A UNIQUE OBJECT FROM THE 10TH-CENTURY TRANSYLVANIAN BASIN. THE MOUNT ORNAMENTED SABRETACHE OF GRAVE NO. 25 IN CLUJ-NAPOCA-PLUGARILOR STREET

Erwin Gáll¹, Szabolcs Nagy², Diana Bindea³, Anikó Horváth⁴, Ioana Hica†

Abstract: To the southeast of the Roman town of Napoca, 26 graves from the 10th century were discovered during the excavation of a Roman-period cemetery between 1985 and 1986.

In the southern, slanted part of the funerary site, the individual of grave 25, the richest and most varied depositions and the only horse burial in the cemetery, was excavated. The most important object of the tomb's very varied grave goods material is clearly the leather sabretache, which was ornamented with different types and sizes of mounts by the masters/leather craftsmen of the 10th century. Based on the available data, the sabretache, decorated with mounts, was not placed horizontally in the grave, but obliquely, at an angle of 45 degrees on the leg of the deceased person. Based on the structural and typological analysis of the mounts, the Cluj-Napoca mount ornamented sabretache shows a connection with the sabretaches of the Upper Tisza region and southern Poland and we can state that we do not know an identical analogy of the mounts on the sabretache from Cluj, so up to the present day, it is a unique piece. The traces of wear and repairs on the mounts of the Cluj-Napoca sabretache clearly indicate its long-term use. The signs of wear on the central mount of the sabretache and the biological age of the skeleton (60–65 years) indicate not only the lengthy use of the sabretache, but taking into account the above observations, they also confirm their placement in the grave in the second half of the 10th century. Based on the 14C samples' results taken from the 60-65-year-old man and the horse sacrificed (4-5 years old), as well as the typochronological analysis of the finds, and the radiocarbon samples taken from the other six graves in the cemetery, grave 25 was most likely dug in the second half of the 10th century, approximately in the years 960–990. This also means that the life course of the senilis man, based on the available scientific researches, had begun around the years 910–930 and, which is at least as important, he was probably born in the vicinity of Cluj-Napoca.

Keywords: mount ornamented sabretache, funerary site, 10th century, 14C analysis

1. The geological and geographical realities and the funerary site from Cluj-Napoca-Plugarilor street

Cluj-Napoca, the centre of the hydrographic basin of Someşul Mic (Fig. 1), is located, from a geological perspective, on the Tisa unit, which is a continental fragment caught in the Alpine folding system. The morphology of the present surface around the area

¹ "Vasile Pârvan" Institute of Archaeology, 010667, Bucharest, Henri Coandă St. 11. erwin.gall@iabvp.ro

² National History Museum of Transylvania, 400020 Cluj-Napoca, Constantin Daicoviciu St. 2, kollek2001@ yahoo.com

 $^{^3\,}$ National History Museum of Transylvania, 400020 Cluj-Napoca, Constantin Daicoviciu St. 2, diana_bindea@yahoo.com

⁴ HUN-REN, Institute for Nuclear Research, Debrecen, Hungary, horvathaniko@isotoptech.hu

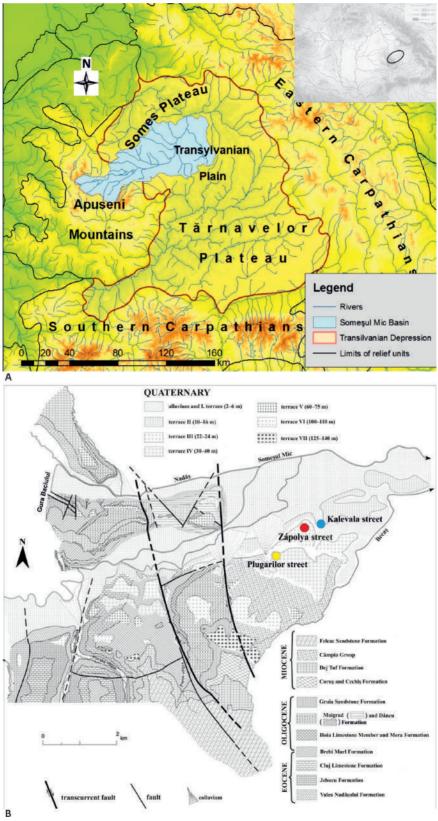


Fig 1/A. The Valley of the Someşul Mic in the Transylvanian Basin (with blue); 1/B. Geological map of part of the city and the $10^{\rm th}$ archaeological sites in the area of Cluj-Napoca

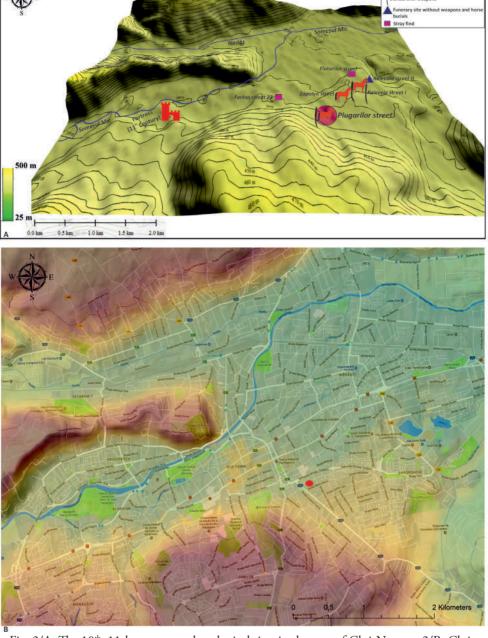


Fig. 2/A. The 10^{th} –11th century archaeological sites in the area of Cluj-Napoca; 2/B. Cluj-Napoca Plugarilor street: location of the archaeological site (marked through a red circle)

discussed in the present study has been completed during the Quaternary (the last 2.5 million years in the geological history of the Earth), modelled through fluviatile erosion; still, slope processes have also been substantial, more intense during the glacial periods, both in the areas of the Transylvanian Basin with hard rocks, and in those consisting mainly of poorly consolidated deposits.

Through the changes triggered by the succession of glacial and inter-glacial periods, fluviatile erosion went through more intense and slower phases, leading, eventually, to the formation of wide alluvial fields. During the intense phases the river bed of Someşul Mic deepened

and left the old alluvial field, transforming into a suspended fluviatile terrace. Thus, seven multitiered terraces, in places just caused by erosion, in places with preserved fluviatile deposits, were formed in the area of Cluj, just like in the entire Transylvanian Basin⁵. These terraces, both in the area of Cluj, and in the Transylvanian Basin, display a very strong N–S asymmetry, caused by the pressure exerted on the E–W oriented courses of gelisolifluxion that was stronger on the slopes with northern exposure⁶. This triggered the more extensive development of the terraces on the right bank of Someşul Mic, but also caused the loss of integrity of the upper terraces through slope movements⁷.

The extended terrace II or the city terrace (10–16 m) is the most favourable to human settlement. On the one hand, it provides protection against the strongest floods and optimal stability for buildings, on the other hand, through the proximity of phreatic water and the presence of springs that usually feature in the front of the low terraces, it ensures a permanent supply of vital drinking water.

The Plugarilor street site was recorded on the SW edge of Pietros/Kövespad, one level higher than the Zápolya (today: Traian Moşoiu) street cemetery (terrace III), at the end of the plateau of a higher terrace, or on its slant slope.

The 800 m wide terrace IV, located SE from the former city of Napoca, currently ends in a steep slope; before the landscaping of 1985, it descended slightly down to the level of Pata (today Bld. Nicolae Titulescu) street and Gheorgheni (today: Constantin Brâncuşi) street⁸. In the immediate vicinity of the site, during the construction of the Greek Catholic cathedral, DorinUrsuţ managed to identify the Roman road to Potaisa (Turda) under the then Gheorgheni (today: str. Constantin Brâncuşi) road (Fig. 2/A)⁹. Here, on the western end of terrace IV, the Roman cemetery had already been found in the 1920s and 30s¹⁰. Between 1972 and 1977, a planned excavation had been carried out in the area of the old Muncitorilor and Plugarilor streets under the direction of Ioana Hica¹¹, which was further researched in 1985–1987 by Ioana Hica, Petre Iambor, and Radu Ardevan¹².

2. About the early medieval funerary site in general¹³ (Pl. 1/A–B)

Of the 26 skeletal graves with NW–SE, WNW–ESE orientation, excavated over the course of two years, 17 were excavated in situ, in the other cases, traces of former disturbance were detected. The explored southern part of the Roman cemetery, however, was not fully excavated. In all likelihood, there are/were (?) unexplored graves in the southern and partly in the eastern direction as well.

Based on the analysis of the cemetery map, the excavated part of the cemetery can be divided into two larger groups: in the northern direction, there is a fairly well distinguishable group I, an interesting feature is that the skeletons of 3 males and the skull fragments of an

⁵ SAVU/MAC/TUDORAN 1973.

⁶ WANEK/POSZET 2010, 80–81.

⁷ WANEK/POSZET 2011, 88–89; GÁLL ET ALII 2020, 350–354.

⁸ The exact localization of the site and the data on former terrain conditions were provided by Dr. Radu Ardevan. We are grateful to the Professor, who was kind enough to provide us with the surviving excavation documentation from the early Middle Ages. We would like to thank him for his selfless help.

⁹ URSUŢ 1999, 234, 237.

¹⁰ FLOCA 1941, 13–15.

¹¹ HICA-CÂMPEANU 1977, 235–236.

¹² REP. ARH. CLUJ, 1992, 126–131; HICA 1999; HICA 2004, 113–139.

¹³ For a general analysis, see.: GÁLL 2013, Vol. I: 261–267. *GPS coordinates*: 46°46′4.90" N – 23°36′14.00" E; Code-RAN:54984.03. The website of the *Repertoriul Arheologic Național* (National Archaeological Repertory), which lists archaeological sites, mentions the previously undisclosed Roman cemetery with an incorrect date.

individual of unknown gender were identified. Group II – which is divided into several smaller subgroups – contains 22 graves. In the southernmost corner of this group, grave no. 25, which will be examined below, and its mount ornamented sabretache was discovered.

