

The Symbolical Significance of Several Fossils discovered in the Epigravettian from Poiana Cireșului-Piatra Neamț, Romania

Marin CÂRCIUMARU^{1*}, Iuliana LAZĂR², Elena-Cristina NIȚU¹ & Minodora ȚUȚUIANU-CÂRCIUMARU¹

¹ Valahia University of Târgoviste, Doctoral School, Lt. Stancu Ion Ave., nr. 36, 130105 Targoviste, Dambovita County, Romania

² University of Bucharest, Faculty of Geology and Geophysics, Department of Geology and Paleontology, 1, N. Balcescu Ave., 010041, Bucharest, Romania

* Corresponding author e-mail: mcarciumaru@yahoo.com

SUMMARY - *The Symbolical Significance of Several Fossils found in the Epigravettian from Poiana Cireșului-Piatra Neamț, România* - The archeological research of the last few years from the settlement of Poiana Cireșului, near Piatra Neamț, demonstrated the exceptional potential of this settlement in defining the cultural aspects of the Upper Paleolithic especially in the Valley of Bistrița and generally in Romania. The dating for the Gravettian II level indicates between $26,347 \pm 387$ (ER 9962) and $26,070 \pm 387$ (Beta 206.707), which means the oldest Gravettian in the Valley of Bistrița, while for the Epigravettian II level, the dating indicates $20,076 \pm 185$ (ER 9.965) and $20,020 \pm 110$ (Beta 224.156) B.P. In the Epigravettian II level from Poiana Cireșului-Piatra Neamț were discovered four fossilized bivalves of the species *Congeria sp. aff. Congeria (Mytilopsis) subcarinata subcarinata*. Certainly, they became part of the cultural layer being brought either directly or through exchange by the members of the Epigravettian community from over 100 km away. Their shape is striking as it suggests a vulva, an element frequently encountered in the West European Cave art. Their significance is profoundly connected to sexual symbolism. The symbolic value of the respective fossils is accentuated by the fact that on their surface are present obvious traces of ochre.

RIASSUNTO - *Il significato simbolico di alcuni fossili scoperti nell'Epigravettiano di Poiana Cireșului - Piatra Neamț, Romania* - Le ricerche archeologiche svolte negli ultimi anni nell'insediamento di Poiana Cireșului, posizionato nella vicinanza della città di Piatra Neamț, hanno dimostrato le eccezionali potenzialità di questo insediamento nel definire gli aspetti culturali del paleolitico superiore della valle del Bistrița, in speciale, e della Romania, generalmente. Le datazioni per il livello gravettiano II sono tra 26.347 ± 387 (ER 9962) e 26.070 ± 387 (Beta 206.707), il che significa il più antico Gravettiano della valle del Bistrița, mentre per il livello Epigravettiano II ci sono diverse datazioni che lo collocano tra 20.076 ± 185 (ER 9.965) e 20.020 ± 110 (Beta 224.156) B.P. Nel livello epigravettiano II di Poiana Cireșului - Piatra Neamț sono state scoperte quattro fossili bivalvi della specie *Congeria sp. aff. Congeria (Mytilopsis) subcarinata subcarinata*. Si può affermare con certezza che questi bivalvi sono arrivati nel livello di cultura direttamente o tramite uno scambio con i membri di una comunità epigravettiana situata ad oltre 100 km di distanza. La forma dei bivalvi impressiona perché suggerisce la vulva, ingrediente trovato spesso nell'arte parietale dell'Europa Occidentale. Il valore simbolico dei fossili è sottolineato dal fatto che questi conservano sulla loro superficie tracce evidenti d'ocra.

Key words: Romania, Epigravettian, symbolism, fossils, vulvas, Paleolithic art, ochre

Parole chiave: Romania, Epigravettiano, simbolismo, fossili, vulva, arte paleolitico, ocra

1. INTRODUCTION

Near Piatra Neamț Town, at the confluence of Doamna rivulet and Bistrița River, at about 400 m absolute altitude, was discovered, in 1963, a new Paleolithic settlement with a cultural horizon attributed to the "Easter Upper Aurignacian" (Scorpan 1972-1973), which, in reality, was to be identified later on as belonging to the Gravettian Culture. The ulterior diggings carried out during several stages confirmed the attribution of this settlement to the Gravettian (Căpitanu 1969), and the recent research has brought to light supplementary information, by defining, so far, the Gravettian and Epigravettian (Cârciumaru et al. 2002-2003, 2003, 2004, 2006, 2007, 2007-2008; Cârciumaru, Anghelinu & Niță 2006-2007, 2007;

Mărgărit 2008; Niță 2008; Steguweit et al. 2009). The most recent, uppermost Late Epigravettian layer belongs to the Late Glacial yellow loess unit; the second concentration – Epigravettian layer II – is deposited in the upper part of the clayey-loessic layer which contains lots of calcitic concentrations; the Gravettian layer I it suggests a short occupational sequence, at the bottom of the same loessic unit; the Gravettian layer II belong to the sandy-loessic deposit at the bottom of the stratigraphical column (Cârciumaru et al. 2006).

The Gravettian II layer was dated between $26,347 \pm 387$ (ER 9962) and $26,070 \pm 387$ (Beta 206.707), which means the oldest Gravettian in the Valley of Bistrița, and the Epigravettian II layer was dated several times and was situated between $20,076 \pm 185$ (ER 9.965) and $20,020 \pm 110$ (Beta 224.156) B.P.

2. POTENTIAL OF THE BONE DISCOVERIES FROM THE POIANA CIREŞULUI SETTLEMENT

The most recent stage of the research from Poiana Cireşului proved the exceptional potential of this settlement in defining the cultural aspects of the Upper Paleolithic, especially in Bistriţa Valley and in Romania in general.

At the same time, concerning the artifacts made of animal bone, the settlement from Poiana Cireşului – Piatra Neamţ is doubtlessly the most important in Romania, both through their number and through their variety, especially in Epigravettian layer II. The arms are represented by means of three ivory pointed ends and one made out of a horn; the tools consisted in several chisels. The ornaments are quite varied, such as: perforated stag tooth, perforated wolf canine, and in the category of undeterminable materials are included two diaphyses with incisions, a fragment of bone engraved through incisions that involve an extremely interesting technology, to which we can add an engraved quartzite pebble and traces of ochre, etc. A whistle made of a reindeer diaphysis was studied using the VHX-600 digital microscope. So, it was possible to state, unequivocally, that the hole is man-made, being achieved by means of rotational movements using a rock tool of the flint or jasper type (Fig. 1-5).

In Gravettian layer II was found only a necklace from 12 perforated snail shells (Fig. 5). This necklace has holes made using a special technique, on which we are going to come back later on in another study with special observations made using the VHX-600 digital microscope. Through their geometrical form they seem similar, for instance, to those of the Epigravettian from Riparo Dalmeri (Borrelli & Dalmeri, 2004).

