
Ivana Popović
Belgrade
ivpop055@gmail.com

SOME CHARACTERISTIC JEWELLERY TYPES FROM THE PRE-ROMAN AND ROMAN CENTRAL BALKANS: SIMILARITIES AND DIFFERENCES, HELLENISTIC INFLUENCES AND LOCAL ADAPTATIONS

Abstract: Different types of pre-Roman and early Roman silver jewellery have been registered on Central Balkan archaeological sites. Some adornments maintained the same shape over the centuries, but others, imitating the original matrix, changed in appearance, manufacturing techniques and function. The reproduction of previous Hellenistic models continued on jewellery from the Balkan-Danubian Basin area until the middle of the 3rd century AD. The symbiosis of various influences resulted in the establishment of a specific style in manufacture of the early Roman jewellery in this region, which was originally just in the reproduction of Hellenistic models transformed through symbiosis with autochthonous forms, many of these later appeared as a result of contacts with the Hellenic world.

Keywords: jewellery, pre-Roman Period, the early Roman period, cultural influences, Hellenic cultural complex, autochthonous traditions.

Different types of pre-Roman and early Roman silver jewellery have been registered on Central Balkan archaeological sites. Pieces of gold jewellery are more or less represented. Some adornments maintained the same shape over the centuries, but others, supporting the original matrix, changed in appearance, manufacturing techniques and function.

I Radial diadems

Radial diadems or radial crowns are best known as one of the Roman emperors' *insignia* (*corona radiata*). The busts of these emperors (fig. 2a) were represented on the obverse side of coins issued during the 3rd and the first years of the 4th century AD (RIC V, 1968; VI, 1967), i.e., at a time when the growth of the cult of the Sun god, Sol, was noted, who had a radial crown as his attribute. However, the appearance of this *insignia* came much earlier. A hoard from Mačvanska Mitrovica (?) contains two rectangular silver *emblemata* made of thin silver sheets that were hanging on a small bronze

loop, which defines them as a part of a necklace or collar. The plates were decorated with embossed lines and points and had schematised representations of the figure of a female barbarian deity, with her hair curled into two braids and with a radial diadem around the head. The diadem rays have a leaf-form or denticulate appearance (fig. 1 a). The composition of silver objects in the hoard from Mačvanska Mitrovica (?) show close similarities with the hoards of silver jewellery from Bare (in the vicinity of *Viminacium*) and Tekija (*Transdierna* military camp, Iron Gates region). The jewellery from these hoards, worn by the autochthonous elite in the second half of the 1st century AD, was deposited in the period after 81/82 AD as a result of a tumultuous period, connected with the conflicts between the Romans and Dacians in the last decades of the 1st century (Guštin, Popović 2017: 56, 69-70, fig. 3. 1-2). In the monetary parts of the hoards from Tekija (Popović P. 1975: 97-107) and Bare (Borić-Brešković 1994: 128-170, 192-198) the latest coins are Domitian's *denarii* from the end of 81 AD, confirming the time of their deposition. Later, during the early Roman period,



Fig. 1. Radial diadem or crown: a) Mačvanska Mitrovica (?), silver *emblema*, after 81/82 AD; b) Juhor, silver pendant-amulet, the first half of the 3rd century AD; c) Jagodina, silver amulet, 2nd – 3rd century AD; d-e) *Sirmium*, handle of ceramic *patera*, the end of the 2nd century AD.

on the territory of the Lower Danube and its wider hinterland, chronologically different groups of exceptionally rich hoards of silver and, rarely, gold jewellery were deposited.

On the circular silver pendant amulets belonging to the find from Juhor (central Serbia, left bank of the Velika Morava river), motifs of very stylised human faces or masks with radial diadems on the heads appear; the rays of these diadems were shaped as oblique lines (fig. 1b). The find from Juhor can be defined as a hoard or sacred treasure. The jewellery from this find represents forms that had been in use during the first half of the 3rd century, meaning that it was deposited around the middle of that century at the latest (Popović 2002: 22, 84, 113-117, cat. 17-18). Not far from Juhor, in the city of Jagodina (site of Crvene livade), three round, fragmented, sheet silver plates, of 5 cm in radius each, were found by the entrance to a Late Iron Age hut, dated into the first centuries of the Roman rule in these areas. Each of them bore a very stylised figure of a goddess wearing a diadem or crown with rays (fig. 1 c), a necklace of globular beads and a lunular ornament below the breasts (Стојић 1995: 80-81, сл. 3; Стојић 2017, сл. 360).

The appearance of the radial diadem or crown worn by a female figure, represented on the handle of a ceramic *patera* found near the north town rampart of *Sirmium* (fig. 1 d-e), is testimony to the different circumstances of the use of this *insignia*. The rays of the diadem are leaf-formed, inclined to the left and right, with a recess in the centre, suggesting that it was a mural crown (*corona muralis*), the insignia of the city goddess, a very popular motif in the late Roman period, the time when the marble head of Tyche of *Sirmium* (fig. 2b) was produced. The figure is dressed in a tunic, probably with ar-



Fig. 2. Radial crown: a) AV multipla of Constantine I Caesar, Rome, 307 AD, mural crown; b) *Sirmium*, marble head of Tyche of *Sirmium*, 4th century AD.

mour on top of it. The front side of left vertical edge of the *patera* handle is designed to resemble a sceptre ending with a swan's head(?), while on the reverse military insignia, the *vexillum* and *signum*, are depicted. This complex composition could be explained as the portrait of Tyche of *Sirmium*, as a universal goddess who, in peacetime, held the sceptre as a sign of authority, while in wartime she was the guardian, not just of the city, but also of the military units stationed in this Pannonian centre at that time (Popović 2009: 122-123, 131, no. 5). *Sirmium* was the starting point in the wars of the Roman army against the barbarians in Pannonia during the final decades of the 2nd century (Mirković 1971: 30-34). This historical data corroborates our thesis that the figure on the *patera* handle denotes the city of Tyche in a dual, peaceful and military, role. As it was discovered in a zone outside the north town rampart, it could have been an offering at some cult location of a military character.

II Necklaces

Necklaces composed of metal beads are not a common ornament among the pre-Roman and early Roman Central Balkan finds. However,

in the grave assemblage at the site of Kruševica near Raška (south-western Serbia), dated to the first half of the 5th century BC (fig. 3a), a necklace made of nine large metal beads was discovered, together with eleven *salteleone* made of silver wire. Five large silver or gilded silver, segmented beads have a filigree ornament along the ribs between the segments and the spools around the apertures (Срејовић, Вукадин 1998: 7-9, T. I, IV, V; Popović 1994b, cat. 11/1-6). The beads of the necklace from the Bela Reka hoard, deposited after 182 AD, are very similar in shape and size. These large, segmented, bulbous silver beads, connected by plaited silver chain (fig. 3 b), are unusual for Roman metalwork (Popović 1994a: 24-26, 53-55, fig. 3, Pl. III). Besides the similarity with the beads from the Kruševica find, they look like large segmented beads of multi-coloured glass (*Melonenperlen*), known even from the Archaic period, such as at necropolis in Trebenište (Popović Lj. 1956, T. XLIV, 4). The clasp of the necklace from the Bela Reka hoard is richly decorated with filigree, granulation and black glass incrustation and manufactured in the best traditions of the Hellenistic toreutics, showing that this necklace was made as a result of various layers of cultural influences. The stratification of these influences on this necklace's clasp



Fig. 3. Necklaces: a) Kruševica, the first half of the 5th century BC; b) Bela Reka, the end of the 2nd century AD.

is also demonstrated by its hook in the shape of a swan's head, analogous to torque ends from the Dacian cultural complex, but known to have been used in Pannonia until the 2nd century (Popović 1994a: 41, 68).

