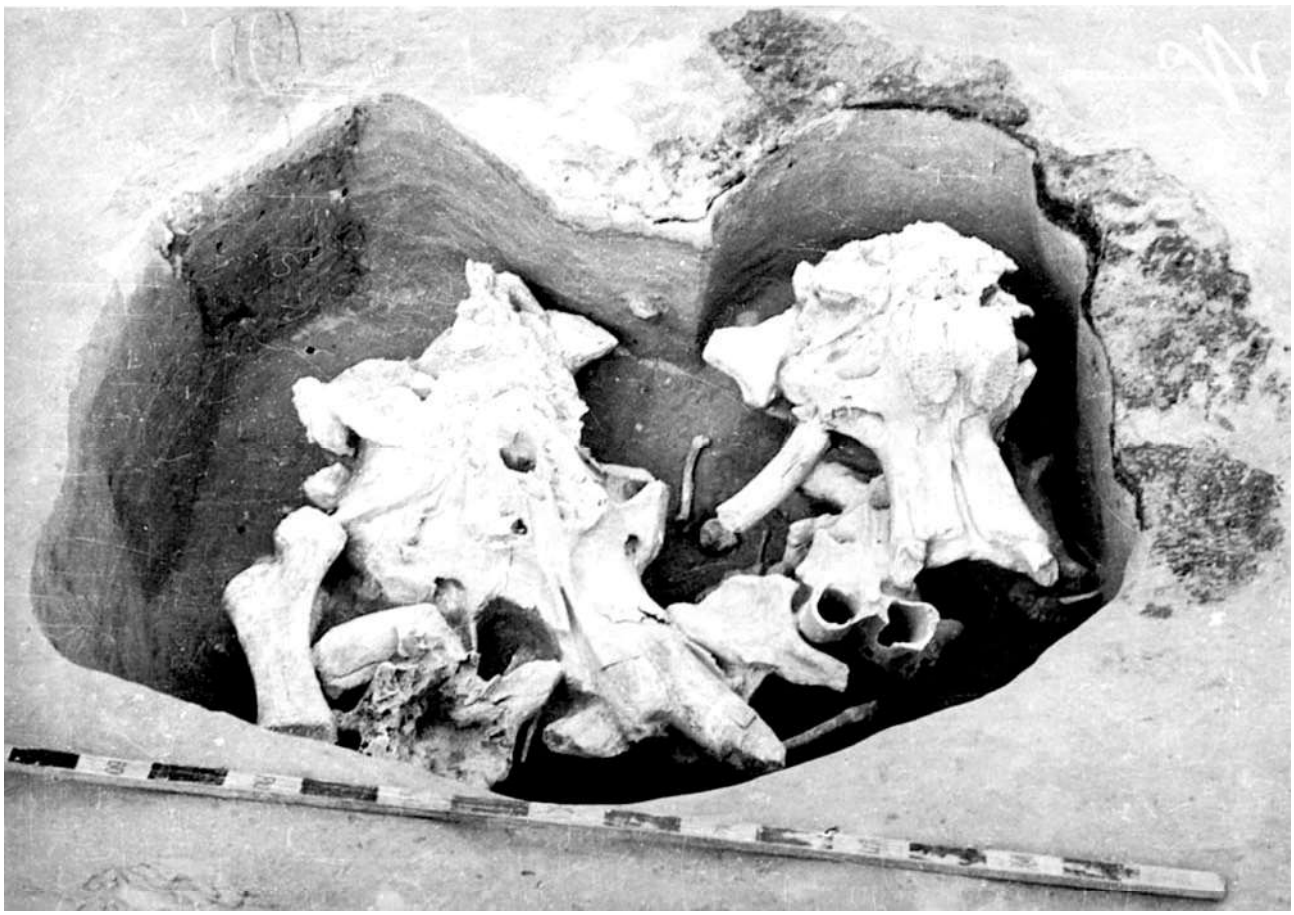

FIGURE 6: Mezin, "meat-cache" with mammoth skulls neat the Hut 1 (Šovkopljas 1965).

long bones (Rogačev, Anikovič 1984: 190). *Figure 6* shows Pit No. 1 with several skulls. In Avdievo mammoth bones were found mainly in pits, especially skulls and vertebrae, but also the skeleton (how complete?) of one large specimen. Lying at the bottom of the shafts were the intact skeletons of wolves (as many as fifteen), while only parts of wolf skeletons were found in the uppermost parts of the backfill (Grigoriev 2000: 312). As in Kostienki I/1, it is thought that people lived in these pits, which these authors doubt for the reasons given above (Jelínek 1975: Fig. 374–378).

We can, however, mention direct evidence of the further ritual use of pits. Found in Kostienki XVIII, not far from a grave containing mammoth bones, were pits as deep as 1.75m with mammoth bones placed in a vertical position, with rocks brought into the site and the remains of a *Plesiosaurus* (Praslov, Rogačev *Eds.* 1982: 189). Discovered in two pits around 40 cm deep in Yeliseevici underneath mammoth scapulae and together with mammoth bones and ash were lavishly decorated tablets made of mammoth ivory (one and six pieces respectively), which Polikarpovič compares to churringas (Polikarpovič 1968: 70–71). At the Upper Gravettian settlement in Zaraysk near Moscow a realistic ivory carving of a bison was found on a special "podium" at the bottom of a "typical storage pit", 60 cm deep. It lay below ochre sediment and the chest of the figure was pockmarked with the traces of blows (Amirkhanov, Lev 2000: 613–614). In other two "storage pits", statuettes of women were found lying below mammoth scapulae (Amirkhanov, Lev 2009: 292–330), as was the case also in Khotylevo (Gavrilov 2008: 64).

In our Gravettian, or Pavlovian, the only thing to fall into the category of such structures is the pit from Pavlov I, sunk 40 cm below the original surface and interpreted as a semi-undergound dwelling (Klíma 1977). The diameter of the bottom, however, is not even one and half metres, so the people who lived in it must have slept packed into a ball, with certainly no room for any other activity, such as work or coupling. It is also hard to suppose that the quantity of large bones found in the backfill served merely to weigh down the roof. Right at the top lay a complete reindeer skull and half a pelvis, while below this in the NW part there was a group of five tusks. By the wall of the SE part of the pit there lay two fragmentary mammoth skulls, with a third near the middle. Also found here were two mammoth scapulae, a large ulna, part of a pelvis, several molars, two pieces of limestone, and, in the lowest place, the bottom of a temporary fireplace. The artefacts included ten points made of mammoth ivory, one of which is complete, and a crusher made from a tusk. Separated from a total of 550 lithic pieces were 198 retouched tools.

Four pits with mammoth bones and reindeer antlers were discovered by S. Vencl at the Epigravettian site at Stadice in NW Bohemia (Vencl 2013: 89–92, Oliva, Vencl 2021). Once again, they are mostly non-meat bones, and also at the site there were six chipped industry hoards. One of these depots was stored in a pit with bones, while in another pit – apparently on the edge of the dwelling – lay 10 kg of red ochre. The clusters of stone industry were certainly not some sort of pagan reserves set aside for harder times. An analysis just completed has shown that the quality of the deposited artifacts is the same as that of the production zones around them, so it is not as if we are seeing any selection of the best or most useful pieces. Basically, these depots were used to store everything that was easy to pick up and carry, i.e. including fragments and waste, with the exception of very tiny chips. These depositions were undoubtedly related to the "added" symbolic importance of flint as the material of choice, just as the bones reflected the symbolic importance of the mammoth as the largest animal known at the time. Another interesting deposit, whether it was originally the backfill for a pit or a concentration on the surface, is the pile of mammoth mandibles, molars and tusks found in 1816 at Seeberg at Bad Cannstatt (Fraas 1866, Bosinski 1990: 146).

