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## **The Engraved Stone Pendant from Poiana Cireșului-Piatra Neamț, Romania. New Contributions to the Understanding of Symbolic Behavior in Gravettian**

*The 2013 archaeological excavation campaign carried out at Poiana Cireșului-Piatra Neamț Paleolithic site (Neamț County, North-Eastern Romania) led to the discovery, in the Gravettian I layer, of the first engraved stone pendant found in this settlement, in an area where such discoveries are very rare. The pendant was engraved on its both sides and notched along its outline. The same layer provided the largest number of art objects and tools made of hard animal materials from the Romanian Upper Paleolithic. The article describes the archaeological context of the find. Data on the sequence of Gravettian deposits, absolute dates of the Gravettian I layer, and information about faunal materials, collections of tools and art objects are given. The stone pendant having an oval shape and notches on both sides is subject to comprehensive study. Notably, incisions on both the upper face and the reverse show traces of ochre; the best preserved pigment is observed along the outline of the pendant. A peculiar decorative element of the pendant is represented by the two incisions near the orifice. Stylistic features of each surface of the object and technical execution of engravings are described, as well as tools that were probably used for making incisions. Differences of the find under study from other suspended personal ornaments of the East European Gravettian, as well as certain similarities, are indentified. It has been established that the Poiana Cireșului pendant is close to Eastern Europe and Northeast Asia Upper Paleolithic adornments.*

Keywords: *Gravettian, art objects, personal ornaments, engraved stone pendant.*

### **Introduction**

Recent studies on suspended personal ornaments (beads, pendants) have brought to light their potential of highlighting various socio-cultural aspects relating

to the Paleolithic, such as exchange and social networks, ethno-linguistic geography, individual and social identities (White, 1999; Taborin, 2004; Vanhaeren, d’Errico, 2005, 2006; Álvarez Fernández, Jöris, 2007). The justification for the use of personal

ornaments during the Paleolithic may have been their sustainability in relation to human experience, being often arguments for cultural and social continuity. In order to demonstrate the emergence of modern human behavior, most studies of personal ornaments have focused on the Early Upper Paleolithic finds, a fact determined by the symbolic function of the beads and pendants (Hahn, 1972; Kuhn et al., 2001; White, 1993, 1999, 2007; Vanhaeren, d'Errico, 2006; Álvarez Fernández, Jöris, 2007). However, on the Gravettian suspended personal ornaments, despite the numerous discoveries, only sparse information is available, this aspect being more obvious for the settlements in South-Eastern and Eastern Europe (Abramova, 1995; Taborin, 2004; Goutas, 2013). From this perspective, the new personal ornaments discovered in the Gravettian sites of South-Eastern Europe can provide important information on the ethno-cultural features of the Paleolithic communities of this region.

Organic raw materials were most often used in the Paleolithic to create suspended personal ornaments (shells, teeth, ivory, bones), while minerals were used rather rarely. For instance, in the Cantabrian region, in eleven Gravettian sites, 112 suspended personal ornaments were analyzed and, of these, only one was made of a mineral material: a schist pendant discovered at Cueva Morín in Spain (Álvarez Fernández, 2006: 219–220, 231–232). Few studies emphasize this aspect, yet the rarity of certain symbolic objects may have special implications for the understanding of the socio-cultural peculiarities of certain communities. At Sungir (Russia), in tomb 1, beside around 3000 ivory beads and pendants made of fox teeth, on the chest of the deceased, a single stone pendant has been found, preserving red pigment (Bader, 1978). According to some authors, this stone is primarily a witness of the symbolic production activities (manufacturing of pendants) which took place on the site (Trinkaus et al., 2014), considering that around 20 more similar pendants were discovered in the layer. But others give in it a special value, mainly because it was covered with red ochre (Bosinski, 2013: 508).

After the analysis made of the stone pendants discovered in various contexts, it may be observed that very few are engraved, the majority being perforated slabs. A few Aurignacian pendants, some decorated, are mentioned for Western Europe (Lorblanchet, 1999: 252). As regards the Early Upper Paleolithic, stone pendants were also discovered in Eastern Europe. For example, the Spitsyean (cultural layer II) of the Kostenki 17 settlement yielded 7 stone pendants, with no additional decoration (Sinitsyn, 2012: 1343–1344).

For the Gravettian, evidence is much scarcer. The Gravettian inhabitants of Isturitz cave (France), related to the “Noaillian” culture (Lacarrière et al., 2011),

appreciated pebble pendants that generally had an oval and flat shape, as well as a convex side opposite to a concave one, above which a perforation for hanging was made, even if the hardness of the rock was sometimes an impediment. Y. Taborin (2004: 125) points out that the stone pendants from the French Gravettian (the so-called “Perigordian”), commonly round-shaped, with the perforation placed in one of the extremities, do not have any apparent decoration. The discovery of an engraved art object made of stone in Florestan Cave (Italy), in a Gravettian layer, cannot be integrated into the category of suspended personal ornaments because its recent analysis has proven that the so-called perforation attempt is actually a part of the object’s ornamentation (Malerba et al., 2014).

For Central Europe, in Moravia, small, flat, perforated pebbles found among other decorative objects at Pavlov VI, Pavlov II and at Dolní Věstonice have been mentioned (Svoboda, 2012: 1467, 1468; Svoboda, Frouz, 2011: 204; Láznicková-Galetová, 2009; Valoch, Láznicková-Galetová, 2009); and Bárta (1988: 178, fig. 7) describes several perforated slabs found at Trencianske Bohuslavice (Czech Republic). One can notice, in the provided illustration, that two of the pendants from Pavlov I and II were decorated (Škrdla, 2000: Fig. 8; Svoboda, Frouz, 2011: Fig. 7). They are similar to the stone pendants discovered at Sungir (Russia) in a layer belonging to the latest phase of the Kostenki-Streletzkaja culture; they also present no apparent decoration (White, 1993, 2007; Abramova, 1995: 180). An oval calcareous marl pebble, with an asymmetrically placed orifice, was found in a layer attributed to the Kostenki-Avdeevoo culture at the Kostenki 13 settlement. The famous Kostenki I settlement also yielded a few stone pendants made of calcareous marl, quite massive and not particularly spectacular (Abramova, 1995).

In view of the scarcity of engraved stone pendants during all the Eurasian Paleolithic, the discovery during the 2013 archaeological excavation campaign at Poiana Cireșului-Piatra Neamț of a stone pendant geometrically engraved on its both sides and notched along its outline may provide new information on the individualization of certain communities by means of particular ornamental systems, or of the existence of large social networks. It was an important discovery because stone pendants engraved in such a manner are very rare in the Eurasian Gravettian, and the one found at Poiana Cireșului-Piatra Neamț has several original elements.

