

A GILDED ATTIRE SET FROM THE MUSEUM OF SREM – A CONTRIBUTION TO THE STUDY OF THE HUNGARIAN CONQUEST PERIOD IN THE SOUTHERNMOST AREA OF THE CARPATHIAN BASIN

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In this paper, part of a gilded attire set for decorating clothes is published, from the Museum of Srem, belonging to the Hungarian arts-and-crafts milieu of the period immediately after their settling in the Pannonian Plain. The group of finds, consisting of a total of 14 pieces, was gifted to the Museum in the middle of the 20th century as a legacy of Franjo Rački, who was the parson of Sremska Mitrovica and trustee of the Archaeological Museum in Zagreb. It is assumed that the finds originate from the area of Mitrovica, where Rački used to procure antiquities, or the wider

region of Syrmia. It is a set consisting of two-piece pendants and two types of appliques which used to adorn the attire of the female part of the population in the 10th century. On this occasion, formal, technological and decorative characteristics are examined, through a comparative analysis with similar decorative sets from the Carpathian Basin. Finally, with an overview of other archaeological finds of similar chronology, historical circumstances and the nature of the Hungarian presence in the area between the Danube and the Sava are briefly discussed.

Key words:

two-piece pendants, heart-shaped, round and tongue-shaped mounts (appliques), clothes, Hungarian Conquest period, Syrmia, Carpathian Basin, necropoles

During his fruitful scientific research work, in addition to other medieval topics, Željko Demo often dealt with those related to the so-called Bijelo Brdo material culture from necropoles.¹ Almost forty years ago, Demo published the first – and it turned out to be the only – comprehensive study on two-piece pendants from the territories of former Yugoslav countries. In his characteristic, meticulous way, the author analysed the origin, style and technology of manufacture of these items and singled out regional variants typical of Slovenia, Croatia and Bosnia.² To date, the number of medieval metal ornaments in these areas

has not increased significantly, because a small number of new necropoles have been explored. Due to the circumstances, some finds discovered a long time ago remained insufficiently studied or completely unknown to the scientific public, like the recently published decorative set for the head and chest, which has been kept in the Archaeological Museum in Zagreb for an entire century. The set probably originates from Surduk.³ This volume of the *Journal of the Archaeological Museum in Zagreb*, dedicated to Željko Demo, presents a good occasion to shed light on another group of 10th century finds from eastern Syrmia.

¹ The term *Bijelo Brdo culture*, which has been in use since the 1920s to designate archaeological finds from necropoles (from the second half) of the 10th, 11th and 12th centuries in the Carpathian Basin, remains in use mostly in scientific papers from Croatia today. The typological-chronological justifiability of its use is pointed out in the context of distinguishing the material from necropoles of the northern part of Croatia in regard to those from the southern part, i.e. Dalmatia, see Bunčić (ed.) (2020, 90–91). The term is still occasionally used by experts from Slovakia, Romania and Serbia, while it is no longer used in Hungary. During the last few decades, a tendency can be noted to avoid the use of older terms containing the names of regions or sites which suggest the place

of origin of a given archaeological phenomenon, and to replace them with chronological or historical designations. In my PhD thesis, in which a synthesis of the archaeological material of the 10th–12th centuries from the northern part of Serbia (AP Vojvodina) is presented, the Hungarian Conquest horizon and the other one, the so-called Bijelo Brdo culture horizon, were singled out and analysed in a wider historico-geographic context – as heritage from the period of the Early Hungarian state (Радишић 2020). See also note 11.

² Demo 1983.

³ Demo 2012.

MAP 1. Finds from the 10th century in Syrmia (made by M. Radišić).



A gilded dress attire set from the Hungarian Conquest period: an early acquisition of the Museum of Srem

The area of today's eastern Syrmia in AP Vojvodina in the Republic of Serbia was under the jurisdiction of the Archaeological Museum in Zagreb until the end of World War I, that is, until 1922, when the National Museum in Belgrade took over the jurisdiction. With the founding of the City Museum of Sremska Mitrovića, today's Museum of Srem, in 1946, Syrmia's heritage finally came under the auspices of a local museum institution.⁴ In the earliest period of the museum's work, the archaeological collection was formed through a network of associates who organised field research.⁵ From insight into the old documentation, it can be concluded that finds were also procured by gift or purchase. Here, we will present a group of 14 gilded bronze decorations which came to the museum in June 1949, as a gift from the Parish House of Sremska Mitrovića (Figs 1–3).⁶ The finds were the legacy of the religious teacher and parish priest of Mitrovića, Franjo Rački, who also was a trustee of the Archaeological Museum in Zagreb in the period between 1912 and 1930 (maybe even until 1940). Rački's long-term activity as a distributor of archaeological finds from the area of Mitrovića to Zagreb has not been fully grasped,⁷ nor is it known how many archaeological items from his personal collection were donated to the Museum of Srem after his death.

The finds belong to the Medieval Archaeological Collection (inv. no. 196–209), and they are displayed in the permanent exhibition "Srem through the centuries". In addition to the fact that the objects reached the museum together, from one source, their stylistic and technological features indicate that they form one group. It is a decorative set for clothes which belongs to the arts-and-crafts milieu of Hungarians who migrated to the Pannonian Plain at the end of the 9th century and the beginning of the 10th. Since such sets are always found in grave contexts, as shown by numerous examples which will be discussed below, it is reasonable to assume that our finds originate from a necropolis between the rivers Sava and Danube which remains unknown today (most likely in the area of Sremska Mitrovića, where Rački was active).⁸ It is unlikely that they originated from hoards, which are extremely rare in the period in question.⁹ The items have not been integrally published, or analysed in the scientific literature – except for a drawing of a heart-shaped plaque that was shown in the typology of Csanád Bálint. The author cites Mitrovića as the location where it was found.¹⁰ What follows is a description of the finds:

4 Bunčić, Solter 2020, 204–205, n. 6; Demo 2012, 82, n. 1; Solter 2016, 129, n. 143.

5 <https://muzejsrema.com/o-muzeju/>

6 Documentation of the Museum of Srem, the first inventory book of archaeological items, pp. 62–64: no. 486, 486 a, 486 b, 486 v, 487, 487 a, 488, 488 a, 488 b, 488 c, 488 d, 488 e, 488 f, 488 h.

7 Basic data in: Bunčić, Solter 2020, 209–210.

8 In the new inventory book of the medieval collection, it has been erroneously stated that the finds originate from Ležimir. During the processing of the items in the museum, wrong data were copied from the previous inventory book of the medieval collection, in which there were two findings from Ležimir listed above the items from the legacy of F. Rački. The most complete data can be found in the first inventory book of the Museum of Srem, where all the archaeological artefacts were written down before being classified according to the period (see note 6). I would like to thank Jasmina Davidović, museum curator-advisor, who indicated those errors in the previous processing of finds to me.

9 Demo 2012, 94.

10 Bálint 1991, 126, Taf. XXXVIII: 4.

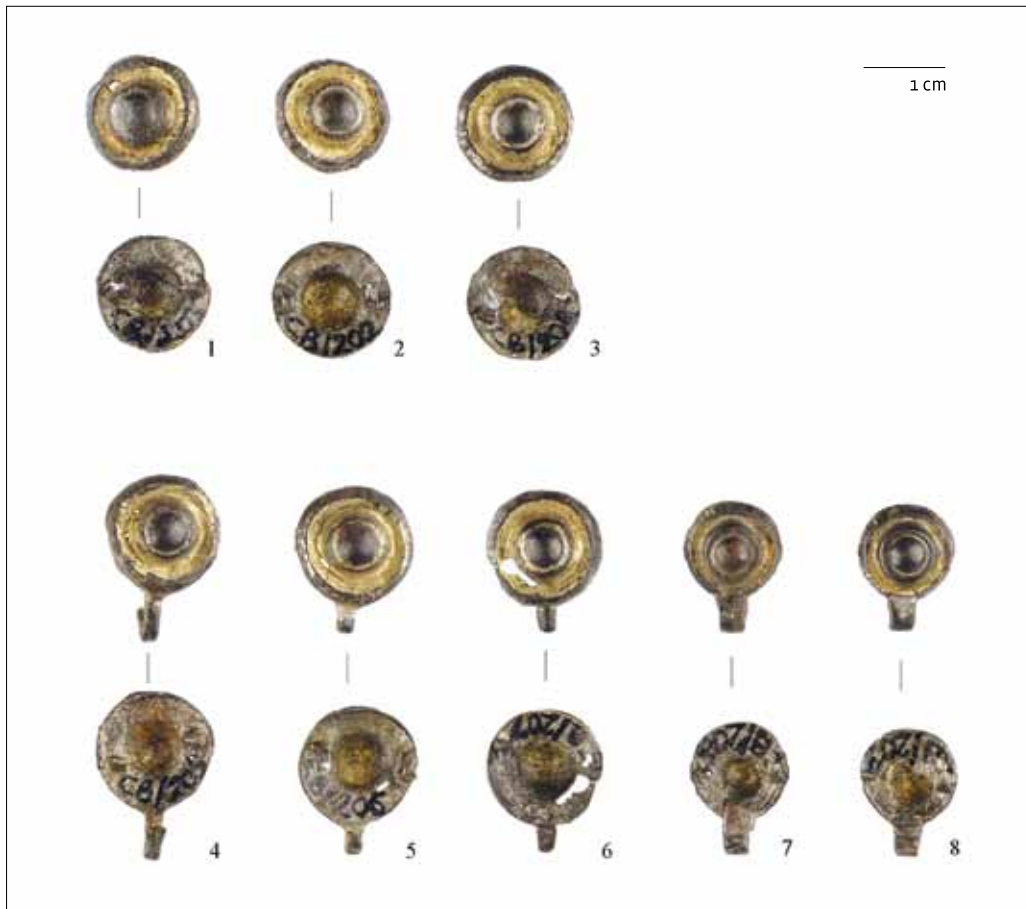


FIGURE 1. Decorative set: round elements (Museum of Srem, in Sremska Mitrovica; photo by S. Maksić).

