A NOTE ON A STONE FIND FROM NOVI PERKOVCI, NEAR ĐAKOVO (NORTHERN CROATIA)

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Abstract: 2005 investigations at the Sopot culture site of Krčavina near Novi Perkovci, on the route of the future Beli Manastir – Ploče motorway, yielded a half of a polished and perforated stone object. The artefact was found in the context of a large open hearth, and it is reminiscent of prehistoric stone maces, although it differs from them in form. The function of this object remains also indeterminate due to the circumstances of the find. By comparing a number of stone artefacts spanning the time from the Palaeolithic to the Bronze Age in Europe, northern Africa and the Middle East, we attempted to find an answer for the utilitarian function of the object as well as for the possible symbolic meaning of the context of discovery.

Rezumat: Cercetările desfășurate în anul 2005 în situl Krčavina, în apropiere de Novi Perkovci, încadrat în cultura Sopot, pe traseul viitoarei autostrăzi Beli–Manastir, au scos la iveală un fragment dintr-o piesă de piatră șlefuită. Acesta a fost descoperit pe o vatră de mari dimensiuni. Deși diferă ca formă, se consideră că reprezintă un fragment dintr-o măciucă preistorică. Funcționalitatea acestui obiect rămâne nedeterminată datorită circumstanțelor descoperirii. Comparând-o cu un număr de piese de piatră șlefuită dintr-un interval cronologic plasat din Paleolitic până în Epoca Bronzului, pe un spațiu cuprinzând Europa, nordul Africii și Orientul Apropiat, autoarea încearcă să interpreteze atât scopului funcțional al acestei piese, cât și posibilul simbolism al contextului descoperirii.

Key words: Neolithic, northern Croatia, Sopot culture, Ražište type, stone, mace.

Cuvinte cheie: Neolitic, nordul Croației, cultura Sopot, tipul Ražište, piatră, măciucă.

Introduction

In autumn 2005 and spring 2006, large scale rescue archaeological excavations were conducted on the Budapest-Ploče motorway (Corridor V C), subsection Đakovo-Sredanci. One of the explored sites was the site Krčavina, near Novi Perkovci village, about 6 km southwest from Đakovo¹ (Fig. 1). Part of this site was also excavated in November of 2006.² The explored area was about 18.000 m². A large number of smaller and bigger pits of different use, together with larger post holes, were registered on this site³ (Fig. 2), most of pits belonging to Sopot culture. A smaller number of pits

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Excavations were organized by Đakovo Regional Museum (Ivo Pavlović). Leaders of excavations were Zorko Marković and Boško Marijan.

² Additional excavation was conducted by Katarina Botić.

³ Marković, Botić 2008.

could be attributed to Starčevo culture, Early Bronze Age Litzen culture and Transdanubian incrusted pottery and some of them to the beginning of the Late Bronze Age.

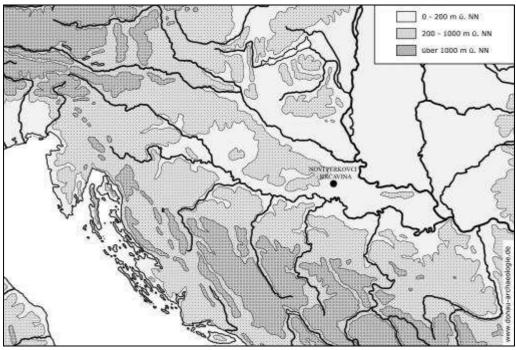


Figure 1. Location of Novi Perkovci-Krčavina site.

