
BUCKET-SHAPED PENDANTS FROM THE SARMATAE ENVIRONMENT. A FEW NOTES ON THE ORIGIN, DATING AND USE OF THESE AMULETS IN THE BARBARIAN WORLD

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REZUMAT: PANDANTIVELE-CĂLDĂRUŞĂ DIN MEDIUL SARMATIC. CÂTEVA OBSERVAȚII PE MARGINEA ORIGINII, DATĂRII ȘI UTILIZĂRII ACESTOR AMULETE ÎN LUMEA BARBARĂ

Pendantivele-căldărușă au avut o largă răspândire în diverse medii culturale din spațiul cuprins între nordul-estul Mării Negre și Europa Centrală. Studiul de față încearcă, fără a avea pretenții de exhaustivitate, o analiză a pieselor de acest tip în mediul sarmatic.

Autorul examinează aceste pandantine din mediul sarmatic alături de cel din alte medii culturale, într-un context mai larg și constată că în mediul sarmatic pendantivele-căldărușă provin cu precădere din morminte de copii și femei, fiind întâlnite atât în morminte bogate, cât și în cele mai săracăcioase.

Autorul remarcă că cele mai timpuri exemplare de astfel de pandantine sunt din spațiul nord-pontic și provin din complexe ce se datează în sec. II-I a. Chr., fapt ce sugerează, originea pendantivelor-căldărușă, alături de alte tipuri de pandantine, în regiunea nord-pontică. În sec. I a. Chr. aceste pandantine sunt prezente la scitii târzii și sarmați din nordul și nord-vestul Mării Negre, dar și în mediul geto-dacic și germanic (cultura Poienesti-Lucășeuca).

Odată cu secolul I p. Chr. numărul pendantivelor-căldărușă crește semnificativ în mediul scitic târziu, sarmatic, geto-dacic, dar și în cadrul necropolelor orașelor și așezărilor din zona nord-pontică. Tot din această perioadă ele încep să fie atestate și în arealul culturii Przeworsk.

În urma analizei descoperirilor de pendantivele-căldărușă din mediul sarmatic s-a ajuns la concluzia că nu se poate vorbi de o utilizare intensă a lor de către sarmați, precum în cazul altor tipuri de pandantine. Autorul remarcă că marea majoritatea a pendantivelor-căldărușă din mediul sarmatic nord și nord-vest pontic sunt din morminte ce se datează în intervalul cronologic cuprins între mijlocul sec. I p. Chr. - începutul/primele decenii ale sec. II p. Chr. De asemenea s-a constatat că astfel de artefacte se întâlnesc rareori în morminte sarmatice din a doua jumătate a sec. II – prima jumătate a sec. III p. Chr., dar și că lipsesc în a doua etapă a perioadei sarmatice târzii (a doua jumătate a sec. III – sec. IV p. Chr.).

Ca urmare a analizei complexelor funerare sarmatice din Câmpia Panonică în care au fost descoperite pendantive-căldărușă se conchide că obiceiul purtării acestor pandantine de către femei și copii a fost adus în acest spațiu în a doua jumătate a sec. I p. Chr. de primele grupuri de sarmați așezăți în această regiune. Nu în ultimul rând s-a remarcat că în mediul sarmatic din acest areal geografic aceste artefacte au fost utilizate, într-o măsură mai mare sau mai mică, pe toată durata locuirii lor în acest areal geografic.

În final se conchide că utilizarea masivă a pendantivelor-căldărușă în sec. II –IV p. Chr. în diverse medii culturale din spațiul cuprins între nordul Mării Negre și Europa Centrală indică faptul că ele au devenit artefacte "supranationale", fiind produse și utilizate de diverse populații din acest areal geografic.

ABSTRACT:

Bucket-shaped pendants were broadly diffused in various cultural environments from the area comprised between the north-east of the Black Sea and Central Europe. This study attempts, without aiming at being exhaustive, to analyse the objects of this type within the Sarmatian environment.

The author examines these pendants from the Sarmatian environment compared to that of other cultural settings, within a broader context and concludes that in the Sarmatian environment, bucket-shaped pendants come mainly from either richly and poorly furnished children and women graves.

The author notes that earliest specimens of such pendants are found in the north-Pontic area and originate in features that date to the 2nd – 1st century BC, which suggests that their origin, beside other pendant types, lies in the north-Pontic region. In the 1st century BC, these pendants are present with the late Scythians and the Sarmatians from the north and north-west of the Black Sea, but also in the Geto-Dacian and Germanic milieu (the Poienesti-Lucășeuca culture).

Once with the 1st century AD, the number of the bucket-shaped pendants increases significantly in the late

Scythian, Sarmatian, Geto-Dacian environments but also in the cemeteries of the towns and settlements from the north-Pontic area. Still in this period, they start to be recorded in the Przeworsk culture area, as well.

Subsequent to the analysis of bucket-shaped pendant finds from the Sarmatian environment, it was concluded they were not extensively used by the Sarmatians, like in the case of other pendant types. The author notes that the majority of bucket-shaped pendants from the Sarmatian environment of the north and north-west Pontic area come from graves dating to the chronological interval comprised between mid 1st century AD – early/first decades of the 2nd century AD. Furthermore, these artefacts are rare in second half of the 2nd century – first half of the 3rd century AD Sarmatian graves and are missing from the second stage of the late Sarmatian period (the second half of the 3rd century – 4th century AD).

Following the analysis of the Sarmatian funerary features of the Great Hungarian Plain in which bucket-shaped pendants were discovered, it is concluded that the custom of wearing such pendants by women and children was carried to this area in the second half of the 1st century AD by the first groups of Sarmatians that settled the region. Last but not least, it was noted that in the Sarmatian environment of this geographical area these artefacts were used, to a more or less extent, on the entire duration of their inhabitancy of this area.

In the end it is concluded that the massive use of bucket-shaped pendants in the 2nd – 4th century AD in various cultural environments of the area comprised between the north of the Black Sea and Central Europe evidences they became “supranational” artefacts, being produced and used by different populations from this geographical area.

CUVINTE CHEIE: pandante-căldărușă, amulete, morminte, sarmați, spațiul nord și nord-vest pontic, Marea Câmpie Ungară, geto-daci, scîti târzi, germanici, Przeworsk, *Barbaricum*

KEYWORDS: bucket-shaped pendants, amulets, graves, the Sarmatians, the north and north-west Pontic area, the Great Hungarian Plain, the Geto-Dacians, late Scythian, the Germans, Przeworsk, the *Barbaricum*.

Similarly to other cultural environments of the Antiquity, pendants were also frequently used in the Sarmatae world. These are jewellery items made in gold, silver, bronze, iron yet also in bone, stone, alabaster, chalkstone, soapstone, glass and amber. They are of different forms and types and play an important role among the Sarmatae grave goods. Pendants are commonly small items, part of sets composed of several jewellery objects. In certain cases, these were the central piece other times they were worn independently. Some of the pendants that the Sarmatae used also fulfilled an apotropaic function.

The bucket-shaped pendants¹ discovered in the Sarmatae environment are made of iron, bronze, silver or gold sheet, are in an elongated or short cylindrical shape, have a flat base and are provided with a small attachment handle. Occasionally, in Sarmatian and Late Scythian burials from Crimea as well as the cemeteries of certain towns and settlements from the north of the Black Sea, also emerge exemplars formed of two or even three buckets². In a 1st century AD grave from the Late Scythian cemetery of Neapolis (Crimea) is known a quadruple bronze exemplar³. Often, double bucket-shaped pendants made in gold are decorated in the filigree technique, alike the common specimens in the same metal from the north and north-west of the Black Sea⁴.

These objects were mainly worn in chains around the neck or by the wrist beside other pendants, beads or amulets⁵, often forming necklaces or bracelets. Evidence to this effect is the fact that in many graves, including from the Sarmatae milieu, such pendants were discovered in the neck area of the deceased. Nevertheless, it is worth mention that in some cases, these were worn by the belt/strap. Their find in the pelvis or thighs area further confirms such hypothesis⁶.

¹ This study is a revised, supplemented and much extended version of the paper published in Romanian in volume *Miscellanea Historica et Archaeologica in honorem Professoris Ionel Cândea septuagenarii*: 43-75. Bucharest-Brăila: The Romanian Academy Publishing House & Istros Press, 2019

² Cf. Mordvintseva and Trejster 2007, vol. I, 96-97 with references. These belong to types J and K in I. Beilke-Voigt's typology of bucket-shaped pendants (Beilke-Voigt 1998, 53, 55, Fig. 58).

³ Cf. Symonovich 1983, 55, 99, Pl. XLV/6; Dashevskaya 1991, 38, Pl. 70/37.

⁴ Decorating pendants in the filigree technique is a tradition origination in the late Hellenistic period (Mordvintseva and Trejster 2007, vol. I, 97).

⁵ Bârcă 2006, 133.

⁶ For how these pendants were worn see Beilke-Voigt 1998, 79-93, Fig. 94-100.

In some cases, on the internal walls of certain bucket-shaped pendants discovered in the Sarmatian environment of the north-Pontic area still survive the dry remains of their content⁷. For instance, inside a bucket pendant from the grave in the Zolotaya Balka cemetery still preserved wool remains⁸, while in one of the pendants from the Sarmatae grave (T 2/41 Gr 1) in the Chertovitsk I cemetery⁹ there still existed pieces of twisted fabric¹⁰. In one of the pendants from the Sarmatae grave (T 7 Gr 4) at Bădragii Vechi (the Prut-Dniester interflue) still survived the remains of a white matter (substance)¹¹. A yellow substance also had inside one of the pendants from the richly furnished graves of the Sokolova Mogila barrow¹² (Lower Bug). The dry remains of the content still survived on the sides of golden pendant composed of two soldered buckets from the same grave¹³.