III Twisted chains, decorated *tubuli* and pendants shaped as ivy-leaves

Two bulky chains twisted according to the “loop in loop” system (Sladić 2006: 41-42, Fig. 26), which have *tubuli* at the ends and rings for hanging (fig 4 a), probably attached to a silver fibulae of the Jarak type (Jevtić 2006: 103-104; Popović 2011: 181, fig. 5), were the parts of the Židovar treasure (fig. 4 b). This treasure was discovered during archaeological excavations in Židovar (Nord-East Serbia) in 2001, in a stratigraphically defined layer, which, together with the historical data, enables the dating of its storage to the middle of the 1st century BC (Lazić 2006: 13-28). The finds from this hoard mainly have characteristics of the Dacian and Celtic cultural complexes (Popović 2011:

188). Connecting silver arched fibulae with chains of the same type was registered in the Late Archaic period on jewellery from the already mentioned site of Kruševica (Срејовић, Вукадин 1998: 9, T. I, 3, 6; II, 3; Popović 1994b, cat. 10/1-2) and in the period of the 1st century BC - 1st century AD, a prototype of which can be seen in the chains found in a rich grave from the late 4th century BC at Malkata mogila in Thrace (Tonkova 2011: 195, fig. 8) This practice continued during the first centuries of the Roman domination. In the numerous Balkan-Pannonian finds of silver jewellery from the 2nd and 3rd century (Bela Reka (Popović 1994a), Janja (Popović 1996: 142, Fig. 9-11), Szalacska (Darnay 1911, T. II; III, 4; Járdányi-Paulovics I. 1953, T. XXVII, 1, 2; XXVIII, 1), *Brigetio* (Popović 1997: 79-80, Fig. 7), Bare-Tribovo (Patsch 1912: 151-152, Fig. 94), Arčar (Ruseva-Slokoska 1991, Cat 136, 136), Gorj (Popilian 1998: 59-60, Fig. 5. 1, 4), Aţel (Crişan 1959: 353-367, Fig. 2), Bălăciţa (Pl. CI-CIII; Popilian 1998: 49-50, Fig. 8-9), silver fibulae of the anchor type and more or less preserved silver chains connecting them have been noted (fig. 4c). The connecting of the elbow fibulae with silver



Fig. 4. Twisted chains connecting fibulae: a) Židovar, silver twisted chains, the middle of the 1st century BC; b) Židovar, twisted chain and fibulae of the Jarak type (reconstruction after Jevtić, Lazić, Sladić 2006, fig. on page 80; c) Janja, fibula of the anchor type and part of a chain, the middle of the 3rd century AD; d) tombstone Seča Reka, the middle of the 3rd century AD (drawing by A. Premk).



Fig. 5. Silver fibulae, chains and pendants in the form of ivy-leaves, finds from the Drina Valley, Pannonia and Oltenia, the middle of the 3rd century AD: hoards of silver jewellery; tombstones; 1) Janja, 2) Dvorska, 3) Brigetio, 4) Gorj, 5) Vâtrop, 6) Bălăcița; a) Voljevica, b) Crvica, c) Skelani, d) Bajina Bašta, e) Seča Reka, f) Vrhpolje (map created by I. Popović).

twisted chains in the Balkan finds was noticed only in Nova Božurna (Jovanović 1978: 82, cat. 9, 12-14, Fig. 163, 166, 167) and Kolovrat (Cermanović-Kuzmanović 1995: 227, Fig. 1, 2). Wearing fibulae connected with twisted chains is closely related to pendants in the form of an ivy-leaf, which, besides the common finds of these ornaments, are also represented on tombstones. Tombstones from the Drina Valley at Bajina Bašta, Voljevica, Crvica, Skelani, Seča Reka and a recently discovered monument from Vrhpolje near Ljubovija (Popović 2013: 541-550, figs. 1-5, 7, with cited bibliography concerning the finds) clearly show the specific decoration on the chest and shoulders, formed by the tangles of chains and pendants in the form of an ivy-leaf (fig. 4d). Such ivy-leaf shaped pendants also adorned earrings (Juhor: Popović 2002, cat. 13-14), or on parts of horse tack (Nova Božurna: Jovanović 1978, cat. 10, fig. 164; Popović 1994, cat. 94, 95). The frequent appearance of pendants in the form of an ivy-leaf in Balkan finds can be explained by the early penetrations of the cult of Dionysos from Greece and Macedonia, i.e., his assimilation with the local cults of the deities of nature. Therefore, the combination of fibulae, chains and pendants in the form of an ivy-leaf is characteristic of the Drina Valley, Pannonia and Oltenia (fig. 5), where this jewellery can be found in hoards deposited during the fifth and sixth decades of the 3rd century. The deposition of the hoards, which, besides silver jewellery, also contained coins, is dated based on the latest registered coin: Vâtrop-

denarius of Gordianus III from 241AD (Popilian 1998: 44-45); Janja-denarius of Gallienus from 254 AD; Dvorska-denarius of Gallienus from 254 AD (Popović 1996a: 142); Szalacska-denarius of Gallienus from 258 AD (Darnay 1911: 311-328). According to their representations on the tombstones, these composite decorations were worn by women. These three elements of the pectoral decoration were also registered in the Židovar treasure. Of course, these fibulae have a different construction to the Roman ones, and all eight specimens belong to the Late La Tène variety of the Jarak type (Sladić 2006: 37-40, Fig. 18-25). Two silver chains were twisted in the same way as the specimens from the Roman period, although they are much thicker and larger.

However, of most interest is a group of eleven pendants in the form of an ivy-leaf (Sladić 2006: 52, Fig. 43-44; Popović 2011: 182-183, fig. 10, 1). They were different to the flat-embossed Roman pendants in the shape of an ivy-leaf (fig. 6b), having been embossed on a die in two parts and then the front and the back were connected, giving a three-dimensional quality (fig. 6a). Were these pendants worn on the chains hung on fibulae, as is shown on the representations on monuments from the Roman period (fig. 6c)? Given the conditions of their find, separate from the fibulae and chains, at this moment this is only one of the possible hypotheses.



Fig. 6. Silver pendants in the form of ivy-leaves: a) Židovar, the middle of the 1st century BC; b) Dvorska, silver chain with ivy-leaf shaped pendants, the middle of the 3rd century AD; c) tombstone, Vrhpolje, the middle of the 3rd century AD.



Fig. 7. Silver filigree decorated *tubuli* of chains: a) Židovar, the middle of the 1st century BC; b) Bela Reka, the end of the 2nd century AD.

The third element of pectoral decoration from the Židovar find are the small damaged *tubuli* decorated with corrugated filigree wire twisted around the grains (fig. 7a). The Celtic Scordisci tribe, who settled in the Danubian region of Serbia, did not use filigree and granulation as decorative techniques in the treatment of the metals. The use of *tubuli* decorated by filigree and granulation appears on the silver chain from Malkata mogila in Thrace, dated to the late 4th century BC, regarded as the prototype of chains from the 1st century BC - 1st century AD (Tonkova 2011: 195, fig. 8). These techniques and analogue decorative motifs were also used on *tubuli* of the chains among the finds in the already mentioned region of the Drina Valley and Pannonia, from hoards deposited at the end of the 2nd (Bela Reka: Popović 1994a, cat. 7, fig. 2, 4, Pl. IV, 1) (fig. 7b) and during the fifth and sixth decades of the 3rd century (Dvorska: Popović 1996a: 142-144, fig. 13, 14; Szalacska: Járdányi-Paulovics 1953, T. XXVII, 2, XXVIII, 1-4).