1. Three circular-shaped mounts (Fig. 1: 1–3), bronze, casting, gilding, diameter 1.4 cm /inv. no. 202–204/. The ornaments have an annular indentation filled with gold, and a calotte-shaped protrusion in the centre. There are two opposing loops on the back for fastening to the base.

2. Parts of two-piece pendant ornaments:

a) Five circular-shaped mounts with a hook (Fig. 1: 4–8, Fig. 4: 1a); bronze, casting, gilding, diameters 1.2 cm and 1.4 cm /inv. no. 205–209/. The mounts have an annular indentation filled with gold and a calotte-shaped protrusion in the centre, while the hook for hanging a heart-shaped plaque is on the lower part. There are two opposing loops on the back for fastening to the base. One item is damaged.

b) Four heart-shaped plaques (Fig. 2: 1–4, Fig. 4: 1b); bronze, casting, gilding, diameter 2 x 2.5 cm /inv. no. 196–199/. Thin heart-shaped/leaf-shaped plaques with a circular attachment loop, decorated with a motif of a horizontally-stretched heart in the middle, around which there are embossed dotted details covered with gold. Two items have minor damage.

3. Two tongue-shaped ornaments (Fig. 3: 1–2, Fig. 4: 2); bronze, casting, gilding, diameter 2.6 x 1 cm and 2.7 x 1 cm /inv. no. 200–201/. On the flat, shorter side there is a small semi-circular extension, and the opposite side is narrowed and has a pointed end. The decoration consists of a shallow concave field with a thin

layer of gold, bordered by wavy lines resembling a vegetal motif. There are two fastening loops on the back, on the opposite sides, lengthwise. One item is significantly damaged.

Hungarians and new fashion in the Carpathian Basin

The migration of Hungarian tribes to the Carpathian Basin is clearly traced in archaeological records, primarily through the appearance of characteristic finds from necropoles.¹¹ They brought a migratory material culture that differed from the local one on the basis of different artistic and craft traditions and by items that fulfilled certain functions that had not existed before.¹² In the absence of pictorial sources, and with scarce writ-

11 The settling of Hungarians occurred over a fairly short period of time, from the last decade of the 9th century up to 907. In the following several decades they went on incursions across Europe, and at the end of the 10th century the Hungarian medieval state was formed. Their specific material culture, originating from Eastern European nomadic traditions, and shaped in the new surroundings, lasted throughout the entire 10th century, and it is named with the phrase: finds from the “period of the Hungarian Conquest” (e.g. Bollók 2010; Bollók 2012; Langó 2005; Révész 2014). In German scientific literature, this cultural horizon is placed in a narrower framework, from the end of the 9th century up to the middle or the third quarter of the 10th (Giesler 1981, 137–140, 151; Schulze 1984, 501–502).

12 On the autochthonous material heritage of the 9th century, the most complete knowledge was obtained from research activities on Great Moravian necropoles in the Czech Republic and Slovakia and necropoles in western Hungary (e.g. Kouřil (ed.) 2014; Szőke 2014).



FIGURE 2. Decorative set: heart-shaped elements (Museum of Srem, in Sremska Mitrovica; photo by S. Maksić).



FIGURE 3. Decorative set: tongue-shaped elements (Museum of Srem, in Sremska Mitrovica; photo by S. Maksić).

ten testimonies about Hungarian attire,¹³ archaeological finds provide key data for the reconstruction of their way of dressing.¹⁴ Members of the newly settled groups practised decorating their heads, clothes and shoes with different types of ornaments. They used specific jewellery, belt equipment and weapons typical of the Eastern European nomadic environment in which they had previously lived. During their constant movements across Europe, Hungarians gained different experiences and came into possession of valuables that they would adjust to their own liking. Thus, in the 10th century, a specific artistic and craft expression was created by mixing Eastern European traditions with impulses from the Byzantine, Carolingian and, to a lesser extent, Northern European environment.¹⁵

According to some earlier estimates, about 1,500 sites have been recorded in the Carpathian Basin, that is, about 30,000 graves from the period of the 10th–11th century.¹⁶ The number of sites was revised in a recent study by L. Révész; he collected and analysed approx. 850 burial sites located east of the Danube in the Carpathian Basin.¹⁷ A large number of graves contained finds on the basis of which the way of dressing of the population was reconstructed. Remains of fabrics testify that clothes were made of linen, hemp and silk.¹⁸ Finds of pieces of silk, mostly of Byzantine provenance, which was transported from the Mediterranean to the Carpathian Basin by various means, confirm the written data on the popularity of luxury fabrics among Hungarians.¹⁹

Men's and women's clothes were very similar; shirts and tunics of various cuts were worn as upper garments, over which a kaftan was worn (short cloak with long sleeves, open at the front). It should be noted that, due to the scant archaeological evidence on male kaftans, we cannot exclude the possibility that male individuals also used a classical type of eastern-steppe kaftan, which was significantly longer than female coats,²⁰ whose form can be reconstructed thanks to their metal accessories.

Women's costume was decorated with one-piece and two-piece ornaments that had a purely decorative function, while the clothes were fastened with small buttons. The ornaments were made mostly of silver or bronze with gilding, rarely entirely of gold.²¹ When researching graves, ornaments are found in the neck area, on the shoulders and chest; smaller ornaments adorned the hem of the collar, while more massive pieces were applied vertically along the opening of the kaftan.²² Decorative sets consist of two lines of ornaments; the inner line consists of one-piece appliques, and the outer line of two-part ornaments with heart-shaped/leaf-shaped pendants (Figs 5, 6). Since there are no archaeological or written data on the existence of a special funeral attire, it is believed that the remains in the graves were of clothes that had been worn in everyday life.²³ Mismatching sets and traces of wear on ornaments indicate their frequent and long-lasting use.

13 See n. 19.

14 Révész, Nepper 1996, 52.

15 Bollók 2015.

16 Langó 2005, 188; Mesterházy 2013, 489–490.

17 Révész 2020, 473–481.

18 Berta et al. 2018; Bollók et al. 2009; Nagy et al. 2009.

19 Bollók et al. 2009, 148–149.

20 See, e.g. Bollók et al. 2009, Figs 31, 35.

21 Cf. Mesterházy 2013.

22 Bálint 1991, 66–69, Taf. XX; Boldog et al. 2015, 6; Révész 2003, 342; Révész 2014, 55–57; Révész, Nepper 1996, 52–55. For reconstruction of the clothes, see Bollók (2015, 16. kép 1, 3–4, 17. kép 3–4, 18. kép 1–4).

23 Langó et al. 2016, 410.

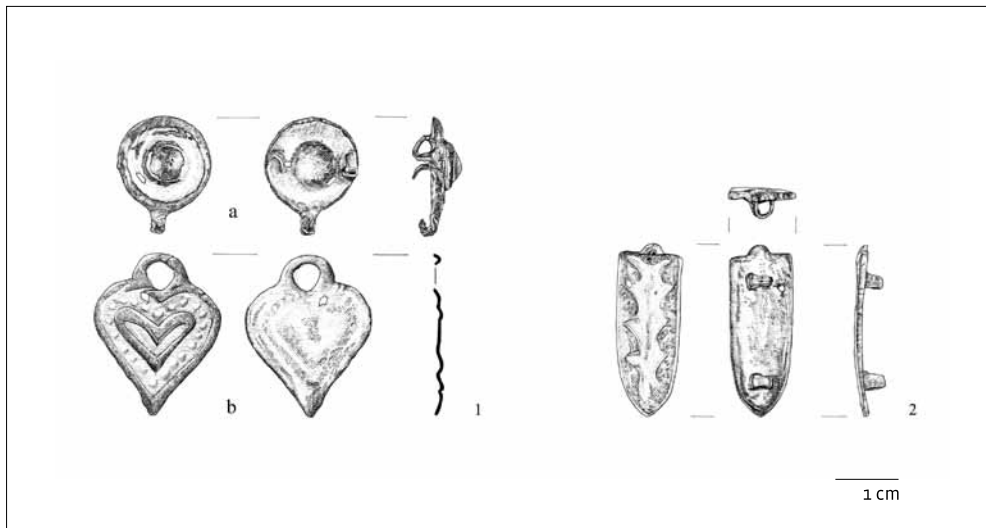


FIGURE 4. Two-piece pendants and tongue-shaped applique (drawings by S. Marković).