It is characteristic of practitioners of contemporary Palaeolithic archaeology that, in spite of the obvious lack of expected material, they interpret pits as meat storage pits. The lack of more precise ethnological analogies does not seem to worry them. Even if these pits, particularly those found in the Ukraine, originally served some practical purpose, the accumulation of large bones with ash, ochre, and various artifacts is a proof of the fact that at least in their latter phases they related to a particular treatment of the remains of the most prestigious hunting game.

In my opinion, the treatment of mammoth remains in the eastern Epigravettian became merely formalised. Whatever was supposed to be visible during the Gravettian (Pavlovian) in the form of piles, which were sorted to various degrees, lent a monumental air to dwellings, and whatever was hidden in marshy zones was placed in pits during the Ukrainian Epigravettian. The representative and spiritual meaning of the deposits was only intensified by the fact that they were arranged in a more distinctive manner.

As the symbolic motivation behind the accumulation of bones may to a certain extent be subjective and therefore variable, it would be pointless to give specific examples (cf. e.g. the oft-cited information with literature in Dehouve 2006, Friedrich 1941–43, 1943, Gahs 1928, Hamayon 1990, Holmberg 1925, Lot-Falck 1953, Pauslon 1963, Zelenin 1936). In general, one widespread attribute that is of importance to archaeologists is the effort to preserve the remains of what were usually the main or the largest (or most dangerous and hence most prestigious) animals that were hunted, motivated by an idea of rebirth, or a fear of extinction. Most of the examples involve treatment of the remains of a bear, here also due to its important role in the mythology of the northern people (for a summary, see Pacher 1977). Bones are hung in trees, placed in water, burned, sorted and arranged in visible groups, etc. Just these few examples show the diversity of the archaeological situations they could have originated in – sometimes there is an attempt to display a bone, other times to hide it or remove it from the world for good. In many cases these were not complicated ceremonies, but more a kind of observance of good morals. In a highly competitive society, as a community of mammoth hunters certainly would have been, it is plain that piles of bones must have represented the group's success at hunting, and that some large bones could have been dragged there just to increase that impression (Oliva 2000a). The secret society of the Barabaig people in Tanzania go on very risky elephant hunts, with the best hunters returning to be heaped with gifts, prestige and sexual favours. This is why they bring the tusks found by dead animals into their camp (Aposporos, Nicolet 2004).

FIGURE 7: Dolní Věstonice I, accumulation 6: Large mammoth bones on a thick layer of bone ash. Photo K. Absolon.

Of course, we cannot rule out the possibility that the essentially symbolic and prestigious significance of the accumulations of bones at mammoth hunter settlements also served a practical purpose. These symbols of success become of extra importance particularly during periodic meetings with allied groups, which could have taken place during mammoth hunts. In this case the piles of large bones could have been used to mark out territory – indicating that the hunting ground was reserved for some especially proficient hunting community. This is perhaps related to the fact that the two largest accumulations of bones in Central Europe – Klíma's "dumping ground" in Dolní Věstonice I and the pile in the locality Kraków-Spadzista B – were situated directly on the remains of a previous settlement (Kozłowski 2004: 62). The thick layer of bones in Dolní Věstonice lay over a workshop with radiolarite debitage (Klíma 1969: 33). The position of ash and burnt loess directly below dense concentrations of bones are also described in accounts of the Absolon sectors in Dolní Věstonice (*Figure 7*; Oliva 2014: 61–62, 68–69), as well as from Předmostí and Milovice. This indicates that many places with accumulations of mammoth remains were previously inhabited (Oliva, 2021).

Although it is likely that the bulk of the bones from these accumulations is actually made up of cooking waste, their position, size and the way they are formed are undoubtedly linked to something other than purely natural or economic factors.

Evidence from graves and thoughts about burials

What was definitely associated with certain preferred places was inhumation, i.e. graves of whole bodies dug into the ground. These indicated a more inward relationship to the land, as only the members of a special group knew about the *underground* graves of their ancestors. We have to bear in mind, however, that such graves do not represent the basic burial rite of the Gravettian people, as it might seem to be the case from a purely archaeological perspective. Archaeologists generally consider a grave (or even a "burial") to be only the pious interment of the whole body or the ashes of the deceased in the ground. These in fact extraordinary graves (those sunken into the ground) appear so typical that the isolated human bones are explained as being the remains of disturbed "burials", which obviously implies underground graves. In fact, almost *all* anthropological material originating from Palaeolithic cultural layers comes probably from burials, either surface or underground ones.

The uneven way in which the traces of various types of behaviour have been preserved has distorted the traditional understanding of Palaeolithic burial rites, a fact also influenced by our own, originally Christian culture, which only permitted inhumation, with cremation not allowed until the last but one century. When scholars of old wanted to present Palaeolithic man to the public in an acceptable way, they had to show how he piously (ideally like us) buried his dead – in this case, the archaeological invisibility of traces of prevailing burial rites was a welcome help.

From the small number of Gravettian inhumations, a number which is wholly disproportionate to the extent of settlement at the time, it is clear that the fundamental burial rites of the Gravettian people did not leave any clear, easily interpretable traces and still remain a mystery (Oliva 2013: 279 sq.). Throughout the Upper Palaeolithic the majority of primary graves were at or above ground level (in trees, on wooden platforms, etc.). The most well preserved and most easily discernible are obviously the finds of whole skeletons, protected by a layer of earth and here and there accompanied by some sort of gifts. These occur only very rarely in the Palaeolithic (Dolní Věstonice I – the grave of an older woman DV 3, DV II – the triple grave of younger individuals and the inhumation of an older man) and constitute a real change from traditional burial rites. In our Gravettian these were most often people with some sort of physical defect, and these individuals like the others might have also suffered from a psychic disorder. Besides the aforementioned ways of treating bodies, it is possible that primary or (more probably) secondary burials of just parts of the deceased, e.g. the head, also took place. Some skulls and bones evidently bear traces of fire (Dolní Věstonice 4, 17, 23, 28; Klíma 1990).

No deeper grave pits are known from the Pavlovian or other Palaeolithic cultures (at least not in Central and Western Europe). Entire bodies were laid in burial beds just a few centimetres deep and covered over with a thin layer of clay. We may therefore assume that the settlement was abandoned for some time after this act. The ceremonial burial of the whole body of an important or somehow outstanding member of a group, or the selected bones of ancestors, obviously emphasised the link to the place these people inhabited and symbolically established it as a place they would return to again and again.

