

СТАРИНАР



На корицама: Локалитет Велика хумска чука, огрлица из оставе откривене приликом ископавања 2022. године, 15–14. век пре н.е. (Народни музеј, Ниш)
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Sur la couverture: Localité Velika humska chuka, un collier provenant d'un trésor découvert lors de fouilles en 2022, 15–14. avant JC (Musée national, Niš)
Photo: Petar Milojević, Institut archéologique, Belgrade



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SET OF BRONZE JEWELLERY FROM THE SITE OF VELIKA HUMSKA ČUKA NEAR NIŠ, SE SERBIA

A contribution to the study of interactions between Bronze Age communities
of Central Europe and the Central Balkans*

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Abstract. – The paper presents an extraordinary new find from the site of Velika Humska Čuka near Niš, in south-eastern Serbia. During the 2022 excavation campaign, a set of bronze jewellery was discovered, comprised of a pin, a band, ten saltaleoni, and ten circular pendants. Of particular importance are the finds of circular pendants, which are known throughout the Bronze Age in the territory of Europe. Such pendants are traditionally connected with Central Europe and the Hügelgräber culture, therefore representing an uncommon find for the Central Balkans. The paper provides a stylistic and typological analysis of jewellery, complemented with physical and chemical analyses, and further discusses the scope and effects of interactions between Central Europe and Central Balkans during the Bronze Age.

Key words. – South-eastern Europe, Central Europe, Balkans, Velika Humska Čuka, Late Bronze Age, Hügelgräber, bronze jewellery, cultural transmission

It is quite rare to discover a hoard or a set of metal objects in the course of archaeological excavations. Such finds are usually found by chance, during construction, agriculture, or similar work, and ordinarily end up in local museums. Or at least that is how it was several decades ago, when people who found such items regularly reported them, gifted or sold them to local museums for a symbolic fee.¹ Lately, however, more and more “treasure hunters” use modern metal detectors to scavenge for valuable finds, in order to sell them abroad, therefore selfishly alienating the national treasure for a petty profit.

Hence, it is true archaeological luck to find a hoard of metal objects during archaeological excavations and record and document it according to all archaeological regulations and using the appropriate methodology.

Such a rare case occurred during the 2022 excavation campaign at the site of Velika Humska Čuka in the village of Hum near the present-day city of Niš.²

The site of Velika Humska Čuka is located on a dominant calcareous plateau in the north-eastern periphery of the village of Hum, approximately 7 km north

¹ Гарашанин 1954; Гарашанин, Тасић (ур.) 1975; Гарашанин, Тасић (ур.) 1994; Вукмановић, Радојчић 1995.

² The research is carried out by the Institute of Archaeology in Belgrade and the National Museum in Niš. It is funded by the Ministry of Culture and Information of the Republic of Serbia, the City of Niš and the Municipality of Crveni krst of the City of Niš.

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Fig. 1. Velika Humska Čuka, drone view from the east (Documentation of the Institute of Archaeology, Belgrade)

Сл. 1. Велика хумска чука, снимак дроном са истока (Документација Археолошкој институцији у Београду)

of the present-day city of Niš.³ The upper and highest plateau spreads in an east-west direction, with an approximate length of 120 m, and a width (north-south) of 90 m, therefore covering an area of around 1 ha (Fig. 1). The Hum River, nowadays a small watercourse, borders the site on the northern and western sides. The site itself is highly inaccessible from all sides but the northern, which connects it to the neighbouring Mala Čuka. Compared to the bank of the Hum River (333 m a.s.l.), the elevation to the highest point of the central plateau (around 455 m a.s.l.), is slightly above 120 m. Below the highest plateau, on its western side, at an altitude of 400 m, several small cavelets and a cave have been recorded. Unfortunately, the entry to the cave collapsed, and it was never explored.⁴ The site of Mala Humska Čuka lies approximately 400 m to the north. It is an elevated plateau, geologically similar to Velika Humska Čuka, although significantly smaller. Archaeological finds have also been recorded on the surface of Mala Humska Čuka, along with brick-built graves.⁵

The site of Kremenac, known for the exploitation of raw stone materials (flint) for the chipped stone industry, lies around 2 km to the west. A clay pit, which is nowadays occasionally used for the repair of old houses

and other facilities in the village, is located 300–400 m northwest of the site.⁶

Visually, the site of Velika Humska Čuka covers most of the Niš Basin, the southern entry to the basin through the Koprivan Gorge, and the narrow pass towards the north (Mezgraj Gorge), between the eastern slopes of Mali Jastrebac and the western slopes of the Kalafat Mountains. Due to such a favourable geo-strategic position of the site, with suitable natural defensive characteristics such as calcareous slopes, and various other natural advantages, the site was almost continuously inhabited for six millennia, from the Early Eneolithic to the medieval period.⁷

³ Булатовић, Милановић 2015.

⁴ Гарашанин, Гарашанин 1959.

⁵ Small trench surveys were conducted at the site during the 1980s. The data on the results of excavations was provided by the members of the excavations team, the former curator of the National Museum in Niš, Natalija Đurić, and M. Veljković, an architect from the Institute for the Protection of Cultural Monuments in Niš, to whom we would like to offer our thanks on this occasion.

⁶ We would like to thank our associate from Hum, Slaviša Žikić, for this information.

⁷ Булатовић, Милановић 2015; Bulatović, Milanović 2021.

The earliest data on the site was collected by the former Niš City Museum, although interest in the site was intensified following the surveys in 1933, which were conducted in collaboration with the American Expedition in Yugoslavia, led by V. Fewkes.⁸ Familiar with the potential of the site, V. Grbić started an initiative for the first archaeological excavations, which were realised the following year by the National Museum in Belgrade.⁹ Finds from those excavations are in the National Museum in Belgrade yet, unfortunately, the documentation from the excavations disappeared during the Second World War. The next excavations were carried out by M. Garašanin at end of the 1950s. Based on the results of those excavations, and the results of excavations from the nearby site of Bubanj, he defined a new archaeological culture named after those two sites, the Bubanj-Hum culture, which was soon after accepted within the European archaeological literature.¹⁰

After a half-century-long break, the excavations were resumed in 2009, by the Institute of Archaeology in Belgrade and the National Museum in Niš.¹¹

The Discovery

The stratigraphy of the site is complex, since the average depth of the cultural layer is 1.2 m, with the site being settled continuously for almost six millennia. Therefore, the younger layers often penetrated the earlier, which had a destructive outcome in terms of the preservation of residential structures and other archaeological features. The earliest settlement, which was erected on the original rocky base of the site, originates from the Early Eneolithic, or more precisely the mid-5th millennium cal BC. This settlement displays a high level of preservation, save for particular spots in which deep late antique pits were dug. Those pits often penetrated all of the cultural layers, reaching the rock, and were sometimes even chiselled more than a half meter into the rock. Up until now, the remains of five Early Eneolithic houses have been excavated (45th–40th century cal BC),¹² and an unexpected find occurred during the excavation of the last house, in 2022.

In a 10 x 6 m trench, within the southern periphery of the site (Fig. 1), in a layer of debris of the Early Eneolithic house, a group of metal objects was discovered within a small oval pit (Fig. 2, green star; Fig. 3a). The pit was not detected within the upper layers, since its infill was almost identical to the surrounding area, comprised of small pieces of burnt daub and burnt red soil mixed with brown soil. The largest portion of a

bronze band was recorded first. The band was laid in line with the north-western fringe of the pit. The second discovery was a pin that was positioned transversely (northwest-southeast) to the orientation of the band (approximately northeast-southwest), at its north-eastern end (Fig. 3b). Southwest of the band, next to it and several centimetres deeper, pendants and *saltaleoni* were recorded. These were densely distributed one next to the other or one on top of the other, and one of the *saltaleoni* was in its original position, connected to a pendant by corrosion (Pl. I/1). Judging by the position of pieces of this set of metal objects, it can be assumed that the set represents a necklace comprised of circular pendants with *saltaleoni* in between. The necklace was not spread out, but rather simply put down from the top, therefore causing the pendants to stack on top of each other. Also, there is a possibility that the necklace was laid down within a sack made of organic material and sealed with a pin, which could explain the dense distribution of pendants and *saltaleoni* (Fig. 3b). The complete set was buried with the previously dug out content, comprised of reddish-brown soil and pieces of burnt daub from the Early Eneolithic house. Considering the relative depth of the find (approximately 0.7 m from the surface level), and the cultural stratigraphy above the hoard, the dig was not deep, with a possible depth of between 25 and 30 cm. A zone of compacted and more or less levelled soil was recorded approximately 20 cm above the highest point of the hoard (the top of the bronze band). This feature had an irregular shape, and its south-eastern portion was not precisely defined (Fig. 2). The archaeological material recorded within the layer of this feature is attributed exclusively to the Middle Bronze Age, which indicates that the feature did not spread further to the southeast, above the hoard, which is certainly younger than those finds. The layer above the aforementioned feature with compacted soil yielded Late Bronze Age pottery, which could chronologically correspond to the hoard. According to the stratigraphy, therefore, the hoard was dug in from the Late Bronze Age layer

⁸ Fewkes 1934: 54.

⁹ Garašanin, Garašanin 1959; Petrović 2005: 63.

¹⁰ Garašanin 1958; Гарашанин, Гарашанин 1959.

¹¹ The excavations are funded by the Ministry of Culture of the Republic of Serbia, the City of Niš, and the municipality of Crveni Krst. We would like to take this opportunity to thank them.

¹² Bulatović *et al.* 2020; Bulatović, Milanović 2021.

¹³ Letica 1973, 75, T. IX/5.

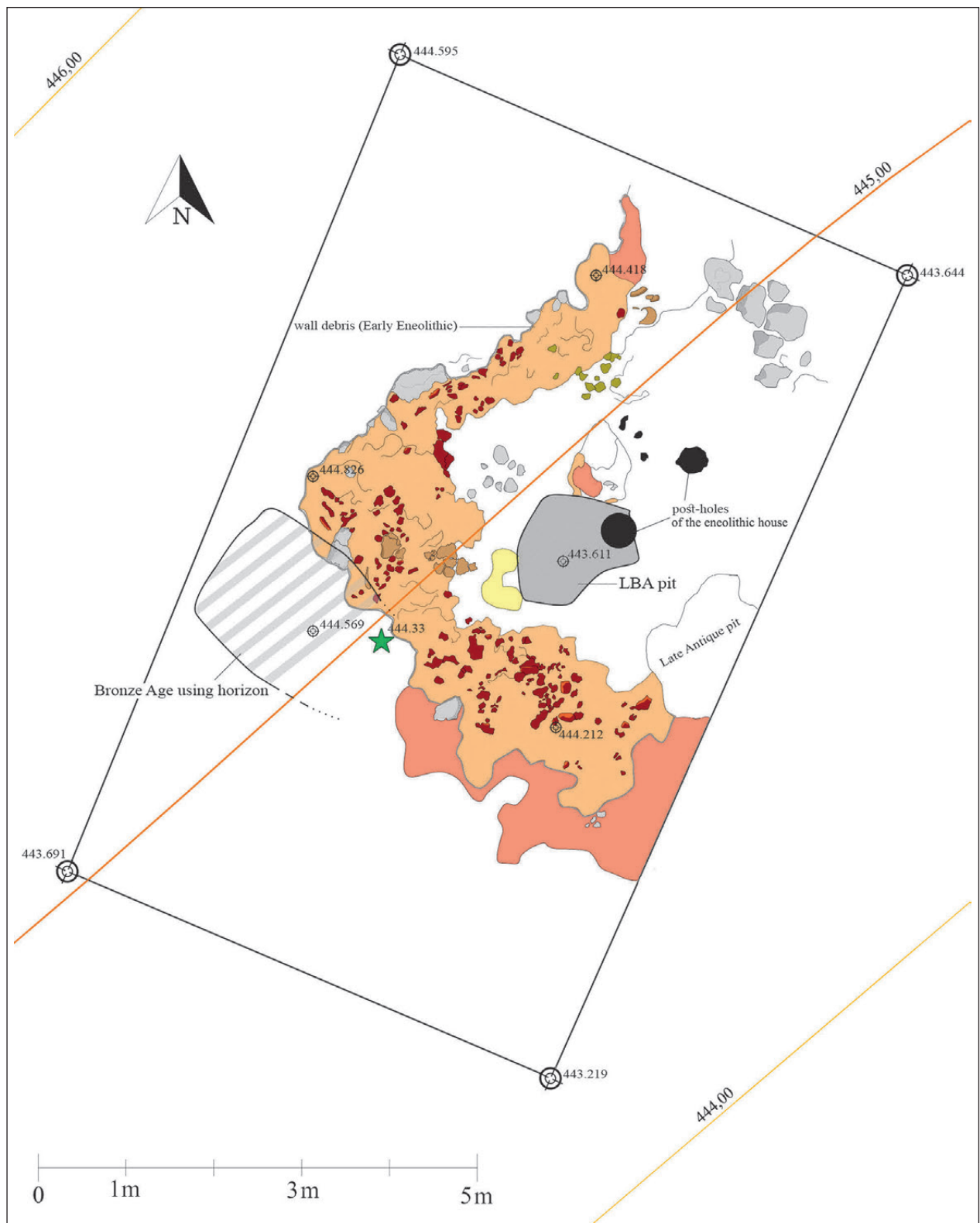


Fig. 2. Plan of trench 1/22 with remains of the Eneolithic house, LBA pit, Bronze Age usage horizon and LBA hoard (green star) (Documentation of the Institute of Archaeology, Belgrade)

Сл. 2. Скица сонде 1/22 са остацима енеолитске куће, јаме из позној бронзаној доба, хоризониа насељавања и оставе из позној бронзаној доба (Документација Археолошкој инститиуиуи у Београду)



Fig. 3. LBA hoard: a) dug into Eneolithic house, view from the north;
b) detail, view from the southeast (a pin is added to the photo in the original position in which the hoard was found)
(Documentation of the Institute of Archaeology, Belgrade)

Сл. 3. Осипава позној бронзаној доба: а) укопана у енеолитску кућу, поглед са севера;
б) детаљ, поглед са ЈИ (игла је додата на фотографију у оригиналној позицији у којој је нађена)
(Документација Археолошког института у Београду)

A circular pit dug into the remains of the Early Eneolithic house was recorded in the vicinity of the hoard, approximately 2 m to the southeast. The pit was dug into the house rubble and floor, all the way to the rock. The pit was not detected in the original level, due to its surroundings and infill, comprised of house rubble, but it was detected near its bottom, where it penetrated the house floor. The pit contained several large Late Bronze Age potsherds, which correspond to the layer above the layer on the zone of compacted soil.