Animal bones were found in several graves, including bird bones. A total of 10 graves – as confirmed by the clay vessels found there – may have included food depositions with the dead (graves no. 2, 4–5, 13, 15–16, 19–20, 23–24). We can state that this is one of the typical depositions in females' and children's graves (vessels were found in 4 females', 4 children's, and 1 male's graves, as well as in the grave of 1 individual of unknown gender and age).

Based on the findings, three of the 26 graves were without depositions (graves no. 1, 17, and 18). A 3–4-year-old *infans* lay in grave no. 1, the skeleton of an elderly female was recorded in grave no. 17, and grave no. 18 contained only a skull.

Jewellery was found in 14 graves: most graves contained silver and bronze lock rings (gold from grave no. 16), and *earrings with grape bunch pendants* from two graves (graves no. 3 and 8). A bronze wire bracelet and a simple bronze necklace were also recorded, as well as beads. Seven rhombus-shaped shirt collar ornaments were found in grave no. 5.

In 12 cases of the 23 graves with depositions, arrowheads are known (graves no. 4, 6, 10–12, 14–16, 20, 22, 25–26), with or without a quiver, one or more pieces. Bone bow-brackets (on the grips and arms of the bows) were found in six graves (graves no. 4, 10, 12, 22, 25, and 26), and quiver remnants from seven (graves no. 4, 10–12, 22, 25, 26), including strap distributors, quiver rings, and quiver buckles. A total of 3 sabres were found (graves no. 4, 22, and 25), so this type of weapon is characteristic of 11.53% of the graves¹⁴.

The male–female binary opposition can also be traced in the case of the cemetery's findings, in the concentration of weapons and jewellery; while the former group of objects can be associated with males, the latter is commonly associated with females. The bow and arrowheads found in grave no. 26 (female grave) are the only ones that can be considered problematic, which is why we consider it necessary to reanalyse the anthropological material of the grave.

3. Burial customs of grave no. 25

In the southern, slanted part of the funerary site, slightly separated from the group II (Fig. 3), the individual of grave no. 25, the richest and most varied depositions and the only horse burial in the cemetery, was excavated. The NW (304°)–SE (124°) oriented grave had the largest pit volume in the cemetery due to the parts of the horse and the space for the bucket, which may indicate the important status of the person, 60–65-year-old male, *senilis*, in his community. The information in the excavation documentation (width 88 cm) testifies to the size of a large burial pit. At the same time, according to the bucket found approx. 25 cm away from the dead's foot, it cannot be ruled out that the elderly male was buried in a coffin.

Based on the 124-cm depth of the horse parts (skull, leg bones) identified next to the male buried at a depth of 145 cm - which is confirmed by the available photo (Pl. 2/B) -, a berm was formed while digging the pit.

3.1. Horse burial (Pl. 1/A-B; pl. 2/A-B)

Among the burial customs that can be recorded in the grave of the extended skeleton, we must highlight the burial of horse parts as the most important. Based on the documentation available to us, the head of the killed animal was placed approx. 20 cm higher than the deceased, followed by the four shins. The horse's skull was lying on the left side, it is possible that it was

 $^{^{14}}$ As a comparison, a total of approx. 142 sabres was found in the 10^{th} -century Carpathian Basin: GÁLL 2020, Fig. 116.

placed in the grave that way. The iron stirrup was found on the horse's bones, while the horse bit was found on the shins. Based on the body measurements of the parts of the horse found next to the *senilis*, a tall stallion with a height of 142 cm at the withers was placed in the grave. Based on the location of its head and shins, it can be classified as a horse burial of the so-called *"folded in hidelhide suitcase"* type by Csanád Bálint¹⁵, its closest analogy is grave no. 9 of the Zápolya street cemetery, located merely 580 meters away¹⁶.

Certainly, it remains a matter of subjective interpretation whether all of this can be classified as a sacrifice or a companion meant for the afterlife, so can we talk about the animal's otherworldly functionality? In our view, the significance of all of these could have completely faded by the 10th century and were mostly related to higher social status, but in the case of the Cluj site, we can also relate all of this to age, considering that he is the oldest person in the cemetery¹⁷.

3.2. Wooden bucket with iron handle and bands (Pl. 2/A-B)

In grave no. 25, based on the available drawing, the photo, and Ioana Hica's notes, the wooden bucket with iron bands was found approx. 25 cm from the deceased's feet in the ESE direction, at the same depth level. Unfortunately, we were unable to identify it after conservation¹⁸. In a unique way, this is the only grave with a mount ornamented sabretache where a wooden bucket was also found in the Carpathian Basin, and the only 10th-century find of this kind in the Transylvanian Basin.

About burial customs, we would like to draw attention to the fact that the burial of a wooden bucket with iron handle and bands can be connected with the customs of the *Slavophone* population of north-western Transylvania (Someşeni and Apahida), which the archaeological literature classifies as part of the so-called Nuşfalău mound group, presumably we are talking about groups belonging to the Avar Khaganate's elites¹⁹. The Plugarilor street site in Cluj-Napoca is only 2.5 km away from the Someşeni cemetery (which was found in the immediate vicinity of the Someşeni salt mound), so in conclusion, some kind of connection between these groups of people is merely a question of interpretation.

We can hence state, in relation to these two customs presented above, that if horse burial is a typical nomadic, eastern cultural funerary custom, then bucket burial is actually a specific interface with the local funerary traditions of the previous era! Continuity (wooden bucket with iron handle andbands) and discontinuity (partial horse burial) in the same grave!

4. Briefly about the finds from grave no. 25 (Pl. 2/A-B)

The finds from the grave fit well with the horse-weapon circle, the main – different – characteristic of which is the placing of the mount ornamented sabretache in the grave. A total of 54 objects were recovered from grave no. 25 – including the finds of the mount ornamented sabretache's component (17 specimens), which can be organized into 5 or 6 object categories (Pl. 2/A–B).

- 4.1. Clothing (two lockrings, diamond-shaped shirt collar ornament).
- 4.2. Belt accessories (maybe the buckle, if it's not also part of the horse's harness set?)?

¹⁵ BÁLINT 1969, 107–114.

¹⁶ The analysis and systematization of the Transylvanian Basin horse burials: GÁLL 2013, Vol. I: 617–629, 877–878, Vol. II: Pl. 302–306.

¹⁷ For the anthropological data of the Zápolya street funerary site, see: GÁLL ET ALII 2020, 406–407.

¹⁸ HICA 2003, 3

¹⁹ GÁLL ET ALII 2017, 136–141, Fig. 66; STANCIU 1999, 245–263; STANCIU 2016, 142, Fig. 25–26.

- 4.3. Weapons (parts of a quiver, arrowheads, bow, sabre). It should be noted that the weapons were placed in a package next to the left foot of the deceased; first, the sabre, and then the quiver containing 6 arrowheads were placed in the grave, and at the end, the bone bow-brackets (the arms and one grip) were recorded next to the phalanges in ESE direction.
- 4.4. Tools (knife, strike-a-light, flintstone the last two in the sabretache: Pl. 4/8; Pl. 8/8).
- 4.5. Perhaps the result of *obolus* giving, the two silver-coloured round mounts could not be ruled out as money, but they have not yet been determined (perhaps this is also indicated by their high silver content!). If the objects found under the skull and in the mouth were proven to be 10th-century coins, then we could register the first two 10th-century coins of the Transylvanian Basin, unearthed from graves.
- 4.6. Horse tack (horse bit, stirrup, girth buckle, strap ends, and probably 13 solid appliques with lugs) indicate the presence of the bridle, crupper, and saddle in the grave. Their position in the grave, however, is not at all classical: the horse bit next to the stirrup, at the phalanges of the left leg²⁰, and perhaps the strap ends on the 4 cruppers between the horse's head and the left femur, since the massive rivets on these objects and their large washers indicate their fixing on a thicker strap refer to fixing, but the length of the rivets decisively refers to the thickness of the leather. The equipment of the horse tack (crupper) may have been very similar to that of the horses in Zápolya street, because we also identified 4 strap ends in grave no. 11 excavated here²¹.

5. The position of the mount ornamented sabretache inside the grave

The most important object of the tomb's very varied grave goods material is clearly the leather sabretache, which was ornamented with different types and sizes of mounts by the masters/leather craftsmen of the 10th century. Based on the documentation of the grave excavated in 1986 – which is presented in detail below –, it seems that the excavators did not recognize the function of the mounts of the sabretache and the sabretache itself. Based on the laconic description, the mounts decorating the sabretache were interpreted as ornaments belonging to the belt²².

Based on the available data, the sabretache, decorated with mounts, was not placed horizontally in the grave, but obliquely, at an angle of 45 degrees on the leg of the deceased person. The interpretation of the available data is also problematic, because the excavation had been carried out at swiftly²³, and there was no very precise, large-scale horizontal and vertical documentation of the very diverse series of findings on the left femur of the skeleton and in its vicinity²⁴. The situation is further complicated by the fact that in the same part of the grave, a set of horse tack was extended to the sternum of the skeleton and strap ends and strap retainers, which probably belong to the horse's crupper, were also recorded. All of this significantly complicates the reconstruction of the position of the mount set of the sabretache within the grave. Based on the comparison of the 1/20 grave drawing and the information on the wrapping

²⁰ A similar case: Karos-Eperjeszög cemetery III,Grave no. 17: RÉVÉSZ 1996, 37–38, 134 tábla.

²¹ GÁLL 2013, Vol. II: 134. táb. 1–4. In a reconstruction drawing, Gyula László also shows the decorations of the horse in grave no. 11: LÁSZLÓ 1943, 54, 55, fig. 7.

²² HICA 2003, 3 (unpublished).

²³ According to Radu Ardevan, who participated in the excavation, the opening and documentation of a specific grave had to be completed on the same day.