### Context of the find

The Gravettian settlement of Poiana Cireșului-Piatra Neamț (hereinafter—Poiana Cireșului) in Neamț County, North-Eastern Romania, is located on an

erosion level cut into flysch strata, on the right bank of the Bistrița River, at the confluence with the Doamna Rivulet (46°55'919" north latitude and 26°19'644" east longitude), at an absolute elevation of 395 m (Fig. 1). In 1998, the settlement of Poiana Cireșului entered a new stage of systematic research, and excavations have since been performed with modern methods. The archaeological materials, recovered from an area of nearly 100 square meters and depths of up to 4 m, were tridimensionally provenienced relative to a unique point zero. The results of the research undertaken between 1998 and 2007 have been published in several studies (Cârciumaru et al., 2006, 2007–2008, 2010; Steguweit, 2009; Zeeden et al., 2009).

The systematic diggings concerned especially the upper part of the geological sequence (8 m loessic sequence) made up of the following stratigraphic units: 1 – Holocene pale brown soil (Cambisol); 2 – yellow Late Glacial carbonate free loess layer; 3 – compact, decalcified light reddish brown Gelistagnic Cambisol; 4 – heavily carbonated clay-loessic light olive layer; 5 – calcic olive sandy-loessic layer (Fig. 2, 1).

Archaeologically, the Poiana Cireșului deposits yielded the following cultural sequence:

an Epigravettian layer found in the upper part of the deposit (geological unit 2), defined by more than 1500 lithic pieces;

a Gravettian (I) layer (initially marked as Epigravettian II), found at a depth of 170–210 cm in the fourth

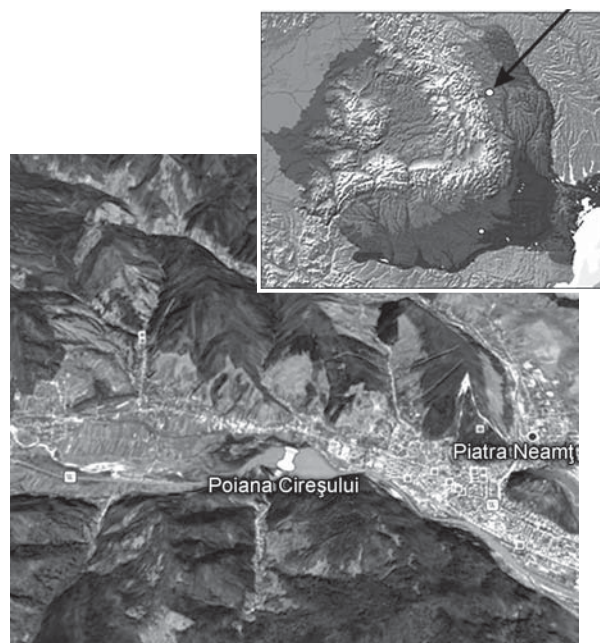


Fig. 1. The Upper Paleolithic settlement of Poiana Cireșului (Piatra Neamț town). Site location.

geological unit, and dated to between  $19,459 \pm 96$  BP (ER 12162) (23.24 ka cal BP) and  $20,154 \pm 97$  BP (ER 12163) (24,096 ka cal BP) (see Table). This is the richest cultural layer at Poiana Cireșului: it yielded over 15,000 lithic

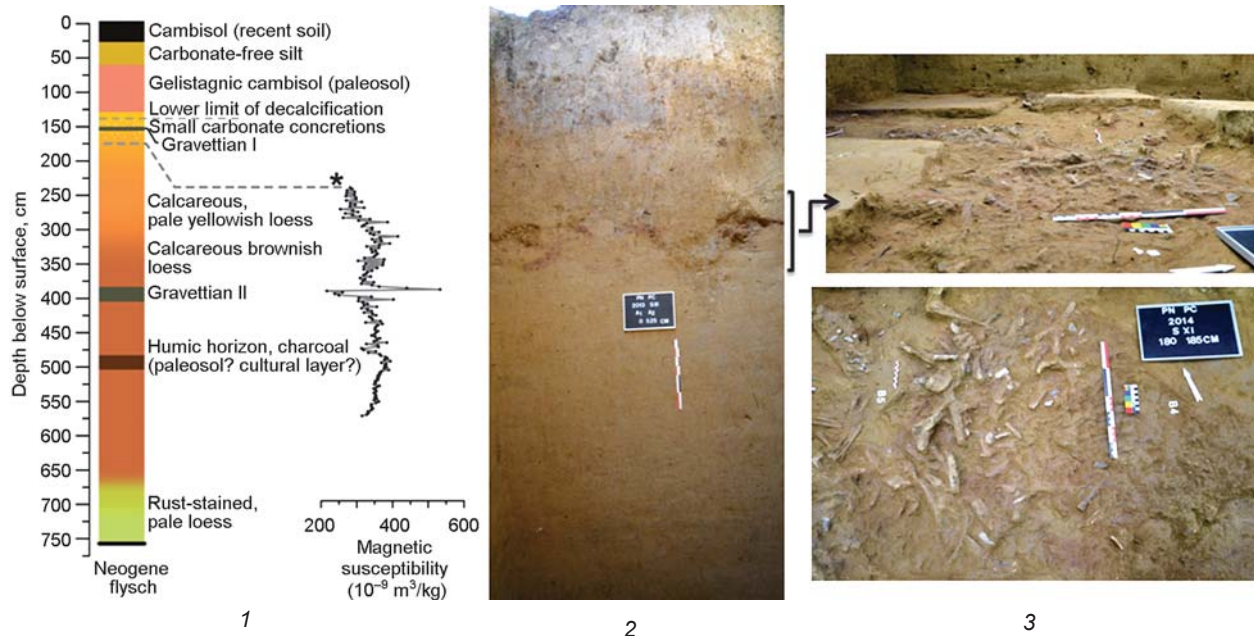


Fig. 2. The Gravettian I layer at Poiana Cireșului.

1 – profile of the western wall (top of the ridge), 2006 excavation (after (Zeeden et al., 2009)); 2 – profile of the southern wall, Gravettian I layer, section IX/2013, near the square in which the stone pendant was found; 3 – images of excavating the Gravettian I layer, section X/2014, marked in the profile of section IX/2013.

materials, numerous osteological remains, an organic material industry and mobiliary art objects (Fig. 2, 2, 3);

a second Gravettian (II) layer (initially marked as Gravettian I), found at a depth of 290–310 cm (the contact between geological units 4 and 5) and dated to  $25,135 \pm 150$  BP (Beta Analytic 244072), which only provided around 200 lithic materials;

a third Gravettian (III) layer (initially marked as Gravettian II), located at a depth of 375–415 cm (fifth geological unit) and dated to between  $25,760 \pm 160$  BP (Beta Analytic 244073) and  $27,321 \pm 234$  BP (ER 11859) ( $31,969$  ka cal BP). This level yielded approximately 2600 lithic materials.

The pendant was discovered in section X, square A-1, at a depth of 190 cm, in the richest cultural layer at Poiana Cireșului, the Gravettian I layer (Fig. 2). This layer benefited from absolute dating on several occasions (AMS, OSL), during different stages, all of them situating it around 20,000 uncal BP (see *Table*). The cultural layers at Poiana Cireșului are separated by very thick sterile deposits, representing veritable seals for the identified habitations. At the same time, in the Gravettian I layer, distinct activity areas were found (butchering, antler-processing, knapping, hearths and ochre areas).