During meticulous archaeological research, by observing the arrangement of metal details and fabric remains, it was concluded that the ornaments were not applied directly to the hem of the collar, but to a strip of solid material attached to the suit.²⁴ Fixed like that, appliques seemed to have mimicked the shape of a necklace that could have been placed around the neck as needed. Some believe that this fashion detail was created by imitating Byzantine necklaces with pendant, radially-arranged ornaments, which were frequently worn in the Ottonian period in the area of the German lands. These are massive necklaces with rows of chains decorated with precious stones or secondarily-used antique gems and cameos.²⁵ It is worth noting that, in the 10th century Byzantine Balkans, it was a practice to decorate clothes with somewhat similar forms of pendant two-piece ornaments, which have so far seldom been documented. In addition, massive necklaces with circular or almond-shaped composite elements linked in several rows, reminiscent of Hungarian sets, are known in the Western and Central Balkans.²⁶ In the areas of Russia, it was a practice to wear large circular medallions arranged in one or two rows on the collar, often in combination with lunular ornaments.²⁷

According to the current state of research, it seems that new fashion trends influenced the Hungarian surroundings even though they were not under their direct political control in the earliest period. In the south-western parts of the Carpathian Basin and the eastern Alpine areas inhabited by the Slavs, the manner of decorating clothes with two-piece pendant ornaments was adopted.²⁸ However, in those regions, it was a practice to wear only one row, instead of two, of decorative elements, which

were not gilded. In graves at Gomjenica (Bosnia) and Ptujski Grad (Slovenia), they were found together with the remains of textiles on the chests of those buried, which clearly indicates that they were applied to clothes.²⁹ It is believed that, in some cases, two-piece ornaments were worn as actual pendants, on necklaces, in combination with glass beads.³⁰ The types represented were present throughout the Carpathian Basin, with different types as well, for which it is assumed that they were made in local workshops in the area of today's northern Croatia.³¹

Analysis of the set from the Museum of Srem in the regional context

The set from the Museum of Srem is made of bronze, using the so-called thin-casting technique, which made it possible to produce very fragile objects.³² A high-quality gilding is present on all pieces. The 14 elements probably represent only part of a set that could have counted up to 40–50 details. From the first (inner) line, three circular-shaped appliques have been preserved (Fig. 1: 1–3), and from the second (outer) line, nine parts of two-piece ornaments (Fig. 4: 1) whose elements are separated: five round ornaments with a hook (Fig. 1: 4–8) and four heart-shaped plaques with a loop for hanging (Fig. 2: 1–4). Two round ornaments are slightly smaller than the others, which may indicate that they did not belong to the original set (Fig. 1: 7–8). Decorative attire sets often contain several types of ornaments, which would suggest that, after long wear, damaged parts would be replaced with other (available) pieces, more or less corresponding to the original ornaments.³³

24 Boldog *et al.* 2015, 6; Fodor 1996c, 358; Kóhegyi, Knotik 1982, 195–200.

25 Schulze-Dörrlamm 1989, 415–419, Abb. 2.

26 Petrinc 2009, 250–253, sl. 132; Petrinc 2014, 81–86.

27 Жилина 2010, 176–187, рис. 2, 5, 8.

28 Langó 2005, 180; Takács 2006, 234–235, with references therein.

29 Miletić 1967, 88, 105, T. XII, XXVII (graves 43 and 192); Korošec 1950, 165–166, 174–175, T. sl. 43, 53 (graves 181 and 208).

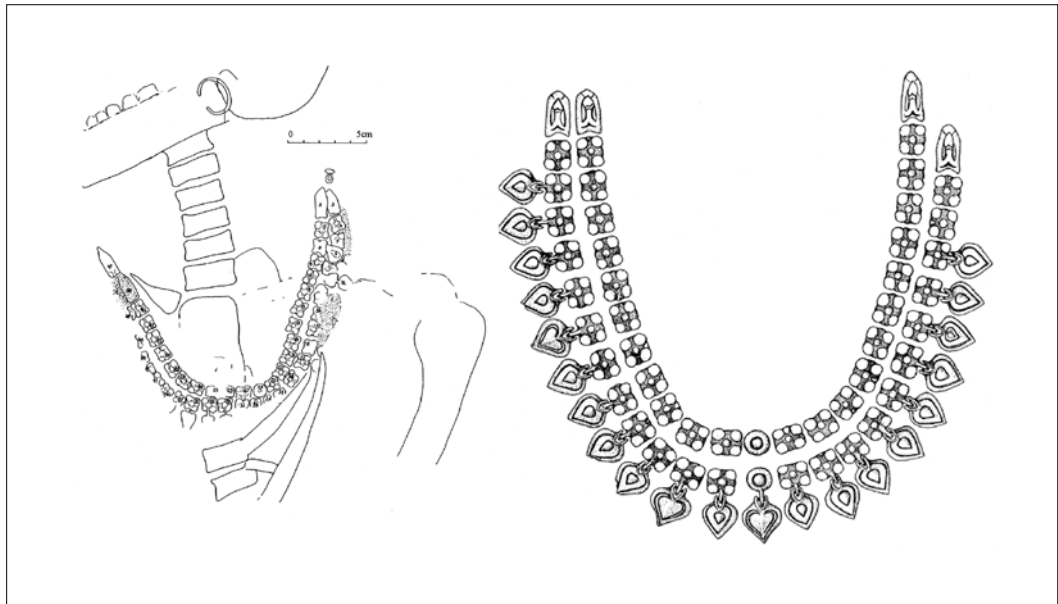
30 Demo 1983, 278, 281 (group B); Korošec 1950, 80; Korošec 1999, 63; Tomičić 2019, 143–146.

31 Demo 1983, 271–293.

32 Bollók 2012, 229–231; Bollók 2015, 174–175.

33 More reliable assumptions would require an analysis of a larger number of sets, which goes beyond the scope of this paper.

FIGURE 5. Decorative set from tomb 7 of the necropolis of Budapest-Soroksár (Bencze, Szigeti 2010, 10, 13. kép).



The use of two-piece pendants as ornaments on clothes is limited to the period from approximately the second quarter of the 10th century to the first decades or the middle of the 11th century. They probably originated from leaf-shaped/heart-shaped pendants that the Hungarians brought to the Carpathian Basin from their ancestral home in Eastern Europe. By adding the upper differently-shaped part with loops on the back, it became possible to attach them to a textile base.³⁴ After the typology of Bálint, which was made on the basis of a sample from the 1970s,³⁵ a unique systematisation of finds for the entire Carpathian Basin has not been made. More recently, brief reviews of the types represented in the eastern parts have been published, but without a more detailed analysis.³⁶ According to the overall appearance of the decorations, it is difficult to determine clear typological parameters, nor are there any differences according to manufacturing technique among the examples. Bálint created a typology based on the appearance of the upper and lower elements, with a much more diverse typology of the lower (heart-shaped) plaques, due to the varied ornamentation made up of vegetable and geometric motifs, as well as stylised depictions of bird heads or even human faces.³⁷ No dating was given for the groups selected, because it was obviously not possible to arrange them into narrower chronological segments within a century.

Demo considered the way in which the loops for hanging a heart-shaped plaque were shaped, as a stylistic and chronological parameter in the systematisation of two-part pendant ornaments.³⁸ According to his observation, the earlier pieces have a

horizontal bar retracted and placed below the upper line of the heart-shaped ornament or a square loop, while the more recent (and most numerous) type would be represented by rounded loops, such as the heart-shaped plaques from the Museum of Srem. However, examples from well-dated necropolises show that circular loops appear at an early stage. The two-part ornaments from the Harta-Freifelt necropolis in Hungary and the Şiclău necropolis in Romania, approximately dated to the second third of the 10th century, already have circular loops.³⁹ Sets containing heart-shaped plaques in which all three ways of hanging are represented have also been documented, like the example from grave 1 of the necropolis of Marcelová (Hungarian: Marcelháza) in Slovakia.⁴⁰

Despite a broad insight into the literature, I have not found identical analogies for these two-part ornaments from the Museum of Srem, but there is a large number of similar pieces. According to Bálint's classification, they belong to type Ic. Heart-shaped plaques of this type are characterised by a dotted border within which the decoration is in the form of an almond field or heart-shaped detail, or two volutes bent inwards. This type of decoration is numerous, widespread in the middle Danube valley and upper Tisza valley.⁴¹ Overall, the most similar pieces originate from grave 13 of the 10th–11th-century necropolis of Hódmezővásárhely-Nagysziget, in Hungary. These ornaments, in addition to lower heart-shaped plaques with dotted details along the edges, also have identical upper, circular, grooved appliques and a calotte-shaped protrusion in the centre,⁴² just like

34 Demo 1983, 275–276, 291; Giesler 1981, 89–90; Oťa 2014, 141, with references therein.

35 Bálint 1991, 123–138; cf. Takács 2006, 234, n. 200.

36 Gáll 2013; Oťa 2014.

37 The author is preparing a paper on these stylised motifs on two-piece pendant ornaments.

38 Demo 1983, 276.

39 Gáll, Mărginean 2015, 282–283, Pl. 15: 11–12, 16:13–14; Langó et al. 2016, 410, Fig. 13.

40 Liptáková 1964, obr. 2: 1–13; 15–36; Točík 1968, Taf. XXIII: 1–12, 20–25.

41 Bálint 1991, 126, Taf. XXXVII: 19–29, XXXVIII: 1–15, 29, XLIII: 3.

42 Révész 1996c, 308–309, Fig. 1.



FIGURE 6. Reconstruction of female clothes (according to Bela Kürti and Zsolt Gallina; taken from: Bollók 2015, 16. kép 1, 3; Gallina 2000, 16. kép).

the pieces from Mitrovica (Fig. 1). A fragmented set from an undocumented necropolis in Trešnjevac, in the North Banat district, contains the same 20 round elements. The lower parts of those pendants are not preserved.⁴³