It was concluded based on these aspects that the role of the bucket pendants was to store various medical organic protective remedies (mineral, vegetal, animal), and since they could be opened, such substances could be replaced according to necessity¹⁴.

Since occasionally, bucket-shaped pendants were discovered together with items of a cult-magical function, it was concluded these may be deemed amulet-pendants fulfilling an apotropaic role¹⁵. Also, it is believed that inside the buckets, various incantations were preserved (spells)¹⁶.

Either in gold, silver, bronze or iron, the bucket-shaped pendants are not, as we shall see below, frequently present in the Sarmatae graves from the north-Pontic territories, alike other pendant types. They were not extensively used¹⁷ either in the Sarmatian setting of the Great Hungarian Plain, even though their find encompasses this entire geographical area¹⁸.

On the western territory of Romania, among recent finds of bucket-shaped pendants also count those in iron from graves 9¹⁹ (Fig. 1/1) and 13²⁰ (Fig. 1/2) in the Sarmatae cemetery of Hunedoara Timișană (Șagu commune, Arad county), located south the Lower Mureș²¹.

On the basis of grave goods, it was concluded that Gr 9²² dates to the chronological frame comprised between late 2nd century AD and first half of the 3rd century AD²³, while Gr 13²⁴ sometime over the course of the first three quarters of the 3rd century AD²⁵.

⁷ See in this respect Kovpanenko 1986, 95, 97, Fig. 100/1-2, 101/1, 3.

⁸ Vyaz'mitina 1972, 22, Fig. 7/6.

⁹ The cemetery lies nearby the Voronezh river, a left tributary of the Don.

¹⁰ Medvedev 1990, 90.

¹¹ Bârcă 2006, 133, 277.

¹² Kovpanenko 1986, 97, Fig. 101/1.

¹³ Kovpanenko 1986, 95, Fig. 100/2, 101/3.

¹⁴ Rustoiu 2019, 170.

¹⁵ Symonovich 1983, 99; Bârcă 2006, 133. See the more recent discussion in Rustoiu 2019, 169-170.

¹⁶ Vyaz'mitina 1972, 153.

¹⁷ For the finds in the Sarmatae environment of the Great Hungarian Plain see Ishtvanovich and Kul'char 2017, 51-61, with complete references; Bârcă 2018, 37-63.

¹⁸ One must though mention these small artefacts are very fragile, often the small fragments that could result from such pieces being not identified either during the archaeological excavations or when their results are published, which explains to a certain extent the not very large number of bucket-shaped pendants. Also, it must be underlined that, very likely, many such pieces were yielded by more recent rescue archaeological investigations, still unpublished.

¹⁹ The pendant in Gr 9 is made of iron sheet, is cylindrical in shape and has a flat base. The attachment handle did not survive. Height – 1.2 cm, diameter – 1.2 cm. It was discovered on the northern side of the gravepit, nearby teeth and a series of beads (Bârcă 2014, 155, Fig. 26/5; 26/1.5; Bârcă 2018, 39, Fig. 2/1.5; 2/5).

²⁰ The bucket pendant in Gr 13 was discovered among beads at ca. 0.7 m from the skull bones and teeth. It is made of iron sheet and is cylindrical, with flat base. The attachment handle did not survive. Height – 1.35 cm, diameter – 1.3 cm (Bârcă 2014, 157-158, Fig. 33/2; 33/1.2; Bârcă 2018, 39, Fig. 6/1.2; 6/2).

²¹ For further details and information regarding this cemetery see Bârcă 2014.

²² Among the grave goods also counts a “Sarmatian” bronze brooch, the version with external chord and vertical catchplate without headknob, a silver pendant in the shape of a half-moon, 201 beads, mainly in glass, an iron pin and a wheel-thrown cup (Cf. Bârcă 2014, 155-156, Pl. 26-29; 59-61). For the analysis of brooches of the type see Cociș and Bârcă 2014, 189-214; Bârcă 2014, 115-117; Cociș and Bârcă 2020, 137-180. Based on the grave goods and gravepit size it was concluded the deceased was likely a subadult /female (age could not be established).

²³ Bârcă 2014, 156.

²⁴ Beside the bucket-shaped pendant, the grave goods of Gr 13 also contained 56 beads, of which 30 in amber, to which add a cup and wheel-thrown bowl, discovered fragmentary. Both vessels were found set one close to another, on the southern side of the gravepit, in the feet area (Cf. Bârcă 2014, 157-158, Pl. 33-34; 65; 78/3). Based on the grave goods and gravepit sizes it was concluded the deceased was a child. Following the analysis of the bone remains, it was noted the infant was aged 4-5 years (Radu and Szerebai 2014, 81, 82).

²⁵ Bârcă 2014, 158.

Among the recently discovered items in the Sarmatae milieu of the Great Hungarian Plain count the iron specimens in Gr 36 at Abony-*Kisbalaton-dűlő*²⁶ (Fig. 4/4) and Gr 138 at Óföldeák-Ürmös II²⁷, those in silver (4 specimens) in Gr 11 at Orosházi-*tanyák*²⁸ (Fig. 4/2), the silver exemplars (1 piece) and bronze (1 piece) in a grave from Derecske-*Darabos-dűlő*²⁹, or the silver exemplars (9 specimens) and iron (11 specimens) from a female burial at Kálló³⁰ (Fig. 5). Grave 11 at Orosházi-*tanyák* is dated to AD 180-230 that of Derecske-*Darabos-dűlő* in the 2nd century AD, while the grave of Kálló to the end of the 1st century – early 2nd century AD. To the second half of the 4th century – first half of the 5th century AD is dated the cemetery of Óföldeák-Ürmös II³¹.

To these add those recently published from Gr 39 (one in gold, six in silver and two in bronze), Gr 41 (two in silver and one in bronze), Gr 60 (bronze), Gr 71 (bronze), Gr 82 (silver), Gr 83 (bronze), Gr 93 (bronze), Gr 117 (bronze), Gr 140 (bronze), Gr 149 (silver) and Gr 235 (bronze) of Nyíregyháza-*Felsősimá*³² (Fig. 4/13). These graves which contain bucket-shaped pendants are dated, depending on their grave goods, to certain chronological frames over the course of the 2nd – 3rd century AD³³.

In the north-west of the Black Sea a bronze pendant has been recently discovered in grave 3 at Medeleni³⁴ (Fig. 2/6) (the Prut-Dniester interfluvium). The grave was found beside other four in the vicinity of a square ditched enclosure provided with access on the southern side³⁵. The grave goods in these graves, including Gr 3³⁶, are indicative in our view, of a dating sometime to the chronological interval comprised between the last quarter of the 1st century AD and the first decades of the 2nd century AD.

In the Sarmatae environment, bucket pendants come mainly from infant and female graves³⁷. Even more, it is noted these are found in both richly or more poorly furnished graves, which is also valid for the north and north-west Pontic Sarmatae environment. This evidences, in our view, that bucket pendants were worn both the wealthier representatives of the Sarmatae society as well as by the commoners, those in gold emphasizing the special status of their bearers.

The discovered bucket pendants in the Sarmatae milieu are made in iron, bronze, silver or gold sheet, are in a cylindrical shape, have a flat base and are provided with a small attachment handle. In some Sarmatae graves are also found double exemplars formed of two buckets.

Most of these artefacts from the Sarmatae graves in the north-Pontic area are notable by their common features and belong to type A in I. Beilke-Voigt's typology³⁸. In the type, two variants may be distinguished. The first is represented by exemplars with cylindrical short body, their height and diameter being similar or close in sizes, yet there are also found exemplars with a slightly larger height compared to the diameter and exemplars whose diameter is somewhat larger than the height. The pendants in the second variation have an elongated cylindrical body and a height up to twice larger than the diameter.

Among the bucket pendant finds in the first variation count those in iron from Gr 5 at Ostrivec-Vertebi³⁹ (1 piece), T 7 Gr 4 at Bădragii Vechi⁴⁰ (2 pieces) (Fig. 1/4-5), T 1 Gr 5 at Zirneşti⁴¹ (1 piece) (Fig. 1/3), T 4 at Kholmskoe⁴² (2 pieces) (Fig. 2/2-3), T 1 Gr 8 at Pisarevka⁴³ (7 pieces) (Fig. 2/7, 11-16), Gr 3 in the Sokolova Mogila

²⁶ Gulyás 2011, 152, Fig. 40/10; Ishtvanovich and Kul'char 2017, 58, cat. no. 1, Fig. 2/11; Bârcă 2018, Fig. 12/4.

²⁷ Gulyás 2014, 25, Pl. XVII/7; Ishtvanovich and Kul'char 2017, 60, cat. no. 25.

²⁸ Nagy 2005, 13-14, Fig. 9/3; Ishtvanovich and Kul'char 2017, 60, cat. no. 24, Fig. 2/4; Bârcă 2018, Fig. 12/2.

²⁹ Ishtvanovich and Kul'char 2017, 59, cat. no. 7, Fig. 2/6; 3/10.

³⁰ Vaday 2016, 760, 767-768, Fig. 4/2c, 4-18; Ishtvanovich and Kul'char 2017, 58, cat. no. 8, Fig. 2/7; 3/11, 19; Bârcă 2018, Fig. 8.

