

DIGGING IN THE PAST OF OLD EUROPE

**Studies in Honor of Cristian Schuster
at his 60th Anniversary**



„Alexandru Ștefulescu” Gorj County Museum

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Editors

Valeriu Sîrbu, Alexandra Comșa and Dumitru Hortopan



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SUMMARY

<i>Summary</i>	5
<i>Selective List of Publications</i>	7
<i>Tabula Gratulatoria</i>	23
VALERIU SÎRBU, <i>Cristian Schuster la 60 de ani</i>	29
MARIN CÂRCIUMARU, <i>Cristian Schuster la 60 de ani</i>	33

STUDIES

GABRIEL BĂLAN, <i>Early Iron Age Settlement at Gelmar (Geoagiu, Hunedoara County, Romania)</i>	37
ADINA BORONEANȚ, MONICA MĂRGĂRIT, CLIVE BONSALE, <i>Discooidal Beads: Novel Elements of the Starčevo Early Neolithic Package</i>	51
JOHN CHAPMAN & BISSERKA GAYDARSKA, <i>The Pilgrimage Model for Trypillia Mega-Sites: the Case of Nebelivka, Ukraine</i>	73
OLIVER DIETRICH, <i>Cristian und Feldioara. Zwei Sichelhorte aus dem Burzenland (Rumänien)</i>	103
KATARINA DMITROVIĆ, <i>New Set of Double Shank Pins from Čačak</i>	117
ALIN FRÎNCULEASA, DANIEL GARVĂN, BIANCA PREDĂ-BĂLĂNICĂ, <i>Curved Stone Knives of the Krummesser Type Recently Discovered in Northern Muntenia</i>	125
GEORGETA EL SUSI, <i>Animal Breeding and Hunting in Celtic Sites from Transylvania and Banat</i>	139
MARTIN GEORGIEV HRISTOV, <i>New Tei Culture Materials from Central North Bulgaria</i>	153
LYUBOV GERASKOVA, ION PÂSLARU, „De la greci la greci” <i>pe Drumul Mătășii (Arta tăierii pietrei la nomazii turci)</i>	159
KRASSIMIR LESHTAKOV, <i>Some LBA Pyraunoi and Vessels with Internal Lugs from the Eastern Bulgaria</i>	173
MARIJA LJUŠTINA, MARIJA KREČKOVIĆ, TEODARA RADIŠIĆ, <i>Notes on Columbella Shells from the Bronze Age Necropolis Mokrin, Northern Serbia</i>	189
VANYA LOZANOVA-STANTCHEVA, <i>Wolves in Dreams... (To Euripides, Hecuba, 68-97)</i>	203
MONICA MĂRGĂRIT, RADU BĂJENARU, <i>Osseous Industry in the Bronze Age Settlement of Odaia Turcului (Dâmbovița County, Romania)</i>	217

LAURENȚIU MECU, <i>A propos de l'archéologie au cœur d'Afrique</i>	229
MARCO MERLINI, <i>The Sound of Rock Art: Canary Lithophones</i>	239
BIANKA NESSEL, CLAES UHNÉR, <i>Transportation in Bronze Age Europe</i>	255
LOLITA NIKOLOVA, <i>Pit Grave Culture in the Danube Basin: Immigrants or Invaders? (Cultural Evolution and Language Diversity)</i>	277
LOREDANA NIȚĂ, MIRCEA ANGHELINU, CRISTINA CORDOȘ, <i>Almost Fully European: the Gravettian Shouldered Points Layer from Bistricioara-Lutărie III (Ceahlău Basin, NE Romania)</i>	283
SORIN PALIGA, <i>The Definite Article as a Reference Point in Defining the Balkan Sprachbund</i>	293
ANCA-DIANA POPESCU, RADU BĂJENARU, <i>A Hoard of Curved Stone Knives from Costișa (Romania)</i>	303
KALIN POROZHANOV, <i>The Thracian Chersonesos in the Odrysian Basileia of Kotys I (383/382 – 360/359 BC)</i>	317
BIANCA PEDA-BĂLĂNICĂ, ALIN FRÎNCULEASA, DANIEL GARVĂN, BOGDAN CONSTANTINESCU, DANIELA STAN, <i>Unfortuitous Accidents – Prehistoric Metal Artefacts Recently Detected in Northern Muntenia (Prahova County, Romania)</i>	321
IULIA RĂBÎNCĂ, SABIN POPOVICI, FLORIN GROFU, <i>L'Âge du Bronze en Olténie. Étude de cas: une Collection d'objets en Terre Cuite du Musée Romanaiți de Caracal, Roumanie</i>	341
AUREL RUSTOIU, <i>Scytho-Celtica. A Vekerzug-Style Stamped Decoration on a La Tène Ceramic Vessel from Malé Kosihy</i>	355
VALERIU SÎRBU, <i>Scythian Cauldrons and the Meaning of their Presence</i>	367
DONE ȘERBĂNESCU, ALEXANDRA COMȘA, <i>Two Funerary Complexes of the Dudești Culture, Discovered at Căscioarele-Fântâna lui Brebu, Călărași County, Romania</i>	389
CRISTIAN EDUARD ȘTEFAN, <i>Scurtă notă asupra unor complexe de tip Basarabi de la Șoimuș-La Avicola (Ferma 2), jud. Hunedoara (România)</i>	403
ION TUȚULESCU, CAROL-CRISTIAN TERTECI, <i>Some Contributions Regarding the Cultural Evolution in the Mountainous and Hilly Area of Oltenia (Romania) During the Final Eneolithic-Incipient Early Bronze Age Period</i>	413
CAMELIA-MIRELA VINTILĂ, PAUL-EMIL MEREUȚĂ, <i>Pendants of Nephrite in the Collection from the Bucharest Municipality Museum (Romania)</i>	423
MICHEL LOUIS SÉFÉRIADÉS, <i>Note philosophique et sociologique sur la mort néolithique et énéolithique balkanique liée au shamanisme</i>	429