IV Pendants and beads in the shape of a lunule, amphora, bird, insect and human mask

Besides ivy-leaf-shaped pendants, the appearance of pendants and beads made in different forms have been well confirmed among the pre-Roman and Roman finds jewellery in the Central Balkans. Pendants of the lunule type or crescent-shaped pendants are known from the Hellenistic period, when they were especially widely distributed in southern Italy and on the Black Sea coast, from where they were very quickly distributed into the Danube Valley (Beccatti 1955, T. CXLVII, 322; Marshall 1911 (1969), no. 2921-2922; Popović 1996: 41-42, 137-138). Nevertheless, the combi-

nation of the lunule and ivy leaf pendants on the same piece of adornment is not common among the silver jewellery from the Balkan-Pannonian region; both of these types of pendants were frequently hung separately on different silver chains. On one silver chain from the National Museum in Belgrade (Popović 1994b: 247, cat. no. 132) and a torque from grave no. 722 at the *Vimancium* necropolis (Zotović 1995: 157-158, Abb. 17, 18), both dated at the end of the 2nd - beginning of the 3rd century, pendants of a lunula and ivy-leaf shape were hung on the same piece of jewellery, but separately. The necklace-chain from the Mačvanska Mitrovica (?) hoard (fig. 8a), deposited in the period after 81/82 AD, seems to be unique by its size, decoration of the clasps and the form of pendants shaped as lunulae in combination with the rhomboidal ivy-leaf (Guštin, Popović 2017: 60, fig. 6, 1), but these forms are not known in pre-Roman jewellery in the Balkan-Pannonian region. In the same find, a simple pendant of the lunula type also appeared (Popović, Guštin 2017: 64, fig. 8, 2) (fig. 8b). Different types of lunula pendants were hung on the five gilded silver belt pendants from the Tekija hoard (Manozišić 1957: 24-26, 85-87, Pl. XIV, XV), also deposited in the period after 81/82 AD, and on the specimen from the site of Hunedoare-Sânpetru in Transilvania (Sirbu et al. 2007, fig. 18. 1). In the Balkan-Pannonian region, silver lunula shaped pendants hung on chains are sometimes found together with other specimens of jewellery of an autochthonous style, as with the specimens from Arčar (*Ratiaria*) and Szalacska, dated to the end of the 2nd or the first half - middle of the 3rd century (Велковъ 1933: 407, обр. 159-162; Járdányi-Paulovics 1953, T. XXVII, 2; Popović 2011: 184, fig. 11, 2). The gold lunula pendants, such as the specimens from the necropolis at the site

of Guberevac (Popović 1996b, cat. 130-131) and the gold chains with the lunula-shaped pendants, such as the specimen from Dubravica (*Margum*) (Popović 1996b, cat. 102) (fig 8c), show that gold lunula-shaped ornaments are less frequent among the finds from this period. The use of lunula pendants hung on a chain during the Tetrarchic period is testified by one gold specimen (fig. 8d) from a set of gold jewellery found in the crypt of the mausoleum in the Tetrarchic imperial complex at

Šarkamen, eastern Serbia (Popović 2005: 60-62, cat. 3, fig. 44, Pl. II).

Pendants in the shape of amphorae appeared in the Hellenic cultural circle in the 7th –6th centuries BC at the sites in Agora and Chalcidic (Amandry 1953, no. 45, 84-94). Later, in the Hellenistic period, they were widespread in the whole Mediterranean basin as beads or pendants on necklaces or earrings. The same custom is also noted among the material from the Židovar treasure, deposited



Fig. 8. Lunula-shaped pendants: a) Mačvanska Mitrovica(?), necklace-chain and pendants in the form of lunula in combination with an ivy-leaf, after 81/82 AD; b) Mačvanska Mitrovica(?), lunula shaped pendant; c) Dubravica (*Margum*), gold chain with lunula-shaped pendant, 2nd – 3rd century AD, d) Šarkamen, gold chain with lunula-shaped pendant, first decades of the 4th century AD.

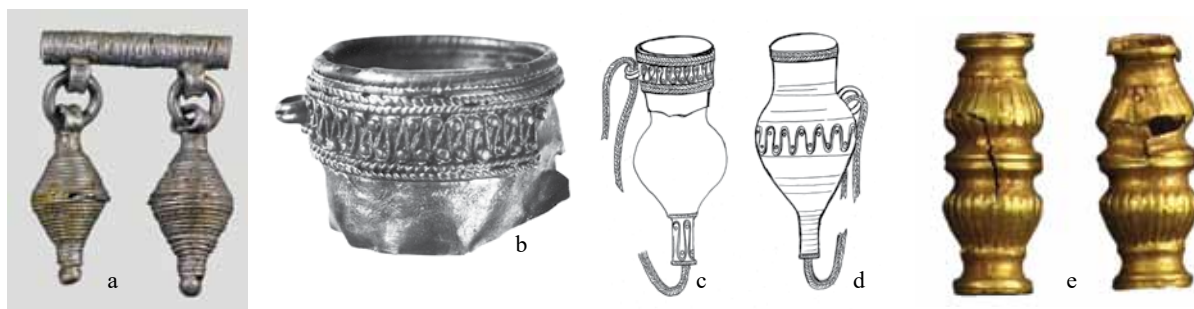


Fig. 9. Pendants made in the form of a miniature vase: a) Židovar, amphora-shaped pendants, the middle of the 1st century BC; b) Dvorska, a silver miniature vase on a chain, the middle of the 3rd century AD; c-d) miniature vases chains: Dvorska, Szalacska, reconstruction (drawing by A. Premk); e) gold beads in the form of miniature vases, Guberevac, 2nd-3rd century AD.

around the middle of the 1st century BC, which contained four silver *tubuli*, parts of a necklace, each with two pendants shaped in the form of an amphora decorated with filigree wire (Jevtić 2006: 139-140, fig. 83; Popović 2011: 186, fig. 13, 4) (fig. 9a). Concerning the early Roman Danube-Pannonian hoards of jewellery, this form of amphora-shaped beads or pendants is not known. However, as with the ends of the silver chains from the Szalacska (Darnay 1911, T. I) and Dvorska (Popović 1996a, fig. 16-17; Popović 2011: 187, fig. 17) hoards (fig. 9b-c), the manufacture of decorations in the form of miniature vessels, based on Hellenistic traditions, continued in the local workshops until the middle of the 3rd century AD. In the same period,

during the 2nd and the first decades of the 3rd century, beads in the forms of miniature vessels (fig. 9d), made of sheet gold, have been confirmed at the site of Guberevac, in the Kosmaj region of the Roman silver and lead mines (Popović 1996b, cat. 122-124). Specimens from Vinik near Niš (Jovanović 1978: 47-48, cat. 21, fig. 88), Karataš (*Diana*) (Popović 2001: 41, fig. 1), Ćirikovac near Smederevo (*Vinceia*) (Цуњак, Марковић-Николић 1997: 41-43, sl. 8), Arčar (*Ratiaria*) (Ruseva-Slokoska 1991: 279) and Silistra (*Durostorum*) (Mușețeanu 1982: 127, fig. 1, 8), show that local transformations of Hellenistic models of gold beads shaped in the form of *cantharos* were also produced sporadically in the Balkan workshops during the 3rd -4th centuries.



Fig 10. Pendants in the shape of birds: a) Židovar, the middle of the 1st century BC; b) Nova Božurna, earrings, 2nd - 3rd century AD.

Silver pendants and beads of different shapes are dominant ornaments in the Židovar treasure. Besides the already mentioned pendants in the form of an ivy-leaf and amphora, there are also pendants and beads in the shape of a bird (fig. 10a), insect (fig. 11a), human figure, human head and mask (fig. 12a) (Sladić 2006: 46-54, Fig. 31-47; Popović 2011: 186-187, fig. 13). Although such jewellery is not common among Balkan finds of decorations of an autochthonous style, some specimens of Roman jewellery from this region deserve closer attention. Namely, pendants in the shape of birds and insects, from Greece and the East Mediterranean, in the Hellenistic period became a frequently represented form of decoration on earrings, necklaces and other adornments. This applies, above all, to pendants in the form of different kinds of birds, such as the miniature figurines from sites in northern Greece, from the 8th -7th centuries BC (Deppert-Lippitz 1996, no. 23), and, especially, the luxuriously executed pendants of the Hellenistic earrings from the 2nd century BC (Deppert-Lippitz 1996, no. 67). The simplified



Fig. 11. Pendants and beads in the shape of insects: a) Židovar, the middle of the 1st century BC; b) Nova Božurna, necklace, 2nd-3rd century AD; c) Juhor, a silver diadem with a gold application, the first half of the 3rd century AD.