³¹ Gulyás 2014, 63-64, 71.

³² Istvánovits and Kulcsár 2017, 206, Fig. 158; Ishtvanovich and Kul'char 2017, 59, cat. no. 13-23, Fig. 2/2-3, 8; 3/1, 7, 9, 13-14, 16-18.

³³ For the grave goods and dating of these graves see Ishtvanovich and Kul'char 2017, 59.

³⁴ Vornic, Bubulici and Popovici 2015, 68, Fig. 15/2; Vornic, Bubulici and Popovici 2016, 23, Fig. 12/4.

³⁵ For various ditched enclosure types in the Sarmatae environment see Bârcă 2015, 103-118; Bârcă 2020a, 325-376.

³⁶ See in this respect Vornic, Bubulici and Popovici 2015; Vornic, Bubulici and Popovici 2016.

³⁷ For the situation in the Sarmatian setting of the Great Hungarian Plain see Ishtvanovich and Kul'char 2017, 57-60. In the Wielbark and Przeworsk cultural circles, bucket pendants are mainly found in female graves (Godłowski 1977, 43; Bierbrauer 1999, 220), while in the Sântana de Mureş-Chernyakhov cultural milieu bucket pendants were found in male graves too (Cf. Gopkalo 2011, 12).

³⁸ Beilke-Voigt 1998, 52-53, 54, 63-67, Fig. 58/A; 59.

³⁹ Bârcă 2006, 133, 341; Bârcă and Symonenko 2009, 163. Dating: first half of the 1st century AD.

⁴⁰ Bârcă 2006, 133, 277, Fig. 6/6-7; Bârcă and Symonenko 2009, 163. Dating: end of the 1st century AD – early 2nd century AD.

⁴¹ Rikman 1975, 27, Fig. 12/10; Bârcă 2006, 133, 376, Fig. 143/10; Bârcă and Symonenko 2009, 163. The grave dates to the second half of the 1st century AD.

⁴² Gudkova and Fokeev 1984, 10, 23, Fig. 2/17-18; Bârcă 2006, 133, 318, Fig. 63/6, 182/5-6; Bârcă and Symonenko 2009, 63, Fig. 14/7-8. Dating: second half/late 1st century BC.

⁴³ Symonenko 2008, 78-79, cat. no. 117, Pl. 130/15-16; Symonenko 2011, 242; Bârcă and Symonenko 2009, 163. Dating:

barrow⁴⁴ (2 pieces) (Fig. 3/2-3) or T 2 Gr 1 at Chuguno-Krepinka⁴⁵ (1 piece) (Fig. 2/17). To these add those in bronze from T 3 Gr 3 Podojma⁴⁶ (1 piece) (Fig. 2/4), Gr 3 at Medeleni⁴⁷ (1 piece) (Fig. 2/6) and T 2 Gr 9 at Präjeni-Tarnă⁴⁸ (3 pieces) (Fig. 3/6-8), as well as those made of gold from T 3 Gr 3 at Mikhajlovka⁴⁹ (Fig. 2/19-20), Tsvetna⁵⁰ (1 piece) (Fig. 2/21-22) and T 3 at Kazanskaya⁵¹ (2 pieces) (Fig. 1/6).

The graves with bucket pendants in the first variation date mainly to the Middle Sarmatian Period (1st century – first half of the 2nd century AD)⁵², the largest part dating to certain chronological spans of the second half of the 1st century – early/first decades of the 2nd century AD. Exceptions are T 4 at Kholmskoe dated to the second half/end of the 1st century BC (the Early Sarmatian Period), yet also T 3 Gr 3 at Podojma, dated to the second half of the 2nd century – early 3rd century AD (first phase of the Late Sarmatian Period). Another note worth making is that six of the graves with bucket pendants belonging to this variation come from the Prut-Dniester interfluve (Ostrivec-Vertebi, Bădragii Vechi, Medeleni, Zirnești, Kholmskoe, Mikajlovka), two from the area left of the Middle Dniester (Pisarevka, Podojma) and one each from territories to the right of the Prut (Prăjeni-Tarnă), Lower Bug (the Sokolova Mogila barrow), Middle Dnieper (Tsvetna) and the Don-Nipru interfluve (Chuguno-Krepinka). The grave in T 3 at Kazanskaya belongs to the “Zolotoe kladbischche” cemetery, located on the right bank of the Kuban river (north-east of the Black Sea).

The bucket pendants in the second variation are in iron, bronze and gold. Iron exemplars were discovered in T 4 at Kholmskoe⁵³ (1 piece) (Fig. 2/1), T 1 Gr 2 at Lenkovtsy⁵⁴ (2 pieces) (Fig. 2/5), T 1 Gr 8 at Pisarevka⁵⁵ (3 pieces) (Fig. 2/8-10), bronze-made in a destroyed barrow grave at Zaprud'e⁵⁶ (1 piece) (Fig. 1/7) and T 2/41 Gr 1 in the Chertovitsk I cemetery⁵⁷ (1 piece) (Fig. 1/8). In what the golden specimens are concerned, these come from T 17 Gr 1 in the Vysochino VII cemetery⁵⁸ (1 piece) (Fig. 1/11) and T 6/11 gr 1 in the Chertovitsk I cemetery⁵⁹ (1 piece).

Except for the grave in T 4 at Kholmskoe, dated by late the Early Sarmatian Period and T 17 Gr 1 in the Vysochino VII cemetery, dated by late 2nd century – first half of the 3rd century AD, the remaining mentioned graves span the time interval comprised between mid 1st century AD and early 2nd century AD. Two of the finds of bucket-pendants belonging to the second version come from the Prut-Dniester interfluve (Lencovtsy, Kholmskoe), and one each from the left of the Middle Dniester (Pisarevka) and the right of the Middle Dnieper (Zaprud'e). A single find comes from the left of the Don mouths (Vysochino VII), and other two from the left of the Middle Don (Chertovitsk I).

To these add several double exemplars formed of two buckets. The discovered items are made in bronze, silver and gold and belong to the first variation of type J in I. Beilke-Voigt's typology⁶⁰.

second half of the 1st century AD.

⁴⁴ Kovpanenko 1986, 96, Fig. 100/1. 3; 101/1-2. Dating: the second half of the 1st century AD (possibly the third quarter or even its last third).

⁴⁵ Simonenko 2008, 65-66, cat. no. 70, Pl. 65/11. Dating: first half of the 2nd century AD (likely towards the end of this chronological interval). See also Bârcă 2020, 84.

⁴⁶ Bubulich and Khakheu 2002, 122, 146, Fig. 6/A3. Dating: the second half of the 2nd century – early 3rd century AD.

⁴⁷ Vornic, Bubulici and Popovici 2015, 68, Fig. 15/2; Vornic, Bubulici and Popovici 2016, 23, Fig. 12/4. Dating: last quarter of the 1st century AD – first decades of the 2nd century AD.

⁴⁸ Ursulescu et al. 2021, 172, Pl. XVII/3-5, XVIII/2-4. Dating: end of the 1st century – early 2nd century AD.

⁴⁹ Subbotin, Dzigovskij and Ostroverkhov 1998, 21, Fig. 16/5; Dzygovs'kyj 2000, Fig. 43/3; Bârcă 2006, 133, 329, Fig. 75/5, 182/7; Simonenko 2008, 77, cat. no. 107, Pl. 119/5; Bârcă and Symonenko 2009, 163, Fig. 60/3; Mordvintseva and Trejster 2007, vol. I, 96, vol. II, 45, cat. no. A129.2. Dating: the second half of the 1st century AD – early 2nd century AD.

⁵⁰ Simonenko 2008, 69, cat. no. 87, Pl. 81/5; Mordvintseva and Trejster 2007, vol. I, 96, vol. II, 136, cat. no. B46. Dating: the second half – late 1st century AD.

⁵¹ Gushchina and Zasetskaya 1994, 42, cat. no. 20, Pl. 2/20; Marčenko and Limberis 2008, 346, cat. no. 34. Dating: the second half of the 1st century AD – early 2nd century AD.

⁵² For all chronologies suggested for the Sarmatian world from the north and north-west of the Black Sea see Symonenko 1999, 5, 9, 12, 27, 34; Simonenko 2004, 134-173; Simonenko 2011, 151-157; Bârcă 2006, 31-36; Bârcă and Symonenko 2009, 37-40.

⁵³ Gudkova and Fokeev 1984, 10, 23, Fig. 2/16; Bârcă 2006, 133, 318, Fig. 63/6, 182/4; Bârcă and Symonenko 2009, 63, Fig. 14/6. Dating: the second half/late 1st century BC).

⁵⁴ Bârcă 2006, 133, 323, Fig. 70/2; Bârcă and Symonenko 2009, 163, Fig. 60/7. Dating: the second half of the 1st century AD.

⁵⁵ Simonenko 2008, 78-79, cat. no. 117, Pl. 130/15-16; Simonenko 2011, 242; Bârcă and Symonenko 2009, 163. Dating: the second half of the 1st century AD.

⁵⁶ Romanyuk and Symonenko, 2001, 23, Fig. 1/5; Simonenko 2008, 68-69, cat. no. 85, Pl. 76/23. Dating: 1st century AD, most likely its second half.

⁵⁷ Medvedev 1990, 33, 90, Fig. 9/10. Dating: second half of the 1st century AD – early 2nd century AD (?).

⁵⁸ Bespalyj 1990, 213, Fig. 1/14. Dating: late 2nd century – first half of the 3rd century AD.

