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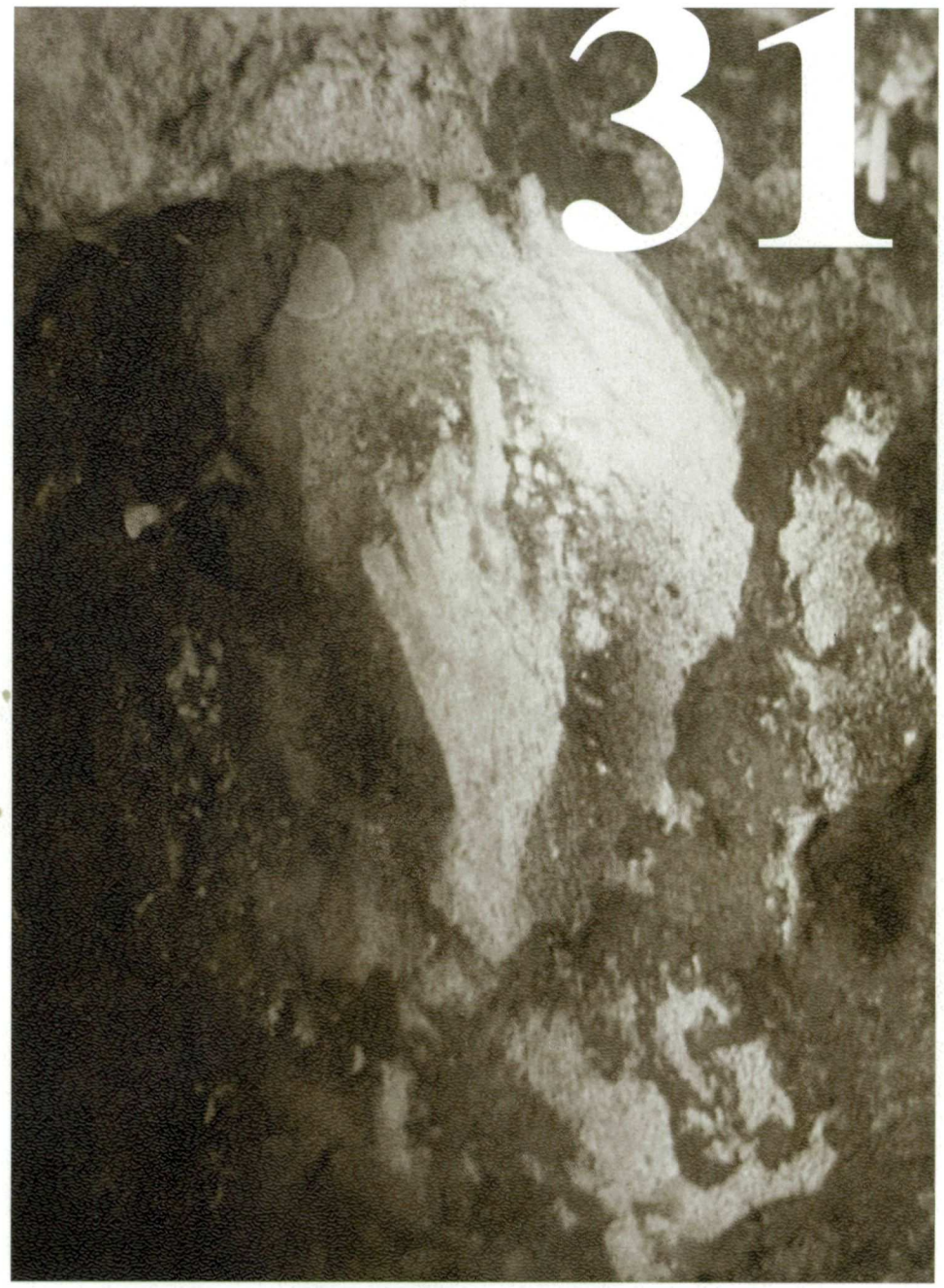

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HUNTERS OF THE GOLDEN AGE

THE MID UPPER PALAEOLITHIC OF EURASIA 30,000 – 20,000 BP

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11 The Brno II Upper Palaeolithic burial

The Brno II burial was discovered by accident in 1891, and part of it salvaged by A. Makowsky. Its position on the lowest erosion level of the Svitava River and the upper loess base date it to a time just before the Pleniglacial B. The stratigraphical position thus corresponds with that of known sites of mammoth hunters of the Gravettian (Pavlovian). The burial is characterised by several unusual features: its location outside both the site and the settlement area, the state of health of the buried man (dispersed periostitis, flection of the femur), unusual grave goods such as a male idol (the only anthropomorphic sculpture to be found in a palaeolithic burial), roundels made of different raw materials with symbolic ornamentation, many hundreds of fossil shells of a single type, a large amount of bones from a large game animal, and the absence of any item of practical (i.e., technical) use. The buried man apparently held a significant position in the ritual sphere.