variant of this jewellery, gold earrings from Nova Božurna near Prokuplje (Jovanović 1978: 81, cat. 1, fig. 158), with an impressed motif of a stylised bird on pendants (fig. 10b), reflects the tradition of reproducing this motif, which survived in the region of Central Serbia until the 1st-3rd centuries AD. This same find also includes a gold necklace composed of 22 pendants in the shape of a stylised bee (Jovanović 1978: 81-82, cat. 4, fig. 160) (fig. 11b). This find could be considered a part of the inventory of some cult place or sacred treasure. The same conclusions apply to a find from Juhor, containing a ribbon diadem decorated with punched ornament, a running zig-zag line touching the edges with dots, circles with dots in the centre as well as with punched lines joined by dots, and schematised representations of bees (fig 11c). The bee had a very important symbolic role in the Ionian world, transferring religious traditions from the pre-Hellenistic period, from Asia Minor and Crete, where, as in Egypt, it was a symbol of royal power. As a

substitute for the human spirit, it played an important part in rituals of the divinisation of the dead, as the guardian of his power (Popović V. 1964: 40). After the establishment of the Ionian colonies, such beliefs spread to the Black Sea coast, whereby a gold bee-shaped pendant also appears in the Scythian finds (Minns 1913: 427, fig. 318). In the Balkan hinterland, bee-shaped applications have been registered in princely graves, dated to the 5th century BC, in Atenica near Čačak (Đuknić, Jovanović 1965, T. XV, 5-7; XIX, 6, 7). This motif also retained its symbolic meaning among the local population in the first centuries of Roman domination.

Motifs of crickets and scarabs, noted on pendants from the Židovar treasure (Popović 2011: 184, fig. 13, 1), as well as very stylised human heads or masks (Popović 2011: 184, fig. 13, 3), also appear on pendants-amulets from Juhor (Popović 2002, cat. 17-18) (fig. 2a; 12c). The material from Juhor also shows certain similarities with objects from the hoards of silver jewellery in Oltenia (Popović 2002: 66-70, 109-112). The representations of beetles or stylised human masks can also be found on the cylindrical silver panelling from the Bare hoard (Popović 1994, cat. 16-17, fig. 12, Pl. XIII; Popović 2011: 187, fig. 16) (fig. 12b), connected to the last phase of the so-called Dacian hoards of silver objects. Should we treat these representations as a continuation of the Hellenistic goldsmith's tradition, in whose preservation and enrichment maybe Celts played an important role?

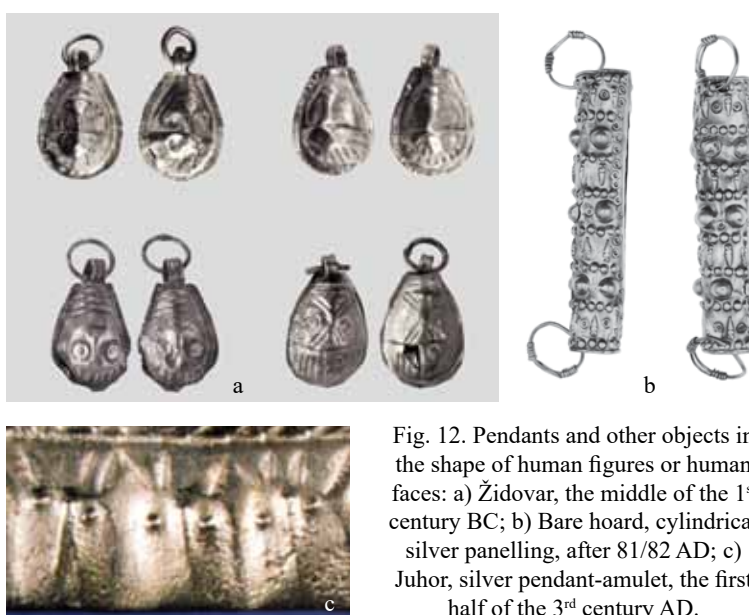


Fig. 12. Pendants and other objects in the shape of human figures or human faces: a) Židovar, the middle of the 1st century BC; b) Bare hoard, cylindrical silver panelling, after 81/82 AD; c) Juhor, silver pendant-amulet, the first half of the 3rd century AD.

V Miniature and double axes

Small axe pendants are known from Celtic graves dated to the Late Iron Age period (*Artefacts AML-3003*) and also from the Roman world (Martin-Kilcher 2008: 228, Abb. 10.2). Later they had a strong protective meaning and were added to various jewellery items, especially rings with overlapped and spirally twisted ends (earrings, bracelets, chains) and even on *tubuli*. These types of amulets made of silver, bronze, iron and even ceramic, were popular in the second half of the 1st century BC on both sides of the Carpathian mountains and widespread in the 1st century AD (Rustoiu 1996: 124, tipul 4b, fig. 90; Spanu 2012: 69; Tonkova 2011: 192-193, fig. 5.1; Ruseva-Slokoska 1991: 25, 131, cat. no. 7).

among the grave finds. We can follow their distribution on both sides of the Carpathians and in the wide Lower Danube, far to the north, to the confluence of the Sava river. Nevertheless, several silver rings with axe pendants were found far to the west in the hinterland of Kvarner Bay, Istria (Guštin, Popović 2017: 66-69, fig. 10). The long duration of this type of amulet is well documented in the hoard from Recaş (Horedt 1973: 137). The practice to attach tool amulets (axes, wedges, pins, spades, bars, etc.), i.e., on rings with overlapped and spirally coiled ends, was also represented in the jewellery of the Migration period (Kiss 1972: 120, 121, T. I, 3).

Concerning pendants in the shape of a double axe - *labrys*, the situation is completely different. A pendant in the form of a double axe was suspended



Fig. 13. Pendants in the form of miniature axes: a) Tekija, silver bracelet, after 81/82 AD; b) Tekija, gold ring, after 81/82 AD; c) Mačvanska Mitrovica, silver rings, after 81/82 AD.

In the group of Tekija – Bare hoards horizon, a discussion about the presence of axe amulets attached to bracelets and rings is obligatory. In the Tekija hoard, the richest of this period, an axe pendant was attached with other miniature tools on a large silver bracelet made of wire with a rectangular cross-section, with overlapped and spirally twisted ends (fig. 13a). Another, smaller, similarly manufactured axe pendant made of filigree wire (fig. 13b) was fixed on a gold ring in the space between the spiral coils. (Mano-Zisi 1957: 13-14, 15-16, 72, 74, Pl. III, 7, VI, VII). The exceptional use of gold and filigree techniques shows the strong tradition of Hellenistic Black Sea goldsmiths and the influence of the metalwork style of this period on objects made in later workshops. In the Mačvanska Mitrovica (?) hoard, four silver pendants in the form of miniature axes were hung separately on rings (fig. 13c) and three were hung on *tubuli* (Guštin Popović 2017: 63-64, figs. 4, 7, 2-5, 8, 1). In this period, axe pendants were present in the settlements, in the hoards and

by an open-ended torque of plain silver wire, originating from the Juhor find (fig. 14). The pendant is profiled at the joint of the two blades, while at its lateral edge there is a wide flat bronze suspension loop attached by rivets (Popović 2002, cat. 3). Pendants of a double axe shape (*labrys*) were not, as far as we know, used as amulets on Roman torques. However, the *labrys* is an important and ancient religious symbol especially frequent in the Minoan and Mycenaean cultures. It was a double-headed axe with a shaft-hole in the middle and was made of various materials



Fig. 14. Double axe-shaped pendants: Juhor, silver torques, the first half of the 3rd century AD.

