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## BURIAL RITES IN ARCTIC EURASIA: A SEARCH FOR UNDERSTANDING MID-UPPER PALEOLITHIC HUMAN SKELETAL BITS AND PIECES IN MORAVIA

*ABSTRACT: The paper addresses the understanding of the complexity in intentional and random manipulation with deceased human bodies in the Mid-Upper Paleolithic in Eurasia. A series of single or multiple anatomic modern human burials at open air-sites, in caves or under rock shelters have been documented. Some of them are decorated and covered by extra-large sized mammal bones for protection. Beside these ritually buried individuals, isolated human cranial and postcranial fragments are scattered through the cultural and other depositional layers, many of them being identified during the post-excavation processing of faunal remains (e.g. Dolní Věstonice I, II and Pavlov I sites in the Czech Republic). These bits and pieces often lack direct evidence of predator or human manipulation (except intentionally perforated human teeth), which raises the question of a differential mortuary practice employed by our ancestors and/or the presence of specific depositional and post-depositional taphonomic conditions in the preservation of human remains. The paper addresses ethnoarcheological observations in different types of treatment of deceased human bodies among recent Arctic and sub-Arctic hunter-gatherers and reindeer herders in Eurasia with a special emphasis on the burial rites among the Nenets from northwestern Siberia. The work aims at the author's own social and economic scope, in which inappropriate or partial manipulation with the deceased human body presents a disputable, unethical and even illegal act.*

*KEY WORDS: Ethnoarcheology - Gravettian - Pavlovian - Czech Republic - Siberia - Human adaptations - Cold climate - Hunter-gatherers - Reindeer herders - Mortuary practice*

## INTRODUCTION

In general, Mid-Upper Paleolithic sites have yielded a series of single or multiple anatomic modern human burials at open air-sites, in caves, and under rock shelters. Some of the bodies were decorated with objects and ochre and/or covered by the flat bones of the extra large sized herbivores. Beside these ritually buried individuals, isolated human cranial and postcranial fragments are scattered throughout the cultural and other depositional layers, many of them being identified during the post-excavation processing of faunal remains (e.g. Bader *ed.* 1998, Borgognini *et al.* 1980, Condemi, Weniger *eds.* 2011, Djindjian *ed.* 2018, Einwögerer *et al.* 2006, Henry-Gambier 2008, 2017, Jaubert *et al.* 2017, Kacki *et al.* 2020, Mallegni *et al.* 1994, McCurdy 1924, Ronchitelli *et al.* 2015, Simon *et al.* 2014, Teschler-Nicola *et al.* 2020, Trinkaus, Svoboda *eds.* 2006, Trinkaus *et al. eds.* 2013, Vilotte *et al.* 2015, Vallois, Billy 1965).

Recently, we have operated with four main scenarios of interpretation of these scattered human skeletal fragments: (a) Do these remains result from the differential burial traditions applied for these individuals? (b) Are they remains of naturally disturbed burials? (c) Do they represent leftovers from secondary burials, in which only selected portions of skeletons were removed? (d) Could they have been intentionally removed from animate or dead bodies and then used or buried? If we confirm a human intention and cross the biological border of individuality, what does it mean for the social and economic status of these scattered human identities? Were there any differences when compared to complete individuals? Do they also belong to beloved ancestors and friends, or do they represent neglected mates or even dreaded enemies (cf. Sázelová *et al.* 2018, Sázelová, Hromádová 2020, Trinkaus *et al.* 2019)? Moreover, the modeling of a gentle pathway leading to answers to these questions demands a change of the author's own social and economic scope, attitudes, and biases, in which inappropriate or partial manipulation of a deceased human body presents at least a disputable, and more often an immoral, unethical and even illegal act. Therefore, a delicate and responsible comparison with different burial practices among other recent societies significantly expands the potential for a correct interpretation.

