

# THESAURUS AVARORUM

Régészeti tanulmányok Garam Éva tiszteletére  
Archaeological Studies in Honour of Éva Garam



## A MEZŐSZILAS TYPE PENDANT FROM GRAVE 14 OF THE MÉLYKÚT-SÁNC-DÜLŐ CEMETERY<sup>1</sup>

Csilla Balogh

Between 1959 and 1968, Mihály Kőhegyi uncovered fifty-four graves of a burial ground at Mélykút-Sánc-dűlő. He found five late Sarmatian/Hun period and forty-nine Avar burials. The burial ground was completely excavated. Grave 14, an Avar burial, yielded a gold pendant of the Mezőszilas type. This study will focus on the parallels and the possible typological forerunners of this pendant, as well as on how these ornaments were worn, their dating, and their place of manufacture.

The site lies south of Farmstead 184 in an area called Sánc-dűlő, ca. 60–80 m from the Mikó-major, the central farmstead of the Termő Kalász Co-operative, east of the village of Mélykút. Mihály Kőhegyi uncovered seven graves after human bones had been found in 1959 during the digging of a silo pit. In 1968, the co-operative (by then renamed Béke Co-operative) began levelling the area and a further forty-seven graves were brought to light. Two additional burials were found a few years later, when pits were dug for the pylons of an electric transmission line; virtually nothing is known about these two burials. The cemetery can be regarded as completely excavated. Of the fifty-four documented graves, forty-nine contained Avar burials, while five could be dated to the late Sarmatian/Hun period.<sup>2</sup> The burial ground lay on the south-eastern edge of a roughly north-west to south-east oriented ridge rising above the surrounding land. The Sarmatian burials lay along the cemetery's northern edge, while the Avar graves formed loose clusters in a north to south direction. Grave 14, containing the Mezőszilas type gold pendant, lay in the middle of the cemetery (*Fig. 1*).

*Grave 14 (Fig. 2. 1–2):* Orientation: NW–SE (326–146)°, L. 172 cm, W. 72 cm, D. ±0. Burial disturbed by earth-moving machines. The shallow, oblong grave pit with rounded corners contained the burial of a woman laid extended on the back. The skull, the upper arms, and the right leg bone were missing. Grave goods: 1. Gold pendant, found in the region where the skull once lay, roughly by the right temporal bone. The round, hollow ornament was soldered together from two pressed gold sheets. The beaded border encloses a horseshoe shaped central area with a protuberant shield shaped motif framed by ribs. The upper section is damaged and pierced by five small holes on both sides. L. 2 cm, W. 2.5 cm, Th. 0.8 cm, Wt. 1.65 g (*Fig. 2. 3; Fig. 3. 4; Fig. 4. 5*). 2. A small, single-edged iron knife with straight back, its tip pointing towards the feet, lay by the left side of the skull. The remnants of a wooden sheath could be noted on the blade. L. 11.2 cm, W. 1.3 cm (*Fig. 2. 6*). 3. Asymmetrical, trapezoidal iron buckle with round section, found on the pelvis. The tongue thickens slightly at the base, its tip rests on the loop. L. 3.2 cm, W. 3.2 cm (*Fig. 2. 4*). 4. A light yellow, biconical spindle whorl made from clay levigated with mica was found by the outer side of the left knee. H. 2.2 cm, Diam. 2.7 cm (*Fig. 2. 5*). 5. Small scrap of iron of unknown function, from the fill of grave. L. 1.4 cm, W. 0.7 cm (*Fig. 2. 7*). 6. An animal rib on the chest and poultry bones on both sides of the left knee. 7. An egg on the outer side of the right ankle.

### I. PARALLELS TO THE PENDANT FROM THE CARPATHIAN BASIN

*1.1.* The single published parallel to the Mélykút pendant from Hungary comes from Mezőszilas (formerly called Szilasbalhás). It was purchased by the Veszprém museum in November 1905 for 5 kreuzers.<sup>3</sup> There were no accompanying finds. The pendant was first briefly described by Gyula Rhé, who dated it to the Avar period.<sup>4</sup> Péter

<sup>1</sup> I would here like to thank Péter Tomka for his insightful comments on the draught version of this study. I am also grateful to Gábor Lőrinczy for reading and commenting on the manuscript and to Margit Koncz for drawing the finds and the reconstructions.

<sup>2</sup> Graves 3–6 and 9 dated from the Sarmatian period. Grave 15 was accidentally excavated again after its infilling and appears as Grave 35 in the documentation, which is housed in the Türr István Museum of Baja (inv. no. 231–2001). The finds were inventoried under nos 75.17.22–26. The human skeletal remains were taken to the Anthropological Department of Szeged University. For the evaluation of the skeletal finds, cp. MARCSIK 1971; FARKAS–LENGYEL–MARCSIK 1971. Imre Lengyel measured the compositional quotient of the skeletal remains; his findings were discussed by Mihály Kőhegyi and Antónia Marcsik in their analysis of the relative chronology of the burials (KŐHEGYI–MARCSIK 1974). They found that in addition to late Sarmatian burials, the cemetery contained also graves from the early Avar period contemporary with the former, and that about 80±20 years had elapsed between the earliest and the latest burials (MARCSIK 1971, 87). However, the Sarmatian–Avar co-existence suggested by them still remains to be confirmed.

<sup>3</sup> Accessions Register, entry no. 1218.

<sup>4</sup> RHÉ 1924, 72, 76–77, Pl. 4.9.

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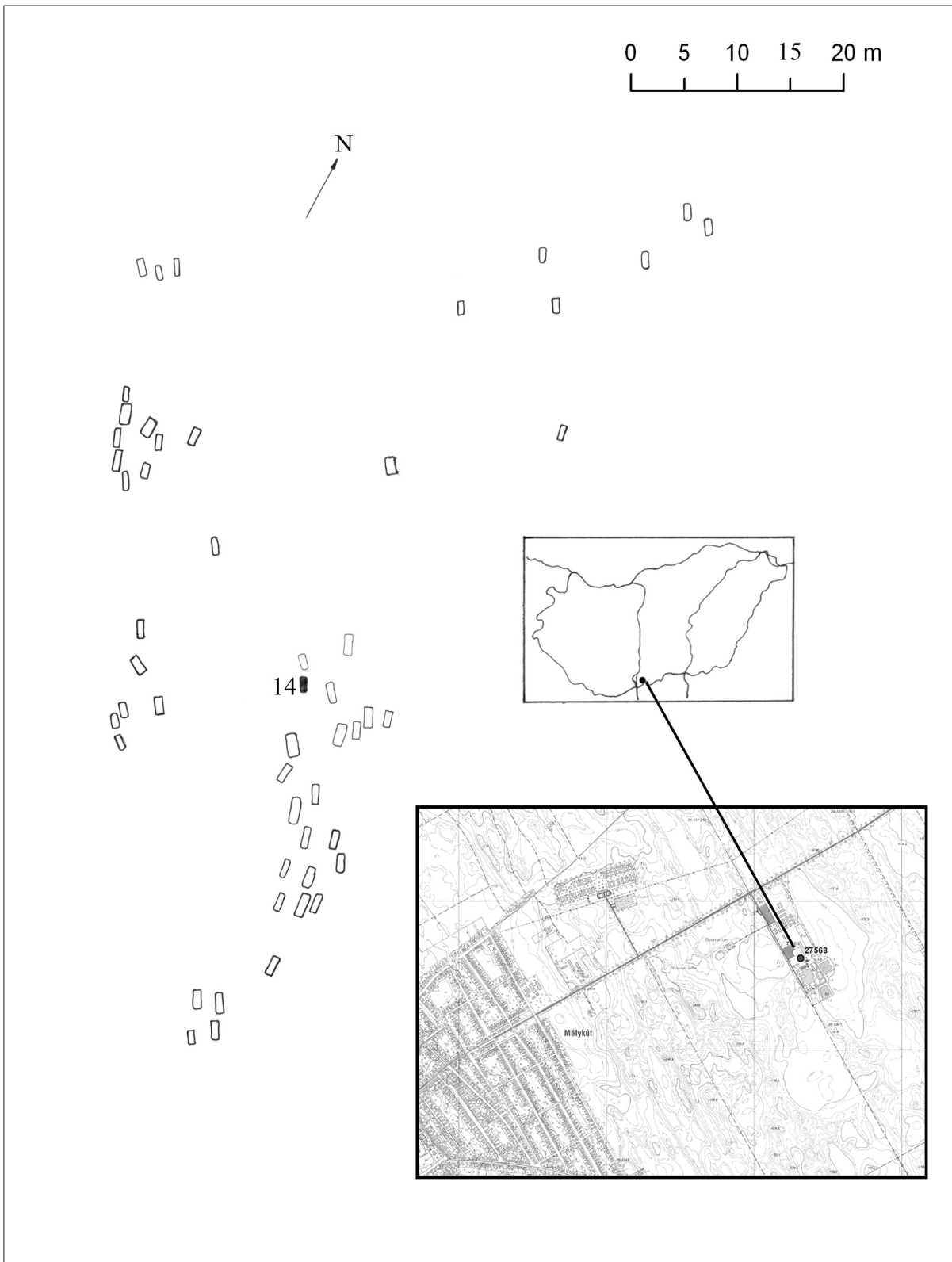