and in different sizes. As votive offerings, *labryses* were deposited on Crete in graves and shrines or placed on columns and Horns of Consecration, while miniature specimens were used as magic objects related to rain and agrarian cults. The *labrys* also retained a significant role in religion during subsequent periods and in the Roman times as an attribute of Jupiter Dolichenus and other deities (Hatto 1969, col. 431-432.; Cermanović-Kuzmanović, Srejšević 1992: 115). In the Balkan hinterland, the custom of depositing a *labrys* in the grave has been recorded for the 6th-5th century BC, in a tumulus necropolis at Romaja near Prizren (Tasić 1998: 196), but no jewellery shaped as a *labrys* has been noted in this region. However, in the 6th century BC, in a grave in Sidonis near Thessalonike, a luxurious gold necklace, decorated with filigree and granulation, composed of many segments, among which four were shaped as *labryses*, was discovered (*Greek Jewellery* 1997, 83, cat. 61). This indicates that within the Hellenic cultural circle, miniature *labryses* preserved the function of magic objects, used in jewellery production as elements of a protective character for a relatively long time, probably to the end of Hellenism. The pendant of a *labrys* shape on the silver torque found at Juhor was made of thin silver sheet and decorated in the middle and along the edges with tiny incisions, depicting a fishbone motif. This motif was very popular with Dacian goldsmiths, where it was most often used as decoration on sheet silver shield-like pendants. These pendants, as well as pendants of a *labrys* shape, are characterised by the reduced linear style of their shape and decoration. Therefore, although pendants of a *labrys* shape are unknown types among Dacian jewellery, pendants of the Juhor torque could be based on the ornamental scheme related to the tradition of the Dacian goldsmiths, which is characterised by standardised linear ornaments. However, it has already been noted that in the formation of the so-called Dacian style in jewellery production, strong cultural influences from the Hellenic-Hellenistic world from the Black Sea coast, especially goldsmith centres in *Olbia*, played rather a significant role. In the same way, the *labrys* symbol could have been accepted as an amulet and, thus, via Dacian goldsmiths, also distributed outside the strictly Dacian territory. As the bronze suspension loop was subsequently attached to the lateral edge-blade of the axe on the

Juhor torque, we concluded that this object was originally used as the amulet and only later, preserving its function, was it used as a pendant on the torque.

VI Rings

A large group of jewellery consisted of silver wire rings of different sizes, with overlapped ends attached to the loop by spirally twisted coils. They were formed of wire with different cross-sections, mostly simple and round, sometimes very fragile. The luxury variant was made of large wire with a square cross-section. They were produced mostly of silver, but also bronze and rarely of gold. The overlapped ends were attached to the ring loop by twisted ends with a different number of coils. As jewellery, they are well known in the Late Hellenistic period and especially in the 1st century BC, with continuity in early Roman imperial contexts. This jewellery was popular along the Black Sea coast in the territory of the Dacians, but also well distributed by the tribe of Liburni (*Nin/Asseria*) in their hinterland, in necropolises in the Una river valley (Gorica, Jezerine, Ribić), to the east and the west from the north of the Italic peninsula and in the hinterland of Lion Bay, as far as the Iberian peninsula, then to the north of the Alps and even further to Northern Europe. The distribution of bracelets and different small rings with overlapped ends attached to the loop by spirally twisted coils is also traceable on numerous sites south of the Danube valley in today's Bulgaria and, on the other side, towards Pannonia and the Middle Danube, and in the territory of Western Balkans, mostly in the early Roman Empire context of the 1st half of the 1st century AD. The hoards at Bare, Tekija and Mačvanska Mitrovica (?) show the popularity of these rings at the end of the 2nd century AD (Guštin, Popović 2017: 59-60, 63). This was an enduring style of ring and it is possible to trace it even to the Migration period. Other types of rings are not common among the pre-Roman and the early Roman Central Balkan finds of adornments, although some specimens from this region deserve our attention.

A small bronze ring from the Židovar hoard (fig. 15a), dated to the first half of the 1st century BC, was kept in a luxurious silver box (Sladić

2006: 56, fig. 51; Popović 2011: 179-181, fig. 4, 1). This ring has its closest parallels in a gold ring from the hoard in Tekija (*Transdierna*) on the Danube (Mano-Zisi 1957: 13, 71, no. 5, Pl. III, 5; Popović 1992, cat. 2; Popović 2011, fig. 4, 2), deposited after 81/2 (fig. 15b). The form of the bronze ring from Židovar and of the gold one from Tekija has an ellipsoid loop, gradually widening and thickening towards the ellipsoid, flat head of the ring. However, the ring from the Židovar hoard has a developed ornament on the head, whereas on the specimen from Tekija it is represented only by a palm leaf. On the specimen from Židovar the palm leaf is above a stylised human figure, under which there is a dolphin. The standing, probably male, figure, has long hair, which falls on his shoulders, secured in two braids, while his arms are held close to his body. Such an ornamental scheme suggests a representation of Apollo, the deity whose sacred animal was the dolphin (Srejšović, Cermanović-Kuzmanović 1979: 40), and who is often represented with long hair, with long curls or braids down the neck. On the other hand, the palm leaf is a symbol not only of Apollo but also of his twin sister Artemis, to whom Leto gave birth by embracing a palm tree with her arms (Srejšović, Cermanović-Kuzmanović 1979: 38, 55). Consequently, the ring from Židovar contains symbols of the solar cult, whose elements can be noticed in this part of Banat on Bronze Age terracottas, to which belong the so-called Votive Cart from Vršac and, especially, the famous Votive Cart from Dupljaja, which, according to the interpretation of some authors, allude to the Hyperborean myth of Apollo (Јовановић 2007: 9-13 with quoted literature). On the ring from Židovar, Apollo and his sacred animal and plant are probably represented, which is also the iconographic scheme represented on the specimen from Tekija, in a reduced form. At the same time, the ornament on the ring from Židovar explains the meaning of the motifs on the ring mentioned above, and also on another one (fig. 15c), a double ring from Tekija (Mano-Zisi 1957: 13, 71-72, no. 6, Pl. III, 6; Popović 1992, cat. 3; Popović 2011, fig. 4, 3). These motifs were, until now, regarded as simple decorations, such

as a palm tree or a spike. The relative geographical proximity of Židovar and Tekija supported the thesis that these rings are connected. Rings of this type are dated approximately into the 1st century AD (Henkel 1913, Nr. 63, 107; Deppert-Lippitz 1985, Nr. 129, 127); among the Italic finds they are represented since the early imperial period, and on their flattened heads there are the representations of birds, sea-shells, comic masks and other motifs (Seipel 1996, Kat. 93, 161, 162). The specimens from Tekija were made, given the range of time in which the hoard was deposited, probably in the middle of the 1st century. Another ring from Tekija gives the testimony to the use of a motif of a palm leaf. The palm leaf is engraved on an ellipsoid gilt plate inserted on top of the large silver ring, dated to the 2nd – 3rd centuries AD (Popović 1992, cat. 79). Above the



Fig 15. Rings: a) Židovar, the middle of the 1st century BC; b) Tekija (*Transdierna*), after 81/82 AD; c) Tekija (*Transdierna*), after 81/82 AD, Tekija (*Transdierna*), 2nd–3rd century AD.

palm leaf, a Greek inscription *EYTYXI*, was engraved. This acclamation, expressing a wish for happiness or good fortune, was very popular in the Roman period, and placed on many different objects. Consequently, the iconographic scheme representing Apollo with his sacred animal and plant (Židovar treasure, the middle of the 1st century BC) appears in a reduced form of a single palm-leaf motif (Tekija hoard, after 81/82 AD), whose symbolic meaning was later transformed through the accompaniment of a wish for happiness or good fortune (Tekija accidental find, 2nd – 3rd century AD).

A short review of some of the characteristic jewellery types from the pre-Roman and Roman

Central Balkan finds shows that some of the forms kept the same shape throughout centuries, but others, supporting the original matrix, changed their appearance, technique of manufacture and original symbolic meaning. Several directions of these processes can be registered.

A good example of an adornment retaining the same appearance and symbolic meaning during the pre-Roman and Roman times is a lunula-shaped pendant. These kinds of pendants always had some protective role. They are made of silver, gold, bronze or other materials. The ends of the crescent can be separated or touching each other, and the upper side of the pendant can be plain or decorated with granulation, but their shape and function did not significantly change from the Hellenistic period to the later Roman times (fig. 8).