The grave of three young people from Dolní Věstonice II (*Figure 8*) was surrounded by burnt pieces of wood. Whether the man on the left (13) died from

a lance wound to the pelvis and the man on the opposite side (14) from a wound to the back of the neck, as assumed by Bohuslav Klíma is a question that has not been answered (Klíma 1995), but whatever the case, all these people died at the same time. The cause of the special "scenic" way in which this trio was buried could be the relationship of both men towards the middle pathological individual of uncertain sex (DV 15), who suffered from feverish condition of contagious origin (judging by dental hypoplasia) and deformations of femur, scapula, and pelvis (Vlček 1991: 66). The person's pubic region is accentuated with an ochre blotch and found by the body was a flint knife and several sharp chips. The skulls of the two young men bear traces of older and recent blows, albeit not necessarily mortal. If the three departed this life due to violence, the uncertain sex of the individual in the middle has surely played a significant role.

In certain archaic societies, people of ambiguous sex attract special attention and often become transsexual shamans. The heads of all three of these corpses were smeared with a mixture of ochre and mud, and both men had diadems made of bored fox teeth and small Tertiary shells. Not far away on the western slope Jiří Svoboda explored the grave of an older man (DV 16), which lay by a fireplace marked out with stones (Svoboda, Vlček 1991). A total of 3 bored fox incisors were found by the left elbow and pelvis. Numerous animal bones were laid around the body, the nearest being almost complete skeletons of hares and polar foxes, with bones of wolves and common foxes concentrated close by. Remains of bear, lynx, and wildcat were only represented by teeth and autopods; hence, these might have been hair skins. The animals were perhaps part of offerings or protective spirits of the buried man (Nývltová-Fišáková, Sázelová 2008). The burial of a woman aged around 40 from Dolní Věstonice I was covered by two mammoth spatulae and a pelvis (Klíma 1963). In her right hand the woman was holding ten unbored fox incisors and near her left hand were several small paw bones and part of the pelvis of an Arctic fox. The limb bones lay so close together that at the time of the burial they were probably not wrapped in a decent layer of meat. We cannot rule out the possibility that this was a so-called deferred burial, i.e. people waited until the snow melted and the ground thawed. The slight asymmetry of the woman's face (*Figure 9*) was probably the result of an

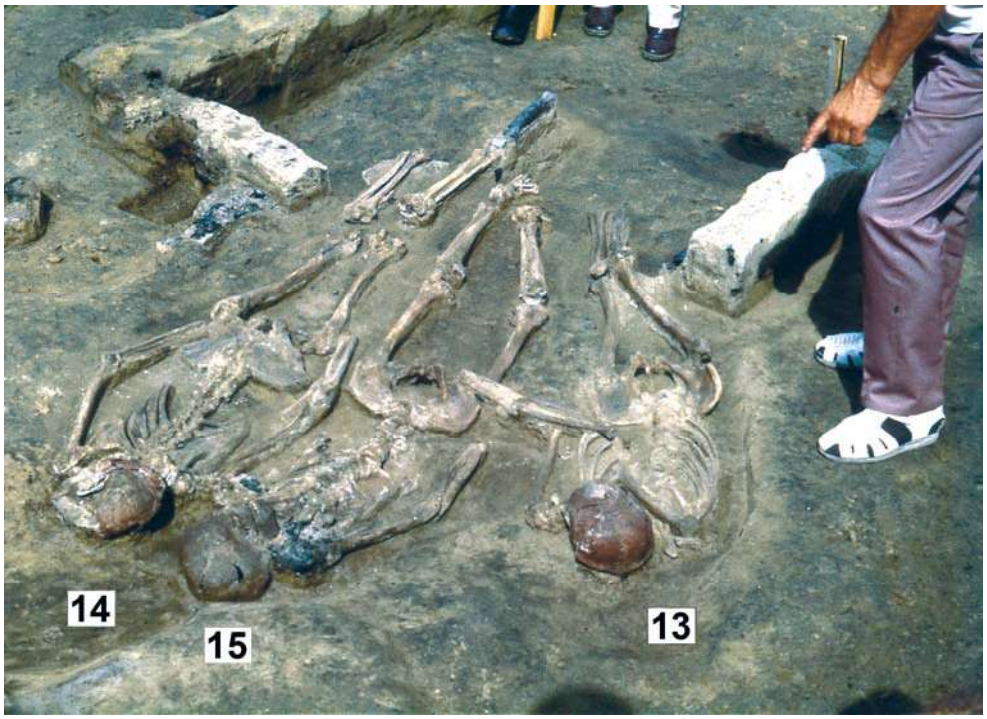

FIGURE 8: Dolní Věstonice II, grave of two or three men (the sex of the central individual is uncertain).

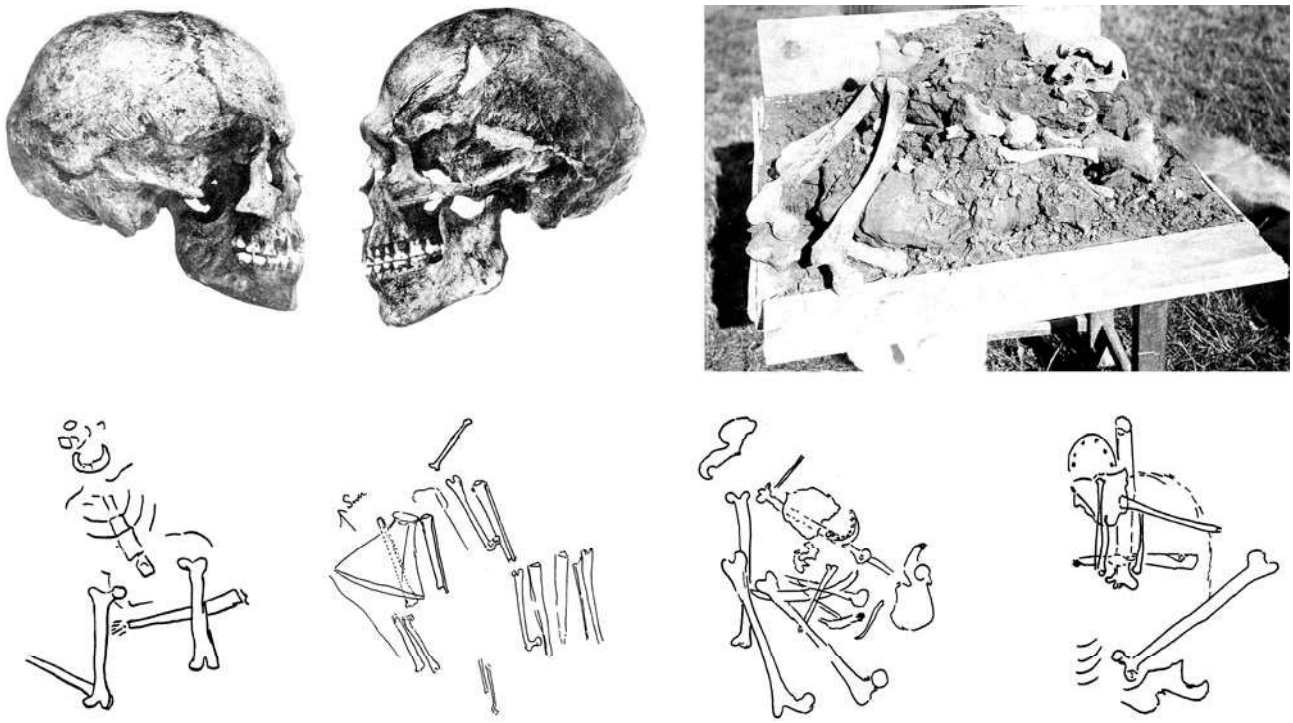

FIGURE 9: Předmostí. Above: female Skull 4, male Skull 3 and male Skeleton Př 9 (?), taken *in situ* from the so-called mass grave in Předmostí I. Below: groups of human bones after Maška's diary. B. Klíma secondarily attached these to the "individuals" fit together later on a hypothetic basis.

injury at an early age (Nerudová *et al.* 2019). At the age of 9–12 the girl's jaw was broken, and as she grew up a substitute jaw developed, although it was shorter and so affected how her face was formed (Ramba 1988).