Fig. 1. Location and plan of the Avar cemetery at Mélykút-Sánc-dűlő

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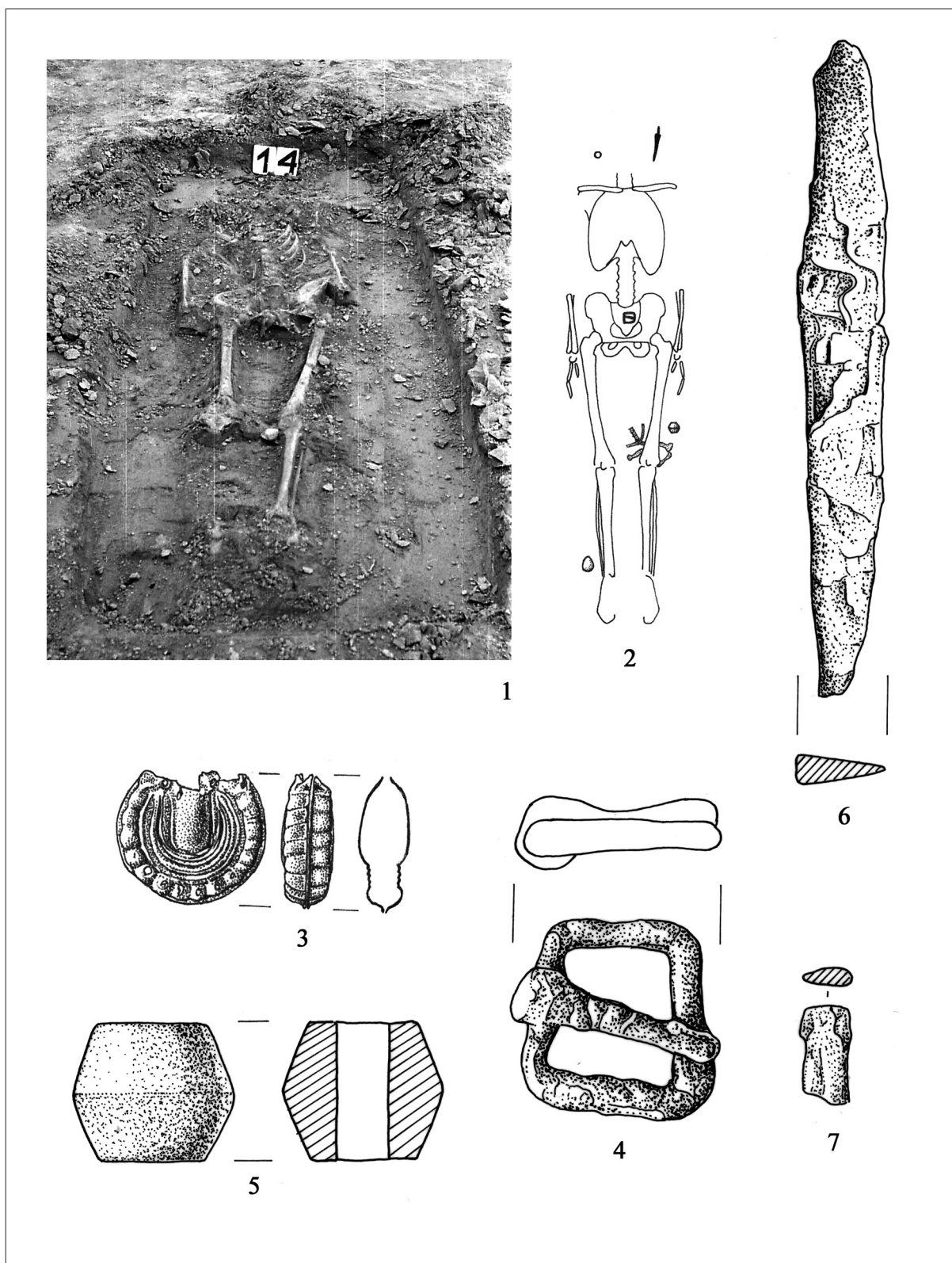


Fig. 2. Mélykút-Sánc-dűlő, Grave 14 (3–7: 1:1)

Németh listed this pendant among the early Avar finds from County Veszprém, quoting the register of sites of the Veszprém museum kept between the 1900s and 1936, but without citing the information in the relevant entry. The register assembled by Dezső Laczkó and Gyula Rhé contains additional data on the pendant's find circumstances, written by Rhé, according to which the pendant was found in the yard of Mrs József Somogyi's house at 145 Fő Street facing the Cinca Stream, during mud brick making, when bones and various rusted iron artefacts came to light alongside the separated halves of a gold pendant. The report on the 1931–1932 activities of the museum mentions that Rhé identified the pendant's exact find spot and planned to conduct an excavation on the site, but this did not take place. It seems likely that he learnt of the other finds found together with the pendant at this time. One caveat in this respect is that at least twenty-six years elapsed between the purchase and Rhé's inspection of the site. The pendant has been repeatedly quoted in the archaeological literature, although without a detailed description and specification of its dimensions.<sup>5</sup>

*Description:* Assembled from two halves, the pendant was made from jointly pressed silver and bronze sheets, which were then covered with gold foil folded over the edges towards the reverse. The pressed oval plates have a beaded border, interrupted by a curved recess on the upper part. The inner crescentic field is filled with two panels of triangle motifs imitating cells separated by a pressed beadrow motif and a row of hanging triangles imitating granulation. A semi-circular loop was created by hammering on the upper edge of each bronze sheet, both of which held bronze rivets with the head hammered flat. Only fragments of the bronze rivets survive. One rivet has a rectangular backplate cut from sheet bronze. The pendant's interior was filled with greyish substance (tenax), of which small patches survive. L. 4.5 cm, W. 3.5 cm, Wt. 6.65 g (*Fig. 3. 3; Fig. 4. 3–4*).<sup>6</sup>

I.2. A gold earring with pyramidal pendant came to light during the levelling of a sandhill in the sandpit on the north-eastern outskirts of Kunpeszér. The site was investigated by Elvira H. Tóth, who uncovered thirty-one Avar burials and a larger Sarmatian cemetery. This site can probably be identified with Peszéradács, where a richly furnished female burial was found in 1894.<sup>7</sup> Grave 7, the burial of a 40–45 years old woman, lay near the south-eastern edge of the cemetery, where the loosely arranged burials extended from west to east in a fan shaped pattern. The burial yielded a few beads, an iron awl, an iron knife, and a clay spindle whorl, as well as a pair of pendants, found on either side of the skull among leather remains.

*Description:* A pair of pendants, each assembled from two pressed gilt bronze sheets. The rounded, slightly concave sheets are framed by a pressed beaded border interrupted by a crescentic recess on top. The slightly protuberant round field underneath is encircled by two raised crescentic bands filled with grooving. A similar grooved band extends between the beadrow and the raised inner part. The triangular loops made by hammering on the upper part once held bronze rivets. Two of the sheets decayed, and only fragments of the third could be lifted. L. 4.3 cm, W. 3.2 cm (*Fig. 3. 2; Fig. 4. 1*).

I.3. István Erdélyi mentions the Mezőszilas pendant among the round earrings of pressed gold with beaded decoration from the Avar period, quoting a similar piece from Rábapordány.<sup>8</sup> Csanád Bálint specified the latter's findspot as Rábapordány–Guczi-halom.<sup>9</sup> The exact findspot of the pendant and its acquisition by the museum were eventually clarified by Péter Tomka, who also published its photo.<sup>10</sup> The pair of pendants was found in 1926 on a hill called Ghicz-domb (later renamed Patyi-domb), and was purchased from György Patyi by the Sopron museum in 1927. It seems likely that the pendants had come to light in the sandpit mined between the late 19<sup>th</sup> century and the 1970s, from where various other Avar finds have also been recovered, suggesting that a larger cemetery had been destroyed at this site.<sup>11</sup>

*Description:* Two pendants, each assembled from two halves made of jointly pressed gold and bronze sheets. The oval sheets have a beaded border, interrupted by a crescentic recess on top. The inner, slightly raised crescentic field is framed by two rows of pressed pseudo-granulation on top and three rows at the bottom. The upper part of both pendants is damaged. L. 6.3–6.4 cm, W. 4.55–4.7 cm, Wt. 2.15 g, 3 g, 3.15 g, 3.17 g (*Fig. 3. 1; Fig. 3. 2*).

<sup>5</sup> BÓNA 1971, 274, Fig. 18; BÁLINT 1989, Fig. 63; ERDÉLYI 1982, 167, who erroneously quotes the findspot as Veszprém-Szilasballás.

<sup>6</sup> I would here like to thank Ágota Perémi for kindly calling my attention to the archival information on the pendants.

<sup>7</sup> H. TÓTH 1984, 11.

<sup>8</sup> ERDÉLYI 1982, 167.

<sup>9</sup> BÁLINT 1995, 248.

<sup>10</sup> TOMKA 2008, Abb. 12.3.

<sup>11</sup> ADAM 2002, 298. Nándor Fettich mentions several early Avar finds from Rábapordány among the Migration period finds from Győr and its broader environs. One of these is a Szentendre type gold earring with pyramidal pendant, which ended up in the collection of Benedictine Museum in Győr (FETTICH 1943, 6, Pl. I. 4).

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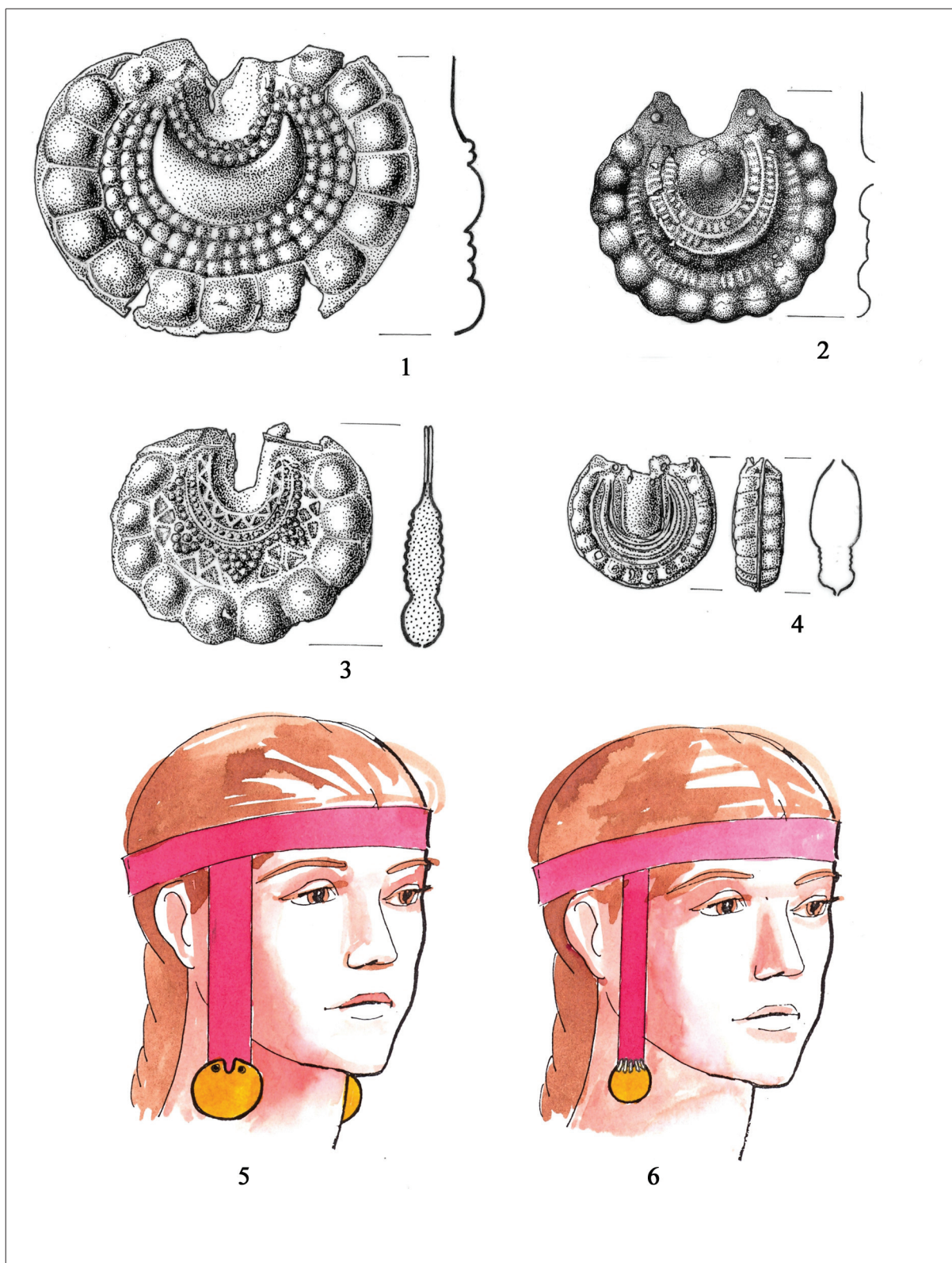