²⁴ Despite the fact that the excavation of Karos-Eperjeszög II was carried out during the planned excavation, the reconstruction of the mount ornamented sabretache, excavated in grave no. 11 similarly encountered difficulties: RÉVÉSZ 1996, 138, 74–76. kép, 18. tábla.

papers containing the finds, the presentation of the objects belonging to the sabretache and the results of their metallographic examination²⁵ can be described as follows:

- 1. Rhomboid-shaped, central locking mount made of castings containing a lot of Cu, pierced in the middle in a rectangular shape. The documentation is somewhat contradictory about its placement in the grave. While the letter (note) accompanying the find indicates the inner side of the left femur as the place of discovery, "in interiorul femurului stâng", the tomb drawing marks its placement on the outer side of the left femur, relatively close to the knee. The asymmetrically elongate palmette decorations illustrated on the object are embossed, their shapes and sizes are also different; in addition to the two elongated palmette leaves, a smaller elongated palmette shape and a stubbier leaf also appear. On the back of the object, in the corner of each heart-shaped palmette, 1 rivet was soldered, which may have fallen out in the case of one of them, so as a secondary homemade? reparation, a large rivet was installed, which was used to punch through the front panel. For a more secure fastening, a small washer plate was attached to the free end of the rivet. Dimensions: 5.9 × 6.1 cm, h: 0.12–0.14 cm. Weight: 15.30 grams. Metal composition: Cu: 96.05±0.08%; Zn: 2.17±0.09%; Ir: 1.6±0.5%; Ag: 0.17±0.01%; Co: 0.02±0.04%. NMHT. No. of inventory: F 30003 (Pl. 3/1; pl. 5/1).
- 2.1–2. Smaller rectangular mounts. Floral design, in four slightly heart-shaped frames. The frames stand out of the relief of the object, just like the pearl-patterned, "Hortobágy-pattern"-like decorations, in an embossed pattern. Traces of subsequent punching are also clearly visible. Between the frames, they were visually separated with a drop-shaped ornament, and also, to emphasize the nature of the decorations in these frames. In the four corners of the back of the mount, there is a bent back rivet soldered to the object. The frame of the objects is shield-shaped with a wide border.
- 2.1. The darker mount was found on the inner side of the femur. Dimensions: 2.56 \times 2.5 cm. Weight: 2.25 grams. Metal composition: Cu: 94.50 \pm 0.14%; Ir: 4.1 \pm 0.5%; Zn: 0.98 \pm 0.11%; Ag: 0.25 \pm 0.01%; Au: 0.11 \pm 0.05%; Co: 0.04 \pm 0.05%. NMHT. No. of inventory: F 30004 (Pl. 3/2.1; pl. 6/2.1).
- 2.2. The second rectangular mount was found on the left femur, a few centimetres away from the knee. Dimensions: 2.53×2.65 cm. Weight: 2.50 grams. Metal composition: Cu: $96.51\pm0.10\%$; Ir: $2.7\pm0.4\%$; Zn: $0.55\pm0.09\%$; Ag: $0.21\pm0.01\%$; Co: $0.03\pm0.04\%$. NMHT. No. of inventory: F 30005 (Pl. 3/2.2; pl. 6/2.2).
- 3. Zoomorphic molded mounts with bear head, also around the femurs, in the following order:
- 3.1–2. The first two of the embossed mounts were found together with one (light) rectangular mount (F. 30005) also on the left femur, a few cm away from the knee. In both cases, there are three bent rivets on the back.
- 3.1. The dimensions of the first zoomorphic mount with bear head are: 1.91×2.03 cm. Weight: 3.85 grams. Metal composition: Cu: $95.59\pm0.10\%$; Ir: $3.0\pm0.4\%$; Zn: $1.12\pm0.09\%$; Ag: $0.17\pm0.01\%$; Au: $0.06\pm0.05\%$; Co: $0.04\pm0.05\%$. NMHT. No. of inventory: F 30007 (Pl. 3/3.1; pl. 6/3.1).
- 3.2. The dimensions of the second zoomorphic mount with bear head are: 2.01 \times 1.85 cm. Weight: 3.30 grams. Metal composition: Cu: 94.23 \pm 0.12%; Ir: 4.1 \pm 0.4%; Zn: 1.00 \pm 0.09%; Ag: 0.55 \pm 0.01%; Au: 0.12 \pm 0.05%; Co: 0.04 \pm 0.05%. NMHT. No. of inventory: F 30009 (Pl. 3/3.2; pl. 6/3.2).
- 3.3–4. The two zoomorphic mounts depicting a bear's head, from the inner side of the left femur, were recorded together with the dark rectangular mount (F. 30004).
 - 3.3. The dimensions of the first zoomorphic mount with bear head are: 1.90×2.0 cm.

²⁵ A Portable EDXRF Elva X Prospector 3 MAX spectrometer with large SDD detector area was used.

Weight: 3.65 grams. Metal composition: Cu: 97.50±0.09%; Ir: 1.8±0.5%; Zn: 0.50±0.10%; Ag: 0.15±0.01%; Co: 0.02±0.04%. NMHT. No. of inventory: F 30010 (Pl. 3/3.3; pl. 7/3.3).

- 3.4. The second bear head mount was cast incorrectly, the animal's eye is missing on the object depicting the bear's head. Dimensions: 1.9 × 1.8 cm. Weight: 2.75 grams. Metal composition: Cu: 97.50±0.09%; Ir: 1.8±0.5%; Zn: 0.50±0.10%; Ag: 0.15±0.01%; Co: 0.02±0.04%. NMHT. No. of inventory: F 30006 (Pl. 3/3.4; pl. 7/3.4).
- 3.5. Another zoomorphic mount with bear head was recorded separately on the inner side of the left femur. Dimensions: 1.9×2.1 cm. Weight: 3.30 grams. Metal composition: Cu: 93.66±0.14%; Ir: $4.5\pm0.5\%$; Zn: $0.92\pm0.11\%$; Ag: $0.69\pm0.02\%$; Au: $0.14\pm0.06\%$; Co: $0.08\pm0.06\%$; Cd: $0.01\pm0.01\%$. NMHT. No. of inventory: F 30008 (Pl. 3/3.5; pl. 7/3.5).
- 4. Molded, small stylized zoomorphic mount depicting a mask, pierced with three circular holes placed in a triangular position. In the upper part of the object, we can observe six, vertically incised lines and a deep spiral line, with twirled end, ending in a dot. Dimensions: 1.59 × 1.49 cm, depth: 0.1 cm. Weight: 1.0 grams. Metal composition: Cu: 95.46±0.11%; Ir: 3.1±0.5%; Zn: 0.95±0.10%; Ag: 0.26±0.01%; Au: 0.10±0.05%; Co: 0.09±0.06%. NMHT. No. of inventory: F 30011 (Pl. 3/4; pl. 7/4).
- 5. On the inner side of the left femur, six pieces of narrow bronze strap end mounts, which can be fitted to each other, decorating the strap of the sabretache were found, with two rivets on the



Fig. 3. The reconstructed mount ornamented sabretache

back. A so-called circle section motif stands out from the elongated star-shaped background in the centre of the objects. In each lower corner of the objects, there is an engraved/hollowsemicircular incised lines, there are connected by a third curved line.

- 5.1. Dimensions: 1.2×0.9 cm. Weight: 0.70 grams. Metal composition: Cu: $94.57\pm0.12\%$; Ir: $4.70\pm0.5\%$; Zn: $0.31\pm0.08\%$; Ag: $0.27\pm0.01\%$; Au: $0.11\pm0.04\%$; Co: $0.03\pm0.04\%$. NMHT. No. of inventory: F 30012 (Pl. 4/5.1; pl. 7/5.1).
- 5.2. Dimensions: 1.2×1.0 cm. Weight: 0.75 grams. Metal composition: Cu: $96.57\pm0.11\%$; Ir: $2.90\pm0.50\%$; Ag: $0.24\pm0.01\%$; Zn: $0.23\pm0.09\%$; Co: $0.02\pm0.04\%$. NMHT. No. of inventory: F 30013 (Pl. 4/5.2; pl. 7/5.2).
- 5.3. Dimensions: 1.3×1.0 cm. Weight: 0.75 grams. Metal composition: Cu: 95.36±0.12%; Ir: $3.90\pm0.5\%$; Zn: $0.34\pm0.10\%$; Ag: $0.32\pm0.01\%$; Co: $0.02\pm0.04\%$; In: $0.01\pm0.01\%$. Bent rivets on the back. NMHT. No. of inventory: F 30014 (Pl. 4/5.3; pl. 8/5.3).
- 5.4. Dimensions: 1.2×1.0 cm. Weight: 0.70 grams. Metal composition: Cu: $95.09\pm0.13\%$; Ir: $4.20\pm0.5\%$; Zn: $0.36\pm0.09\%$; Ag: $0.29\pm0.01\%$; Co: $0.03\pm0.05\%$. NMHT. No. of inventory: F 30015 (Pl. 4/5.4; pl. 8/5.4).

- 5.5. Dimensions: 1.1×1.0 cm. Weight: 0.80 grams. Metal composition: Cu: $96.00\pm0.10\%$; Ir: $1.1\pm0.5\%$; Zn: $0.44\pm0.08\%$; Ag: $0.14\pm0.01\%$; Co: $0.05\pm0.05\%$. NMHT. No. of inventory: F 30016 (Pl. 4/5.5; pl. 8/5.5).
- 5.6. Dimensions: 1.1×1.0 cm. Weight: 0.80 grams. Metal composition: Cu: $98.22\pm0.07\%$; Ir: $1.1\pm0.5\%$; Zn: $0.44\pm0.08\%$; Ag: $0.14\pm0.01\%$; Co: $0.05\pm0.05\%$. NMHT. No. of inventory: F 30017 (Pl. 4/5.6; pl. 8/5.6).
- 6. Oval strap retainer from the inner side of the left femur. Dimensions: 1.85×0.85 cm; thickness of the ring: 0.87 cm. Weight: 1.95 grams. Metal composition: Cu: $93.08\pm0.14\%$; Zn: $6.65\pm0.20\%$; Ag: $0.24\pm0.02\%$; Co: $0.03\pm0.09\%$. NMHT. No. of inventory: F 29588 (Pl. 4/6; pl. 8/6).
- 7. Oval, thinner ring with a triangular cross-section. Dimensions: 2.08×0.95 -0.85 cm; thickness of the ring: 0.14 cm. Metal composition: Cu: $94.37\pm0.23\%$; Ir: $4.6\pm0.8\%$; Zn: $0.61\pm0.17\%$; Ag: $0.35\pm0.02\%$; Co: $0.05\pm0.10\%$. NMHT. No. of inventory: F 30018 (Pl.4/7; pl. 8/7).