The Inventory of the Hoard

The hoard comprised 10 circular pendants with a knob in the middle, 10 *saltaleoni*, one folded bronze band, and a pin with a nail-shaped head (Pl. I).

The circular pendants have quite uniform dimensions, and the existing differences in the outer diameters and heights of the central knobs could rather be the result of a different state of preservation than a different mould. The height (with bent part-tube for fixing to *saltaleoni* on top) is between 40 and 43 mm, the diameter between 36 and 39 mm, and the thickness with the central knob is between 4 and 13 mm. The thickness of the bronze sheet is uniform and measures approximately 4 mm.

The back surface of the pendants is flat, save for a narrow band for the fixing of *saltaleoni*, which is bent backward to form a tube. The front surface of the pendants is decorated with three concentric circular ribs

and a knob in the middle, with a height of between 3 and 9 mm.

The dimensions and form of the pendants indicate that all of the examples are made in the same mould. Namely, the outer diameter of the narrowest circular rib measures 16 mm in all of the examples, while the outer diameter of the middle rib measures around 25 mm. The outer diameter of pendants varies between 2 to 3 mm, depending on the state of preservation.

The hoard contained 10 pieces of spirally twisted bronze wire that formed tubes (*saltaleoni*), of which one was still attached to the upper backward bent part of the circular pendant, therefore indicating the original position of *saltaleoni* in relation to pendants. Such a position suggested that the *saltaleoni* connected the circular pendants to form a composite necklace. Most of the *saltaleoni* have 11 segments (5 examples), while others have 12 (one example), 13 (two examples), and 15 and 7 segments (one example) (the latter possibly being the result of damage). The lengths of the *saltaleoni* vary between 30 and 53 mm, depending on the number of segments, while the diameter of the segments and the thickness of the wire are identical in each example, measuring 5 and 2 mm respectively. Interestingly, the longest *saltaleone* (Pl. I/16) is bent at a 140° angle, five examples were slightly bent, and four examples were completely straight. This could be explained as a process of forming the necklace, meaning the arc between the first and the last pendant, where

%	Pendant (Pl. 1/6)	Pendant (Pl. 1/9)	Saltaleone (Pl. 1/16)	Band (Pl. 1/21)	Pin (Pl. 1/20)
Cu	89.42	88.03	89.92	87.32	88.9
Sn	8.90	9.71	7.72	9.34	8.91
As	1.00	0.97	0.75	0.96	0.72
Fe	-	0.84	0.8	0.25	0.24
Ni	0.51	0.38	0.28	0.88	0.72
Zn	0.17	0.04	-	0.11	-
Sb	-	-	-	0.80	0.27

Table 1. Elemental composition of several bronze finds from the hoard

Табела 1. Елементарни састав неколико бронзаних предмета из ошаве

the longest *saltaleone* was in the middle of the necklace, thus forming the greatest curve (angle). However, it is possible that the pieces were secondarily bent due to damage. Judging by the form, angle, and length of the *saltaleoni*, the ends of the necklace were not connected, and the necklace itself was most likely hung on the shoulders, which can be observed on certain Late Bronze Age anthropomorphic figurines. Namely, the figurine from Golubac (Pl. III/2) wears an almost identical necklace on the chest, composed of the same number of pendants connected with wire (*saltaleoni*?), with the ends positioned on the shoulders.¹³ However, if the pendants were connected with *saltaleoni*, and the necklace ended with *saltaleoni* on both ends, it remains unclear why there are not 11 pieces, which suggests that either one piece is missing, or that the necklace ended with a pendant at one end, and a *saltaleone* at the other.

The pin from the hoard is 198 mm long and 5 mm thick (Pl. I/20). The head of the pin has an irregular circular shape with a maximum diameter of 12 mm. The head is not placed on the pin with its central portion, as it is slightly off centre compared to the axis of the pin body. A horizontally positioned circular perforation is located approximately 8 mm below the pin head, with a diameter of 1 mm. The upper two-thirds of the pin body have a rectangular, almost square cross-section, while the lower third has a circular cross-section. The lower two-thirds of the pin body are slightly bent in a wavy manner. The pin could be attributed to a type with a nail-shaped head (*Nagelkopfnadeln*), although there are no direct analogies due to its square cross-section, perforation below the pin head, and the position of the head compared to the body axis, which all suggests a semi-finished product.

The last object from the hoard is a long bronze band that has been folded several times (Pl. I/21). The length of the folded band is around 360 mm, while the approximate length of the straightened band is 1430 mm. The width of the band is 6 mm, and the thickness is 2 mm. It is unclear whether the band represents a piece of jewellery, such as a waist or shoulder band, which could hold various pendants, or raw material for the production of jewellery or other bronze objects. Similar bands have been recorded within hoards of the Danube region, and their function is likewise unclear.¹⁴

Chemical Properties of the Inventory

A number of pieces from the hoard have undergone chemical analyses of their elemental composition using a Hitachi X-MET8000 Optimum handheld XRF spectrometer at the Vinča Institute of Nuclear Sciences, Department of Chemical Dynamics and Permanent Education.¹⁵ A total of five pieces have been analysed – a pin, a bronze band, one *saltaleone*, and two circular pendants. The pieces were freed from corrosion, in order to examine their chemical composition as precisely as possible, without interference from corrosion, patina, and other impurities. The analyses have shown that, besides copper and tin, all of the objects have arsenic and nickel in their composition, while iron was detected in all of the analysed pieces except for one pendant. Zinc was detected in both pendants and the

¹⁴ The hoard from Šimanovci contained several similar bands of unknown function (Поповић 1975, T. XLVIII), although similar bands have been recorded in hoards as parts of unravelled spiral applications and other decorative objects (T. XX/2, T. XXXVIII).

¹⁵ We would like to take this opportunity to thank Velibor Andrić for the analyses.

band, and antimony in the band and pin (Tab. 1). The percentage of tin in the analysed pieces varies between 7.72% and 9.71%, and one pendant and the pin have an almost identical amount (8.90% and 8.91%). It is interesting that all of the pieces have an almost identical percentage of arsenic, 0.72–1%, which, after accounting the uncertainty of the measurements, could indicate that all of the pieces were made from copper of the same origin. This is highly possible for the analysed pendants, since all of the elements except for iron are approximately equally abounded, as is the abundance of tin. Based on the similar content of tin, and the high probability that the pendants originate from the same mould, it can be assumed that these were manufactured in the same workshop, which could also be assumed for other pieces, although with less certainty.

Therefore, based on the XRF analyses, it can be concluded that the analysed pieces were made of tin-bronze, and that their chemical composition is quite uniform. Based on the representation of certain elements, it is highly possible that the two analysed pendants were made using the same raw material.

Function, Cultural and Chronological Parallels

All objects from the hoard except the band represent pieces of jewellery. The necklace comprised of ten circular pendants with a central knob and ten *saltaleoni* is almost identical to a necklace represented on an anthropomorphic figurine from Golubac, attributed to the Žuto Brdo culture (Pl. III/2).¹⁶ The necklace on the figurine is represented as ten concentric circles with emphasised centres, on the chest of the figurine. The tops of the circles are connected with a semi-circular line, which most likely represents *saltaleoni* or a string. Besides the necklace, the figurine displays other decorations that represent jewellery or ornaments on clothing. This affirms the assumption that Bronze Age figurines from this region, and especially the Serbian Danube region, attributed to the Žuto Brdo-Girila Mare group, include representations of pieces of jewellery.¹⁷ This type of necklace is represented on a number of other figurines, such as the examples from Klenovnik, Žuto Brdo, Krna, and others (Pl. III/1–3). An additional argument for the representation of jewellery on figurines attributed to the Žuto Brdo culture are representations of lunular pendants (Pl. III/4–6), which have been recorded in identical forms throughout Central Europe and the Serbian Danube region

during the Middle and Late Bronze Age.¹⁸ A stone mould for lunular pendants, identical to the representations on figurines was recorded during the 2022 rescue archaeological excavations at the site of Žuto Brdo in Radoševac near present-day Golubac (Pl. III/7). Another mould originates from grave 80 at the Velebit necropolis near present-day Kanjiža,¹⁹ and a third example comes from the site of Velesnica.²⁰

The most indicative finds from the Velika Humska Čuka hoard are circular pendants with a central knob and concentric ribs (*Stachelscheibenhänger* or *Stachelscheibe*), which, together with *saltaleoni*, formed a necklace.

According to G. Schumacher-Matthäus, there are three types of such pendants, types A, B, and C. Pendants with wide ribs and blunt thorns are attributed to type A, pendants with wide ribs and sharp thorns are attributed to type B, and type C is characterised by pendants with narrow ribs and a sharp thorn.²¹ According to B. Hansel, such pendants can be separated into examples with a central thorn (long point), and those with a central knob (small knob-shaped or cone-shaped ornament in the centre).²² Within the typology proposed by B. Hansel, pendants from Velika Humska Čuka would be attributed to the type with a knob, or type A according to the Schumacher-Matthäus typology. The author further elaborates that types A and B could not be precisely defined in terms of cultural and chronological attribution, while type C is connected with the Carpathian *Hügelgräber* (Tumulus) culture. Judging by the position of pendants within graves, she considered them to represent chest jewellery, and since all of the analysed deceased with pendants were females, she concludes that those represent a female piece of jewellery. As some of the *saltaleoni*, usually recorded with the pendants, were connected with pendants, similar to one of the examples from Velika Humska Čuka, the author suggested that the *saltaleoni* were used to form a connection between the pendants

¹⁶ Letica 1973, T. IX/5.

¹⁷ Letica 1973; Schumacher-Matthäus 1985; Peković 2013.

¹⁸ Bona 1975; Wels-Weyrauch 1991; Vasić 2010.

¹⁹ Kapuran 2019a, 88, Fig. 81.

²⁰ Васић, Ерцеговић-Павловић, Минић 1984, сл. 110/4.

²¹ Schumacher-Matthäus 1985, 100–101.

²² Hänsel 1968, 225–226. It is difficult to differentiate the examples since a large number of published illustrations do not present the cross-section, and authors often use the same term for thorn and knob.