Fig. 3. 1: Rábapordány-Patyi domb; 2: Kunpeszér-Felsőpeszéri út, Homokbánya, Grave 7; 3: Mezőszilas; 4: Mélykút-Sánc-dűlő, Grave 14; 5-6: reconstruction (1-4: 1:1) (Drawing: Margit Koncz)

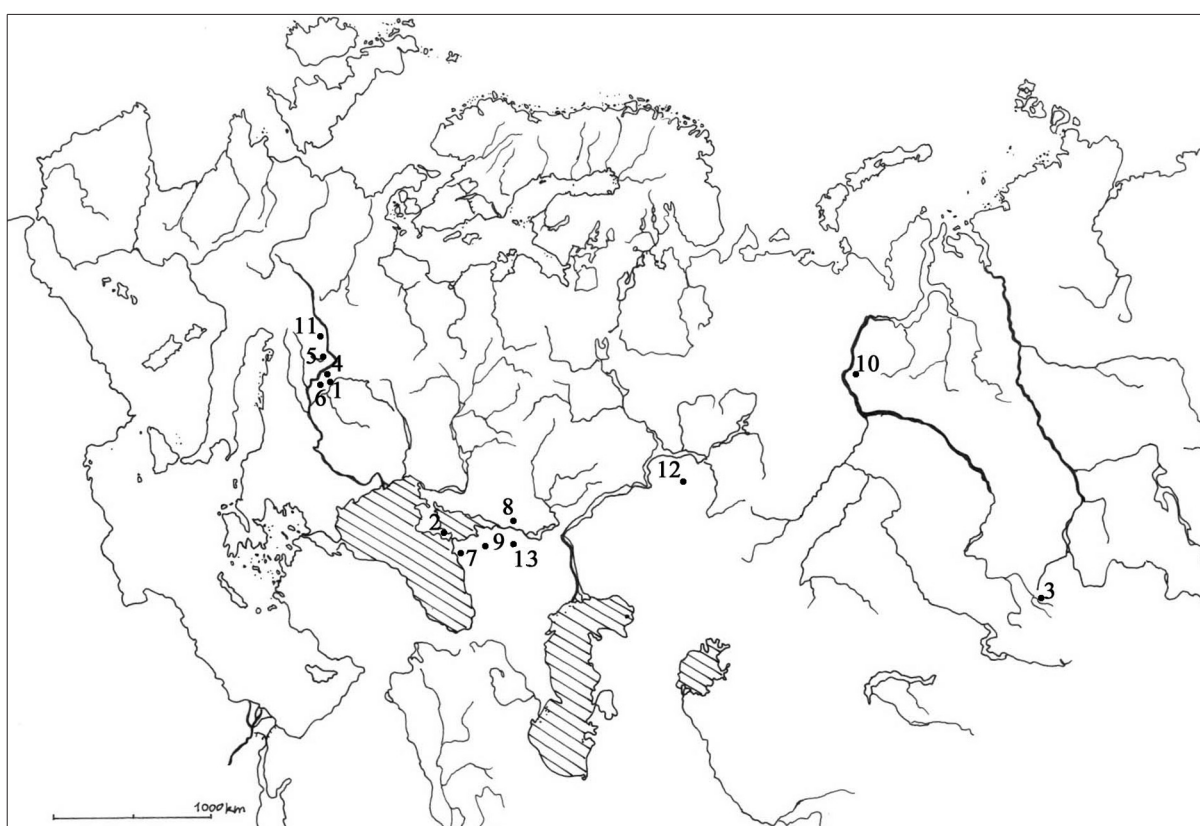


Fig. 4. 1: Kunpeszér-Felsőpeszéri út, Homokbánya, Grave 7; 2: Rábapordány-Patyi domb; 3–4: Mezőszilas; 5: Mélykút-Sánc-dűlő, Grave 14 (1–5: 1:1)

## A MEZŐSZILAS TYPE PENDANT FROM GRAVE 14 OF THE MÉLYKÚT-SÁNC-DŰLŐ CEMETERY

*I.4.* Another specimen of this rare jewellery type came to light in 2006 at Felgyő-Kettőshalmi-dűlő. The apparently solitary burial was dug into a Sarmatian ditch. A pair of silver pendants was found by the skull of the woman buried in a coffin. The single other grave good from the burial was an iron fragment of unknown function. The pressed pendants of poor quality sheet silver are closest to the piece from Mélykút in terms of their size. These pendants lack the pressed beaded border so typical of the other pendants of this type.<sup>12</sup>

Three of the five sites<sup>13</sup> yielding pendants of this type lie in the Danube–Tisza Interfluve, the other two in northern Transdanubia. Although the pieces from the latter region were stray finds, it seems likely that they too had been the grave goods of female burials (*Fig 5*). A pair of these pendants was brought to light at Rábapordány, Kunpeszér, and Felgyő; the burial at Mélykút was partially disturbed by earth-moving machines, this probably being the reason that only one piece was found. The five pendants can be divided into three groups regarding their size: the pair from Rábapordány is the largest (6.3–6.4 cm by 4.55–4.7 cm), the pieces from Mezőszilas and Kunpeszér are roughly identical (4.3 cm by 3.5–3.2 cm), while the pendants from Felgyő and Mélykút are much smaller (2.3–2.4 cm). While each of these pendants exhibits unique features, they also share several similarities. The pendant from Felgyő is the one least resembling the others, in part because it was made from poor quality sheet silver and in part because it lacks the beadrow motif around the edge.



*Fig. 5.* 1. Felgyő-Kettőshalmi-dűlő; 2. Kerch; 3. Kudyrge; 4. Kunpeszér-Felsőpeszéri út, Homokbánya; 5. Mezőszilas; 6. Mélykút-Sánc-dűlő; 7. Mihaelsfeld; 8. Morskoy Chulek; 9. Novopokrovka; 10. Odintsovka; 11. Rábapordány-Patyi domb; 12. Ufa; 13. Verhne-Kurmoyarska

<sup>12</sup> I would here like to thank the excavators for kindly providing information about this find. For a preliminary report on the site and the grave, cp. MÉSZÁROS et al. 2007, 125.

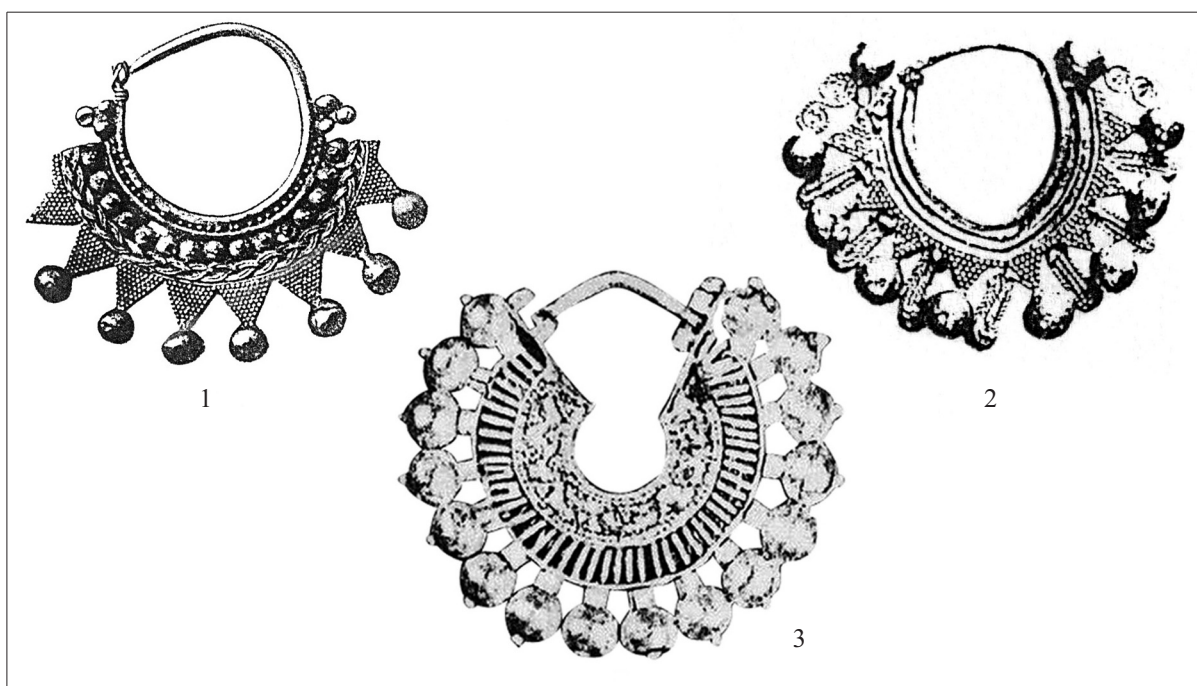
<sup>13</sup> Erdélyi quotes a pendant of this type from Öskü, but without giving any references, and this piece therefore remains unverified. The published grave goods from the Öskü cemetery do not include a pendant of this type. cp. RHÉ-FETICH 1931!



