

Palaeolithic art in Slovenia

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ABSTRACT – *This article is a review of Slovenian Palaeolithic ‘art’ objects. Most were found quite some time ago and were described as ‘art’ by their excavators, who undertook no further examination and authentication. More recent finds, like the Mousterian ‘flute’, were thoroughly examined, but in the case of the flute, there is still no uniform agreement on whether it was used as musical instrument or not. The only objects which are definitely artificial are engraved bone points, two engraved stones and three pieces of jewellery from Late Palaeolithic sites.*

IZVLEČEK – *Članek je pregled slovenskih paleolitskih ‘umetniških’ predmetov. Večina izmed njih je bila najdenih pred dolgo časa in so jih kot umetniške izdelke opisali njihovi najditelji, ki pa niso opravili nobenih nadaljnjih raziskav in overitev teh predmetov. Mlajše najdbe, kot je mousterienska ‘piščal’, so bile temeljito preiskane, vendar v primeru piščali še vedno ni enotnega sporazuma ali so jo uporabljali kot glasbeni instrument ali ne. Edini predmeti, ki so zagotovo delo človeških rok, so gravirane koščene konice, dva gravirana kamna in trije kosi nakita iz mlajšepaleolitskih najdišč.*

KEY WORDS – *Slovenian Palaeolithic; Palaeolithic art; flute; engravings; jewellery*

Majority of the Palaeolithic art objects in Slovenia require reassessment, as most were excavated decades ago and never properly examined, or were lost after excavation. The best known is a Neanderthal ‘flute’ from Divje babe I (Fig. 1). The purpose of this bone has been disputed since its resurrection and the debate continues. Some believe that the holes are artificial (*Turk et al. 1997; 2003; 2005*), while others are not convinced (*d’Errico et al. 1998; Chase P. G. & Nowell A. 1998*).

The flute was found in the Mousterian horizon D, in the breccia layer near one of the hearths. It is made from the bone of a cave bear cub (*Turk et al. 1997*). It has aged in the last 10 years from about 45 000 (*Turk & Kavur 1997.149*) to about 60 000 years (*Turk et al. 2007.148*). It is impossible to determine with certainty if the holes in it are artificial, or were made by animals or other natural agents, but Turk and his co-workers conducted a series of experiments which show that it is more likely that the

holes were made by a human than an animal. They demonstrated that drilling is not the only way to produce holes in bone, and that a bone or stone awl with a blunt tip could also be used. Such chiselled holes do not differ from those made with teeth and there are no traces of the production tool on their edges. On the other hand, it is very unlikely animals could damage bone in such a way that it would resemble a flute. Biting the bone with canines would not produce holes in a straight line and the bone would break before being punctured (*Turk et al. 2003*).

The holes of the ‘flute’ were examined by multi-slice computed tomography (MSCT). With this method it was possible to distinguish four holes. One was probably made by a carnivores, while other three were artificial. All the other damage made by the carnivores (mostly gnawing) was subsequent to the production of the holes (*Turk et al. 2005*). It is quite probable that the holes are anthropogenic, and given the

age of the flute, could only have been made by Neanderthals. But, of course, even if the holes are artificial, the bone might appear to be a flute only from our Modern perspective, but not for Neanderthals, who might have used it in a totally different way.

Should we change our view of Neanderthals because of the flute from Divje babe I, and accept them as the first artists? But why is Neanderthal art so scarce and simple? Why did they create only simple lines or uncomplicated geometrical designs on stones and bones? Why are there so few coloured objects – like the polished mammoth tooth lamella with traces of ochre from Tata (*Marshack 1990*), if ochre or black pigments are quite frequent in Mousterian layers?

What we today call ‘Palaeolithic art’ is a form of communication. By painting pictures on the walls of caves or by making figures, Ice-age artists made the information durable, and accessible even to people with whom they were not in direct contact. Perhaps this form of communication could not spread, because Europe was too scarcely populated in the Middle Palaeolithic. Even if there were some simple artistic achievements, they could not develop further, because communication between Neanderthal groups was limited. So innovations were not widespread, but restricted to the group which invented them. If groups were small and far apart and the amount of information was rather limited, there was no need for the external and more permanent storage of knowledge, which developed later in the Upper Palaeolithic.