During the first campaign in autumn 2005, pit SU⁴ 061 of indeterminate function was explored. It consisted of two areas: the southern area where a big open hearth (SU 135), about 2 m in diameter and almost 2 m deep (Fig. 3/1-4) was found, and the northern area, separated from the southern one by an earth ridge, containing only the E-W oriented wooden division supported by several pairs of wooden posts (Fig. 3/5). Northern area contained very small amount of finds while most of the finds were concentrated in the southern area, in the layers of ash alternated with layers of burnt earth (Fig. 3/3). The layers of burnt earth were thicker when closer to the surface of the pit (Fig. 3/1-2). In one of the layers of ash, about 0.90 m deep, half of the round polished perforated stone object was found (Fig. 2; Fig. 4; Fig. 5), together with various fragments of pottery and one polished axe with damaged cutting edge. According to the finds, the

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⁴ Stratigrafic unit.

pit was dated to IB/II phase⁵ of Sopot culture according to S. Dimitrijević, i.e. to Ražište type of Sopot culture according to Z. Marković⁶.

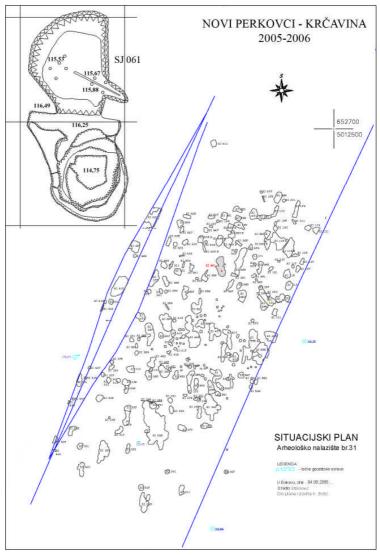


Figure 2. Plan of Novi Perkovci-Krčavina site (the site of discovery of the stone disc is marked in red) with the plan of the pit 061 (plan design: Stilinović and Botić).

⁵ Marković, Botić 2008, 23.

⁶ Marković 1985.



Figure 3. Details of pit SU 061 during the excavation (1: upper layers of the burned soil of the hearth fill SU 136; 2: detail of upper layers of the burned soil of the hearth fill SU 136; 3: lower layers of the burned soil of the hearth fill SU 136; 4: southern area of pit 061 after the excavation; 5: detail of a beam in the northern part of pit SU 061) (phots by J. Bulog).

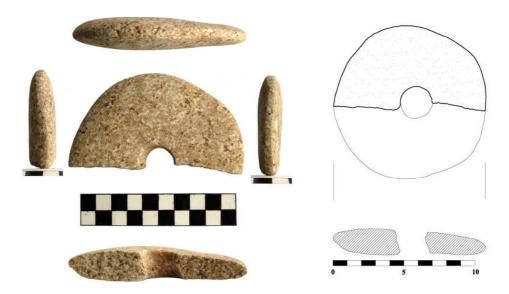


Figure 4. Polished stone disc from pit SU 061 (photo and drawing by K. Botić).

Polished stone object - disc (Fig. 4)

The object found in the hearth of a large two segmented pit was a riddle from the very beginning. By its uneven round shape (about 11 cm in diameter) and relatively narrow cross-section (1.5-1.9 cm), it opposes so-called maces which were used as weapons (Fig. 6/2-4; Fig. 7/1-2; Fig. 9/1 up; 9/5 up; Fig. 10/3, 10/5-9) from Prehistory to the Middle Ages. It could be classified as a stone disc rather than a weapon. Its uniqueness is additionally stressed by the fact that it was made from granodiorite. During the excavations only one other object made from this type of rock was found – dice of small dimensions. Disk was broken almost in half along its diameter, perforated (hole diameter about 2.3 cm), with polished surface and visible facet (0.5 cm wide) along the ridge. Second half of the disc wasn't found so it was assumed it ended in the hearth already damaged.

It was difficult to find analogies for this kind of object due to insufficient research of Sopot sites or due to insufficient publishing of the material from already

For typology of Bronze Age maces of central Europe see Beková-Berounská 1989, 219-222.