Other types of pendants show a different picture. Ivy-leaf shaped pendants, registered in the Židovar treasure, deposited during the middle of the 1st century BC, were made by embossing on a die and the additional connecting of the front and back side, rendering a three-dimensional quality. Different appearances and techniques of manufacture could be noticed in the early Roman ivy leaf-shaped pendants, which were stamped flat. According to the finds of silver jewellery from Balkan and Pannonian hoards from the 1st - 3rd centuries and representations on the tombstones in the Drina Valley, these pendants were hung on the chain that connected fibulae, and on the chains hanging on fibulae placed on the shoulders. This combination of fibulae and chains with the pendants in the form of an ivy leaf is characteristic of the Drina Valley, Pannonia and Oltenia (figs. 5-6). The relation of the silver fibulae with the silver chains twisted based on the "loop in loop" system in south-western Serbia was registered in the Late Archaic period on jewellery from Kruševica. However, in the early Roman period, the pectoral ornament composed of silver chains and ivy leaf-shaped pendants was characteristic of women's decoration in the Drina Valley, Pannonia and Oltenia. The question arises as to where this mode of wearing decoration among the inhabitants of different entities, living at the same time in relatively distant regions, originates. The answer could be the hypothesis, which

has already been set forth, that the upper part of the Drina Valley in the pre-Roman period was inhabited by the *Breuci*, skilled in mining and metallurgy, who, during the period of the hegemony of the *Scordisci*, exploited the mines around Krupanj and Srebrenica (Јовановић 1995: 111-115). The skilfulness of the *Breuci* as miners is confirmed by the epigraphic material from the mining zones in Dacia, where they worked on the extraction of metal ores and metal processing (Јовановић 1995: 112), which could also explain the appearance of the silver anchor-fibulae, twisted chains and pendants in the form of an ivy-leaf at many sites in Oltenia. If we accept this hypothesis, it would mean that the *Scordisci*, for whom the *Breuci* were extracting silver ore in the Drina Valley, took over from them the custom of wearing twisted chains and pendants in an ivy-leaf shape. Because of their conservatism and low intensity of Romanisation, the *Scordisci* continued to practice this fashion in women's costumes until the middle of the 3rd century, not only in its central region but also in Oltenia, where certain parts of this tribe had migrated. However, after the middle of the 3rd century AD, the custom of pectoral ornaments with chains and ivy-leaf pendants in women's costumes had disappeared in the Balkans.

Regarding necklaces composed of large metal segmented beads, the situation is similar. Originating from the Late Archaic period (the Kruševica find), the transformed type of this jewellery was sporadically represented in the early Roman time (Bela Reka hoard) (fig. 3). Some of the other types of pendants, such as those shaped as lunulae, amphorae, birds, insects and human masks, originated from the Hellenic cultural circle and had appeared in the Central Balkan finds in the Archaic period (a princely grave in Atenica). However, all of these forms are represented in the Židovar treasure, dated to the middle of the 1st century BC. These motifs were in use in some parts of today's Central Serbia (Nova Božurna, Juhor and Bare) until the middle of the 3rd century AD (figs. 10-12), albeit in stylised forms. Only beads shaped as miniature vessels, silver specimens used during the 2nd - 3rd century AD on silver chain ends (Dvorska, Szalacska), or gold ones as the beads for necklaces (fig. 9), were continuously produced in the late Roman period, mostly as kantharos-shaped beads fixed on hair-pin tops, often used in sites

along the Middle and Lower Danube. The silver miniature vessels from the 2nd – 3rd century AD were decorated with filigree and granulation, and the *tubuli* of the silver chain ends were produced at the same time. The custom of the decoration of silver *tubuli* using filigree and granulation was noted on pieces from the Židovar find, dating to the middle of the 1st century BC (fig. 7). However, the most expressive piece of jewellery ornamented by the filigree and granulation technique is the clasp of a necklace from the Bela Reka hoard, deposited during the last years of the 2nd century AD. The result of a combination of fine toreutic techniques with black glass inlays, it is an extraordinary example of early Roman jewellery, manufactured using the best Hellenistic traditions. The clasp was fixed on a necklace composed of large segmented silver beads, originating from Late Archaic pieces of jewellery (fig 3).

When observing the types of miniature pendants in the shape of an axe and double axe, the *labrys*, the situation of their origin and representation is different. The small axe pendants had strong protective meanings when added to various jewellery items. This type of amulet was popular in the second half of the 1st century BC on both sides of the Carpathian mountains and widespread in the 1st century AD. In hoards of silver jewellery deposited after 81/82 AD (Tekija, Bare and Mačvanska Mitrovica (?)) the presence of the axe amulet on bracelets and rings was obligatory (fig. 13). In this period, axe pendants are also present in settlements and graves. We can trace them on both sides of the Carpathian and in the wider area of the Lower Danube to the confluence of the Sava river, but some of them were found far to the west in the hinterland of Kvarner Bay. The long duration of this type of amulet is documented by pieces dated to the Migration period. On the other hand, the pendants of the double axe shape (*labrys*) were not, as far as we know, used as amulets in Roman jewellery. However, the *labrys* is an important and ancient religious symbol especially frequent in the Minoan and then Mycenaean culture. The *labrys* also retained a significant role in religion during subsequent periods, and in Roman times it was considered an attribute of Jupiter Dolichenus and other deities. On one open-ended torque of plain silver wire from the Juhor find the pendant in the form of a double axe was suspended (fig. 14). This

pendant was decorated by incisions depicting a fishbone motif, very popular in Dacian goldsmithing. Maybe the appearance of the *labrys*-shaped pendant was as a result of the strong cultural influences from the Hellenic and Hellenistic centres on the Black Sea coast, especially goldsmith workshops in Olbia, on Dacian toreutics.

The evolution of two jewellery groups is especially interesting.

The first group, radial diadems, was worn by the solar goddesses in the pre-Roman and early Roman period (finds from Mačvanska Mitrovica (?), Juhor and Smederevo). Later, these adornments developed in two different directions.

The first is a radial crown (*corona radiata*), the insignia of Roman emperors, but first worn by the sun god, Sol, a very important divinity from the first half of the 3rd century, i.e., during the time of the religious syncretism when cults of a solar character became widespread. In this atmosphere, even the supreme god, Jupiter, was sometimes represented with a laurel wreath resembling a radial crown, as on one bronze statuette of this god, found in the village of Planinica near Zaječar, eastern Serbia (Јаловић 1974: 163-164, Т. I; Јовановић 2007: 189-191, сл. 26. 1).

The second direction of the radial diadem's evolution is the town crown (*corona muralis*), worn by city goddesses (figs. 1-2), very popular personifications during the late Roman period.

The second group of jewellery, whose evolution can be traced, comprises rings with symbols of the Apollo cult depicted on the tops of their heads. The earliest specimen, a bronze ring from the Židovar treasure (the middle of the 1st century BC), renders a developed ornament containing the figure of Apollo with his sacred animal and plant, the dolphin and the palm leaf. Two gold rings from the Tekija hoard, deposited after 81/82 AD, have only a palm leaf represented on their heads, symbolising Apollo. On the head of the latest ring from Tekija, an accidental find dated to the 2nd – 3rd centuries AD, above a palm leaf, a Greek inscription EYTYXI, was engraved (fig. 15). This acclamation, expressing a wish for happiness or good fortune, was very popular in the Roman period.

The mentioned rings from Židovar and Tekija are good examples of the transformation of messages engraved on the head of these rings, primarily by the appearance of the simplified symbol-

ism, and later by their use for profane purposes. The chronological difference between the jewellery from the Židovar treasure and the Tekija hoard can explain the presence of the reduced ornament on the rings from Tekija, visible in its full form on the specimen from Židovar. On the other hand, this would point to this ring having been placed into a box just before the deposition of the hoard, i.e., that it is one of the latest objects in the treasure, made around the middle of the 1st century BC. Although a hundred years is not a short chronological period, our opinion is that this simple form of ring, created under the influences of a Roman goldsmith, could have remained in use during this period. The cultic content of the visual presentations on these rings probably depicts the beliefs of the local population, created through the long-lasting contacts with the Hellenic world. However, this jewellery does not render any facts on the ethnic affiliation of its owners. This population, although in some religious aspects connected to the Hellenic and Hellenistic culture, was indirectly in touch with the Roman civilisation's heritage during the last decades of the 1st century BC. The composition engraved on the head of the latest ring from Tekija, the acclamation expressing the wish for happiness or good fortune accompanied by a palm leaf, shows that the influence of Roman culture became stronger in the Iron Gate region during the 2nd – 3rd centuries AD.