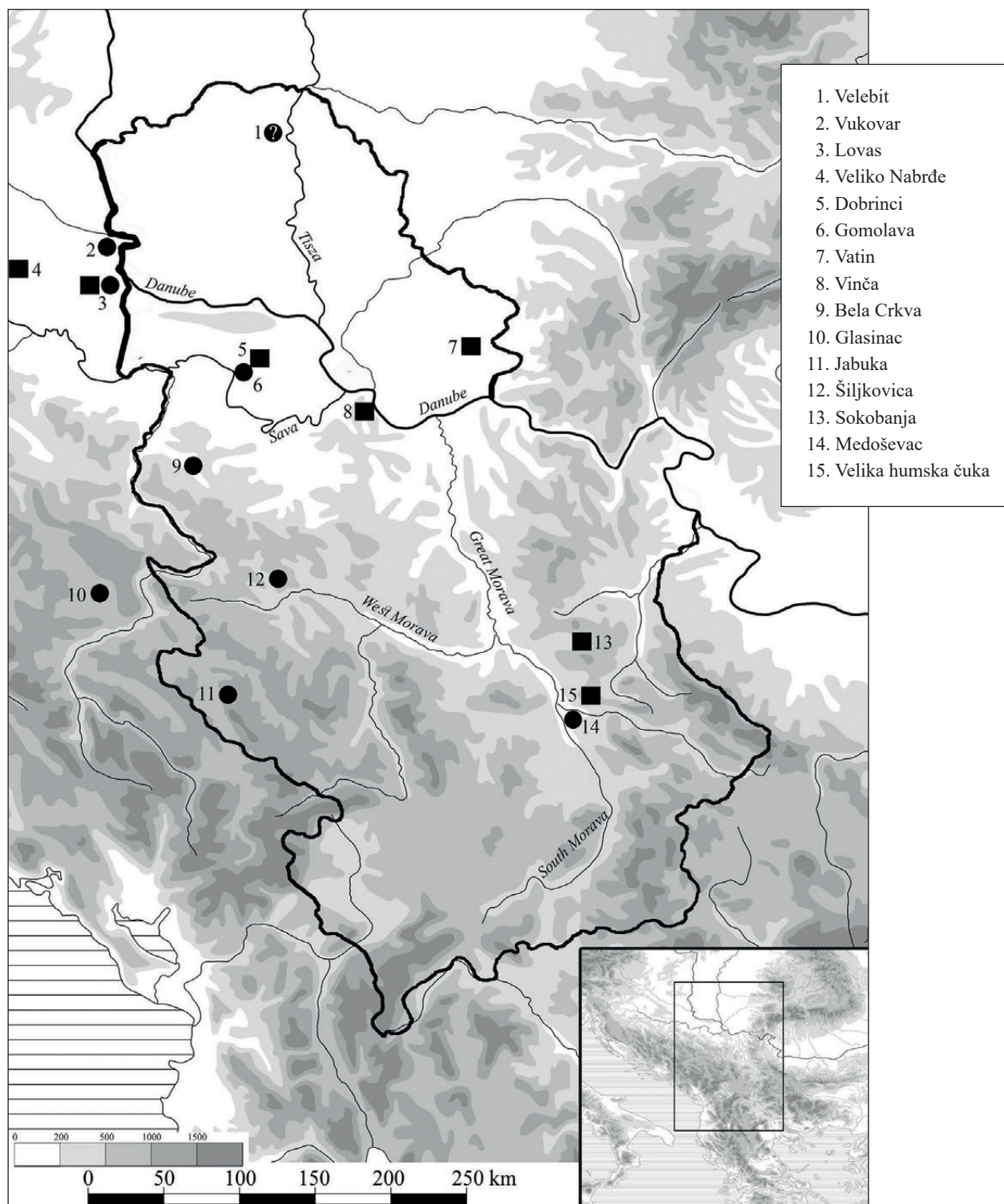


Fig. 4. Distribution of circular pendants with central thorn/knob in the Balkans

Squares: Circular pendants with central knob; **Dots:** Circular pendants with central thorn
 (The background of the map was made by M. Milinković)

Сл. 4. Распрострањеност кружних њрвезака са централним њрном/гуџмејом на Балкану
квадрати: кружни њрвезаци са централним испуџчењем; **џачке:** кружни њрвезаци са централним њрном
 (позадину мапе је израдио М. Милинковић)

and to space them. *Saltaleoni* and pendants were most likely strung together on a string that was attached on the shoulders to a piece of clothing, possibly a cloak, since it represents the so-called cloak jewellery. The number of pendants varies from one to fourteen, with ten being the most usual number. The observations made by Schumacher-Matthäus have proven to be correct regarding the position and function of pendants and *saltaleoni*, and the number of pendants, at least when it comes to the necklace from Velika Humska Čuka. The author lists a large number of sites with such pendants, mostly necropolises, but also hoards, which sometimes contain more than 30 examples.²³ Such pendants have been registered over a vast area from Saxony and Bohemia in Central Europe (Fig. 5b),²⁴ to Little Alföld (Little Hungarian Plain), Great Hungarian Plain, and the Balkan Peninsula.

A large number of such pendants are known from Saxony, where they are characterised as female jewellery and separated into several types.²⁵ The form of pendants from Velika Humska Čuka has parallels in the *Becklingen* type from Saxony, although that type has four ribs, compared to three ribs in our examples. However, these parallels are not adequate, since the aforementioned type was in use earlier than in the Balkans, from the end of the Early Bronze Age to the beginning of the Late Bronze Age.²⁶

In neighbouring Bohemia, such pendants, although with five ribs, were recorded within the Varvažov hoard, and connected with the *Hügelgräber* complex, the local Milavče-Knoviz culture. They are dated to the later phase of the Middle Bronze Age, meaning the Br C period, according to Reinecke. The author suggests that the pendants originate from the Middle Danube region, with distribution throughout Czechia, Bavaria, and south-western Germany.²⁷

Within the Little Alföld (Little Hungarian Plain), in the Slovakian Danube region, circular pendants are often correlated with pins with uncentered nail-shaped heads and twisted lower portions (*Sichelnadeln*). The pendants usually possess two or three ribs and a central knob and, besides the aforementioned pins, *saltaleoni* are often found within graves.²⁸ These finds have been chronologically attributed to the Carpathian *Hügelgräber* culture (MBZ 2 and MBZ 3 according to Lichardus/Vladar), which would correspond to the Br B-C period, according to the Central European periodisation.²⁹

Circular pendants with central thorns or knobs have also been recorded within the Carpathian Basin.

In present-day Hungary, pendants with five concentric ribs have been recorded within the Hungarian Danube Basin, in graves of the Vanya culture, chronologically attributed to the Middle Bronze Age,³⁰ as well as at the Dunaújváros necropolis, in graves attributed to the late Koszider culture, although those examples possess only two concentric ribs.³¹ Similar pendants are widely distributed throughout present-day Hungary, yet eight examples from the Alsonemedy hoard in the Hungarian Danube region south of Budapest are particularly interesting,³² since those are almost identical to examples from Velika Humska Čuka, both in form and dimensions. Besides other objects, the hoard from Alsonemedy contained *saltaleoni*, as pieces of a necklace. Interestingly, a small set of finds was recorded in Szentendre, north of Budapest, which, besides other finds, contained a circular pendant with a central thorn and a pin with an uncentered nail-shaped head and a perforation in the upper portion of the body,³³ which closely resembles the example from Velika Humska Čuka. A hoard from Rákospalota near Budapest contained almost identical pendants, *saltaleoni*, and two pins with a slightly larger uncentered head and a perforation in the upper portion of the body.³⁴

In Transylvania, which is geographically significantly isolated from the territories connected with the

²³ Schumacher-Matthäus 1985, 104, Tab. 74.

²⁴ Seidel 1995.

²⁵ Laux 2016, 135–136.

²⁶ However, it should be highlighted that regional variants of female graves, based on the selection of jewellery sets, are observable in the territory of Germany during the Middle Bronze Age (Southern Bavarian group, Upper Palatinate, Alb group, Hagenauer group, and Rhine-Main group). Each of the variants is represented by a specific combination of decorative items with characteristic stylistic and typological features (Seidel 1995, 82–83). The jewellery sets of all of these regional groups contain decorative pins and circular pendants with a thorn. The combination of pins and pendants within graves of the Hagenauer group, distributed in the Alsace and Lower Rhine regions, on the border between Germany and France, display the highest similarities with the hoard from Velika Humska Čuka.

²⁷ Kytlicová 2007, 205.

²⁸ Lichardus, Vladar 1998, Taf. 29, 32, 42.

²⁹ Lichardus, Vladar 1998, 296–297.

³⁰ Bona 1975, 51–56, Taf. 34/21, 35/12.

³¹ Vicze 2011, pls. 206/4, 216/4. A typologically equivalent pendant was recorded in the Szentendre hoard north of Budapest (Mozsolich 1967, Taf. 44).

³² Hänsel 1968, Taf. 22/5–13.

³³ Hänsel 1968, Taf. 23/11, 13.

³⁴ Csanyi et al. 1992, fig. 15.

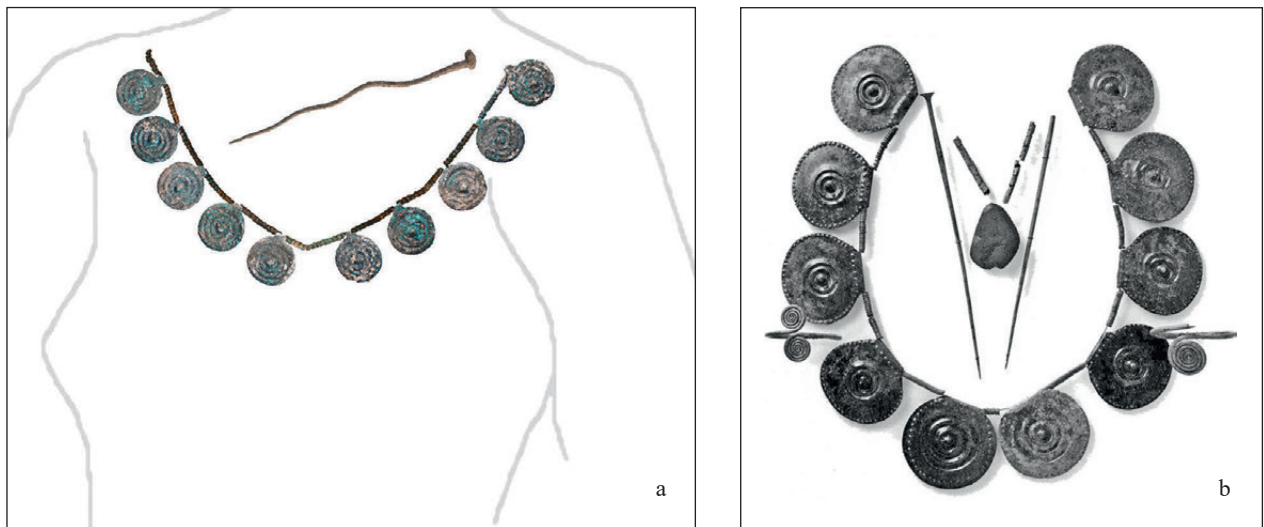


Fig. 5a. Possible reconstruction of necklace with pin from Velika Humska Čuka (by A. Bulatović)

Fig. 5b. Jewellery set from a female grave from a mound near Großengstingen, Baden–Württemberg (south-western Germany)

Сл. 5а. Идеална реконструкција ојрлице, са иџлом, са Велике хумске чуке (фотографије и графичка обрада А. Булатовић)

Сл. 5б. Сет накитија из женској гроба из џумула код Гросенсџингена (Großengstingen), Баден–Виртемберџ (Baden–Württemberg) (ЈЗ Немачка)

distribution of such pendants, the Danube region and the Hungarian Plain, an example almost identical to pendants from Velika Humska Čuka was recorded, with another similar example with two ribs. The pendant has three ribs and a central knob, and it was discovered within a large hoard of bronze objects in Uioara de Sus, and dated to the Ha A₁ period.³⁵ The hoard from Santu Mare within the eastern fringe of the Carpathian Basin, with three pendants with two ribs and a central knob, dated to the end of the Middle Bronze Age, suggests that such pendants were circulating in Romania prior to the Ha A₁ period.³⁶

R. Vasić, who was most dedicated to Bronze Age metal finds in the Central Balkans, suggested that such pendants with cone-shaped thorns and three to five ribs belong to the second phase of development of such pendants, which could not be precisely chronologically defined.³⁷ Furthermore, he indicates that such pendants first appear in the territory of Central Europe during the Br B₁ period, according to the Central European chronology, and prevail during the Br C period, approximately when such pendants appear in the Balkans.³⁸

In the synthesis of Late Bronze Age finds from Srem, regarding the pendants, D. Popović proposes a different dating of such finds, shifting their chrono-

logical position from Br B-C,³⁹ to a slightly younger Br D period.⁴⁰

Within the Balkans, such pendants have been recorded mostly in the territory of Vojvodina, the Serbian Danube region, the Drina region (western Serbia and eastern Bosnia), and the South Morava Valley (Fig. 4). Pendants have been recorded in the Srem region (Dobrinci and Gomolava),⁴¹ the Banat region (Vatin),⁴² and in the area of the confluence of the Sava and Danube rivers (Vinča).⁴³ The examples from Vinča and Vatin are quite similar to the examples from Velika Humska Čuka, as those possess three ribs and a central knob (Pl. II/2, 3). However, pendants from the Srem region possess two and three ribs, and a central

³⁵ Petrescu-Dimbovița 1977, 114–117, Pl. 247/26–27.

³⁶ Gogaltan 1999, Figs. 33, 49.

³⁷ Vasić 2010, 20.

³⁸ Васић 1997, 40.

³⁹ Popović 1996, 266–267.

⁴⁰ Popović 1996, 265.

⁴¹ Popović 1994; Tasić 1965.

⁴² Васић 1997, 39, with cited literature.

⁴³ Garašanin 1954, 70, T. LX/10.

thorn, while the example from Dobrinči could be defined as a pendant with a (shorter) thorn and (longer) knob (Pl. II/5, 11). Parallels for pendants from Velika Humska Čuka, in terms of the size of the knob and the number of ribs, are found in pendants from Slavonia, from Veliko Nabrđe and in one of six pendants from Lovas (Pl. II/10, 12–14),⁴⁴ as the example from Vukovar hoard possesses a knob, but only two concentric ribs (Pl. II/15).⁴⁵ The pendant from Bela Crkva has three ribs, similar to pieces from Velika Humska Čuka, but also possesses a long thorn (Pl. II/1).⁴⁶ The pendant from Šiljkovica in western Serbia (Pl. II/8)⁴⁷ is almost identical to pendants from Jabuka (Pl. II/9), although these examples differ from Velika Humska Čuka by the empty space on the edges of pendants and a long thorn. The pendant from Jabuka originates from the central construction of a mound, and most likely belongs to a disturbed grave of a cremated deceased. Besides four pendants, two long *saltaleoni* made of twisted wire have been recorded as well.⁴⁸ The author, similar to previous authors, suggests that pendants and *saltaleoni* formed a necklace,⁴⁹ and such a function of *saltaleoni* is confirmed by finds from Velika Humska Čuka.