Both graves from Krems-Wachtberg undoubtedly count among primary burials as well. In the first rested two newborn babies in a sack containing red ochre, in the other one child (Einwögerer 2005). These and other buried children (e.g. those from Sungir) bear no traces of pathological phenomena typical for the buried adults. Interment of children probably has not been tied to such stringent rules, and has not required reburial, since with primitive people children are not yet integrated into the society (Hertz 2004: 210)

One mystery is the grave of a woman from Sušilova Street in Brno-Žabovřesky, sprinkled with red ochre, identified as Brno 3 (Absolon 1929). The buried woman had an asymmetrical face, like the woman from the grave in Dolní Věstonice. The grave cannot be dated directly, as it did not contain any gifts and the bones had not been preserved. The skeleton lay in a river terrace probably from the Rissian Period (i.e. at least 120 thousand years ago), into which she must have been placed from above. However, no disturbance of the overburden was found.

For some significant reason, through the primary burials the exhaustive listing of which we have just given the Upper Palaeolithic humans diverted from the standard rite. That is to say with hunters – gatherers the primary burials only preserve the earthly remains until the time of their secondary deposition, and only through this the deceased person joins the ancestors, and his or her soul leaves this world (Kandert 2010: 38). Primary inhumations are normal to our cultural tradition, but abnormal in the Palaeolithic. Contrary to the current practice (e.g. Henry-Gambier 2008), exactly their existence should be evidenced much more meticulously than that of secondary graves.

Indeed, some finds of selected human remains which were earlier considered to be cases of primary inhumation (i.e. when the body of the deceased was immediately laid in the earth) now seem to be secondary graves.

The remains of an adult male from Pavlov I were also covered by mammoth bones (Klíma 1959). A skull (without the facial part) lay below a mammoth molar and

there were long limb bones under a scapula, while the femurs were facing the opposite way round. This could have happened when the deceased was being placed into a severe crouching position, although it would be strange if solifluction that removed 90% of bones from the grave have saved exactly this disposition as well as the connection of the mammoth molar with the human head.

Nowadays, however, what seems to be even more important is the find referred to as Brno 2, as it gives us an insight into the spiritual world of the mammoth hunters (Makowsky 1892, Jelínek *et al.* 1959, Oliva 2000b).

In September 1891 workmen digging a drain on Franz Josef Strasse (what is now the crossroads of Francouzská and Přadlácká streets) came across a cluster of large animal bones and some unusual objects. They drew this unexpected discovery to the attention of Prof. Alexander Makowsky, who then excavated large parts of the find site. The bones and artifacts lay in sandy sediment on the surface of a river terrace under 4.5 metres of loess loam. Radiocarbon dating performed in an Oxford laboratory determined its age to be 23,680 ±200 years (Pettitt, Trinkaus 2000). Lying under a 1-metre long tusk was a whole mammoth scapula and next to it a human skull with other human bones. From the reddish sediment in the vicinity of the skull Makowsky collected around 600 dentalia, which were accompanied by rhinoceros ribs as much as a metre long, elaborate disks made from a variety of materials, and the figure of a man. Just prior to this the works foreman had rescued the complete skull of a rhinoceros, mammoth tusks, red-dyed bones, fragments of disks, two larger stone rings, and a rounded stick made from a reindeer antler. None of these items can be said to serve a practical or decorative purpose. There is a complete lack of chipped or normal bone industry and no cinders from any possible fireplaces were found in the vicinity, explored to a distance of 2 metres from the find. A meticulous examination of a deep construction pit in 2018 also did not produce any evidence of a dating back to the Palaeolithic (Zůbek 2020). The grave – or possible deposition of ritual props – also contained the remains of a prominent individual – it lay completely on its own on the river terrace. Two stone annuli are reminiscent of the discs used by Siberian shamans, which conceal a complex cosmological symbolism (Oliva 2000b: Fig. 2). The carefully worked disks made from various materials (ivory, mammoth molar, bone, red limonite, claystone) were certainly not used for purposes of ornamentation, as there is no way to fasten or hang them (Oliva 2000b: Figs. 3–4, 2015: Figs. 130–133). Also, the faint cuts on the edges of the mammoth ivory objects are scarcely visible to the untrained eye. The round shapes with deep grooves probably symbolised cosmological phenomena and sexual attributes. These are primarily requisites of some sort of magical ceremonies. The most famous part of the equipment was the figure of a man in the form of a puppet, carved from a mammoth tusk (*Figure 10*; Oliva 2015, Figs. 127–130). Similar carvings tend to be shamanic props such as "spirit-catchers", etc. In the context of the find, the worked reindeer antler could have been used as a drumstick. Almost all the bones of the buried man showed signs of a painful inflammation of the

FIGURE 10: Brno 2, male idol of ivory.

periosteum (Oliva 1996: Tab. 2, 2000b: Fig. 1). We know that an important part of the mental preparations of the Siberian shamans involved overcoming pain. On his way to the other world, the deceased was accompanied by a representative selection of the bones of the largest animals that existed at that time – mammoths and hairy rhinoceros.

Since the preserved skeletons feature a number of bodily defects, it is unlikely that the main purpose of rare burials into the ground (apparently with the aim of preserving some individuals "eternally") was worshipping the ancestors. Moreover, none of these graves contains gifts, which would symbolize the deceased person e.g. as an outstanding hunter or tool manufacturer. Rather, the funeral movables are always more likely indicative of the transcendental sphere, which is probably also related with the unfavourable state of health of the dead. Such fated people enjoying a significant status in the ritual sphere presumably used to be interred to maintain their magical faculties exactly at the locations that have been occupied by the group either frequently, or for a longer time.

If at least 99% of the Gravettians were primarily buried otherwise than underground, there must have been a huge quantity of bones emerging from their disintegrated bodies. These were surely handled afterwards, and some might have been interred.

As a good example of such a behaviour could serve the huge deposition of selected human bones with some remains of disarticulated bodies from Předmostí, traditionally thought to be a mass primary grave (Maška 1895, Velemínská, Brůžek *Eds*. 2008). K. J. Maška, a grammar school headmaster, was a creationist, and, at his time, he had no idea about the funeral customs of Palaeolithic people. In an endeavour to present them in as positive light as possible, Maška assumed they laid their dead to rest in a "proper" manner, i.e. by inhumation of complete bodies, and this projection of the period still persists in literature to this day (Henry-Gambier 2008, Svoboda 2008). Nevertheless, serious facts attest against this. All eighteen individuals are represented by a piece of the lower jaw or skull, and most of them also by long bones from the arm and leg. A number of pelvises, scapulae and whole sections of the spinal column were also added. However, there is a complete lack of ribs. The most complete set of remains is the male skeleton number 3, the skull of which had distinctively ancient features. Contrary to primary inhumations and isolated secondary burials (Brno 2) there are no traces of diseases.