NOTES ON *COLUMBELLA* SHELLS FROM THE BRONZE AGE NECROPOLIS MOKRIN, NORTHERN SERBIA

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Key-words: *the Bronze Age, Maros/Moriš/Mureş culture, Mokrin necropolis, funerary practice, Columbella shells.*

Abstract: *The cemeteries of the Maros culture have been the subject of archaeological investigations since the 19th century. One of the best known is the Mokrin necropolis, located in the northern part of Serbian Banat, near the town of Kikinda. Although general picture of funerary practices executed at the Mokrin necropolis has already been formed, some details in the primary publication of the finds attracted our attention and resulted in a small-scale study on presence of Columbella shells in the graves. They occur in the graves with more opulent fittings, equally in the graves of males and females, but mostly adults. Their usage in clothes and accessories is restricted to a single zone: head, chest or waist.*

The accessible shell items were examined, both the ones that had been published as fossils and the ones that had not, and eventually we were able to dismiss the assumption that the beads were made out of fossils. After the re-examination we came to the conclusion that the available morphological characteristics were not sufficient to diagnose all of the items with any certainty to the level of species. In accordance with it goes the determination of them as Columbella sp., but also the assumption that we actually deal with the C. rustica species, being that it is the only member of the Columbella genus inhabiting the Mediterranean. Looking at the Mediterranean as the place of origin of the Collumbelae in Mokrin gave us more solid base to claim the existence of networks of long distance trade and exchange.

Introduction

The territory of the Early and Middle Bronze Age Maros/Moriš/Mureş culture stretches through three modern day countries – Hungary, Serbia and Romania (Garašanin 1983). Its borders are the rivers Körös to the North, Tisza to the West and Zlatica and Galacka on the South, but most of the sites are located near the Maros and Tisza confluence (Girić 1971). The Maros culture can be found under different names in the archaeological literature published thus far, due to the vast territory it spans: in the Hungarian literature, it is sometimes called Perjámos and Szőreg, in the Romanian Periam / Periam-Pécska, and in Serbia, it is occasionally recognized as the Mokrin group. The Maros culture timeframe lasts for longer than a millennium - the earliest date from the site Kiszombor in Hungary marks its start at around 2700 BC, and the late phase is defined by the dates from Klárafalva and Mokrin which fall around 1700/1500 BC. The Mokrin necropolis is the best dated site so far - the six dates cover the sequence from 2100 to 1800 BC (Girić 1971; Forenbaher 1993; O'Shea 1992; O'Shea 1996).

The cemeteries of the Maros culture have been the subject of archaeological investigations since the 19th century. The biggest ones are Szőreg in Hungary and Mokrin in Serbia, but Deszk A, Deszk F, Ószentiván, Óbeba (Beba Veche) and Ostojićevo are just as

important. The Mokrin necropolis is located in the northern Banat, near Kikinda in Serbia. Archaeological potential of the site was recognised already in the late 19th century due to some findings of the Bronze Age ceramics, but formal excavations did not start until 1958. 312 graves have been excavated so far, and M. Girić, the head of the excavation team, speculated that at least 50 to 100 graves might remain for future archaeologists (Girić 1971). The Mokrin necropolis has been the object of many investigations through the years after the publication of the initial findings: J. O'Shea's interest was piqued by the assortment of grave goods found on the Maros necropolises and their potential role as status markers (O'Shea 1996); S. Stefanović and M. Porčić were interested in social status as well, but they investigated it through an anthropological lens by analyzing musculo-skeletal markers (Stefanović 2008; Porčić, Stefanović 2009), to name but a few. The other Maros necropolis found in Serbia, Ostojićevo, was investigated as well, but has not been published up to now.

Although general picture of funerary practices performed at the Mokrin necropolis has already been formed, some details in the primary publication of the finds attracted our attention and resulted in a small-scale study on presence of *Columbella* shells in the graves (cf Garašanin 1983).