## II. PARALLELS TO THE PENDANT BEYOND THE CARPATHIAN BASIN

Joachim Werner correctly noted that the closest analogy to the Mezőszilás type pendants comes from Grave 4 of the Kudyrga cemetery in the Altai region.<sup>14</sup> The north to south oriented burial of a woman laid to rest in a rectangular stone-lined grave contained also fragments of a child's skull and skeletal bones. Found beside the woman's skull was a pair of pendants made from jointly pressed bronze and gold sheet: while both have a beaded border, one pendant has a decoration of pseudo-granulation resembling the piece from Rábapordány, the other a design of pressed imitation cellwork resembling the pendant from Mezőszilás (*Fig. 7. 7–8*).<sup>15</sup> In addition to the pendants, the grave goods included a pair of earrings with a small spherical pendant, a few beads (one covered with gold foil, two opal beads, and two carnelian beads), two bronze rings, two iron buckles, the plain iron hoop of the strap distributor of the footwear, two silver buckles with a shield shaped plate cast in one, also part of the footwear, a whetstone, an iron awl, and a carved bone container.<sup>16</sup> Other finds recovered from the grave were the remains of a vessel or basket carved from elmwood, and horse harness pieces deposited by the woman's feet: a bit with cheek-pieces, a pair of stirrups with straight foot-plate and elongated loop, a bronze strap retainer, an iron girth buckle, the bone plaques of a saddle, lobed harness ornaments cast from silver, and a strap end with a tendril pattern. Grave 3, a horse burial in a stone-lined oval grave pit, lay by the northern end of the woman's burial. The horse was deposited with an opposite orientation and laid on its legs. The single grave good was a stirrup with elongated loop.<sup>17</sup> The horse burial can probably be linked to the female burial.

The form of the pendants found in the Carpathian Basin and in the Kudyrga burials undeniably reflect a continuation of late antique traditions since crescentic earrings framed by beading, some of which have triangular granulation, represent a popular Mediterranean type (*Fig. 6*). At the same time, the typological forerunners can be sought among the various early medieval crescentic pendants of the steppe. One of the best parallels to the pieces from the Carpathian Basin, and especially to the specimen from Felgyő, is the pair of undecorated pendants



*Fig. 6.* Antique crescentic earrings. 1: Egypt (1<sup>st</sup>–2<sup>nd</sup> century AD, after OGDEN 1991); 2: Syria (1<sup>st</sup>–2<sup>nd</sup> century AD, after HACKNES 1976); 3: Anatolia (4<sup>th</sup> century BC, after OGDEN 1991)

<sup>14</sup> WERNER 1966, 314, Taf. 3, Abb. 18.

<sup>15</sup> GAVRILOVA 1965, Tab. 9.3–4; KENK 1982, Abb. 13.2–3. This grave is noteworthy not only for its pendants, but also because the cast, four-lobed harness ornaments are among the best parallels to the six-lobed belt mounts of the Martinovka type from Kecel (BALOGH 2004, 244).

<sup>16</sup> The iron awl was mistakenly described as an iron knife, while the container was erroneously interpreted as a needle case. Cp. KENK 1982, 57, Abb. 13.16–17.

<sup>17</sup> GAVRILOVA 1965, 22–23; KENK 1982, 55–57.

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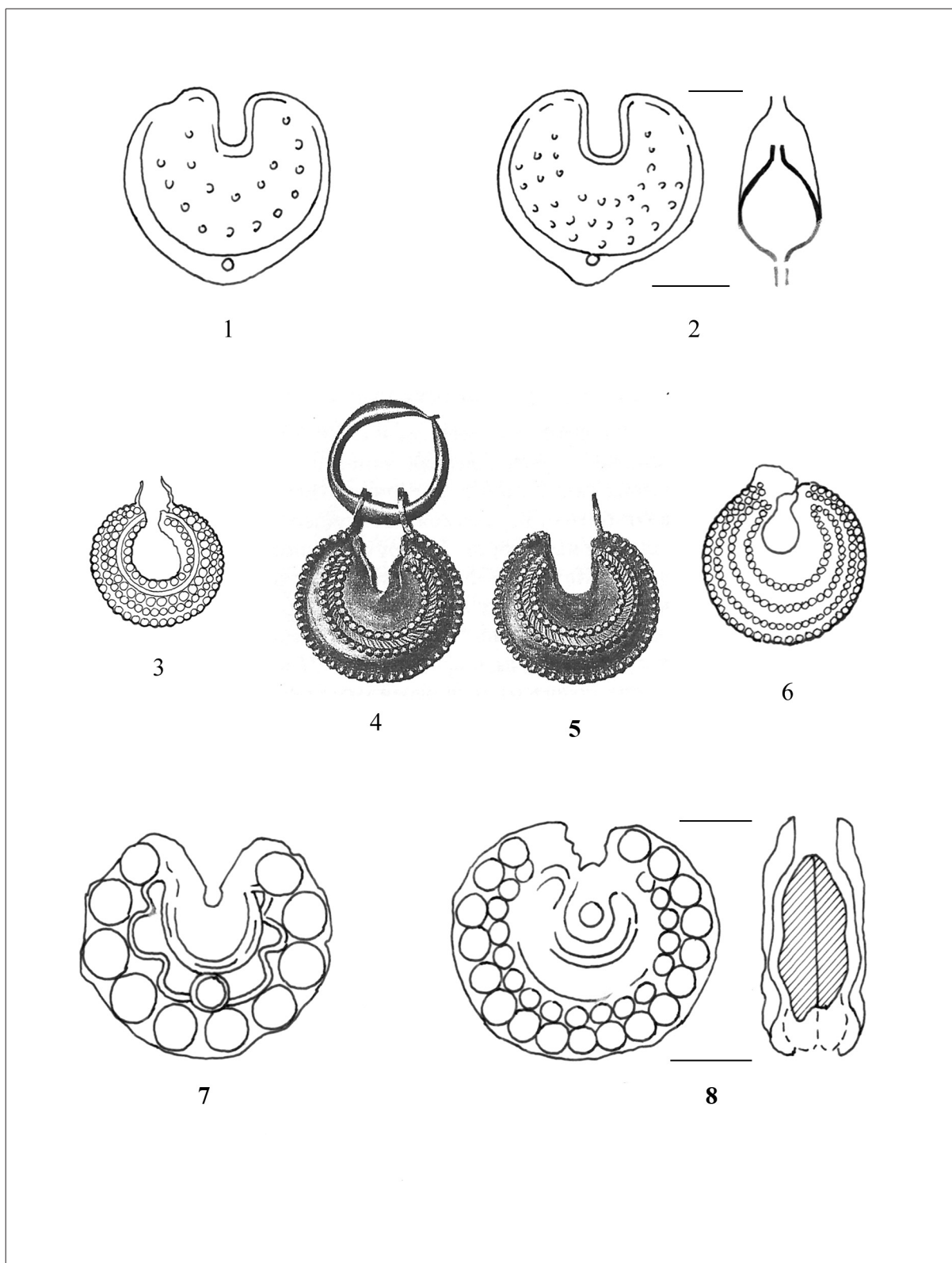


Fig. 7. 1–2: Odintsovka; 3: Morskoy Chulek; 4–5: Verhne-Kurmoyarskaya; 6: unprovenanced (Kiev); 7–8: Kudyrga, Grave 4 (3–6: 1:1)

of sheet bronze from Odintsovka in the Upper Ob region, recovered from a burial dated to the 4<sup>th</sup>–5<sup>th</sup> century (*Fig. 7. 1–2*),<sup>18</sup> quoted by Werner.<sup>19</sup> Mezőszilas type pendants also have much in common with the garnet inlaid, granulated earrings and pendants of the Hun period from the Crimea.<sup>20</sup> Bálint quotes an entirely different pendant type as a possible forerunner, likewise from the Crimea.<sup>21</sup> Two female graves came to light in 1868 in the valley of the Morskoy Chulek River, 33 km from Taganrog, whose finds eventually ended up in the Ermitage.<sup>22</sup> One grave contained two small gold pendants measuring 2.5 cm by 2.1 cm (*Fig. 7. 3*), a cast gold bracelet, and a bezelled finger-ring, also of gold. The pendants were assembled from two halves and decorated with concentric rows of granulation. Each pendant was fitted with a small loop of gold wire soldered to the pendant. It seems likely that Bálint dated the pendants from Morskoy Chulek to the earlier 5<sup>th</sup> century based on the garnet inlaid gold harness ornaments found in the other burial. In contrast, A. K. Ambroz suggested a later date and assigned these pieces to the later 7<sup>th</sup>/earlier 8<sup>th</sup> century.<sup>23</sup> More recent Russian research considers this date as being too late, contending that the fashion of these pendants fell into the later 5<sup>th</sup> century/early 6<sup>th</sup> century.<sup>24</sup> A. V. Komar has convincingly argued for a date in the later 6<sup>th</sup> century in view of the oval granulated medallions with stone inlay found in the grave assemblage.<sup>25</sup> He quotes an excellent parallel to the pendant found at Morskoy Chulek from the Kiev museum (*Fig. 7. 6*).<sup>26</sup> Another parallel known from Verhne-Kurmoyarskaya (*Fig. 7. 4–5*).<sup>27</sup>

In view of their decoration imitating granulation and cellwork, the pendants from the Carpathian Basin can undoubtedly be linked to the round *kolts* (or temporal pendants) decorated with a combination of granulation and cellwork in the late antique tradition. Bálint was the first to enlarge the corpus of parallels to the Mezőszilas pendant by quoting a probably 6<sup>th</sup> century pendant from Kerch, now in the British Museum, decorated with granulation enclosing a crescentic panel with multiple cells (*Fig. 8. 3*).<sup>28</sup> The curved cell walls reflect the cellwork technique of the Pontic.<sup>29</sup> Comparable pieces can be found in the Šukin Collection, also dating from the 6<sup>th</sup> century (*Fig. 8. 1–2*), whose exact provenance and find circumstances are unknown.<sup>30</sup> The two pendants are roughly identical in size (3.46 cm by 4.2 cm, and 4 cm by 3.9 cm, respectively), but their decorative design of large granulation combined with cellwork of gold foil set in a crescentic panel differs slightly.