No answer will ever be found to the question of whether and, if so, how these bones related to one another (*Figure 9*). However, regardless of this, nowadays we can review what bones lay in the grave and were found around it (Oliva 2001). The unequal composition of these bones is in sharp conflict with the established opinion that these were burials of whole bodies which were later torn apart by animals, as recently indicated by Jiří Svoboda (2005). It is true that the higher representation of skulls and long bones is typical both for secondary burials and for old, careless excavations or incidental finds (Henry-Gambier 2008). Nevertheless, Maška (1895: 5) emphasizes that even the tiniest little bone has not escaped his attention, and this is reflected by 93 small phalanges (Oliva 2001: Table I, 2002), so that in this case we have to incline towards the first option. The accumulations of fox skeletons in the grave as mentioned by Maška and Svoboda may be interpreted in a number of ways, but we can hardly claim that these are the remains of the very animals that were responsible for plundering the grave. Also, why would an animal (or geological processes at the foot of the rock) systematically remove all the ribs, most of the pelvises, yet leave almost all the mandibles, most of the long bones, many tiny bones from the hands and feet, and a lot of cranial parts? We also cannot help asking, why the skeletons of the carnivores have been preserved in a more complete state than those of the humans. The answer to this probably is that the latter have been sorted beforehand.

Although we cannot rule out the possibility that this deposition was in some way disturbed, the choice of bones and the body parts that were found imply that the overwhelming majority of these bodies were the result of the secondary deposition of selected remains. The fact that nowhere does Jindřich Matiegka doubt that there was a link between the long bones and the reconstructed vertebral columns (Matiegka 1934, 1938) leads us to assume that these parts could have belonged together and were preserved as being of special interest to prehistoric man. As regards the smaller "non-representative" bones, when the body decomposes naturally it is these bones that remain anatomically linked for the longest time, as they have the strongest ligaments (e.g. vertebrae: Duday *et al.* 1990, Micozzi 1991). This could also explain the abundant occurrence of metacarpals and phalanges from the hands and feet. It might seem strange that entire vertebral columns were treasured next to skulls and long bones. It should be pointed out here that in

certain archaic philosophies the backbone is seen as the main channel for vital energy, which otherwise is actually not so far from the truth. The special role played by the backbone in the ideology of the Gravettian people is proven by a find from Weinberghöhle near Mauern in Bavaria, where lying by the walls of a cave there were the long vertebral columns of 6 young mammoths and, some distance away, a whole mammoth skull together with tusks and scapulae. Everything had been sprinkled with red ochre and the remains were accompanied by mammoth ivory beads and a selection of retouched tools (Bohmers 1951).

At Předmostí some bones had been burnt and there were large quantities of ash in a pit. Besides the passage in Maška's diary (Absolon, Klíma 1977, Oliva 2001, Svoboda 2005) this is also confirmed by a set of documents recently discovered in the estate of the late K. Absolon. These are the results of an inquiry which Martin Kříž made amongst the eye witnesses to Maška's find. The most interesting answer is certainly worth reading, and we present it here in full, including grammatical errors:

František Prášil states:

I don't know what day the skeletons was found I was working with the director (K. J. Maška) *alone at the layer while the other workers were a bit of a way off.*

The find was unerthed towards evening and work continued carefuly, the bones were not lying regular-like and were scattered about, so some skulls weren't where they should a have been but were all over the place, bits in pieces behind skeletons and amongst skeletons. The jawbones were not lying but were scattered around, the other parts of the skeleton were not arranged in a regular fashion, so that some hands was fingers and the fingers of other hands was a long way off.

I noticed how some bones was lying on black coal, the director told as how this were charcoal, and I said how they'd been baked and eaten.

The layer were not as hard as that one found today. I didn't pay enough attention to the layer as I would if I known how important it was.

František Prášil, 18th September 1894, in Předmostí.

Signed as witnesses:

Vozihnoj František, teacher, Florián Mackovík, Mayor, Josef Juračka, alderman.

Some of the remains in the grave had evidently come into contact with fire, as we know from a number of Maška's diary entries about cinders on the skeletons and under bones, and burnt areas. Ethnographic evidence of similar rites involving small fires made on human remains had existed already at Maška's time (Preuss1894:198–199). The "huge black layers" and the massive sunken fireplace between the grave pit and the actually hollowed-out rock, recorded in the diary on 27th August, could have been linked to the special role of this space, just like the *granite* blocks, which cannot be explained as having fallen from the *limestone* rock (as claimed by Svoboda 2008). The human bones were covered by a thick layer of limestone scree, on the edge of which were lying three mammoth scapulae and many fox bones. As in the woman's grave from Dolní Věstonice and the male burial from Pavlov, cuts had been made in one of the scapulae. Fortunately, Maška's epochal find was assessed in great detail by the country's leading anthropologist, Jindřich Matiegka (1934, 1938). At the end of WW II all the skeletal material was destroyed in a fire at the Mikulov Chateau.

EVIDENCE IN THE FORM OF ART

We can also get an insight into the spiritual way of thinking of the Pavlovian hunters through their art, in which the Gravettian is exceptionally abundant. Yet our attention will not do full justice to this art, since the complete documentation and a number of interpretations can be found in a specialized monograph (Oliva 2015). Besides those cultures, regions and localities with lavish displays of art, there were others (many more on a worldwide scale) which were accompanied by almost no creativity, or at least not in materials that would persist. The natural and socio-economic conditions of various "artistically-creative" cultures differed more than the regions or localities of one and the same culture, of which some provide art and others do not. This indicates that besides the importance of religious and social factors, at least an equally significant role was played by factors that were subjective, or purely "*cultural*" – the individual ability to create things and the collective ability to evaluate a piece and to rank it within some sort of rating system. The general spread of art in the Gravettian is undoubtedly linked to the increasing need for symbolic communication, part of which is also the generalisation of imports of good stone raw materials. In the earlier and middle phases of the Gravettian, articles of mobile art occur at most central settlements and a number of smaller sites. In the later phases (Kostienki–Willendorf culture, 24–20 thousand noncal. years ago) the amount of aesthetic expression diversifies considerably – some central settlements in

Eastern Europe are still rich in such art (Kostienki, Avdievo, Gagarino), while Central European sites yield only isolated figures of women (Willendorf II, Moravany nad Váhom, Petřkovice), or there is a complete lack of small art (Kraków–Spadzista).