The lower plaques of the pendants from the Museum in Mitrovica have a heart-shaped motif in the centre, which is a common detail on clothes decorations,⁴⁴ as well as on other items of the Early Hungarian milieu: discoid plaited ornaments,⁴⁵ belt appliques and buckles,⁴⁶ decorative boot fittings,⁴⁷ etc. The motif of a symmetrical or vertically stretched heart, created by merging two volutes inwards, is most often performed,⁴⁸ while the motif of a horizontally stretched heart, as seen on pieces from our set (Fig. 2), is rare on the lower plaques of two-part pendants. I have found a corresponding ornament on one piece from grave 13 of the Szob-Ipolypart necropolis in Hungary, which is broadly dated to the 10th century,⁴⁹ and on an item from the set in the abovementioned grave 1 in Marcelová.⁵⁰ Two more heart-shaped plaques from the same grave in Marcelová correspond to our examples in the shape and appearance of the circular loop, while the central

decoration consists of two volutes bent at one end.⁵¹ The beginning of the founding of this necropolis in Slovakia dates back to the beginning of the second half of the 10th century.⁵²

The decorative set from the Museum of Srem, assuming that it originates from the area of Sremska Mitrovica, would represent the southernmost find of a gilded women's attire set from the Hungarian Conquest period in the Carpathian Basin. In addition to the previously-mentioned set from Trešnjevac, a somewhat more luxurious group of ornaments for clothes from Vojvodina includes pieces discovered a while ago which allegedly originate from the vicinity of Vršac, in southern Banat.⁵³ Decorative sets with a large number of one-piece and two-piece ornaments have also been discovered in graves in Jazovo and Rumenka. A few finds come from Banatsko Arandelovo, Rabe, Crna Bara, Bogojevo and Novi Banovci, among which there are later examples, from the early 11th century.⁵⁴

43 Stanojev 1989, 115–116, kat. 633–634.

44 E.g. Bálint 1991, Taf. II: 7, XXXVIII: 3–5, 8, 23–24; Demo 1983, sl. 8: 1; Istvánovits 2003, 176. tábla 13/2–7; Kiss 2000, 32. kép 9, 53. tábla 131/3; Nevizánsky, Košta 2009, obr. 11.

45 Istvánovits 2003, 103, 72. kép, 102. tábla 2–3; Lezsák, Novichikhin, Gáll 2018, 144–147, Figs 1, 3/8.

46 Istvánovits 2003, 238, 229. tábla 6/23–28, 230. tábla 6/31–32, 231. tábla 1998/10/1; Nepper 1996a, 225, Fig. 1. The finding of a belt set from Nagykőrű: <https://mnm.hu/hu/nagyorun-elokerult-honfoglalas-kori-lelettek-restauralasa/>.

47 Istvánovits 2003, 33, 26. tábla 3.

48 Bollók 2015, 238, 43. kép.

49 Bakay 1978, 53, 199, T. XXIX: 20; Bálint 1991, Taf. XXXVIII: 5.

50 Bálint 1991, Taf. XXXVIII: 3; Liptáková 1964, 238–239, obr. 2: 35; Točík 1968, 33–34, Taf. XXIII: 9, LVII: 13.

51 Liptáková 1964, 238–239, obr. 2: 34, 36; Točík 1968, 33–34, Taf. XXIII: 8, 10, LVII: 11.

52 Liptáková 1964, 253.

53 Fodor 1996c, 358; Stanojev 1989, 43, kat. 218–219. Part of a set discovered at the end of the 19th century, probably in a devastated grave, consists of three two-piece pendant decorations and three (or five) round appliques. These items are kept at the Hungarian National Museum in Budapest today.

54 Demo 1983, 271–273, sl. 2, sl. 8: 3–5, 7–8, Tab. 1: 1–3; Kovács 1992, 61, 14. kép 3–9; Stanojev 1989, 14–19 (kat. 49, 70), 46–51 (kat. 237, 239, 242–245), 129–130 (kat. 703–707); Радишић 2020, 249–251, 269–271, T. 29: 1–14.

Regarding the typo-chronological definition of our decorative set, two tongue-shaped ornaments offer more precise data, a type that has not been known in the material from Vojvodina so far, whose shape resembles belt strap ends or strap ends for equestrian-equipment belts. Unlike such items, which have rivets on the back for pressing into a leather belt, our pieces have two loops typical of garment embellishments that are sewn on to a softer organic base (Fig. 3, Fig. 4: 2). Tongue-shaped ornaments are much rarer in graves than two-piece ornaments, because they probably did not represent a regular detail on the collars of clothes. If there were any, two or four pieces (one or two pairs) were worn. They represented the final decorations at the end of a string,⁵⁵ which is best illustrated by a completely preserved set consisting of a total of 51 parts, found in grave 7 at the Budapest-Soroksár necropolis (Fig. 5). This necropolis is dated to the late 10th century or early 11th.⁵⁶

Analogies from grave 42 of the Szeged-Algyő necropolis probably come from an earlier period, being dated to the first half of the 10th century. In this case, two strings of one-piece and two-piece decorations have been documented, but the tongue-shaped appliques, decorated with vegetable motifs, were only at the ends of one string.⁵⁷ Another tongue-shaped ornament was discovered in grave 1 of the same necropolis,⁵⁸ which was also decorated differently than the pieces from the Museum of Srem. Three tongue-shaped appliques were found in the necropolis of the Early Hungarian period Vojnica-Komarnó, in south-western Slovakia, in a set from grave 4. In this case, however, the decorations were not distributed on the chest of the deceased, but scattered next to her skull.⁵⁹ Another similar find comes from an insufficiently documented woman's grave with a large number of metal details for clothes from Kecskemét.⁶⁰

The following are some close analogies for the engraved and gilded ornament (Fig. 3). Authors generally believe that it is a stylised vegetable ornament that has been described variously – as a spiralling tendril, cinquefoil palmette, or even 'tree of life'.⁶¹ A similar motif is present on three tongue-shaped silver ornaments with loops on the back, found along with several other details of clothes in the area of the deceased's chest in grave 31 of the Sárrétudvari-Hízó föld necropolis. On the basis of the grave goods, it was estimated that the cemetery was in use during the 10th century.⁶² The closest parallels to our decorations, however, are strap ends for belts and equestrian-equipment straps. An almost identical motif is engraved on the strap end of the belt

set in grave 1, of a male individual, in the Karos-Eperjesszög I necropolis.⁶³ It is one of the three smaller necropolises in Karos that are attributed to the first generations of Hungarians who migrated to the upper Tisza valley; they are dated to the period from the end of the 9th century to the middle of the 10th.⁶⁴ Similarly decorated are the strap end for a sabretache belt from grave 6 of the Tuzsér-Boszorkány-hegy necropolis, dated to the first two thirds of the 10th century,⁶⁵ and another one from the Izsák-Balázspusztá necropolis, from the second quarter of the 10th century, which is also believed to have adorned the end of the belt of a sabretache.⁶⁶

Along with general methodological difficulties relating to the precise dating of finds from the Hungarian Conquest period,⁶⁷ i.e. the lack of serialisation results, the fact that our decorative set does not come from an archaeological context prevents it from being reliably placed in a narrower chronological framework. The presence of gilding indicates a somewhat earlier time, because at the end of the 10th century the use of precious metals declined.⁶⁸ Analogies for tongue-shaped appliques also belong mostly to the older phase of this period. Due to all of the above, it could be assumed that the attire ornaments from the Museum in Mitrovica belong to the middle or the third quarter of the 10th century, just like the territorially close set for the head and chest of the 'Varpálot' type from Surduk, which was processed by Željko Demo.⁶⁹ This fragmented set consists of one earring, a chain and two large leaf-shaped pendants made of gilded silver, which correspond, according to their stylistic features, to the Eastern European (nomadic) taste in fashion.

The gilding on the items does not have to indicate that they belonged to the attire of people of a higher social rank. The studying of manufacturing techniques has shown that the quality of manufacture of the items, in the overwhelming majority of known instances, did not have a deciding role in expressing the social status of the population of that time. It turned out that there were decorations in extremely richly equipped graves that had been made with the same techniques as those from graves with modest inventories.⁷⁰ Grave 22 of the Harta-Freifelt necropolis, with decorations made similarly to our pieces, is not attributed to the richest group of burials in the necropolis; instead, the authors placed it in the third hierarchical category. This necropolis is a good example, because it contains a large number of burials of female individuals.⁷¹ Finally, it should be pointed out that the set from the Museum in Sremska Mitrovica belongs to

55 There are only rare examples where, instead of tongue-shaped appliques, final pieces of decoration consist of appliques shaped as two round motifs reminiscent of 'owl's eyes' (Gallina 2000, 27–29, 31, 14–15. kép).

56 Bencze, Szigeti 2010, 58–61, 64, 9–13. kép.

57 Kürti 1980, 331, 333, 5. kép 3, 6. kép.

58 Kürti 1980, 333, I. tábla 9.

59 Liptáková 1964, 242, obr. 7/14–16; Točík 1968, 59–60, Abb. 24, Taf. LI: 9–11.

60 Szabó 1955, 124, XXXI. tábla 12. The description of the tongue-shaped application on page 124 is missing, as noted in Kürti (1980, 333, n. 24).