The Mokrin necropolis and the Maros culture funerary practice

In most cases on the Mokrin necropolis the burial rite is inhumation. Cremation is rare, and it is mostly tied to the earliest phases of the necropolis (cf. Garašanin 1983). Most of the graves contained only one burial, although there are occasional double and triple graves. The inhumations were flat, without tumular markers, bodies were put in the graves on their side in a flexed position, with their faces turned toward the east. The orientation of the body depended on the sex of the deceased: men were placed in the grave on their left side with their heads to the north, and women were laid to rest on their right side with their heads toward the south (Girić 1971; O'Shea 1996). The graves with “deviant” orientation attracted attention of some scholars, too (cf. Porčić 2010; Matić 2012). Traces of grave markers were not found during the excavations, but there is a general supposition that they had existed, since the later graves did not disturb the earlier ones.

Although it is difficult to identify the inventory which was used by the mourners and other living participants in the funerals as ritual equipment unless they are left in the grave (which would then be difficult to distinguish from other grave gifts), there are two categories of artefacts usually described as grave goods which can be archaeologically recognised: the deceased's body items such as clothes and jewellery on the one hand, and grave gifts (offerings) on the other hand. These two categories are not absolute and may overlap since there are prescribed cultural and religious norms for how the deceased can appear in death during the funeral and what might be given as gifts to the dead. The personal items following the dead such as jewellery or weapons will always be a selection of his or her possessions, and hence, the descendants choose those objects which were mandatory or preferable for the fulfilment of the rite in accordance to cultural, ritual and religious norms (Fahlander, Oestigaard 2008, p. 7).

1. Previous research on social aspects revealed through funerary practice

In search of confirmation of existence of social stratification in the Maros culture, and hence not taking too much care of other multi-dimensional elements of funerary practice, J. O'Shea (1996) in his book “*Villagers of the Maros*” published a detailed analysis of all the

necropolises of the Maros culture, with the exception of Ostojićevo. He argued that social stratification did in fact exist in this culture.

He differentiated the grave goods in several categories: clothing ornaments, body and head ornaments, weapons, tools, ceramic vessels and unmodified animal bones. Taking into account sex, age and treatment of the body of the deceased, placement of grave offerings, and frequency and clustering of the graves with certain types of grave offerings on the necropolises, O'Shea concluded that four types of objects carried a connotation of a better social status of the deceased: bone needles, sashes with pierced animal teeth, head ornaments, weapons (O'Shea 1996). Status can be based on dominance and/or prestige, but for humans either form of status is symbolically meaningful. High status is usually invested with moral worth, which is an aspect of prestige and may vary culturally (Ames 2007, p. 488 with further references). Significantly, the criteria applied to consider an object, person, structure or context as prestigious are not usually specified. There appears to be an implicit acceptance that the use of a rare raw material or of specific technologies in the production of an item automatically categorizes it as a 'prestige object' (Pedraza 2016, p. 10).

J. O'Shea argues that despite 20 years of refining and applying the Binford-Saxe approach, surprisingly little substantial has emerged. There are so many different ways in which one may try to recognize social distinctions through burial data and unfortunately some of them are not compatible with each other, which may lead to contradictory results. Additionally, one must consider the possible importance of perishable materials that may not be recoverable (Fahlander, Oestigaard 2008, p. 10).

Although being aware of all the insufficiencies and restrictions of O'Shea's approach, we used it as a starting point and methodological frames for our study. At many points, his results were more than instructive for the Mokrin necropolis. Bone needles and sashes with animal teeth were found almost exclusively in the graves of females. Bone needles were found both in the graves of adults and those of subadults, and even though they were probably produced locally, due to their spatial distribution on the necropolises of the Maros culture, O'Shea concluded that they were markers of higher social status. On the other hand, sashes were found both in the graves of adult women and subadult girls. The important distinction lies in the placement of the sash in the grave: the adult women were buried wearing them, while the girls had them placed in the vicinity of their knees and feet or hands. The number of weapons found in the graves of Maros necropolises is not high, and in almost all cases the daggers and axes were placed in the graves of men. In Mokrin, only one fragmented stone axe was found in the grave of a woman (O'Shea 1996, p. 226). Unlike the previously mentioned "status markers" which appear to be strongly associated with the sex of the deceased, head ornaments can be found in both male and female graves, albeit more commonly in female graves in Mokrin. They were reserved for the adults; only two subadult graves in Mokrin had head ornaments - one young man (Grave 16) and one little girl (Grave 161). O'Shea devised a typology of these composite ornaments and divided them into four types, though Mokrin is the only necropolis where all the types can be found. Spatial distribution of all the head ornaments found in Mokrin did not show any pertinent results, but when he grouped the graves in relation to the sex of the buried individuals, O'Shea noticed that Types 1 and 2 of head ornaments from "male" graves were grouped in different parts of the necropolis. "Female" graves showed no such pattern. He interpreted that as a sign of a difference in the meaning of head ornaments for the two sexes.

S. Stefanović in her doctoral thesis also investigated social status. She divided Mokrin graves into four categories following the previous work of J. O'Shea. The first group was

made of graves without any grave offerings, attributed to the “poorest” members of the society. The second group was represented by only one ceramic vessel in the grave or a couple of beads. The third group represented the greatest challenge since it encompassed graves with a larger quantity of both poorly made and “luxury” items. The last group is represented by the objects that J. O’Shea identified as the markers of status (Stefanović 2008).