Sophisticated art as carrier of information was not possible until humans were able to form complex communication systems to transfer information to others. Only in such systems could the development of external storage systems and symbolic thought that we today perceive as Palaeolithic art have occurred. But such systems did not develop if the population was thin and uninterested in the extensive exchange of knowledge and ideas.

Groups of Neanderthals probably communicated their knowledge inside the group and much less to outsiders. Communication between people in close contact can be transmitted with gestures and voices. There is no need for images as visual mediators of ideas and knowledge, particularly if there is little information to be exchanged. If Neanderthals communicated with voices, then sounds, and consequentially, music were familiar to them. Words and sounds are suitable for transmitting knowledge, but with

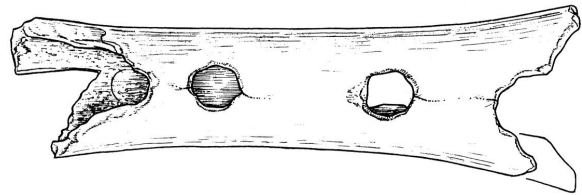


Fig. 1. Neanderthal ‘flute’ from Divje babe I (after Turk & Kavur 1997a. sl. 12.1/1).

music it is possible to express feelings and also to comfort and entertain others. Experiencing comfort together might have consolidated bonds among the members of the group. Since the invention of the flute was not communicated to outsiders, it died out with the group.

There is a similar difficulty with so-called flutes from Slovenian Aurignacian sites – it is not certain if the holes are artificial. In Potočka zijalka, a cave bear lower jaw with a widened entrance to the nerve canal and three additional successive holes was found (Fig. 2), which the Brodars interpreted as a flute (*Brodar and Brodar 1983*). Similar jaws or ‘flutes’ are also known from Mokriška jama. Mitja Brodar believes that the holes are not pathological and that they might have been produced artificially. But he states that if there are no traces of stone tools, it is difficult to distinguish between holes made by animal gnawing and those made by humans (*Brodar 1985*).

Besides being potential musicians, Ice-age visitors to Potočka zijalka also engraved bone points. Approximately one third of the bone points from this site are engraved. There are two types of engraving: the first has parallel lines along the edges of the point; while the second has spirals winding around the point (Fig. 3). Most are very delicate (*Brodar 1935; Brodar & Brodar 1983*). They might be a form of counting or annotation of periodical events (a type of calendar). A recent interpretation of these engravings is that they were made for practical reasons – to facilitate the production of bone points (*Odar 2009*).

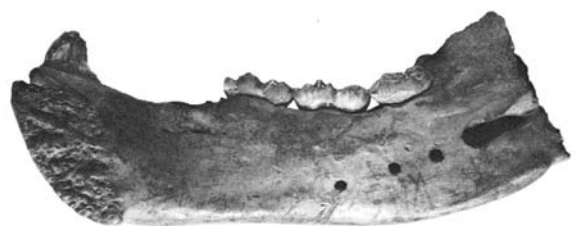


Fig. 2. Aurignacian ‘flute’ from Potočka zijalka (after Brodar & Brodar 1983.sl. 57).



Fig. 3. Aurignacian engraved bone point from Potočka zijalka (after Brodar and Brodar 1983.T8/97).

An engraved bone was found in the Tardigravettian layers in Ciganska jama cave (Fig. 4). Brodar (1991) interpreted the lines as schematic female representations, but he states that the incisions were not made with stone tools, but with a carnivore canine. After renewed examination of the bone, it was found that the incisions are almost certainly natural, caused by plant roots.¹ Similar traces were described by D'Errico and Villa (1997).

It is interesting that engravings resembling those on the bone were recently found on a wall in this cave, but they are made in the fresh layer of calcite film on the wall, so they are recent and probably natural formations (Fig. 5).



Fig. 4. 'Engraved' bone from Ciganska jama (after Brodar 1991.sl. 11).



Fig. 5. Infrared photograph of the 'engravings' on the wall of Ciganska jama cave (photo Žiga Smit).

This is an example of how easily we can be led by similar forms and wishful thinking to the conclusion that natural forms are some sort of prehistoric art, and how essential it is to find strong evidence for statements that objects are anthropogenic.