1. Introduction

In September 1891 workers digging to deepen a drainage ditch on Franz Josef Boulevard in Brno (today Francouzská Street) came upon a clump of large animal bones accompanied by several unusual objects. They reported their discovery to a professor at the German technical college, A. Makowsky, who undertook a small salvage excavation there. In 1956, J. Jelínek had an inspection probe sent down in the same general area. However, as this spot lies at least 130 m away from and some 6 m higher than the actual findspot, the profile published by Jelínek *et al.* (1959) is not relevant for the burial site. The site lies on a very gentle southeast incline in the Černá Pole district of Brno, at an elevation of 208 m above sea level, and 230 m from the current bank of the Svitava River.

From Makowsky's description (1892) of the findspot, it follows that the finds were present underneath a thin sand and gravel cover, covered by 4.5 m of uniform loess without foreign admixture. The three surviving samples of the 'cultural layer' of Makowsky's research, in which *Dentalium* shells as well as sandy sediment with small pebbles were found, likewise attest to the nature of the layer where the find was made.

The base of the third ('Husovice') terrace, the sedimentation of which ends in the lower Würm (Musil and Valoch 1961: 238), is found in the northeastern part of the Brno basin, at a height of 5 m above the river. We are therefore dealing here with the remains of erosion activity from later times (perhaps the Interpleniglacial), basically identical with the current level of the flood plain (cf. also Karásek 1992). The burial was probably dug in an elevated section of the flood plain at a time when the river could have accumulated a terrace lying rather more to the east. The flood plain, at an altitude of 203-204 m above sea level, is approximately one km wide here. The achieved erosion level of 203 m above sea level in the Würm Interpleniglacial (?) represents the *terminus post quem* and the massive upper Würm accumulation of loess the *terminus ante quem* for the time of the burial. The chronological position of the burial thus falls entirely within the period of the Moravian Gravettian, which was recently confirmed by an Oxford AMS radiocarbon dating of 23,680 ± 200 bp (Pettitt and Trinkaus pers comm.).

2. Disposition of the burial

We know relatively little about the actual arrangement of the bones and grave goods since a considerable part of the contents was taken by the workers from the excavation site. Makowsky later found a tusk about 1 m long here, beneath which lay the entire shoulderblade of a mammoth and, close beside it, a human skull; near this were other human bones, likewise coloured red. The loess near the skull, from which Makowsky removed some 600 *Dentalium* shells, contained pigment as well. Also found in the burial were a large quantity of possible rhinoceros ribs measuring up to a metre in length, small fragile roundels and crumbling pieces of mammoth ivory, which, glued together, form a male figure. No charcoal or traces of fire were observed, and no objects were found at a distance greater than 2 m from the bones.

Of the disturbed part of the burial Makowsky describes 'some noticeably red stained smaller bones, between which several larger and smaller stone and bone discs were embedded' (Makowsky 1892: 75). Since he does not mention red coloration in connection with the large animal bones from this part of the burial, this apparently refers to human bones (red coloured fragments of human limbs and ribs have even been preserved). The large stone discs mentioned undoubtedly represent the two stone rings already discovered in October

Fig. 1. Human ulna from the Brno II burial with periostitic changes (scale 3:2).

(ibid.: 81). The decorated roundels were probably both found lying near the head in the part of the burial which was examined and between the postcranial skeleton, together with the stone rings. The animal bones were found near the head (mammoth shoulderblade, tusk and ribs) and the lower part of the body (tusks, rhinoceros skull, ribs, horse teeth). There is no reference to the place where the worked reindeer antler was found.