All these are sufficiently illustrative elements concerning the symbolical or metaphysical activities involving the creative imagination of the Epigravettian communities from Poiana Cireşului. Their capacity to elaborate personalized systems, materialized in the achievement of ornaments with diverse morphologies, highly schematized decorations, means of communication between the individuals or means of creation of special sounds, and somewhat similar engravings in point of style and form on similar supports suggesting ways of perceiving some temporal cycles, is a proof of the symbolical individualization of the respective societies.

This image of the testimonies on the spiritual capacities of the Epigravettian communities from Poiana Cireşului-Piatra Neamţ was to be completed in 2003, the year when in section V (Epigravettian layer II), square A-1 were discovered four fossilized bivalves, attributed at that time to the *Congeria* sp.

3. GENERALE CONSIDERATIONS CONCERNING THE GEOLOGICAL FOSSILS DISCOVERED IN PALEOLITHICAL SETTLEMENTS

The introduction by the Paleolithic communities of certain fossils in their settlements has deep roots, the oldest testimonies of this type being attributed to the Neanderthal man. Here is A. Leroi-Gourhan's interpretation of these discoveries: "In the Mousterian, the number of manifesta-

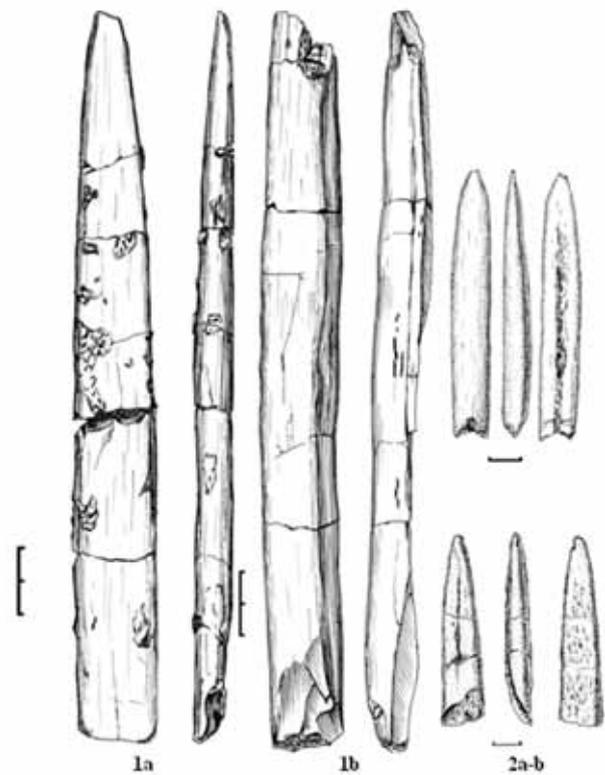


Fig. 1 - Poiana Cireşului – Piatra Neamţ: 1 pointed ends made of ivory; 2 pointed ends made of reindeer horn found in the Epigravettian layer II.

Fig. 1 - Poiana Cireşului – Piatra Neamţ: 1 punte in avorio; 2 punte in corno di renna dal livello epigravettiano II.

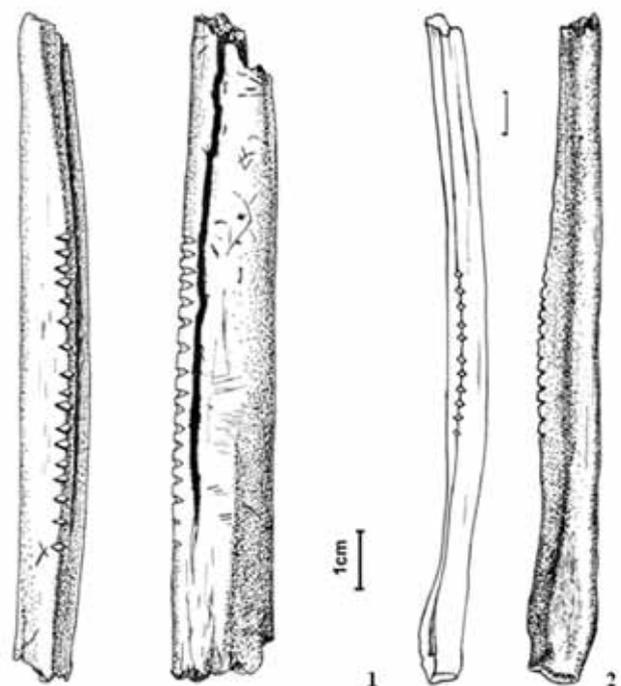


Fig. 2 - Poiana Cireşului-Piatra Neamţ: 1-2 engraved diaphyses found in the Epigravettian layer II.

Fig. 2 - Poiana Cireşului-Piatra Neamţ: 1-2 diafisi incise dal livello epigravettiano II.

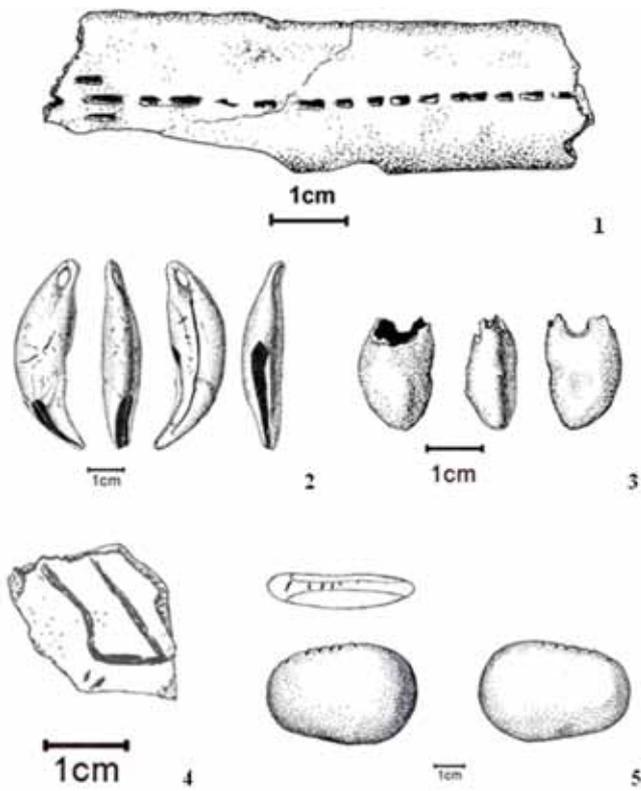


Fig. 3 - Poiana Cireșului-Piatra Neamț, Epigravettian layer II: 1 bone engraved in a special technique, 2 perforated wolf canine, 3 perforated stag canine, 4 engraved bone suggesting an animal hoof; 5 quartzite pebble engraved and painted with ochre.