Ethnological analogies collected among recent hunter-gatherers and reindeer herders from the Arctic and sub-Arctic regions have been used since the beginning of Paleolithic research around the mid-19<sup>th</sup> century. The advantages are the ability to recover past

and static find situations through the dynamic lens obtained by observation of recent social, economic, and symbolic human activities and their motivations. The positive impact is repeatedly stressed for those activities without any archeological evidence left behind. The extreme variety in recent human socio-economic adaptations correlates with a majority of the archeological hypotheses, and the absence of a direct multi-generational ancestral link between past and present societies ranks among the major drawbacks to the ethnoarcheological theory (Barnard 2004, Binford 1978, 1981, Cunningham, MacEarchern 2016, Gould, Watson 1982, Gowdy 1998, Hamilakis 2016, Sellet *et al. eds.* 2006, Stiles 1977, Wobst 1978). Nevertheless, recent ethnoarcheological research presumes that cold and dry environmental pressure produce necessary human adaptations, behavior and their motivation in social, economic-subsistence and ritual strategies, and material objects (e.g. clothes, dwelling shape, household, and hunting/herding artifacts, inner and outer settlement structure, landscape orientation) to such a degree that allows at least a partial comparison between recent and past societies adapted to similar climate conditions (David, Kramer *eds.* 2001, Van Reybrouck 2000). Thus, we can simultaneously document similarities, e.g. the position of the central hearth in a dwelling; a circular or oval dwelling shape with the highest thermoregulation impact in winter and the best protective smoke effect against stinging insects in summer; the number of expected inhabitants; the winter hunting of furbearers and seasonal fur processing as well as the differences, e.g. the position of the human burial inside or outside the settlement area; and unconvincing evidence for cremation in the Mid-Upper Paleolithic. The complex ethnoarcheological research allows us then to evaluate equally past and recent societies and to increase our ability to discern the smallest social, economic, and symbolic nuances, in our case the burial rites and differences in manipulation with human bodies and/or their various parts (Anderson 2000, Golovnev 2004, Guthrie 2001, Ingold 1986, Krupnik 1993, Nuttall, Callaghan 2000, Panter-Brick *et al. eds.* 2001, Pettitt 2010, Phillips 2001, Roux 2007, Sázelová *et al.* 2015; Svoboda *et al.* 2011).

## ARCHEOLOGICAL CONTEXT

The Moravia region (Czech Republic) has provided several important Early to Late Upper Paleolithic paleoanthropological open-air and cave sites with

anatomic modern human remains, e.g. Mladeč Cave (Aurignacian), Dolní Věstonice-Pavlov, Předmostí I, Brno II (Gravettian) and Kůlna, Balcarka and Michalka caves (Magdalenian). This paper focuses on the Dolní Věstonice – Pavlov – Milovice micro-region, where the main cultural layer is dated to 33–29 ky cal BP. This time frame is connected to the intensive and complex patterns of human occupations on the northeastern slopes of the Pavlov Hills, which resulted from different economic, subsistence and ritual activities. The overall site elevations (with the exception of the Milovice IV

site) provide a good overview above the Thaya River, which offers the best position in hunting strategies oriented on large herbivores and furbearers. The streams and shallow water basins occur in the gullies in their closest proximity to human settlements. Based on the archeological evidence, we can distinguish between long-term (e.g. Dolní Věstonice I, Pavlov I, Milovice IV) and short-term occupation (e.g. Dolní Věstonice II, Pavlov IV) and settlements with mammoth bone deposits on their settlement periphery, which have also yielded important paleoanthropological finds (Absolon 1938,