Current archaeozoological research has focused on the Gravettian I layer because of the abundance of osteological material recovered from it (approximately 16,000 remains) (Fig. 2, 3). Analyses led to the conclusion that Poiana Cireșului was a seasonal settlement, used for the hunting of *Rangifer tarandus*, which accounts for 97 % of the identified remains. Aside from reindeer, small quantities of *Bos/Bison*, *Cervus elaphus*, *Equus* sp., *Rupicapra rupicapra* and *Vulpes/Alopex* remains were found as well. The study of the inferior dentition and antlers of reindeer proves that the Poiana Cireșului

Gravettians inhabited this settlement from early autumn to early winter, when they hunted mainly full-grown females and young of both sexes, especially for food (Cârciumaru et al., 2006, 2007–2008, 2010).

The hard animal material industry is quite rich and diverse, and includes ivory objects, among which two at least are processing-tools (“outils de transformation” in French), a few reindeer antler points, numerous antler tools with rounded and massive active part (wedges and/or smoothers), and rare bone awls (study by N. Goutas, in progress). The lithic material was partially published in several synthesis studies (Ibid.) and is now being analyzed. A few general features can be highlighted. The dominant tools are burins and, to a lesser extent, end-scrapers, while backed bladelets are not very numerous. Several tool-types are particular to this layer, such as denticulated bladelets, denticulated backed bladelets and finely retouched microbladelets.

The Gravettian I layer provided the largest number of art objects and tools made of hard animal materials. The Poiana Cireșului collection is characterized by significant diversity, and includes approximately 2/3 of all art objects of the Upper Paleolithic in Romania (Cârciumaru, Nițu, Țuțuianu-Cârciumaru, 2012). The Gravettian I layer yielded four pendants made of wolf canine, deer tooth, residual deer tooth, fox canine, two beads made of stone and *Dentalium*, an engraved antler fragment (Cârciumaru, Țuțuianu-Cârciumaru, 2009), two diaphysis with triangular incisions (notches), a whistle made of a reindeer phalange (Cârciumaru, Țuțuianu-Cârciumaru, 2011), several variously engraved bone fragments, a quartzite pebble engraved and painted with red ochre, and four aragonite moulds (*Congerina subcarinata* bivalves) painted with red ochre (Cârciumaru et al., 2011). Another important find, this time from the Gravettian III

#### Absolute dating for the Poiana Cireșului Gravettian I layer\*

| No. | Depth, m  | Layer                        | Material type            | Lab. No              | Age, uncal. ka BP | Age, ka          | Age error, ka |
|-----|-----------|------------------------------|--------------------------|----------------------|-------------------|------------------|---------------|
| 1   | 1.20      | Above the Gravettian I layer | Silt-sized quartz grains | BT 499               | –                 | $22.66 \pm 1.81$ | –             |
| 2   | 1.90      | Gravettian I                 | Charcoal                 | ER 12162             | $19,459 \pm 96$   | 23.24            | 0.31          |
| 3   | 1.92–1.93 | Same                         | Same                     | Beta 224156          | $20,020 \pm 110$  | –                | –             |
| 4   | 2.10      | "                            | "                        | Beta Analytic 244071 | $20,050 \pm 110$  | –                | –             |
| 5   | 2.07      | "                            | "                        | ER 9964              | $20,053 \pm 188$  | 23.978           | 0.294         |
| 6   | 2.10      | "                            | "                        | ER 9965              | $20,076 \pm 185$  | 24               | 0.358         |
| 7   | 2.10      | "                            | "                        | ER 12163             | $20,154 \pm 97$   | 24.096           | 0.294         |

\*<sup>14</sup>C data were calibrated using CalPal 2007<sup>online</sup> with the Weninger and Jöris (2008) calibration data; for details on the AMS dating and the OSL analyses, see (Zeeden et al. 2009).

layer ( $25,760 \pm 160$  to  $27,321 \pm 234$  BP), is a necklace made of 12 very small snail shells (5–8 mm) of the *Lythoglyphus naticoides* species (Cârciumaru, Țuțuianu-Cârciumaru, 2012).

The manufacture of morphologically diversified adornments, the development of a decorative style with a high degree of schematization, and also engravings that are fairly similar in style and shape, etc., prove that the communities were able to produce personalized systems that defined the cultural features of this important settlement of Gravettian hunters from South-Eastern Europe.

### Description of the engraved stone pendant

As mentioned above, the 2013 archaeological excavation campaign carried out at Poiana Cireșului-Piatra Neamț led to the discovery, in section X, square A-1, at a depth of 190 cm, in the Gravettian I layer, of the first engraved stone pendant found in this settlement (Fig. 3). The pendant's dimensions are as follows: length 34 mm, width 19 mm, thickness 4.5 mm, weight 2.64 g. The pendant was made of a relatively soft rock, a polymictic siltite, with a slightly greenish tint. The intensity of the color is accentuated if the rock is wet. This property was probably noticed by the Gravettian(s) who wore this pendant.

The pendant is oval, with a convex to slightly concave profile. It has a unique perforation intended for hanging, which is located at one of its extremities (Fig. 3). The hole is biconical, and was probably created using a lithic tool with a sharpened end (e.g. a burin, bladelet, borer etc.). The current dimensions of the orifice (there is obvious wear that resulted from hanging) are  $2274.16 \mu\text{m}$  (2.2 mm) in maximum length and  $1429.69 \mu\text{m}$  (1.4 mm) in maximum width (Fig. 3). Suspension-marks are visible to the naked eye, in the sense that an elongation of the orifice, which probably had initially a more or less circular shape, occurred. Using a fiber-optic digital microscope (Keyence VHX 600, 20x–200x magnification), one can confirm the presence of use-wear (polishing and deformation of hole) of the upper part of the orifice (Fig. 4, 1, 2).

The use by suspension of this pendant is certain. Evidence for this is provided not only by the rather elongated orifice (because of the weight of the pendant which would have deformed the hole of suspension, doubtless further to long use), but also by the heavy polish on the distal part of the lower face (Fig. 3, 2), which resulted from contact with the body of the person who wore it, or with his or her clothes. The preservation of the use-wear, particularly on the distal end, was favored by the slightly curved shape of the pendant reverse.