⁵⁹ Medvedev 1990, 41, 90, Fig. 12/13. Dating: second half of the 1st century AD – early 2nd century AD (?).

⁶⁰ Beilke-Voigt 1998, 52-53, 55, 69, Fig. 58/J.

The bronze exemplars come from T 5 Gr 1 at Ust'-Kamenka⁶¹ (1 piece) (Fig. 1/15), Lipovets⁶² (1 piece) (Fig. 2/18), T 11 Gr 1 in the Chertovitsk II cemetery⁶³ (1 piece) (Fig. 1/14) and T 2/41 Gr 1 in the Chertovitsk I cemetery⁶⁴ (2 pieces) (Fig. 1/9-10), while those in silver from T 17 Gr 1 in the Vysochino VII cemetery⁶⁵ (2 pieces) (Fig. 1/12-13). Such pendants made in gold were discovered in the Sokolova Mogila barrow⁶⁶ (3 pieces) (Fig. 3/1), T 19 Gr 1 in the barrow cemetery of Karshinskij⁶⁷ (1 piece) and T 38 at Ust'-Labinsk⁶⁸ (1 piece). All mentioned graves, except for T 17 Gr 1 in the Vysochino VII cemetery date to the Middle Sarmatian Period and frame certain chronological intervals comprised between mid 1st century AD and first half of the 2nd century AD. From the point of view of the geographical location of said finds, they lack from the Prut-Dniester and Dnieper-Don interfluves, with only two finds in the territory between the Dnieper and the Bug (Lipovets, Ust'-Kamenka). In the north-west Pontic area, such artefacts come from the Sokolova Mogila barrow (right to the Lower Bug). A single find of such pendants come from the north-east of the Black Sea (Ust'-Labinsk), and two each from the territories left of the Don mouths (Karshinskij, Vysochino VII) and Middle Don (Chertovitsk I, Chertovitsk II).

Singular for the north-Pontic Sarmatian environment is the golden pendant with body decorated with horizontal ribs in relief from Gr 3 in the Sokolova Mogila barrow⁶⁹. It belongs to the first variation of the **H** type in above typology⁷⁰.

Similarly to the north-Pontic Sarmatian environment, in that of the Great Hungarian Plain most bucket pendants belong to type **A** in I. Beilke-Voigt's typology⁷¹, dominant being those in the first variation. Exception make the silver cone-shaped pendants in Gr 11 at Orosházi-tanyák⁷² (Fig. 4/2) which belong to type **F**⁷³. Compared to the north-Pontic Sarmatian environment, in that of the Great Hungarian Plain exemplars formed of two buckets are missing.

The items in the first variation from the Sarmatae environment of the Great Hungarian Plain are made in gold, silver, bronze and iron, being much more numerous than those in the second variation⁷⁴. To the first variation also belong the iron specimens from graves 9 (Fig. 1/1) and 3 (Fig. 1/2) in the Hunedoara Timișană cemetery. To this version also belongs the golden specimen from the infant grave at Átány⁷⁵ (Fig. 4/6), dated to the last quarter/end of the 1st century AD – early 2nd century AD, yet also that made in the same metal from Gr 39 at Nyíregyháza-Felsősimá⁷⁶ (Fig. 4/13), dated to the second half of the 2nd century AD⁷⁷.

The bucket pendants in the second variation are in bronze and iron and mainly come from Early Sarmatian Period graves from the Great Hungarian Plain⁷⁸, some dating to the late 1st century – early 2nd century AD (Alsónémedi-Faluréti domb⁷⁹, Kálló⁸⁰ (Fig. 5), Endrőd-Szujókereszt⁸¹ (Fig. 4/3)).

⁶¹ Makhno 1961, Fig. 2/12; Arkheologiya SSSR 1989, Pl. 82/56; Kostenko 1993, Fig. 28/19; Simonenko 2008, 63, cat. no. 54, Pl. 42/3h; Simonenko 2011, 187. Dating: the second half of the 1st century – early 2nd century AD.

⁶² Simonenko 2008, 68, cat. no. 82, Pl. 72/2g; Bârcă and Symonenko 2009, 163. Dating: the second half of the 1st century – first decades of the 2nd century AD.

⁶³ Medvedev 1990, 68, 90, Fig. 27/7. Dating: the second half of the 1st century AD.

⁶⁴ Medvedev 1990, 33, 90, Fig. 9/8-9. Dating: the second half of the 1st century AD – early 2nd century AD (?).

⁶⁵ Bespalyj 1990, 213, Fig. 1/3. Dating: late 2nd century – first hal of the 3rd century AD.

⁶⁶ Kovpanenko 1986, 95, 98, Fig. 100/2, 101/3; Mordvintseva and Trejster 2007, vol. I, 96, vol. II, 80, cat. no. A250.12.

⁶⁷ Mordvintseva and Trejster 2007, vol. I, 96, vol. II, 38, cat. no. A105.1. Dating: 1st century AD.

⁶⁸ Gushchina and Zasetskaya 1994, 68, cat. no. 417, 5, Pl. 45/417, 5. Dating: first half of the 2nd century AD.

⁶⁹ Kovpanenko 1986, 97, Fig. 103; 104/3; Mordvintseva and Trejster 2007, I, 96, II, 80, cat. no. A250.11.

⁷⁰ Beilke-Voigt 1998, 52-53, 55, 68-69, Fig. 58/H; 60.

⁷¹ Beilke-Voigt 1998, 52-53, 54, 63-67, Fig. 58/A; 59.

⁷² Nagy 2005, 13-14, Fig. 9/3; Ishtvanovich and Kul'char 2017, 60, cat. no. 24, Fig. 2/4; Bârcă 2018, Fig. 12/2.

⁷³ Beilke-Voigt 1998, 55, Fig. 58/F.

⁷⁴ Cf. Ishtvanovich and Kul'char 2017, 55; Bârcă 2018, 40.

⁷⁵ Párducz 1941, 56, Pl. XXIX/56.

⁷⁶ Istvánovits and Kulcsár 2017, 206, Fig. 158.

⁷⁷ Ishtvanovich and Kul'char 2017, 59.

⁷⁸ In the current state of research, it is certain the first Sarmatae arrived and settled the Great Hungarian Plain once with the second half of the 1st century AD (Cf. Bârcă 2014, 35-69). We believe this places the start of the Early Sarmatian Period in the area in the 50's AD. According to the archaeological and historical facts, the end of the first phase of the Early Sarmatian Period from the Great Hungarian Plain may be established by the end of the political and military events of the early 2nd century AD. Regarding the end of the second phase, it may be placed towards the end of the Marcomannic Wars, when in the area emerge new Sarmatae groups from the north-west Pontic area, who carry a series of elements specific to the Middle and Late Sarmatian Periods from the north-Pontic area, including in funerary rites and rituals. Therefore, the first phase of the early Sarmatian Period from the Great Hungarian Plain corresponds to the last part of phase B1 – phase B2a in the Central-European chronology, and the second to phase B2b – first decades of stage C1a (B2/C1). For the chronology of the Sarmatian culture in the Great Hungarian Plain see Bârcă 2014, 31-32.

⁷⁹ Korek 1980, Fig. 13/2.

⁸⁰ Vaday 2016, 760, Fig. 4/9-18.

⁸¹ Vaday and Szöke 1983, 82, Fig. 6/2.

The bucket-shaped pendants, either similar or close to those discovered in the Sarmatian graves, yet belonging to other types in I. Beilke-Voigt's typology⁸² are also documented in the Geto-Dacian⁸³, Late Scythian⁸⁴ (Fig. 7/1, 6-13) and the Poieneşti-Lucăseuca culture environments⁸⁵. These artefacts are also frequent in the Germanic world, mainly in the Przeworsk culture area⁸⁶. In the Zemplin cemetery (Slovakia) such pendants come both from Germanic (Przeworsk) and Dacian graves⁸⁷ (Fig. 6/1-16). Such pendants are also found in the cemeteries of the towns and settlements from the north-Pontic area⁸⁸, yet they are also known in territories west of the Black Sea, like those in the grave from the Roshova Dragana barrow at Chatalk⁸⁹. These artefacts are not missing either from the cultural environments of the 2nd – 4th century from the area east⁹⁰ (Cf. Fig. 7/17-20) and south of the Carpathians⁹¹ (Cf. Fig. 7/14-16), Transcarpathia⁹² (Fig. 7/21-28), as well as those from the territory of Crimea⁹³ (Fig. 7/1, 7-13), yet also the entire area of the Sântana de Mureş-Chernyakhov culture⁹⁴. Such iron and filigree silver pendants were discovered in graves from cemeteries on the territory of Roman Dacia (Soporul de Câmpie⁹⁵, Obreja⁹⁶, Locusteni⁹⁷, Fărcașele⁹⁸, Sighișoara–Dealul Viilor⁹⁹), but are also known from non-funerary contexts

⁸² Beilke-Voigt 1998, 52-53, Fig. 58/A; 59.

⁸³ Vulpe and Vulpe 1933, 329, Fig. 109/25-27; Vulpe 1976, 198, 208, Fig. 5/10, 6/24; Berciu 1981, 106, Pl. 91/4-5; Berciu 1983, 34, 35, Fig. 2/1-3; Ursachi 1986, 112-115, 121, Pl. XVII/5-10, XXI/4-5, XXIII/4-5; Ursachi 1995, 244, Pl. 359/5-10, 361/4-5, 362/4-5; Căpitanu 1989, 103, Fig. 11/16-19; Rustoiu 1996, 125, Fig. 86/41-47; Crișan 2000, 138, Pl. 111/12; Crișan 2000a, Fig. 4/1; Teodor 2005, 131-132, Fig. 2/10; Sirbu et al. 2007, 19, 20, 25-26, 33, 40, 41, 64, 67, 68, 70, 76, 78-79, Fig. 34/1-2, 36/7, 37/9, 38/10, 13-14, 69.