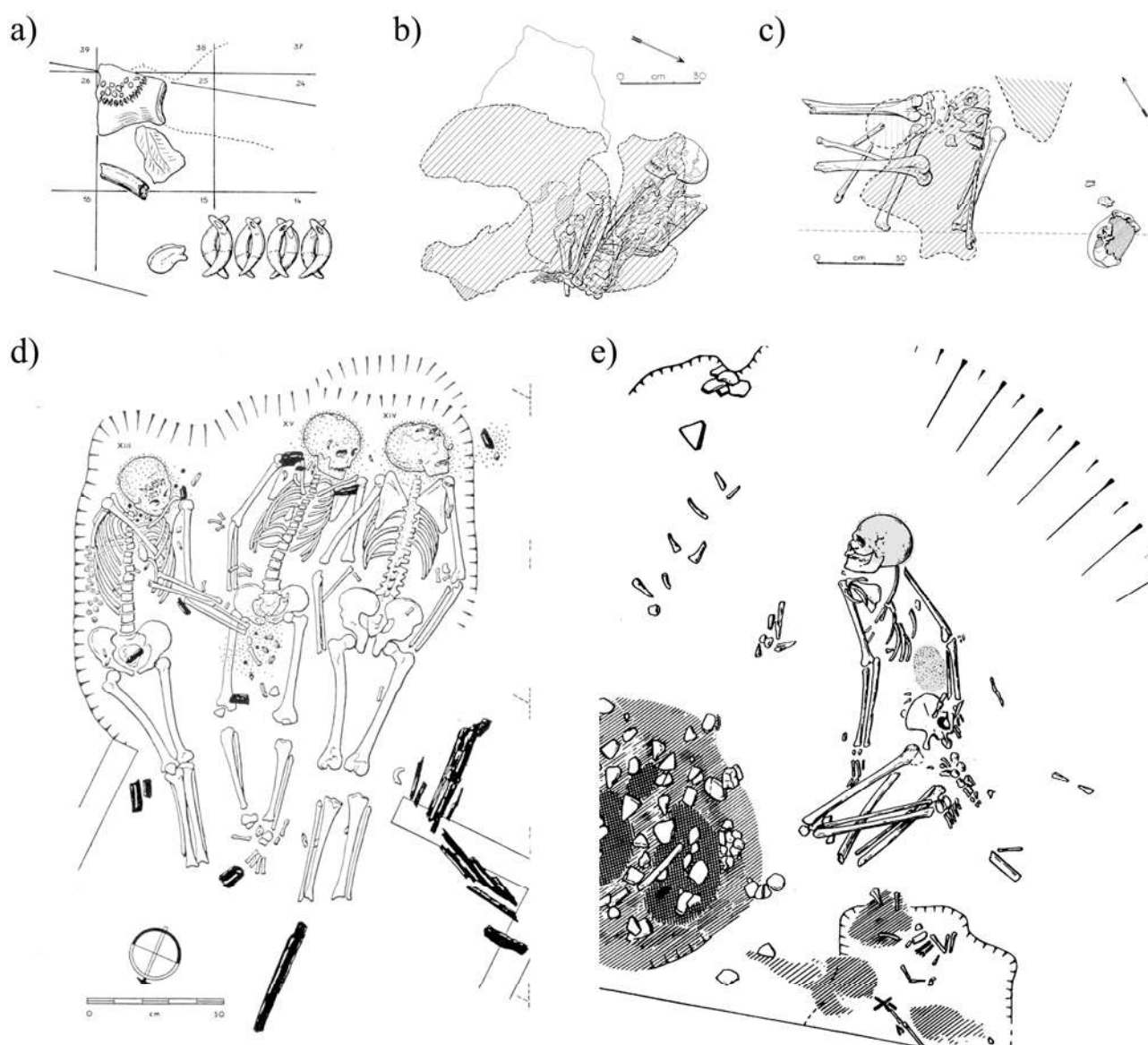


FIGURE 1: Mid-Upper Paleolithic human burials from Dolní Věstonice I, II and Pavlov I sites: a) DV4, b) DV3, c) Pav1, d) DV13–15 and e) DV16. Graphics modified after E. Dania, B. Klíma, J. Svoboda and E. Vlček.



1945, Fewlass *et al.* 2019, Klíma 1954, 1963, Musil 2010, Oliva 1996, Soffer 1993, Svoboda 1988, 2008, 2016b, Svoboda *et al.* 2016, 2019, Svoboda *ed.* 1991, 1994, 2005, Velemínská, Brůžek *eds.* 2008). The human remains from the Dolní Věstonice I and II and Pavlov I sites bear traces of intentional and random manipulation with dead bodies and generally could be divided into three main categories.