A peculiar decorative element highlighted on this pendant is represented by the two incisions near the

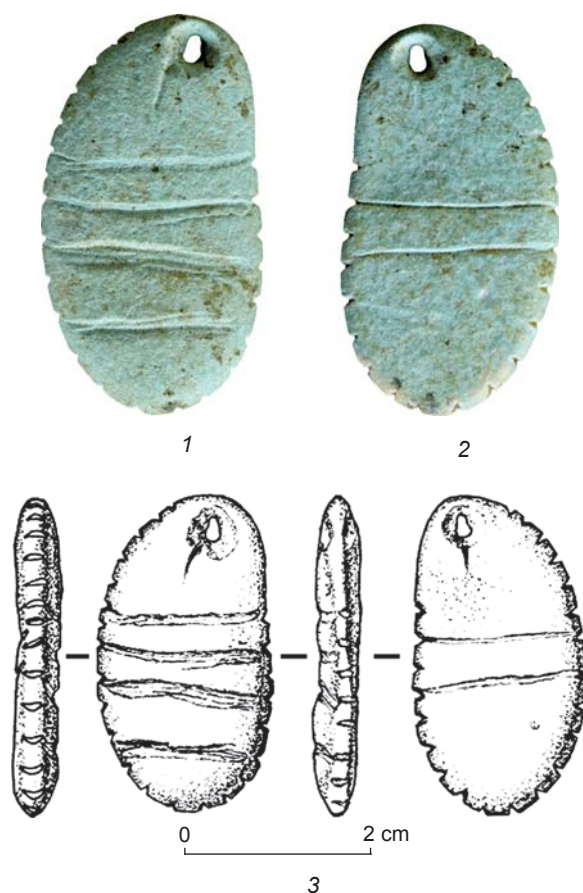


Fig. 3. The engraved stone pendant from the Gravettian I layer of Poiana Cireșului.

1 – upper face; 2 – reverse-lower face; 3 – pendant drawing and profile (drawing by F. Dumitru).

orifice. The one on the upper face is placed slightly to the left, while that on the reverse is oriented towards the middle of the perforation. They do not seem to have a decorative role. These incisions are recovered by the hole and the functional polishing (Fig. 3, 1, 2), their realization is thus previous. Actually, we can interpret these incisions as a preparatory stage to making the hole of suspension. This stage is necessary all the more on hard materials, and when the hole is fitted out from both sides of the blank. These incisions are remnants of marks allowing the craftsman: 1) to prop up well the lithic tool, in order to realize then the hole by semi-rotary scraping; 2) to make sure that both orifices fitted out on each side correspond perfectly.

The pendant from Poiana Cireșului was decorated with schematic and abstract themes. It is possible that the use of geometrical motifs would have been suggested in this case precisely by the relatively regular and oval shape of the pendant, which encouraged the engraving of independent linear regular incisions, with a certain logic, in order to achieve a visual equilibrium (Taborin, 2004).

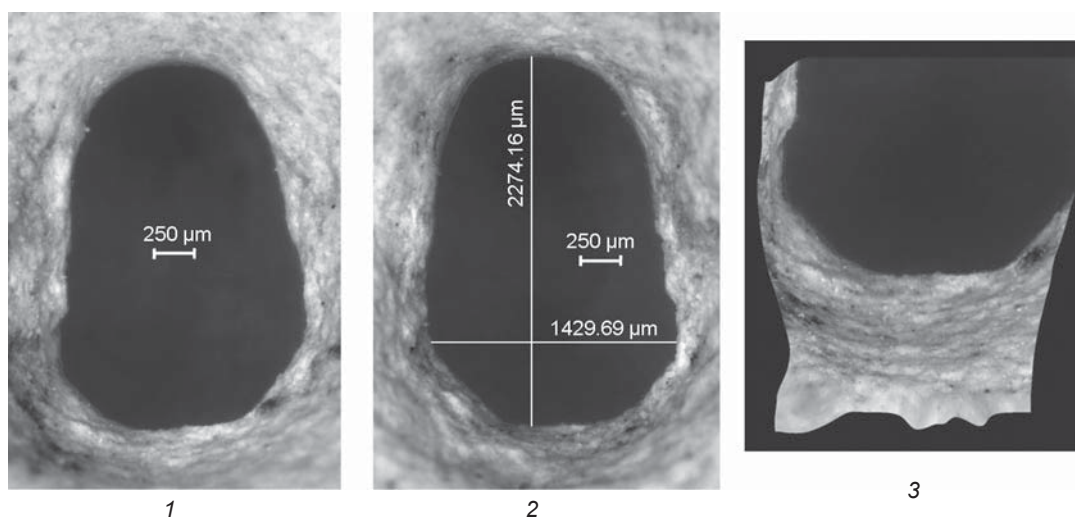


Fig. 4. Use-wear on the upper part of the orifice due to usage by suspension.  
 1 – upper face; 2 – reverse face (magnification 100x); 3 – marks resulting from the rotation of a lithic tool to make the penetration, preserved on the lower part (magnification 150x).

Most of the pendant's outline is marked with a total of 23 parallel and linear incisions (notches), arranged, by an overwhelming majority, roughly 3 mm apart. These were meant to give the pendant a unique aspect, particularly since the incisions were clearly painted with ochre, which is visible macroscopically, and much more so with a digital microscope (Fig. 5). In fact, some traces of pigments could also be observed on both sides of the pendant; but, because of the conditions in which the pendant had lain in the deposit, they were probably not preserved as well as on the incisions along the outline.

One of the unusual attributes of the pendant from Poiana Cireşului is that it is engraved on both sides, which is rather rare among Gravettian pendants in Europe, especially those decorated with geometrical motifs. The engravings on the upper face (Fig. 6, 1–4) consist of four rows (numbered top-to-bottom according to the position of the pendant in Fig. 3) of incised, relatively parallel lines. From a technical point of view, these stigmata can be related to the grooving technique (Goutas, 2004). Grooves (each being composed by a “floor” and by two “walls”) have a particular morphology. Indeed, they give the impression that several incisions have been drawn individually. But according to the observations on other objects from the site (study by N. Goutas in progress), these irregular incisions seem to ensue from the particular morphology of the lithic tool used, probably a burin. These features are more obvious with the first two rows, and fade out towards the fourth row.

The first groove consists, apparently, of a single incision (Fig. 6, 1). The second groove is made of two parallel incisions with an additional third incision on

the right half (Fig. 6, 2). The third groove is the most complex, as it consists of four incisions which do not always span the entire width of the upper face; this sequence of incisions resulted in a width twice that of the previous row (Fig. 6, 3). Finally, the fourth groove consists of two closely spaced incisions, and towards the right side, even a third incision can be observed (Fig. 6, 4). We shall also note that the first two grooves (Fig. 6, 1, 2) seem to have been realized with the trihedron of the burin (V dissymmetric profile), while the third seems more realized with the dihedral of the tool (U dissymmetric cross-section) (Fig. 6, 3).

Concerning the fourth groove, we can also wonder if the tool would not have revolved in the course of use: the groove would have been begun with the trihedron then the dihedral of the burin (Fig. 6, 4). Experiments will be necessary to confirm this hypothesis and to better characterize techniques used.

The reverse (Fig. 3, 2) is decorated with two relatively parallel incisions which are quite firmly traced, without hesitation. The first incision is slightly irregular in terms of its width relative to the other incision (Fig. 6, 5), but it offers a classic “V profile”, and may be related to the use of the trihedron of the burin. In any case, these two grooves were made with a different tool than the one used for the upper side. Here, a very narrow burin has been used, as an “angle burin”; or, because of the thinness of the grooves, maybe a “spall burin”.

We believe that the difference in the technical execution of the decoration on the two sides of the pendant may not be accidental. The choice of a polyhedral burin to make the grooves on the upper side emphasizes the Gravettian artist's intention to give that particular surface greater aesthetic value.