Several other pendants adorned with granulation and cellwork can be quoted from among the analogous finds. A gold chain with three medallions was discovered at Mihaelsfeld in the Upper Kuban region in 1892.<sup>31</sup> Attached to the chain was a coin issued jointly by Iustinus I and Iustinian I in 527.<sup>32</sup> The fourth pendant was found in 1895. During his control excavation of the site in 1893, K. E. Dumberg found an iron knife with bone hilt, a bronze mirror, various gold ornaments, and a pair of gold pendants (*Fig. 9. 1–2*). According to the locals' recollection, the finds included also a silver brooch and a buckle. It seems likely that the finds represent the grave goods of a female burial.<sup>33</sup> The two pendants are of roughly the same size (7.3 cm by 5.5 cm), but their design differs slightly. Both are decorated with granulation and cellwork made from gold foil. One pendant has high cells set with tiny garnets framed by granulation. The date of the pendants is still debated: Ambroz suggested a date around the late 7<sup>th</sup>/early 8<sup>th</sup> century, which seems too late, since the assemblage can be confidently assigned to the second half or third quarter of the 6<sup>th</sup> century in view of the gold solidus. A. V. Komar quotes a comparable pendant from the Novopokrovka, lying between the Volga and the Sea of Azov (*Fig. 10. 2–3*).<sup>34</sup> The pendant bears a design combining granulation and garnet plaques, and has two loops on top, through which a disc headed pin ornamented with cell-

<sup>18</sup> GRJAZNOV 1956, 109, Ris. 18.

<sup>19</sup> WERNER 1966, 314, Abb. 3. 3; 18.

<sup>20</sup> ZASECKÁ 1994, Ris. 11.

<sup>21</sup> BÁLINT 1995, 249.

<sup>22</sup> TOLSTOJ–KONDAKOV 1890, 140–142, Ris. 166–171; ARTAMONOV 1962, 77; ZALESKÁ et al. 1989, 19–21, Ris. 20–21.

<sup>23</sup> AMBROZ 1981, 18.

<sup>24</sup> ZALESKÁ et al. 1989, 19; ZASECKÁ 1996, 72.

<sup>25</sup> KOMAR 2006, 97.

<sup>26</sup> KOMAR 2006, Ris. 24, 13.

<sup>27</sup> ZASECKÁ et al. 2007, Ris. 57.3.

<sup>28</sup> BÁLINT 1978, 203, Fig. 15, 4.

<sup>29</sup> NAGY 1998, 380.

<sup>30</sup> MEROWINGERZEIT 2007, 332–333.

<sup>31</sup> Ambroz specified the findspot of the pendants as Dzhiginskoye (AMBROZ 1971, Ris. 8–9).

<sup>32</sup> ZASECKÁ 1996, 82. In his initial publication, Kropotkin attributed the solidus to Iustinian I (KROPOTKIN 1962, 21, Nr. 9, Abb. 14), an attribution accepted by Zaleská and her colleagues (ZALESKÁ et al. 1989, 21). Péter Somogyi noted that Kropotkin and Zasecká were correct in their attribution. He provides the exact determination of the coin (MIB 2c, Offizin 10) in note 6 of his manuscript, "Ein Solidusfunde des 7. Jahrhunderts in der Sammlung des Römisch-Germanischen Zentralmuseums". I would here like to thank him for allowing me to read this study.

<sup>33</sup> ZALESKÁ et al. 1989, 21–22, Ris. 33–34; MEROWINGERZEIT 2007, 312–313. Ambroz specified the findspot of the pendants as Dzhiginskoye (AMBROZ 1971, Ris. 8, 9).

<sup>34</sup> KOMAR 2006, Ris. 24.

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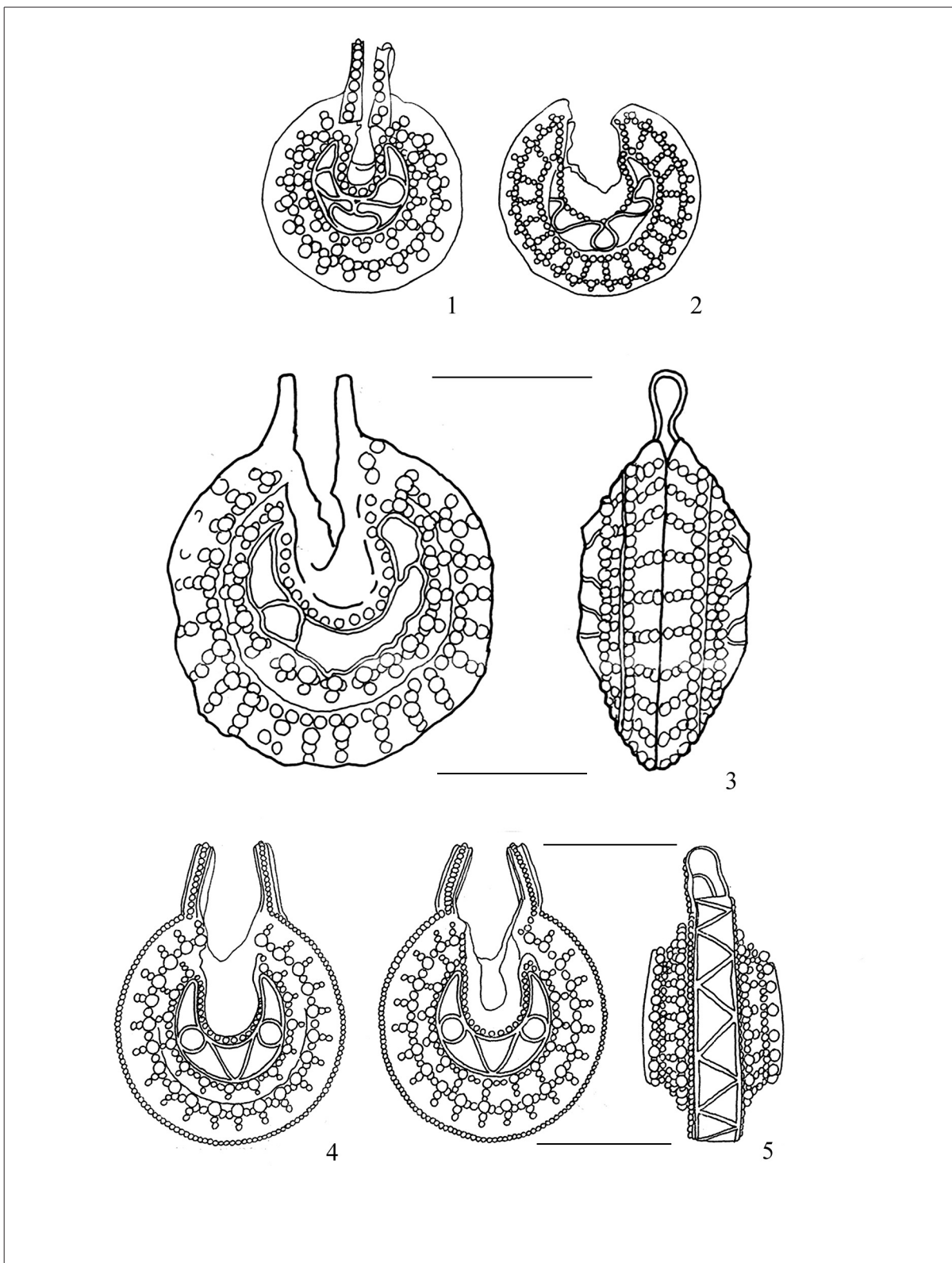


Fig. 8. 1–2: Šukin Collection; 3: Kerch (British Museum); 4–5: Novopokrovka (Platar Collection) (1–5: 1:1)

work was threaded. The Platar Collection too contains a pair of similar, but smaller pendants measuring 5 cm by 3.9 cm from Novopokrovka, brought to light in 1995 (*Fig. 8. 4–5*).<sup>35</sup>

One feature shared by these pendants with granulation and cellwork is that the design on the pendant pairs found together differs slightly, their sides are straight, and the pieces on with loops generally have two loops perpendicular to the pendant's axis. On some pendants, the loops are also decorated with granulation or its imitation. The paired loops are also regarded as a characteristic feature of the pendants of this type.<sup>36</sup>

The round pendants from Ufa (*Fig. 9. 3–4*) can most likely be derived from the same prototype as the kolts, but developed along different lines.<sup>37</sup> Three graves containing the burial of a man, a woman, and a child came to light in 1936, when the foundations of a new building for the Bashkyr Medical University were laid. Unfortunately, neither a description of the graves, nor any drawings of the burials have survived. Grave 2, a north-east to south-west oriented female burial, contained the grave goods of a 25–30 years old woman. Deposited in the grave were various medallions, teardrop shaped pendants, openwork discs, a gold earring, a silvered bronze bracelet, two gold strap-ends, round mounts of cast silver, a mirror, a cosmetic spoon, two silvered bronze shoe buckles and trefoil shoe mounts, the silver sequins of the shroud, and two large gold kolts (measuring 9.5 cm by 8.8 cm).<sup>38</sup> Both pendants are adorned with filigree, granulation, and coloured stone inlay, with slightly differing designs. Their loop is missing. R. V. Ahmerov dated the graves to the late 7<sup>th</sup>/early 8<sup>th</sup> century,<sup>39</sup> although a date around the later 6<sup>th</sup> century or the third quarter of the 6<sup>th</sup> century seems more likely in view of the similarity to the Mihaelsfeld pendants.<sup>40</sup>

The parallels quoted above indicate that crescentic and round *kolts* decorated with granulation and garnet or stone inlay were fashionable in the Pontic and that they were produced in a local workshop active in the later 6<sup>th</sup> century, whose products were made in the late antique traditions under cultural impacts from Byzantium.

### III. RECONSTRUCTION OF HOW MEZŐSZILAS TYPE PENDANTS WERE WORN

The manner in which Mezőszilas type pendants were worn is still a matter of debate. Gy. Rhé believed that they were worn as earrings,<sup>41</sup> an opinion shared by J. Werner<sup>42</sup> and Cs. Bálint.<sup>43</sup> A. A. Gavrilova and, following her, R. Kenk interpreted the pieces from Kudyrge as kolts, i.e. temporal pendants,<sup>44</sup> similarly to István Bóna, who reconstructed the pieces from Mezőszilas as temporal pendants dangling on either side of the face.<sup>45</sup> The interpretation of the pendants from the Carpathian Basin as earrings is contradicted by the fact that all lacked a ring hoop, while the pieces from Grave 4 of Kudyrge, recovered from a professionally excavated undisturbed burial, lacked the loops whereby they could be suspended. This burial also yielded “genuine” earrings: a pair of earrings with small spherical pendant was found on either side of the skull.