### *Burials*

Child burial DV 4 was discovered in 1927 during the excavations led by K. Absolon at Dolní Věstonice I. The individual consists of skull bone fragments and part of the postcranial skeleton, on which several and perhaps indirect burning traces occur (*Figure 1a*). In 1949, B. Klíma discovered the nearly complete adult female burial DV3. The skeleton was in a crouched position with the lower limbs extremely flexed to the rest of her body. Originally, a secondary burial was considered; however, the impact of the natural taphonomic conditions, especially the sediment pressure against the shallow pit in which she was buried, seems a more plausible interpretation (*Figure 1b*). Both buried bodies were found within the settlement area; they were covered by a mammoth scapula, decorated by ochre and 10 and 24 perforated animal teeth were discovered in their immediate vicinity. An incomplete mid-adult male burial in a crouched position was excavated in 1957 by B. Klíma at Pavlov I (*Figure 1c*). The body was deposited in the settlement area and covered by a mammoth scapula with a series of cut marks on its inner side. The burial was disturbed by erosion, which caused a lack of grave goods. Next, nearly complete triple burial DV13-DV15 of young adult males deposited in stretched positions was found in 1986 by B. Klíma at the Dolní Věstonice II site (*Figure 1d*), followed by another nearly complete mid-adult male burial DV16 discovered in 1987 by J. Svoboda. The body was buried in the crouched position next to a central dwelling hearth (*Figure 1e*). Again, all the bodies were found within the settlement area and in both cases they were most probably protected by wooden constructions. Their bodies were covered by ochre and 27 and 4 perforated animal teeth together with mammoth pendants accompanied them as grave goods (Vlček 1986, Trinkaus, Svoboda *eds.* 2006, Svoboda 2016a).

### *Isolated bits and pieces*

Beside the seven burials, all three sites provided several isolated human cranial and postcranial remains, which were discovered directly during field excavations

and following material processing or more recently, when the faunal material was being described and documented. The Dolní Věstonice I site provided 28 additional human skeletal fragments, covering mainly isolated tooth remains. The minimum number of individuals cannot be precisely estimated due to the loss of several important fossils during the Second World War. However, we would obtain a minimum number of three adult individuals from the preserved material. A minimum of three adults and three children were identified in 41 cranial and postcranial fragments at the Dolní Věstonice II site, and 89 cranial and postcranial fragments were discovered at the Pavlov I site; these belong to four adults and three children (Sázelová *et al.* 2018, Trinkaus *et al.* 2000, 2010, 2017, 2019).

### *Tooth pendants*

The carnivore and herbivore tooth pendants present common finds in the mid-Upper Paleolithic settlement and burial contexts. In contrast, the human tooth pendants play a much different role, even if we consider that human teeth provide the same raw material as the other small to large sized mammal species. Still, to date we know only 12 Upper Paleolithic sites from the Czech Republic and France where human tooth pendants occur. Our finds include the DV8 permanent upper incisor from Dolní Věstonice I discovered by K. Absolon (lost today) and the deciduous canine Pav 15 and permanent lower incisor Pav 25 documented at Pavlov I by B. Klíma. The root surfaces of both teeth are corroded to such an extent that any traces of extractions from the jaw are barely visible. Therefore, several interpretations of a natural and social avulsion from a living or deceased individual should be still considered. Additionally, the Pav25 has strong traces of having been repeatedly worn as a pendant (Vlček 1986, Sázelová, Hromádová 2020).

## ETHNOLOGICAL CONTEXT

In our paper, we must consider several important and common aspects in Arctic and sub-Arctic Siberian beliefs and philosophies, commonly described as shamanism, which are important in understanding burial practices among recent hunting and reindeer herding societies.

### *Soul games*

The everyday needs and wishes of human beings are motivated by biological, psychological and socio-





FIGURE 2: A general landscape view of a Nenets burial (in front) and the active campsite in its background. Gydan River, northwestern Siberia. Photo by J. Svoboda.