⁸⁴ Vyaz'mitina 1972, 22, 44, 50, 56, 153-154, Fig. 7/6, 17/7, 21/10, 25/3, 5; Symonovich 1983, 99, Pl. XLV/6-13; Arkheologiya SSSR 1989, Pl. 51/20, 45-46; Dashevskaya 1991, 38, Pl. 70/33-34, 37; Vysotskaya 1994, Pl. 9/13, 10/25, 12/58, 15/1, 24, 19/23, 28, 23/30, 31/44-45, 40/20; Zajtsev 1997, Fig. 3/6, 12; Stoyanova 2004, 297; Puzdrovskij 2007, Pl. 15/8; Fig. 57/11, 58/6, 115/4, 144/20; Mordvintseva and Trejster 2007, vol. I, 96, 97; Trufanov 2009, 231, Fig. 65/1-2, 5-6, 9-10, 17, 20; Puzdrovskij and Trufanov 2016, 45, 47, 92, Fig. 81/2-3, 85/3-4, 14, 174/1, 177/4.

⁸⁵ Smirnova 1981, 195, 204, Fig. 3/5; Babeş 1993, 113, Pl. 47/2g.

⁸⁶ Cf. Bichir 1973, 119 with complete bibliography; Godłowski 1968, Fig. 1/32, 3/8, 5/20; Godłowski 1970, Pl. I/32, II/9, III/25, IV/10, V/14, VII/22, IX/17, XII/14, XX/21, XXII; Godłowski 1992, Fig. 12/10, 13/17, 18/18, 22/13; Godłowski and Wichman 1998, Pl. III/7-8, LXXII/2, XCII/17; Szydłowski 1964, Fig. 44/2, 101/8, 120, 124/2, 6; Szydłowski 1974, Pl. CII/c-e, i, CLXXX/h-o; Kaczanowski 1980, 179-180; Kaczanowski 1987, Pl. II/10, 32, VI/8; Tempelmann-Mączyńska 1989, map 13; Olędzki 1999, Fig. 2/6, 19, 3/3-4, 8-9, 19/1-12; Droberjar 2002, 377, no. 23, 25-26; Szela 2007, 286, Fig. 1/9; Tejral 1999, Fig. 25/1-3; Tejral 2011, Fig. 26/22; Madyda-Legutko, Rodzińska-Nowak and Zagórska-Telega 2011, Pl. LXXVII/5, CXXII/3-5, 12, 14, 17, CXXXII/1, 7, CXXXV/1, CXXXVI/3, CCCL/1, CCCLI/4, CCCLIV/4, CCCLX/11-12, CDXVIII.

⁸⁷ Budinský-Krička and Lamiová-Schmiedlová 1990, 294, Pl. III/9-20, VI/3-4, 8-9, XVI/43, XX/11, 25.

⁸⁸ Cf. Pyatysheva 1956, 60, Fig. 19; Shelov 1961, 78; Shelov 1970, 146; Arsen'eva 1977, Pl. XXIX/2, XXXI/2; Vyaz'mitina 1972, 154-155; Ruxer and Kubszak 1972, 271, Pl. LXX/1-3; Alekseeva 1982, 25, type 24-25; Korpusova 1983, 72, 102, 111, 112, Pl. XI/2, 18, XXII/15; Kazanskij 2006, 29, Fig. 3/9; Mordvintseva and Trejster 2007, vol. I, 96-97.

⁸⁹ Buyukliev 1986, 67, 106, no. 49, Pl. 4.

⁹⁰ Bichir 1973, 119, Pl. CLXIV/7-10, CLXXXII/13-14; Căpitanu 1975, 64, 65, 67, 75, 85, 90, Fig. 13/4-11; Căpitanu 1976, 161, 163, 167, 174, 179, 181; Ioniță 1977, R50b/9; Ioniță 1982, Fig. 16/8; Babeş, Mirițoiu, Istrate and Coman 1980, 39, 44, Fig. 3/1; Palade 1985, Fig. 9/6; Palade 1986, R74/3-5, R77/6, R86/1, R87/4; Rafalovich 1986, p. 88, Pl. XLV/1-10; Ioniță and Ursachi 1988, 11, 12, 26, 33, 35, 37, 38, 39, 40, 43, 49, 50, 65, 93, Fig. 19/1, 20/1, 28/1, 33/6, 34/9, 35/9, 36/23, 30, 37/48, 38/177, 39/32, 41/15, 44/69, 46/40, 51/22, 61/1-2; Ignat 1980, 64, Fig. 2/5-6; Ignat 1999, 55; Vornic 2006, 182, 206; Șovan 2009, 162, 210, 211-213, tab. 5, Pl. 5/5-9, 35D/3, 54B/2-3, 81D/20, 108A/1, 130B/6, 165/153-154, 194B/3, 220/2, 253/27; Spânu 2019, 52, 54, 58, 69, Fig. 12/2, 13/12-14, Pl. 5/55.8, 8/71.6, 11/130.2, 15/230.6, 22/327.6, 25/360.2, 26/437, 29/538.3-5, 38/720.5, 39/741.7, 48/1000.10-14, 59/1352.1-5. In the 2nd – 3rd century cemetery of Poieneşti (Vaslui county), bucket pendants were discovered according to Daniel Spânu, in 19 graves, of both cremation and inhumation. Out of these, 10 are in bronze and 20 in iron, to which adds a silver exemplar with granulated and filigree decoration).

⁹¹ Diaconu 1965, 94-95, 286, Pl. CXXIV/5, CXXXVI/18; Diaconu 1970, 16, Fig. 15/4, 7; Diaconu 1986, Fig. 2/3; Bichir 1984, 53-54, Pl. L/16-18.

⁹² Kotigoroshko 1987, 187-188, Fig. 7/1-15, 25-26, 29.

⁹³ Cf. Kazanskij 2006, 29, Fig. 3/10-11; Stoyanova 2016, 130-132, Fig. 3/8-16, with complete references; Khrapunov 2002, 47, Fig. 104/3-4; Khrapunov 2013, 43, Fig. 35/6, 8-10.

⁹⁴ Magomedov 2001, 70, Fig. 74/1-6; Gopkalo 2008, 63-65, with complete references. For finds in the Sântana de Mureş-Chernyakhov environment from the area east and south of the Carpathians see also certain bibliographical references from previous notes.

⁹⁵ Protase 1976, 66, 68, note 123, Pl. XXX/2.

⁹⁶ Protase 2002, Pl. LVI/M.c.

⁹⁷ Popilian 1980, 34, 37, 38, 42, 92, 93, Pl. XXI/M144, 2, XXII/M162, 3-5, XXIV/M177, 5-10, XXVII/M194, 6-7. Opreanu 1998, 99, Fig. 15. The 17 bucket-pendants in the Locusteni cemetery are made of filigree silver.

⁹⁸ Bichir 1973, 119; Protase 1976, 68.

⁹⁹ Spânu 2014-2015, 43, Fig. 2/195b.

within the province territory¹⁰⁰. Such pendants are present in the Barbarian environment west of Dacia (Suplacu de Barcău¹⁰¹ as well (Fig. 7/3)). In the case of filigree silver specimens from the Locusteni cemetery it is worth mentioning these come from graves dated to the first half of the 2nd century¹⁰² and belong to type M in I. Beilke-Voigt's typology¹⁰³. The item of Suplacu de Barcău is of gold and has the body decorated in the filigree technique, coming from a 3rd century context¹⁰⁴.

As it may be noted, bucket pendants were broadly diffused in various cultural milieus from the Roman imperial period, which over the course of time raised increased interest for their study. Nevertheless, it must be noted that although various scholars attempted to identify their origin, the time when they emerge in certain cultural environments and their diffusion paths, it is increasingly obvious today that some of these aspects remained unanswered.

On their shape, it was believed it was spontaneous and sporadic in different regions¹⁰⁵. For the bucket pendants in the Sântana de Mureş-Chernyakhov environment from the north and north-west of the Black Sea, it was argued they represent the evidence of the arrival in this area of the Germanic tribes and that they are of Gothic origin¹⁰⁶. It is not excluded that some of these pendants were adopted from the Carpi, then allies of the Goths¹⁰⁷. A diametrically opposite view was expressed by E. A. Symonovichi, who rejected any connection between the Sântana de Mureş-Chernyakhov finds from the north of the Black Sea and the further westward parallels, considering, based on the presence of these pendants in the north-Pontic area much prior, that these were adopted from the local populace¹⁰⁸.

Also, it was believed that bucket pendants originate in the Przeworsk culture area, from where they were adopted by the Carpi, Sarmatae etc.¹⁰⁹. Later, based on finds of such pendants in the pre-Roman Geto-Dacian area it was evidenced that there, they emerged earlier and spread to other ethno-cultural areas¹¹⁰. I. Ionuță believes that pendants in the shape of a bucket are specific only to the Goths and the Dacians¹¹¹ and that iron exemplars from the Free Dacians milieu have correspondences only in Dacian and by no means Sarmatae cremation graves¹¹². Based on archaeological facts, yet also the fact that bucket-pendants were used in the 1st century BC – first centuries AD on a spread area in various cultural environments, it was argued these may be deemed “supranational” artefacts¹¹³.