Based on this series of data, we can reconstruct the sabretache as follows:

- A. In the two upper corners of the sabretache, there may have been two small rectangular mounts, filled with punch marks.
- B.1. On the left edge of the sabretache, 3 zoomorphic bear head depictions were installed under the small rectangular mounts.
- B.2. On the right edge of the sabretache, 2 zoomorphic bear head depictions were installed under the small rectangular mounts.
- C. The rectangular, large central locking mount was installed in the middle part of the sabretache.
- D. Based on the concentration of Cu, the two strap retainers probably belonged to the sabretache and could have been placed in the upper part of the sabretache's closing strap.
- D. On the lower section of the closing strap, the object was decorated with six matching bronze strap end mounts.

6. Regarding the metal content of the components of the mount ornamented sabretache (Fig. 4)

In the case of the 10^{th} -century material culture, we hardly know about material analyses²⁶, and this statement is even more true in case of the metal analysis of the components of the sabretaches with mounts. In addition to silver, the most commonly used raw material in the era was copper (Cu) and its various alloys (e.g. lead [Pb], zinc [Zn]). The source of the procurement of copper-based alloys, however, raises additional questions, for which we do not have any sources at our disposal so far – from a 10^{th} -century perspective.

On the basis of the XRF analysis of the components of the Cluj-Napoca mount ornamented sabretache, we can obviously speak of the minimally alloyed elemental copper, the so-called red copper²⁷:

Item nr.	Description of the find	Cu content
1	Asynchronous central mount with palmette decoration	96.05±0.08%
2.1	Rectangular, small mount with floral decoration	94.50±0.14%
2.2	Rectangular, small mount with floral decoration	96.51±0.10%

Fig. 4. Cu content of the components of the mount ornamented sabretache

²⁶ BOLLÓK 2015, 166.

²⁷ Similar objects, according to Ádám Bollók, are the pair of discoid braid ornament from Dormánd and the sabretache plate from Tiszabezdéd. BOLLÓK 2015, 166.

Item nr.	Description of the find	Cu content
3.1	Cast, zoomorphic mount with bear head	95.59±0.10%
3.2	Cast, zoomorphic mount with bear head	94.23±0.12%
3.3	Cast, zoomorphic mount with bear head	97.50±0.09%
3.4	Cast, zoomorphic mount with bear head	97.50±0.09%
3.5	Cast, zoomorphic mount with bear head	93.66±0.14%
4	Small triangular, zoomorphic mount, pierced in a triangular shape	95.46±0.11%
5.1	Fitting, elongated strap end mounts	94.57±0.12%
5.2	Fitting, elongated strap end mounts	96.57±0.11%
5.3	Fitting, elongated strap end mounts	95.36±0.12%
5.4	Fitting, elongated strap end mounts	95.09±0.13%
5.5	Fitting, elongated strap end mounts	96.00±0.10%
5.6	Fitting, elongated strap end mounts	98.22±0.07%
6	Oval strap retainer	93.08±0.14%
7	Oval, strap retainer with thin ring	94.37±0.23%

It is obvious, however, that with the exception of the central closing mount, the mounts, in addition to the high Cu content, the next highest content percentage was of iridium. This extremely hard, corrosion-resistant, silver-coloured metal could significantly improve the physical and perhaps aesthetic properties of objects, but its high melting point $(2446^{\circ}\text{C})^{28}$ almost excludes the possibility of intentional alloying. It is much more likely that this rare metal with excellent properties could have been mined naturally, along with the copper ore, and could have been left in the material after further processing.

7. Typochronological examination of the components of the mount ornamented sabretache

In contrast to sabretache plates, mostly attributed to the Carpathian basin by the research, the mount ornamented sabretaches were spread much more widely, practically from Denmark to Inner Asia²⁹. Tibor Horváth's identification of the first Carpathian Basin mount ornamented sabretache, considered a *prestige good* in grave no. 9 of Cemetery I in Karos³⁰, Gyula László's reconstruction of the Streda nad Bodrogom find³¹ was followed by the excavation, identification, and analysis of new finds³².

As in the case of several sabretaches with mounts, on the sabretache of grave no. 25 in Cluj, central symmetry based on the vertical axis was used for the placement of the decorative elements (mounts). As a result of this approach, the central mount was the visual and structural centre of the object. Since the metal components of the Cluj sabretache are unique in terms of their shapes and decorative patterns, when collecting the typological analogies, we also considered the similarities, but we also mentioned their differences in shape and decoration.

7.1. In the first phase of the research, we performed an individual analysis of the sabretache's mounts, starting with the central mount (Pl. 3/1; pl. 5/1). Analogies of the copper-based object with more than 90% content, which are not completely identical in shape and decoration, are known from cemeteries in the Upper Tisza region and from a site in southern

²⁸ https://en.wikipedia.org/wiki/Iridium.

²⁹ Pl. HEDENSTIERNA-JOHNSON/HOLMGVIST OLAUSSON 2006, 56–59; GRÄSLUND 1984.

³⁰ The find remained unpublished until 1996. RÉVÉSZ 1996, 140–141, 78. kép.

³¹ LÁSZLÓ 1944, 54. kép.

³² RÉVÉSZ 1996, 133-144.

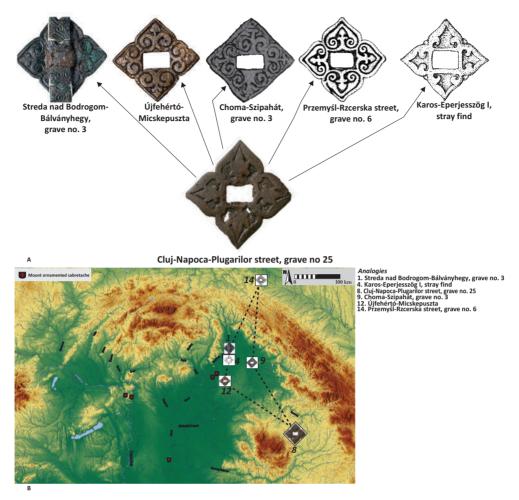


Fig. 5. Analogies of the central mount and their geographical distribution

Poland: Streda nad Bodrogom-Bálványhegy grave no. 3³³, Choma-Szipahát grave no. 3³⁴, Újfehértó-Micskepuszta³⁵, Przemyśl-Rzcerska street grave no. 6³⁶, Karos-Eperjesszög I (scattered find)³⁷. However, we could observe similarities, as well as significant differences in shape and decoration between these mounts. Each specimen is rhomboid and each is decorated with an embossed palmette pattern (Streda nad Bodrogom-Bálványhegy grave no. 3, Choma-Szipahát grave no. 3, Újfehértó-Micskepuszta, Przemyśl-Rzcerska street grave no. 6), however, in one case – which has most similar shape to the Cluj-Napoca object – the negative of the palmette pattern was created, i.e. the pattern itself was the background (Karos-Eperjesszög I, scattered find). At the same time, in each case, the four-leaf/palmette decorations were enclosed in a heart-shaped frame and a rectangular punch was made in the centre of the object. Among other differences, it is important to mention that the background of the embossed palmette patterns of the Cluj-Napoca diamond-shaped central mount were decorated with punch marks, unlike the other objects, and two of the four-leaf patterns are more elongated, the other two are stubbier (in the case of the analogies, the spatial structure of the patterns is uniform). Another significant mor-

³³ AH 1996, 139: Fig. 5-6.

³⁴ BALAHURI/FODOR 1998, Ris. 2–13.

³⁵ AH 1996, 206: Fig. 1.

³⁶ AH 1996, 444: Fig. 3.

³⁷ RÉVÉSZ 2003, 3.kép 4.

phological difference is that the rim of the frame of the Cluj-Napoca object is much wider than that of the other four objects' rim, but this aspect is significantly similar to the scattered find from Karos-Eperjesszög I. In conclusion, as shown in the figure below, more distant analogies of this object are known from the Upper Tisza region and the closely linked Przemyśl, in San Valley, in southern Poland.

7.2. The quite distant analogies of the rectangular mount with smaller floral patterns, decorated in four slightly heart-shaped frames (Pl. 3/2.1–2.2; pl. 6/2.1–2.2), are known from the mount ornamented sabretaches of Karos-Eperjeszög II grave no. 11³⁸, Újfehértó-Micskepuszta³⁹, Tiszavasvári-Nagy-Gyepáros grave no. 16⁴⁰. We would like to highlight two similarities between these specimens: 1. they are rectangular; 2. the fields between the patterns in the frames contain various decorations. However, the differences between these objects are more significant: 1. on the Cluj-Napoca object, the leaf-shaped patterns were separated by a wide frame, unlike the above-mentioned specimens; 2. in the leaf-shaped frames and in the central thick circular frame, the pearl pattern decoration is absent from the other rectangular mounts. We can conclude that the – quite distant – analogies of the Cluj object are also known from the Upper Tisza region:

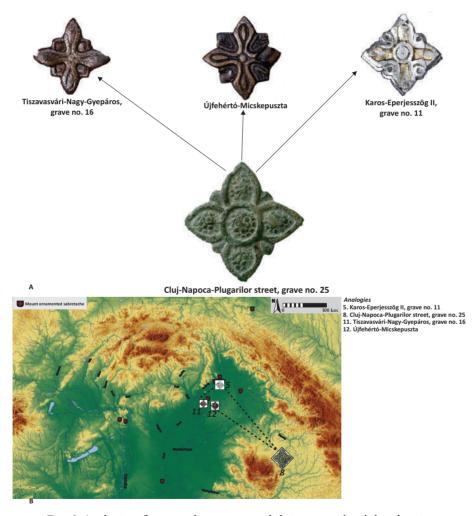


Fig. 6. Analogies of rectangular mounts and their geographical distribution

³⁸ RÉVÉSZ 1996, 17, 138–139, 74–76. kép, 18. tábla.