Fig. 3 - Poiana Cireșului-Piatra Neamț, livello II epigravettiano: 1 - canino di lupo perforato; 2 - canino di cervo perforato; 3 - osso inciso che suggerisce lo zoccolo di un'animale; 4 - ciottolo di quarzite inciso e dipinto con ocre.

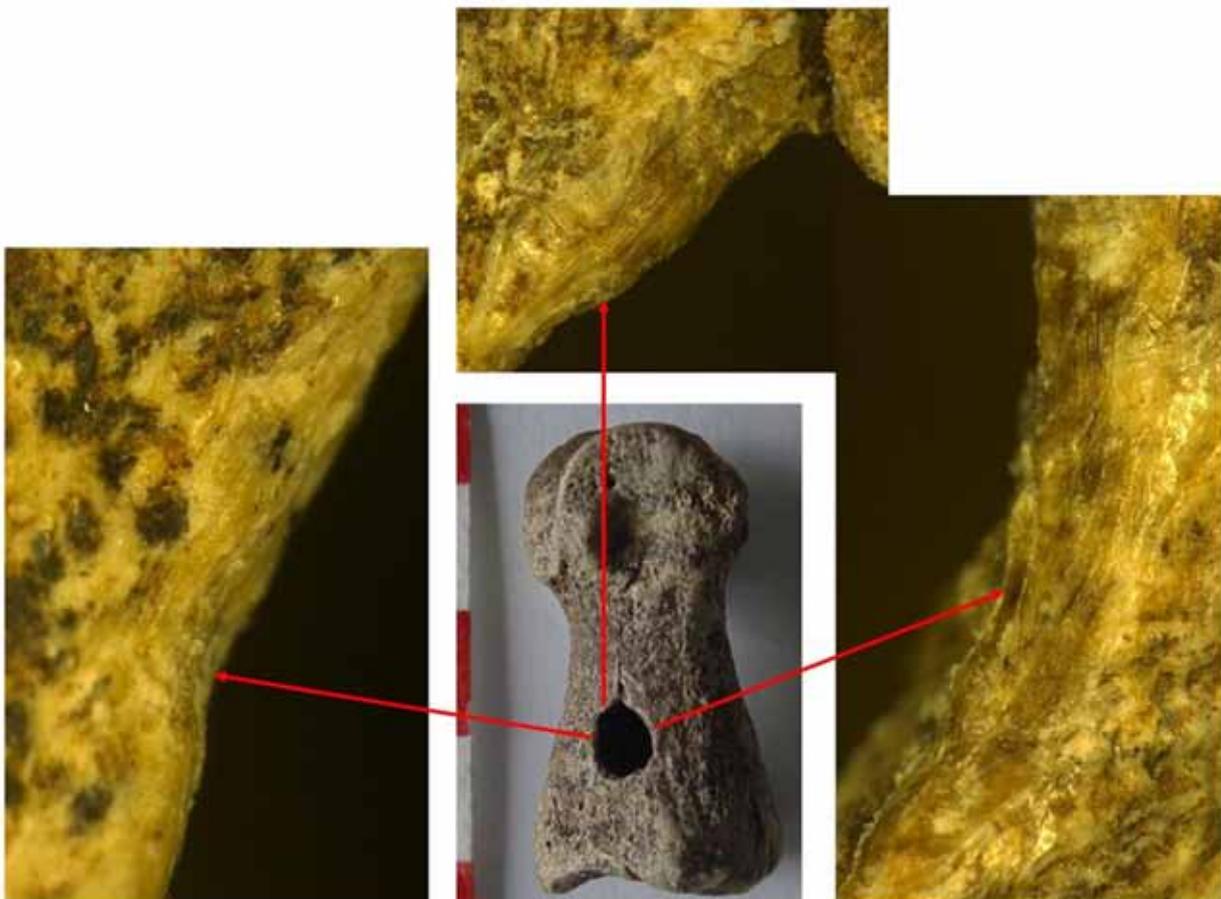


Fig. 4 - Poiana Cireșului-Piatra Neamț, Epigravettian layer II: 1 reindeer phalange turned into whistle.

Fig. 4 - Poiana Cireșului-Piatra Neamț, livello II epigravettiano: 1 - strumento a fiato realizzato su una falange di renna.



Fig. 5 - Poiana Cireșului-Piatra Neamț: 1 Necklace made of perforated snail-shells of the species *Lithoglyphus* discovered in the Gravettian layer II (around 26.000 B.P.), 2 small bone fragments engraved differently (Epigravettian layer II), 3 samples of prepared ochre found in a layer with significant quantities of this material, containing predominantly red shades (Epigravettian layer II).

Fig. 5 – Poiana Cireșului-Piatra Neamț: 1 – collana di conchiglie perforate dalla specie *Lythoglyphus* scoperta nel livello Gravettiano II (circa 26.000 B.P.); 2 – piccoli frammenti d’ossa incise (livello II epigravettiano); 3 – campioni d’ocra preparata recuperati da un livello con grandi quantità di questo materiale e aspetto rosso (livello II epigravettiano).

tions that can be linked to religion is very limited.” “...In the Hyena’s Cave, in Arcy-sur-Cure... in the very advanced Mousterian, we discovered a little deposit made up of two big fossils, a gastropod and a spheroid polypier, and of two blocks of iron pyrite shaped like agglomerated spheres... These objects’ situation in point of origin makes it necessary for them to have been brought here voluntarily. So, these pieces constitute the first piece of evidence, as least as far as we know, concerning man’s interest in unusual forms; it is somehow the far introduction into the figurative art, but it is more than that, it is the first of the forms encountered in nature coming out of rock or earth.” (Leroi-Gourhan 1964: 70) (Fig. 6).

M. Otte, a representative of another generation, appropriates A. Leroi-Gourhan’s interpretations and brings again to light the hypothesis of the foreign “objects” picked up and transported by the Neanderthal man who confers them, despite their apparently non-utilitarian aspect, a symbolical value. “So, the natural products play a role of mediator between the spirit and nature, and the creative act is reduced to the choice of these elements invested from now on with a human value. Among them, the fossils create a bridge between the mineral they are made of, and the animal whose imprint, trace and image they are.” (Otte 1996: 79-80).

Since then, no other similarly old discoveries were made, maybe except a bivalve geologically attributed to the Maastrichtian – Paleocene layer (of the species *Glyptoactis*

(*Baluchicardia*) sp.) and recovered in 1991 from among the lithic materials resulted from older diggings of the lower stratum of the Mousterian layer from Chez-Pourré-Chez-Comte (Correze), attributed to a Charantian Mousterian with an evolved aspect (Lhomme & Freneix 1993).

P. Y. Demars, in his turn, through the reevaluation of some older diggings of F. Bordes, brings back into actuality two shell fossils recuperated from the Combe-Grenal Cave (Dordogne). The first is a *Rhynchonellidae* (*Teraebratulina*) delivered by a stratum that is contemporary with the Riss glacial period and attributed to an evolved Southern Acheulean, while the second belongs to the *Zeillerinae* (*Terebratulina*) species and was recovered from a level attributed to a Quina Mousterian industry. The fossils come from the deposits attributed to the Upper Cretaceous (Demars 1992).