Fig. 5. Ochre preserved on the incisions on the pendant outline.

1–8 – first incisions on the concave side (see Fig. 3, 1, numbered from top to bottom); 9–13 – incisions on the convex side: 9–11 – incisions 1–3; 12 – incision 5; 13 – incision 12 (images captured with the Keyence VHX 600 microscope).

As for the shaping of the stone by scraping or polishing, no traces of such processes could be observed, despite the use of a powerful digital microscope that allows a magnification up to 200x; this is likely due to the structural characteristics of the rock.

### Discussion and conclusions

The pendant discovered at Poiana Cireșului is exceptional among the suspended personal ornaments of the East European Gravettian by three aspects: the raw material from which it was made, the schematic engraving style, and the unusual use of polyhedral burin to make some decoration. As we mentioned at the beginning of the article, decorated stone pendants are very rare during the Upper Paleolithic. If we take into account the first two aspects, some analogies that can be made refer to two more pendants discovered in Romania at Mitoc-Malu Galben (Botoșani County) (Fig. 7, 1) (Chirica, 1982) and at the Cioarei Cave from Boroșteni (Gorj County) (Fig. 7, 2) (Cârciumaru, Dobrescu, 1997).

The engravings on the Gravettian I (old Gravettian) pendant from Mitoc-Malu Galben (Fig. 7, 1), discovered by V. Chirica (1982), were described by C. Beldiman (2004). The decorations consist of straight and curved, radially set lines with a V or U asymmetric profile. The pendant's outline is decorated with 23 parallel notches, the same number as on the Poiana Cireșului pendant, with 7 of them set on the two convex sides and 9 on the concave. After some hesitation regarding the stratigraphic position of this pendant, it is now generally agreed that it dates to between  $28,910 \pm 480$  uncal BP (GrN-12636) and  $26,700 \pm 1040$  uncal BP (GX-9418). From a stylistic perspective, the ornament of the pendant of Mitoc is hard to interpret. It is far from the realism of the

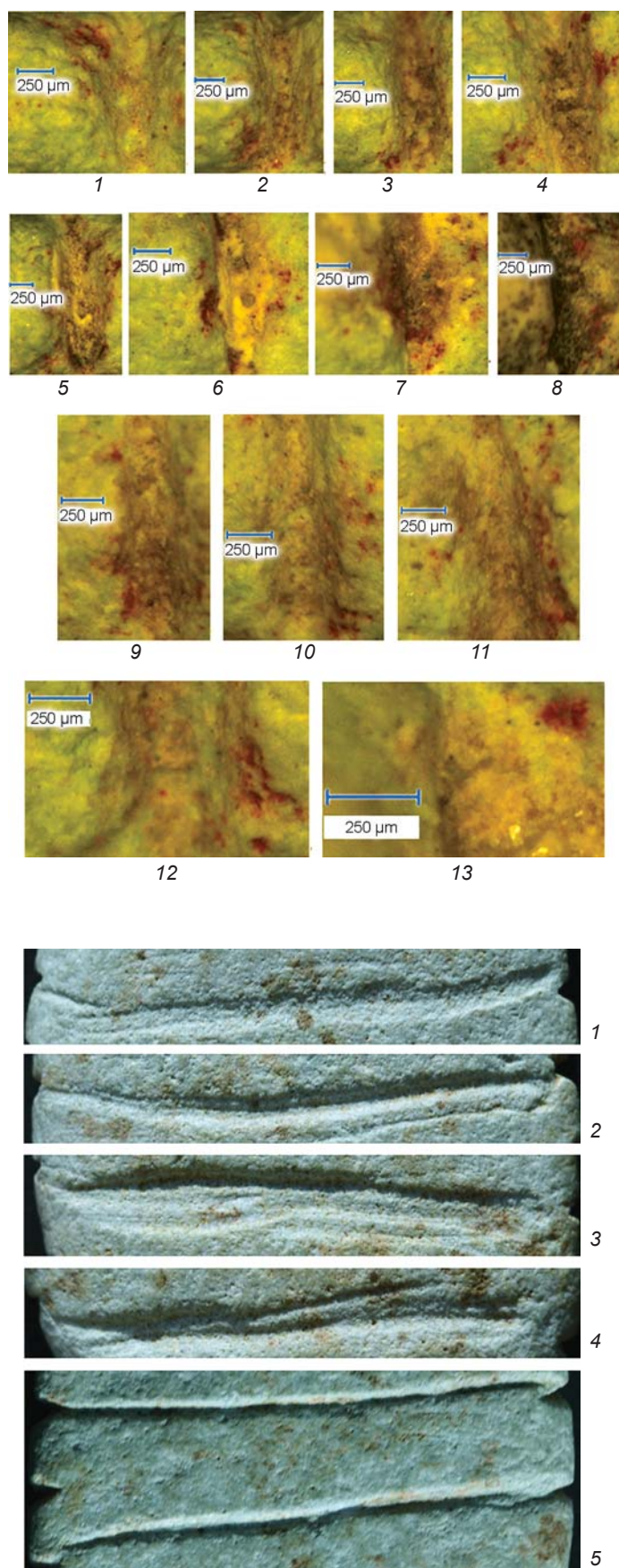


Fig. 6. Method of making incisions on the upper face (1–4) and reverse (5).

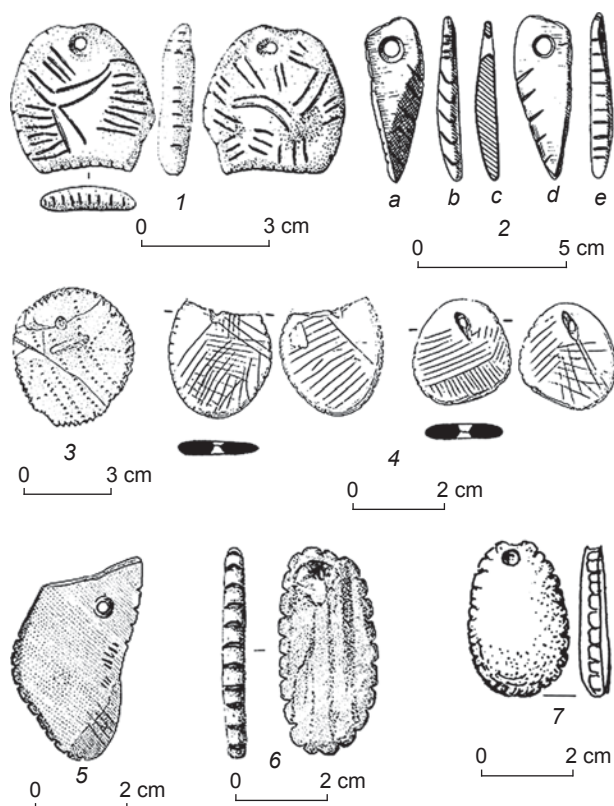


Fig. 7. Engraved stone pendants.