³⁹ JÓSA 1914, 206; AH 1996, 206–208, Fig. 1.

⁴⁰ AH 1996, 200–202, Fig. 1; TÓTH 2014, 156, 158, 112. tábla.

7.3. The only analogy of a zoomorphic, animal-head-patterned mount (bear-head) (Pl. 3/3.1–5; pl. 6/3.1–3.2; pl. 7/3.3–3.5), discovered along with flower-patterned rectangular mounts is known from grave no. 3 of Streda nad Bodrogom-Bálványhegy, on which the gold-smith displayed a fox head⁴¹. However, the Cluj-Napoca object is completely different: the animal's ears are stubby and small, the eyes are drop-shaped, the nose barely appears⁴², clearly the master tried to illustrate a bear's head – unknown in the Carpathian Basin (!):

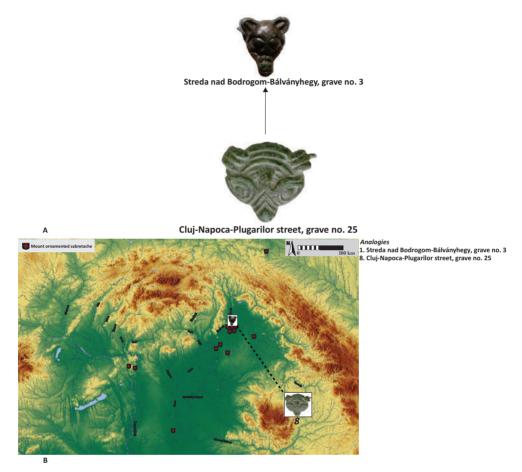


Fig. 7. Analogies and geographical distribution of zoomorphic mounts

7.4. Similar analogies of cast, small, triangularly pierced, stylized zoomorphic mount (Pl. 3/4; pl. 7/4) are known from Tiszavasvári-Nagy-Gyepáros grave no. 16⁴³, Újfehértó-Micskepuszta⁴⁴, Przemyśl-Rycerska street grave no. 6⁴⁵. The four mounts are similar in terms of the pattern of the stylized, zoomorphic, and incised decoration, as well as the vertical hatching. However, there are significant differences in execution: on the Cluj-Napoca object, the eyes and nose were symbolized with an opening, and on the Przemyśl specimen, only the eyes were indicated in a similar way, while on the Tiszavasvár-Nagy-Gyepáros grave no. 16 and the Újfehértó-Micskepuszta specimens, all these were marked with an incised spiral dot pattern:

⁴¹ ERDÉLYI 1961, 24, 9. kép, 12. kép a, II. tábla; NEVIZÁNSZKY/KOŚTA 2009, Obr. 7–8.

⁴² For the collection of the representations of different animal heads, see: BOLLÓK 2015, 344–357. We must also mention that *bear heads* are so far unknown in the Carpathian Basin finds.

⁴³ AH 1996, 200–202, Fig. 1; TÓTH 2014, 156, 158, 112. tábla.

⁴⁴ JÓSA 1914, 206; AH 1996, 206–208, Fig. 1.

⁴⁵ AH 1996, 444: Fig. 3.

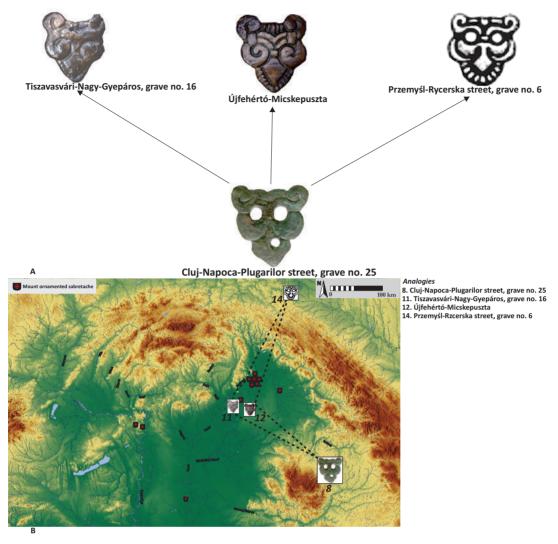


Fig. 8. Analogies of the stylized zoomorphic mount and their geographical distribution

7.5. Six elongated, incised strap end mounts decorated with dot pattern (Pl. 4/5.1–6; pl. 7/5.1–5.2; pl. 8/5.3–5.6) appear on the strap ends of Streda nad Bodrogom-Bálványhegy grave no. 3⁴⁶, Újfehértó-Micskepuszta⁴⁷, Przemyśl-Rycerska street grave no. 6⁴⁸, Karos- EperjeSszög I grave no. 9⁴⁹, however, the dot patterns are only known from Streda nad Bodrogom-Bálványhegy and Przemyśl-Rycerska street. The circle section motif, which stands out from the elongated star-shaped background in the centre of the object, cannot be identified on this type of belt ends, but on the long strap end of grave no. 11 Karos-Eperjesszög cemetery II⁵⁰. These mounts were fitted into each other (see Fig. 9).

7.6. The two strap retainers (Pl. 4/6–7; pl. 8/6–7) probably belonging to the sabretache, are commonly known among the products of the 10^{th} -century material culture, with various and very different functions.

⁴⁶ ERDÉLYI 1961, 9. kép, 12. kép a; NEVIZÁNSZKY/KOŚTA 2009, Obr. 7–8.

⁴⁷ JÓSA 1914, 206; AH 1996, 206–208, Fig. 1.

⁴⁸ AH 1996, 444: Fig. 3.

⁴⁹ RÉVÉSZ 1996, 14.

⁵⁰ RÉVÉSZ 1996, 17, 138–139, 74–76. kép, 18. tábla: down.

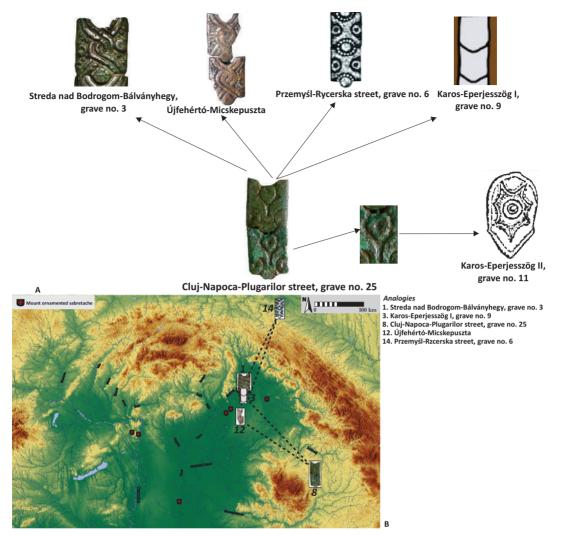


Fig. 9. Analogies of fitting strap ends and their geographical distribution

- 7.7. We can summarize our structural and typological analysis and observations as follows:
- A. Based on the structural and typological analysis of the mounts, the Cluj-Napoca mount ornamented sabretache shows a connection with the sabretaches of the Upper Tisza region and southern Poland.
- B. If we individually examine the assemblage of mounts on the sabretache, it can be stated that we do not know an identical analogy of the mounts on the sabretache from Cluj, so up to the present day, it is *a unique piece*.
- C. The mounts of the sabretache are most closely related to the decorations of the sabretache found in Újfehértó-Micskepuszta (in the case of four mounts), which are followed by the mounts discovered in Streda nad Bodrogom grave no. 3 and Przemyśl-Rycerska street grave no. 6 (3 mounts each).
- D. The traces of wear and repairs on the mounts of the Cluj-Napoca sabretache (a rivet on the central mount) clearly indicate its long-term use.

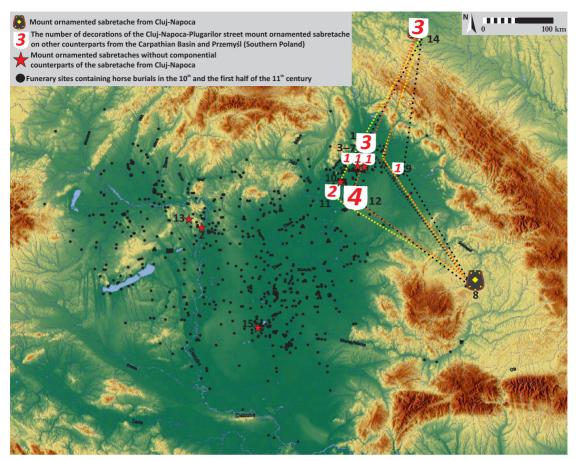


Fig. 10. The number of decorations of the Cluj-Napoca-Plugarilor street mount ornamented sabretache on other counterparts from the Carpathian Basin and Przemyśl (Southern Poland)

8. The dating of grave no. 25

Several methods were used in dating of the grave with the sabretache, and we tried to integrate all of them in a unified methodological framework:

- 1. The classic typochronological dating of the finds from the 26 graves excavated in the Cluj-Napoca cemetery is difficult to place within the 10th century, but based on the current typochronology, the grape cluster earrings from graves no. 3 and 8 cannot be dated earlier than the middle of the century⁵¹.
- 2. Based on the typochronological comparison of the finds from grave no. 25 with the finds lot of the Carpathian Basin, we can state that these can be dated to the middle of the century or the second half of the century, including the other graves with sabretaches with mounts. In the grave no. 3 of Choma, a coin from 961–976 was identified, and in grave no. 41 of Karos-Eperjesszög II, a trapeze-shaped stirrup, and the grave of the infant in Tiszavasvári-Nagy-Gyepáros⁵² can also be dated to the middle or the second half of the century, just like Tiszaeszlár Bashalom II⁵³. Újfehértó-Micskepuszta cannot be dated more precisely within the 10th century. The burial site in Przemysl in southern Poland can definitely be placed in the second half of the 10th century.