Numerous individual finds and hoards with silver jewellery from the early Roman period testify to the important role in local manufacture in the whole Balkan-Danubian area that was played by the autochthonous component, resulting from the tradition of the La Tène culture, expressing in its manifestation numerous generally adopted elements, common to the Illyrian, Dacian, Thracian and Celtic substrate. The presence of Hellenistic elements on jewellery from the Roman period had been the expression of older contacts of this territory with the Hellenic world, which had already been intensive since the Archaic period. At this time, the penetration of cultural influences into the interior of the Balkans followed two main directions.

The road leading across the western parts of the North Macedonia and Kosovo region and then, by the valleys of the Ibar and Drina rivers, to south Pannonia is testified by the inventory of the princely graves at Trebenište, Radolište, Pečka

Banja, Novi Pazar, Kruševica, Atenica and of the assemblage of some later graves at Jarak in Srem. The other direction, running by the Vardar and Morava valleys, representing the direct communication between the Hellenic world and the Balkan hinterland, was confirmed by the decoration of large silver belts of the Mramorac type (Palavestra 1995: 35-56). During the last centuries BC, the strong cultural influences from the Hellenic and Hellenistic world from the Black Sea coast, especially goldsmith centres in *Olbia*, played a somewhat significant role in the manufacturing of local pieces of adornments. Nevertheless, the later replicas of the Hellenistic models, made by local craftsmen, show some divergence from classical forms, although the filigree and granulation techniques were well-known and had been mastered. However, the reproduction of previous Hellenistic models continued on jewellery from the Balkan-Danubian area until the middle of the 3rd century AD. Various influences resulted in the establishment of a specific style in metalwork and manufacture of jewellery in this region, the originality of which was just in the reproduction of Hellenistic models transformed through a symbiosis with autochthonous forms, out of which many had appeared as a result of previous contacts with the Hellenic world.

Bibliography

Abbreviations

Artefacts AML – *Artefacts. Encyclopédie collaborative en ligne des objets archéologiques*

(artefacts.mom.fr/en/results.php?page=code&find=AML)

RIC V – P. H. Weeb, *The Roman Imperial Coinage*, Vol. V, eds. H. Mattingly, E. A. Sydenham, London 1968.

RIC VI – C.H.V. Sutherland, From Diocletian's reform (A.D. 294) to the death of Maximinus (A.D. 313), *The Roman Imperial Coinage* Vol. VI, ed. C.H.V. Sutherland, R.A.G. Carson, London 1967.

Amandry, P., 1953. *Collection Hélène Stathatos*. Strasbourg: Strasbourg Institution Archéologie de l'Univ

Beccatti, G., 1955. *Oreficerie antiche dalle minoiche alle barbariche*. Roma: Libreria dello Stato

Borić-Brešković, B., 1994. Roman Republican and Imperial Denarii in the Bare Hoard, in *The Bare Hoard*. (Eds.) I. Popović, and B. Borić-Brešković, Belgrade: National museum, 105–198.

Цермановић-Кузмановић, А., 1995. Предмети и накит од сребра из Коловрата (Summary: A. Cermanović-Kuzmanović, Silver Objects and Jewellery from Kolovrat), у *Радионице и ковнице сребра (Silver Workshops and Mints)*. (Ур.) И. Поповић, Т. Цвјетићанин и Б. Борић-Брешковић, Београд: Народни музеј, 227–231.

Цермановић-Кузмановић, А. и Срејовић Д., 1992. *Leksikon religija i mitova drevne Evrope*. Beograd: Savremena administracija

Crîșan, I.H., 1959. Le trésor d'Ațel et ses relations balkano-danubiennes. *Dacia*, 3, 353–367.

Џуњак, М. и Марковић-Николић Љ., 1997. *Античке и средњовековне некрополе Смедерева*. Смедерево: Музеј у Смедереву

Darnay, K., 1911. Ujabb leletek a Szalacsikai barbár kelta pénzverő- és öntóműhely területén. *Archaeologiai Ertesítő*, 31, 311–328.

Deppert-Lippitz, B., 1985. *Goldschmuck der Römerzeit im Römisch-Germanischen Zentralmuseum*. Bonn: Habelt

Deppert-Lippitz, B., 1996. Late Roman splendor: jewelry from the age of Constantine. *Cleveland Studies in the History of Art*, 1, 30–71.

Ђукнић, Јовановић, М and Јовановић В., 1965. Illyrian Princely Necropolis at Atenica. *Archaeologia Jugoslavica*, 6, 1–35.

Greek Jewellery 1997. *Greek Jewellery: 6,000 Years of Tradition*. Athens: Archaeological Receipts Fund

Guštin, M. and Popović I., 2017. Early Roman silver hoard from Mačvanska Mitrovica (?). Contribution to the precious silver metalworking cultural koiné. *Starinar*, 67, 53–74.

Hatto, W., 1969. Labrys, in *Der Kleine Pauly Lexikon der Antike*, 3. (Eds.) K. Ziegler and W. Sontheimer, Stuttgart: Alfred Druckenmuller

Henkel, F., 1913. *Die römischen Fingerringe der Rheinlande und benachbarten Gebiete*. Berlin: Georg Reimer

Horedt, K., 1973. Die dakischen Silberfunde. *Dacia*, 17, 127–167.

Járdányi-Paulovics, S., 1953. Szalacska, ein Zentrum des Metallschmiedegewerbes in Kapostal unter der Römern. *Archaeologiai Ertesítő*, 80, 115–129.

Jevtić, M., 2006. Character of Finds and Chronology, in *The Židovar Treasure. Silver Jewellery Hoard from the Settlement of Scordisci*. (Eds.) M. Jevtić, M. Lazić, and M. Sladić, Vršac and Beograd: Gradski muzej, Filozofski fakultet Beograd, 82–166.

Jovanović, A., 1978. *Nakit u rimskoj Dardaniji*. Beograd: Savez arheoloških društava Jugoslavije

Јовановић, А., 1995. Прилог истраживању експлоатације сребра код Бреука, у *Радионице и ковнице сребра*. (Ур.) И. Поповић, Т. Цвјетићанин и Б. Борић-Брешковић, Београд: Народни музеј, 111–115.

Јовановић, А., 2007. *Огледи из античког култа и иконографије*. Београд: Филозофски факултет, Центар за археолошка истраживања

Kiss, A., 1972. Unpublished Finds from the Vth century originated from Transdanubia in the British Museum and Janus Pannonius Museum of Pécs. *A Janus Pannonius museum évkönyve, 14-15*, 119–123.

Лаловић, А., 1974. Три бронзане статуете из збирке Народног музеја у Зајечару. *Starinar*, 22, 163–165.

Lazić, M., 2006. The treasure of Židovar Hoard within Late Iron Age Settlement, in *The Židovar Treasure. Silver Jewellery Hoard from the Settlement of Scordisci*. (Eds.) M. Jevtić, M. Lazić, and M. Sladić, Vršac and Beograd: Gradski muzej, Filozofski fakultet Beograd, 14–28.

Mano-Zisi, Đ., 1957. *Les trouvailles de Tekiya = Nalaz iz Tekije*. Beograd: Narodni muzej

Marshall, F.H., 1911 (1969). *Catalogue of the Jewellery, Greek, Etruscan and Roman in the Departments of Antiquities, British Museum*. London: Printed by order of the Trustees

Martin-Kilcher, S., 2008. Der Godschmuck und Münzen; Die Schmuckstücke Formen-Datierung-Herkunft; Schmuckhorte und andere Deponierungen von Wertsachen; Schmuck als Zeichen gesellschaftlicher und kultureller Identität; Der Schmuckhort von Lunnern und andere Depots von Wertsachen; Schlaglichter auf die Geschichte des Reusstals im 3. Jahrhundert, in *Der römische Goldschmuck aus Lunnern (ZH)*. (Eds.) S. Martin-Kilcher, H. Amrein and B. Horisberger, Zurich: Chronos Verlag/Schweizerische Landesmuseen, 33–146, 201–204, 227–235.