61 See notes 62–63, 65.

62 Nepper 1996b, 257–258, Fig. 2; Nepper 2002, 301, 450–452, 232. tábla 8–9.

63 Révész 1996a, 13–14, 4. tábla 35, 142. tábla; Révész 1996b, 84, Fig. 2.

64 Révész 1996b, 82–83.

65 Fodor 1996b, 205–206, Figs 4, 6; Istvánovits 2003, 236–238, 230. tábla 6/16.

66 Horváth 1996, 318, 320, Fig. 2; Tóth 1976, 153, 159, 172–173, Figs 15: 14, 20: 14.

67 Cf. Bollók 2012; Langó 2012; Langó 2005, 278–283.

68 Dienes 1972, 71; Révész, Nepper 1996, 43; Takács 2012, 43–44.

69 Demo 2012, 94, n. 43.

70 Bollók 2012, 233. However, there are a number of artefacts of exceptional quality, which might speak of the prominent social position of the deceased (e.g. Bollók 2015, 205, 35. kép; 207, 298, 75. kép; 303, 79. kép).

71 Langó *et al.* 2016, 397.

Early Hungarian heritage, but the possibility that it adorned the attire of a person of another ethnic origin cannot be excluded. Archaeology can merely determine the cultural attribution of finds, especially of stray finds like these, while ethnic interpretations of archaeological records do not always follow the same lines. Genetic research of osteological material in regions where the continuity of life before and after the Hungarian settlement was proved clearly indicates the adoption of new items of material culture by the local population.⁷² In addition to the previously-mentioned phenomenon of partial takeover (imitation) of fashion on the example of two-piece ornaments from the south-western parts of the Carpathian Basin, we can also mention one historical fact according to which the Moravian Slavs practiced shaving their heads in a way peculiar to Hungarians.⁷³

Historical and archaeological data on the Hungarian Conquest of Syrmia

Hungarian settlement and the establishment of the Hungarian state-kingdom in the Carpathian Basin represents a key turning point in the medieval history of Central Europe. According to the general reconstruction of events, it is considered that Hungarian colonisation, at the very end of the 9th century, came from the direction of northern Transylvania towards the Tisza valley, continuing farther south. The most massive settlement comprehended the north-eastern and eastern areas of the Carpathian Basin.⁷⁴ In the scientific literature, the opinion has been repeatedly expressed that the southern Pannonian area had been included in the Hungarian sphere of interest since the earliest times, as an important penetration route towards Bulgaria and Byzantium. Bačka seems to have been conquered in the first decade of the 10th century after battles with regional Bulgarian lords.⁷⁵ When it comes to Syrmia, there is an unequal stance among historians on the question as to which political sphere it belonged to before the Hungarian Conquest. In earlier historiography, the prevailing opinion was that of Bulgarian supremacy, while in recent times the thesis that Syrmia was under East Frankish rule during the 9th century stands out.⁷⁶ As the Hungarians ended Frankish rule in Pannonia in the beginning of the 10th century or up until 907, it can be considered that it was then that Syrmia fell into their hands.⁷⁷

The most important Early Medieval source, *De Administrando Imperio* composed at the court of Emperor Constantine Porphyrogenitus in the middle of the 10th century, describes the south-

ern borders of the territories under Hungarian rule. Chapter 40 makes known the position of the Hungarian groups towards the surrounding peoples by stating that they were separated from Bulgarians by the river Danube in the east, their neighbours to the north were the Pechenegs, to the west Franks, and to the south Croats.⁷⁸ For this topic, data from chapter 42 is also important, where it is stated that, in addition to living in the areas behind the Danube, Hungarians also inhabited the area between the Danube and the Sava (i.e. Syrmia).⁷⁹ Both items of information underscore the importance of rivers as border zones in the Balkans. Considering the allegations from the work of Constantine Porphyrogenitus to be credible, many experts are of the opinion that Syrmia was under Hungarian rule during the 10th century.⁸⁰

The chronicle *Gesta Hungarorum*, written at the end of the 12th century, or in the early 13th, on the basis of an older unpreserved source from the 11th century, also testifies that the newly settled nomadic groups had affinities towards the southernmost Pannonian area very early on. *Gesta* is often used in reviews of the earliest Hungarian history. It describes the failed Hungarian siege of Belgrade that followed Arpad's army's battles with a Bulgarian military leader in Bačka.⁸¹ After consolidating in Pannonia, when the first signs of the decline of the power of the Bulgarian Empire were felt after the reign of Emperor Simeon ended, Hungarians undertook campaigns towards the Balkans. The first incursion took place in 934, when the Hungarian army, after the devastation of Thrace, went as far as Constantinople. In the next three decades they carried out several more war campaigns in the Balkan Peninsula of varying intensity.⁸² Written source materials also give information about Hungarian battles with the Serbian prince Časlav Klonimirović in the Sava valley or Syrmia, at some point during the fourth or fifth decade of the 10th century, although historians do not agree on the credibility of these data.⁸³

The historical evidence of the Hungarian presence and their political activities in the region presented above has been supplemented by archaeological finds. The spatial distribution of Early Hungarian sites in Vojvodina shows a higher concentration of sites in the areas of the north of Bačka and Banat, closer to the confluence of the Moriš river with the Tisza, while the occurrence of sites in the south of Vojvodina is sporadic. On the basis of such evidence, a conclusion has been drawn about the distinction between zones that were more massively inhabited by Hungarian groups and those that were placed under their nominal rule.⁸⁴ The latter group includes the area of Syrmia.

72 The example of the site of Vörs-Papkert B, in the area of Balaton, is very indicative, since it was established there that graves containing material with Early Hungarian traits belonged to descendants of Late Avar populations (Költő *et al.* 2014, 381).

73 Révész 2014, 39.

74 Fodor 1996a, 17–18; Makkai 1990, 11.

75 Ђирковић 2017, 98.

76 Коматина, Коматина 2018, 142–143, with references therein. The opposite view, on Bulgarian supremacy in Syrmia see in Filipec (2015, 143–151, 204–211, sl. 70–71, 74). Yet there are no convincing archeological findings that would make it clear to whom Syrmia administratively belonged during the 9th century. As a territory that represented the most remote point of reach of both Bulgaria and the Carolingian Empire, their political and cultural influences could have been of a very low intensity.

77 Gračanin 2011, 193–195, 201, n. 191; Коматина, Коматина 2018, 143.

78 DAI, ch. 40, 174–179.

79 DAI, ch. 42, 182–183; cf. Györfy 2002, 14.

80 Bálint 1991, 101–103; Ђирковић 1997, 27–30; Gračanin 2011, 195–196, 208–209; Györfy 2002, 14–15; Динић 1978, 271; Калић 2007, 35; Коматина, Коматина 2018, 143, 146–147; Поповић 2003, 295.

81 *Gesta Hungarorum*, ch. 11, 38–41; cf. Калић-Мижушковић 1967, 32–33.

82 Balogh 2008; Димитров 1998, 71–80; Moravcsik 1970, 55–61.

83 Е.г. Ђирковић 1997, 29–32; Живковић 2007, 279–280.

84 Bálint 1991, 101–103, 196, Karte III; Radičević, Špehar 2015, 143, 153–154, Fig. 1; Радишић, Узелац 2018, 30–33, карта 2; Радишић 2020, 307–312, 421–427, карта 11; Шлехар, Стругар Бевц 2016, 106–107.

Archaeological data for the Sava valley are particularly scarce. The commented decorative attire set from the Museum of Srem, probably originating from the area of Mitrovica, represents, for now, the most concrete trace of the Early Hungarian cultural milieu along the Sava. In medieval necropolises of the 10th–12th centuries on Site 4 in Sremska Mitrovica and Širingrad in Mačvanska Mitrovica, a small number of examples of horse equipment and archery weapons has been documented.⁸⁵ In the Croatian part of Syrmia, the only necropolis with finds of warrior equipment is Lijeva Bara, near Vukovar.⁸⁶ Farther west – if we exclude one find of a rhombic arrowhead from the necropolis in Đakovo⁸⁷ – there are no such material-culture objects, which coincides with the historical interpretation that the route through today's Slavonia was not used for Hungarian incursions to the west.⁸⁸

The grouping of sites with special finds of parts of clothes, jewellery, equipment and weapons from the Hungarian milieu can be traced in the Danube part of eastern Syrmia⁸⁹ (Map 1). The best-researched necropolis is Batajnica-Velika Humka, with 115 graves, some of which contain partial burials of horses, weapons and equestrian equipment. This necropolis is dated to between the middle or last decades of the 10th century and the middle of the 11th century.⁹⁰ Several graves with equestrian equipment and metal details of clothes, approximately from the middle of the 10th century, have been excavated at the site of Vojka-Humka.⁹¹ Along with the attire set from Surduk, accidental finds of parts of belt equipment decorated with palmette motif from Novi Banovci⁹² and Zemun are also known (the site of Kapela and an unknown site).⁹³ Since these finds belong to a widespread belt style popular not only in the Hungarian milieu, but also in the Bulgarian cultural circle and Eastern Europe during the 10th century, the question of the precise origin of the Syrmian pieces should be discussed with caution.⁹⁴ A rare find of a mould for pressing applications typical of Hungarian goldsmithing comes from the site of Zemun-Buldožer.⁹⁵ A find of an Arabic dirham of the first half of the 10th century from Popinci, in the interior of Syrmia, belongs to the same horizon. The coin was brought into

context with Hungarians because such numismatic finds in the Carpathian Basin originate exclusively from cemeteries of the Hungarian Conquest period.⁹⁶

On the basis of all of the above, it seems that the wider Danube area of eastern Syrmia was a border territory where Hungarian military footholds were placed, to face towards the neighbouring political forces in the Balkans. This picture can be supplemented during planned research of sites of the medieval period that have not yet received the attention they deserve.⁹⁷ New finds from the Hungarian Conquest period between the Sava and the Danube should certainly be expected. Equally important is the research of the post-Avar substrate, because we are missing the knowledge of early contacts between the local population and eastern newcomers. We hope that this article will eventually encourage the publication and scientific analysis of some of the 'forgotten' finds from the 10th century in museum collections, and, in a broader sense, that it will contribute to further illuminate the dynamic processes that marked the creation of the Hungarian medieval state in the twilight of the first millennium.