⁵¹ GÁLL 2013, Vol. I: 266.

⁵² TÓTH 2014, 156, 158, 112. tábla.

⁵³ TÓTH 2014, 45.

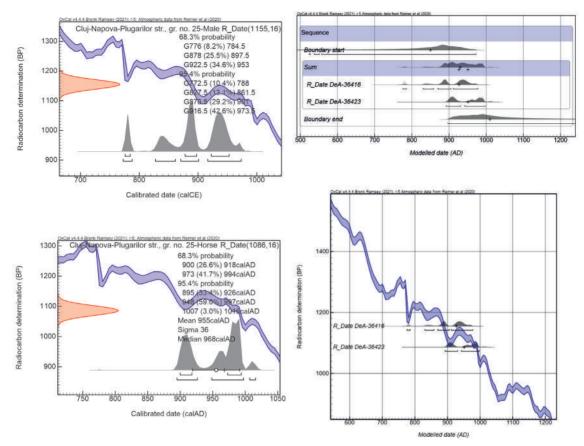


Fig. 11/A–B. ¹⁴C calibration of grave no. 25 of Cluj-Napoca-Plugarilor street (horse and human bone sample; HUN-REN Institute for Nuclear Research, Debrecen, Hungary)

- 3. The signs of wear on the central mount of the sabretache and the biological age of the skeleton (60–65 years) indicate not only the lengthy use of the sabretache 54 , but taking into account the above observations, they also confirm their placement in the grave in the second half of the 10^{th} century.
- 4. In the archaeological research of the 10thcentury, the radiocarbon method barely gained ground. The dating of this grave to the second half of the 10th century can be underpinned by the human and animal (horse bone) samples taken from grave no. 25 in Cluj-Napoca (see Fig. 11). However, the sample taken from the horse bone further narrows down the date of the grave to the last third of the 10th century. This is also confirmed by the ¹⁴C sample results of six additional graves from the cemetery⁵⁵.

9. Summary: the socio-biographical data of the individual from grave no. 25

Based on the ¹⁴C samples' results taken from the 60–65-year-old male and the horse sacrificed (4–5 years old), as well as the typochronological analysis of the finds, and the radiocarbon samples taken from the other six graves in the cemetery, grave no. 25 was most likely dug in the second half of the 10th century, approximately in the years 960–990. This also means that the life course of the *senilis* male, based on the available scientific researches, had begun around the

⁵⁴ In this case, we can exclude the possibility of inheriting the sabretache.

⁵⁵ Currently unpublished research of the authors.

years 910–930 and, which is at least as important, he was probably born in the vicinity of Cluj-Napoca⁵⁶. In conclusion, his life might have ended in the period between approx. 960 and 990. By narrowing down these chronological time periods, we can illustrate three main chronological variants.

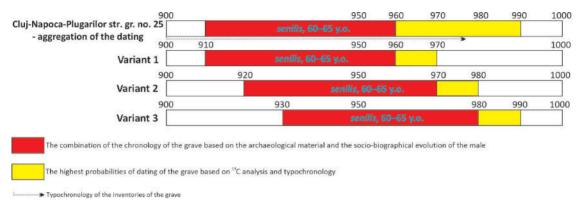


Fig. 12. Alternative dating variants on the basis of ¹⁴C and typochronology from Cluj-Napoca-Plugarilor street grave no. 25

10. A few thoughts regarding the geographical distribution of the Carpathian Basin sabretaches

The context of the mount ornamented sabretaches, which can be considered prestige goods, is very closely linked, basically identical to the burial customs, material culture, and burial cultural habitus identified so far in the 10th-century Hungarian conquest period burials, and these are all closely connected to the territorial spread (clan-type?) of the conquest period's power structure. However, the chronological analyses also point out the fact that only a part of them is concentrated in a specific "Core Region" (see Fig. 13/A).

With the exception of the completely unique, 9th-century mount ornamented sabretache in Szeged, the earliest copies can be identified in the Upper Tisza region, and their spread – just like the sabretache plates (see Fig. 13/B) – is the result of a multi-step chronological process, the latest examples of which being the sabretaches of Cluj-Napoca, Choma, and Przemyśl in southern Poland, and every aspect can have geopolitical and geoeconomic explanations, considering that both regions are known for their significant salt sources⁵⁷.

List 1. The mount ornamented sabretache finds (with bibliography) (the numberring were used on the Figs. 5-10 and Fig. 13/A):

- 1. Streda nad Bodrogom-Bálványhegy, grave no. 3: AH 1996, 139: Fig. 5–6; ERDÉLYI 1961, 9. kép, 12. kép a; NEVIZÁNSZKY/KOŚTA 2009, Obr. 7–8.
- 2. Budapest-Farkasrét: DIENES 1973, 177–217.
- 3–4. Karos-Eperjesszög I, grave no. 9 and stray find: RÉVÉSZ 1996, 140–141, 78. kép; RÉVÉSZ 2003, 259–276, 3. kép.
- 5–7. Karos-Eperjesszög II, graves no. 11, 41, and 61: RÉVÉSZ 1996, 17, 23, 30–31, 138–139, 68–70. kép, 74–76. kép, 18., 56., 103. tábla.
- 8. Cluj-Napoca-Plugarilor street, grave no. 25.
- 9. Choma-Szipahát, grave no. 3: BALAHURI/FODOR 1998, 166–196, Ris. 2–13.
- 10. Tiszaeszlár-Bashalom II, grave no. 13:TÓTH 2014, 38, 42–43,223, 50. tábla.

⁵⁶ Ongoing, unpublished research of the authors.

⁵⁷ GÁLL 2020, 231–239, 260–261.

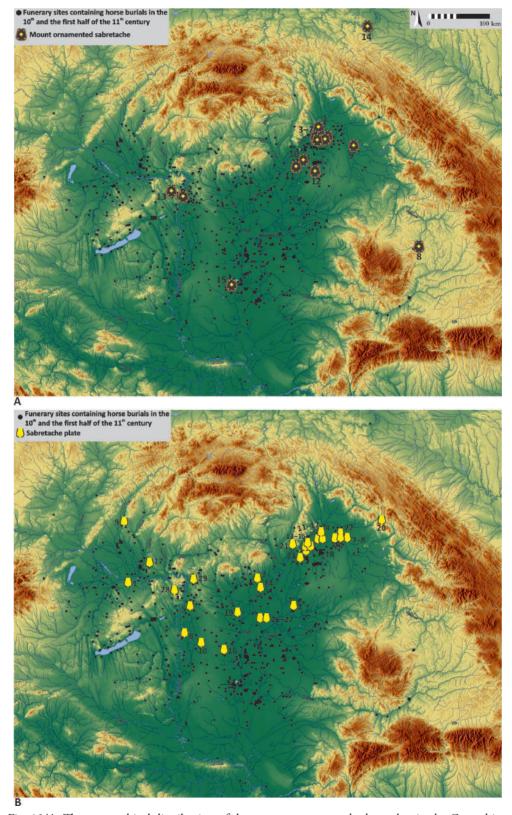


Fig. 13/A. The geographical distribution of the mount ornamented sabretaches in the Carpathian Basin (10^{th} century) / B. The geographical distribution of the sabretache plates in the Carpathian Basin (10^{th} century) (their bibliography: GÁLL/LEZSÁK 2018, 103–105: 6. List of the Sabretache Find)

- 11. Tiszavasvári-Nagy-Gyepáros, grave no. 16: AH 1996, 200–202, Fig. 1; TÓTH 2014, 156, 158, 112. tábla.
- 12. Újfehértó-Micskepuszta: AH 1996, 206: Fig. 1; JÓSA 1914, 206.
- 13. Páty-Malom dűlő, grave no. 170: BERTA/MAJOR 2022, 41 and Figure.
- 14. Przemyśl-Rzcerska street, grave no. 6: AH 1996, 444: Fig. 3.
- 15. Szeged-Öthalom, grave no. 124: TÜRK/LŐRINCZY/ MARCSIK 2015, 112, 17. kép 1.

The study has been implemented with the support provided by the Ministry of Innovation and Technology of Hungary from the National Research, Development and Innovation Fund, financed under the TKP2021-NKTA-24 funding scheme.

BIBLIOGRAPHY

AH 1996

I. FODOR (Ed.), The Ancient Hungarians. Exhibition Catalogue (Budapest 1996).

BALAHURI/FODOR 1998

Е. А. BALAHURI/I. FODOR, Раскопки могильника периода приобретения венграми новой отчизны в с. Чома Береговского района Закарпатской области. Карпатика5, 1998, 166–196.

BÁLINT 1969

Cs. BÁLINT, A honfoglalás kori lovastemetkezések néhány kérdése. Móra Ferenc Múzeum Évkönyve1969/1, 107–114.

BERTA/MAJOR 2022

N. BERTA/P. MAJOR, Páty-Malom-dűlő, 170. sír. In: G. Virágos (Szerk.), Tarsolylemezek. A Honfoglaló Elit Kincsei. Kiállítási Katalógus (Budapest 2022).

BOLLÓK 2015

Á. BOLLÓK, Ornamentika a 10. századi Kárpát-medencében: formatörténeti tanulmányok a magyar honfoglalás kori díszítőművészethez (Budapest 2015).

DIENES 1973

I. DIENES, Honfoglalás kori veretes tarsoly Budapest-Farkasrétről. Folia Archaeologica 24, 1973, 177–217.

ERDÉLYI 1961

I. ERDÉLYI, A bodrogszerdahelyi honfoglaláskori temető. Jósa András Múzeum Évkönyve IV–V, 1961–1962 (1964), 17–30.

FLOCA 1941

O. FLOCA, Sistemele de înmormântare din Dacia Superioară romană. Sargetia, II, 1941, 1–116.

GÁLL 2013

E. GÁLL, Az Erdélyi-medence, a Partium és a Bánság 10–11. századi temetői / 10th and 11th century burial sites, stray finds and treasures in the Transylvanian Basin, the Partium and the Banat. Magyarország honfoglalás kori és kora Árpád-kori sírleletei 6. (Szeged 2013) Vol. I–II.