Because it is a very rare find, chemical and geological analysis haven't been conducted, but Prof. Boško Lugović from Faculty of Mining, Geology and Petroleum Engineering in Zagreb, after seeing the object, preliminary classified it as granodiorite rock for which we are grateful.

explored ones. In the region of northern Croatia, three published and two unpublished objects are known to the author. The published objects are:

- 1. Vučedol (Fig. 6/3)⁹ the object is not dated, but R. Schmidt brings forth parallels for the late Neolithic and Bronze Age from sites Vršac, Pančevo and Omoljica; he calls this object *Hammerkeule*
- 2. Ludbreški Ivanac (Fig. 6/4)¹⁰ the object is damage, has outer diameter around 7 cm, hole diameter around 2 cm; it is made from greenish olivine mineral; upper side is flat, lower side is biconical; a light facet of the rim is visible on the undamaged part; it is dated to the Eneolithic or Early Bronze Age
- 3. Mirkovec?, Zabok district (Fig. 6/5)¹¹ the object is not described in the text but it is present on the plate near the axe made of green serpentinite from Mirkovec site (inv. no. 1690 AMZ); its dimensions are unknown; it can possibly be dated to the Bronze Age

So far, the unpublished objects are:

- 1. Unknown site, Slavonia (Fig. 6/1) the object is kept in the Museum of Slavonia in Osijek, under inv. no. 5413; it was registered in the inventory book on April 1st 1957, together with an obsidian core; it is made from granular stone with finely polished surface, reconstructed; outer diameter around 10 cm, hole diameter around 2 cm, thickness around 1 cm; Neolithic?¹²
- 2. Kaznica-Rutak near Selaci Đakovački (Fig. 6/2) the object is kept in the Archaeological Museum in Osijek (AMO-857); it was found during the rescue excavations on Sredanci-Đakovo motorway subsection; this site was situated between sites Krčavina-Novi Perkovci and Ivandvor; the object has outer diameter around 12 cm, hole diameter around 2.5 cm, thickness around 2.7 cm; Neolithic?¹³

⁹ Schmidt 1945, Fig. 61/2, T. 49, Abb. 4.

¹⁰ Marković 1988, T. 2/1.

¹¹ Pavišić 1990, T. I/2.

We hereby thank the Museum of Slavonia in Osijek for giving us permission to publish this object; special thanks to colleague Dragana Rajković for the information provided.

We hereby thank the Archaeological Museum in Osijek for giving us permission to publish this object. The object was depicteded in the graduation thesis by colleague Petar Sekulić entitled "Polished stone objects from Kaznica-Rutak site".

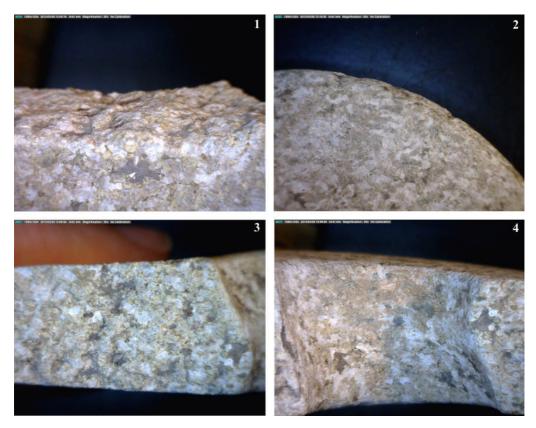
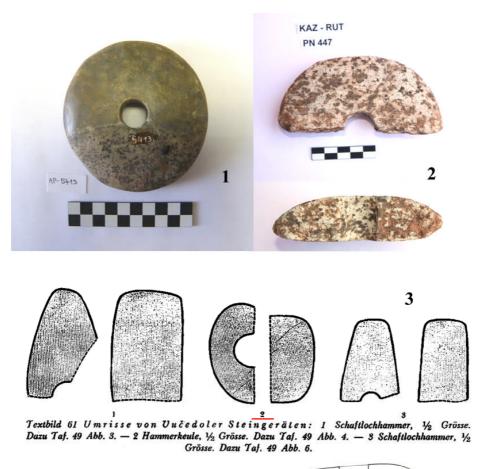


Figure 5. Details of the disc surface – 1: thicker cross section (magn. 20%) with visible damage to the surface; 2: V-shaped damage to the outer surface of the disc (magn. 20%); 3: slimmer cross section (magn. 20%) of the disc; 4: detail of the hole with traces of drilling (magn. 20%) (photos by A. Kudelić).