2. *Columbella shells in the Mokrin necropolis*

Aside from the analysis of the grave goods as the markers of social status, J. O’Shea analysed the contacts with the neighbouring regions through the elements of non-local origin. He states that the faience and shell beads, as well as metal goods and non-local ceramics were good examples of the trade (O’Shea 1996, p. 353). Among the remains of shells found in Mokrin (both fresh and saltwater) those determined as *Columbella rustica* are the most numerous, but in literature they attracted little attention. They were found in 28 graves as parts of men’s and women’s attire. Although it is apparent that they were an integral element of this culture, questions about their origin and significance were not discussed. In this paper we will focus on these questions.

2. 1. *Characteristics and determination of shells*

In the monograph on the Mokrin necropolis (Girić 1971) numerous remains of shells were published as *Columbella rustica*, and some of them as fossils of this species. In the *Graves* 38, 74, 129, 179 and 187 shells of *Columbella rustica* were determined as fossils. After the re-examination of available specimens, it was concluded that these shells, determined as fossils, do not have characteristics which would assign them to this group (Fig. 1)¹.

Shells determined as *Columbella rustica* from the necropolis in Mokrin are not very well preserved. They are broken or damaged, and have perforations artificially made by piercing in the middle of the shell, usually in irregular circular shape. The majority of them were intensively used, and besides wear perforations, surfaces display polishing and weathering (Vitezović 2017, p. 69). Surfaces of shells are white and rough, probably due to taphonomic processes that occurred in the ground during long period of time. Because of all these factors determination to the level of species for all the specimens is not possible. So we have to accept this determination reservedly.

Although it is very probable that some of these shells belong to Rustic dove snail (*Columbella rustica*), we have to bear in mind that we do not have all determining characteristics for all the specimens. For this reason, in our paper we will determine them as *Columbella* sp. *Columbella* (Lamarck 1799) is a genus of columbellid neogastropods (dove shells) that include 17 recognized species, mostly from tropical America and the East Atlantic/Mediterranean (WoRMS: Bouchet, Gofas 2015). Three species are recorded in the eastern Atlantic and the Mediterranean Sea: *Columbella rustica* (Linnaeus, 1758), *Columbella adansoni* (Meneke, 1853) and *Columbella xiphitella* (Duclos, 1840). *Columbella rustica* is distributed over the entire Mediterranean Sea and the neighbouring Atlantic southward to Senegal and northward to Portugal, while *Columbella adansoni* ranges throughout Macronesia, and is not present in continental African waters. The third species *Columbella xiphitella* (Duclos, 1840) is recognized through molecular methods and according to the material examined genetically, this species ranges along West African coasts from Ghana to

¹ Determination was performed with the help of Biljana Mitrović, PhD, Natural History Museum Belgrade.

Angola, including São Tomé and Príncipe (Russini *et alii* 2017, p. 204-207). Except for protoconch features, no major morphological characteristics are available to separate the three species. *Columbella rustica* has a paucispiral protoconch, whereas *Columbella adansoni* and *Columbella xiphitella* have a multispiral protoconch (Russini *et alii* 2017, p. 198). Shells of these species are of medium size for the family, 10-25 mm long. Colour is very variable, with white-whitish background and yellow, orange, brown, grey or black irregular spots.

2. 2. Analysis of the graves with *Columbella* shell beads in the Mokrin necropolis

To discern the significance of the *Columbella* beads in the Mokrin material, we analyzed the graves in which they occur using basic descriptive statistics, with the goal to determine their frequency in graves, and possible differences in use correlating to sex and age of the deceased and the rest of the artefacts.

During the excavation campaigns a total of 312 graves were discovered, with 315 individuals, 160 women, 125 men and 30 individuals whose sex could not be determined. Most of the deceased are adults (53%); subadults make up the 30% of the population of the cemetery, and the *senilis* category is the least represented with 9%. For 8% of the skeletons age could not be determined.

Columbella beads occur in 28 graves, and they are almost equally distributed among males and females (12 and 14 respectively); the sex for the rest could not be determined. Most of the individuals from these 28 graves are adults (21); there are only 3 subadults and 2 *senilis*. Graves with *Columbella* beads have much more grave goods on average than the graves without them. The average number of grave goods on the whole necropolis amounts to 2.08; women on average have slightly higher number of grave goods 2.63 as opposed to the men with 2.03. On the other hand, if we only take into account the graves with *Columbella* beads, the average number of grave goods is significantly higher - 4.22, especially in the graves of women with the average of 5.14 items per grave, while in the graves of men the number is 3.23, higher than average of the whole necropolis, but significantly lower than in the females' graves (Fig. 2). Just looking at the basic descriptive statistics for the Mokrin necropolis it is apparent that the graves of females on average have more grave goods than the graves of men, but the difference in quantity is stark when we take in consideration only the graves with *Columbella* beads. One should bear in mind that 21 % of the Mokrin graves have no grave goods at all.