1 – Mitoc-Malul Galben (after (Chirica, 1982)); 2 – Cioarei cave from Boroșteni (after (Cârciumaru, Dobrescu, 1997)); 3 – Cosăuți (after (Borziac, Otte, Noiret, 1998)); 4 – Pavlov I and II (after (Škrđla, 2000)); 5, 6 – Isturitz (after (Lorblanchet, 1999; Sacchi, 1987)); 7 – Dzudzuana (after (Bar-Yosef, 2011)).

engravings made out of various objects of the West European portable art, and does not belong to the East European schematism either.

The highly silicified marly sandstone pendant from the Cioarei Cave of Boroșteni (Fig. 7, 2) distinguishes itself by the regularity of the incisions (Cârciumaru, 2000). On the right edge of the pendant, on both the upper face and the reverse, oblique incisions were made; these come together on the edge in a V-shape. The left edge is wider, and adorned with ten transversal, parallel incisions, which are set at different distances and reach diverse depths. The smaller edge, located above the orifice, has only two incisions. Overall, the pendant has 21 incisions along its outline. The symbolic value of the pendant found at Cioarei Cave is highlighted by the fact that its entire surface was painted with red ochre. The Gravettian layer in which the marly sandstone pendant was discovered was dated to between  $25,900 \pm 120$  uncal BP (GrN-15051) and  $23,570 \pm 230$  uncal BP (GrN-15050).

Relatively close to Poiana Cireșului, at the site of Cosăuți in the Republic of Moldova, an amulet-pendant was found in the Gravettian II level, dated to between

$19,020 \pm 925$  uncal BP (SOAN 2462) and  $15,520 \pm 800$  uncal BP (LE 3305). It was made of a disk-shaped stone, with an oval cross-section, and measures  $5.0 \times 4.0 \times 0.9$  cm (Fig. 7, 3). The decoration consists of about 60 incisions along the entire outline, nine alignments of deep punctuation on one surface and traces of ochre (Borziac, 1991; Chirica, Borziac, Chetaru, 1996; Borziac, Otte, Noiret, 1998; Noiret, 2009).

Among the stone pendants found in the Moravian sites Pavlov VI, I, II, Dolni Věstonice I and Předmosti (Lázníková-Galetová, 2009; Škrđla, 2000; Svoboda, 2012; Svoboda, Frouz, 2011) at Pavlov I and II, in each of these sites, a pendant engraved on both sides has been found (Fig. 7, 4). According to the illustration provided in some studies (Škrđla, 2000: Fig. 8; Svoboda, Frouz, 2011: Fig. 7), they are incised with parallel lines on both sides and notches on the outline, stylistically being quite similar to the one from Poiana Cireșului.

The pendant from Poiana Cireșului is stylistically similar to that of Boroșteni by the ornament made up of parallel lines and by the painting with red ochre, to those from Pavlov by the notches and incisions on both sides and to the ones from Mitoc and Cosăuți only by the notches on its outline. These are the only Gravettian stone pendants stylistically close to the complexity of the pendant from Poiana Cireșului.

The decoration of the outline with incisions (notches) is a more general characteristic style, also seen in other art objects. Actually, this type of incision is a constant of the decoration of some art objects from Poiana Cireșului, such as the incised quartz pebble and the two engraved diaphysis. In this context, we believe that the marking of the outline of the pendant indicates the invoking of possible analogies. From a certain perspective, this method of decoration would indicate the mental universe of certain Paleolithic groups, and a legacy probably from the Aurignacian. Indeed, there are several interesting examples of Aurignacian pendants on which the outline is marked by incisions, such as a schist pendant whose shape suggests a horse's head, from the typical Aurignacian found at Isturitz Cave (Fig. 7, 5) (Lorblanchet, 1999: 252); and a perforated micaschist pebble with genuine notches on the contour, from the Aurignacian II layer of the southern chamber of the Isturitz Cave (Fig. 7, 6) (Sacchi, 1987: 14–15).

When dealing with schematic decorations, analogies can obviously be extended on ample chronological levels. Pendants of almost the same type seem to be found more towards Eastern Europe, and even the Asian part of Russia. Some similarities in terms of the already defined criteria, namely raw material, method of decoration and chronology, come from sites located in Eastern Europe. Geographically, the closest example is one of the two stone pendants discovered at Dzudzuana cave in the Caucasus (Georgia), in the upper part of the stratigraphic



unit C, dated to between 27 and 24 ka cal BP (Bar-Yosef et al., 2011: 339, 340). The dimensions and shape of the pebble are very similar to those of the Poiana Cireșului pendant; and the same type of incisions, placed along the pendant's outline, can be observed (Fig. 7, 7). The stratigraphic and cultural sequence, which is fairly similar at the two sites, adds to the similarities in terms of context, although the two sites seem quite distant geographically.

If one considers only the style of decoration, regular peripheral incisions seem to be a particular and common feature of decorated objects discovered in the Siberian sites of the Irkutsk region (Bednarik, 2013: 51), namely: Oshurkovo, Malta, Buret, Afontova Gora II, Afontova Gora III, Itkutskii gospital, etc. As a matter of fact, the bone pendant from Oshurkovo is stylistically comparable to the one from Poiana Cireșului. Still in Siberia, level II of the Khotyc site revealed ornamented stone pendants made of soft rocks and the Pereselencheskyi-punkt 1 site yielded a pendant with peripheral incisions and a biconical perforation. This type of schematic decoration was discovered in the two sites only in levels dated to between 30,000 and 25,000 years BP (Lbova, 2010, 2012: 1126). What we find interesting is the intensification of color in contact with water with the Khotyc pendants, a phenomenon that can be noticed with the Poiana Cireșului pendant.

In conclusion, there are several characteristics which bring the Poiana Cireșului pendant close to Eastern Europe and Northeast Asia Upper Paleolithic adornments, such as the relatively soft rocks that served as blanks, which can change color depending on the intensity of wetting, the use of geometrical motifs engraved on both sides, the incisions along the outline, the painting with red ochre, the similar chronological level of the discoveries, etc. These elements may indicate a peculiarity of some Upper Paleolithic groups and possibly large social networks.

While similarities regarding the engraving of the outline may be noticed in Eastern Eurasia, engravings on both sides of the stone pendants are extremely rare in the Gravettian from Central and Eastern Europe. For this reason, the discovery of four engraved stone pendants in the Carpathian region (the pendants of Poiana Cireșului, Mitoș, Cioarei Cave and Cosăuți) may represent a feature of the Gravettian from this area, bringing new information on the individual and social identities of some Gravettian communities of South-Eastern Europe.