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85 Ercegović-Pavlović 1980, 52, Pl. XXIV: son. 3c; Паровић-Пешикан 1981, 183, 185, сл. 3: d.

86 Demo 2009.

87 Filipec 2015, 210–211, n. 578.

88 Gračanin 2011, 195–196, 199–200, n. 157, 182.

89 Radičević, Špehar 2015, 143, 153–154, Fig. 1.

90 Шпехар, Стругар Бевц 2016.

91 The site of Vojka-Humka is mentioned as a necropolis of the Hungarian Conquest period in Bálint (1991, 261), Dimitrijević, Kovačević, Vinski (1962, 101); and the findings are commented more thoroughly in Радишић (2020, 117–118, кат. 87, Т. 23: а/б–7).

92 Станојев 1989, 60–62, кат. 309–314.

93 Бајаловић-Хаџи-Пешић 1984, 114, кат. 494–497, Т. XIII: 7–10.

94 Radičević, Špehar 2015, 151; Радишић 2020, 257–258.

95 Бајаловић-Хаџи-Пешић 1984, 140, кат. 691, Т. LXIV: 1; Bálint 1991, 261, Abb. 26.

96 Bálint 1991, 101; Kovács 1989, 55, XCIV 277; Nagy 1974, 7.

97 Systemic research of the medieval settlement and necropolis in Mačvanska Mitrovica and the church complex in Rakovac are exempt.

LITERARY SOURCES

DAI – Constantine Porphyrogenitus, *De administrando Imperio*, Moravcsik, Gy. (ed.), *Corpus fontium historiae Byzantinae* 1, Dumbarton Oaks Center for Byzantine Studies, 1967.

Gesta Hungarorum – P. Magister quondam Bele regis Hungariae notarius: *Gesta Hungarorum*, Juhász, L. (ed.), Királyi Magyar Egyetemi Ny., 1932.

BIBLIOGRAPHY

Бажаловић-Хаџи-Пешић 1984 – М. Бажаловић-Хаџи-Пешић, *Накит VIII–XVIII века у Музеју града Београда*, Музеј града Београда, 1984.

Bálint 1991 – Cs. Bálint, *Südongarn im 10. Jahrhundert*, *Studia Archaeologica* 11, Akadémiai Kiadó, 1991.

Balogh 2008 – L. Balogh, A New Source on the Hungarian Raids against Byzantium in the Middle of the Tenth Century, *Chronicon* 7–8, 2008, 16–25.

Bakay 1978 – K. Bakay, *Honfoglalás- és államalapítás-kori temetők az Ipoly mentén / Gräberfelder an der Ipoly aus der Zeit der ungarischen Landnahme und Staatsgründung*, *Studia Comitatensia* 6, Pest Megyei Múzeumok Igazgatósága, 1978.

Bencze, Szigeti 2010 – Z. Bencze, J. Szigeti, Honfoglalás kori temető Soroksár határában (Mo BP 09) / Cemetery from the Hungarian conquest period on the route of the Mo ring road], *Budapest Régiségei* 42–43, 2010, 53–79.

Berta et al. 2018 – N. Berta, F. Harangi, K. E. Nagy, A. Türk, New data to the research on the 10th century textiles from the Hungarian Conquest period cemetery at Derecske-Nagymező-dűlő, *Hungarian Archaeology E-Journal* 2018 Autumn, 27–35, http://files.archaeolingua.hu/20180/Upload/Turk_E183.pdf (10 February 2021).

Boldog et al. 2015 – Z. Boldog, Zs. Petkes, B. Sudár, A. Türk, From the Ancient Homelands to the Carpathians – from the Finds to the Apparel. Travelling Exhibition of Posters on the Most Recent Results from Archaeological Research on Ancient Hungarian History and the Conquest Period, *Hungarian Archaeology E-Journal* 2015 Autumn, 1–8, http://files.archaeolingua.hu/20150/Turk_E150%a6%f5%20new.pdf (10 February 2021).

Bollók 2010 – A. Bollók, Byzantine Jewellery of the Hungarian Conquest Period: A View from the Balkans, in Entwistle, C., Adams, N. (eds.), *Intelligible Beauty: Recent Research on Byzantine Jewellery*, British Museum Research Publication 178, The British Museum, 2010, 179–191.

Bollók 2012 – A. Bollók, Chronological questions of the Hungarian Conquest Period: a technological perspective, in Tobias, B. (ed.), *Die Archäologie der frühen Ungarn. Chronologie, Technologie und Methodik, Internationaler Workshop des Archäologischen Instituts der Ungarischen Akademie der Wissenschaften und des Römisch-Germanischen Zentralmuseums Mainz in Budapest am 4. und 5. Dezember 2009*, RGZM – Tagungen 17, Römisch-Germanischen Zentralmuseums, 2012, 229–240.

Bollók 2015 – A. Bollók, *Ornamentika a 10. századi Kárpát-medencében. Formátörténeti tanulmányok a honfoglalás kori díszítőművészethez / The Ornamental Vocabulary of the Tenth Century in the Carpathian Basin. Form-historical Studies in the Decorative Arts of the Hungarian Conquest Period*, Budapest Magyar tudományos Akadémia Bölcsészettudományi kutatóközpont régészeti intézet, 2015.

Bollók et al. 2009 – A. Bollók, M. T. Knotik, P. Langó, K. E. Nagy, A. A. Türk, Textile remnants in the archaeological heritage of the Carpathian Basin from the 10th–11th centuries, *Acta Archaeologica Academiae Scientiarum Hungaricae* 60/1, 2009, 147–223.

Bunčić (ed.) 2020 – M. Bunčić (ed.), *Permanent exhibition of the Medieval collection – Guide*, The Archaeological Museum in Zagreb, 2020.

Bunčić, Solter 2020 – M. Bunčić, A. Solter, *Ta ova je godina dobra počela samo da nije B. i G.'a*. Trgovina arheološkim nalazima početkom 20. stoljeća na primjeru Srijemske Mitrovice / *This year would have started well if only it were not for B. and G.* The antiquities trade in Sremska Mitrovica at the turn of the 20th century, *Vjesnik Arheološkog muzeja u Zagrebu* 53, 2020, 203–227.

Ђирковић 1997 – С. Ђирковић, Међаши дуж Истра. О јужној граници Мађара у Х веку, in Bordás, G. et al. (eds.), *A honfoglalás 1100 éve és a Vajdaság: egy tudományos tanácskozás anyaga / 1100 година досељења Мађара у Војводина: зборник радова научног скупа*, Завод за уџбенике и наставна средства, Форум, 1997, 27–37.

Ђирковић 2017 – С. Ђирковић, Краљевска жупанија Бодрошка, in Јерковић, В., Петровић, М. (ed.), *Историја Сомбора: град кроз векове*, Градска библиотека „Карло Бијелички”, 2017, 95–108.

Demo 1983 – Ž. Demo, Bjelobrdski privesci u Jugoslaviji (u povodu nalaza s lokaliteta Đelekovec-Gornji Batijan I), *Podravski zbornik* 9, 1983, 271–301.

Demo 2009 – Ž. Demo, *Ranosrednjovjekovno groblje bjelobrdske kulture: Vukovar-Lijeva Bara (X – XI. stoljeće) / An Early Medieval Cemetery of the Bijelo Brdo Culture: Vukovar Lijeva Bara (10th – 11th Centuries)*, Katalozi i monografije Arheološkog muzeja u Zagrebu 6/1–2, Arheološki muzej u Zagrebu, 2009.

Demo 2012 – Ž. Demo, Srebrni ukrasni komplet za glavu i prsa iz Arheološkog muzeja u Zagrebu, in Šeparović, T. (ed.), *Dani Stjepana Gunjače 2: Zbornik radova sa Znanstvenog skupa “Dani Stjepana Gunjače 2”. Hrvatska srednjovjekovna povijesno-arheološka baština, Međunarodne teme, Split 18.-21. listopada 2011*, Muzej hrvatskih arheoloških spomenika, 2012, 81–105.

Dienes 1972 – I. Dienes, *The Hungarians Cross the Carpathians*, Corvina Press, 1972.

Dimitrijević, Kovačević, Vinski 1962 – D. Dimitrijević, J. Kovačević, Z. Vinski, *Seoba naroda: arheološki nalazi jugoslovenskog Podunavlja*, Narodni muzej Zemun, 1962.

Димитров 1998 – Хр. Димитров, *Българо-унгарски отношения през средновековието*, Академично издателство „Проф. Марин Дринов”, 1998.

Динић 1978 – М. Динић, *Српске земље у средњем веку: историјско-географске студије*, Српска књижевна задруга, 1978.