economic aspects. One of the most sustainable ways to support balance in human life is to make an alliance with the spirits. However, the spirits possess their own nature and nurture; they could be protecting, helping and destructive, and thus the contact with them could not be accidental. Maintaining balance in human life thus demands many complex ritual activities and access to different worlds and dealings with the spirits inhabiting them, and therefore it is not always the easiest way to solve human problems or achieve goals. The shaman is the only person capable of travelling in between different world layers accompanied by helping and protecting spirits, where s/he achieves the knowledge necessary for restoring the order and peace in human society and the rest of the world. Furthermore, humans as well as other animals, plants and inanimate objects possess their own souls. Humans could have several

souls responsible for different parts of the individuality, with their close cooperation maintaining the health and power of the individual. However, souls are not strictly attached to the body and could leave it: (a) temporarily, when the soul arbitrarily left its place or is kidnapped by an evil entity. In both cases, the owner starts to lose life power and falls ill; (b) permanently, when the soul refuses to return back to its owner, or the kidnapper is not successfully persuaded to return the stolen soul. In both cases the owner dies. The shaman plays an important role in soul restoration. Moreover, s/he serves as the psychopomp, a guide for souls of deceased humans and animals, who leads them into the underworld or brings them back if they are necessary for restoring the balance of powers in the world of animates. Additionally, a harmless option in soul migration between humans and animals in Arctic and



Subarctic Siberia occurs and the ability is highly valued. If the human individual is capable of perceiving itself as being another animal species beside its own human identity (and does not lose it), which presents a key aspect in obtaining the identity of a full-fledged being (Anisimov 1951, Michailovskiy 1892, 1895 a,b, Nadasdy 2007, Shirokogorov 1919, Siikala 1978, Willerslev 2007).

#### *Ritual items*

Ritual objects represent the physical receivers providing the visualization of helpful, protective and evil spirits and their identity, which can inhabit them according to their own needs. The natural or artificial objects serve the purpose in two-way communication and come alive by spirits when humans utter the incantation. During the ritual, the object owner is then

endowed with a specific ability and quality which is not available in their everyday life. Specific bloody and non-bloody sacrifices can maintain the object power of these ritual objects. Nevertheless, over time it weakens the strength of the special incantation and should be replaced by newer one. We can distinguish three main types of ritual objects according to their purpose and usage. (a) The ritual items ensuring success in hunting and breeding are devoted to the Lord or Lady of animals, who could rule universally or according to specific animal species. These spirits could enter into coalitions or disputes. They may even lose the prey in a gamble. The humans are entitled to ask the spirit to share its resources with them and the request is often filled. However, people are afraid if they receive too much from the spirit world, because then it could reverse the



FIGURE 3: A dead human body is placed directly on the ground and covered by a wooden coffin and symbolically harnessed behind the turned-over sledges and complete skeletons of slaughtered reindeers. Photo by J. Svoboda.



tip of balance and the spirits are allowed to demand the return of the resources. (b) The ritual objects ensuring the protection and fertility of the family are usually connected to the totemic ancestor, protective spirits of fire and the household. These items could be produced by any adult person and often occupy places of honor inside the dwelling or they might be placed in their own separate abodes in sacred places. Another possibility is to wear them as visible or invisible amulets and protective objects. (c) The ritual soul catchers are used in the sick person's treatment or if the strayed soul of the deceased human is being caught. The objects are often made of grass, meat, fat or wood. The natural objects, such as a bone fragment, wooden chip or stone, could serve the same purpose as well. The important aspect of the soul catchers is that they are immediately destroyed after the ritual act is finished in order to no longer attract negative and evil attention from human or spirit worlds (Czaplicka 1914, Hoppál 1984 a, b, Sázelová 2014, Zelenin 1935).

Human remains do not often serve a purpose in the creation of ritual objects in the Arctic and Sub-Arctic Siberia. Based on the systematic literature search and

analyses of ethnological collections, it seems that indigenous societies here avoid the human body as a source of the raw material in their production. Based on a few notes from northeastern Siberia, the dried pieces of human body parts, such as heart, liver or a phalanx, are occasionally used in the creation of hunting or fertility lucky charms. Furthermore, we lack any record of intentional dental avulsion or the use of human teeth as pendants or plugs as a part of body decorations or a declaration of group membership (cf. Bogoras 1904-1909, Dioszégi *ed.* 1968, Jochelson 1905-1908, 1926, Nelson 1900, Nordenskiöld 1881, Potapova, Levina 1956).