Similar circular pendants with six and seven ribs with a missing thorn (or knob)⁵⁰ have been recorded in two graves at the Velebit necropolis (Pl. II/6–7),⁵¹ while an example from Glasinac possesses four ribs and a long thorn (Pl. II/16).⁵²

Geographically, the closest analogy for pendants from Velika Humska Čuka is in Medoševac, located approximately 6 km southwest of the site. It represents a chance find from a grave with an urn and the remains of a cremated deceased. Besides the circular pendant, the grave goods were comprised of cone-shaped applique, *Noppenrings*, rings made of bronze wire, a torque with spirally twisted ends, and others.⁵³ Although geographically close, typologically the pendant does not resemble the examples from Velika Humska Čuka, since it possesses six ribs and a long thorn. The grave from Medoševac is dated between the 14th and the 11th century cal BC.⁵⁴

Another find of a pendant with a central knob is known from Sokobanja, which is relatively close to Velika Humska Čuka, although the example is solely known from a drawing by F. Holste.⁵⁵

Regarding the pin with the nail-shaped head, it has been highlighted that the example from Velika Humska Čuka is uncommon for this type. The head of the pin is not in line with the axis of the pin body, and the upper portion of the pin has a square cross-section.

Such pins, with uncentered heads and square cross-sections, although with twisted lower portions, have been recorded at necropolises within the Slovakian Danube region, in graves attributed to the *Hügelgräber* culture, in combination with circular pendants with a central knob.⁵⁶ These so-called sickle-shaped pins (*Sichelnadel*) are similar to the example from Velika Humska Čuka, and a similar pin with a nail-shaped head and a square cross-section was recorded within the Tășad hoard in Oradea, north-western Romania, dated to the Ha A₁ period.⁵⁷ Pins with uncentered and large heads, possibly with a square cross-section, have been recorded at the Dunaujváros necropolis, attributed to the late Koszider culture,⁵⁸ and in Valena in eastern Romania.⁵⁹ Interestingly, the aforementioned pins are usually perforated below the head, as the example from Velika Humska Čuka. A similar pin, with a large nail-shaped head and a square cross-section of the upper part of the body, and a twisted lower part of the body, was recorded in Bijelo Brdo near Osijek.⁶⁰ Therefore, it is possible that the pin from Velika Humska Čuka represents an unfinished product, and that its lower portion was meant to be twisted. The aforementioned pin from Szentendre, with uncentered nail-shaped head and perforation in the upper part of the twisted body, is also similar to our example.⁶¹ However, the closest analogy for our pin can be found in a pin from the Szob hoard in northern Hungary, which possesses a thin nail-shaped head, a square cross-section of the body, a perforation, and a body bent in a wavy manner,

⁴⁴ Vinski 1958, T. 1, T. II/5–7.

⁴⁵ Vinski 1958, T. VII/1.

⁴⁶ Гарашанин, Гарашанин 1958, Сл. 156.

⁴⁷ Икодиновић 1985, kat. br. 21.

⁴⁸ Лазих 2007, 119.

⁴⁹ Schumacher-Matthäus 1985, 101; Лазих 2007, 120.

⁵⁰ Judging by the number of ribs and form, it is more probable that the pendants possessed a central thorn rather than a knob.

⁵¹ Kapuran 2019.

⁵² Венас, Човић 1956, 27, Taf. 7/5.

⁵³ Гарашанин 1971; Васић 1997; Васић 2003; Васић 2010; Kapuran 2019.

⁵⁴ Kapuran et al. 2020, 39.

⁵⁵ Holste 1951; Hänsel 1968, 226.

⁵⁶ Lichardus, Vladar 1998, Taf. 27, 29, 33, 41, 42.

⁵⁷ Petrescu-Dîmbovița 1977, 112–113, Pl. 213/4.

⁵⁸ Vicze 2011, Pl. 194/4.

⁵⁹ Hänsel 1976, Taf. 7/4.

⁶⁰ Hänsel 1968, Taf. 14/35.

⁶¹ Hänsel 1968, Taf. 23/11, 13.

the same as the example from Velika Humska Čuka.⁶² According to B. Hansel, this pin is dated to phase MD II (Middle Danubian culture), or Br B1, according to Central European chronology.⁶³

On the other hand, according to F. Innerhofer, this pin could be determined as “*Lochhalsnadeln mit plattenförmigem Kopf und gekantetem Schaft vom Typ Wetzleinsdorf I*”, which is also dated to the phase Br B1.⁶⁴

In his comprehensive work on pins in the territory of the Central Balkans, R. Vasić does not present this type of pin, which possesses a square cross-section of the body and uncentered head. Yet, if such details are disregarded, pins with nail-shaped heads (*Nagelkopfnadeln*), sometimes perforated below the head, and with or without the twisted lower portion of the body, are widespread throughout the Central Balkans, and cover a longer chronological period, from Br B do Ha A, according to Central European chronology.⁶⁵ Our example is similar to pins from Susek, with large and thin heads, although those pins possess a twisted upper portion of the body.⁶⁶

The bronze band and *saltaleoni* from Velika Humska Čuka are both culturally and chronologically insensitive and, therefore, their distribution and analogies will not be minutely discussed in the paper.

Concluding Remarks

The hoard from Velika Humska Čuka most likely represents a sort of stash, swiftly formed, without any elements that could indicate a sacral nature of its deposition. The pit is casually formed, shallow and irregular, and the hoard was made of objects that were practically “thrown” without any regularity, save for the possibility that the necklace was deposited in some sort of bag sealed with a pin. The lack of sacral elements that could indicate a votive hoard, such as the regular form of the pit, careful deposition of objects within the pit, filling the pit with cleansed soil, or the presence of other goods in the pit (food, pottery, etc.), is discernible.⁶⁷ All of the aforementioned indicates that, in fact, the hoard from Velika Humska Čuka represents a stash. However, it should be highlighted that the remains of the Early Eneolithic house were visible in the time when the hoard was formed, which might have affected the selection of the location of the hoard, thus leaving open the possibility for its votive nature.

The hoard was dug within the southern periphery of the plateau, yet since the position of the Late Bronze Age settlement is unknown, so is the relationship be-

tween the hoard and the settlement. Despite a considerable number of Late Bronze Age finds, no archaeological features that might indicate the size and architecture of the settlement were recorded during the excavations. When observing the distribution of Late Bronze Age pottery and bronze finds, which are found all over the site, their highest number has been recorded within the cultural layer in the north-eastern edge of the site.

The hoard contained female jewellery, a necklace made of *saltaleoni* and circular pendants with a central knob, a pin with nail-shaped head, and a folded bronze band that most likely represented raw material for the production of bronze objects. The necklace was comprised of 10 circular pendants, which is the number of pendants most often recorded within graves and hoards of Central Europe,⁶⁸ while a Žuto Brdo culture figurine has a representation of an identical necklace on the chest (Pl. III/2).⁶⁹

Chemical composition of the analysed pieces (two pendants, a *saltaleone*, a band, and a pin) is quite uniform, and the composition of the two analysed pendants is almost identical, with a similar percentage of all of the represented elements (except iron). Therefore, it is highly likely that the pendants were made in the same mould, from the same raw materials, and possibly within the same workshop.⁷⁰

From a number of perspectives, the circular pendants are the most sensitive finds from the hoard. Their origins are connected with Saxony, where examples with concentric ribs and a central knob occur from the

⁶² Hänsel 1968, Taf. 26/17.

⁶³ Hänsel 1968, Abb. 2, Abb. 4.

⁶⁴ Innerhofer 2000, 38–42, 337–339, Fundliste 3, Karte 4, Taf. 3, 8.

⁶⁵ Vasić 2003, 37 etc.

⁶⁶ Vasić 2003, Taf. 15/211–212.

⁶⁷ Compare: Булатовић 2015.

⁶⁸ Schumacher-Matthäus 1985, 101; Compare finds from graves in Southwestern Germany. https://en.wikipedia.org/wiki/Tumulus_culture#/media/File:Landesmuseum_W%C3%BCrttemberg_-W%C3%BCrttingen-Grabbeigaben560.jpg i https://en.wikipedia.org/wiki/Tumulus_culture#/media/File:Landesmuseum_W%C3%BCrttemberg-Engstingen-Frauengrab554.jpg, accessed on 25th of December 2022.

⁶⁹ Letica 1973, T. IX/5.

⁷⁰ The objects were sampled for lead and tin isotopes, in order to possibly determine the origin of the copper and tin ores. The analyses will be performed during 2023 within the Flow project, funded by the Science Fund of the Republic of Serbia (Programme IDEAS, Grant no. 7750074).

end of the Early Bronze Age, and prevail up to the Late Bronze Age.⁷¹ By observing the distribution and chronology of such pendants, it can be noted that their utilisation gradually moved towards the south, mostly following the Danube through the Small and Great Hungarian Plain, and further to the east and west throughout the Carpathian Basin. During the Br B₁ period, these pendants are known in the Slovakian Danube region, connected with the early *Hügelgräber* (Tumulus) culture,⁷² and in the Great Hungarian Plain, where they are, according to different authors, connected with the Tószeg C phase,⁷³ the late phase of the Koszider culture,⁷⁴ and the appearance of the *Hügelgräber* culture in that territory.⁷⁵ According to new absolute dates, the appearance of the *Hügelgräber* culture in Hungary⁷⁶ is positioned between the end of the 16th and the 15th century BC, which corresponds to HGK graves in the territory of southern Germany,⁷⁷ or the Br B/C period, according to Central European chronology.⁷⁸

The only radiocarbon dated grave of the HGK in southern Pannonia (Vojvodina region) comes from the Velebit necropolis near Senta, and falls within the 14th or the first half of the 13th century cal BC.⁷⁹ Besides other finds, this necropolis yielded finds of circular pendants with missing thorns (or knobs).

In the territory of the Balkans, these pendants came from the north, through the Danube corridor (Fig. 4) and, judging by their current distribution, reached the confluence zone of the Sava and Danube. However, based on numerous representations of such pendants on figurines of the Late Bronze Age Žuto Brdo-Girila Mare culture, whose communities inhabited the banks of the Danube from the Great Morava confluence to the Timok confluence; it is only a matter of time before the discovery of such pendants in the given territory. Interestingly, such pendants have not been recorded in the three largest Belegiš I–Cruceni necropolises: Kaluđerske Livade, Karaburma, and Belegiš,⁸⁰ even though their appearance in the Balkans is connected with the Belegiš I–Cruceni group and the related cultural group in the Drina region and western Serbia. The related cultural group in western Serbia could be found in literature in several definitions: the western Serbian variant of the Vatin culture,⁸¹ the Brezjak culture,⁸² the western Serbian Middle Bronze Age group,⁸³ etc.

In the Vukovar and Lovas hoards, such pendants have been recorded with the pottery characteristic for the Belegiš I–Cruceni group, and almost identical pot-

tery was utilised in western Serbia. Regarding the territory of western Serbia, a circular pendant with a thorn in the middle was found within a mound burial in Bela Crkva, and two examples were recorded in Gornja Dobrinja and Jabuka, which might indicate that this type of pendant in the territory of the Balkans was particularly popular within the Belegiš I–Cruceni communities, and its related group in western Serbia. According to absolute dates from graves in western Serbia, the group is positioned from the beginning of the 15th to the end of the 13th century cal BC,⁸⁴ which matches the dating of the Belegiš I–Cruceni group.⁸⁵ Interestingly, the northern part of western Serbia is known for deposits of the tin ore cassiterite, which was procured and abundantly utilised by Late Bronze Age communities in this territory, resulting in the production of a large number of bronze objects, known from mound burials connected with the group.⁸⁶ Those mound burials are also connected with the earliest appearance of Baltic amber in the territory of the Central Balkans.⁸⁷ This emphasises the idea of a possible tin trade with neighbouring northern communities, both for amber and possibly finished products made of bronze, which might be one of the explanations for the distribution of circular pendants in western Serbia. On the other hand, pendants from Velika Humska Čuka all originate from one mould. Furthermore, they were probably made of the same material (at least the two analysed pendants), enabling the possibility of local production, which will be more precisely determined following the result of tin and lead isotope analyses.

⁷¹ Laux 2016, 135–136; Wels-Weyrauch 1991, 5 etc.

⁷² Hänsel 1968; Lichardus, Vladoar 1998.

⁷³ Bona 1975, 51–56.

⁷⁴ Vicze 2011.

⁷⁵ Kiss et al. 2019, 189–190.

⁷⁶ The term HGK will be used for this culture.

⁷⁷ Kiss et al. 2019, 189–190.

⁷⁸ Gerloff 1993, Abb. 10; Harding 2000, 9–17, figs. 1.3. i 1.5.

⁷⁹ Kapuran 2019a.

⁸⁰ Петровић 2006; Тодоровић 1977; Вранић 2002.

⁸¹ Гарашанин 1973, 359–380.

⁸² Филиповић 2013, 70.

⁸³ Дмитровић 2016, 233.

⁸⁴ Bulatović et al. 2018; Gligorić et al 2016; Cwalinski et al. forthcoming.

⁸⁵ Waterbolk 1988, 117–121; Szentmiklosi 2021, 364, Fig. 1.