3. Description of the finds

Unfortunately not only the less than perfect circumstances of the find caused a loss of information about this unique discovery. On a later occasion, cases with collected objects, stored at first at the German *Technische Hochschule*, were lost. As Makowsky himself states, one of the two stone rings was lost and many *Dentalium* shells also disappeared over time. After the Second World War, the German technical college was abolished, and its Quaternary collection was transferred to the collections of the Anthropos Institute of the Moravian Museum. Thanks to these circumstances, the find was not lost like so many other unique items from the Moravian Palaeolithic in a fire at Mikulov Castle in 1945.

The anthropological remains and the contents of the burial have always enjoyed considerable interest from both Czech and foreign researchers, who studied these materials while they were still in the collection of the German technical college (e.g., J. Bayer, H. Breuil, H. Obermaier, O. Menghin).

The contents of the burial was subjected to thorough study at the Anthropos Institute in the 1950's (Jelínek 1959; Valoch 1959). I have drawn in part on these descriptions, and supplemented them with new information.

3.1 Human remains

Among the human remains Makowsky found was a dolichocephalic skull with preserved calvarium and a pronounced supraorbital foramen. A small protrusion (osteom), which could have been the result of a healed injury, may be observed 35 mm anterior to the lambda. The brow bone is thickly covered with grooves and unevennesses, which H. Ullrich (1982) considered to be signs of deliberate postmortem intervention. He interpreted the entire burial as the secondary deposition of an incomplete skeleton.

Fragments of the mandible, humerus, ulna, a rib and two femurs have also been preserved. On both femurs and the ulna considerable manifestations of periostitis may be observed (Fig. 1).

3.2 Animal bones

Of the animal bones, only the lesser part has been preserved: a fragment of a mammoth shoulderblade, 7 fragments of the ribs of a mammoth or woolly rhinoceros, and fragments of mammoth ivory. Makowsky (1892: 75-77) states that the workers found a pile of bones, amongst which an entire juvenile skull, parts of the skeleton and teeth of a rhinoceros, large mammoth tusks (original length approx. 1.5-2 m), the teeth of a young horse coloured ochre and, perhaps, 2 molars of a bovine. He himself unearthed a number of ribs of up to 1 m in length (supposedly of a rhinoceros), a tusk 1 m long and the nearly entire shoulderblade of a mammoth, found lying near the human skull.

3.3 Artefacts

– In the vicinity of the skull, Makowsky collected some 600 shells of the Miocene mollusc *Dentalium badense*.

Their original number was probably much higher, and they apparently originally served as decoration for head coverings. A selection of smaller specimens is evident here, and they were often cut perpendicularly at their extremities.

- A reindeer antler with polished extremities.
- A ring of marl slate (Fig. 2), split horizontally into two conjoining pieces. The edges of the fissure are slightly rounded, therefore the artefact was probably already split in prehistoric times. There are red spots and dendrites on the slightly convex dorsal side, while the other side is slightly concave. The outer periphery forms a smooth facet, and the slightly conical aperture is positioned rather eccentrically and non-axially – it forms an angle of about 80 degrees with the surface of the disc. There are traces of abrasion at places in the aperture, running vertical to the surface of the ring, perhaps the result of having been suspended. Dimensions: diameter 140 mm, aperture dorsally 50 mm, ventrally 45 mm, thickness 24 mm, weight 715 g. Another ring, now lost, had a diameter of 150 mm, an aperture measuring 22 mm and a thickness of 24 mm.
- 14 roundels made of various raw materials (Fig. 3: 1 haematite, 2-3 marlite, 4-6 bone; Fig. 4: 1-3 mammoth molar, 4-8 ivory). Some of these are decorated with short incisions on their circumference (Fig. 3: 2-3, 5; Fig. 4: 3-6), a deep radial groove (Fig. 3: 6; Fig. 4: 1, 3) or a central indentation (Fig. 3: 1, 5; Fig. 4: 4, 5, 7), which in one case goes 'through' (Fig. 4: 5). The piece in figure 4: 6 is radially drilled.
- A carving of a man (Fig. 5), of which 3 separate parts have been preserved: the head, trunk and the left arm. The proportions of the head are anatomically very exact, only the forehead is rather low and the mouth is not marked. Part of the nose apparently broke off before the figure was deposited in the earth. Traces of ochre pigment remain visible in the heavily corroded eye sockets, and the ears are indicated by a lateral widening and light vertical grooves at the same height as the eyes. The lower part was partially broken off at an earlier time, or remained unworked. The sculpture was made from the core of a tusk, the centre of which forms the axis of a vertical aperture (diameter below 5-6.5 mm, 2.5 mm at the crown of the head). Examination with a magnifying glass reveals a tangle of very fine grooves (probably traces of work) on the left cheek and the lower part of the left auricle. These are less dense on the right cheek, behind the left ear and on the chin, and are absent on the surface left where the nose was broken off. Dimensions: height 66 mm, maximum width 51 mm, maximum thickness 49 mm.