An interesting hypothesis was expressed by I. A. Bazhan and S. Yu. Kargopol'tsev, who believe these pendants originate in the ancient centres of the north-Pontic area, where they were largely diffused by the boundary between the 1st century BC – 1st century AD, being adopted by the Sarmatae and the Late Scythians¹¹⁴ in the first half of the 1st century AD following contacts with the north-Pontic ancient centres. Via the Sarmatae, according to the two scholars, the bucket pendants reached farther to the west, where at their turn were adopted by the bearers of the Poienesti-Vărteșcoiu and Przeworsk cultures, and then, via the latter, in the rest of the area inhabited by the Germanic populaces¹¹⁵. Following the analyses of features comprising such pendants known at that date in the north of the Black Sea, the two scholars noted their lack in graves from the chronological interval comprised between the end of the 2nd century AD and first half of the 3rd century AD. This made them conclude the pendants re-emerge in the east-Carpathian and north-Pontic area following the entry and influence of the Germanic peoples in the C2-C3 phases of the Central-European chronology¹¹⁶. Somewhat more recently, M. B. Shchukin concluded that once with establishment process of the Chernyakhov culture, iron bucket pendants and rarely in gold with filigree decoration re-emerge in the north-Pontica area under the cultural impulse of the north-western regions¹¹⁷. Furthermore, the

¹⁰⁰ Pop 1966, 175-176; Protase 1976, 68.

¹⁰¹ Gindele 2015, 11, Fig. 20.

¹⁰² See for the dating of these pendants and of the cemetery Opreanu 1998, 99, 101, 102, 103.

¹⁰³ Beilke-Voigt 1998, 56, Fig. 58/M.

¹⁰⁴ We thank this way too our colleague and friend Robert Gindele for kindly providing us this information.

¹⁰⁵ Bazhan and Kargopol'tsev 1989, 163.

¹⁰⁶ Blume 1912, 97, 98; Kukharenko 1958, 82; Kropotkin 1978, 156, 157.

¹⁰⁷ Bazhan and Kargopol'tsev 1989, 166.

¹⁰⁸ Symonovich 1983, 72.

¹⁰⁹ Bichir 1973, 119.

¹¹⁰ Cf. Vulpe 1976, 214; Bichir 1984, 54; Ursachi 1986, 121; Rustoiu 1996, 125.

¹¹¹ Ioniță 1982, 111.

¹¹² Ioniță 1982, 66.

¹¹³ Babeș 1999, 230; Bârcă 2006, 134. See in this respect also Rustoiu 2019, 169.

¹¹⁴ Bazhan and Kargopol'tsev 1989, 164, 169.

¹¹⁵ Bazhan and Kargopol'tsev 1989, 169.

¹¹⁶ Bazhan and Kargopol'tsev 1989, 169.

¹¹⁷ Shchukin 2005, 190.

author argued these became a characteristic trait of the Chernyakhov culture, although they continued to be used on the entire diagonal the Baltic – Black sea, the Caucasian coast of the Black Sea and the Tsebeldin valley¹¹⁸. The archaeological research of the last three decades revealed though graves with such pendants¹¹⁹ which date to late 2nd century – first half of the 3rd century AD, thus invalidating the view expressed by I. A. Bazhan and S. Yu. Kargopol'tsev. Their use in this time frame is confirmed by the finds in Sarmatae graves from the left of the Don mouths¹²⁰ (T 17 Gr 1 in the Vysochino VII cemetery) and left the Middle Dniester¹²¹ (T 3 Gr 3 at Podojma). Notably, in T 17 Gr 1 at Vysochino VII beside the bronze bucket pendant, there are other two double made of silver. A different view has been recently expressed by I. Khrapunov¹²², who believes there are either two independent traditions for making bucket pendants, Germanic and north-Pontic, or the Germanic population has borrowed this tradition from the north-Pontic area, possibly via the Sarmatae or the northern Thracians (namely, the Geto-Dacians), in whose inhabitancy area bucket pendants were identified¹²³. According to the same scholar, both the Germanic populations as well as those from the north of the Black Sea produced at a certain point such pendants concurrently.

For the Sarmatae milieu of the Great Hungarian Plain, it was argued until recently that bucket pendants were more extensively used in the Early Sarmatian Period, yet also that in the 3rd century AD they ceased to exist, only to re-emerge in the late stage of the Late Period (late 4th century – early 5th century AD)¹²⁴. Another view was expressed by M. B. Shchukin, who argued that bucket pendants diffuse in the Sarmatae milieu on the Hungarian territory and the Carpathian Basin and also among the Germanic populaces inhabiting the lower course of the Oder river and upper Elbe as well as the Carpīi from the east-Carpathian area in the 2nd century AD, mainly its second half¹²⁵.

Based on the archaeological finds of numerous such pendants over the last decades as well as subsequent to the analysis of the graves in which these were identified, it was noted that in the Sarmatae milieu of the Great Hungarian Plain bucket pendants were used over the course of their entire inhabitancy of this geographical space¹²⁶.

Bucket pendants emerge in the north-Pontic area sometime in the 2nd – 1st century BC, yet no later than the 1st century BC. For instance, from grave 180 in the cemetery of the town of Tanais come two golden bucket pendants with their body decorated with horizontal ribs in relief¹²⁷, yet also two earrings with zoomorphic heads made of the same metal, decorated with pseudo-granulation and pseudo-filigree¹²⁸. The pendants belong to type **H**, variation I in I. Beilke-Voigt's typology¹²⁹. With respect to the earrings, such types were broadly diffused in the late Hellenistic period¹³⁰. In the north-Pontic territories, earrings in this type come mainly from 2nd – 1st century BC graves¹³¹. Such an earring comes from a Sarmatian grave (?) discovered in 1985 at Solontsy, dated to the 2nd – 1st century BC, 1st century BC or only in the second half of the 1st century BC¹³². To the torsion ring of this earring was attached a golden cylindrical pendant provided with attachment handle whose surface was decorated with a filigree pattern (spirals in shape of waves and ovolos on the edges). According to the excavator, from inside the pendant fell a “stone”. On the territory of Crimea, earliest bucket pendants come from 1st century BC graves from within late Scythian cemeteries¹³³. Sometime in the 1st century BC dates grave 2 of type Poieneşti-Lucăseuca

¹¹⁸ Shchukin 2005, 190.

¹¹⁹ Stoyanova 2004, 297; Stoyanova 2016, 131-132; Khrapunov 2011, 39; Khrapunov and Mul'd 2000, 13.

¹²⁰ Bespalyj 1990, 213, Fig. 1/3, 14.

¹²¹ Bubulich and Khakheu 2002, 122, 146, Fig. 6/A3.

¹²² Khrapunov 2013, 189.

¹²³ With this view also agree E. Istvánovits and V. Kulcsár (Ishtvanovich and Kul'char 2017, 59, note 9).

¹²⁴ Vaday 1984, 174; Vaday 2016, 767-768; Gulyás 2011, 155; Gulyás 2014, 43.

¹²⁵ Shchukin 2005, 190.

¹²⁶ Cf. Ishtvanovich and Kul'char 2017; Bârcă 2018.

¹²⁷ Shelov 1970, 146; Arsen'eva 1977, 21, Pl. XXIX/2, XXXI/2.

¹²⁸ Shelov 1970, 146; Arsen'eva 1977, 21, Pl. XXIX/3, XXXI/1.

¹²⁹ Beilke-Voigt 1998, 55, 68, Fig. 60/I.

¹³⁰ Cf. Pyatysheva 1956, 18, Pl. VIII/3; Marshall 1969, 184-193, 287, 288, Pl. XXXI/1728-1735, 1772-1782, 1805-1808, LIII/2444-2445; Hoffmann and Davidson 1965, 106, nr. 26, *apud* Bylkova 1993, 164; Higgins 1980, 159-161, Pl. 47; Korpusova 1983, 56, 57, Fig. 15/1-3, Pl. XIII/3-4, XXIII/6; Symonovich 1983, 92, Pl. XXXI/8, 15; Dashevskaya 1991, 37, Pl. 67/4-6; Bylkova 1993, 164-165, Fig. 1/1; Bârcă 2006a, 71-72, 215, Fig. 34/9, 60/1.

¹³¹ Mordvintseva and Trejster 2007, vol. I, 101-103.

¹³² See for this find and its dating Bylkova 1993, 164-168, Fig. 1-2 (1st century BC); Simonenko 1993, 15-18, 27-29, Fig. 5 (sec.I a. Chr.); Bârcă 2006a, 83, 87, 214-215, Fig. 34 (second half of the 1st century BC); Mordvintseva and Trejster 2007, vol. II, 131-132, cat. no. B40 (2nd – 1st century BC).

¹³³ Bogdanova 1963, Fig. 4/16; Zajtsev 1997, 164, 166, Fig. 3/6, 12; Vysotskaya 1994, 164. According to Yu. P. Zaitsev's

from Dolineni (Hotin region, Ukraine), whose grave goods contained also two iron bucket pendants, two iron bracelets, a fragmentary bronze bracelet, a bowl, a glass bead and a leaf-shaped brooch of La Tène D1 scheme of type Kostrzewski H in iron¹³⁴.

Out of the bucket pendants from the Sarmatae graves in the north-west Pontic area, the earliest are in iron from T 4 at Kholmskoe¹³⁵ (Fig. 2/1-3), dated sometime to the second half/late 1st century BC. Among the grave goods of this richly furnished grave also counts a silver brooch of Middle La Tène scheme (type Kostrzewski B), 30 golden appliques, two bracelets and two silver footrings, 74 beads, an iron knife, a bronze needle and a wheel-thrown cup¹³⁶.