Similar objects, found in Europe, Middle East and northern Africa, include time span from Palaeolithic to the Bronze Age. Below there is the list of twenty published and three unpublished objects, two of which are from Museum für Vor- und Frühgeschichte Berlin.



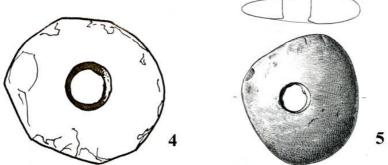


Figure 6. Stone objects from Croatia – 1: unknown site, Museum of Slavonia in Osijek, inv. no. 5413; 2: Kaznica-Rutak near Selci Đakovački, Archaeological Museum in Osijek (AMO-857); 3: Vučedol; 4: Ludbreški Ivanac; 5: Mirkovec?

The published objects are:

- 1. Brno II, Czech Republic (Fig. 10/1)¹⁴ the object was found among offerings in a male burial together with several hundred shells, animal bones, deer antler with polished ends (drumstick?), smaller discs made of stone and mammoth tusks, figurine of a man made of mammoth tusks etc.; the disc was broken in half along its flat side i.e. it consists of two thinner discs; outer diameter is 14 cm, hole diameter 4.5-5 cm, thickness 2 x 2.4 cm; Palaeolithic 23,680±200 BP¹⁵
- 2. Hallan Çemi, Turkey (Fig. 10/7)¹⁶ outer diameter 8.4-9.4 cm, hole diameter 2.4 cm, thickness 4.9 cm; PPNA, 9500-8800 BP
- 3. Hallan Çemi, Turkey (Fig. 10/8)¹⁷ outer diameter 8.1 cm, hole diameter 2.3 cm, thickness 4.7 cm; PPNA, 9500-8800 BP
- 4. Körtik Tepe, Turkey (Fig. 10/9)¹⁸ outer diameter 7.9-9.7 cm, hole diameter 3 cm, thickness 4.9 cm; PPNA/PPNB, 9500-8800 BP
- 5. Çayönü, Turkey (Fig. 10/2)¹⁹ there is no description of this object, it is shown *in situ* in one of the rooms of the building U-9; PPNB, 8600-8300 BP
- 6. Bylany, Czech Republic (Fig. 8/3)²⁰ outer diameter 8.4-11.4 cm; LBK
- 7. Müddersheim, Germany (Fig. 8/4)²¹ outer diameter 11 cm; LBK
- 8. Goldberg, Germany (Fig. 8/5)²² outer diameter around 8.5 cm; Neolithic
- 9. Girdles-Courtenay, France (Fig. 8/2 smaller disc)²³ outer diameter around 9.6 cm; Fossé, France (Fig. 8/2 larger disc)²⁴ outer diameter around 12.4 cm; Neolithic
- 10. Čuka near Topolčani, FYR Macedonia (Fig. 8/6)²⁵ unknown dimensions; found in layer IB (2.75-1.95 m); described as a stone weight with a hole; Neolithic
- 11. Geili necropolis, Sudan (Fig. 10/10)²⁶ unknown dimensions, among offerings from the graves; late 4th millennium BC

Oliva 1996, Fig. 4; Oliva 1999, Fig. 2; Oliva 2007, Fig. 62.

¹⁵ Oliva 1999, 143.

¹⁶ Başgelen (ed.) 2007, 155.

¹⁷ Başgelen (ed.) 2007, 155.

¹⁸ Başgelen (ed.) 2007, 155.

¹⁹ Braidwood *et alii* 1971, Fig. 3-4; Özdoğan 1995, Fig. 7.

²⁰ Müller-Karpe 1968, T. 196/6.

²¹ Müller-Karpe 1968, T. 214/B1.

²² Müller-Karpe 1968, T. 229/A10.

²³ Müller-Karpe 1968, T. 272/D.

²⁴ Müller-Karpe 1968, T. 272/E.

²⁵ Kitanoski et alii 1978, T. III/27.