At beginning of the 19th century (1819), the lower jaw of a cave lion with an unusually shaped canine was found in Postojna Cave (Fig. 6). Freyer, who found the jaw, decided that it should be the part of the collection of the newly opened Land Museum in Ljubljana. Much later, S. Brodar suggested that the canine might have been artificially shaped to resemble an animal head, probably the head of a cave lion – that is the same animal species to which the jaw belonged. He excluded natural agents which could be responsible for the unusual shape of the canine. He also excluded the possibility that the canine was damaged by humans during the use of the jaw for different tasks like skinning and scraping hides, or as an axe, but he suggested that it might have been 'core' used for knapping some sort of 'tooth flakes'. Meanwhile, another researcher, Kos, described the jaw as an example of natural damage which occurred during the life and shortly after the death of the animal (Brodar 1951).

Brodar also suggested that three of the cave bear teeth from Potočka zijalka were artificially shaped, so that they resembled birds (Brodar 1951). But the teeth have been lost and so it is not possible to verify if they were really shaped by people, or if they were natural forms, and it was just wishful thinking that they represent Palaeolithic art. The interpretation of the teeth as 'birds' is probably merely example of the human need to place forms within known frameworks and associate them with something fa-



Fig. 6. Cave lion canine, which resembles the head of a cave lion. Postojnska jama, Upper Palaeolithic? (after Brodar 1951.sl. 4).

¹ I'm thankful to Irena Debeljak, who showed me traces of the plant roots on the bone and enlightened me about natural phenomena on the bone surface.

miliar. People sometimes have difficulty accepting that nature can also be creative, and that it can form shapes which imitate objects made by human activities.

There is an interesting story connected with Slovenian Palaeolithic research, about a probable Palaeolithic cave painting somewhere near the spring of the Kolpa river. The story is based on a conversation between Srečko Brodar and a mining engineer called Šimečki. Šimečki told Brodar that a long time before (around 1890 - he was speaking in 1937) he had visited a cave near the Kolpa spring in which he saw something unusual on the wall. At first he thought

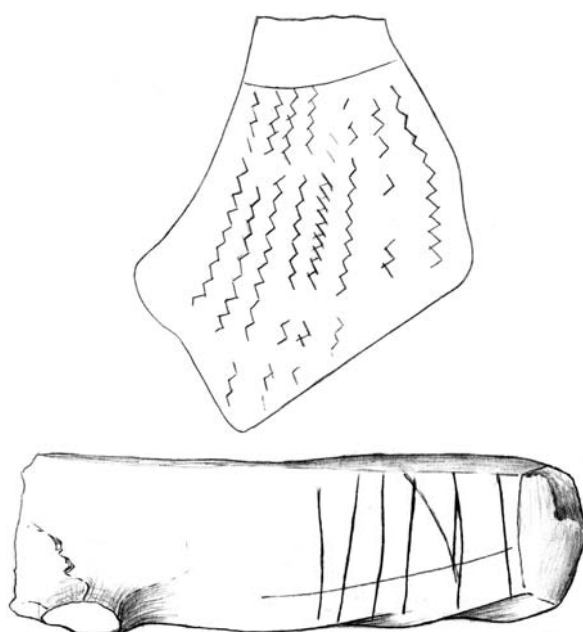


Fig. 7A and B: Engraved stones from Zemono (drawing by Ida Murgelj).

that it was algae, but on closer inspection, he realized that it was a painting of an elephant or mammoth. He also told Brodar that there was a lot of water in the cave. Today, this area is part of Croatia, but Slovenian researchers searched for the cave quite intensively in the time of the former Yugoslavia, but were never able to find it. The most probable candidate is Hajdučka pečina, but because of water it is inaccessible today and no matter how much speleologists and other researchers have tried, they have been unable to get through the narrow cave entrance to the deeper parts of the cave where the painting might be (Brodar 1978; Josipović 1987).

All the objects described thus far are more or less open to doubt regarding their artificial or intentional origins, but two stones from the Late Palaeolithic

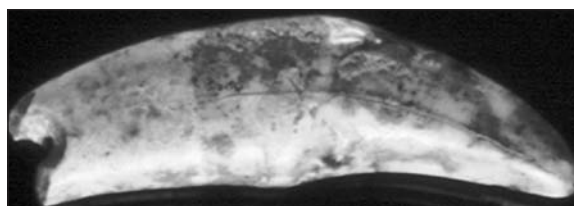


Fig. 8. Canine with hole drilled in the root from Velika Peč (after Pohar and Josipović 1992.sl. 1b).

site at Zemono are undoubtedly engraved with geometric patterns. The incisions are very delicate and hard to detect. On one side of the first stone, there are eight zigzag lines, while on the other side there is a ladder motif and a longer line with smaller perpendicular ones (Fig. 7A). On the second stone (Fig. 7B), there is a much simpler pattern, composed of parallel and perpendicular lines (Petru 2005).