The *Columbella* beads graves do not have just an average higher quantity of grave goods when compared with the rest of the necropolis, but the quality of their inventory is also noticeable. The grave goods that J. O'Shea (1996) defined as status markers - head ornaments, sashes, daggers and bone needles - appear frequently in these graves, and furthermore *Columbella* beads are often part of composite ornaments. These graves stand out in one more manner - on the whole necropolis there are only 13 graves with golden ornaments, and out of these 13 graves five have *Columbella* beads as well.

Head ornaments are defined as composite ornaments made of plaques, spectacle pendants, disks, strips, salteleons, bow pendants and *Columbella* beads (O'Shea 1996, p. 107) (Fig. 4/a). J. O'Shea identified four types of head ornaments according to their elements, but due to the small sample of the graves with *Columbella* beads we did not take this typology into account. There are 50 graves on the Mokrin necropolis which have head ornaments as part of their inventory: 17 of these were found in the graves of men and 33 were placed in the graves of women (O'Shea 1996). This discrepancy between men and women concerning head

ornaments is completely different when we look at the head ornaments with *Columbella* beads elements - 5 were found in the graves of women and 8 in the graves of men (Fig. 3). The grave 302 is a little problematic, since the elements of head ornament and sash mixed due to the taphonomic processes, so we cannot say with certainty if the *Columbella* beads were part of the particular head ornament or the sash.

In addition to head ornaments, *Columbella* beads most frequently make parts of necklaces, together with *Dentalium*, *Cardium* and other shell beads, clay and bone/antler beads, pendants, animal teeth, plaques and salteleons (O'Shea 1996, p. 126) (Fig. 4/b). They appear in 10 necklaces (the total sum of necklace on the whole necropolis comes up to 66) - 6 of these necklaces come from the graves of females, 4 from the graves of males (Fig. 3).

Sashes comprised *Columbella*, *Dentalium*, *Cardium*, bone/antler and clay beads, animal teeth, pendants, salteleons and bone rings (O'Shea 1996, p. 116) (Fig. 5). They are an infrequent find: only 7 were discovered on the whole necropolis, and two of these have *Columbella* beads. The sashes are exclusively found in the graves of women (Fig. 3).

Bone needles, which J. O'Shea identified as the markers of status as well, were found in three *Columbella* beads graves (the total number of the graves with bone needles on the necropolis is 20) (Fig. 3). All of them were placed by females.

Daggers are another marker of status, as defined by O'Shea. They are not very frequent - they were only recovered from 7 graves, and two of these had *Columbella* beads as well; all of them were placed by men (Fig. 3).

Golden ornaments are also infrequent finds; they were found in 13 graves and 5 of these were graves with *Columbella* beads (four in graves of females and one in the grave of a very young boy) (Fig. 3).

3. *Columbella rustica* shell beads from the Palaeolithic to the Bronze Age

Rustic dove snail (*Columbella rustica*) is a characteristic species of the intertidal and shallow water under rocks and stones (Poppe, Goto 1991, p. 150), so it is not surprising that they had been drawing attention of people for thousands of years. Shells of this type of sea snail are recorded in archaeological contexts on sites from different periods in the Mediterranean Basin and even hundreds of kilometres inland (Álvarez Fernández 2010, p. 131). It is not known to be eaten by humans, but shells of these snails were used as ornaments. It is, in particular, an important element of the Upper Palaeolithic, Mesolithic and Neolithic ornamental tradition. The use of rustic dove shells has been documented in Europe and in the Eastern Mediterranean region since the Aurignacian. However, it remained quite scarce throughout the Upper Palaeolithic (Álvarez Fernández 2008, p. 106).

In the Mesolithic *Columbella rustica* has been found at sites in the central and western part of the Mediterranean region, but also at sites along the Rhone Valley as far as southern Germany, and in North Africa. It is also important to mention the Eastern Adriatic coast and its hinterland where this type of shells was found on the Upper Paleolithic and Mesolithic sites (Cvitkušić 2017), and also interior of the Balkans - the Danube Gorges region. The Late Mesolithic deposits at the site of Vlasac yielded evidence of *Columbella rustica* beads in association with a non-local individual, based on strontium isotope analysis, which suggests that this person originated in areas outside the Danube Gorges (Borić, Cristiani 2016, p. 93).

Their use continued in the early Neolithic at sites in the western Mediterranean region and also in the Near East. In some parts of Europe they are recorded through the middle and late Neolithic, Chalcolithic and in the Bronze Age. Perforated specimens have been found at settlement sites and in funerary contexts from these periods (Álvarez Fernández 2008, p. 108).

In the Early Bronze Age in the Maros material culture seashells were used as beads. Along with the beads made of *Dentalium* and *Cardium*, the beads of *Columbella* shells were very popular (O'Shea 1996, p. 47). According to O'Shea (1996) some of the *Columbella* from the graves almost certainly derived from fossil deposits, and the remaining must have been obtained through long-distance trade. Freshwater shells are also common finds from settlement sites, and presumably came from the rivers Maros and Tisza.