In the Geto-Dacian space south the Carpathians, earliest known exemplars are those from the cremation barrow graves of Popeşti (Fig. 6/20-21) and Piscul Crăsan, dated over the course of the 1st century BC or only its second half¹³⁷. In the Dacian environment from the intra-Carpathian area, an iron bucket has been recently discovered in a cremation grave at Piatra Craivii dated to the 1st century BC, most likely only its second half¹³⁸. An iron exemplar comes also from a Dacian cremation grave (Gr 13) from the Chellenitsya I cemetery¹³⁹ (Fig. 6/17), dated to La Tène D1¹⁴⁰, located 150-200 north the Dacian fortification of Mala Kopanya, located in the Upper Tisza area, in Trans-Carpathian Ukraine. Still from Chellenitsya I comes another iron bucket pendant¹⁴¹ (Fig. 6/18). It was discovered inside a pyxis discovered outside the graves¹⁴² together with several beads, a waist belt segment, bronze and iron rings, iron hinges from the waist belt. To these iron pendants also adds a golden specimen (Fig. 6/19, 7/2), of which information specifies only it comes from Chellenitsya I¹⁴³. Based on the many archaeological materials it was noted that the Chellenitsya I remains date to the chronological span between the late 2nd century BC and early 1st century AD¹⁴⁴.

During the 1st century AD – early 2nd century AD, bucket pendants become increasingly frequent in the late Scythian and Sarmatae environment, being represented by golden, silver, bronze and iron specimens¹⁴⁵.

It is worth noting that some early exemplars resemble those of the 1st century AD. For instance, the golden bucket pendant from Gr 3 in the Sokolova Mogila barrow (Fig. 3/4, 5), decorated with horizontal ribs in relief (type Beilke-Voigt H, variation I), is similar to that in Gr 180 from the Tanais cemetery, mentioned above. Other three golden bucket pendants from this grave are double and have smooth body surface¹⁴⁶ (Fig. 3/1), and two are in iron¹⁴⁷ (Fig. 3/2-3). The richly furnished grave of Sokolova Mogila barrow dates as already mentioned in the second half of the 1st century AD (possibly the third quarter or even its last third)¹⁴⁸ and not its first half as dated by G. T. Kovpanenko¹⁴⁹.

Some of the golden bucket pendants of the 1st century – early 2nd century AD, either common or double, are decorated with filigree patterns, golden granules, incrusted paste or enamel, yet also other decoration elements¹⁵⁰. For the Sarmatae environment of the north and north-west Pontic area we mention the specimens from T 3 Gr 3 at Mikhajlovka¹⁵¹ (Fig. 2/19-20), Tsvetna¹⁵² (Fig. 2/21-22) and T 19 Gr 1 at Karshinskij¹⁵³. The Mikhajlovka grave (T

analysis, tomb 390 in the Ust'-Al'ma cemetery to which belong the common and double bucket pendants dates towards late 2nd century – first half of the 1st century BC.

¹³⁴ Smirnova 1981, 195, 204, Fig. 2/3, 3/1-6; Babeş 1993, 219, Pl. 47/2a-g.

¹³⁵ Cf. Gudkova and Fokeev 1984, 10, 23, Fig. 2/16-18; Bârcă 2006, 133-134, 318, Fig. 63/6. Bârcă and Symonenko 2009, 63, Fig. 14/6-8.

¹³⁶ Cf. Gudkova and Fokeev 1984, 8-10, 21, 23-24, Fig. 2; Bârcă 2006, 317-318, Fig. 63.

¹³⁷ Vulpé 1976, 198, 208, 214, Fig. 5/10, 6/24; for dating see also Sîrbu et al. 2007, 79.

¹³⁸ We thank this way our colleague and friend Cristinel Plantos PhD, head of the archaeological excavation site of Piatra Craivii, for reporting this find to us and dating it.

¹³⁹ Kotigoroshko 2015, 21, 52, 109, 139, 197, 226, Fig. 12/9.

¹⁴⁰ Kotigoroshko 2015, 77, 166, 252.

¹⁴¹ Kotigoroshko 2015, Fig. 69/6.

¹⁴² Kotigoroshko 2015, 53, 140, 227, Fig. 69.

¹⁴³ Kotigoroshko 2015, 51, 139, 226, Fig. 70/4, photo 27/4.

¹⁴⁴ Kotigoroshko 2015, 77, 166, 253.

¹⁴⁵ See references above.

¹⁴⁶ Kovpanenko 1986, 95, 98, Fig. 100/2, 101/3.

¹⁴⁷ Kovpanenko 1986, 96, Fig. 100/1, 3, 101/1-2.

¹⁴⁸ Bârcă 2011, 10; Bârcă 2015, 41; Simonenko 2011, 43-44.

¹⁴⁹ Kovpanenko 1986, 127.

¹⁵⁰ Cf. Mordvintseva and Trejster 2007, vol. I, 96-97.

¹⁵¹ Subbotin, Dzigovskij and Ostroverkhov 1998, 21, Fig. 16/5; Dzygovs'kyj 2000, Fig. 43/3; Bârcă 2006, 329, Fig. 75/5; Simonenko 2008, 77, cat. no. 107, Pl. 119/5; Bârcă and Symonenko 2009, 163, Fig. 60/3.

¹⁵² Simonenko 2008, 69, cat. no. 87, Pl. 81/5.

¹⁵³ Mordvintseva and Trejster 2007, vol. I, 96, vol. II, 38, cat. no. A105.1.

3 Gr 3) dates based on the richly grave goods sometime to the second half of the 1st century – early 2nd century AD¹⁵⁴, the Tsvetna feature to the second half – late of the 1st century AD¹⁵⁵, and the Karshinskij grave (T 19 Gr 1) to the 1st century AD¹⁵⁶. With anthropomorphic figures made by dotting is decorated the bronze bucket pendant from the Lipovets grave¹⁵⁷ (Fig. 2/18), dated sometime to the second half of the 1st century – first decades of the 2nd century AD.

From Sarmatian graves of the second half of the 1st century – early 2nd century AD come mainly the simple bucket pendants made in gold from the north-east of the Black Sea (the Kuban region). An example to this effect is the Sarmatae grave from T 3 at Kazanskaya, whose grave goods included two golden bucket pendants¹⁵⁸, yet also the grave in T 42 at Ust'-Labinsk¹⁵⁹, both from the “Zolotoe kladbischche” cemetery, located on the right bank of the Kuban river. Sometime to the first half of the 2nd century AD also dates the grave in T 38 at Ust'-Labinsk, whose grave goods include a double golden bucket pendant¹⁶⁰.

In the Sarmatae milieu of the Great Hungarian Plain, a golden pendant decorated on body with granulation comes from the infant grave of Átány¹⁶¹ (Fig. 4/6). Beside the pendant were also discovered other golden items¹⁶², pointing to a dating of the feature sometime in the last quarter/late 1st century – early 2nd century AD. The Átány grave, together with other from the same chronologic frame whose grave goods contain bucket pendants, is part of the group of early Sarmatian antiquities from the region. Some graves, including that of Átány, may be ascribed to the so-called “golden horizon”¹⁶³.

To the second half of the 1st century AD date the bronze bucket pendants from the Geto-Dacian settlement of Ocnita¹⁶⁴ (Fig. 6/22-23), located south of the Carpathians. Pendants come from a feature (no. 19), with the remains of a jeweller's workshop, dated to the 2nd century BC¹⁶⁵, although its inventory¹⁶⁶, which also includes a strongly profiled brooch of Eastern type¹⁶⁷, indicates a dating to the second half of the 1st century AD. One of the pendants of Ocnita seems to belong to type G (Fig. 6/23) in I. Beilke-Voigt's typology¹⁶⁸. Also, at Ocnita were found two iron and one bronze bucket pendants¹⁶⁹ in an infant grave buried with a female¹⁷⁰. Regarding the bronze specimen, it must be mentioned its body is decorated with two groups of three horizontal ribs in relief each. Based on the dating of feature 19, whose inventory contained two bucket pendants, erroneously dated as shown above, D. Berciu dated this burial to the second half of the 2nd century BC or no later than its end¹⁷¹, although a dating to the 1st century AD is most plausible. In the summer of 2019, an iron bucket pendant was discovered in a cremation grave of the second half of the 1st century AD from the Ocnita cemetery¹⁷². It is in iron and belongs to type A, variation II in I. Beilke-Voigt's typology.

Bucket pendants found associated with artefacts that point to a dating to the 1st century AD are also present in the

¹⁵⁴ Bârcă 2006, 156, 330; Bârcă and Symonenko 2009, 176; Symonenko 2011, 87. A. N. Dzigovskij dates the grave to the 1st century AD (Dzygovs'kyj 1993, 74-75; Dzygovs'kyj 2000, 105), while V. Mordvintseva and M. Trejster to the middle-third quarter of the 1st century AD (Mordvintseva and Trejster 2007, vol. II, 45, cat. no. A129).

¹⁵⁵ Symonenko 2008, 15; Symonenko 2011, 40; V. Mordvintseva and M. Trejster date the feature to mid – third quarter of the 1st century AD (Mordvintseva and Trejster 2007, vol. II, 136, cat. no. B46).

¹⁵⁶ Mordvintseva and Trejster 2007, vol. II, 38, cat. no. A105.1.

¹⁵⁷ Symonenko 2008, 68, cat. no. 82, Pl. 72/2g.