The meaning of the patterns can be interpreted in different ways. They could be symbols of water (Marshack 1979), or representations of entoptics (Lewis-Williams & Dowson 1988), or tallies.

Jewellery

There are three pieces of jewellery known from Slovenian Palaeolithic sites. A perforated Aurignacian or Gravettian canine was found in Velika peč cave, together with cave bear bones and a few stone tools (Fig. 8). The canine belonged to a type of canid, probably jackal. It has a hole drilled into the root of the tooth (Pohar & Josipović 1992).

A similar artefact was discovered in the Tardigravettian layers of Ciganska jama (Fig. 9). It is a part of the upper jaw of a marten. A natural hole in the jaw is artificially widened for use as a pendant (Pohar & Josipović 1992).

The most elaborate piece of jewellery is a ring found in the Epigravettian layers of Babja jama cave (Fig. 10). It is made from deer antler, is 5mm wide and has 22mm in diameter. There are traces of the stone tools used for the

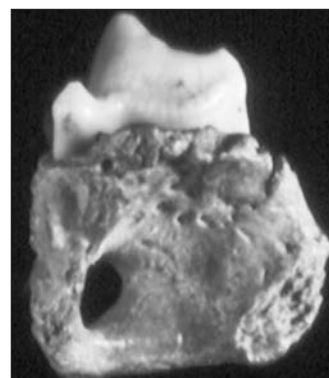


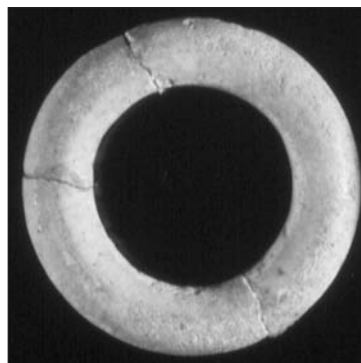
Fig. 9. Upper jaw of marten with artificially widened hole from Ciganska jama (after Pohar and Josipović 1992.sl. 2b).

production of the ring and also traces of charcoal on the surface (Pohar & Josipovič 1992).

Pieces of ochre have been found in the cultural layers of many Palaeolithic sites. At Ciganska jama, particularly in the lower cultural layer, there were many small grains of this pigment. Grind-stones with traces of ochre were also found at three Late Palaeolithic sites (Petru 2006). All this indicates the use of the pigments in the Slovenian Palaeolithic. Of course, ochre can be used for practical reasons, but even if people at first used it in such a manner, they would probably have quickly recognised its dyeing potential, so the finds should not be overlooked.

Objects of an unquestionably artistic nature have rarely been found at Slovenian Paleolithic sites. But Slovenia probably was not a blank spot for Palaeolithic artistic aspirations. A possible explanation for the

Fig. 10. Ring from Babja jama (after Pohar and Josipovič 1992.sl. 3b).



dearth of Palaeolithic art might be that most of the sites were excavated rather long ago without the deposits being sieved, so some artefacts might have been overlooked. The other reason might be climate, which has not allowed much cave art to survive. We can only hope that future excavations will bring surprises, like the engraved stones from Zemono, and that new surveys of caves for possible engravings will reveal the first Slovenian cave art.