GÁLL 2020

E. GÁLL, A hatalom forrása és a magyar honfoglalás – hódítás és integráció. A korai magyar történelem egy régész szemszögéből (Budapest 2020).

GÁLL/LEZSÁK 2018

E. GÁLL/G. LEZSÁK, A view from the West to the East. An analysis of the characteristics, chronology, and distribution of the sabretache plates in the 10th century. Zeitschrift für Archäologie des Mittelalters 46, 2018, 85–112.

GÁLL ET ALII 2017

E. GÁLL/D. PETRUŢ/A. DOBOS/N. KAPCSOS/F. WANEK/E. PIROSKA/SZ. NAGY/A. IVÁN, "Daciától Ultrasilvaniáig". A Kis-Szamos medencéjének településtörténeti változásai. 3/4–12/13. század. Kolozsvár 2017.

GÁLL ET ALII 2020

E.GÁLL/A.TÜRK/SZ.NAGY/S.PETER/F.WANEK/M.HARAMZA, Újabb adatok a Kolozsvár-Zápolya utcai 10. századi temető régészeti és embertani hagyatékából / Noi date arheologice şi antropologice privind spaţiul funerar din Cluj-Napoca – strada Zápolya. In: А. Тürk/A. D. Budai О. Praem/Л. В. Дергачёва/В. С. Синика/Р. А. Рабинович (Ред./Szerk.), Первый Молдо-Венгерский археологический круглый стол, посвященный вопросам раннего средневековья Восточной Европы. Кишинёв, 10–11 июня 2015 г. / І. Moldáv–Magyar régészeti kerekasztal konferencia Kelet-Európa kora középkoráról. Chişinău, 2015. június 10–11 (Studia ad Archaeologiam Pazmaniensia 18, 2020, 347–457.

GRÄSLUND 1984

A-S. GRÄSLUND, Beutel und Taschen. In: G. ARWIDSSON (Ed.): Birka II/1. Systematische Analysen der Gräberfunde (Stockholm 1984), 141–154.

HEDENSTIERNA-JOHNSON/HOLMGVIST OLAUSSON 2006

Ch. HEDENSTIERNA-JOHNSON/L. HOLMGVIST OLAUSSON, The Oriental Mounts from Birka's Garrison: An Expression of Warrior Rank and Status (Stockholm 2006).

HICA 1999

I. HICA, Necropola din zona de sud-est a municipiului Napoca (sec. II–IV). In: D. Protase/D. Brudașcu (Ed.), Napoca 1880 de ani de la începutul vieții urbane (Cluj-Napoca 1999), 97–104.

HICA 2003

I. HICA, Date despre cimitirul din sec. X de la Cluj-Napoca "str. Plugarilor" (Cluj-Napoca 2003) (unpublished).

HICA 2004

I. HICA, Reutilizări de monumente litice în arhitectura funerară din fosta provincie Dacia. In: D. Benea/ I. Hica, Damnatio Memoriae în arhitectura romană târzie de la Dunărea de Jos (Timișoara 2004), 112–153.

HICA-CÂMPEANU 1977

I. HICA-CÂMPEANU, Cu privire la unele morminte romane târzii de la Napoca. Acta Musei Napocensis14, 1977, 221–237.

JÓSA 1914

A. JÓSA, Honfoglaláskori temető Micskepusztán. Múzeumi és Könyvtári Értesítő 8, 1914, 201–206.

LÁSZLÓ 1943

GY. LÁSZLÓ, A honfoglaló magyarság művészete Erdélyben (Kolozsvár 1943).

LÁSZLÓ 1944

GY. LÁSZLÓ, A honfoglaló magyar népélete (Budapest 1944).

NEVIZÁNSZKY/KOŚTA 2009

G. NEVIZÁNSZKY/J. KOŚTA, Výskum staro maďarského jazdeckého pohrebiska v Strede nad Bodrogom v rokoch 1926 a 1937. Slovenská archeológia 57, 2009, 301–354.

RÉVÉSZ 1996

L. RÉVÉSZ, A karosi honfoglaláskori temetők. Régészeti adatok a Felső-Tisza vidék X. századi történetéhez. Magyarország honfoglalás kori és kora Árpád-kori sírleletei 1 (Miskolc 1996).

RÉVÉSZ 2003

L. RÉVÉSZ, Újabbadatok a Karos-Eperjesszög I. Honfoglaláskori temető értékeléséhez. A Móra Ferenc Múzeum Évkönyve – Studia Archaeologica 9, 2003, 259–276.

SAVU/MAC/TUDORAN

A. SAVU/I. MAC/P. TUDORAN, Aspecte privind geneza și vîrsta teraselor din Transilvania. In: Realizări în geografia României (București 1973), 169–175.

STANCIU 1999

I. STANCIU, Die slawische Hügel-Brandgräber vom Typs Nuşfalău-Someşeni (nord-westlichen Gebiet Rumäniens). Acta Musei Napocensis 36/I, 1999, 245–263.

STANCIU 2016

I. STANCIU, Cei mai vechi slavi în spațiul intracarpatic al României. O scurtă examinare. Marmatia 12, 2015, 97–162.

URSUŢ 1999

D. Ursuţ, Consideraţii privind drumurile de acces în oraşul Napoca. In: D. Protase, D. Brudaşcu (eds.), Napoca 1880 de ani de la începutul vieţii urbane (Cluj-Napoca 1999), 234–238.

REP. ARH. CLUJ 1992

I. H. CRIŞAN/M. BĂRBULESCU/E. CHIRILĂ/V. VASILIEV/I. WINKLER (Ed.), Repertoriul arheologic al județului Cluj (Cluj-Napoca 1992).

TÓTH 2014

A. TÓTH, A nyíri Mezőség a 10–11. században.Magyarország honfoglalás kori és kora Árpád-kori sírleletei 7 (Szeged 2014).

TÜRK/LŐRINCZY/ MARCSIK 2015

A. TÜRK/G. LŐRINCZY/A. MARCSIK, Régészeti és természettudományi adatok a Marostorkolat nyugati oldalának 10. századi történetéhez. Studia ad Archaeologiam Pasmaniensia 4 (Budapest 2015).

WANEK/POSZET 2010

F. WANEK, SZ. POSZET, A Kis-Szamos jobboldali lejtőinek földtani felépítéséből és morfológiájából adódó lejtőveszélyeztetettség Kolozsvár területén (a Papok- és a Békás-völgye között). In: VII. Kárpátmedencei Környezettudományi Konferencia, Kolozsvár 2011. március 24–27 (Kolozsvár 2011), Vol. II, 687–691.

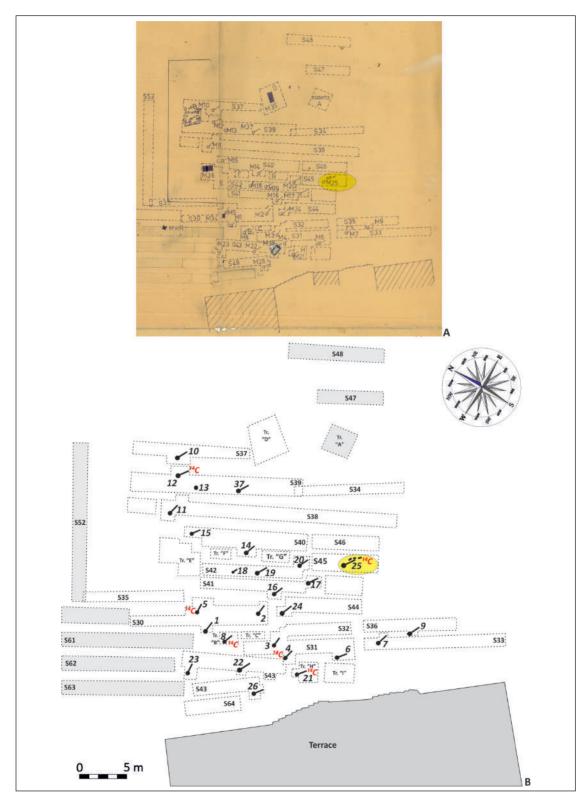


Plate 1. A–B. Cluj-Napoca-Plugarilor street, ground plan of the funerary site (the grave no. 25 was marked with yellow).

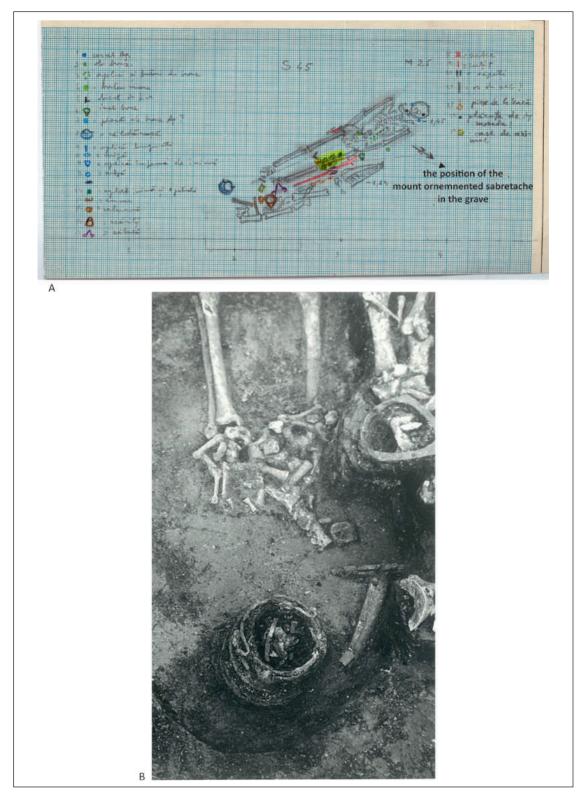


Plate 2. A. Cluj-Napoca-Plugarilor street, grave no. 25; B. Photo of apart of the grave: horse bones, bone arms of the bow, and the wooden bucket with the iron handle.