However, macroregional differences can also be seen in the Gravettian world, too: cave wall paintings and carvings occur only in Western Europe, in the north of Spain and the south of France, to be specific, whereas geometric abstract carvings on bones tend to be typical for Central and Eastern Europe. The unifying link, distributed throughout Europe, and reaching out to as far as Siberia (Mal'ta, Buret), are the statuettes of women, usually naked, known as "Venuses". Many authors have dwelled on the explanation of their significance. Frequent occurrence of Venuses in the Gravettian suggests they should be based on one generally disseminated idea. Contrary to the representations of women in the Magdalenian later on they are linked together by three-dimensional rendering, but it would be difficult to find other common features in the Gravettian Venuses except perhaps their missing faces – as these are never depicted, the purpose surely was not to create images of concrete women. This does not mean, however, that the artists have not captured certain age, somatic, and situational types that had concrete models in living humans. Some sculptures represent young women, even girls (Petřkovice, Jelisejeviči, Malta in Siberia: Delporte 1993: Figs. 156, 200, 200), some of which can bear either moderate (Petřkovice, Kostěnki I, Avdievo: Cook 2013: 83–85) or conspicuous marks of pregnancy (Grimaldi, Kostěnki, Gagarino). There are reflections that some statuettes of slim and obese women with distinct genitals and rounded bellies or those sitting may represent women prior to childbirth (Monpazier: Duhard 1987, Clottes 2008: 74) or in its course (Sireuil: Cook 2013: 96; Pavlov: Svoboda 2011: Fig. VII.4; Kostěnki: Svoboda 2011: Fig. III-46, Iakovleva 2013: 265, Kuczyńska-Zonik 2014: 25). In the cases of ambiguous statuettes from Tursac and Grimaldi (the so-called Hermaphrodite from Barma Grande) artists might have sculpted the emerging babies (Duhard 1993, Cook 2013: 94–96). Sometimes the gravid bellies are somewhat brutally covered with a number of traces of blows (Svoboda 2011: Fig. IX: 38–39); this can be evidence of both emotions that are related with pregnancy and of – in some concrete instance – an unwanted expecting. In Kostienki I the central fragment of a deliberately broken limestone statuette with a large belly was placed into a small pit (Praslov 1993, Cook 2013: 81). A band above the belly should probably assist in childbirth, because as one worn above the breasts as we know it from other statuettes from this site it would be placed too low. On the contrary, in connection with a stooped figure a conspicuous belly can also be a mark of old age (Gagarino: Tarasov 1963, Delporte 1993: Figs. 189–190, 192) or steatopygy, if it comes together with hypertrophy of buttocks, even in women of young appearance (Savignano, Grimaldi, *La Polichinelle* from Barma Grande: Cook 2013: Fig. 41). Only the remaining group of the most classic, but perhaps not most numerous Venuses depicts fat women of excessive forms, in whom corpulence masks the possible signs of pregnancy. Due to their build raised in the middle only these statuettes fulfil the presumed rule, according to which Gravettian Venuses can be inscribed within an upright trapezium (Leroi-Gourhan 1965: Fig. 52). This impression stems from just the best-known and mostly also earliest discovered statuettes (Lespugue, reliefs from Laussel, some sculptures from Brassempouy and from Grimaldi, Savignano, Willendorf, Dolní Věstonice I, Moravany, a number of carvings from Kostienki and Avdievo and perhaps the very fattest ladies of Gagarino nad Khotylevo: Delporte 1993: Figs. 189, 201–203). All of these statuettes stand out with their ample breasts, but only a part of them have primary sex differentiation attributes elaborated in detail. At the place of their pudenda the Venuses of the Dolní Věstonice style feature deep horizontal grooves that illustrate pendulous bellies (Absolon 1938: 85 sq., Oliva 2015: Fig. 26). In these Venuses the real, albeit perhaps rather rare physical property prevailed over the depiction of genitals and became a local code. This would definitely not happen had the sense of the sculptures been primarily sexual or related to fertility.

Further reflections on the semantics of female sculptures require mentioning a few generally known facts, which are often not taken into consideration. Admittedly all things erotic in women can also be symbols of fertility. This is merely because the organs on which libido concentrates are the same from which the lives of newborns originate and are maintained. Many primitive peoples do not realize the link of procreation with the preceding sexual experience (von Reitzenstein 1931: 95–96). In these cases an artefact of a phallic shape would not be a symbol of generation, but only of sex. Even in women it holds, however, that not all that is linked with procreation (e.g. signs of heavy pregnancy) also has an erotic appeal, just as these characteristics, although unequivocally expressed

do not need to be related with their cult. Quite a large number of Venuses show apparent signs of gravidity or even childbirth, but this is by no means evidence of the existence of *adoration* of fertility at a symbolic level. Pregnancy and motherhood are the most important matters of female world, whereas the *cult* of fertility is more likely a male construct of a later (Neolithic?) origin. Given the nomadic way of life of hunters excessive fertility in women was hardly desirable; fertility of game was more important. Although breasts can be related with sex, i.e. male point of view, in connotation with pregnancy breast-feeding suggests itself as a more likely option. After all, it is only a depiction of the viewed reality like with the primary sex differentiation attributes, not always represented at that. A conspicuous characteristic of most of the Venuses is obesity to adiposis. In an ice age society exposed certainly at least to occasional shortages obesity may be representative and attractive in its own way (Frisch 1988), not only for men (rather exceptionally in their case), but also for women. Many traditional societies, e.g. in Africa, nurture exceptionally fat women, who are even incapable of moving around without someone else's help; they drink only sweet milk instead of water and sometimes meat soup (von Reitzenstein 1931: 122). A fat woman is a symbol of affluence; sufficiency of fat facilitates survival through periods of shortages and is important for pregnancy and during motherhood (Trinkaus 2005: 269). Faithfulness of their features in the sculptures proves that such women existed also in the Gravettian; without doubt they counted among those people who remained at the base camps throughout the year. This fact itself signified maybe a rather uncommon phenomenon, encountered by other Gravettians quite rarely; consequently, the social standing of these women might have been even more superior (perhaps ritualized).

Therefore, all of the mentioned typical parameters of the Venuses are suggestive of the phenomena characterizing various stages of female life: girlhood, sexual life, motherhood, well-beeing during ripeness, old age. They represent a female ideal of a reliable mother-nurturer and care-giver rather than aesthetic, erotic, or procreative ideals to which only some characteristics correspond and others contradict. Some of the statuettes may have served as amulets to be worn (i.e. to ensure plentiful breast milk), but others were hidden in shallow pits and even fireplaces. The situation of the Venus of Věstonice in the central hearth may either be primary (in which case she could be of "focal" significance) or secondary, but hardly random. If the Venus was supposed to be destroyed in the fireplace, we can see a connection both with deliberate destroying of flint tools and cores in the same hearth (Absolon 1938: 94, Oliva 2014: 52) and with smashing and battering of the statuettes of pregnant women from Kostienki. Singularity of an object always leads to exceptionality of its destruction. They never occur in graves. Thus, in the deeper ideological sphere, they could symbolize the ancient continuity of life (not just human?) and the legitimization of the female, life-giving element as the counterpoint to death. It might have not been an exceedingly sacred object but also not quite common one. Certainly every woman did not own a symbolic little figurine, since otherwise a fragment of some sculpture would have to be found at the majority of the Gravettian settlements. On the other hand, scarcity of Venuses is largely a misleading impression. Only the best-known are rarities, because they are technically most demanding and artistically most advanced specimens, and this can be linked with an absence of corresponding capacities in the vast majority of humans. Wherever it was possible to apply a simpler technology, e.g. clay modeling at Dolní Věstonice or carving into a soft stone in Kostienki, there is a greater number of statuettes and their fragments. It was not at all places that people deemed it necessary to embark upon such activity; thus the confidence in the wholesome powers of similar idols or amulets must have been just alternative.