²⁶ Caneva 1989, Fig. 4; Caneva 2005. Fig. 7.

12. Neve Ur, Israel (Fig. 9/6)²⁷ – made of brown silex, outer diameter 12.5 cm, hole diameter 1.6 cm, thickness 1 cm; second half of the 4th millennium BC, Ghassoulian culture

- 13. Dera, Syria (Fig. 9/2)²⁸ outer diameter around 8 cm; second half of the 4th millennium BC
- 14. Neve Ur, Israel (Fig. 9/4)²⁹ made of brown silex, outer diameter 12.5 cm, hole diameter 1.4 cm, thickness 1 cm; second half of the 4th millennium BC, Ghassoulian culture
- 15. Safadi, Israel (Fig. 9/5 upper disc)³⁰ outer diameter 9.3 cm, thickness 2.7 cm; second half of the 4th millennium BC
- 16. Neve Ur, Israel (Fig. 9/1 upper disc)³¹ black polished marble, outer diameter around 9 cm, thickness around 2.5 cm; Neve Ur, Israel (Fig. 9/1 lower disc)³² limestone, outer diameter around 9.5 cm, thickness around 1-1.5 cm; second half of the 4th millennium BC, Ghassoulian culture
- 17. Turdaş-La Luncã, Romania (Fig. 10/5)³³ National Transylvanian History Museum di Cluj-Napoca, inv. no. V.9394; black stone, outer diameter 9.4 cm, hole diameter 2 cm, thickness 3.4 cm; late Neolithic (Vinča-Turdaş phase)
- 18. Avebury, United Kingdom (Fig. 10/6)³⁴ larger dimensions; late Neolithic

So far, the unpublished objects are:

- 1. Halberstadt, Sachsen-Anhalt, Germany (Fig. 7/1) the object is kept in Museum für Vor- und Frühgeschichte Berlin, Staatliche Mussen zu Berlin SPK (Inv.-Nr. II 4727); unknown find circumstances; outer diameter around 16 cm; Bandkeramik (photo: Claudia Plamp, Museum für Vor- und Frühgeschichte Berlin, Staatliche Mussen zu Berlin SPK)³⁵
- 2. Rössen, Sachsen-Anhalt, Germany (Fig. 7/2) the object is kept in Museum für Vor- und Frühgeschichte Berlin, Staatliche Mussen zu Berlin SPK (Inv.-Nr. Ig 105); outer diameter around 12 cm; Rössen culture (5th millennium BC) (photo:

²⁷ Perrot *et alii* 1967, Fig. 2.

²⁸ Perrot *et alii* 1967, Fig. 6/6.

²⁹ Perrot *et alii* 1967, Fig. 8.

³⁰ Perrot *et alii* 1967, Fig. 9/1.

³¹ Perrot *et alii* 1967, Fig. 13/5.

³² Perrot *et alii* 1967, Fig. 13/6.

³³ Maxim *et alii* 2009, cat. 20; Merlini 2009, 384, Fig. 6.18.

³⁴ Burl 1979, Fig. 64.

We hereby thank Museum für Vor- und Frühgeschichte Berlin, Staatliche Mussen zu Berlin
SPK for giving us permission to publish this object.

Claudia Plamp, Museum für Vor- und Frühgeschichte Berlin, Staatliche Mussen zu Berlin – SPK)³⁶

3. Becsehely-Alsóerdő-dűlő, Hungary (Fig. 10/3) – the object was found during the rescue excavations on the motorway M70 Nagykanizsa-Letenye in 2003; serpentinite; late Neolithic³⁷

Objects of similar shape but made from different material are also known. Two published amber discs and one ceramic disc with decoration similar to inscription are listed below:

- 1. Unknown site, Samland/Gemany (Fig. 9/3)³⁸ amber, outer diameter 11.4 cm, hole diameter 4.56 cm, thickness 2.2 cm; Neolithic
- 2. Ivanne (Rivno), Ukraine (Fig. 8/1)³⁹ decorated disc found in a stone cist as an offering near the male remains; unknown dimensions; the end of the 4th millennium BC
- 3. Valea Nandrului-Dosu Mare, Romania (Fig. 10/4)⁴⁰ National Transylvanian History Museum di Cluj-Napoca, Inv. no. VI.1059; decorated ceramic spindle whorl, outer diameter 9.25 cm, hole diameter 1.4-1.6 cm, thickness 3.3 cm; late Neolithic 4900-4500 BC (Vinča B2/C1-2)

There is another stone object that, according to its function, does not belong in the list of objects in this paper, but can partially explain their symbolical meaning:

1. Maltegard, Denmark (Fig. 10/11)⁴¹ – lid of sandstone urn with the image of "sacred wedding", rough at the edge but with finely shaped hole; Bronze Age

Comparison of the above listed discs and maces with the find form Novi Perkovci leads to the conclusion that it shares most similarities in the shape and material with disc from the Museum of Slavonia (Fig. 6/1), while the disc from Rössen (Fig. 7/2) is very similar to it in shape and size; mace from Kaznica-Rutak (Fig. 6/2) is the most similar to it in material, and the disc from Brno II (Fig. 10/1) is similar to it by the inclination of the hole - another uniqueness of this object (Fig. 5/4). Uneven

www.zmmi.hu/gm/m7/015_074_073.htm (page not longer accessible); the map of the excavation sites on this motorway can be seen at Kvassay 2005, 252.

³⁶ Ibidem.

³⁸ Kosmowska-Ceranowicz, Paner (eds.) 1999, Abb. 17.

³⁹ Gimbutas 1991, Fig. 10-30.

Winn, 1981, 273, Fig. 41; Maxim et alii 2009, 141, cat. 21; Merlini 2009, 316, Fig. 5.283.

⁴¹ Burl 1979, Fig. 95.

thickness, similar to the object from Novi Perkovci (Fig. 4), is seen at the object from Mirkovci (Fig. 6/5) and at one of the objects from Neve Ur (Fig. 9/1 – down).

It is interesting to note how majority of these objects came from every day utilitarian context, for some origin and context are not known while others came from graves (probably Fig. 7/2, Fig. 8/1, Fig. 10/1; 10/6; 10/10). To this latest group of finds the lid from Maltegard urn belongs. It is not known if some of these objects come from the same context as the one from Novi Perkovci.



Figure 7. Stone objects – 1: Halberstadt, Sachsen-Anhalt, Germany, Inv.-Nr. II 4727; 2: Rössen, Sachsen-Anhalt, Germany, Inv.-Nr. Ig 105 (photo by Claudia Plamp, Museum für Vor- und Frühgeschichte Berlin, Staatliche Museen zu Berlin – SPK).

Conclusion

The stone disc from Novi Perkovci, by shape and manufacturing, finds its analogies primarily on the territory of northern Croatia, while distant analogies can also

be found in the wider area of Europe, Middle East and northern Africa. So far, there are no analogies for the context of discovery in the hearth. We are also not familiar with analogies for the deposit of polished stone axes in hearths and kilns, documented at Krčavina-Novi Perkovci site in various instances.⁴² Symbolic connection between stone (especially axes) and fire is very complex and requires wider study, but possible connection between stone objects and fire can be demonstrated by the above-mentioned perforated urn lid from Maltegard. The images of a man and woman are incised on this lid, extending hands to each other over the carefully made hole, while behind the woman the image of a Maypole can be seen (symbol of fertility). The whole scene is surrounded by a wreath, possibly of spring flowers. Maybe the scene depicts a "secret wedding" and a hole could represent the connection between the underground and life (here symbolically depicted by the wedding scene, i.e. unification). The hole can also represent the connection between death/cremation and life/regeneration.⁴³ In our case, the stone disc could have a similar meaning - the connection between life (the object probably had its everyday utilitarian function until it was damaged) and death, i.e. purification (the object was "given back" to the fire that is not only a force of destruction, but also the source of heat, i.e. life).