In the Maros graves, *Columbella* shell beads occurred as part of head ornaments, necklaces, sashes or worry beads (O'Shea 1996, p. 84). It should be emphasized that they are not as frequent in other necropolises as they are in Mokrin, and that Mokrin is the only necropolis where they are found in all of the mentioned composite ornaments. As part of head ornaments *Columbella* shell beads are present in three graves from Szőreg (O'Shea 1996, p. 111). On sashes *Columbella* shell beads were recorded in Deszk F in one grave, in Szőreg in two graves (O'Shea 1996, p. 116). As worry beads they were noted in two graves from Szőreg (O'Shea 1996, p. 136). O'Shea did not provide data for their occurrence in necklaces on other necropolises of the Maros culture. The necropolis in Ostojićevo has artefacts made with *Columbella* beads as well - but due to the fact that the necropolis has not been published yet, the data on them are incomplete.

***Columbella* shells in the Maros culture environment: provenance and social significance**

The first thing that we noticed when we went through the original publication in search of the information on the *Columbella* shells was that some of them were defined as fossils. This prompted us to think about the potential presence of fossils in the Mokrin graves. Are they fossils at all? If yes, could they have been sourced from local fossil deposits? We re-examined *Columbella* beads which were accessible to us, both those that had been published as fossils and those that had not, with the help of Biljana Mitrović PhD, Natural History Museum Belgrade. We were able to dismiss the assumption that the beads were made out of fossils. In favour of this argument goes the fact that it is improbable that the well-preserved fossils were available in sufficient numbers for production, and that they were convenient for modifying into ornaments, given their potential lack of elasticity (Dimitrijević, Tripković 2006, p. 240).

Determination of species was another issue deserving re-examination. This is expected to provide an important piece of information to answer the question of trade and contacts. In the previous research the beads were determined as *Columbella rustica*, but after the re-examination we concluded that there were not enough morphological characteristic to diagnose all of them with any certainty to the level of species. Accordingly, we determined them as *Columbella* sp. There is a good possibility that the shells are, in fact, *Columbella rustica*, since other species from *Columbella* genus are not found in European seas, while only *Columbella rustica* inhabits the Mediterranean (WoRMS: Bouchet and Gofas 2015). A few other genera from the Columbelidae family live in the Mediterranean seas, but it is almost impossible to confuse them with *Columbella rustica* (Pope and Goto 1991, p. 151). Taking into account that *Columbella* is a marine snail, the beads from Mokrin must have been the

result of long distance trade and exchange. In the Maros culture *Columbella* beads were found on several necropolises, but their appearance within houses in the settlement Pecica-Șanțul Mare is significant. This suggests that they were worn by the living as well as the dead and that almost every household had access to them. It remains unclear if these beads arrived finished or as raw material - only one unmodified snail shell has been found so far (Nicodemus, Lemke 2016, p. 111).

Ornamental beads often play an important role in discussions about long-distance exchanges between different communities. They can be understood as powerful material objectification with symbolic connotations and also an important element of visual information technologies because they have standardized qualities and they are easy to transfer (Borić and Cristiani 2016, p. 90 with further references). Long-distance contacts were important for Maros communities - not only for obtaining raw materials for metallurgy and finished metal items, but for the acquisition of ornaments, such as shell beads. According to J. O'Shea big rivers like the Tisza and Maros played an active role in the regional exchange system, particularly because metal goods were derived from both northern and eastern sources; southern route for obtaining exotic goods was emphasized, too. However, there are significant differences in the geographic occurrence of exotic types across the Maros necropolises. These differences suggest that the availability of specific trade items varied among villages, depending on where within the Maros region they were located, or were the result of intentional local funerary practice (O'Shea 1996, p. 355). In addition to obviously exotic goods, the Maros burials occasionally incorporated non-local ceramics, for example Nagyrév-style vessels, which point to the contacts beyond Tisza-Maros region (O'Shea 1996, p. 356).

In Maros Culture *Columbella* beads were used in the production of the head ornaments, necklaces and sashes, but only on Mokrin they can be found in all of these types of artefacts. Upon further examination, we noticed that the author of the monograph on the Mokrin necropolis (Girić 1971) used a somewhat neutral term "string" (*niska* in Serbian) that has a broader meaning of a composite ornament made out of stringed beads, which could encompass both necklaces and sashes. Using J. O'Shea's (1996) typology of Maros composite ornaments and the description and drawings of the graves, we managed to sort most of these "strings" into proper categories. It appears that in the grave 302 the pieces of both the head ornament and the sash got mixed due to the taphonomic processes, leaving us unable to determine if the *Columbella* beads from this grave were part of the sash or the head ornament. We are fairly certain that the *Columbella* beads were segments of only one of those ornaments, since in all other graves they appear exclusively as a part of one item at a time. In other words, even when a grave had both a head ornament and a necklace among its funerary inventory, *Columbella* beads would appear only in a single one of the mentioned items.

It appears that the graves with *Columbella* beads could be categorized as those with the highest quantity and quality of grave goods on the Mokrin necropolis. Not only is the average number of inventory items per grave is higher for the graves with *Columbella* beads when compared to the whole necropolis, but the graves with *Columbella* bead also have considerable amounts of the exotic and the items that are considered status markers.