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### References

- Abramova A.Z. 1995**  
L'art paléolithique d'Europe orientale et de Sibérie. Paris: Edition Jérôme Millon.
- Álvarez Fernández E. 2006**  
Los objetos de adorno-colgante del Paleolítico Superior y del Mesolítico en la Cornisa Cantábrica y en el valle del Ebro: una visión europea. Salamanca: Ediciones Universidad de Salamanca. (In Spanish).
- Álvarez Fernández E., Jöris O. 2007**  
Personal ornaments in the Early Upper Paleolithic of Western Eurasia: An evaluation of the record. *Eurasian Prehistory*, vol. 5 (2): 31–44.
- Bader O.N. 1978**  
Sungir: An Upper Paleolithic Site. Moscow: Nauka. (In Russian).
- Bar-Yosef O., Belfer-Cohen A., Mesheviliani T., Jakeli N., Bar-Oz G., Boaretto E., Goldberg P., Kvavadze E., Matskevich Z. 2011**  
Dzudzuana: An Upper Palaeolithic cave site in the Caucasus foothills (Georgia). *Antiquity*, vol. 85: 331–349.
- Bárta J. 1988**  
Trencianske Bohuslavice, un habitat gravettien en Slovaquie Occidentale. *L'Anthropologie*, vol. 92 (4): 172–182.
- Bednarik R.G. 2013**  
Pleistocene paleoart of Asia. *Arts*, vol. 2: 46–76.
- Beldiman C. 2004**  
Parures préhistoriques de Roumanie: pendeloques paléolithiques et épipaléolithiques (25.000-10.000 B.P.). In *La Spiritualité*, M. Otte (ed.). Liège: Université de Liège, pp. 55–69. (ERAUL; No. 106).
- Borziac I. 1991**  
Quelques données préalables sur l'habitat tardipaléolithique pluristratifié de Cosaouty sur Dniestr Moyen. In *Le Paléolithique et le Néolithique de la Roumanie en contexte européen*, V. Chirica, D. Monah (eds.). Bibliotheca Arheologica Iassiensis 4. Iași: Institut d'Archéologie, pp. 56–72.
- Borziac I., Chirica V., Chetraru A.N. 1996**  
Gisements du Paléolithique Supérieur ancien entre le Dniestr et la Tisa. Bibliotheca Arheologica Iassiensis V. Iași: Helios.
- Borziac I., Otte M., Noiret P. 1998**  
Piese de artă paleolitică și de podoabă de la stațiunea paleolitică cu mai multe niveluri de locuire Cosăuți din zona Nistrului mijlociu. *Revista Arheologică*, vol. 2: 5–27.
- Bosinski G. 2013**  
Le précurseurs de l'art aurignacien. In *Le Paléolithique Supérieur Ancien de l'Europe du Nord-Ouest*, P. Bodu, L. Chehmana, L. Klarik, L. Mevel, S. Soriano, N. Teyssandier (eds.). Mémoire LVI: Société Préhistorique Française, pp. 497–511.
- Cârciumaru M. 2000**  
Peștera Cioarei-Boroșteni. Paleomediul, cronologia și activitățile umane în Paleolitic (La grotte Cioarei-Boroșteni. Paléoenvironnement, chronologie et activités humaines en Paléolithique). Târgoviște: Editura Macarie.

**Cârciumaru M., Anghelinu M., Niță L., Mărgărit M., Dumitrașcu V., Dumitru F., Cosac M., Cîrstina O. 2007–2008**

A Cold Season Occupation during the LGM. The Early Epigravettian from Poiana Cireșului (județul Neamț, North-Eastern, Romania). *Acta Archaeologica Carpathica*, vol. XLII–XLIII: 27–58.

**Cârciumaru M., Anghelinu M., Steguweit L., Niță L., Fontana L., Brugère A., Hambach U., Dumitru F., Cîrstina O. 2006**

The Upper Palaeolithic site of Poiana Cireșului (Piatra Neamț, North-Eastern Romania) - Recent results. *Archäologisches Korrespondenzblatt*, vol. 36 (3): 319–331.

**Cârciumaru M., Anghelinu M., Steguweit L., Niță L., Fontana L., Brugère A., Hambach U., Mărgărit M., Dumitrașcu V., Cosac M., Dumitru F., Cîrstina O. 2010**

Recent Results from the Upper Paleolithic Site of Poiana Cireșului-Piatra Neamț. In *Aspects concerning the Middle and Eastern European Upper Paleolithic-Methods, Chronology, Technology and Subsistence*, C. Neugebauer-Maresch, L. Owen (eds.). Wien: Akademie-Verlag, pp. 209–219.

**Cârciumaru M., Dobrescu R. 1997**

Paleoliticul superior din peștera Cioarei (Boroșteni, com. Peștișani, jud. Gorj). *Studii și Cercetări de Istorie Veche și Arheologie*, vol. 48 (1): 31–62.

**Cârciumaru M., Lazăr I., Nițu E.-C., Țuțuianu-Cârciumaru M. 2011**

The symbolical significance of several fossils discovered in the Epigravettian from Poiana Cireșului-Piatra Neamț, Romania. *Preistoria Alpina*, vol. 45: 9–15.

**Cârciumaru M., Nițu E.-C.,**

**Țuțuianu-Cârciumaru M. 2012**

L'art mobilier gravettien et épigravettien en Roumanie. In *L'art pléistocène dans le monde*, J. Clottes (ed.). Préhistoire, Art et Sociétés, Bulletin de la Société Préhistorique Ariège-Pyrénées LXV–LXVI, Actes du Congrès IFRAO 2010. Tarascon-sur-Ariège, pp. 240–241/CD 1361–1377.

**Cârciumaru M., Țuțuianu-Cârciumaru M. 2009**

Etude technologique, effectuée à l'aide du microscope digital VHX-600, sur un os gravé épigravettien de l'habitat de Poiana Cireșului-Piatra Neamț. *Annales d'Université Valahia Târgoviște*, Section d'Archéologie et d'Histoire, vol. XI (2): 7–22.

**Cârciumaru M., Țuțuianu-Cârciumaru M. 2011**

Le sifflet de Poiana Cireșului-Piatra Neamț (Roumanie) [19.459± 96 B.P. (23.24 ka) - 20.154 ± 97 B.P. (24.096 ka)]. *Annales d'Université Valahia Târgoviște*, Section d'Archéologie et d'Histoire, vol. XIII (2): 41–58.

**Cârciumaru M., Țuțuianu-Cârciumaru M. 2012**

The oldest snail (Lithoglyphus naticoides) necklace discovered in Romania in the Gravettian III stratum of Poiana Cireșului-Piatra Neamț [25.760±160 –27.321±234 B.P. (31.969 ka)]. *Annales d'Université Valahia Târgoviște*, Section d'Archéologie et d'Histoire, vol. XIV (1): 19–42.

**Chirica V. 1982**

Amuleta-pendantiv de la Mitoc, jud. Botoșani. Notă preliminară (L'amulette-pendentif de Mitoc, dép. de Botosani. Note préliminaire). *Studii și Cercetări de Istorie Veche și Arheologie*, vol. 33 (2): 229–231.

**Goutas N. 2004**

Caractérisation et évolution du Gravettien en France par l'approche techno-économique des industries en matières dures animales (étude de six gisements du Sud-ouest). Doctorat de Préhistoire de l'Université de Paris I – Panthéon Sorbonne, 2 vol.

**Goutas N. 2013**

New Data on the Osseous Industry from Eastern Gravettian (Russia): Technological Analyses and Sociological Perspectives. In *The Sound of Bones*, F. Lang (ed.). Salzburg: ArchaeoPlus, pp. 133–154.