The everyday utilitarian function of this disc could have also been connected to fire. With its unevenly perforated hole (Fig. 5/4) and its uneven thickness (Fig. 4) it could have served as a weight in the fire starting or stone drilling system (Fig. 11/1-2), because both of these characteristics would give it a perfect swing during spinning and would prevent it from sliding down the pole. It is also possible that the unevenness of the hole is due to several attempts to drill it - it was drilled from both sides and not from just one side as it is normally the case (Fig. 5/4). This fact can be connected to dating this object to an earlier phase of Sopot culture for which the lack of drilled tools is generally assumed until its later phases - this was confirmed on Novi Perkovci site where all the axes were flat and not perforated. The only drilled axe from the site, broken in half by drilling and never finished, was found in the pit dated to the 3rd phase of Sopot culture, which would correspond to the time when perforated tools were used. Given its weight, we exclude its use as a spindle whorl. Due to the rarity of the material from which it was made we exclude its use as a fishing net weight. Here, we find it important to mention the object determined as a spindle whorl made of ceramic from the site of Valea Nandrului-Dosu Mare (Fig. 10/4), because we find it different from usual weights/spindle whorls due to its dimensions; it is similar to the stone discs listed in this paper.

⁴² At this site, all the kilns and this only big hearth contained polished axes, mostly undamaged. In one instance the polished stone wedge was found.

⁴³ Burl 1979, 223.

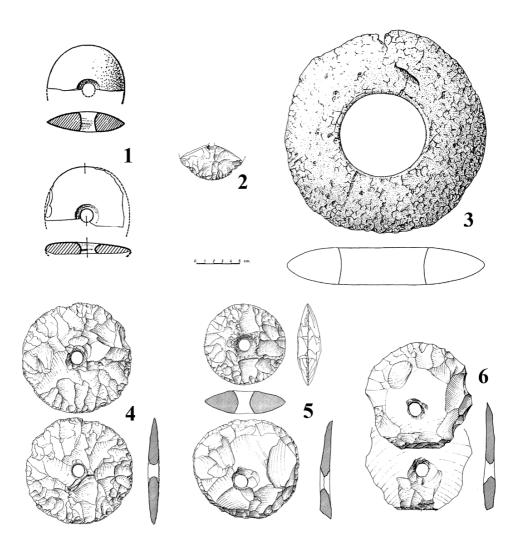


Figure 8. Stone objects – 1: Ivanne (Rivno), Ukraine; 2: Girdles-Courtenay, France – smaller disc, Fossé, France – larger disc; 3: Bylany, Czech Republic; 4: Müddersheim, Germany; 5: Goldberg, Germany; 6: Čuka near Topolčani, FYR Macedonia.

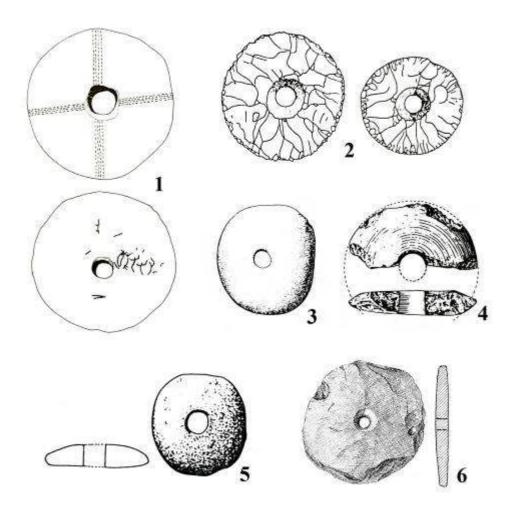


Figure 9. Stone objects – 1: Neve Ur, Israel; 2: Dera, Syria; 3: unknown site, Samland – Germany; 4: Neve Ur, Israel; 5: Safadi, Israel; 6: Neve Ur, Israel.

The disc from Brno II burial refers to somewhat different use of this object in magical purposes. According to M. Oliva,⁴⁴ the burial is shamanic, not so much because of many different offerings, including a male idol/doll made from mammoth tusks, but because of the presence of polished deer antler, which could have served as a drumstick.