Minns, E.H., 1913. *Scythians and Greeks*. Cambridge: Cambridge University Press

Mirković, M., 1971. Sirmium – its history from the 1st Century A.D. to 582 A. D., in *Sirmium I*. (Ed.) V. Popović, Belgrade: Institute of Archaeology, 5–94.

Mușețeanu, C., 1992. Bijuteriile romane de la Durostorum. *Studii și Cercetări de Istorie Veche și Arheologie*, 33(1), 125–130.

Palavestra, A., 1994. Prehistoric Trade and Cultural Model for Princely Tombs in the Central Balkans, in *Europe in the First Millennium B.C.* (Eds.) K. Kristiansen and J. Jensen, Sheffield: J.R. Collis Publication, 45–57.

Patsch, C., 1912. Archäologisch-epigraphische Untersuchungen zur Geschichte der römischen Provinz Dalmatien. *Wissenschaftliche Mitteilungen aus Bosnien und der Herzegovina*, 12, 68–167.

Popilian, G., 1998. Câteva considerații cu privire la tezaurul de la Vârtop, Jud. Dolj. *Arhivele Olteniei*, 13, 43–70.

Popović, I., 1992. *Les bijoux romains du Musée national de Beograd. I Les bagues*. Belgrade: Narodni muzej

Popović, I., 1994a. The Archaeological Aspect of the Bela Reka Hoard, in *The Bela Reka Hoard* (Eds.) I. Popović and B. Borić-Brešković, Belgrade: National museum, 11–76.

A Step into the Past: Approaches to Identity, Communications and Material culture in South-Eastern European Archaeology

- Popović, I. (Ed.), 1994b.** *Antique Silver from Serbia*. Beograd: National museum
- Popović, I., 1994c.** The Archaeological Aspect of the Bare Hoard, in *The Bare Hoard*. (Eds.) I. Popović and B. Borić-Brešković, Belgrade: National museum, 11–76.
- Popović, I., 1996a.** Certain Traits of the Roman Silver Jewellery Manufacture in the Central Balkans. *Starinar*, 47, 139–154.
- Popović, I., 1996b.** *Les bijoux romains du Musée national de Beograd. II Les bijoux d'or* (Антика VI/2). Belgrade: National museum
- Popović, I., 1997.** Miscellanea argentea. *Starinar*, 48, 73–90.
- Popović, I., 2001.** Bijoux en or et en argent de IIe-IIIe siècle de la partie serbe du Bassin danubien, in *Die Archäologie und Geschichte der Region des Eisernen Tores zwischen 106-275 n. Chr.* (Kolloquium in Drobeta-Turnu Severin, 1.-4. Oktober 2000). (Ed.) M. Zahariade, București: Institutul Român de Tracologie, 41–58.
- Popović, I., 2002.** *Jewellery from Juhor - Hoard or Sacred Treasure*. Belgrade: National museum and Institute of archaeology
- Popović, I., 2005.** The Find of the Crypt of the Mausoleum: Golden Jewellery and Votive Plaques, in *Šarkamen (Eastern Serbia): A Tetrarchic Imperial Palace. The Memorial Complex*. (Ed.) I. Popović, Belgrade: Archaeological Institute, 59–82.
- Popović, I., 2011.** Židovar Treasure and Roman Jewellery from Balkan Provinces of the Empire, in *The Eastern Celts. The Communities between the Alps and the Black Sea*. (Eds.) M. Guštin and M. Jevtić, Annales Mediterraneae, Koper-Beograd: Univerzitet u Beogradu, Filozofski fakultet i Univerza na Primorskem, Znanstveno-raziskovalno središče Koper, Založba Annales, 179–188.
- Popović, I., 2013.** Jewellery on the Representations of the Deceased Women on the Tombstones from Eastern Dalmatia, in *Funerary Sculpture of the Western Illyricum and Neighbouring Regions of the Roman Empire* (Proceedings of the International Scholarly Conference Held in Split from September 27th to the 30th 2009). (Eds.) N. Cambi and G. Koch, Split: Književni krug, 541–556.
- Popović, I., 2009.** Relief Decorated Handles of Ceramic Paterae from Sirmium, Singidunum and Viminacium. *Starinar*, 58, 119–134.
- Popović, Lj., 1956.** *Katalog nalaza iz nekropole kod Trebeništa*. Beograd: Narodni muzej
- Поповић, П., 1987.** Остата римских денара из Бољетина. *Нумизматичар*, 10, 5–23.
- Popović, V., 1964.** Les masques funéraires de la nécropole archaïque de Trebenište. *Archaeologia Iugoslavica*, 5, 33–44.
- Ruseva-Slokoska, Lj., 1991.** *Roman Jewellery. A Collection of the National Archaeological Museum-Sofia*. Sofia: Cromwell Ed.
- Rustoiu, A., 1996.** *Metalurgia bronzului la Daci (sec. II î. Chr. – sec. d. Chr.). Tehnici, atelierie și produse de bronz*. București: Institutul român de Tracologie
- Seipel, W., 1996.** *Die Magie des Goldes. Antike Schätze aus Italien*. Wien: Kunsthistorisches Museum Wien
- Sirbu, et al. 2007.** *Vestigiiile dacice de la Humedoara. Grădina Castelului: necropolă și /sau incintă sacră? Dealul Sânpetru: așezarea/ Sânpetru*. Sibiu: Muzeul Național Brukenthal
- Sladić, M., 2006.** Contents of the Hoard and Stylistic and Typological Analysis, in *The Židovar Treasure. Silver Jewellery Hoard from the Settlement of Scordisci*. (Eds.) M. Jevtić, M. Lazić and M. Sladić, Vršac i Beograd: Gradski muzej i Filozofski fakultet, 30–80.
- Spanu, D., 2012.** *Tezaurele dacice. Creația în metale prețioase din Dacie preromană*. București: Simetria
- Срејовић, Д. и Вукадин О. 1998.** Благо из Крушевице. *Рашка баштина*, 3, 7–14.
- Стојић, М., 1995.** Неколико предмета фигуралне уметности у сребру у басену Велике Мораве, у *Радионице и ковнице сребра*. (Ур.) И. Поповић, Т. Цвјетићанин и Б. Борић-Брешковић, Београд: Народни музеј, 77–82.
- Стојић, М., 2017.** *Трибали у археологији и историјским изворима*. Београд: HERAedu
- Tasić, N., 1998.** Katalog, u *Arheološko blago Kosova i Metohije od neolita do ranog srednjeg veka*. Beograd i Priština: SANU i Muzej Kosova i Metohije
- Tonkova, M., 2011.** The silver jewellery hoard from Chelyushnitsa in Thrace – a new perspective, in *The Eastern Celts. The Communities between Alps and Black Sea*. (Eds.) M. Guštin and M. Jevtić, Koper-Beograd: Annales Mediterraneae, 189–198.
- Велковъ, И., 1933.** Новооткрири старини. *Известия на Български археологически институтъ*, 7, 407.
- Zotović, Lj., 1995.** Glatte und tordierte Drahtalsringe aus den Nekropolen von Viminacium. *Starinar*, 45-46, 155–162.

Photographic credits

- City Museum of Vršac: figs. 4a, 6a, 7a, 9a, 10a, 11a, 12a and 15a
- Institute of Archaeology, Belgrade: figs. 1d-e, and 2b
- Institute for protection of the cultural monuments, Kraljevo: fig. 3a
- Museum of Krajina, Negotin: fig. 8d
- Museum of Srem, Sremska Mitrovica: fig. 6c
- National Museum in Belgrade: figs. 1b, 3b, 4c, 6b, 7b, 8c, 9b, 9e, 11c, 12c, 13a-b, 14 and 15b-d
- National Museum Niš: figs. 10b and 11b
- National Museum, Požarevac: fig. 12b
- Private collection: figs. 1a, 8a-b and 13c
- Regional Museum Jagodina: fig. 1c
- http://www.wildwinds.com/coins/ric/constantine/_rome_RIC_VI_0142.jpg: fig. 2a