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REFERENCES

- BLACKWELL B. A. B., YU E. S. K., SKINNER A. R., TURK I., BLICKSTEIN J. I. B., TURK J., YIN V. S. W., LAU B. 2007. ESR-datiranje najdišča Divje babe I, Slovenija. In T. Ivan (ed.), *Divje babe I (1. del)*. Založba ZRC, Ljubljana: 123–157.
- BRODAR M. 1978. Paleolitska slika mamuta pri izviru Kolpe? *Arheološki vestnik* 29: 729–734.
1985. Fossile Knochendurchlochungen (Luknje v fosilnih kosteh). *Razprave IV. Razreda SAZU XXVI*: 29–48.
1991. Paleolitik Ciganske jame pri Željnah. *Arheološki vestnik* 42: 23–64.
- BRODAR S. 1935. Črteži na paleolitskih artefaktih iz Potočke zijalke na Olševi. *Etnolog* 8: 1–25.
1951. Paleolitski sledovi v Postojnski jami. *Razprave SAZU, Razred IV*: 3–42.
- BRODAR S., BRODAR M., 1983. *Potočka zijalka – visokogorska postaja aurignacijskih lovcev (Potočka zijalka – eine hochalpine Aurignacjäger-Station)*. Dela 1 in 4. razr. Slovenske akademije znanosti in umetnosti 24. Slovenska akademija znanosti in umetnosti, Ljubljana.
- CHASE P. G., NOWELL A. 1998. Taphonomy of a Suggested Middle Paleolithic Bone Flute from Slovenia. *Current Anthropology* 39/4: 549–553.
- D'ERRICO F., VILLA P. 1997. Holes and grooves: the contribution of microscopy and taphonomy to the problem of art origins. *Journal of Human Evolution* 33: 1–31.
- D'ERRICO F., VILLA P., PINTO LLONA A. C., RUIZ IDARRAGA R. 1998. A Middle Palaeolithic origin of music? Using cave-bear bone accumulations to assess the Divje Babe I bone »flute«. *Antiquity* 72: 65–79.
- JOSIPOVIČ D. 1987. Ponovno o Hajdučki pečini pri izviru Kolpe. *Poročilo o raziskovanju paleolita, neolita in eneolita v Sloveniji* 15: 7–10.
- LEWIS-WILLIAMS J. D. and DOWSON T. A. 1988. Signs of all times: entoptic phenomena in Upper Palaeolithic art. *Current Anthropology* 29(2): 201–245.
- MARSHACK A. 1979. Upper Paleolithic Symbol Systems of the Russian Plain: Cognitive and Comparative Analysis. *Current Anthropology* 20(2): 271–311.
1990. Early Hominid Symbol and Evolution of the Human Capacity. In P. Mellars (ed.), *The Emergence of Modern Humans*. Edinburgh University Press, Edinburgh: 457–498.
- ODAR B. 2009. *Izdelava in uporaba koščenin konic iz Potočke zijalke*. Doktorsko delo. Univerza v Ljubljani, Filozofska fakulteta, Oddelek za arheologijo. Ljubljana.

PETRU S. 2005. Decorated stones from the open-air site of Zemono, Slovenia. *World Archaeology* 37(4): 637–640.

2006. Red, black or white? The dawn of colour symbolism. In M. Budja (ed.), 13th *Neolithic Studies. Documenta Praehistorica* 33: 203–208.

POHAR V., JOSIPOVIČ D. 1992. Nakit iz paleolitskih in mezolitskih najdišč Slovenije. *Poročilo o raziskovanju paleolita, neolita in eneolita v Sloveniji* 20: 7–13.

TURK I., KAVUR B. 1997. Pregled in opis paleolitskih orodij, kurišč in ognjišč. In T. Ivan (ed.), *Moustérienska "koščena piščal" in druge najdbe iz Divjih bab I v Sloveniji*. Založba ZRC, Ljubljana: 119–156.

1997a. Paleolitske koščene piščali – primerjalno gradivo. In T. Ivan (ed.), *Moustérienska "koščena piščal"*

in druge najdbe iz Divjih bab I v Sloveniji. Založba ZRC, Ljubljana: 179–184.

TURK I., DIRJEC J., KAVUR B. 1997. Opis in razlaga nastanka domnevne koščene piščali. In T. Ivan (ed.), *Moustérienska "koščena piščal" in druge najdbe iz Divjih bab I v Sloveniji*. Založba ZRC, Ljubljana: 157–178.

TURK I., BASTIANI G., BLACKWELL B. A. B., HORUSITZKY F. Z. 2003. Domnevna musterjenska piščal iz Divjih bab I: psevdofakt ali prava piščal ali kdo je naredil luknje. *Arheološki vestnik* 54: 67–72.

TURK I., PFLAUM M., PEKAROVIČ D. 2005. Rezultati računalniške tomografije najstarejše domnevne piščali iz Divjih bab I (Slovenija): prispevek k teoriji luknjanja kosti. *Arheološki vestnik* 56: 9–36.