⁴⁴ Oliva 1996; Oliva 1999; Oliva 2007.

The stone disc found in this burial recalls of the disc from Novi Perkovci by its out-of-axis hole (Fig. 10/1). Oliva takes the illustration from Hoppál where the Tungus shaman is depicted with various pendants in the shape of rings and discs tied to the clothes by strings⁴⁵ (Fig. 12). Here, the objects are mainly metal, but we can certainly presume that before using metal other materials (such as bones, tusks or stone) were used.⁴⁶ The disc from Novi Perkovci shows very regular wavy fracture, possibly due to the string on which it was hanging (Fig. 5/1, 5/2). According to the information provided by B. Lugović (see note 3), granodiorite is not one of the most solid rocks and it is relatively easy to break it if proper force is applied. It is therefore possible that the disc, suspended on a stronger string, caused its own wearing out and eventually broke.

We can only speculate about the real meaning and use of this object. It is certainly worth noting that this object served utilitarian purpose from the time it was made until the time it was discarded – as a part of the fire starting system,⁴⁷ a part of the shaman costume or as a status symbol of power. This later can be deduced for almost all discs and maces listed above, especially for those found in graves. It is also worth noting that the largest number of such objects appear in late Neolithic (although they can be found in earlier periods as well) and in the Bronze Age, periods marked by socio-economic changes and social stratification. The older tradition of magical function of objects, present from the Palaeolithic (Brno II burial), shouldn't be cast aside either. In any case, these objects were instruments that served either as utilitarian or magical objects, and were not worshiped but used⁴⁸ – they were not special on their own accord, but rather due to what they symbolised and were used for. It is hard to establish whether the disc from Novi Perkovci had some symbolic meaning during his utilitarian phase or this meaning was attributed to it by the act of throwing it into the fire.⁴⁹

⁴⁵ Oliva 1996, Fig. 10; Hoppál 1994, Fig. 48.

⁴⁶ Offerings in the Brno II burial go in favour to this – 14 smaller discs of bone, mammoth tusks, haematite and marlite (Oliva 1999, 145) and several hundred shells were found.

⁴⁷ Here, the connection to the fire, i.e. fire making, can be seen, which gives way to the firmer supposition that the object was "given back" to the fire after being damaged, i.e. after losing its utilitarian value.

⁴⁸ Eliade 1992, 278.

⁴⁹ This paper was originaly published in Croatian in Dizdar, M. (ed.) 2011, Panonski prapovijesni osviti - Zbornik radova posvećenih Korneliji Minichreiter uz 65. obljetnicu života (Festschrift dedicated to Kornelija Minichreiter for her 65th birthday) - Botić 2011, 227-245. Some alterations have been made in this English version.



Figure 10. Stone objects – 1: Brno II, Czech Republic; 2: Çayönü, Turkey; 3: Becsehely– *Alsóerdő-dűlő*, Hungary; 4: Valea Nandrului–*Dosu Mare*, Romania; 5: Turdaş–*La Luncă*, Romania; 6: Avebury, United Kingdom; 7: Hallan Çemi, Turkey; 8: Hallan Çemi, Turkey; 9: Körtik Tepe, Turkey; 10: Geili necropolis, Sudan; 11: Maltegard, Denmark.

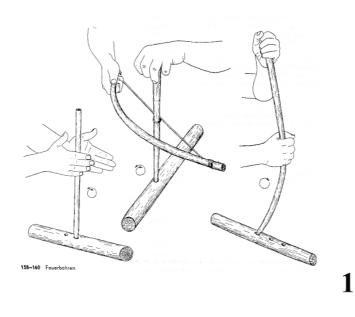




Figure 11. Methods to start a fire (Feustel 1973) (1) and mechanism for drilling holes in stone objects, a reconstruction from the Museum of History and Archaeology "Alexandru Ştefulescu" in Drobeta-Turnu Severin, Romania (2).



Figure 12. Reconstruction of the equipment of a Tungus shaman (Oliva 1996, Fig. 10 – after Hoppál 1994, Fig. 48).

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