Viewed in cross-section, the trunk is straight in front and rounded behind. In profile, both outlines are more or less straight, converging slightly as they approach the head. Protruding from the frontal surface are a penis (7 mm), with a slight groove to indicate the mouth of the urinary tract, a navel (2 mm) and the right nipple (3 mm). After treatment, an aperture with cylindrical walls with a diameter of 4 mm and a depth of 6 mm appeared on the markedly smooth and rather reduced surface to the right (anatomically) of the penis. The rounded lower part of the back is furrowed by a 14 mm long, 3 mm deep groove, undoubtedly representing the rectum. Viewed from below, it is evident that here as well the natural axis of the tusk was used to make an aperture running through the entire trunk (diameter below 7-5.5 mm, above 5-6 mm). The entire surface of the trunk shows marked traces of corrosion and has been worn down considerably, even the break on the left side. This argues against the opinion, adopted from Makowsky (1892: 82; Rzehak 1911; Valoch 1959: 25) that this part of the idol was damaged in later times. A magnification of this broken

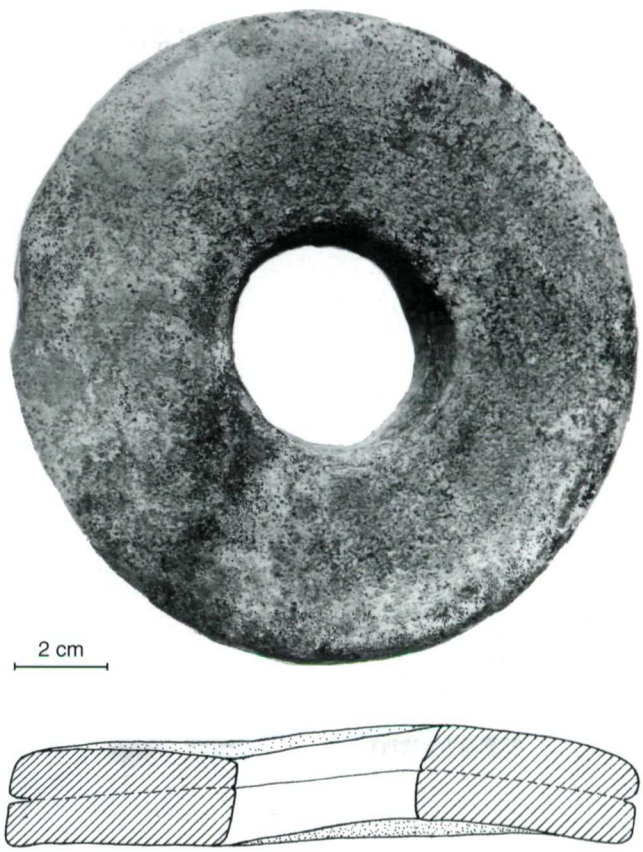

Fig. 2. Brno II, ring of marl slate.