Ercegović-Pavlović 1980 – S. Ercegović-Pavlović, Les nécropoles romaines et médiévales de Mačvanska Mitrovice / Мацванска Митровица. Некрополе, *Sirmium* 12, Institut archéologique de Beograd, 1980, 1–75.

Filipec 2015 – K. Filipec, *Donja Panonija od 9. do 11. stoljeća*, Univerzitet u Sarajevu, 2015.

Fodor 1996a – I. Fodor, The Hungarian Conquest, in Fodor, I., Révész, L., Wolf, M., Nepper I. M. (eds.), *The Ancient Hungarians. Exhibition Catalogue*, Hungarian National Museum, 1996, 13–18.

Fodor 1996b – I. Fodor, Tuzsér (Szabolcs-Szatmár-Bereg county), in Fodor, I., Révész, L., Wolf, M., Nepper I. M. (eds.), *The Ancient Hungarians. Exhibition Catalogue*, Hungarian National Museum, 1996, 204–206.

Fodor 1996c – I. Fodor, Versec (Vršac, Serbia), in Fodor, I., Révész, L., Wolf, M., Nepper I. M. (eds.), *The Ancient Hungarians. Exhibition Catalogue*, Hungarian National Museum, 1996, 358.

Gáll 2013 – E. Gáll, *Az Erdélyi-medence, a Partium és a Bánság 10–11. századi temetői, szórvány- és kincsleletei / 10th and 11th century burial sites, stray finds and treasures in the Transylvanian Basin, the Partium and the Banat*, Szegedi Tudományegyetem Régészeti Tanszéke, Magyar Nemzeti Múzeum, Magyar Tudományos Akadémia Bölcsészettudományi Kutatóközpont Régészeti Intézet, 2013.

Gáll, Mărginean 2015 – E. Gáll, F. Mărginean, Şiclău (hung.: Sikló) “Gropoiaie” (Arad County). A Burial Ground Section from the Mid-10th Century in the Basin of Lower Crişul Alb (hung.: Fehér Körös), *Ziridava Studia Archaeologica* 29, 2015, 265–304.

- Gallina 2000 – Zs. Gallina, *A honfoglalás kori köznép temetője Homokmégyen*, Kalocsai Múzeumi Kiskönyvtár 6, Kalocsai Múzeumbárátok Köre, Viski Károly Múzeum, 2000.
- Giesler 1981 – J. Giesler, Untersuchungen zur Chronologie der Bijelo Brdo-Kultur (Ein Beitrag zur Archäologie des 10. und 11. Jahrhunderts im Karpatenbecken), *Praehistorische Zeitschrift* 56/1, 1981, 4–167.
- Gračanin 2011 – H. Gračanin, *Južna Panonija u kasnoj antici i ranom srednjovjekovlju (od konca 4. do konca 11. stoljeća)*, Biblioteka Nova Plejada, Plejada, 2011.
- Györfy 2002 – Gy. Györfy, Pregled dobara grčkog manastira u Svetom Dimitriju na Savi (Sremska Mitrovica) iz XII veka, *Споменица Историјског архива „Срем“* 1, 2002, 7–64.
- Horváth 1996 – A. M. Horváth, Izsák-Balázspuszta, in Fodor, I., Révész, L., Wolf, M., Nepper I. M. (eds.), *The Ancient Hungarians. Exhibition Catalogue*, Hungarian National Museum, 1996, 317–321.
- Istvánovits 2003 – E. Istvánovits, *A Rétköz honfoglalás és Árpád-kori emlékanyaga / Das Landnahme- und arpadenzeitliche Nachlassmaterial des Rétköz*, Jóna András Múzeum, Magyar Nemzeti Múzeum, Magyar Tudományos Akadémia Régészeti Intézete, 2003.
- Калић 2007 – J. Калић, Темељи културне историје Срема: Средњи век, in Матицки, М. (ed.), *Срем кроз векове. Сложиви култура Фрушке Горе и Срема*, Вукова задужбина, 2007, 31–44.
- Калић-Мијушковић 1967 – J. Калић-Мијушковић, *Београд у средњем веку*, Српска књижевна задруга, 1967.
- Kiss 2000 – G. Kiss, *Vas megye 10–12. századi sír- és kincsleletei*, Magyarország honfoglalás kori és kora Árpád-kori sírleletei 2, Magyar Nemzeti Múzeum, 2000.
- Kőhegyi, Knotik 1982 – M. Kőhegyi, T. Knotik, A madarasi (Bács-Kiskun m.) honfoglaláskori temető textiltápjainak vizsgálata, *Cumania* 7, 1982, 191–200.
- Költő et al. 2014 – L. Költő, J. Szentpéteri, Z. Bernert, I. Pap, Families, finds and generations: an interdisciplinary experiment at the early medieval cemetery of Vörs-Papkert B, in: Heinrich-Tamáska, O., Straub, P. (eds.), *Mensch, Siedlung und Landschaft im Wechsel der Jahrtausende am Balaton = People, settlement and landscape on lake Balaton over the millennia*, Castellum Pannonicum Pelsonense 4, Verlag Marie Leidorf, 2014, 361–390.
- Коматина, Коматина 2018 – И. Коматина, П. Коматина, Византијски и угарски Срем од X до XIII века, *Зборник радова Византолошког института* 55, 2018, 141–164.
- Korošec 1950 – J. Korošec, *Staroslovansko grobišče na Ptujem Gradu / The Old Slav burial place on the Castle-hill of Ptuj*, Slovenska akademija znanosti in umetnosti, 1950.
- Korošec 1999 – P. Korošec, *Nekropola na Ptujem Gradu: turnirski prostor / Das Gräberfeld an dem Schlossberg von Ptuj: Turnierplata*, Pokrajinski muzej Ptuj, 1999.
- Kouřil (ed.) 2014 – P. Kouřil (ed.), *Great Moravia and the Beginnings of Christianity*, The Institute of Archaeology of the Academy of Sciences of the Czech Republic, 2014.
- Kovács 1989 – L. Kovács, *Münzen aus der ungarischen Landnahmezeit: archäologische Untersuchung der arabischen, byzantinischen, westeuropäischen und römischen Münzen aus dem Karpatenbecken des 10. Jahrhunderts*, Fontes archaeologici Hungariae, Akadémiai Kiadó, 1989.
- Kovács 1992 – L. Kovács, A Móra Ferenc Múzeum néhány régi, 10–11. századi leletanyagáról: Oroszlámos, Horgos, Majdán, Rábe (Csóka) / Zu einigen alten, landnahmezeitlichen Fundmaterialien des Móra Ferenc Museums: Oroszlámos, Horgos, Majdán, Rábé, *A Móra Ferenc Múzeum Évkönyve* 1991/1992–1, 1992, 37–74.
- Kürti 1980 – B. Kürti, Honfoglalás kori magyar temető Szeged-Algyőn (Előzetes beszámoló) / Ein ungarisches Gräberfeld aus der Landnahmezeit in Szeged-Algyő, *A Móra Ferenc Múzeum Évkönyve* 1978/1979–1, 1980, 323–347.
- Langó 2005 – P. Langó, Archaeological research on the Conquering Hungarians: A review, in Mende, B. G. (ed.), *Research on the Prehistory of the Hungarians: A review*, Varia Archaeologica Hungarica 18, Archaeological Institute of the Hungarian Academy of Sciences, 2005, 175–340.
- Langó 2012 – P. Langó, Notes on the dating of Byzantine coin finds from 10th century context in the Carpathian Basin, in Tobias, B. (ed.), *Die Archäologie der frühen Ungarn. Chronologie, Technologie und Methodik, Internationaler Workshop des Archäologischen Instituts der Ungarischen Akademie der Wissenschaften und des Römisch-Germanischen Zentralmuseums Mainz in Budapest am 4. und 5. Dezember 2009*, RGZM – Tagungen 17, Römisch-Germanischen Zentralmuseums, 2012, 49–66.
- Langó et al. 2016 – P. Langó, R. Kustár, K. Köhler, A. Csósz, A study of the tenth-century cemetery at Harta-Freifelt, *Antaeus* 34, 2016, 389–416.
- Lezsák, Novichikhin, Gáll 2018 – G. M. Lezsák, A. Novichikhin, E. Gáll, The analysis of the discoid braid ornament from Andreyevskaya Shhel (Anapa, Russia) (10th century), *Acta Archaeologica Carpathica* 53, 2018, 143–168.
- Liptáková 1964 – Z. Liptáková, Dve pohrebiská z X. storočia na juhozápadnom Slovensku, *Študijné zvesti AU SAV* 14, 1964, 237–258.
- Makkai 1990 – L. Makkai, The Hungarians' Prehistory, Their Conquest of Hungary and Their Raids to the West to 955, in Sugar, P. F., Hanák, P., Frank, T. (eds.), *A History of Hungary*, Indiana University Press, 1990, 8–14.
- Mesterházy 2013 – K. Mesterházy, Das Gold der landnehmenden Ungarn (10. Jh.), in Hardt, M., Heinrich-Tamáska, O. (eds.), *Macht des Goldes. Gold der Macht: Herrschaft- und Jenseitsrepräsentation zwischen Antike und Frühmittelalter im mittleren Donauraum, Akten des 23. Internationalen Symposiums der Grundprobleme der frühgeschichtlichen Entwicklung im mittleren Donauraum, Tengelic, 16.–19.11.2011*, Bernhard Albert Greiner, 2013, 483–498.
- Miletić 1967 – N. Miletić, Slovenska nekropola u Gomjenici kod Prijedora, *Glasnik Zemaljskog muzeja Bosne i Hercegovine* 21/22, 1967, 81–154.
- Moravcsik 1970 – Gy. Moravcsik, *Byzantium and the Magyars*, Adolf M. Hakkert, 1970.
- Nagy 1974 – S. Nagy, *Dombó*, Forum, 1974.
- Nagy et al. 2009 – K. E. Nagy, A. Bíró, A. Bollók, L. Költő, P. Langó, A. A. Türk, Byzantine silk fragments from a tenth-century grave at Fonyód: New data on a garment in the tenth-century Carpathian basin, *Ars Decorativa* 27, 2009, 21–49.
- Nepper 1996a – I. M. Nepper, Hajdúböszörmény-Vid, Erdős-tanya (Hajdú-Bihar county), in Fodor, I., Révész, L., Wolf, M., Nepper I. M. (eds.), *The Ancient Hungarians. Exhibition Catalogue*, Hungarian National Museum, 1996, 225.
- Nepper 1996b – I. M. Nepper, Sárrétudvari-Hízóföld (Hajdú-Bihar county), in Fodor, I., Révész, L., Wolf, M., Nepper I. M. (eds.), *The Ancient Hungarians. Exhibition Catalogue*, Hungarian National Museum, 1996, 257–277.
- Nepper 2002 – I. M. Nepper, *Hajdú-bihar megye 10–11. századi sírleletei 1–2 / Grabfunde aus dem 10–11. Jahrhundert im Komitat Hajdu-Bihar 1–2*, Déri Múzeum, Magyar Nemzeti Múzeum, Magyar Tudományos Akadémia Régészeti Intézete, 2002.
- Nevizánsky, Košta 2009 – G. Nevizánsky, J. Košta, Výskum staromadžarského jazdeckého pohrebiska v Strede nad Bodrogom v rokoch 1926 a 1937, *Slovenská archeológia* 57/2, 2009, 301–354.
- Ota 2014 – S. Ota, *The Mortuary Archaeology of the Medieval Banat (10th–14th Centuries)*, East Central and Eastern Europe in the Middle Ages (450–1450) 26, Brill, 2014.
- Паровић-Пешикан 1981 – М. Паровић-Пешикан, Средњовековна некропола у Сремској Митровици, *Старинар* 31, 1981, 179–191.
- Petrinec 2009 – M. Petrinec, *Groblja od 8. do 11. stoljeća na području ranosrednjovjekovne hrvatske države*, Muzej hrvatskih arheoloških spomenika, 2009.
- Petrinec 2014 – M. Petrinec, O pojedinim predmetima bizantske provenijencije na istočnoj obali Jadrana, *Starohrvatska prosvjeta* 3/41, 2014, 63–96.
- Поповић 2003 – В. Поповић, *Sirmium. Град царева и мученика (Сабрани радови о археологији и историји Сирмијума)*, Пројекат Благо Сирмијума 1, Археолошки институт, 2003.
- Radičević, Špehar 2015 – D. Radičević, P. Špehar, Some remarks on Hungarian Conquest Period Finds in Vojvodina, *Acta Archaeologica Carpathica* 50, 2015, 137–162.
- Радишић 2020 – М. Радишић, *Средњовековно археолошко наслеђе на југу карпатско-панонског простора: „бјелобрдски комплекс“ у Србији*, unpublished PhD thesis, Филозофски факултет Универзитета у Београду, 2020.
- Радишић, Узелац 2018 – М. Радишић, В. Узелац, Појасне апликације из Станишића у светлу ранамађарске оставштине у Бачкој, *Рад Музеја Војводине* 60, 2018, 21–38.