Personally, I consider a certain "double reading" of the statuettes from Dolní Věstonice (Kehoe 1991, Svoboda 1986, 2007; 2011: 235–237) not too credible. This concerns the proposition that, alongside the female element, the Venus of Věstonice (Oliva 2015: Item 26 in the catalogue), the "stick" figure (*Figure 11: 5*) and the beads (*Figure 11: 2–4;* o.c. Items 90–97) express the male element as well, either in the form of a thorn (artefacts of mammoth ivory), or in the shape of the head (the Venus and other similar fragments). However, the thorns are too small and marginal compared to the breasts, a fact which denies the reproductive importance or the usual imposing aspect of penis size. The reconstructed top part of the "stick with breasts" was probably drilled to form the eye of a pendant (just as the so-called fork, *Figure 11: 1*), and the heads of the Venuses always bear several non-anatomical holes at the top but not at the urethral orifice. Further, all suggestion of the glans penis is absent. Had the primeval man wanted to express the male principle of the same standard as the female, he

would have equipped it with substantially more marked characteristics. The cuspate head of the Venus from Savignano in Italy usually mentioned in this respect again does not resemble penis very much (Delporte 1993: 109). The headless and armless Venus from Tursac has a kind of spike in its lower part that might have served for sticking into clay (Delporte 1993:57, Jelínek 1975: Fig. 617). Should the spike represent phallus, it would again have no glans and be in a downward position. Newer interpretation says it is a woman just giving birth (see above). Double stone sculpture of a woman and a man (?) originates from Grimaldi (Mussi 2001: 261), from where also a shapeless carving of a woman with two heads that probably form an eye of a pendant was published (Bolduc *et al.* 1996, Svoboda 2011: Fig. V.36).

Peculiar finds from Dolní Věstonice I and Pavlov I are the simple, yet often very accurate carvings of animals in fired clay. According to Bohuslav Klíma, there is a predominance of figures representing bears, followed by a lion, a mammoth, a horse with an owl, a wolf, a rhinoceros, and a fox (Klíma 1979: 326). Particularly successful examples include the heads of wild beasts whose eyes are depicted with dashed lines, although their bodies have never been found; they were probably never fired and so soon fell apart. On the other hand, we know of a series of broken-off legs with feet, which never occur on more complete items (Valoch 1996: 140). Interpreted as proof of the hunters' magic was the deep incision in the heads of some of the feline predators (e.g. Oliva 2014: 95), which were obviously not species which were hunted out of necessity. Jan Jelínek assumes that the animal figures were deliberately destroyed, both after being fired and before, as some show signs of impact in their sculptural form (Jelínek 1988: 209). An even more attractive hypothesis in support of the hunters' magic was presented by Pamela Vandiver (*et al.* 1989): the figures were supposedly deliberately fired before they were completely dry, so that when they were fired they would explode, enhancing the magical effect. Here we should

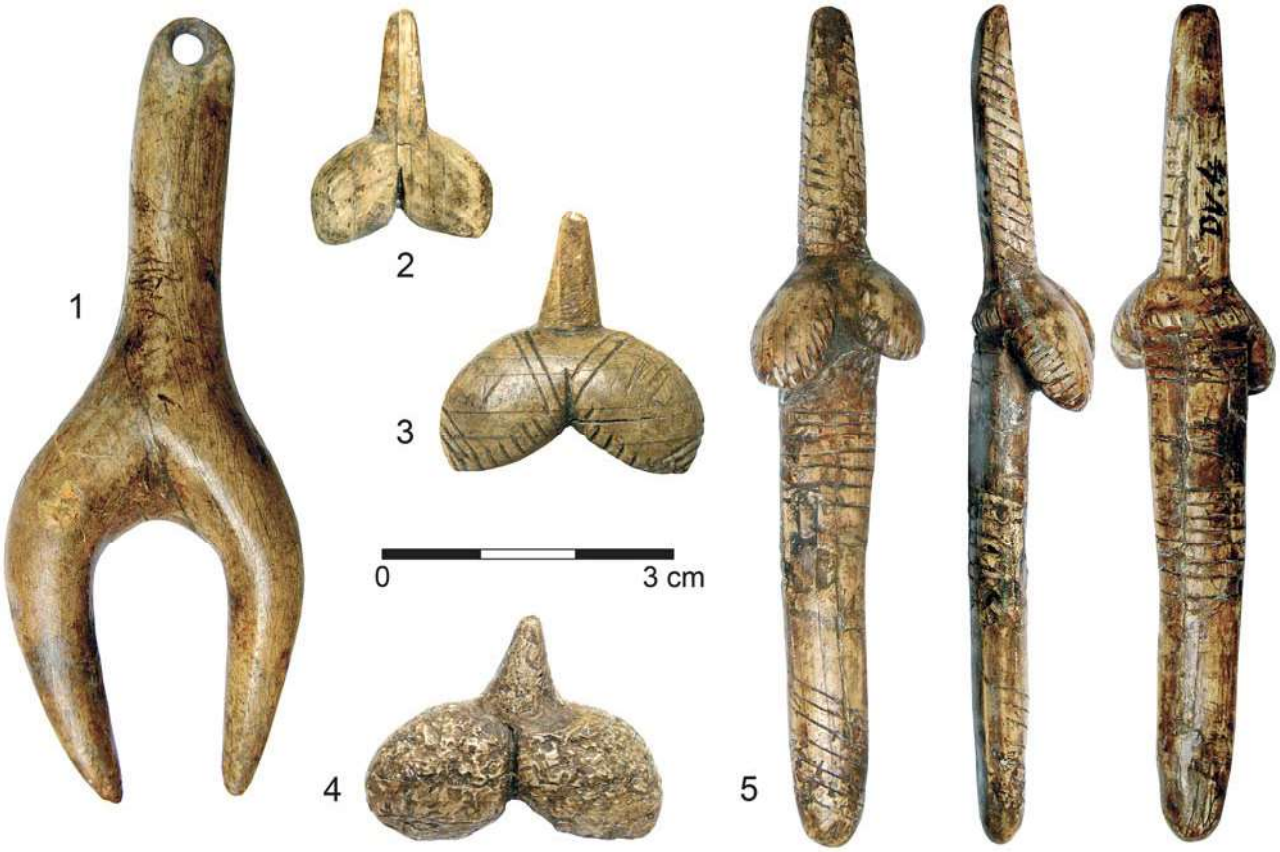

FIGURE 11: Dolní Věstonice I – gynaecomorphic ivory pendants.

add that in our experiments, carried out in 1988 in Milovice together with a graduate in applied ceramics and an artist expert in the manufacture of small figural pottery, despite all our efforts most of the figures fell apart as they were fired.

Whether ceremonies of destruction took place or not, most of the animal figures and mainly the simple modelled torsos were found in the vicinity of fireplaces, which in some places resembled a kind of hearth or kiln. The simplicity and fragility of these figures imply that they were probably ceremonial props intended for use by the broader populace.