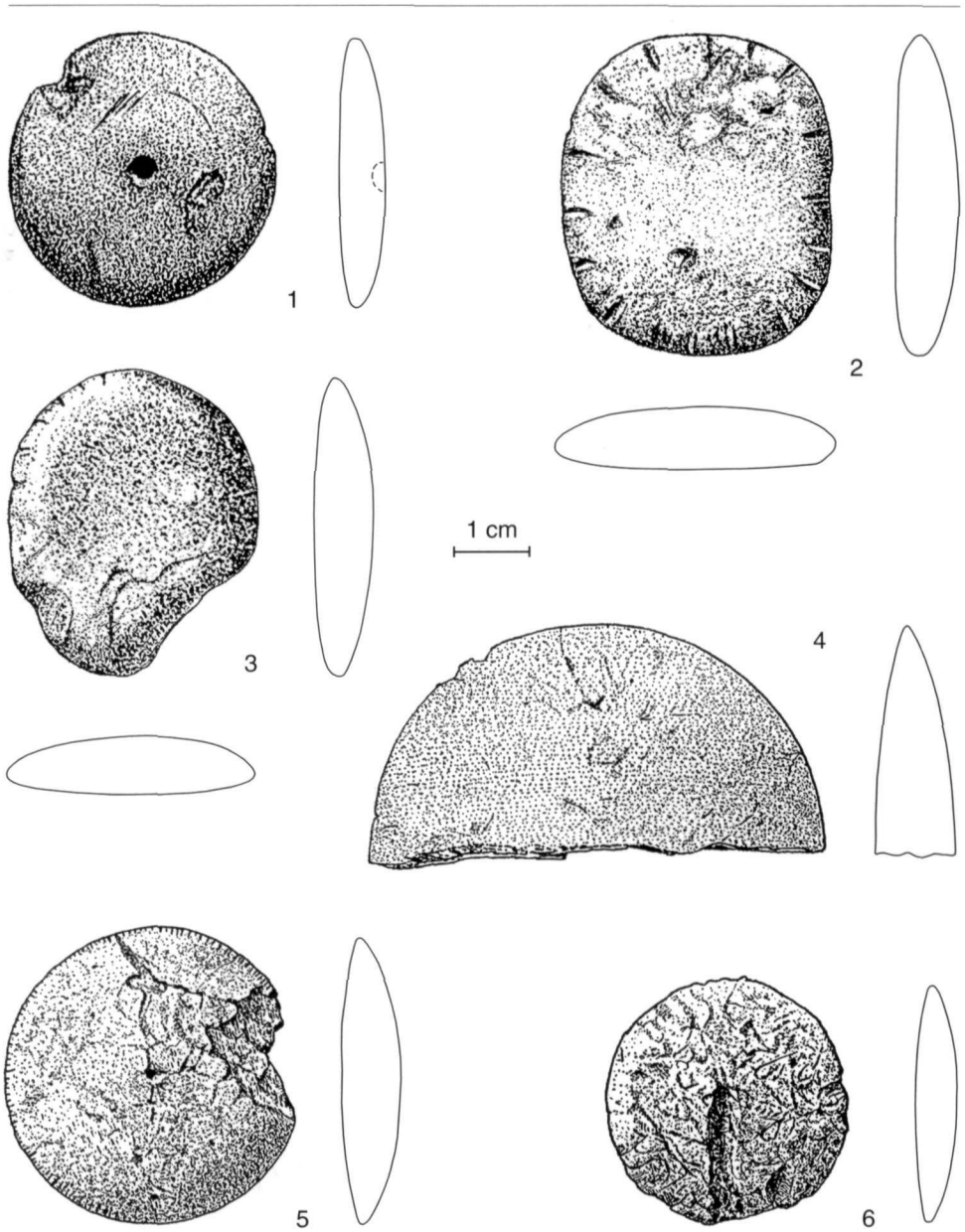

Fig. 3. Brno II, roundels of stone (1-3) and bone (4-6).

surface shows numerous grooves differing in direction, length and degree of sharpness. It cannot be reliably determined whether human activity (the working of the surface) or sediment action played the greater role in producing these grooves. The sharpest and longest incisions are, however, deliberate, as they change direction several times. Grooves which originated naturally run in a straight line or arch slightly (D'Errico and Giacobini 1988: fig. 7-9). Most of these traces of 'work' are found precisely on the broken left side of the sculpture. Dimensions: height 137.5 mm, width above 22 mm, below 37 mm, maximum thickness 52 mm.

The left arm was connected to the idol's left side which was broken a long time ago. It has a round smoothed shoulder and a delicately formed elbow, while the hand is missing (an old break). The inner side of the shoulder is formed by an even surface with two distinct bunches of grooves. One deep groove separates the shoulder from the