Maybe for these reasons, the recent discovery of a bivalve in the Mousterian level from the Bordul Mare Cave of Ohaba Ponor (Romania) becomes quite interesting. The geological study and the archaeological implications of this discovery will be finalized in a near future.

In exchange, similar discoveries were made quite frequently in the settlements attributed to the Upper Paleolithic everywhere, attributed to *Homo sapiens sapiens*, which we are not going to remember for the very reason that they are especially frequent. Many of them were reminded and commented, actually, by A. Leroi-Gourhan

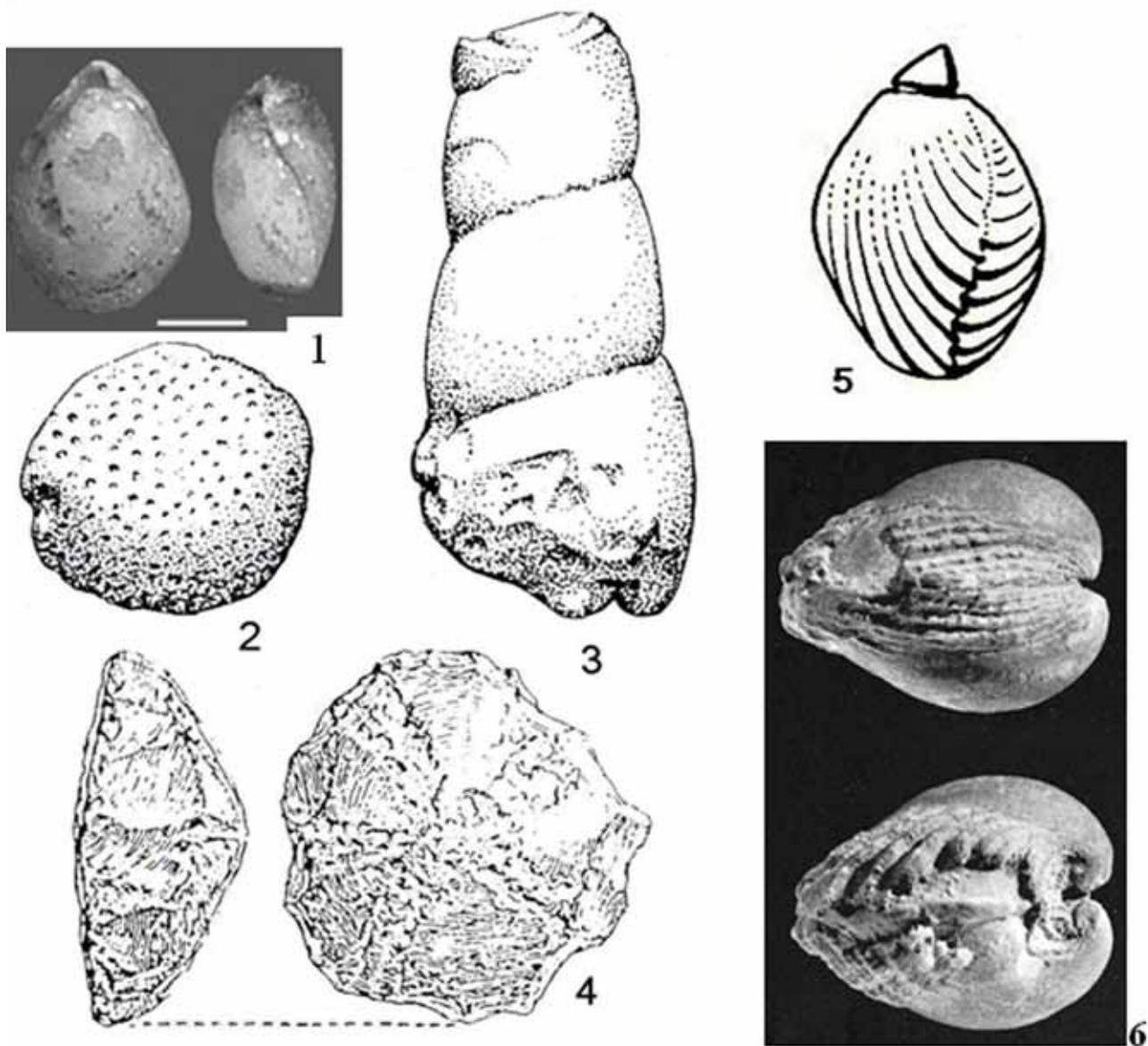


Fig. 6 - Fossils introduced by the Neanderthal man in his settlements. Mousterian level: A-the Hyena's Cave in Arcy-sur-Cure – 1 brachiopods of the Terebratulids family, dated to the Bajocian, transported more than 30 km away from their source (according to M. Soressi, 2002; M. Soressi, F. d'Errico, 2008), 2 globular polypier, 3 fossilized spiral gastropod (according to A. Leroi-Gourhan, 1964); B-Chez-Pourré-Chez-Compte (Corrèze) - 6 bivalve shells, dated to the Maastrichtian - Paleocene *Glyptoactis* (*Baluchicardia*) sp. (according to V. Lhomme, S. Freneix, 1993); Châtelperronian level: 4 fossilized sea urchins (according to M. Otte, 1996), 5 "rhyconelle", shaped up to be hung up (according to A. Leroi-Gourhan, 1964).

Fig. 6 - Fossili introdotti nei suoi insediamenti dall'Uomo di Neandertalo. Livello Musteriano: A – Grotta Hyène à Arcy-sur-Cure – 1 brachiopode della famiglia Térébratulidés del Bajocien trasportati da oltre 30 km km (dopo M. Soressi, 2002; M. Soressi, F. D'Errico, 2008), 2 „polypier globulaire”, 3 gasteropodi a spirale fossili (dopo A. Leroi-Gourhan, 1964); B - Chez-Pourré-Chez-Compte (Corrèze) – 6 conchiglia di bivalve di Maastrichtien - Paleocen *Glyptoactis* (*Baluchicardia*) sp. (după V. Lhomme, S. Freneix, 1993); Livello Cas-telperoniano: 4 «oursin fossile» (după M. Otte, 1996), 5 «rhyconelle» preparata per la sospensione (dopo A. Leroi-Gourhan, 1964).

even since 1964. However, one of these discoveries needs to be mentioned because it was made in a region nearby Poiana Ciresului. It is about a fossil "sea urchin" of 4,8/5,2 cm, recovered from an Aurignacian layer from Climăuți (Republic of Moldova), which is considered to have undergone changes meant to give it human features (Borziac & Chirica 1996).