#### *Case study: Nenets burial practice*

In the summer of 2018, the author had an opportunity to document surface traces left by the Nenets on the Gyda River on the Gydan Peninsula (northwestern Siberia, Russia). In order to respect the families' right to piety and protection of their identity, no detailed information concerning family names, maps or GPS navigation would be published. The oldest burial traces could be traced back to the 1970s and 1980s,

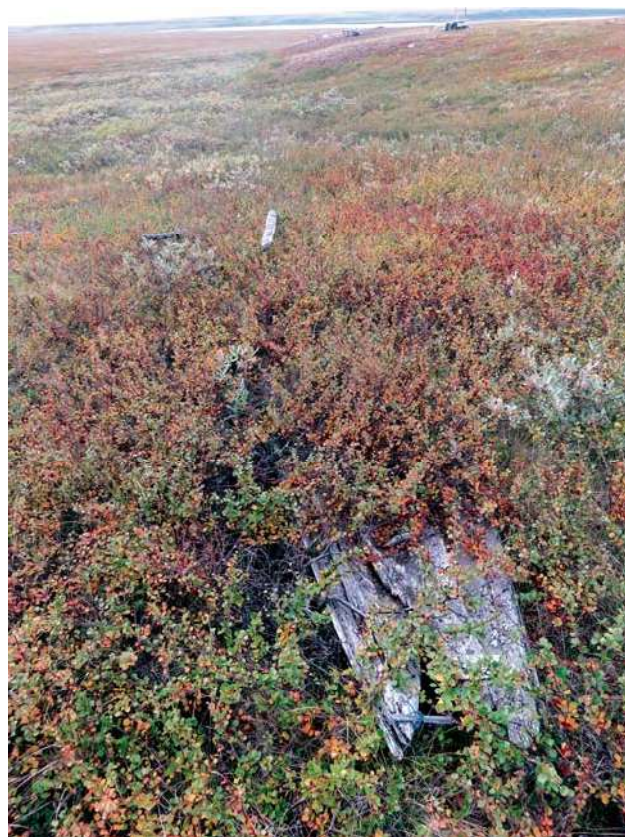


FIGURE 4: The burial constructions left after a) the wooden coffin and sledges (left), and b) the boat, which was used in older times (right). Photos by J. Svoboda.



when the area was extensively settled, which was also confirmed by many traces of abandoned campsites of the same age within the studied micro-region, and up to the latest burial from the spring of 2018 and active summer campsites (*Figure 2*).

The dead body is placed directly on the ground. In former times it was placed under a wooden boat, more recently a wooden formwork is prepared (*Figure 3*), from which two wooden poles run vertically. In between them is horizontally placed a third pole, on which a metal bell is hung. It's role could be substituted by and empty tin with a stone instead of the clapper. Before the formwork, a series of turned sleds on which the body and the burial equipment was carried, and mostly the articulated skeletons of slaughtered reindeers used in the burial harness, are disposed. Behind the formwork or in its closest vicinity the everyday life items used by the deceased person are also displayed. Male graves were often accompanied by a lasso used in manipulation with reindeer, the hunting traps, high rubber boots and fragments of male clothing. Female graves were supplemented with a small table used in serving meals, cut glasses or vases, tea pots and cooking pots of various sizes. All of the burial goods were broken in the middle or at least turned over in the opposite way to their usage in the animate world. Such traditions prepare all the belongings of the deceased person to be ready for use in the after-life in the underworld. The manner protects the living family members, who could suffer or could be harmed by the deceased's soul if it stays abnormally attached to its equipment or a favorite reindeer (cf. Chomich 1995, Golovnev 2004, Stämmeler 2007). The buried places are left as they are after the decomposition of the body and the disintegration of the wooden protective constructions (*Figures 4a and 4b*), being continuously over taken by the surface vegetation. Still, the survivors bear in their memories where the old burials of their ancestors took place and pay attention to them even if they cross the place. Interestingly, a group of Nenets males found a dead reindeer body in the tundra and dragged it several kilometers and placed it next to an old human burial. They explain that the reindeer could not stay left alone as it was.