Conclusion

Despite being questionable if burials are the best source of approaching social issues, it was inspiring to us to follow the path settled by J. O'Shea already in 1990s. There are so

many different ways in which we may try to recognise and understand social distinctions through burial data. Much to our disappointment, some of them are not compatible with each other, which opens possibilities for contradictory results. That is why in our study we were focused on solving some simple questions, which may be instructive for some further researches.

Presence of *Columbella* shells – no matter of fossil origin or contemporary with the rest of grave goods - as grave inventory in the Maros culture has been taken for granted in the sense of confirmation of long distance trade and exchange. An idea of local fossil extraction occurred and led us to re-examination of the *Columbella* beads from the Mokrin necropolis. The items which were accessible to us were examined, both the ones that had been published as fossils and the ones that had not, and eventually we were able to dismiss the assumption that the beads were made out of fossils. Another piece of information of great importance to answer the question of trade and contacts was expected to be provided by determination of species. In the primary publication the beads were determined as *Columbella rustica*, but after the re-examination we came to the conclusion that the available morphological characteristics were not sufficient to diagnose all of the items with any certainty to the level of species. In accordance with it goes the determination of them as *Columbella* sp., but also the assumption that we actually deal with the *C. rustica* species, being that it is the only member of the *Columbella* genus inhabiting the Mediterranean. Looking at the Mediterranean as the place of origin of the *Collumbelae* in Mokrin gave us more solid base to claim the existence of networks of long distance trade and exchange. The analysis of their presence in grave inventory resulted in interesting facts. They occur in the graves with more opulent fittings, equally in the graves of males and females, but mostly adults. Their usage in clothes and accessories is restricted to a single zone: head, chest or waist. The actual meaning of it remains hidden.

It is undeniable that the big rivers like the Tisza and Maros played an active role in the regional exchange network. Interestingly, there are significant differences in the geographic distribution of exotic goods among the necropolises. The Mokrin necropolis with its *Columbella* beads gives the impression of being unique. These differences can be taken as indicators of differences of preferences as well as availability of specific trade items among local communities. They can also be the result of locally specific funerary practice, comprising sets of rituals by which the living deal with death.

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Fig. 1. a = *Columbella* shell beads as part of necklace in the grave 38 published as fossil shells (photo: Dragoslav Stojanović), b = *Columbella* shell beads as part of head ornament in the *Grave 7* published as contemporary shells (photo: Dragoslav Stojanović).

	Total	Females	Males
All the graves	2.08	2.63	2.03
Graves with <i>Columbella</i> beads	4.22	5.14	3.23

Fig. 2. Overview of average number of goods per grave in the graves of females and males for the whole necropolis and the graves with *Columbella* beads.

	Head ornaments	Necklaces	Sashes	Bone needles	Daggers	Golden ornaments
All the graves	50	66	7	20	7	13
Graves with <i>Columbella</i> beads	13	10	2	3	2	5

Fig. 3. Overview of the graves with grave goods considered status markers for the whole necropolis and the graves with *Columbella* beads.