In Romania no other discoveries were made concerning fossils brought by the Paleolithic communities in their settlements, except the recent discovery of a bivalve in the Mousterian level from the Bordul Mare Cave of Ohaba Ponor and the already mentioned four fossils discovered in the Epigravettian layer from Poiana Ciresului-Piatra Neamț.

4. PALEONTOLOGICAL STUDY OF THE FOSSILS FROM POIANA CIREŞULUI

After a careful paleontological study, they were attributed to the species *Congeria sp. aff. Congeria (Mytilopsis) subcarinata subcarinata* (Deshayes 1838). In order to remove any confusion, we mention that the four fossils, attributed to the above species, are the same as those presented in studies so far under the generic denomination of *Congeria* (Cârciumaru et al. 2002-2003, 2003, 2004; Mărgărit 2008). That is why we consider it useful to describe the morphology of this species, its occurrence, etc. Such being the situation, the four fossils (Fig. 7-10) can be defined as follows:

Class Bivalvia

Subclass Heterodonta Neumayr, 1884

Oder Veneroida H. Adams & A. Adams, 1856

Superfamily Dreissenacea Gray, 1840

Family Dreissenidae Gray, 1840

Genus **Congeria** Partsch, 1835

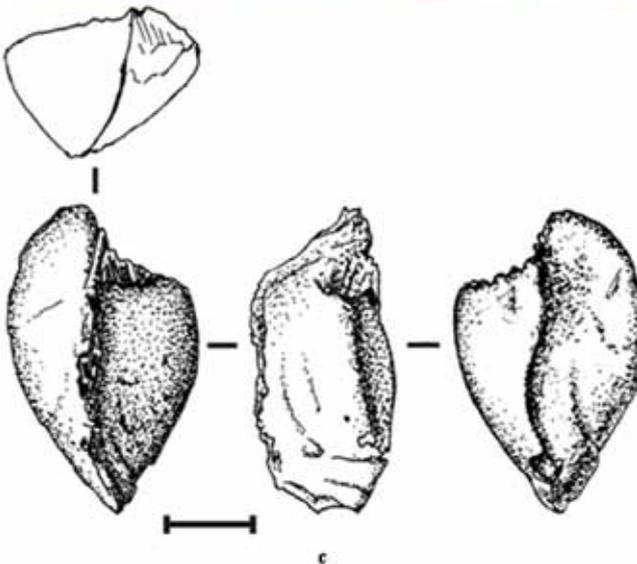


Fig. 7 - Specimen no.1 de *Congeria sp. aff. Congeria (Mytilopsis) subcarinata subcarinata* from the Epigravettian layer II from the settlement of Poiana Cireşului-Piatra Neamţ.

Fig. 7 - Campione no. 1 di *Congeria sp. aff. Congeria (Mytilopsis) subcarinata subcarinata* dal livello epigravettiano II dall'insediamento di Poiana Cireşului - Piatra Neamţ.

Congeria sp. aff. Congeria (Mytilopsis) subcarinata subcarinata (Deshayes 1838)

4.1. Material

Four specimens, internal moulds, partially cemented inside with aragonite; the specimens have articulated valves and the general outline of the shell is almost complete; in two specimens, few fragments of the shell are preserved, showing an original moderate thickness of the shell.

4.2. Description

Small sized, almost triangular in outline, significantly convex shell; the dorsal margin is straight, with variable length; the posterior margin is gently convex and longer than the dorsal one; the connection between the dorsal and the posterior margin generates a wing-shape extension, which is wider or very small; the angle between the dorsal and the posterior margin is 115° to 130°; the angle between the anterior and the dorsal margin is 52° to 62°; the umbo is very small, sharp, slightly incurved forward; the ventral margin is straight or just with a shallow concavity in the anterior half; the postero-ventral margin

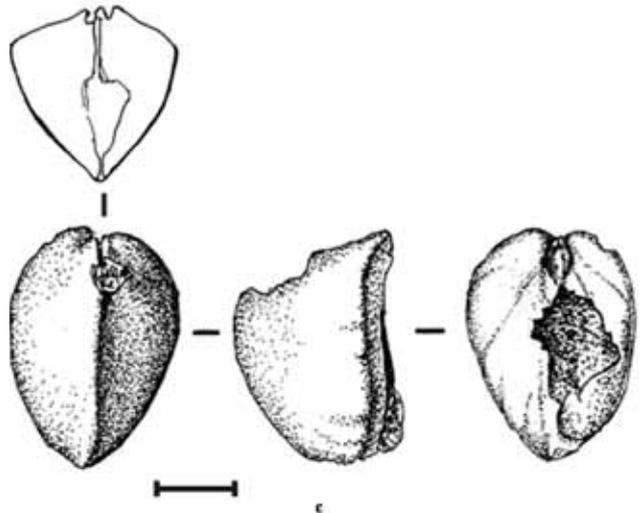


Fig. 8 - Specimen no. 2 de *Congeria sp. aff. Congeria (Mytilopsis) subcarinata subcarinata* from the Epigravettian layer II from the settlement of Poiana Cireşului-Piatra Neamţ.

Fig. 8 - Campione no. 2 di *Congeria sp. aff. Congeria (Mytilopsis) subcarinata subcarinata* dal livello epigravettiano II dall'insediamento di Poiana Cireşului - Piatra Neamţ.

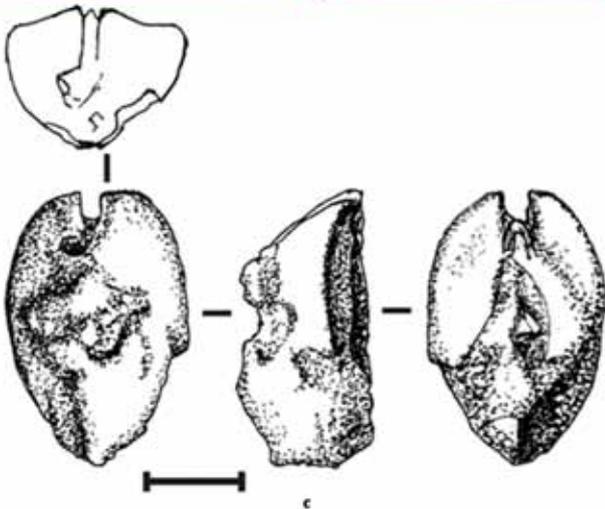


Fig. 9 - Specimen no. 3 de *Congeria sp. aff. Congeria (Mytilopsis) subcarinata subcarinata* from the Epigravettian layer II from the settlement of Poiana Cireşului-Piatra Neamţ

Fig. 9 - Campione no. 3 di *Congeria sp. aff. Congeria (Mytilopsis) subcarinata subcarinata* dal livello epigravettiano II dall'insediamento di Poiana Cireşului - Piatra Neamţ