⁸⁶ Huska et al. 2014; Mason et al. 2016; Mason et al. 2020.

⁸⁷ Cwalinski et al. forthcoming.

By dating the grave from Bela Crkva, which contained a circular pendant, and heart-shaped pendants into the middle and late horizon of HGK, R. Vasić indirectly dates the earliest appearance of such pendants in the Central Balkans to the Br B2/C period.⁸⁸ The pendant from Bela Crkva possesses a central thorn and, within the Central European scope, such pendants (with a thorn) are generally younger compared to pendants with a knob.⁸⁹ In the Balkans, it seems that pendants with thorns appear simultaneously with pendants with knobs.⁹⁰ The grave from Medoševac is the most relevant for dating such pendants in the territory of the Balkans. The grave is dated between 1380 and 1010 cal BC (Br C-Ha A2), while the statistically most probable date falls between the end of the 13th and the end of the 12th century,⁹¹ or the Ha A₁ period, according to the Central European chronology. Such a date is quite young for this type of pendant, as the grave contained other bronze finds that are characteristic of the territory of Central Europe in the earlier phase of HGK.⁹² Also, such pendants have not been recorded in any of the numerous hoards within the Serbian Danube region or the Srem region, which are dated into the Ha A₁ period. Therefore, we are prone to shift the utilisation of the Medoševac pendant at least to the slightly earlier Br D period, despite the statistical evaluation of the date. On the other hand, the absolute date originates from the bones of the deceased, and if the statistical evaluation of the date is correct, the pendant could have been in use for a while before it was placed in the grave.

The hoard from Velika Humska Čuka had no chronologically relevant finds besides the jewellery, and the animal bone “from” the pit yielded an Early Eneolithic absolute date, thus originating from the layer in which the hoard was dug.

Above the hoard, a layer with finds predominantly attributed to the Middle Bronze Age was recorded on a zone of compact levelled soil, which was obviously damaged by hoard digging (Fig. 2). Above it, a layer of finds with elements characteristic for the Late Bronze Age in this territory was recorded. The characteristic potsherds from this Late Bronze Age layer are represented by slightly S-profiled bowls with or without wart-like juts on the belly (Pl. IV/1–3, 5), and an example with several short vertical grooves on each side of the jut (Pl. IV/4), along with by cups and beakers with one handle and a modelled extension on the top (Pl. IV/6, 7), amphorae with a slantwise profiled wide rim and ring-shaped inner side (the so-called Brnjica

rims) (Pl. IV/8), vessels with wide and deep oblique channels on the belly (Pl. IV/9), vertically perforated tongue-shaped handles with a rectangular cross-section (Pl. IV/11), etc. The closest analogies for such ceramic forms have been recorded at the nearby site of Medijana, in a house dated to the 14th century cal BC, or the Br C period, according to the Central European chronology.⁹³ The pottery displays certain elements of both the Brnjica and Paraćin groups, which is, likewise, characteristic of this region during the Late Bronze Age.⁹⁴ A similar ceramic inventory was recorded within a pit located approximately 2 m southeast of the hoard (Fig. 2), which contained a small S-profiled bowl, a semi-globular cup with a handle and modelled extension on the top, a cup with an arched handle, a pear-shaped amphora with a wide slantwise profiled rim, and a fragment of a vessel with a rectangularly emphasised root of the handle (Pl. IV/12–16). Such stylistic and typological elements are also characteristic of the Brnjica and Paraćin groups from a number of sites within the South Morava Basin.⁹⁵ Some of those sites, Gradište in Končulj, Gradina in Svinjište, Medijana in Niš, and Hisar in Leskovac, are absolutely dated between the 15th and the beginning of the 12th century BC, or the Br C and Br D period, according to the Central European chronology.⁹⁶

Interestingly, although these pendants are connected with cultural groups that were in the contact

⁸⁸ Васић 1997, 40.

⁸⁹ Vinski 1958, 10 i citirana literatura; Hänsel 1968, 162.

⁹⁰ According to Hänsel (1968), pendants with thorns appear during the MD II (Middle Danubian) period, which would correspond to the Br B1 period, according to the Central European chronology, while pendants with a knob appear during the preceding MD I (Br A2/B1) period.

⁹¹ Kapuran et al. 2020, 39.

⁹² Васић 1997, 38, with cited literature.

⁹³ Булатовић 2008; Bulatović et al. 2018.

⁹⁴ Булатовић 2008, 236–239; Булатовић, Станковски 2012, 353–355.

⁹⁵ Булатовић 2007, T. XLIX, LX/1, LXI/1, LXXIX/1, 3, 7; Булатовић, Станковски 2012, T. XXVII/13,16, XXVI/26–31, 37, 39, XXVII i dr.

⁹⁶ Bulatović et al. 2018; Bulatović et al. 2021. Dates from the earliest horizon at the site of Hisar, which position it into the 14th/13th century cal BC are unpublished. Those dates were acquired through the project *Death and Burial between the Aegean and the Balkans* (FWF-P 30475), which was coordinated by S. Gimatzidis from the Austrian Archaeological Institute of the Austrian Academy of Sciences. A paper on the interpretation of the dates is being prepared.

zone with the bearers of the HGK in the southern part of the Carpathian Basin, there are no traces of contact between the indigenous communities and cultural groups from the northwest in the ceramic inventory at Velika Humska Čuka, and those contacts are hardly perceptible on other Late Bronze Age sites in this region.⁹⁷ A similar situation can be noted for metal finds, except for the find from Medoševac, which is dominated by finds attributed to the HGK cultural sphere. Therefore, it seems as if those contacts in the territory of the Balkans, meaning the spread of the HGK or its bearers, took place along the Danube region and further to the Srem region and western Serbia, similar to the slightly earlier contacts between the Vinkovci-Somogyvár and Belotić-Bela Crkva groups.⁹⁸ According to some authors, the HGK spread in a non-aggressive manner, by a gradual adoption of cultural heritage and the cultural symbiosis between the newcomers and the indigenous population.⁹⁹

In contrast, Velika Humska Čuka displays noticeable indicators of intensified contacts with communities in the northeast, primarily bearers of the Verbicioara group. Pottery attributed to the mentioned group is highly represented within the Late Bronze Age cultural layer at the site. The moment of the onset of those contacts remains unknown, yet judging by a larger usage horizon with a significant amount of pottery in the north-eastern edge of the plateau, dated to the 16th century cal BC,¹⁰⁰ and with no elements of the Verbicioara group, the contacts were most likely established at the beginning of the Late Bronze Age, or the Br C period. Such intensive contacts with the Verbicioara group at the beginning of the Late Bronze Age have also been observed at other sites in this region,¹⁰¹ as well as contacts with the Žuto Brdo group,¹⁰² while contacts with groups from the Srem region and western Serbia are almost non-existent. All those sites are dated to the beginning of the Late Bronze Age, which gives the impression that the Verbicioara group made a definite contribution to the formation of the Brnjica group.

All of the given data, including the presence of circular pendants with a central knob/thorn, indicate intensive and direct contacts between the communities in the Central Balkans and the surrounding regions during the 15th century cal BC (Br B2/C), especially between communities in western Serbia and Southern Pannonia, and communities of the South Morava Basin and the Timok Valley.¹⁰³ These intensive contacts could have been sparked and facilitated by a larger utilisation of horses as a means of transportation, as the presence

of the horse in the Central Balkans has been attested since the end of the Early Bronze Age.¹⁰⁴

The extensive contact would have had a significant impact on the formation of Late Bronze Age groups in the Central Balkans, such as the Paraćin group in the Morava Valley, the Brnjica group in the South Morava Valley and the Kosovo Plain, and the Brezjak group (a regional variant of the Belegiš I group) in western Serbia.

Those groups consolidated during the 14th and the 13th century cal BC, when a new series of changes occurred in the Balkans, especially in the Great and South Morava Valleys.¹⁰⁵ Those changes would bring new cultures and possibly new populations into the region, which could be one of the causes for the profound changes that happened in the Old World after the 13th century BC.

* * *

This remarkable find from Velika Humska Čuka certainly represents a set of female bronze jewellery, most likely stashed at the periphery of the Late Bronze Age settlement during the period of the late 15th and 14th century BC, or Br C period. This was a period of most intensive contacts and cultural interactions during the Bronze Age in the Central Balkans. Although there is a lack of archaeological evidence of direct contacts between the indigenous populations of the South Morava Valley and populations from Pannonia, save for the Medoševac find, the hoard from Velika Humska Čuka represents the result of some sort of indirect contacts with northern populations, which was, additionally, in close and intensive contact with the bearers of the HGK. This primarily refers to the Belegiš

⁹⁷ Булатовић 2008, сл. 4/9; Булатовић, Станковски 2012, Т. XXV/25, Т. XXXI/117, Т. XXXVII/2, 4.

⁹⁸ Булатовић, Станковски 2012, 331.

⁹⁹ Tasić 1972, 95; Vicze 2011, 139.

¹⁰⁰ The AMS date has not been published yet, although a publication is being prepared.

¹⁰¹ Such pottery has been recorded at Svinjarička Čuka, Mađilka, Donja Toponica, Graštica, and numerous other sites (Булатовић, Станковски 2012, 73, 131–133, 345–347; Лазих 1996, Т. XI/10–14, Т. XIX/1–3; Т. XXVII/14, XXVIII/3, 6–10; Т. XXX/10–13.)

¹⁰² Булатовић, Станковски 2012, Т. XLIV/1–3.

¹⁰³ Such intensive contacts and possible migrations in the Balkans were previously indicated on the basis of several specific ceramic forms (Bulatović 2011, 133–134).

¹⁰⁴ Bulatović, Vander Linden 2017; Bulatović et al. 2019.

¹⁰⁵ Bulatović, Filipović 2018; Bulatović et al. 2021.

I-Cruceni group and its local variant in western Serbia, which were, it seems, the direct result of the development of autochthonous Middle Bronze Age groups (Transdanubian Encrusted Pottery culture, Vatin culture) and their partial symbiosis with the HGK.

Those contacts and population movements from the north to the south paved the way for more intensive movements and interactions that consumed the Balkans, especially the Morava and Danube regions, at the end of Br D and the beginning of the Ha A period.

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BIBLIOGRAPHY:

Benac, Čović 1956 – A. Benac, B. Čović, *Glasinac I*, Sarajevo 1956.

Богдановић 1996 – И. Богдановић, *Присијуу класификацији бронзаних предмета средње бронзане доба у Србији*, необјављена магистарска теза, одбрањена 1996. године на Одељењу за археологију Филозофског факултета у Београду 1996. (I. Bogdanović, *Pristup klasifikaciji bronzanih predmeta srednjeg bronzanog doba u Srbiji*, neobjavljena magistarska teza, odbranjena 1996. godine na Odeljenju za arheologiju Filozofskog fakulteta u Beogradu 1996.)

Bona 1975 – I. Bona, *Die Mittlere Bronzezeit Ungarns und ihre Südöstlichen Beziehungen*, Budapest 1975.

Булатовић, 2007 – А. Булатовић, *Врање: културна стратиграфија праисторијских локалитета у Врањској регији*, Београд – Врање 2007. (A. Bulatović, *Vranje: kulturna stratigrafija praistorijskih lokaliteta u Vranjskoj regiji*, Beograd – Vranje 2007.)

Булатовић 2008 – А. Булатовић, Стамбени објекат из позног бронзаног доба са локалитета Медијана–сектор југ – прилог проучавању односа параћинске културне групе и брњичке културне групе, *Гласник Српског археолошког друштва* 24, 2008, 223–244 (A. Bulatović, *Stambeni objekat iz poznog bronzanog doba sa lokaliteta Medijana–sektor jug – prilog proučavanju odnosa paraćinske kulturne grupe i brnjičke kulturne grupe*, *Glasnik Srpskog arheološkog društva* 24, 2008, 223–244.)

Булатовић 2011 – А. Булатовић, Карактеристичне керамичке форме на централном Балкану и у северној Егеји у позно бронзано доба, *Старинар* LXI 2011, 121–140. (A. Bulatović, *Karakteristične keramičke forme na centralnom Balkanu i u severnoj Egeji u pozno bronzano doba*, *Starinar* LXI 2011, 121–140.)

Булатовић, А., 2015 – А. Булатовић, Феномен праисторијских ритуалних јама, неколико примера са централног Балкана, *Старинар* н.с. LXV 2015, 7–35. (A. Bulatović, *Fenomen praistorijskih ritualnih jama, nekoliko primera sa centralnog Balkana*, *Starinar* LXV 2015, 7–35.)

Bulatović et al. 2018 – A. Bulatović, M. Gori, M. Vander Linden, *New Absolute Dates As A Contribution To The Study Of The Late Bronze Age Chronology in The Central Balkans*, *Glasnik Srpskog arheološkog društva* 34, 121–132.

Bulatović et al. 2019 – A. Bulatović, M. Jovičić, B. Milovanović, *Horizont ranog bronzanog doba na lokalitetu Rit, у: Viminacium u praistoriji*, A. Kapuran, A. Bulatović, V. Filipović, S. Golubović, (ur.), Beograd, 57–79. (Bulatović et al. 2019 – A. Bulatović, M. Jovičić, B. Milovanović, *Early Bronze Age horizon at the site of Rit*, in: *Viminacium in*

Prehistory, A. Kapuran, A. Bulatović, V. Filipović, S. Golubović, (ur.), Belgrade, 57–79.)