Of the pieces found in the Carpathian Basin, the edge of the pendant from Rábapordány is fragmentary, similarly to the pieces from Kunpezsér and Mezőszilas. However, certain features of the latter allow a reconstruction of how they were worn. Two small loops were created by hammering on either side of the crescentic recess on top of the latter pendants – semicircular ones on the piece from Mezőszilas and triangular ones on the pendant from Kunpezsér – which contained the fragments of tiny rivets, suggesting that the pendants had been attached to some thicker fabric, perhaps leather (*Fig. 3. 5*). A discoloured patch, the remnant of some organic substance, was identified in the region of the pendants in the Kunpezsér burial and a rectangular backplate of sheet bronze was attached to one of the rivets on the Mezőszilas pendant. The pendant from Mélykút differs slightly in that it has five pairs of tiny holes on top whereby it was attached or sewn onto some thinner textile (*Fig. 3. 6*). The structure of

<sup>35</sup> PLATAR 2004, 224. Ukrainian specialists regard several pieces in the collection as modern forgeries. According to A. V. Komar's kind personal communication, about 60 per cent of the gold pieces in the collection are not original, but extremely good copies made for collectors. Seeing that a provenance is specified for the pendants, I have included them among the analogous pieces, even though I am aware of the fact that they might be forgeries.

<sup>36</sup> GARAM 2001, 33.

<sup>37</sup> AHMEROV 1951, Ris. 36.1–3.

<sup>38</sup> AHMEROV 1951, 126–131, Ris. 36.4; Ris. 37–40.

<sup>39</sup> AHMEROV 1951, 137.

<sup>40</sup> In his discussion of the stone inlaid oval medallion from Grave 1 of the early Avar cemetery at Szegvár–Oromdűlő, Gábor Lőrinczy pointed out the remarkable similarity between the pendants from Mihaelsfeld and Ufa, noting that they can be assigned to the same chronological horizon (LŐRINCZY 1991, 136).

<sup>41</sup> RHÉ 1924, 76–77.

<sup>42</sup> WERNER 1966, 314.

<sup>43</sup> BÁLINT 1978, 203, 205.

<sup>44</sup> GAVRILOVA 1951, 22; KENK 1982, 56.

<sup>45</sup> BÓNA 1971, 240 (24).

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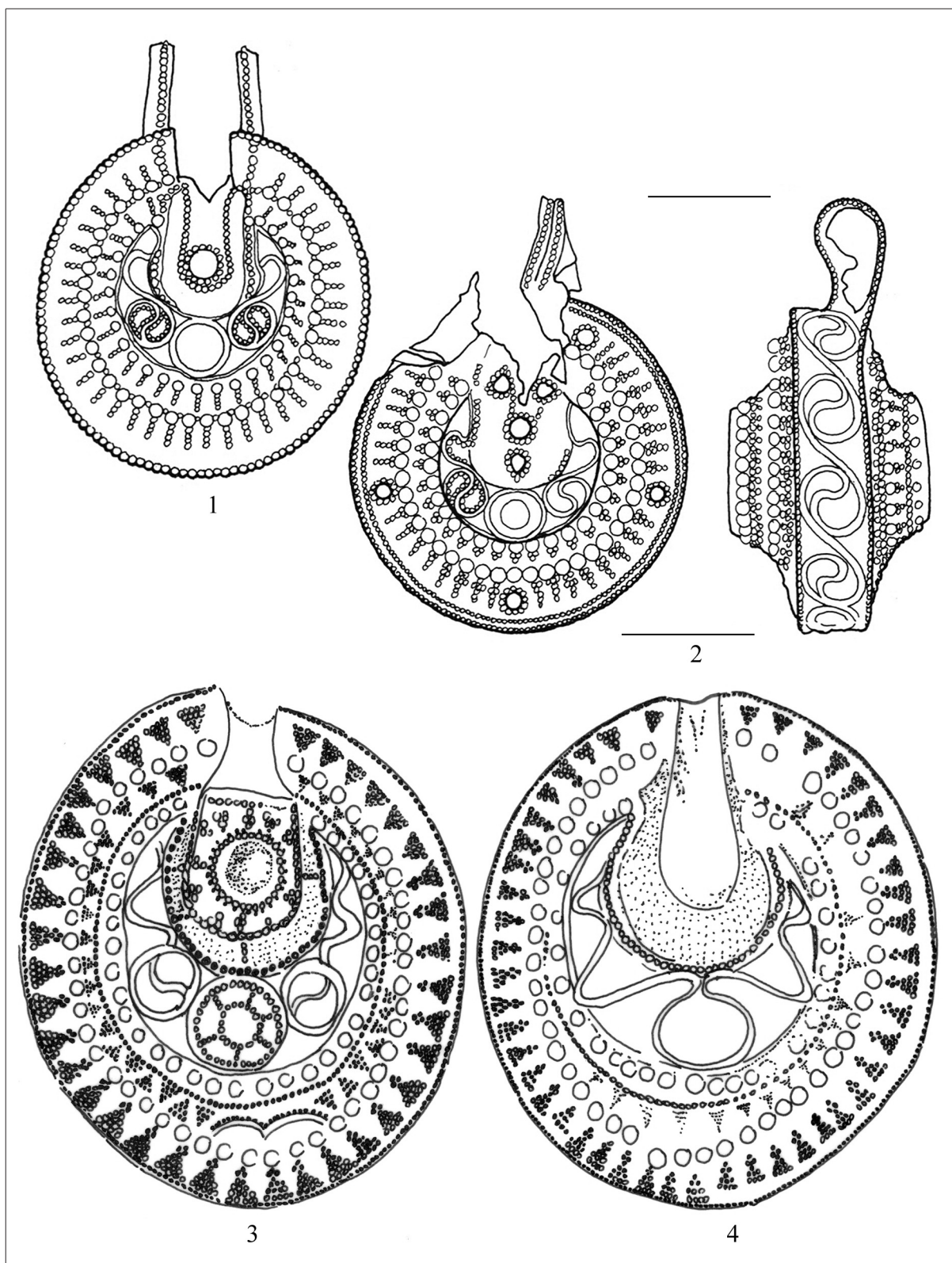


Fig. 9. 1–2: Mihaelsfeld; 3–4: Ufa, Grave 2 (1–4: 1:1)

these pendants suggests that their interpretation as earrings can be definitely rejected. István Bóna was probably correct in his reconstruction of pendent ornaments dangling on either side of the face. The interpretation of the pendants from Felgyő is slightly more difficult. One pendant has a small bronze plaque, probably the fragment of a suspension loop, soldered on the inner face. The fragmented state of the pendants does not allow a reconstruction of how they were worn, and even their function is uncertain. The other Mezőszilas type pendants can best be likened to the large oval pendants decorated with granulation and stone inlay of the 5<sup>th</sup> century from the Crimea,<sup>46</sup> which I. P. Zasecká reconstructed as pendants suspended from a headdress.<sup>47</sup> G. Damm proposed a slightly differing reconstruction, suggesting that they had been attached to the lower sides of a fez-like cap.<sup>48</sup>

The looped pendants from the Pontic, described as kolts in Russian archaeological studies, represent an entirely different case. The interpretation of their function was most likely based on the loops set perpendicular to the ornament's axis. However, the pieces from Novopokrovka suggest that these had been earrings worn with the aid of a round-headed pin rather than a hoop (*Fig. 10. 1*). The pendants from Morskoy Chulek are similarly fitted with two loops perpendicular to the ornament's axis and the finds from the burial include two pins with long shank, whose head is decorated with garnets set in cells framed with granulation.<sup>49</sup> But the same piece from Verhne-Kurmoyarskaya with earring were found together.<sup>50</sup>

#### IV. THE ORIGINS AND DATE OF THE MEZŐSZILAS TYPE PENDANTS

Gyula Rhé linked the Mezőszilas pendants to the Avars<sup>51</sup> and Dezső Csallány too dated them to the 7<sup>th</sup> century.<sup>52</sup> Péter Németh assigned them to the finds of the early Avar period.<sup>53</sup> Quoting their likeness to the pieces from Kudyrge and Odintsovka, István Bóna regarded these pendants as representing the Inner Asian heritage of the earliest Avar assemblages,<sup>54</sup> and suggested a date in the last third of the 6<sup>th</sup> century,<sup>55</sup> which became generally accepted. Csanád Bálint had initially accepted Bóna's suggestion regarding the origins of the pendant,<sup>56</sup> but later convincingly demonstrated that an origin in Central Asia was unlikely, as was their early dating. He suggested that the pendants from Pannonia had perhaps been locally made pieces modelled on Byzantine prototypes,<sup>57</sup> even though neither comparable pendants serving as possible models, nor the costume of which they had been part of are known from Byzantium. István Erdélyi called attention to the crescentic pendants inset with stones from Central Asia and the Volga region<sup>58</sup> but these pieces are at best distant relatives of the specimens discussed here. In his analysis of the Rábapordány pendants, Péter Tomka suggested that they had been made in a town under Byzantine rule,<sup>59</sup> which seems acceptable in the case of the kolts decorated with granulation and cellwork. The lack of technical and formal parallels to the pendants from the Carpathian Basin, with the single exception of the pieces from Kudyrge, as well as the style of the ornamentation suggests that these pendants had been made locally. The beadrow framing the pendants, the pressed pseudo-granulation, and the imitation cells share many similarities with genuine Byzantine finds and Byzantine inspired articles of the early Avar period, such as the earliest group of pressed round clasps adorned with imitation cells, a granulated or beaded border, and late antique decorative motifs,<sup>60</sup> earrings with pyramidal pendants of the Szentendre type, pressed belt mounts with a beaded border, and pseudo-buckles. Arguments favouring the local manufacture of these articles seem well-founded in view of the goldsmiths' graves known from this period, the unprovenanced die for pressing mounts with beaded border in the collection of the Hungarian National Museum,<sup>61</sup>

<sup>46</sup> ZASECKÁ 1994, Ris. 11.6–9.

<sup>47</sup> ZASECKÁ 1994, Ris. 12.1.

<sup>48</sup> DAMM 1996, 84.

<sup>49</sup> ARTAMONOV 1962, 77.