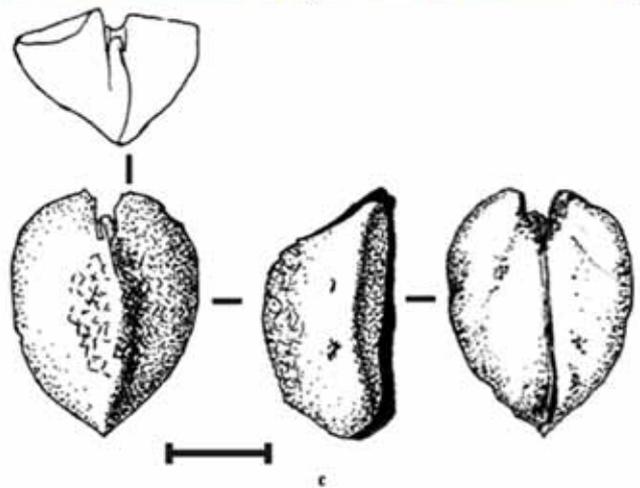


Fig. 10 - Specimen no. 4 de *Congeria sp. aff. Congeria (Mytilopsis) subcarinata subcarinata* from the Epigravettian layer II from the settlement of Poiana Cireşului-Piatra Neamţ

Fig. 10 - Campione no. 4 di *Congeria sp. aff. Congeria (Mytilopsis) subcarinata subcarinata* dal livello epigravettiano II dall'insediamento di Poiana Cireşului - Piatra Neamţ

is narrow and rounded; the most convex part of the shell bears a sharp ridge that is running from the umbo to the postero-ventral angle; the ridge is very clear and sharp on the anterior half of the shell and then becomes more rounded and attenuated before reaching the postero-ventral angle; the ridge splits the shell in two fields: the ventral (or the anterior) field that is almost flat or just a little concave and the posterior field with a weakly pronounced wing-shaped extension, which becomes well developed in older specimens; the surface of the shell is covered with concentric growing lines, that become more prominent at irregular intervals; the internal features of the shell can not be observed; in just one specimen, on the internal mould, the general triangular shape of the septum and the entire pallial line can be identified; the ligament lamella, extending along the dorsal edge, almost half of its length, can be observed in one specimen (Tab. 1).

4. 3. Discussions

Our specimens are very similar to the *Congeria subcarinata subcarinata* (Deshayes) described by Papaianopol (1976: 117, pl. IX, fig. 2a-b) from the Upper Pontian (Bos-

phorian) of Prahova County and by Papaianopol (1990: 260, pl. III, fig. 1-4) from the Middle Pontian (Portaferian) of Boteni (Arges County), except for the wider extension of the wing-shaped surface in our specimens.

The *Congeria subcarinata botenica* Andrusov, described by Papaianopol (1990: 258-259, pl. II, fig. 8-9) from the Middle Pontian (Portaferian) of Boteni (Arges County) and by Wenz (1942: 114, pl. 57, fig. 605 a, b) of Prahova County (Negii Valley, Pontian) differ from our specimens by a clear, deep concavity on the anterior half of the ventral margin.

Two of our specimens are very similar to the *Congeria neumayri carpatica* Macarovicu described by Marinescu (1972: 77, pl. 2, fig. 6-10) from the Upper Miocene of the Dacic basin, but differ by the more elongated and more inclined dorsal margin and the deeper anterior concavity of the ventral margin in the last ones.

The *Congeria balatonica cavernosa* Brusina described by Gillet and Marinescu (1971: 37, pl. 14, fig. 5-6) has a deeper and larger concavity on the median part of the ventral margin and the *Congeria simulans batuti* Brusina described by Gillet and Marinescu (1971: 35, pl. 12, fig. 1-5) has a longer and more inclined dorsal margin.

Dimensions (mm):	Specimen no. 1	Specimen no. 2	Specimen no. 3	Specimen no. 4
L (antero-posterior length)	19.49	? 15.16	? 12.92	11.86
H (dorso-ventral length)	28.62	33.54	26.32	23.44
ld (length of the dorsal margin)	17.10	12.63	14.46	10.32
lp (length of the posterior margin)	25.92	26.61	18.50	18.98
lv (length of the ventral margin)	22.68	27.78	21.52	19.76
C (convexity of the shell)	19.89	20.66	17.92	17.77
α (the angle between the anterior and the dorsal margin)	62°	52°	58°	55°
β (the angle between the dorsal and the posterior margin)	115°	130°	121°	122°

Tab. 1 - Dimensions of each of the four fossils of *Congerina sp. aff. Congeria (Mytilopsis) subcarinata subcarinata*
 Tab. 1 - Dimensioni dei quattro fossili di *Congerina sp. aff. Congeria (Mytilopsis) subcarinata subcarinata*

4.4. Occurrence

This species occur with high frequency within the Middle and Late Pontian deposits (Portaferian and Bosphorian) of the Dacic and Euxinic basin; very rarely this taxon is known from the Pannonian deposits of south-west Romania (Banat area) (Papaianopol 1990).

Most probably, the fossils studied come from Middle-Upper Pontian deposits. In this sense, we must say that the Pontian deposits with similar fauna do not appear at the surface northwards and southwards in an area of about 100 km (Fig. 11). However, they can be met southwards, in the curvature area of the Carpathian Mountains, begin-

ning approximately from a line that would connect Oneşti Town and Bârlad Town. Westwards from Piatra Neamţ, such deposits are found beyond the alpine area, on the eastern frame of the Transylvanian basin, where the Pannonian deposits appear at the surface.

5. CONSIDERATIONS ON THE DYNAMICS OF THE POPULATIONS FROM POIANA CIREŞULUI

To conclude, the fossils of *Congerina sp. aff. Congeria (Mytilopsis) subcarinata subcarinata* come from at



Fig. 11 - Occurrence of the fossils belonging to the species *Congerina sp. aff. Congeria (Mytilopsis) subcarinata subcarinata*. The circle marks the area, 100 km around Poiana Cireşului, where the fossil cannot be found in natural structures, and the pointed line suggests the region where one can find the outcrops with the strata in which this species is present.

Fig. 11 - L'occorrenza dei fossili della specie *Congerina sp. aff. Congeria (Mytilopsis) subcarinata subcarinata*. Il cerchio rappresenta lo spazio, su un raggio di 100 km intorno all'insediamento di Poiana Cireşului, nel quale il fossile non può apparire in strutture naturali; la linea con freccia suggerisce la regione dove sono affioramenti con livelli che presentano questa specie.

least 100 km away from the settlement of Poiana Cireșului-Piatra Neamț. They may have been either obtained by the members of the Epigravettian community directly in an outcrop in the Curvature area of the Carpathians, or by means of an exchange with other communities from the regions where these fossils appeared at the surface. In the present stage of the research, we must not remove completely the western origin of the respective fossils, from the Eastern Side of the Transylvanian Basin, where the Pannonian strata appear at the surface. Whatever the situation may be, remarkable is the evidence brought by the study of the fossils of *Congerina sp. aff. Congeria (Mytilopsis) subcarinata subcarinata*, concerning the mobility of the Epigravettian communities of Poiana Cireșului - Piatra Neamț.