Bulatović et al. 2020 – A. Bulatović, M. Gori, M. Vander Linden, *Radiocarbon Dating the 3rd Millennium BC in the Central Balkans: a re-examination of the Early Bronze Age sequence*, *Radiocarbon* vol. 62, no 5, 2020, 1163–1191.

Bulatović et al. 2021 – A. Bulatović, B. Molloy, V. Filipović, *The Balkan–Aegean migrations revisited: Changes in material culture and settlement patterns in the Late Bronze Age Central Balkans in light of new data*, *Starinar* LXXI 2021, 9–53.

Bulatović, Filipović 2017 – A. Bulatović, V. Filipović, *Morava Valley in the Late Bronze Age and the Transitional period – changes in topography and material culture*, In: *Fortifications: the Rise and Fall of Defended Sites in the Late Bronze and Early Iron Age of South–East Europe*, B. Heeb, A. Szentmiklosi, R. Krause, M. Wemhoff (eds). (Proceedings of International Conference, Temisoara, Romania from November 11–13th 2015), Berlin 2017, 149–159.

Булатовић, Милановић 2015 – А. Булатовић, Д. Милановић, Велика хумска чука, истраживања 2009. године – прилог проучавању стратиграфије енеолита и бронзаног доба у југоисточној Србији, *Гласник Српског археолошког друштва* 30 2009, 163–188. (A. Bulatović, D. Milanović, *Velika humska čuka, istraživanja 2009. godine – prilog proučavanju stratigrafije eneolita i bronzanog doba u jugoistočnoj Srbiji*, *Glasnik Srpskog arheološkog društva* 30 2009, 163–188.)

Bulatović, Milanović 2021 – A. Bulatović, D. Milanović, *The cultural and chronological context of sites of Bubanj and Velika Humska Čuka near Niš (southeastern Serbia) and their significance for understanding the emergence and development of the Central Balkans eneolithic, Circumponics 2021/ no. 5, серия История и политические науки 2021, 36–64.*

Булатовић, Станковски 2012 – А. Булатовић, Ј. Станковски, Бронзано доба у басену Јужне Мораве и долини Пчиње, Београд–Куманово 2021. (A. Bulatović, J. Stankovski, *Bronzano doba u basenu Južne Morave i dolini Pčinje*, Beograd–Kumanovo 2021.)

Bulatović, Vander Linden 2017 – A. Bulatović, M. Vander Linden, *Absolute Dating of Copper and Early Bronze Age Levels at the Eponymous Archaeological Site Bubanj (South-eastern Serbia)*, *Radiocarbon* 59 (4) 2017, 1047–1065.

Csányi et al. 1992 – M. Csányi, Sz. Máthe, J. Tárnoki, M. Vicze, *A bronzkori tell-kultúrak kutatástörténete Magyarországon*, in: *Dombokká vált évszázadok*, P. Raczky (Sze.), Budapest–Szolnok 1991–1992, 5–15.

Cwalinski et al. forthcoming – M. Cwaliński, V. Filipović, A. Bulatović, S. Kaur, E. Stout, R. Gligorić, Paulje, mound XI (mound K): new AMS dates and provenience of the earliest amber finds in Serbia, *Prilozi Instituta za arheologiju u Zagrebu*, 39 (2) in press.

Дмитровић 2016 – К. Дмитровић, *Некрополе бронзаног доба у регији Чачка*, *Ћакак* 2016. (Dmitrović 2016 – К. Dmitrović, *Nekropole bronzanog doba u regiji Čačka*, *Čačak* 2016.)

Fewkes 1934 – V. Fewkes, Archaeological reconnaissance in Yugoslavia: American Expedition, Season 1933. *Bulletin of American School of Prehistoric Reserach* 10, 29–62.

Филиповић 2013 – В. Филиповић, Нова истраживања некропола развијеног бронзаног доба у северозападној Србији, хронолошка и термилошка питања. *Гласник Српској археолошкој друштва* 29, 2013, 51–84. (V. Filipović, Nova istraživanja nekropola razvijenog bronzanog doba u severozapadnoj Srbiji, hronološka i terminološka pitanja. *Glasnik Srpskog arheološkog društva* 29, 2013, 51–84.)

Гарашанин 1954 – Д. Гарашанин, *Каталог метала I*, Београд 1954. (D. Garašanin, *Katalog metala I*, Beograd 1954.)

Garašanin 1958 – M. Garašanin, Neolithikum und Bronzezeit in Serbien und Makedonien, *Bericht der Romisch-Germanischen Kommission des Deutschen* 39, 1958, 1–130.

Гарашанин 1971 – М. Гарашанин, Праисторијске културе Поморавља и источне Србије, у: Д. Дејановић (ур.) *Праисторијске културе Поморавља и источне Србије*, Ниш, 1971, 11–17 (M. Garašanin, *Les civilisations préhistoriques de la Morava et de la Serbie Orientale*, Niš, 1971, 11–17.).

Гарашанин 1973 – М. Гарашанин, *Праисторија на тлу Србије*, Београд 1973. (M. Garašanin, *Praistorija na tlu Srbije*, Beograd 1973.)

Гарашанин, Гарашанин, 1958 – М. Гарашанин, Д. Гарашанин, Ископавање тумула у Белотићу и Белој Цркви, *Зборник радова Народної музеја I* 1958, 17–50. (M. Garašanin, D. Garašanin, Iskopavanje tumula u Belotiću i Beloj Crkvi, *Zbornik radova Narodnog muzeja I* 1958, 17–50.)

Гарашанин, Гарашанин, 1959 – М. Гарашанин, Д. Гарашанин, Нова ископавања на Великој Хумској Чуки код Ниша, *Старинар IX–X* 1959, 243–255. (M. Garašanin, D. Garašanin, Nova iskopavanja na Velikoj Humskoj Čuki kod Niša, *Starinar IX–X* 1959, 243–255.)

Гарашанин, Тасић (ур.) 1975 – М. Гарашанин, Н. Тасић (ур.), *Праисторијске оставе у Србији и Војводини I*, Београд 1975. (M. Garašanin, N. Tasić (ur.), *Praistorijske ostave u Srbiji i Vojvodini I*, Beograd 1975.)

Гарашанин, Тасић (ур.) 1994 – М. Гарашанин, Н. Тасић (ур.), *Праисторијске оставе у Србији и Војводини II*, САНУ, Одељење историјских наука, Београд 1994.

Gerloff 1993 – S. Gerloff, Zu Fragen mittelmeerländischer Kontakte und absoluter Chronologie der Frühbronzezeit in Mittel- und Westeuropa, *Praehistorische Zeitschrift*, vol. 68, no. 1, 1993, 58–102.

Gligorić et al. 2016 – R. Gligorić, V. Filipović, A. Bulatović, An AMS dated Late Bronze Age grave from the mound necropolis at Paulje, *Starinar LXVI*: 103–110.

Gogaltan 1999 – F. Gogâltan, *Bronzul timpurui și mijlocii în Banatul Românesc și pe cursul inferior al Mureșului*, *Chronologia și descoperirile de metal*, Timișoara 1999.

Hänsel 1968 – B. Hänsel, *Beiträge zur ur- und frühgeschichtlichen archäologie des mittelmeer-kururraumes*, Bonn 1968.

Hänsel 1976 – B. Hänsel, *Beiträge zur Regionalen und Chronologischen Gliederung der Älteren Hallstattzeit an der Unteren Donau*, Bonn 1976.

Harding 2000 – A. Harding, *European Societies in the Bronze Age*, Cambridge 2000.

Huska et al. 2014 – A. Huska, W. Powell, S. Mitrović, H. A. Bankoff, A. Bulatović, V. Filipović, R. Boger, Placer Tin Ores from Mt. Cer, West Serbia, and Their Potential Exploitation during the Bronze Age, *Georchaology*, vol. 29, issue 6, 2014, 477–493.

Икодиновић 1985 – М. Икодиновић, *Сахрањивање њог хумкама бронзаног доба у чачанском крају*, Каталог изложбе, Народни музеј, Чачак, 1985. (M. Ikodinović, *Sa hranjivanje pod humkama bronzanog doba u čačanskom kraju*, Katalog izložbe, Čačak 1985.)

Innerhofer 2000 – F. Innerhofer, *Die mittelbronzezeitlichen Nadeln zwischen Vogesen und Karpaten*, Studien zur Chronologie, Typologie und regionalen Gliederung der Hügelgräberkultur, Universitätsforschungen zur prähistorischen Archäologie 71, Teil I-II (Bonn 2000).

Kapuran 2019 – A. Kapuran, The Find from Medoševac 20 Years Later – an Addition to the Studies of the Tumulus Culture on the Territory of the Central Balkans. In: *Papers in Honour of Rastko Vasić 80 th Birthday*, V. Filipović, A. Bulatović, A. Kapuran (eds.), Belgrade 2019, 165–176.

Kapuran 2019a – A. Kapuran, *Velebit, Tumulus culture necropolis in the souther Carpatian Basin (Vojvodina, Serbia)*, British Archaeological Reports 2942, Oxford 2019.

Kapuran et al. 2020 – A. Kapuran, M. Gavranović, I. Jovanović, Bronze Age Burials within the Morava, Nišava and Timok Basins, *Starinar LXXII*, 21 – 48.

Kiss et al. 2019 – V. Kiss, M. Csányi, J. Dani, K.P. Fischl, G. Kulcsár, I. Szathmári, Chronology of the Early and

Middle Bronze Age in Hungary. New results, *Studia Hercynia* XXIII/2, 2019, 173–197.

Kytlicová 2007 – O. Kytlicová *Jungbronzezeitliche Hortfunde in Böhmen*, *Prähistorische Bronzefunde* Ab. XX, Band 12, Stuttgart 2007.

Лазих 1996 – М. Лазих, *Култура Доња Брњица – ĩнеза, развој и хронологија*, необјављена докторска дисертација одбрањена на Одељењу за археологију, Филозофског факултета у Београду, 1996. (М. Lazić, *Kultura Donja Brnjica – geneza, razvoj i hronologija*, neobjavljena doktorska disertacija odbranjena na Odeljenju za arheologiju, Filozofskog fakulteta u Beogradu, 1996.)

Лазих 2007 – М. Лазих, Хумка из бронзаног доба на локалитету Савин лакат код Пријепоља, Архаика 1, 109–132. (М. Lazić, *Humka iz bronzanog doba na lokalitetu Savin lakat kod Prijepolja*, Arhaika 1, 109–132.)

Laux 2016 – F. Laux, *Der Hals- und Brustschmuck in Niedersachsen*, *Prähistorische Bronzefunde* Ab.VI, Band 15, Stuttgart 2016.

Letica 1973 – Z. Letica, *Antropomorfne figurine bronzanog doba u Jugoslaviji*, Beograd 1973.

Lichardus, Vladar 1998 – J. Lichardus, J. Vladar, Frühe und Mittlere Bronzezeit in der Südwestslowakei Forschungsbeitrag von Anton Točik (Rückblick und Ausblick), *Slovenska Archeologia* XLV–2, 1998, 221–352.

Mason et al. 2016 – A. H. Mason, W.G. Powell, H. A. Bankoff, R. Mathur, A. Bulatović, V. Filipović, J. Ruiz, Tin isotope characterization of bronze artifacts of the central Balkans, *Journal of Archaeological Science* 69, 2016, 110–117.

Mason et al. 2020 – A. Mason, W. Powell, A.H. Bankoff, R. Mathur, M. Price, A. Bulatović, V. Filipović, Provenance of tin in the Late Bronze Age Balkans based on probabilistic and spatial analysis of Sn isotopes, *Journal of Archaeological Science* 122, 2020, 1051–1081.

Mozsolich 1967 – A. Mozsolich, *Bronzefunde des Karpatenbeckens*, Budapest 1967.

Novotna 1980 – M. Novotna, *Die Nadeln in der Slowakei*, *Prähistorische Bronzefunde*, Abt. XIII, 6. Band, München 1980.

Пековић 2013 – М. Пековић, *Инкрустиована керамика бронзаног доба у српском Подунављу*, Београд 2013. (М. Peković, *Inkrustovana keramika bronzanog doba u srpskom Podunavlju*, Beograd 2013.)

Petrescu-Dîmbovița 1977 – M. Petrescu-Dîmbovița, *Depozitele de bronzuri din România*, București, 1977.

Петровић 2006 – Б. Петровић, *Калуђерске ливаде, некропола бронзаног доба*, Београд 2006. (B. Petrović, *Kaluđerske livade, nekropola bronzanog doba*, Beograd 2006.)

Петровић 2005 – Ж. Петровић, *Народни музеј у Нишу, 1933–2003*, Ниш 2005. (Ž. Petrović, *Narodni muzej u Nišu, 1933–2003*, Niš 2005.)

Поповић 1975 – Д. Поповић, Бронзана остава из Шимановаца, у: *Праисторијске оставе у Србији и Војводини I*, М. Гарашанин, Н. Тасић (ур.), Београд 1975, 43–51. (D. Popović, *Bronzana ostava iz Šimanovaca*, u: *Praistorijske ostave u Srbiji i Vojvodini I*, M. Garašanin, N. Tasić (ur.), Beograd 1975, 43–51.)