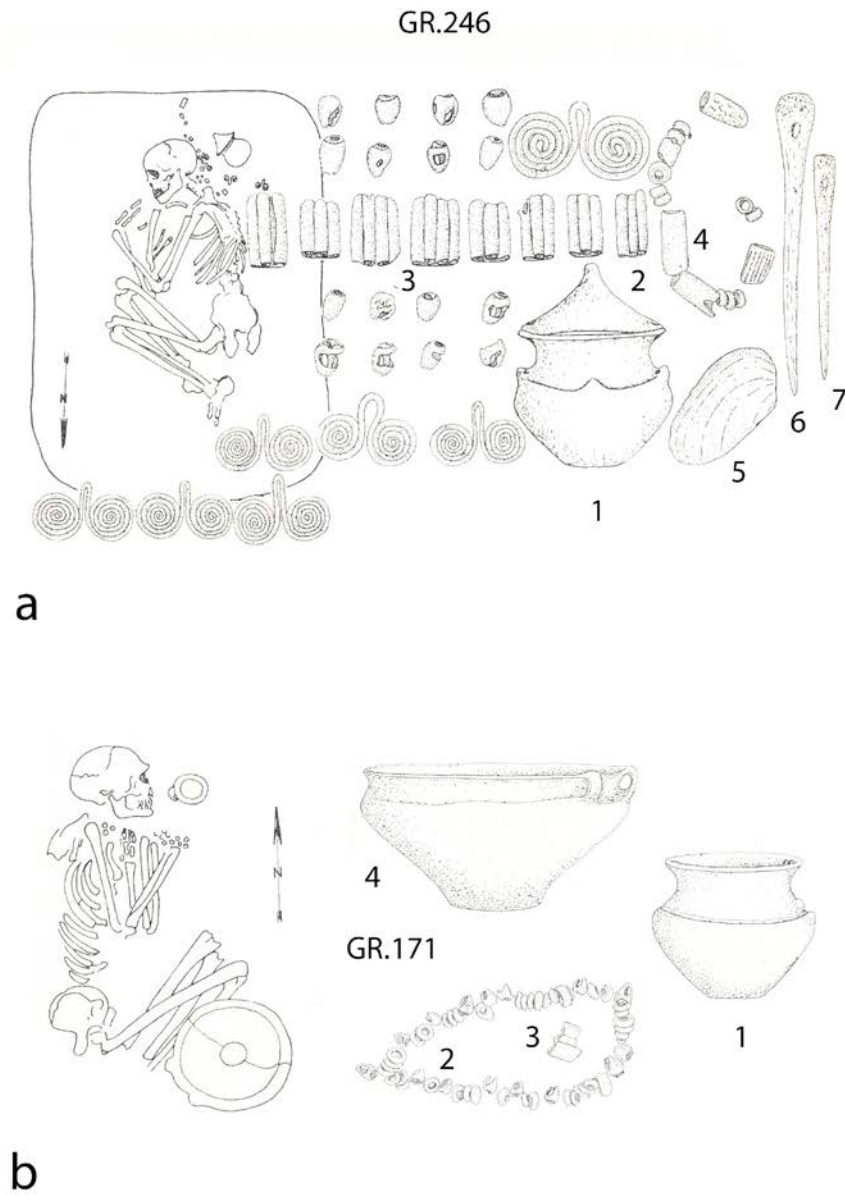


Fig. 4. a = *Grave 246* where *Columbella* beads are a part of the head ornament (modified after Girić 1971), b = *Grave 171* where *Columbella* beads are a part of the necklace (modified after Girić 1971).

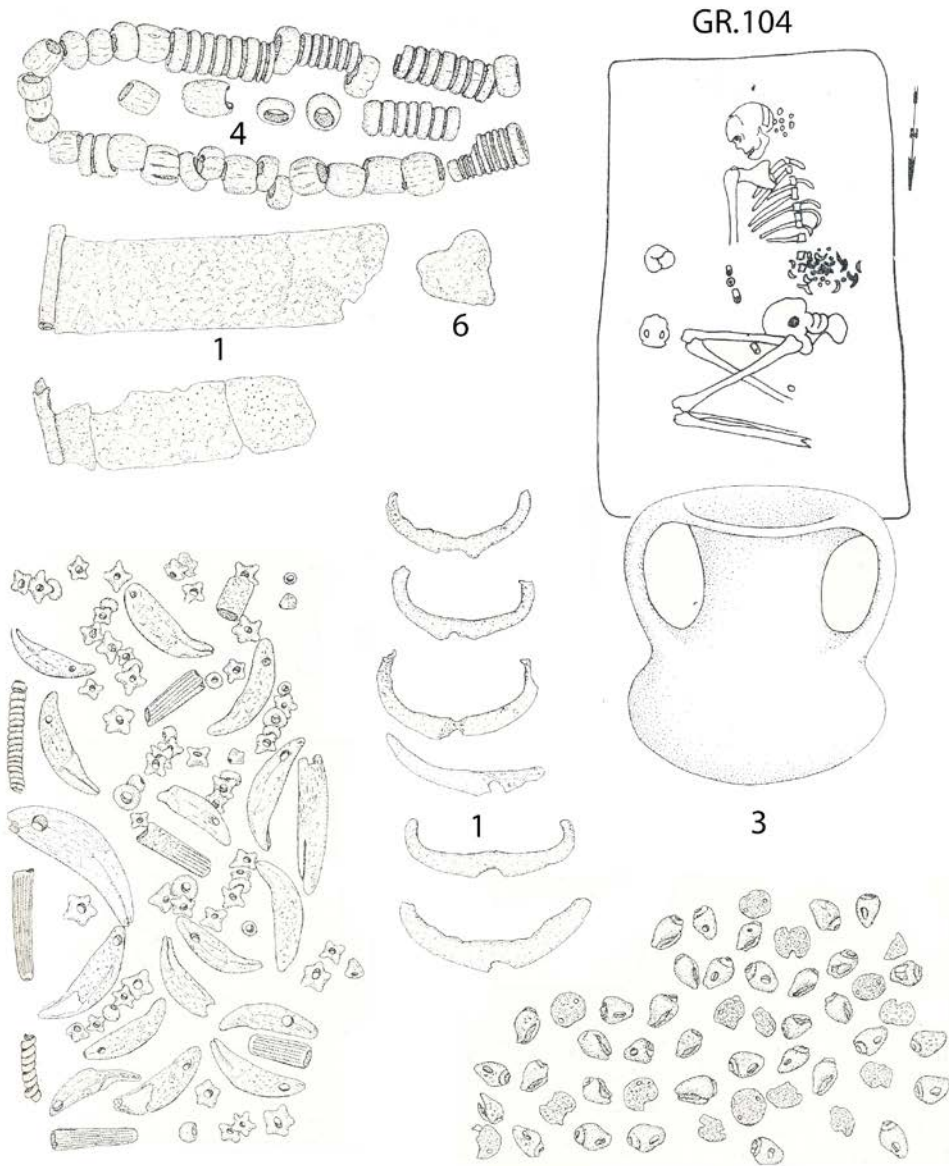


Fig. 5. Grave 104 where *Columbella* beads are a part of the sash (modified after Girić 1971).