The importance of the determination of the movements of the Paleolithic populations based on the verification of the occurrence of the respective species was highlighted more and more lately, the constant preoccupations of Y. Taborin (1985, 1993, 2004) and also those based on interdisciplinary studies thanks to the efforts of many researchers lately (Borrello 2005 a, b; Borrello & Micheli 2004; Borrello & Rossi 2004; Bullinger & Thew 2006; Landof 2004; Sedelmeier 1988) being well-known.

6. THE SYMBOLIC SIGNIFICANCE OF FOSSILS

Beside the fact itself and the unexpected situation of discovering such fossils, which certainly could not have gotten to the respective settlement except as a consequence of a deliberate act of some members of the respective community, we must mention from the very beginning that their shape suggests to an amazing extent a vulva, an organ that has been so much invoked in the Western Europe cave art as feminine symbol (Fig. 7-10).

At the same time, we consider it is not without importance that the fossils of *Congerina sp. aff. Congeria (Mytilopsis) subcarinata subcarinata* represent in fact molds of the species, made up of aragonite. The aragonite, because of its aspect, may have represented a supplementary element of attraction.

On the other hand, the microscopic study demonstrated the fact that on the respective aragonite molds no interventions have been attempted to follow their natural modification, or their perforation to hang them as necklaces. Actually, it is not excluded that these fossils' transformations may have represented no independent purpose for the respective communities, inasmuch as their form and aspect were enough to suggest a sufficiently revealing symbolical message for the Epigravettian community from Poiana Cireșului.

Even though we have not set ourselves the goal to inventory the numerous examples of cave sites where the vulva sign is very frequently encountered, its significance being always associated with the feminine symbol, we would like to invoke just a few revealing examples in this sense: the engravings of vulva signs in Combarelles Cave, those on the limestone blocks from La Ferrassie Cave, or those incised in the soil of Bedeilhac Cave, the vulva sketches on the walls of the Tito Bustillo Cave, the shelter Cellier etc. (Fig. 12).

Concerning the interpretation of the meaning and

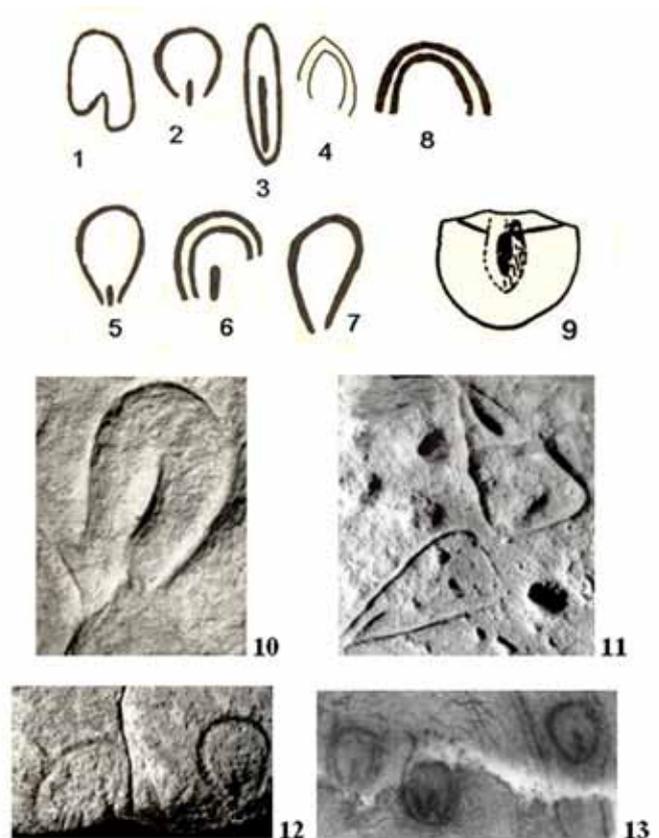


Fig. 12 – Representations of vulvas in the European Upper Paleolithic cave and ornamental art. 1-8 diverse types of vulvas in the West European cave art (1-7 Périgord, 8 Pyrénées); 9 vulva motives in the ornamental art from Kostenki; 10-12 vulvas engraved on stone blocks (10-11 La Ferrassie; 12 Cellier shelter); 13 vulvas painted on a wall in the Tito Bustillo Cave (1-10; 12 according to A. Leroi-Gourhan 1965; 11; 13 according to D. Vialou 1991).
Fig. 12 – Rappresentazioni di vulve nell'arte parietale e mobiliare del Paleolitico superiore d'Europa. 1 – 8 diversi tipi di vulve dall'arte parietale dell'Europa Occidentale (1-7 Périgord, 8 Pyrénées); 9 „motif vulvaire” nell'arte mobiliare di Kostenki; 10 – 12 vulve incise su blocchi di pietra (10 - 11 La Ferrassie; 12 il riparo Cellier); 13 vulve parietali dipinte su una parete della grotta Tito Bustillo (1 - 10; 12 dopo A. Leroi-Gourhan, 1965; 11; 13 dopo D. Vialou, 1991).

role of some bivalves discovered in the settlements of the Upper Paleolithic, we consider it useful to reiterate a few of the principles extremely pertinently stated by D. Vialou. “Natural shapes and symbolical shapes become one in these exceptional objects as in a doubling of meaning reuniting nature and the artistic work. In the cases when true fossils were picked up, it is the symbolical side of the natural object that is deliberately introduced in the habitat and invested with meaning... The fascination with shells suggesting strongly a sexual, particularly genital, imagery, is one of the most marked features of many ornaments... on the one hand, long tubular shells, such as the tooth-shaped shells, reminding somehow imperfectly of some phalluses, in the other hand, oval shells with longitudinal opening, ... explicitly illustrating vulvas... the sexual symbolism emanating from them was considered independently from

their eventual utilization as ornaments, worn on the body or on the clothes, attached with strings... In other words, the symbolical meaning of these objects, processed just a little after having been picked up according to a careful selection, derives from the somehow direct relation between their natural forms and their functions of ornaments.” (Vialou 1991: 22-23).

The fossils of *Congerina sp. aff. Congerina (Mytilopsis) subcarinata subcarinata* (Deshayes, 1838) were not introduced in the settlement from Poiana Cireşului as objects inciting, through their form, only the curiosity of the respective people. The reason why they were picked up is found in the significance strikingly suggested by the shape of these fossils, truly bizarre, yet with a strong symbolical connotation materialized in the sexual meaning they suggest.