<sup>50</sup> ZASECKÁ et al. 2007, Ris. 57.3.

<sup>51</sup> RHÉ 1924, 76.

<sup>52</sup> CSALLÁNY 1956, 162.

<sup>53</sup> NÉMETH 1969, 154.

<sup>54</sup> BÓNA 1971, 240 (24).

<sup>55</sup> ADAM 2001, 239.

<sup>56</sup> BÁLINT 1978, 203.

<sup>57</sup> BÁLINT 1993, 204–205; BÁLINT 1995, 248–250.

<sup>58</sup> ERDÉLYI 1982, 167–168.

<sup>59</sup> TOMKA 2005.

<sup>60</sup> BALOGH 2000, 224: Group I/a, round clasps.

<sup>61</sup> A die for a large strap end with beaded border is known from Adony (FETTICH 1926, Pl. VI.3), a die for a rosette shaped belt mount from Gátér, Grave 11 (KADA 1905, 369; FETTICH 1926, Pl. VI.19), and one for a round belt mount from Zselickislak (FETTICH 1926, Pl. VII.4), alongside an unprovenanced piece for oval belt mounts (FETTICH 1926, Pl. VII.1).

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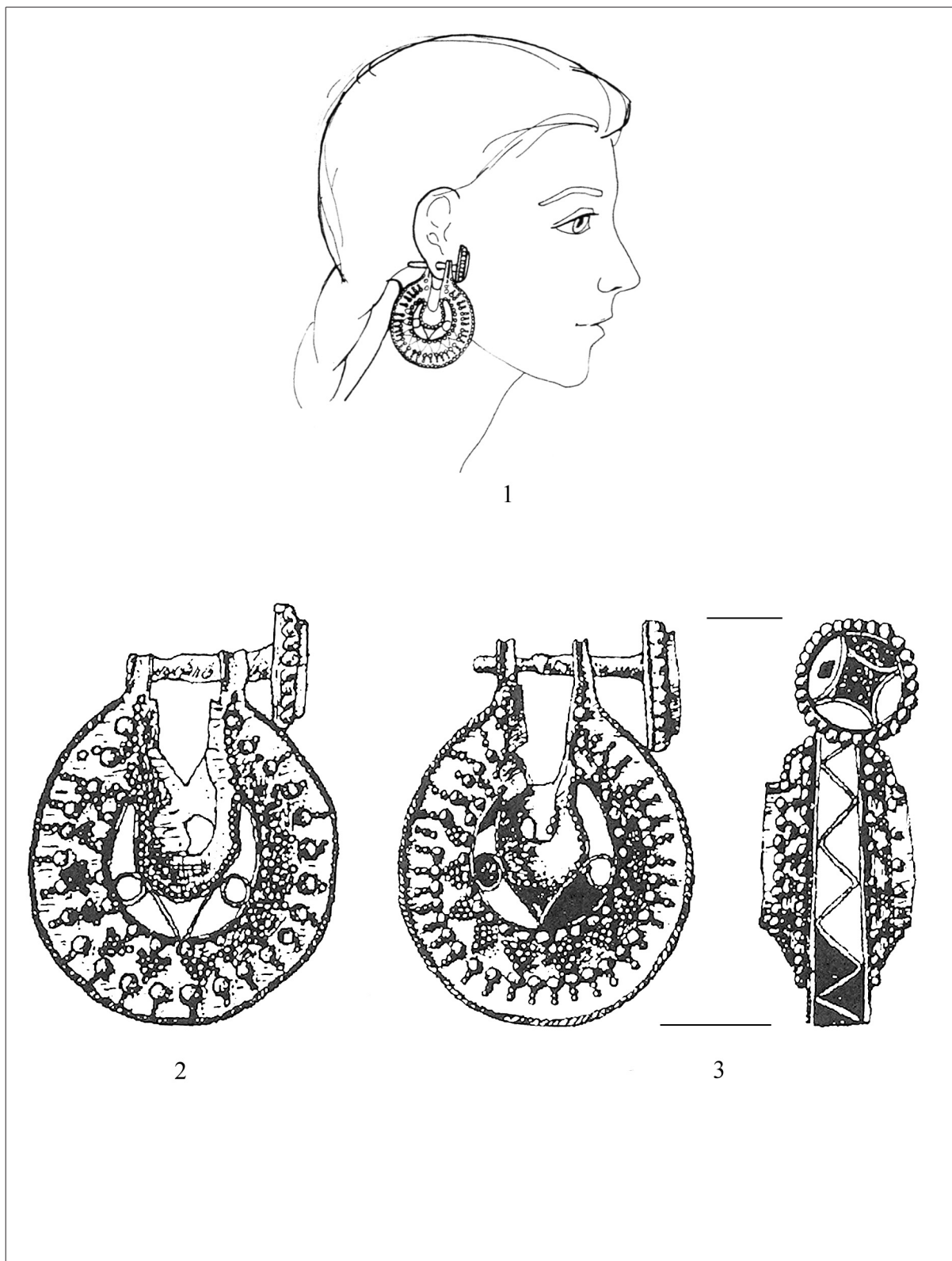


Fig. 10. 1: Reconstruction, 2-3: Novopokrovka (after KOMAR 2006)



and the similarity between the pressed clasps and the disc brooches from Keszthely. It seems quite likely that some of the latter were probably made in a Pannonian workshop continuing late antique traditions<sup>62</sup> The concentration of Szentendre type earrings with pyramidal pendant, pressed mounts with beaded border, and pseudo-buckles in north-eastern Transdanubia and the Danube–Tisza Interfluve would imply that the workshop(s) producing these articles lay somewhere in these regions. A local manufacture is also indicated by a few fragments found together with the Rábapordány pendants, bearing a beadrow pattern larger than the one on the pendants, which had perhaps been used for repairing damaged ornaments of this type.<sup>63</sup>

The dating of the pendants is rather problematic. Their manufacturing technique and decorative motifs certainly date them to the early Avar period, although not to the earliest find horizon. The pieces from Transdanubia (Mezőszilas and Rábapordány) were stray finds. Although the ones found in the Danube–Tisza Interfluve came from professionally excavated burials, the other grave goods do not offer any secure anchors for dating. The three graves can at best be dated on the basis of their broader cultural milieu. Two Avar graves were found lying some 300 m from each other at Felgyő, on an extensive, intensively occupied Avar settlement. The two graves probably represent solitary burials owing to the distance between them. The female burial contained nothing else but the pendants and iron fragments of unknown function, while the male burial contained various bone articles dating from the early Avar period. At Kunpeszér, an early Avar cemetery with loosely arranged burials was in part overlain by a late Avar row grave cemetery. Grave 7, containing the pendant, lay among the early Avar burials, whose grave goods included earrings with pyramidal and large spherical pendants, belt sets of small round mounts and rosettes framed with beading, and swords with gold and silver fittings and P shaped suspension loops. In view of the similarity of these finds to the grave goods of the Kunbábony burial, Elvira H. Tóth dated the use of the cemetery to the second third of the 7<sup>th</sup> century,<sup>64</sup> which corresponds to the accepted date of the Kunbábony burial.<sup>65</sup> The belt sets with small pressed mounts and many pendent straps and the earrings with large spherical pendant assign the earliest burials in the cemetery at Mélykút–Sánc-dűlő to the mid-7<sup>th</sup> century. The Mezőszilas type pendants from the Carpathian Basin can thus indirectly be dated to the second half of the early Avar period, to the middle third of the 7<sup>th</sup> century, in view of their manufacturing technique and ornamental design, as well as their cultural milieu. The gradual decrease of the size of the pendants and the more simple designs perhaps reflect chronological differences, suggesting the following typological sequence: Kunpeszér/Rábapordány–Mezőszilas–Mélykút/Felgyő.

\* \* \*

The gold pendant from Grave 14 of the Mélykút cemetery and the other pendants from the Carpathian Basin, as well as the pendant from Kudyrga were not earrings, but were attached to leather or textile bands and worn on either side of the face. The Mezőszilas type pendants and the granulated and stone inlaid kolts (probably worn as earrings) appearing in the Pontic during the later 6<sup>th</sup> century can both be derived from a common prototype, explaining the many similarities between them. Although their typological development differed, they nonetheless preserved several elements of the late antique heritage. Both types were produced for a fairly short period of time and their distribution is restricted to a relatively small region. They did not become cheap, mass produced trinkets. The Pontic pieces were probably produced in late antique or Byzantine workshops, while the pendants from the Carpathian Basin were most likely manufactured locally: they were probably the products of genuine Byzantine workshops or workshops manufacturing articles in the Byzantine style, where pseudo-buckles, mounts with beaded border and Szentendre type earring with triangular pendant were also crafted. The distribution of these finds suggests that the workshop(s) lay in the Danube–Tisza Interfluve. Similarly to the pressed clasps, the pendants too reflect a blend of two cultural traditions: their manufacturing technique points towards Byzantium, while the way they were worn towards the steppean world. Their dating to the middle third of the 7<sup>th</sup> century is based on their stylistic features. While this dating may be modified by new finds, we may confidently state that the pendants of this type fit into the series of early Avar finds inspired by Byzantine prototypes and the period's genuine Byzantine finds.

<sup>62</sup> BALOGH 2000, 226.

<sup>63</sup> TOMKA 2005.

<sup>64</sup> H. TÓTH 1984, 18.

<sup>65</sup> BÓNA 1984, 324; WENER 1986, 62; KISS 1995, 134. The problems of dating assemblages with pseudo-buckles was most recently reviewed by Éva Garam in her study on the Avar chieftain's grave found at Maglód (GARAM 2005), in which she basically re-iterated her earlier opinion (GARAM 2000, 219).