## CONCLUSION

The paper questions the differential burial practices of anatomically modern humans in the Mid-Upper Paleolithic in Moravia, where besides the ritual burials the evidence of scattered human remains occurred. The

loss of deciduous and permanent teeth presents for a healthy human individual an adequate stage of growth and aging. However, the absence of other cranial and postcranial bits and pieces as observed in archeological evidence means a certain stage of disability or creates final conditions incompatible with life. The minimum number of individuals calculated from the repeated and isolated skeletal parts usually exceeds the number of persons ritually buried, and therefore the standard and its deviations in burial practice might be examined and still opens a scientific discussion. The disproportion does not change much even if we reduce the numbers of children by the statement that the presence of isolated deciduous teeth represents a natural state of their loss and replacement with the permanent dentition. Then what does this asymmetric image of the manipulation of dead human bodies mean? Where exactly lies the burial standard manner and its deviation? Shall the carefully buried individuals on one hand be connected to a ritualized reverent act corresponding to their social and economic status? And on the other, those individuals dismembered here and there into their various body parts represent its extreme of complete neglect of their personal identity (Sázelová *et al.* 2018, Svoboda 2016a). Still, we cannot forget that the edges of this "black and white script" have been shaped by depositional and post-depositional processes, changing the arrangement of find situations with abiotic and biotic agents (e.g. land sliding, freezing, trampling, body disarticulation and dismembering, partial transport, gnawing and beak marking) in highly effective ways, which resembles the strategies and shifts of experienced poker players (cf. Behrensmeyer 1978, Behrensmeyer *et al.* 1986, Bello, Soligo 2008, Bello *et al.* 2016, Blasco, Rossel 2009, Coard, Dannel 1995, Chlopachev, Giriya 2010, Costamagno, David 2009, Fernández-Jalvo, Andrews 2017, Jans *et al.* 2004, Olsen, Shipman 1988).

The creation of a comparative model based on ethnological analogies among the recent Arctic and sub-Arctic hunter-gatherers and reindeer herders might help us understand different handling of dead human bodies, especially when compared to the author's background in recent Czech mortuary practices. Based on the surface documentation, we did not observe a direct overlap between the burial and settlement area, which is followed by a series of rules and recommendations until the corpse becomes skeletonized. Nevertheless, the boundaries between the world of the living and the deceased are not as strictly defined as in our cemeteries, where when crossing the iron wicket and surrounded by high brick walls you know that you are paying a visit

to the world of the dead. Within the Nenets landscape, dead people were like close neighbors; the living people were aware of their presence in their everyday life and fully paid their respect and piety, hence differently, and without visible protective fence limitations set in between the two worlds. From the positions of the burials at the Dolní Věstonice – Pavlov settlement area, the contact in between the world of the living and dead people seems to be even closer than provided in our ethnological record (cf. Golovnev 2004, Klíma 1963, Svoboda 2016b, Vlček 1986). In our recent Czech mortuary tradition, the burial place with skeletonization is usually supported and kept in order until the family members and friends hold the dead person in their memories (or until they can financially afford the burial place). The place could be covered with various marble or granite constructions; ornaments and various designs might be created in coarse grained sand or pebbles, and numerous flowers or decorative shrubs can be planted on the grave surface. The energy invested by Nenets into their burial places was again different and there was no special attention paid to the wooden construction above the body nor to the vegetation on the grave surface. However, according to our observation there was no correlation between the lowering in memorization of the dead person and destruction of provided burial goods. In other words, for our archeological contexts, leaving the natural process of decomposition of the buried human body and its goods as they are does not necessarily correspond to neglecting the buried person and their identity, nor does it reflect a difference in the social and economic status or the relationship with descendants, friends and broader community (cf. Henry-Gambier 2008, Trinkaus 2019). Moreover, our laws restrict the handling of parts of human corpses, and buying or searching them elsewhere in the extralegal grey zone raises at least moral and ethical questions. A similar situation seems to be found among recent Arctic and sub-Arctic hunter-gatherers and reindeer herders in Eurasia, who revealingly avoid human body parts as a potential raw material source in the production of everyday use and ritual objects. Pierced human teeth and the evidence of their wearing as pendants reflect different attitudes towards the handling of human body parts in Mid-Upper Paleolithic society in Moravia (cf. Sázelová, Hromadová 2020). And naturally, such similarities and differences in mortuary practices and handling of human body parts can help us cross socio-economic and ritual boundaries in a comparison of past and present societies.

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