Поповић 1994 – Д. Поповић, Остава из Добринаца, у: М. Гарашанин, Н. Тасић (ур.) *Праисторијске оставе у Србији и Војводини II*, Београд 1994, 8–24.

Popović 1996 – D. Popović, Älteste und jüngste Elemente der Hortfunde aus der späten Bronzezeit in Srem, in: *The Yugoslav Danube basin and the Neighbouring Regions in the 2nd millennium b.c.*, N. Tasić (Ed.), Belgrade–Vršac 1996, 265–278.

Seidel 1995 – U. Siedel, *Bronzezeit*. Stuttgart 1995.

Schumacher–Matthäus 1985 – G. Schumacher–Matthäus, *Studien zu Bronzezeitlichen Schmucktrachten im Karpatenbecken. Ein Beitrag zur Deutung der Hortfunde im Karpatenbecken*, Mainz 1985.

Szentmiklosi 2021 – A. Szentmiklosi, *Așezările culturii Cruceni–Belegiș în Banat*, Cluj–Napoca 2021.

Тасић 1965 – Н. Тасић, *Позно енеолитски, бронзанодобни и слој старије гвозденог доба на Гомолави*, Рад војвођанских музеја 14, 177–228. (N. Tasić, *Pozno eneolitski, bronzanodobni i sloj starijeg gvozdеног doba na Gomolavi*, Rad vojvođanskih muzeja 14, 177–228.)

Tasić 1972 – N. Tasić, Die Panonische tiefebene und der Zentralbalkan an übergang von der Mittleren in die späte Bronzezeit, *Balkanica* III 1972, 93–115.

Todorović 1977 – J. Todorović, *Praistorijska Karaburma II, nekropola bronzanog doba*, Beograd 1977.

Васић 1997 – Р. Васић, Белешке о бронзаном добу у Србији, *Зборник радова Народног музеја (Ниш) XXVII* 1997, 37–49. (R. Vasić, *Beleške o bronzanom dobu u Srbiji*, Zbornik radova Narodnog muzeja (Niš) XXVII 1997, 37–49.)

Vasić 2003 – R. Vasić, *Die Nadeln im Zentralbalkan (Vojvodina, Serbien, Kosovo und Makedonien)*, *Prähistorische Bronzefunde* Abt. XIII, Band 11, Stuttgart 2003.

Vasić 2010 – R. Vasić, *Die Halsringe im Zentralbalkan (Vojvodina, Serbien, Kosovo und Mazedonien)*, *Prähistorische Bronzefunde* Abt. XI, Band 7, Stuttgart 2010.

Васић, Ерцеговић–Павловић, Минић 1984 – Р. Васић, С. Ерцеговић–Павловић, Д. Минић, Велесница, извештај о сондажним рекогносцирањима у 1980. години, *Ђергајске свеске II* 1984, 125–132. (R. Vasić, S. Ercegović–Pavlović, D. Minić, *Velesnica, Prospection par sondage de 1980, Ђerdapske sveske II* 1984, 125–132.)

Vicze 2011 – M. Vicze, *Bronze Age Cemetery at Dunaiújváros–Duna-dűlő, Eötvös Loránd*, Budapest 2011.

Vinski 1958 – Z. Vinski, Brončane ostave Lovas i Vukovar, *Vjesnik arheološkog muzeja u Zagrebu*, Zagreb, 1–44.

Vinski Gasparini 1973 – K. Vinski Gasparini, Kultura polja sa žarama u sjevernoj Hrvatskoj, Zadar 1973.

Вранић 2002 – С. Вранић, *Белеши, Стојића гумно – некропола спаљених покојника*, Београд 2002. (S. Vranić, *Belegiš, Stojića gumno – nekropola spaljenih pokojnika*, Beograd 2002.)

Вукмановић, Радојчић 1995 – М. Вукмановић, Н. Радојчић, *Каталог метала II*, Београд 1995. (M. Vukmanović, N. Radojčić, *Katalog metala II*, Beograd 1995.)

Waterbolk 1988 – H. T. Waterbolk, C¹⁴-Datierungen von Gomolava, in: *Gomolava I, Chronologie und Stratigraphie der Vorgeschichtlichen und antiken kulturen der Donauniederung und Sudosteuropas*, (eds.) N. Tasić, J. Petrović, Novi Sad 1988, 117–122.

Wels-Weyrauch 1991 – U. Wels-Weyrauch, *Die Anhänger in Südbayern. Prähistorische Bronzefunde Abt. XI, Band 5*. Stuttgart.

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СЕТ БРОНЗАНОГ НАКИТА СА ЛОКАЛИТЕТА ВЕЛИКА ХУМСКА ЧУКА КОД НИША, ЈУГОИСТОЧНА СРБИЈА

Прилог проучавању интеракција бронзано-допских заједница
централне Европе и централног Балкана

Кључне речи. – југоисточна Европа, централна Европа, Балкан, Велика хумска чука, позно бронзано доба, култура гробних хумки, бронзани накит, културна трансмисија

Приликом археолошких истраживања на локалитету Велика хумска чука код Ниша у 2022. години откривен је сет бронзаног накита, укопан у остатке ране неолитске куће. Сет се састојао од 22 бронзана предмета: 10 примерака спирално увијене траке (*saltaleoni*), 10 кружних привезака са по три концентрична ребра и испупчењем у средини (*Stachelscheibenanhänger*), игле са ексерастом главом и комадом више пута савијене бронзане траке. Овај налаз донекле је јединствен, не само према свом саставу већ и по чињеници да представља један од ретких налаза остава/скривница бронзаних предмета који је откривен приликом систематских археолошких истраживања.

На основу броја и међусобног положаја кружних привезака и салтелеона, ови налази највероватније представљају делове композитне огрлице, односно плаштног накита, какав нам је познат са представа на жутобрдским фигуринама у српском Подунављу. Готово идентични сетови накита, са комбинацијом огрлице и игле, познати су из сахрана женских особа под тумулима са територије централне Европе у бронзано доба.

У погледу стилске и типолошке анализе, свакако су најиндикативнији кружни привезци са испупчењем у средини (*Stachelscheibenanhänger*). Овакав облик привезака, односно различити типови и варијанте ових предмета јављају се током свих фаза бронзаног доба на широј територији од Саксоније, преко Бохемије, Карпатске котлине и Трансилваније, док је мањи број примерака познат и са територије централног Балкана. На овој пространог територији, дистрибуција таквих привезака доводи се у блиску везу са носиоцима културе гробних хумки (*Hügelgräberkultur*), односно њеним локалним варијантама, и готово увек се јавља у комбинацији са салтелеонима, у оквиру сетова накита у

оставама или гробовима. На територији Србије, њихова дистрибуција прати се на простору Срема, Баната и Подунавља, али и западне Србије (Подриње), односно у оквиру локалних група које стоје у вези са културом гробних хумки на овом простору (Белегиш–Кручени I, брезјачка). На територији Јужног Поморавља, одакле потиче наша остава, најближу аналогију налазимо у гробу из Медошевца, који је апсолутно датован у период између 14. и 11. века пре наше ере.

Иако некарактеристична, игле из остава са Велике хумске чуке аналогије налазимо у карпатским примерцима (Словачка, Мађарска, Румунија), где су често повезиване са налазима културе гробних хумки. На територији централног Балкана, најближе аналогије јој налазимо у иглама са ексерастом главом (*Nagelkopfnadeln*), које су продуженог хронолошког трајања, те у том смислу не претерано осетљиве.

Резултати хемијских анализа састава једног дела остава указују на велику уједначеност свих присутних елемената, док се за два анализирана кружна привезака може претпоставити да су израђени у истом калупу и од исте сировине.

Остава/скривница са Велике хумске чуке представља сет женског накита која је похрањена крајем 15. или током 14. века пре наше ере (Br C). Управо у том периоду одигравају се најинтензивнији контакти популација бронзаног доба на територији централног Балкана, о чему сведоче и стилско-типолошке карактеристике налаза из остава, односно њихова веза са централном Европом, Карпатском котлином, и културом гробних хумки. Остава са Велике хумске чуке највероватније представља резултат ових све интензивнијих контаката, који су имали значајног удела у формирању културних група позног бронзаног доба на територији централног Балкана (брњичка, параћинска, брезјачка).

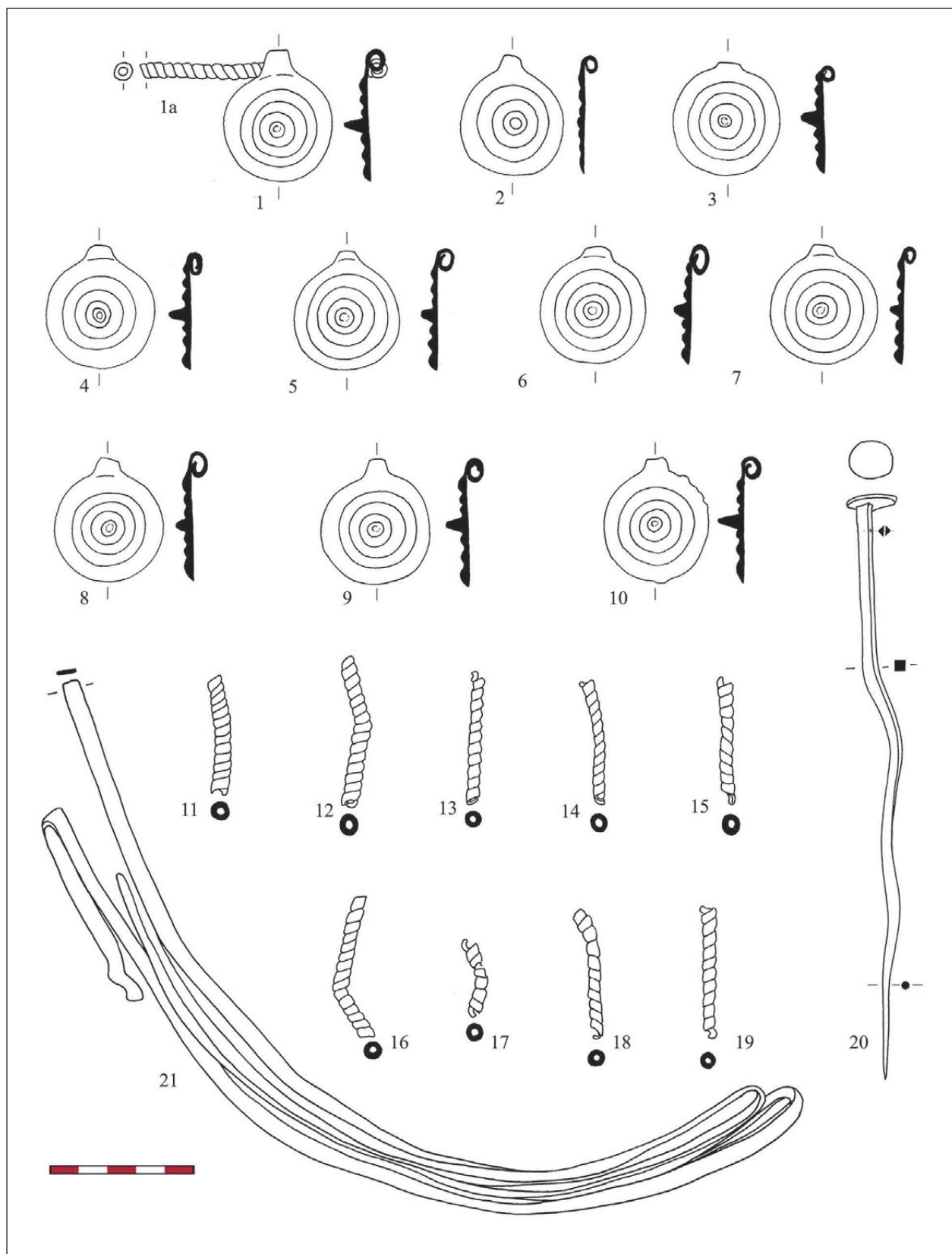


Plate I – Set of bronze jewellery from Velika Humska Čuka (by A. Kapuran)

Табла I – Сет бронзаної накити са Велике хумске чуке (цртеж А. Капуран)