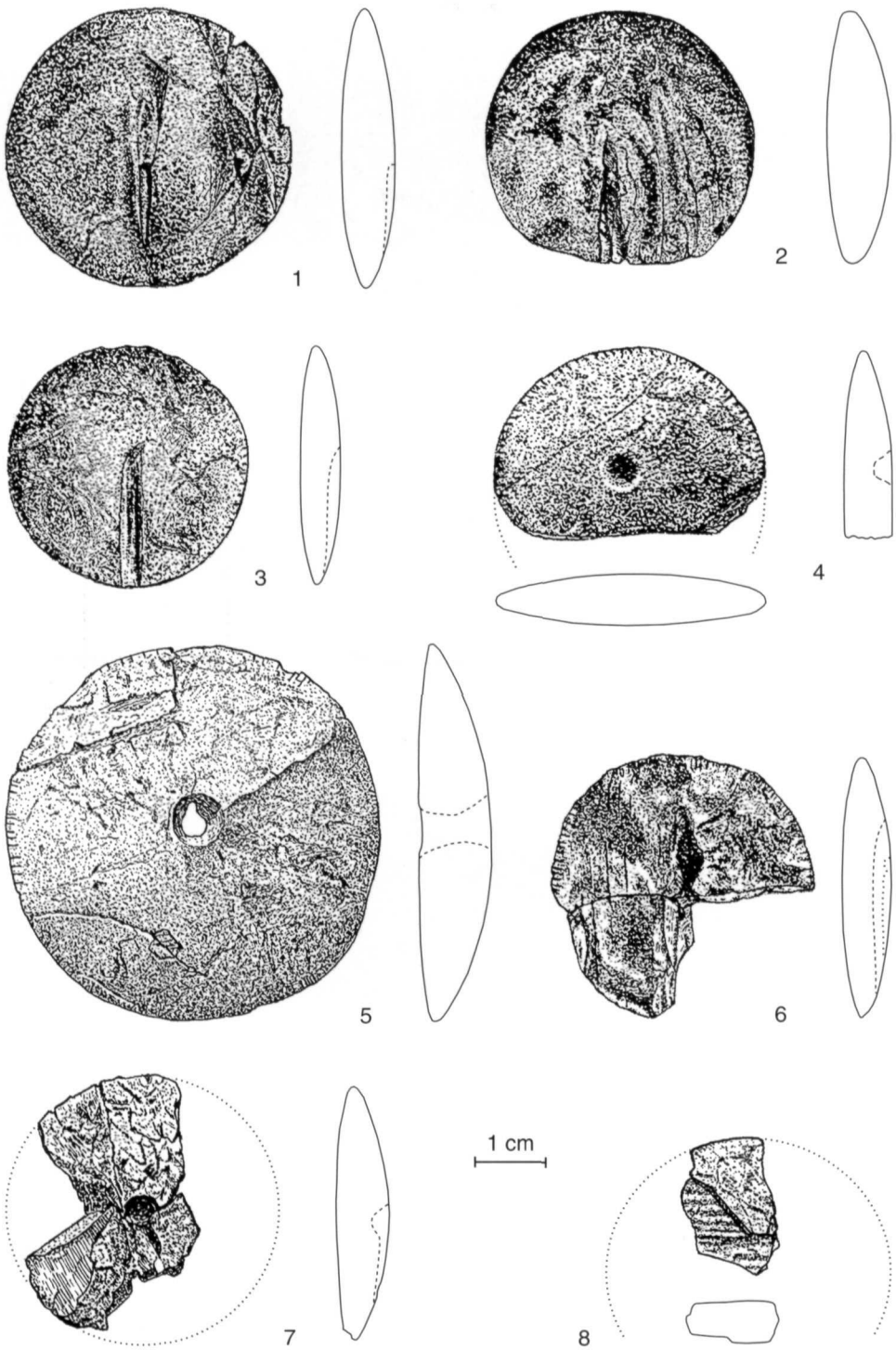

Fig. 4. Brno II, roundels of mammoth molars (1-3) and ivory (4-8).

Fig. 5. Brno II male idol of ivory

arm, while another groove from the inner side of the elbow emphasizes the effect of a bent limb. The surface is corroded. Dimensions: length 98 mm, thickness at the shoulder 23 mm, at the elbow 17 mm.