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## REFERENCES

- ADAM Szentpéteri, J. (Hrsg.): Archäologische Denkmäler der Awarenzeit in Mitteleuropa. *VariaArchHung* 13. Budapest 2000.
- AHMEROV 1951 Ahmerov, R. B.: Ufimskie pogrebeniâ VI–VIII vekov našej èry. *KSIIMK* 40 (1951) 125–137.
- AMBROZ 1971 Ambroz, A. K.: Problemy rannesrednevekovoj hronologii Vostočnoj Evropy. *SA* 1971/2 (1971) 96–123.
- AMBROZ 1981 Ambroz, A. K.: Vostočnoevropejskie i srednehaziarskije stepy V–pervoj poloviny VIII vv. In: Pletneva, S. A. (red.): *Stepy Evrazii v epohu srednevekov'ja*. Moskva 1981, 10–23.
- ARTAMONOV 1962 Artamonov, M. I.: *Istoriâ Hazar*. Leningrad 1962.
- BALOGH 2000 Balogh Cs.: Az avar kori préselt, lemezes boglárók (Die awarenzeitlichen gepreßten blechernen Agraffen). *MFMÉ–StudArch* 6 (2000) 219–235.
- BALOGH 2004 Balogh Cs.: Martinovka-típusú övgarnitúra Kecelről. A Kárpát-medencei maskkos veretek tipokronológiája (Gürtelgarnitur des Typs Martinovka von Kecel. Die Typochronologie der Maskenbeschläge des Karpatenbeckens). *MFMÉ–StudArch* 10 (2004) 241–303.
- BÁLINT 1978 Bálint, Cs.: Vestiges archéologiques de l'époque tardive des Sassanides et leurs relations avec les peuples des steppes. *ActaArchHung* 30 (1978) 173–212.
- BÁLINT 1989 Cs. Bálint: Die Archäologie der Steppe. Steppenvölker zwischen Volga und Donau vom 6. bis zum 10. Jahrhundert. Wien–Köln 1989.
- BÁLINT 1993 Bálint, Cs.: Probleme der archäologischen Forschung zur awarischen Landnahme. In: Müller-Wille, M.–Schneider, R. (Hrsg.): *Ausgewählte Probleme der europäischen Landnahmen des Früh- und Hochmittelalters*. *VuF* 41. Sigmaringen 1993, 195–273.
- BÁLINT 1995 Bálint Cs.: Kelet, a korai avarok és Bizánc kapcsolatai. Szeged 1995.
- BÓNA 1971 Bóna I.: A népvándorlás kora Fejér megyében. Fejér megye története az őskortól a honfoglalásig 5. Székesfehérvár 1971.
- BÓNA 1984 Bóna I.: A népvándorlaskor és a korai középkor története Magyarországon. In.: Székely Gy. (főszerk.): *Magyarország története I*. Budapest 1984, 265–374.
- CSALLÁNY 1956 Csallány, D.: Archäologische Denkmäler der Awarenzeit in Mitteleuropa. Budapest 1956.
- DAMM 1996 Damm, I. G.: Goldschmuck des 5. Jahrhunderts aus dem pontischen Raum im Römisch-Germanischen Museum Köln. In: *Reitervölker aus dem Osten. Hunnen und Awaren*. Eisenstadt 1996, 82–89.
- ERDÉLYI 1982 Erdélyi I.: Az avarság és Kelet a régészeti források tükrében. Budapest 1982.
- FARKAS–LENGYEL–MARCSIK 1972 Farkas, Gy.–Lengyel, I.–Marcsik, A.: Supposition of genetic connections between the finds of the cemetery at Mélykút–Sáncdűlő (Southern Hungary) on the basis of blood grouping ABO. *ActaBiol* 17 (1971) 199–207.
- FETTICH 1926 Fettich N.: Az avar kori műipar Magyarországon (Das Kunstgewerbe der Avarzeit in Ungarn). *ArchHung* 1. Budapest 1926.
- FETTICH 1943 Fettich N.: Győr a népvándorlaskorban. In: Lovas E. (szerk.): *Győr szabad királyi város monográfiái I–II*. Győr 1943.
- GARAM 2000 Garam, É.: Über die Beziehungen des byzantinischen Goldschnallen und der awarenzeitlichen Pseudoschnallen. In: Bálint, Cs. (Hrsg.): *Kontakte zwischen Iran, Byzanz und der Steppe im 6.–7. Jahrhundert*. *VariaArchHung* 9. Budapest–Napoli–Roma 2000, 217–227.
- GARAM 2001 Garam, É.: Funde byzantinischer Herkunft in der Awarenzeit vom Ende des 6. bis zum Ende des 7. Jahrhunderts. *MonAvarArch* 5. Budapest 2001.
- GARAM 2005 Garam É.: Avar kori nemzetségfő sírja Maglódon (Das awarenzeitliche Sippenhäuptlingsgrab von Maglód). *ComArchHung* (2005) 407–436.
- GAVRILOVA 1965 Gavrilova, A. A.: *Mogil'nik Kudyrge kak istočnik po istorii altajskich plemen*. Moskva–Leningrad 1965.
- GRJAZNOV 1956 Grjaznov, M. P.: *Istoriâ drevnih plemen Verhnej Oby po raskopkam bliz s. Bol'saâ Rečka*. MIA 48. Moskva 1956.
- HACKENS 1976 Hackens, T.: *Catalogue of the Classical Collection. Classical Jewelry*. Rhode Island School of Design. Providence 1976.
- KADA 1905 Kada E.: Gátéri (kun-kisszállási) temető a régibb középkorból. *ArchÉrt* 25 (1905) 360–384, 402–407.
- KENK 1982 Kenk, R.: Früh- und hochmittelalterliche Gräber von Kudyrge im Altai. *AVA-Materialien* 3. München 1982.
- KISS 1995 Kiss A.: Tanulmányok a kora avar kori kunbábonyi vezérsírról (Studien zum Fürstengrab von Kunbábony aus der Frühawarenzeit). *MFMÉ–StudArch* 1 (1995) 131–149.
- KOMAR 2006 Komar, A. V.: Perešcepinskij kompleks v kontekste ocnovnyh problem istorii i kul'tury kočevnyikov Vostočnoj Evropy VII–nač. VIII. v. In: Yevglevsky, A. V. (ed.): *The European steppes in the Middle Ages*. Donetsk 2006, 7–244.
- KÓHEGYI–MARCSIK 1974 Kőhegyi, M.–Marcsik, A.: Das sarmatische und awarische Gräberfeld von Mélykút. *MFMÉ* 1971/2 (1974) 119–128.
- KROPOTKIN 1962 Kropotkin, V. V.: *Kladi vizantijskich monet na t'eritorii SSSR*. SA 1. Moskva 1962.
- LŐRINCZY 1991 Lőrinczy G.: A szegvár-oromdűlői kora avar kori temető 1. sírja (Das Grab 1 des Frühawarenzeitlichen Gräberfeldes von Szegvár–Oromdűlő). *MFMÉ* 1984/85-2 (1991) 127–154.
- MARCSIK 1971 Marcsik A.: A mélykúti avar kori temető embertani leleteinek vizsgálata (Anthropological investigation of a cemetery at Mélykút from the Avar period). *AnthrKözl* 15 (1971) 87–95.

## CSILLA BALOGH

- MEROWINGERZEIT 2007 Menghin, W. (Hrsg.): Merowingerzeit. Europa ohne Grenzen. Archäologie und Geschichte des 5. bis 6. Jahrhundert. Berlin 2007.
- MÉSZÁROS et al. 2007 Mészáros P.–Paluch T.–Sóskuti K.–Sz. Wilhelm G.: Régészeti kutatások Felgyő határában. MKCsM 2006 (2007) 121–134.
- NAGY 1998 Nagy M.: Ornamenta Avarica I. Az avar kori ornamentika geometrikus elemei (Ornamenta Avarica I. Die geometrischen Elemente der awarenzeitlichen Ornamentik). MFMÉ–StudArch 4 (1998) 377–499.
- NÉMETH 1969 Németh P.: Újabb avar kori leletek a történeti Veszprém megyéből (Neue Funde aus der Avarenzeit auf dem historischen Gebiet des Komitats Veszprém). VMMK 8 (1969) 153–166.
- OGDEN 1991 Ogden, J. M.: Classical Gold Wire: Some Aspects of its Manufacture and Use. In: Classical Gold Jewellery and the classical tradition. Papers in honour of R. A. Higgins. JewSt 5 (1991) 95–105.
- PLATAR 2004 Arhinova, E. I.–Videjko, M. U.–Kločko, V. I.–Kločko, L. S.–Levada, M. E.–Simon'enko, O. V.–Stojanov, R. V.: Platar. Kollekcija predmetib starovini rogin Platonovih ta Tarut. Kiev 2004.
- RHÉ 1924 Rhé Gy.: Veszprémvármegyei avar emlékek. KVM II. Veszprém 1924.
- RHÉ–FETTICH 1931 Rhé, Gy.–Fettich, N.: Jutas und Öskü. Zwei Gräberfelder aus der Völkerwanderungszeit in Ungarn. Skythika 4. Prag 1931.
- TOLSTOJ–KONDAKOV 1890 Tolstoj, I.–Kondakov, N.: Russkije drevnosti. Sankt-Peterburg 1890.
- TOMKA 2008 Tomka, P.: Die Lehre der Bestattungsbräuche. Antaeus 29–30 (2008) 233–263.
- H. TÓTH 1984 H. Tóth E.: Korai avar vezetőréteg családi temetője a kunbányai kagán szállásterületén. MKBKM (1984) 10–20.
- WERNER 1966 Werner, J.: Zum Stand der Forschung über die archäologische Hinterlassenschaft der Awaren. In: Schmaus, A. (Hrsg.): Beiträge zur Südosteuropa-Forschung anlässlich des I. Internationalen Balkanologenkongresses in Sofia 1966. München 1966, 304–378.
- ZASECKÁ 1994 Zasecká, I. P.: Kul'tura kočevnikov Južnorusskih stepej v gunnskuu epohu (konec IV–V. vv.) (Nomadic culture of the South russian steppenlands: The end of the fourth and the fifth centuries A.D). Sankt-Peterburg 1994.
- ZASECKÁ 1996 Zasecká, I. P.: Die Steppen des nördlichen Schwarzmeergebietes während der Hunnenzeit. In: Reitervölker aus dem Osten. Hunnen und Awaren. Eisenstadt 1996, 70–72.
- ZASECKÁ et al. 2007 Zasecká, I. P.–Kazansky, M. M.–Ahmerov, I. P.–Minasán, P. C.: Morskoy Chulek. Burials of the Nobility from the Sea of Azov Region and Their Place in the History of Tribes from the North Black Sea Coast un the Post-Hun Epoch. St. Petersburg 2007.
- ZALESKÁ et al. 1989 Zaleská, V. N.–Zasecká, I. P.–Kasparova, K. V.–Lvova, Z. A.–Maršák, B. I.–Sokolova, I. V.–Ščukin, M. B.: Škrovišče na han Kuvrat. Kul'tura na bul'gary, hazary, slavjary. Sofija 1989.