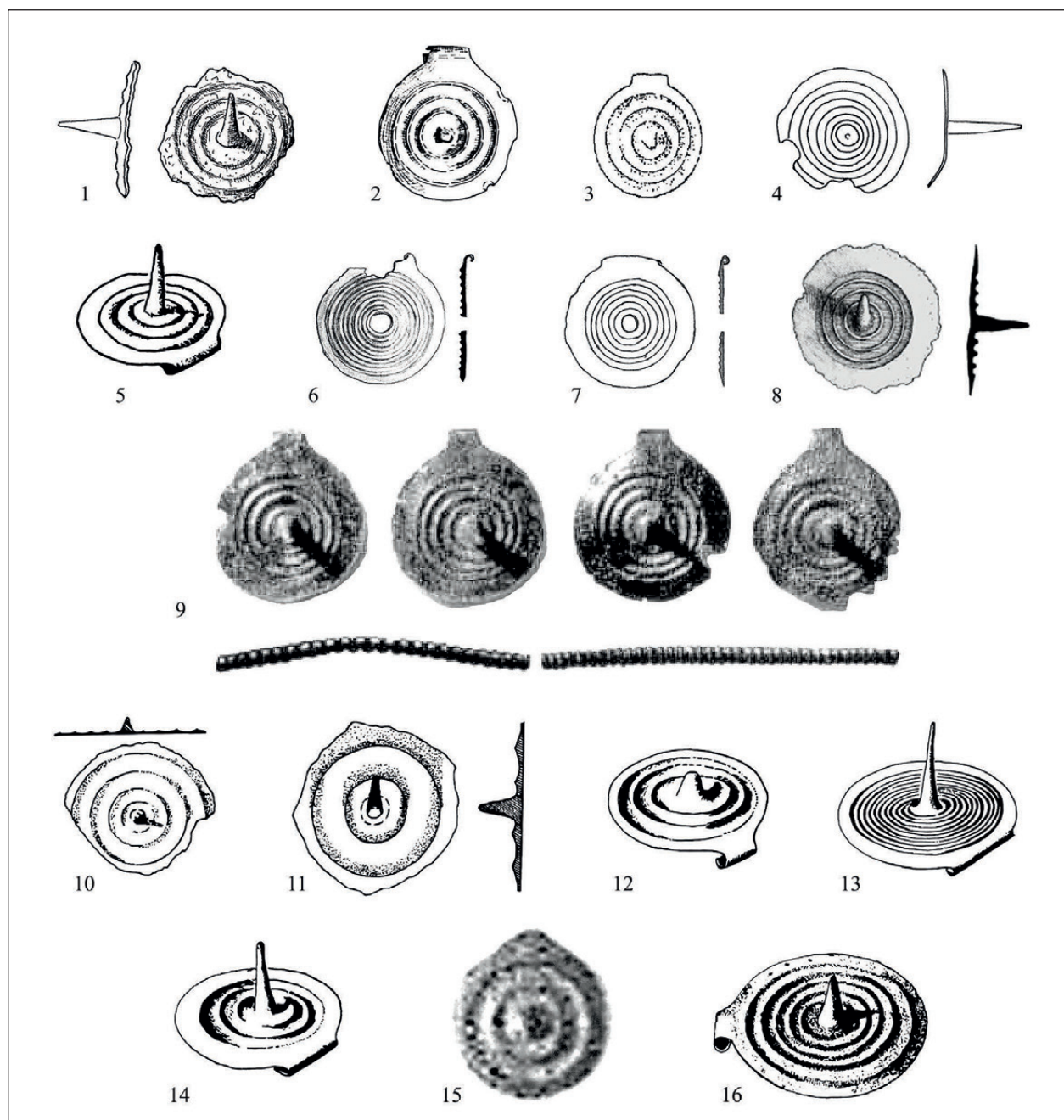


Plate II – Circular pendants with central thorn/knob in the Balkans

Sites: 1. Bela Crkva, Humka 3 grave 1 (Гарашианин, М, Гарашианин Д. 1958); 2. Vinča (D. Гарашианин 1954); 3. Vatin (Milleker 1905); 4. Medoševac, grave (Kapuran 2019); 5. Gomolava (Tasić 1965); 6–7. Velebit, graves 8 and 11 (Kapuran 2019a); 8. Šiljkovica (Икодиновић 1985); 9. Jabuka, central part of the tumulus (Лазућ 2007); 10. Veliko Nabrđe (Vinski Gasparini 1973); 11. Dobrinči (Popović 1996); 12–14. Lovas, hoard (Vinski 1958); 15. Vukovar, hoard (Vinski 1958); 16. Glasinac, Han Osovo, tumulus 1, grave 2 (Benac, Čović 1956).

Табла II – Кружни привесци са централним шпиром/испучењем на Балкану

Налазишта: 1. Бела Црква, Хумка 3 гробе 1 (Гарашианин, М., Гарашианин Д. 1958); 2. Винча (Гарашианин, Д., 1954); 3. Вајин (Миллекер 1905); 4. Медошевац, гроба (Капуран 2019); 5. Гомолава (Тасић 1965); 6–7. Велебит, гробови 8 и 11 (Капуран 2019а); 8. Шилковица (Икодиновић 1985); 9. Јабука, централни део тумула (Лазућ 2007); 10. Велико Набрђе (Vinski Gasparini 1973); 11. Добринци (Поповић 1996); 12–14. Ловас, осипава (Vinski 1958); 15. Вуковар, осипава (Vinski 1958); 16. Гласинац, Хан Осово, тумул 1, гроб 2 (Бенас, Џовић 1956)

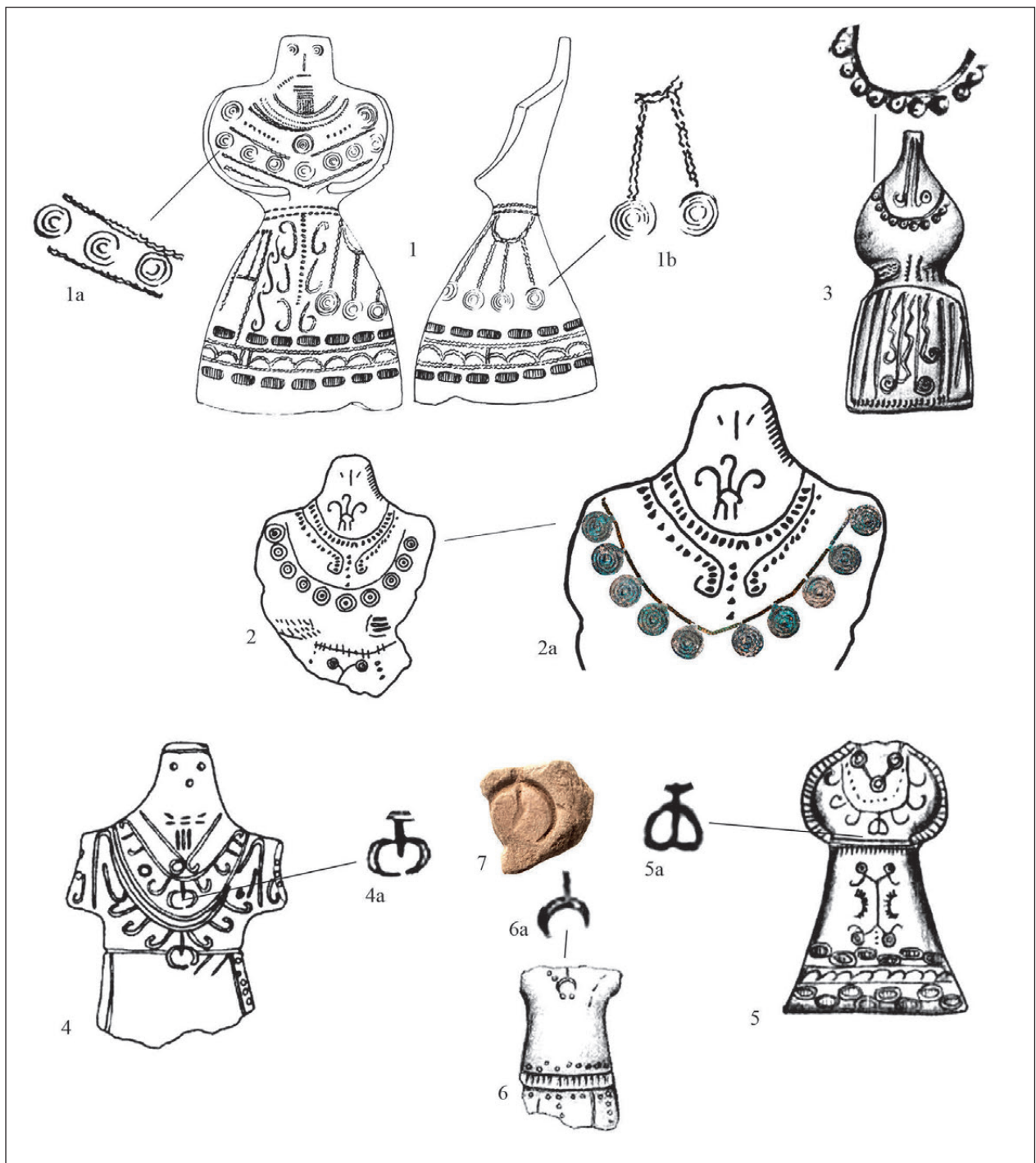


Plate III – LBA figurines with ornaments in form of circular or lunular pendants from sites in the Balkans
Sites: 1. Klenovnik; 2. Golubac, 2a. Same figurine with the possible reconstruction of the necklace from Velika Humska Čuka hoard; 3. Krna; 4. Gardinovci; 5. Minine vode; 6. Klisa–Ekonomija; 7. Žuto brdo, Radoševac
(1, 2, 4 – Letica 1973; 3, 5, 6 – Пековић 2013)

Табла III – Фигурине језној бронзаној доба са орнаментима у виду кружних и лунуласких привезака са налазишта на Балкану
Налазишта: 1. Кленовник; 2. Голубац, 2а. Иста фигурина са идеалном реконструкцијом ојрлице из оставе са Велике хумске чуке; 3. Крна; 4. Гардиновци; 5. Минине воде; 6. Клиса–Економија; 7. Жуто брдо, Радошевац
(1, 2, 4 – Letica 1973; 3, 5, 6 – Пековић 2013)

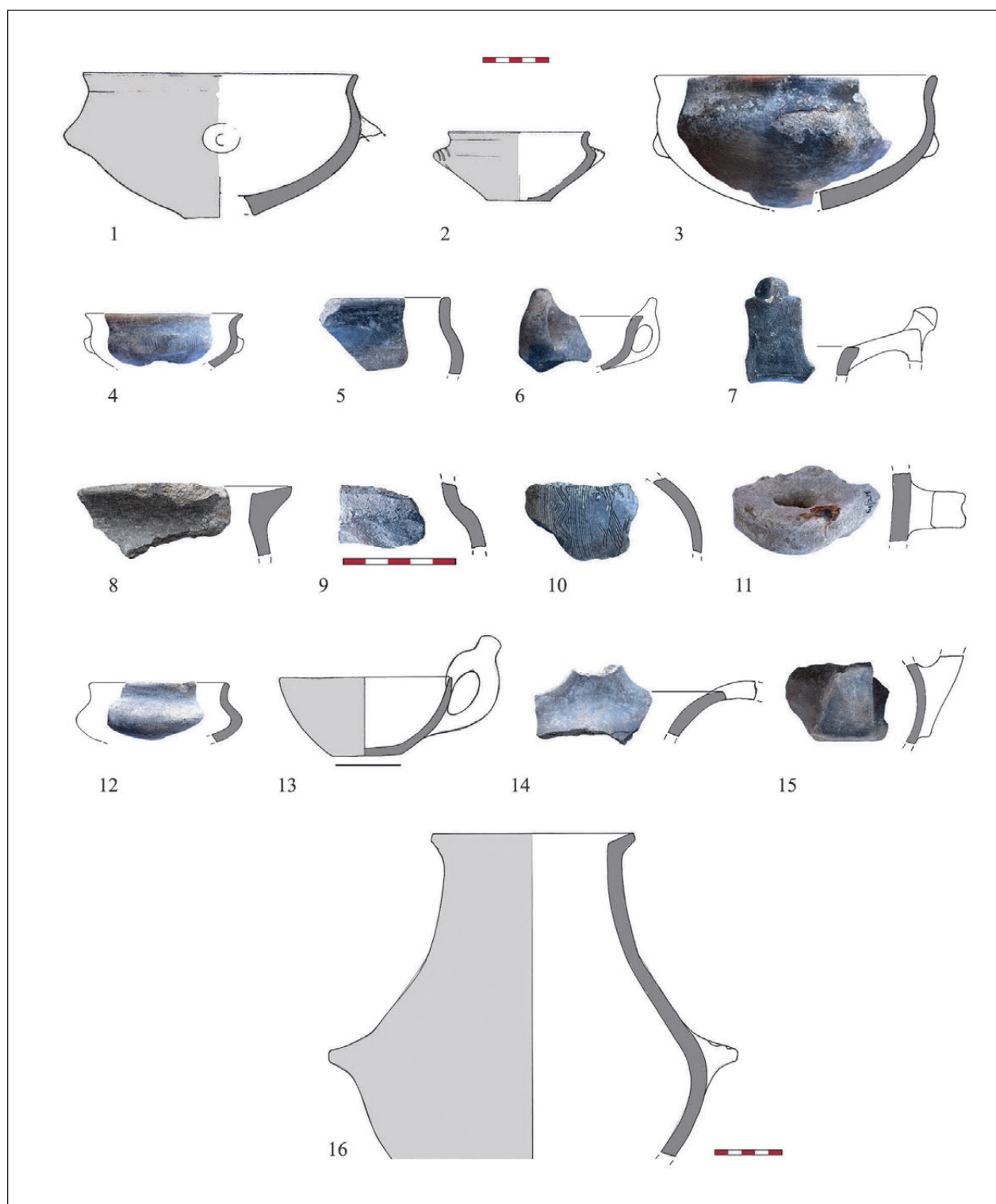


Plate IV – 1–11. Pottery from the layer in which the hoard was dug;
12–16. Pottery from the Late Bronze Age pit in the vicinity of the hoard
(by A. Bulatović and A. Kapuran)

Табла IV – 1–11. Керамика из културној слоја из које је остатак уочиана;
12–16. Керамика из јаме позној бронзане доба у близини остатака
(илустрације А. Булатовић и А. Капуран)

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