**Hahn J. 1972**

Aurignacian sign, pendants and art objects in Central and Eastern Europe. *World Archaeology*, vol. 3 (3): 252–266.

**Kuhn S., Stiner M., Reese D., Güleç E. 2001**

Ornaments of the earliest Upper Paleolithic: New insight from the Levant. *PNAS*, vol. 98 (13): 7641–7646.

**Lacarrière J., Goutas N., Normand C.,**

**Simonet A. 2011**

Vers une redéfinition des occupations gravettiennes de la grotte d'Isturitz (Pyrénées-Atlantiques, France): révision critique des collections "anciennes" par l'approche intégrée des données lithiques, fauniques et de l'industrie osseuse. In *À la recherche des identités gravettiennes. Actualités, questionnements et perspectives*, N. Goutas, L. Klaric, D. Pesesse, P. Guillermin (eds.). Actes de la table ronde internationale du 6-8 octobre 2008. Aix-en-Provence: Mémoire LIII de la Société préhistorique française, pp. 67–83.

**Lázníčková-Galetová M. 2009**

Analysis of personal ornaments. In *Pavlov Excavations 2007-2011*, J. Svoboda (ed.). Academy of Sciences of the Czech Republic: Institute of Archaeology at Brno, pp. 245–249.

**Lbova L. 2010**

Evidence of modern human behavior in the Baikal zone during the Early Upper Paleolithic period. *Bulletin of the Indo-Pacific Prehistory Association*, vol. 30: 9–13.

**Lbova L. 2012**

The chronological context of Pleistocene art in Siberia. In *L'art pléistocène dans le monde*, J. Clottes (ed.). Préhistoire, Art et Sociétés, Bulletin de la Société Préhistorique Ariège-Pyrénées LXV–LXVI, Actes du Congrès IFRAO 2010. Tarascon-sur-Ariège: pp. CD 1123–1128.

**Lorblanchet M. 1999**

La naissance de l'art. Genèse de l'art préhistorique. Paris: Errance.

**Malerba G., Giacobini G., Onorati G.,**

**Arellano A., Moullé P.-E. 2014**

Entre esthétique et symbolisme. L'objet gravettien en stéatite de la Grotte Florestan (Grimaldi, Vintimille, Italie). Étude descriptive et technologique. *L'anthropologie*, vol. 118: 292–308.

**Noiret P. 2009**

Le Paléolithique supérieur de Moldavie. Liège: Université de Liège. (ERAUL; No. 121).

**Sacchi D. 1987**

Bases objectives de la chronologie de l'art mobilier paléolithique dans les Pyrénées septentrionales. In *L'art des objets au Paléolithique 1: Les voies de la recherche*, J. Clottes (ed.). Colloque international Foix-Les Mas-d'Azil, 16-21 novembre 1987. Paris: Ministère de la culture, de la communication, des grands travaux et du bicentenaire, pp. 13–29.

**Sinitsyn A.A. 2012**

Figurative and decorative art of Kostenki: Chronological and cultural differentiation. In *L'art pléistocène dans le monde*, J. Clottes (ed.). Préhistoire, Art et Sociétés, Bulletin de la Société Préhistorique Ariège-Pyrénées LXV-LXVI, Actes du Congrès IFRAO 2010. Tarascon-sur Ariège: pp. CD 1339–1359.

**Steguweit L. 2009**

Long Upper Palaeolithic sequences from the site of Poiana Cireșului, Bistricioara and Dartsu (NE-Romania). *Preistoria Alpina*, vol. 44: 33–38.

**Svoboda J. 2012**

Gravettian art of Pavlov I and VI: An aggregation site and an episodic site compared. In *L'art pléistocène dans le monde*, J. Clottes (ed.). Préhistoire, Art et Sociétés, Bulletin de la Société Préhistorique Ariège-Pyrénées LXV-LXVI, Actes du Congrès IFRAO 2010. Tarascon-sur Ariège: pp. CD 1461–1469.

**Svoboda J., Frouz M. 2011**

Symbolic objects and items of decoration. In *Pavlov Excavations 2007-2011*, J. Svoboda (ed.). Academy of Sciences of the Czech Republic: Institute of Archaeology at Brno, pp. 200–206.

**Škrdla P. 2000**

Zhodnocení technologií výroby kamenných nástrojů. *Rekonstrukce a experiment v archeologii*, vol. 1: 9–36.

**Taborin Y. 2004**

Langage sans parole. La parure au temps préhistoriques. Paris: La maison des roches.

**Trinkaus E., Buzhilova A.P., Mednikova M.B., Dobrovolskaya M.V. 2014**

The People of Sungir. Burials, Bodies, and Behavior in the Earlier Upper Paleolithic. New York: Oxford University Press.

**Valoch K., Lázníčková-Galetová M. 2009**

Nejstarší umění střední Evropy. První mezinárodní výstava originálů paleolitického umění (The Oldest Art of Central Europe. The first interational exhibition of original Art from the Paleolithic). Brno: Moravské zemské museum.

**Vanhaeren M., d'Errico F. 2005**

Grave goods from the Saint-Germain-la-Rivière burial: Evidence for social inequality in the Upper Palaeolithic. *Journal of Anthropological Archaeology*, vol. 24: 117–134.

**Vanhaeren M., d'Errico F. 2006**

Aurignacian ethno-linguistic geography of Europe revealed by personal ornaments. *Journal of Archaeological Science*, vol. 33: 1105–1128.

**Weninger B., Jöris O. 2008**

A <sup>14</sup>C calibration curve for the last 60 ka: The Greenland-Hulu U/Th timescale and its impact on understanding the Middle to Upper Paleolithic transition on Western Eurasia. *Journal of Human Evolution*, vol. 55: 772–781.

**White R. 1993**

Technological and social dimensions of Aurignacian age body ornaments across Europe. In *Before Lascaux: The complex Record of the Early Upper Paleolithic*, H. Knecht, A. Pike-Tay, R. White (eds.). Florida: CRC Press, pp. 227–299.

**White R. 1999**

Intégrer la complexité sociale et opérationnelle: la construction matérielle et l'identité sociale à Sungir. In *Préhistoire d'os: Recueil d'études sur l'industries osseuse préhistorique*, H. Camps-Fabrer (ed.). Publications de l'Université de Provence: pp. 319–331.

**White R. 2007**

Systems of personal ornamentation in the Early Upper Palaeolithic: Methodological challenge and new observations. In *Rethinking the Human Revolution: New Behavioural and Biological Perspectives on the Origin and Dispersal of Modern Humans*, P. Mellars, K. Boyle, O. Bar-Yosef, C. Stringer (eds.). Cambridge: McDonald Institute for Archaeological Research, pp. 287–302.

**Zeeden C., Hambach U., Steguweit L.,****Fülling A., Anghelinu M., Zöller L. 2009**

Using the relative intensity variation of the Earth's magnetic palaeofield as correlative dating technique: A case study from loess with Upper Palaeolithic cultural layers at Poiana Cireșului, Romania. *Quartär*, vol. 56: 175–185.

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