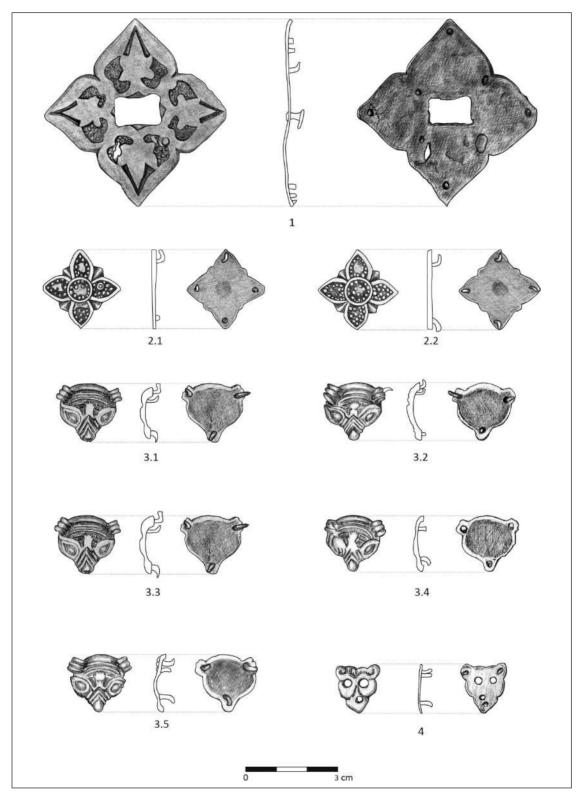


Plate 3. Cluj-Napoca-Plugarilor street, grave no. 25: 1–4 (Drawing by D. Gheorghe-Şerban).

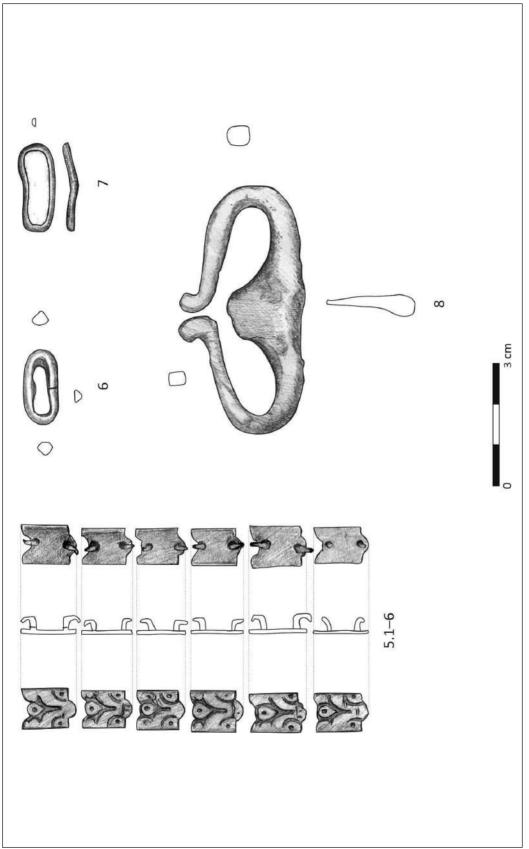


Plate 4. Cluj-Napoca-Plugarilor street, grave no. 25: 5-9 (Drawing by D. Gheorghe-Şerban).

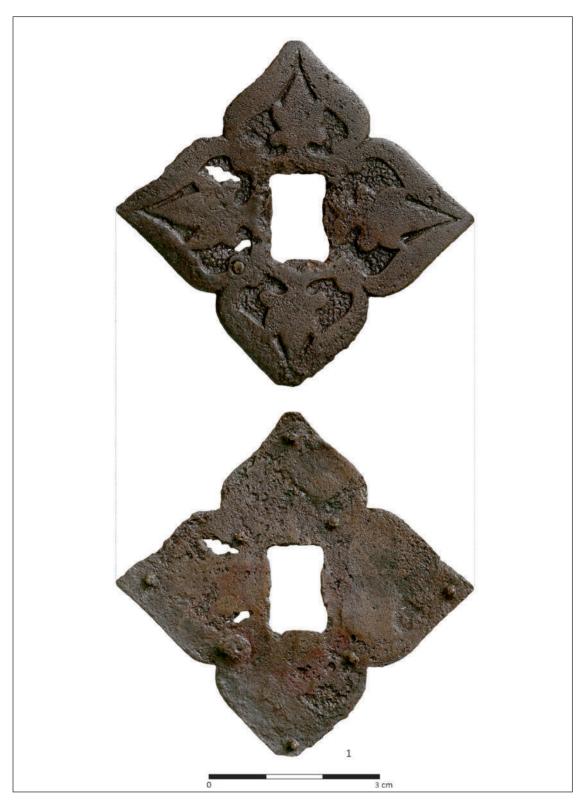


Plate 5. Cluj-Napoca-Plugarilor street, grave no. 25: 1 (Photo by S. Odenie).

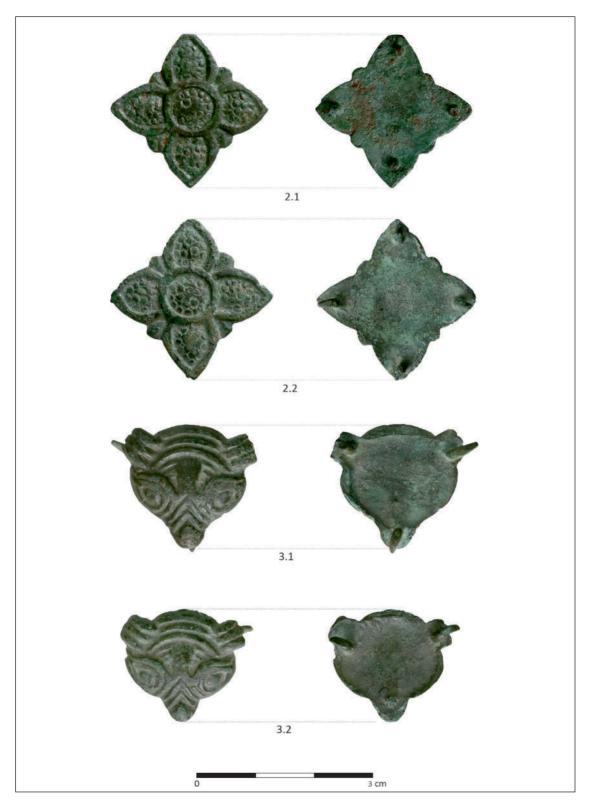


Plate 6. Cluj-Napoca-Plugarilor street, grave no. 25: 2.1–3.2 (Photo by S. Odenie).

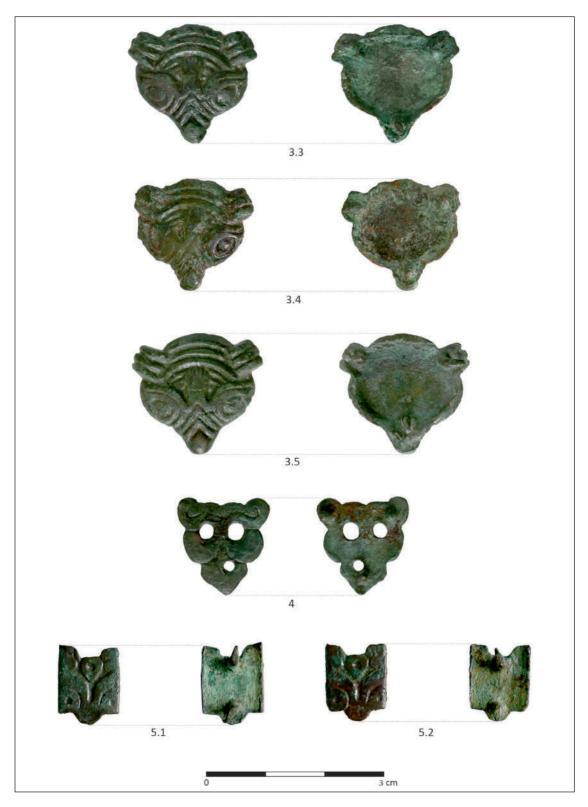


Plate 7. Cluj-Napoca-Plugarilor street, grave no. 25: 3.3–5.2 (Photo by S. Odenie).

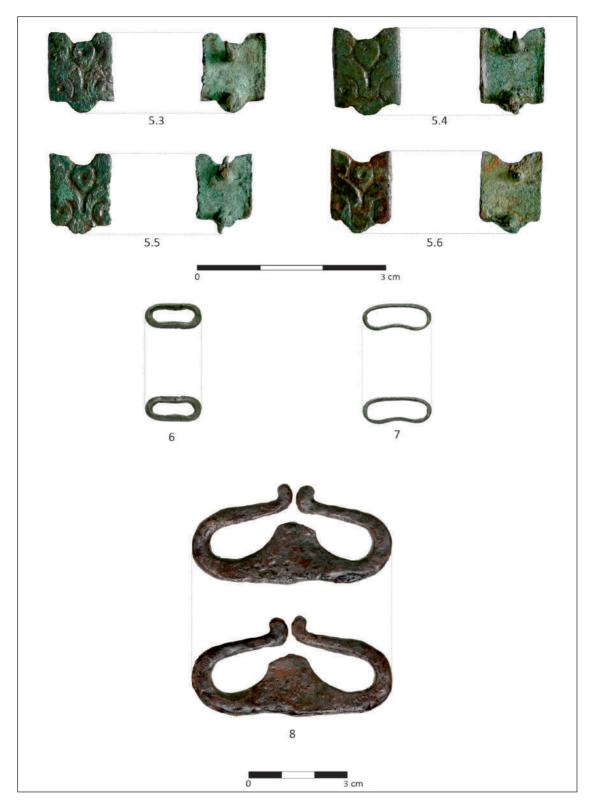


Plate 8. Cluj-Napoca-Plugarilor street, grave no. 25: 5.3–8 (Photo by S. Odenie).