The last important group of Pavlovian art, although scarce in numbers due to the complexity involved in making them, consists of figural carvings. From a technological viewpoint these can be divided up into silhouettes, from a tusk flake, and three-dimensional sculptures. The first group includes the silhouettes of humans, a mammoth, and a leaping lion from Pavlov (Klíma 1964, Cook 2013: 160), and the so-called mask with the face shown in dashed lines from Dolní Věstonice I (Klíma 1963: 192 sq., Oliva 2015: 107). Unlike Magdalenian sculptures, women here are always shown from the front. The same technique was also used in Pavlov to make figural pendants with a large hole, sometimes reminiscent of the head of an owl or feline predator.

The group of three-dimensional sculptures includes, besides the aforementioned anthropomorphic figures, of which we should also mention the wholly unique male marionette from the grave in Francouzská Street in Brno (*Figure 10*), just one wonderful carving of a mammoth from Předmostí, which, however, with its flattish shape, represents the transition between silhouettes and fully-fledged sculptures (Oliva 2015: 76). Fully three-dimensional sculptures of animals have so far only been found rendered in pottery.

In Gravettian art there is a lack of much of what these materials and techniques allowed, e.g. realistic carvings of animals and the application of engraved motifs on some non-ceramic zoomorphic sculptures, even though the smoothed surfaces of the animal silhouettes from Pavlov were ideal for engraving. It is interesting that these complex geometric patterns are never featured on normal weapons (cylindrical points) or tools (unlike the weapons from the Magdalenian). On the antler adzes from Pavlov, the most distinctive decorations, the series of variously slanted striae, appear on the smallest, i.e. the least useful, perhaps only symbolic specimens (Klíma 1987: Fig. 30–35). This implies that art was strictly canonised, and that not everyone was aware of the rules and spiritual background. With a few exceptions, engraved motifs are abstract, although often highly complex and always

FIGURE 12: Pavlov I, alleged map of the Pavlov Hills, meanders of the Dyje (Thaya) River and position of a settlement (double circle). Engraving on mammoth tusk. Institute of Archaeology, Brno.

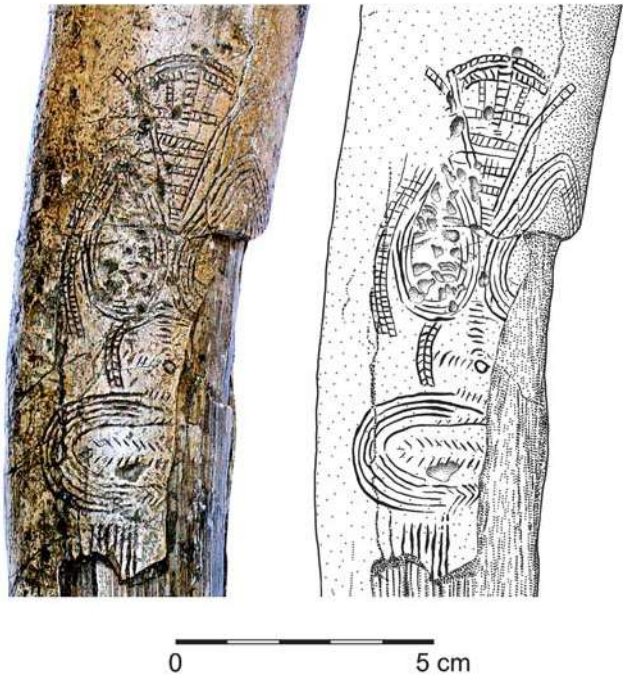

FIGURE 13: The most famous piece of art from Předmostí – geometrized engraving of a woman with traces of punctures into the right breast and head. Graphic T. Janků.

asymmetrical. Various patterns freely complement one another and are grouped into fields, which, according to the "*horror vacui*" principle, are never left empty. While complete decorative objects, such as pendants or diadems, are strictly symmetrical in terms of their overall shape, the decor is always markedly asymmetrical. It would seem that abstract engravings, unlike sculptures, do not tell us much about the spirituality of that time. However, some compositions are so complex that we are tempted to try to see some sort of deformed reality in them. Bohuslav Klíma interprets the complex engraving on the mammoth tusk from Pavlov as a map of the landscape below Pavlov Hills (*Figure 12*), with the hill and the river in its marshy floodplain (Klíma 1988, Cook 2013: 137). The position of the settlement area is supposed to be designated by a double circle. If we observe only the artefact in question, the proposed interpretation seems to be acceptable; an overall assessment of the Pleistocene fluvial system and the semantics of the Gravettian engravings, however, decreases its probability. First of all, at that time rivers did not form meanders in the floodplain; they were braided fluvial streams (Kadlec *et al.* 2015). Secondly, with only two exceptions these works never reflect any concrete subject: we are not aware of any engravings of animal and human images or sexual or hunter symbolism. Exceptions are two engravings of women from Předmostí (Oliva 2015: 73–74), allegedly relating to an altered state of consciousness (Pokorný 1982). The head of the first one (*Figure 13*) is intentionally depicted in an unrealistic manner and is filled with complicated strips which, however, are not related to the facial features in any way. This is why Martin Kříž (who discovered the engraving) thought that the head was some sort of miniskirt and displayed it upside-down (Kříž 1903: 221), as arrangers and photographers still do today. It is probable, however, that the complex pattern had not been discerned even by the contemporaries of its Gravettian creator, since it represented an exceptional vision, perhaps emerged in an altered state of consciousness. Traces of puncture into the right breast and head would correspond to a state of trance. Expressing one's emotion was more important than preserving a masterpiece intact.

The consumption of certain species of fungi, e.g. the red toadstool (*Amanita muscaria*), could have had halucinogenic effects. Otherwise mushroom caps are also called to mind by some of the ceramic "heads" from Pavlov (Delporte 1993: Fig. 155), and are obviously not so dissimilar to a glans or the distal end of a phallus. The link between all these aspects (fungi, delirogens and sex/fertility) was noticed by A. Pokorný (1973). These observations are a good complement to the shamanistic attributes of the gifts found in grave Brno 2. The actions of a shaman as a man entrusted with communicating with the spirits actually require such a state of consciousness.

TO CONCLUDE

From various figurations and particular structures it is impossible to discern the doctrine and myths from which the spirituality of the Gravettian people originated. The main hindrance to our knowledge, however, is not the scarcity of proofs but our unwillingness to depart from the rigorously naturalistic and technicist interpretation of particular phenomena. As stated in the introduction, out of the wide range of the evidence we tried to take into account in this work, presently only a small segment, namely art and inhumations, has been in use more often than not. Everything else is left in the realm of natural sciences, and archaeologists (i.e. "palaeoethnologists") do not have any say in it. This brings to mind the fairy tale *The Emperor's New Clothes* by Andersen – although everyone is aware that prehistoric as well as more modern humans would be like naked without social behaviour and spirituality, the contemporary authors will at best admit it privately.

There is no reason why we should not regard the Upper Palaeolithic societies as real communities of hunters and gatherers. For this reason we may rightly assume that the accumulations of mammoth remains at Pavlovian settlements, or in the walls of Epigravettian dwellings and nearby pits were probably linked to the social and symbolic dimension of the then life. Even this fragmented picture of Gravettian spirituality is much more colourful than what we know in this respect about other cultures of the Central European Palaeolithic.

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