7. CONCLUSIONS

The symbolical value of the fossils discovered in the Epigravettian layer from Poiana Cireşului is accentuated by the fact that they preserve on their surface obvious traces of ochre (Fig. 13). It was possible to notice the ochre present

on their surface thanks to the special resolution obtained with a VHX 600 digital microscope. The traces of ochre are more frequent on the surface of the fossils that are not covered by the calcium carbonate crust. If we consider the fact that the four *Congerina sp. aff. Congerina (Mytilopsis) subcarinata subcarinata* were washed, which led to the destruction of the initial traces of ochre, we can hope that the ochre was even better preserved under this crust (Fig. 7-8). That is why we will try to remove this crust, probably using ultrasounds, in order to better highlight the ochre layer. Actually, the confirmation of the existence of the ochre under the calcium carbonate crust has already been determined through a preliminary experiment. The removal of a minute surface of the crust allowed us to notice its surface of contact with the fossil support. The image obtained under the microscope proved the conservation of the ochre both on the initial surface of the fossil (Fig. 13/10), and on the crust that was in contact with it (Fig. 13/11).

Such being the case, we can say that the goal for which the community members introduced the fossils of *Congerina sp. aff. Congerina (Mytilopsis) subcarinata subcarinata* (Deshayes 1838) in the settlement from Poana Cireşului has a strong connotation in the sense of the sexual

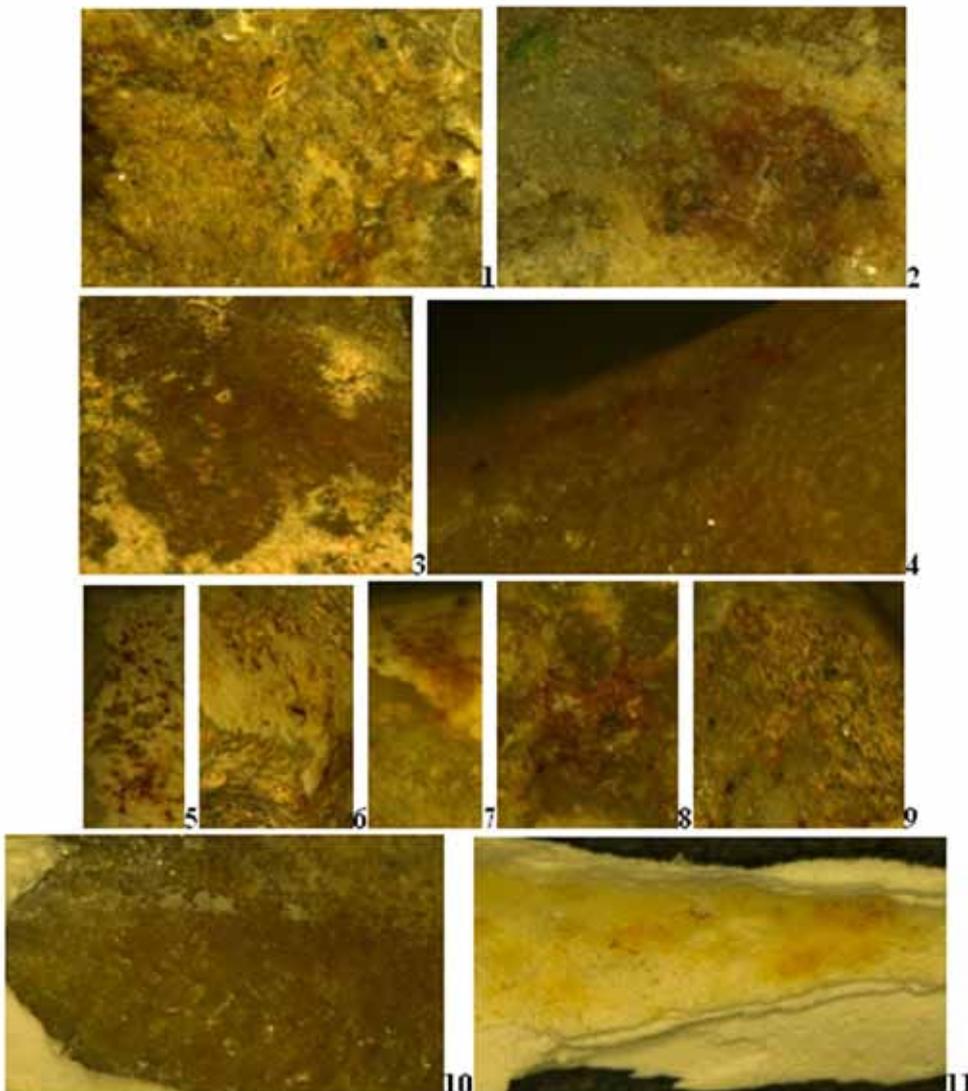


Fig. 13 - Ochre on the surface of *Congerina sp. aff. Congerina (Mytilopsis) subcarinata subcarinata* [1 specimen 1; 2-4 specimen 2; 5-6 specimen 3; 7-9 specimen 4; traces of ochre on the surface from which the crust was taken away (10) and on the back of the crust that was in contact with the surface of the fossil specimen 2 (11)].

Fig. 13 - Ocre sulla superficie dei fossili di *Congerina sp. aff. Congerina (Mytilopsis) subcarinata subcarinata* [1 campione 1; 2 - 4 campione 2; 5 - 6 campione 3; 7 - 9 campione 4; tracce d'ocra sulla superficie dalla quale è stata rimossa la crosta (10); il dietro della crosta che è stato in contatto con la superficie del fossile (11)].

symbolism. Their characteristic shape doubtlessly suggests that of the vulvas represented in the West European caves, with all their symbolical implications. The fact that they have this very suggestive shape, often identical to that of the cave ones, and the fact that they were found in an settlement out in the open confers them similar significances to those of the cave ones, and in the absence of the support represented by a cave's walls, they become a projection of these symbols in another natural environment, just by virtue of their symbolical vocation. Actually, the vulva motive as part of the ornamental art from the settlement situated out in the open from Kostenki I (fig. 12/9) (Leroi-Gourhan 1965) is, in its turn, extremely revealing. The similarity between this representation and the one suggested by the fossils of *Congeria sp. aff. Congeria (Mytilopsis) subcarinata subcarinata* (Deshayes 1838) from Poiana Cireșului is striking. The fact is all the more important as, this time, the analogies concern two open air settlements, situated in juxtaposed chronological intervals.

Their existence in this settlement, which however seems to be a seasonal reindeer hunting settlement, is not an isolated fact, if we consider the rich and diverse stone material, and the significant number of bone objects, many of them true works of art. The fossils of *Congeria sp. aff. Congeria (Mytilopsis) subcarinata subcarinata* (Deshayes 1838) simply complete the image and the ample picture of a full spirituality, with major significances in the life of the respective community.

Maybe we should say that the diversity of all these pieces of evidence we have in hand now would not have been possible if we had not applied, very scrupulously and rigorously, some methods of extremely careful digging throughout the campaign reopened in 1998 in the settlement of Poiana Cireșului from Piatra Neamț. This explains, actually, why similar pieces of evidence were not found during the previous archeological diggings, though in some cases considerable areas were dug up.

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