Révész 1996a – L. Révész, *A Karosi Honfoglalás Kori Temetők. Régészeti adatok a Felső-Tisza-vidék X. századi történetéhez / Die Gräberfelder von Karos aus der Landnahmezeit. Archäologische Angaben zur Geschichte des oberen Theißgebietes im 10. Jahrhundert*, Magyarország honfoglalás kori és kora Árpád-kori sírleletei 1, Herman Ottó Múzeum, Magyar Nemzeti Múzeum, 1996.

Révész 1996b – L. Révész, Karos-Eperjesszög, Cemeteries 1–3 (Borsod-Abaúj-Zemplén county), in Fodor, I., Révész, L., Wolf, M., Nepper I. M. (eds.), *The Ancient Hungarians. Exhibition Catalogue*, Hungarian National Museum, 1996, 82–109.

Révész 1996c – L. Révész, Hódmezővásárhely-Nagysziget (Csongrád county), in Fodor, I., Révész, L., Wolf, M., Nepper I. M. (eds.), *The Ancient Hungarians. Exhibition Catalogue*, Hungarian National Museum, 1996, 308–312.

Révész 2003 – L. Révész, The Cemeteries of the Conquest Period, in Visy, Z. (ed.), *Hungarian Archaeology at the turn of the Millennium*, Ministry of National Cultural Heritage and Teleki László Foundation, 2003, 338–343.

Révész 2014 – L. Révész, *The Era of the Hungarian Conquest. Permanent Exhibition of the Hungarian National Museum*, Hungarian National Museum, 2014.

Révész 2020 – L. Révész, *A 10–11. századi temetők regionális jellemzői a Keleti-Kárpátoktól a Dunáig / Regional Features of the 10th–11th Century Cemeteries from the Eastern Carpathians to the Danube*, Magyarország honfoglalás kori és kora Árpád-kori sírleletei 13, SZTE BTK Régészeti Tanszék, MTA BTK Régészeti Intézet, Magyar Nemzeti Múzeum, 2020.

Révész, Nepper 1996 – L. Révész, I. M. Nepper, The archaeological heritage of the ancient Hungarians, in Fodor, I., Révész, L., Wolf, M., Nepper I. M. (eds.), *The Ancient Hungarians. Exhibition Catalogue*, Hungarian National Museum, 1996, 37–56.

Schulze 1984 – M. Schulze, Das ungarische Kriegergrab von Aspers-lès-Corps. Untersuchungen zu den Ungarneinfällen nach Mittel-, West- und Südeuropa (899–955 n. Chr.) mit einem Exkurs zur Munzchronologie altungarischer Gräber, *Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz* 31, 1984, 473–514.

Schulze-Dörrlamm 1989 – M. Schulze-Dörrlamm, Juwelen der Kaiserin Theophanu. Ottonischer Schmuck im Spiegel zeitgenössischer Buchmalerei, *Archäologisches Korrespondenzblatt* 19/4, 1989, 415–422.

Solter 2016 – A. Solter, *Arheološki muzej u Zagrebu – život od 19. do 21. stoljeća*, Arheološki muzej u Zagrebu, 2016.

Stanojević 1989 – N. Stanojević, *Некрополе X-XV века у Војводини*, Археолошко друштво Војводине, 1989.

Szabó 1955 – K. Szabó, Honfoglaláskori párták, *Folia Archeologica* 7, 1955, 123–125.

Szöke 2014 – B. M. Szöke, *The Carolingian Age in the Carpathian Basin. Permanent Exhibition of the Hungarian National Museum*, Hungarian National Museum, 2014.

Шпехар, Стругар Бевц 2016 – П. Шпехар, Н. Стругар Бевц, *Батајница-Велика хумка: раномађарска некропола*, Монографије 18, Музеј града Београда, 2016.

Takács 2006 – M. Takács, Siedlungsgeschichtliche Auswertung, in Daim, F., Lauermann, E., Bogácsi-Szabó, E. (eds.), *Das frühungarische Reitergrab von Gnaden-dorf (Niederösterreich)*, Monographien – Römisch-Germanisches Zentralmuseum 64, Römisch-Germanischen Zentralmuseums, 2006, 211–252.

Takács 2012 – M. Takács, Crafts in the Árpád-era, in Szulovszky, J. (ed.), *The History of Handicraft in Hungary*, Hungarian Chamber of Commerce and Industry, 2012, 39–53.

Točík 1968 – A. Točík, *Altmagyarische Gräberfelder in der Südwestslowakei*, *Archaeologica Slovaca Monographiae* 3, Slovenskej Akadémie Vied, 1968.

Tomičić 2019 – Ž. Tomičić, *Bjelobrdski kulturni krug: groblja 9. do 13. stoljeća u međurečju Mure, Drave, Dunava i Save*, Hrvatska akademija znanosti i umjetnosti, Zavod za znanstveni i umjetnički rad, 2019.

Tóth 1976 – E. H. Tóth, The equestrian grave of Izsák-Balázspuszta from the period of the Magyar Conquest / Az Izsák-Balázspusztai honfoglaláskori lovas sír, *Cumania* 4, 1976, 141–184.

Жилина 2010 – Н. В. Жилина, История древнерусского металлического убора IX–XIII вв., in Пескова, А. А., Щеглова, О. А., Мусин, А. Е. (eds.), *Славяно-русское ювелирное дело и его истоки. Материалы Международной научной конференции, посвященной 100-летию со дня рождения Гали Фёдоровны Корзухиной*, Санкт-Петербург, 10– апреля 2006 г., Нестор-История, 2010, 175–198.

Живковић 2007 – Т. Живковић, *Јужни Словени под византијском влашћу 600–1025*, Чигоја, 2007.

INTERNET SOURCES

<https://mnm.hu/hu/nagykorun-elokerult-honfoglalas-kori-leletek-restauralasa/> (14 December 2020).

<https://muzejsrema.com/o-muzeju/> (25 December 2020).