Makowsky (1892: 82) believed that this was a fragment of a small statue made from a single piece of mammoth ivory. It was only Rzehak (1911) who recognized that the arm could not form a single piece with the trunk because of the disposition of the lamellae, and he therefore assigned it to a different sculpture. Not until much later did Valoch (1959: 20) interpret it unequivocally as a figurine made up of several parts. One can only agree with this explanation. There remains, however, the question of how the individual parts were connected to one another. The head and trunk could perhaps have originally formed a single unit, but then the aperture along the axis of both parts would not be necessary (nor would it have been necessary for the aperture to run through the entire trunk in order to join it with the head). We cannot observe any modification on the intact right side of the trunk which would serve the purpose of attaching the right arm, insofar as this would have been the mirror image of the preserved left arm, i.e., with a vertical surface at the shoulder. It cannot, therefore, be ruled out that the left arm was adapted to the flat secondary breakage on the left side. It fits the trunk best when the upper part of the arm is directed slanting towards the back or, in the reverse direction, with the arm slanting upwards. The reduced polished surface with an aperture at the lower part of the right side of the trunk probably served to attach a movable right leg. The absence of the lower limbs and the right arm need not mean that Makowsky overlooked them in his examination – which is, in any case, very unlikely. Considering the secondary modification of the broken left side of the idol and the overall disintegration of its surface, it may be assumed that the figure was put into the grave in an already incomplete state. The origin of the aperture along the axis of the head and trunk is also unclear. It may be said with certainty only that its presence is deliberate. Either this was a case of the selection of an exceptional piece of raw material with a pathologically extended nerve canal (however, such specimens practically never occur, according to Musil), or the aperture was drilled or widened by some means which cannot be specified in greater detail (cf. the unusual lateral drill hole in the roundel in figure 4: 6).

– A worked fragment of ivory, cylindrical in shape, probably belonging to a different artefact.

4. Discussion

The Brno II burial of a man unquestionably belongs to the Gravettian or Pavlovian, as Valoch (1959) convincingly documented for the first time. The uncommon circumstances of its discovery and its unusual contents, however, distinguish the Brno burial site from other palaeolithic graves. Among these unusual features are, in particular:

– the burial's position in a flood plain, outside the site and the settlement area of the gravettian population in Moravia,
– the state of health of the deceased.

Periostitis is among the so-called non-specific infectious bone diseases (sometimes the term osteomyelitis is used, in which case, however, the entire bone, including the spongiosis, would have to be affected). X-ray pictures of the ulna (Fig. 1) show that pathological changes here are limited to the periosteum. With regard to the fact that pathological changes affect not only the femur but also the ulna and humerus, an infectious or metabolic origin seems more probable, while a traumatic origin may be ruled out. The inflammation was chronic, and the man must have been in considerable pain for years, which undoubtedly manifested itself in his psychological state as well (the connection of this phenomenon to shamanism has been emphasized by M. Eliade [1974: 27-28], among others). Non-specific infectious bone inflammations are common from the Neolithic onward (Steinbock 1976: 82), while no such case from the Palaeolithic was published until 1996. A connection between bone inflammation and the curvature of the femur in the man from the burial on Francouzská Street can be neither proved nor denied. The man from the Brno II burial may be pictured as an unusually robust, muscular individual of middle age (Jelínek 1959: 20-21) with neuroticised chronic pain throughout his entire body.

Another peculiarity involves the unusual grave goods: the Brno II burial was provided with considerable amounts of bones from large game animals; however, the circumstances of the find do not allow a determination as to whether the bones composed some kind of 'tomb' (as, for instance, at Kostenki 2 and 18: Boriskovski 1963; Praslov and Rogacev 1982) or were placed here as symbolic attributes. In contrast to cases of animal bones occurring in graves in palaeolithic settlement sites, their direct connection with the burial is apparent here. The significance of this part of the contents is thus of a more symbolic nature, and is apparently tied with the deceased's exceptional status. There is extensive literature on the transcendental aspects of deposits of bones of large game animals (for example, Holmberg 1925: 34 ff.; Zelenin 1936; Friedrich 1943; Lot-Falck 1953: 202-218; Findeisen 1957: 24-28; Paulson 1963; Eliade 1974: 158 ff.). From this perspective it is not possible to interpret the large mammoth bone dumps found in moist depressions in the vicinity of gravettian sites (Předmostí, Dolní Věstonice I and II, Milovice, Spytihněv) as mere waste material or supplies of raw materials or fuel.

The exceptional status of the deceased is also shown by the large occurrence of decorations made from fossilised

Dentalium badense Partsch molluscs, which never occurred on a massive scale anywhere in the South Moravian Miocene. In the burial on Francouzská Street, these shells were concentrated around the skull, that is, around that part of the body which is most closely associated with transcendental and symbolic aspects (cf. Taborin 1982: 45). Mollusc decorations in Upper Palaeolithic graves in Italy were likewise concentrated around the head (Zampetti and Mussi 1991: 151). The extensive abrasion on the longitudinal ribs of the shells bears witness to long use. The gathering together of such a large number of fossils of the same type could have lasted for several generations.

The male idol found here is the only anthropomorphic sculpture known from a palaeolithic grave thus far (Delporte 1993: 92), and its composition departs from the analogy of the European Palaeolithic in several respects. Figurines representing a human being, often clothed and placed in a household or ritual area, function as amulets or protective spirits with defined powers. The shaman captured the spirit of maladies, people and animals in them (Friedrich 1941-43: 30), and they became thus the instruments of various ritual performances (Dupré 1975: 90-91), often in connection with hunting magic – luring out the shadow soul of the animal (Paulson *et al.* 1962: 79, 81).

The most important shamanistic tool is, of course, the drum. Its existence in the Brno II burial is perhaps evidenced by the polished reindeer antler. Although in this form it could have served as a soft hammer in the fabrication of the chipped industry, the smooth surface of its functional part rules out such a use (cf. E. Boëda). It is therefore possible that it was a drumstick.

The set of decorative roundels has a certain analogy with that in Kostenki, namely, the round silt objects from Kostenki 1 and 4 (Abramova 1962). Particularly noteworthy is the fact that their execution is similar (and always perfect in terms of craftsmanship), even though the raw materials used varied, requiring different processing techniques. The most demanding must have been the three roundels made of rough-outs, which were obtained by dividing mammal molars diagonally to their natural lamellar structure. The marginal incisions are so light and inconspicuous that we might hesitate in designating them as decorative elements; perhaps they had some hidden meaning known only to their possessor. With the exception of the one item that is drilled through, the objects lack any kind of modification which would allow them to be strung or sewn on, thus excluding them from the large range of decorative objects of the Moravian Gravettian. This could be a case of cosmological symbols expressing 'centre' and 'radiation'; nor can a sexual significance of these deep radial grooves be ruled out (Breuil 1924: 549; Valoch 1959: 28).

Shaman circles, which our rings distinctly resemble, also served as cosmological symbols (Eliade 1974: 29, 148). A practical function has never been convincingly determined for them, and it is interesting that such a ring was also found near the mass grave in Předmostí (Valoch 1960). Isolated deposits of entire series of such objects have also been encountered in Moravia (Jiřice, Bořetice?). They recall the circular pectorals found in the shaman's grave at Ust'Uda in Siberia (Okladnikov 1975: tab. 126).

The analogies with sub-recent shamanism shown by the Brno burial site are truly surprising, and certainly could be due in part to chance. In any case, they indicate the deceased's exceptional status in the religious and ritual sphere. If this were merely a gravettian hunter, why would he be buried alone in open terrain outside the settlement, and equipped for the next world solely with objects which cannot be used either as weapons or for decoration?

Several of the themes of palaeolithic art (Clottes and Lewis-Williams 1996), the conspicuous depositing of bones (Ozols 1971; Tromnau 1992) and several burial sites have often been presented as possible evidence of prehistoric shamanism. Besides the Brno II burial, the burial sites at Paviland and Grimaldi-Grotta del Caviglione are also included in the Gravettian. Both were discovered in the last century and information about them is not precise (cf. May 1986). The grave of a man from Arene Candide in Liguria (Cardini 1942, lower Epigravettian) and that of a woman from St. Germain-la-Rivière (Blanchard *et al.* 1972, Magdalenian) stand out for their unusually rich furnishings.

Each of these graves exhibits certain features which may be linked to the exceptional status of the deceased in the ritual sphere: non-profane objects, roundels, rich ornamentation around the head, pathological phenomena, the bones or horns of large game animals, or the unusual design of the grave. The graves mentioned are also characterised by the distinct presence of ochre, which has been found in only half of all recorded palaeolithic burials (Binant 1991: 129). This indicates the prestigious status of those individuals who, even after death, were represented otherwise than as brave hunters.

Of all these graves, the one found on Francouzská Street in Brno is the oldest and, at the same time, the one which provides the most complete selection of 'shamanistic' attributes. 'Religionists' will presumably not be satisfied with such an assertion. They will find, for instance, that evidence of the ecstatic practices essential for a shaman is lacking. Although the similarity of attributes could attest to the existence of similar mechanisms, the question of which ideas, which myth they were derived from still remains.

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