¹⁵⁸ Gushchina and Zasetskaya 1994, 42, cat. no. 20, Pl. 2/20. Among the grave goods also counts a strongly profiled brooch of Eastern type (cat. no. 22, Pl. 2/22).

¹⁵⁹ Gushchina and Zasetskaya 1994, 70, cat. no. 443, 8, Pl. 48/443, 8.

¹⁶⁰ Gushchina and Zasetskaya 1994, 68, cat. no. 417, 5, Pl. 45/417, 5.

¹⁶¹ Párducz 1941, 56, Pl. XXIX/56.

¹⁶² Párducz 1941, 56-57, 58, Pl. VII/5-7, XXIV/15-22, XXIX/30, 56.

¹⁶³ For the types of items from finds ascribed to this horizon see Kőhegyi 1984; Vaday 1984; Vaday, Istvánovits and Kulcsár 1989, 110-111; Farkas 2000; Ishtvanovich and Kul'char 2005; Istvánovits and Kulcsár 2006; Istvánovits and Kulcsár 2013; Bârcă 2014, 35-69.

¹⁶⁴ For the grave goods of this feature which contains a strongly profiled brooch of Eastern type see Berciu 1981, 106, Fig. 91/4-5.

¹⁶⁵ Berciu 1981, 106; Berciu 1983, 35. This dating was also adopted by Gh. Bichir (Bichir 1984, 54), I. Beilke-Voigt (Beilke-Voigt 1998, 64), yet also M. B. Shchukin (Shchukin 205, 190).

¹⁶⁶ For the grave goods of this feature see Berciu 1981, 105-106, Fig. 91/1-7.

¹⁶⁷ For dating these brooches see Rustoiu 1997, 54; Bârcă 2011, 17-18.

¹⁶⁸ Cf. Beilke-Voigt 1998, 53, 68, Fig. 58.

¹⁶⁹ The pendant's body is decorated with two groups of three horizontal ribs in relief each.

¹⁷⁰ Berciu 1983, 34, Fig. 2/1-3.

¹⁷¹ This dating was also adopted by I. A. Bazhan and S. Yu. Kargopol'tsev (Bazhan and Kargopol'tsev 1989, 164).

¹⁷² We wish to thank this way our colleague PhD Associate Professor Constantin Bărbulescu, head of the archaeological excavation site of Ocnita, for reporting to us this find and dating it.

Geto-Dacian settlements from the east-Carpathian area, namely Brad (Fig. 6/25-27)¹⁷³, Răcătău¹⁷⁴ and Poiana¹⁷⁵. These come from closed features and graves, as well as from the last levels of respective settlements.

In the Dacian environment of the intra-Carpathian area from the period of the 1st century AD such pendants are rare. A bucket pendant, decorated on the external sides with a network of incised lines (Fig. 6/24) was discovered in the settlement of Mereşti (Harghita county)¹⁷⁶. Such an iron pendant is supposed to likely come from the Dacian fortress of Tilişca (Sibiu county)¹⁷⁷. Two iron bucket pendants were discovered rather recently in the Dacian fortress of Ardeu (Hunedoara county)¹⁷⁸. Eight bucket pendants, in iron (6 pieces) and bronze (2 pieces), were discovered in six inhumations (1a, 2a, 8, 16b, 27 (2 pieces), 28a (2 pieces)) in Grădina-Castelului at Hunedoara¹⁷⁹ (Fig. 6/32-36). In the case of the bronze specimen from burial 16b, it must be mentioned its body is decorated with zigzag lines forming a row of rhombuses (Fig. 6/32). The eight bucket pendants discovered in various zones of the graves come, with one exception, (the dead in inhumation 27), only from toddler burials¹⁸⁰. The majority of inhumations with bucket pendants from Hunedoara-*Grădina-Castelului* were dated to the 1st century AD¹⁸¹, although a dating to its second half, as mentioned¹⁸², seems more likely.

In the Przeworsk culture area, earliest bucket pendants come from features and contexts dated to stage B1 in the Central-European chronology, while starting from stage B2 the number of these artefacts increases significantly in this cultural environment, predominant being those in iron. The massive use of bucket pendants in the Przeworsk culture environment is framed to the chronological interval comprised between the last decades of the 2nd century – early 4th century AD (stages C1-C2), yet they are also found, though rarely, over the 4th century AD¹⁸³. Although in small numbers, bucket pendants are found during phases B2-C1 also in the Wilbark culture environment. These pendants were massively used in the Sântana de Mureş-Chernyakhov milieu, as confirmed by the many finds from the entire area of this culture¹⁸⁴, where predominate those in iron, alike the Germanic environment of Central Europe¹⁸⁵. A ceaseless use of bucket pendants until the 4th century AD is noted for the territory of Crimea, those in bronze being more numerous, while iron specimens date mainly to the late period¹⁸⁶. Last but not least it must be mentioned that most golden pendants from the late Scythian environment on the territory of Crimea, yet also from the north-Pontic ancient centres are from graves dated to the period comprised between mid 1st century AD and early/first decades of the 2nd century AD. Another note worth mention is related to the double, triple or quadruple bucket pendants coming from the cultural environments of the north-Pontic area only¹⁸⁷. The latter are made mainly in gold and bronze and originate mainly from graves dated to the chronological interval comprised between mid 1st century AD and early/first decades of the 2nd century AD¹⁸⁸.

Interestingly to note in the case of double bucket pendants is also the fact that the region where they are found is very close to that where pendants with similar shape yet made of Egyptian faience¹⁸⁹ were diffused. These Egyptian faience pendants emerge in the north-Pontic area by late 1st century BC, yet are dominant in the 1st – 2nd century graves¹⁹⁰. On the other hand, it is very likely that double metal bucket pendants had emerged simultaneously or shortly after those simple, in this respect indicative being the association of common bucket pendants and those double from tomb 390 at Ust'-Al'ma, dated by late 2nd century – first half of the 1st century BC¹⁹¹.

¹⁷³ Ursachi 1986, 112-115, 121, Pl. XVII/5-10, XXI/4-5, XXIII/4-5; Ursachi 1995, Pl. 359/5-10, 361/4-5, 362/4-5.

¹⁷⁴ Căpitanu 1989, 103, Fig. 11/16-19.

¹⁷⁵ Vulpe and Vulpe 1933, 329, Fig. 109/25-27; Teodor 2005, 131-132, Fig. 2/10.

¹⁷⁶ Crişan 2000, 138, Pl. 111/12; Crişan 2000a, Fig. 4/1.

¹⁷⁷ Rustoiu 2019, 168, Fig. 2/1.

¹⁷⁸ Rustoiu 2019, 169.

¹⁷⁹ Sîrbu et al. 2007, 19, 20, 25-26, 33, 40, 41, 64, 67, 78, Fig. 34/1-2, 36/7, 37/9, 38/10, 13-14, 69.

¹⁸⁰ Sîrbu et al. 2007, 67, 79.

¹⁸¹ Sîrbu et alii 2007, 68, 76, 79.

¹⁸² Rustoiu 2019, 169.

¹⁸³ For the finds from the Przeworsk environment see the above mentioned references.

¹⁸⁴ Magomedov 2001, 70; Gopkalo 2008, 63-65 with complete references.

¹⁸⁵ Cf. Beilke-Voigt 1998, 57-58, Fig. 62-65.

¹⁸⁶ Cf. Stoyanova 2016, 132.

¹⁸⁷ Cf. Beilke-Voigt 1998, 69, types **J** and **K**.

¹⁸⁸ An interesting case is found in grave 178 from the Nejzats cemetery (Crimea), where two golden tubular pendants were made of bucket pendants (Khrapunov and Stoyanova 2014, 181, Fig. 4/11; Stoyanova 2016, 130, 131, Fig. 3/15.). The grave is dated based on the grave goods within the limits of the 2nd century AD (Khrapunov and Stoyanova 2014, 183), although the brooch in this grave points to a dating when the Late Sarmatian Period formed, such brooches no longer being found in the late phase of the 2nd century AD (Cf. Kropotov 2010, 213).

¹⁸⁹ See for these pendants Alekseeva 1975, 47, types 84-86, Pl. 11/45-46, 13/48; for a series of finds of such pendants see Bârcă 2006, 136 with references.

¹⁹⁰ Alekseeva 1975, 47, types 84-86.

¹⁹¹ Cf. Zajtsev 1997, 164, 166, Fig. 3/6, 12.

Given the above, we wish to emphasize that it is difficult to establish the origin of these artefacts with certainty. Nevertheless, it is increasingly noted that earliest exemplars come from the north-Pontic area and originate in features dated to the 2nd century – 1st century BC, which suggests, at least in the current state of knowledge, that bucket pendants, beside other pendant types, originated in the north-Pontic area¹⁹². Also, it is hard to say whether bucket pendants derive from the Greek environment of the north of the Black Sea or were produced by artisans in the ancient centres for Barbarian use only. If we keep in mind that the majority of bucket pendants come from the Barbarian environment, we may argue these are their “invention” and specific to their dress. We believe this is supported by both the existence of similar function metal pendants shaped as cauldrons¹⁹³ or miniature “vases”¹⁹⁴, as well as the numerous pendant types used by the north-Pontic Barbarian populations.

In the 1st century BC, bucket pendants are present, if we keep in mind the few other finds, with the Late Scythians and Sarmatians from the north and north-western area of the Black Sea. Still in the 1st century BC, concurrently or within a close time span, bucket pendants emerge in the Geto-Dacian (Popeşti, Crăsan, Piatra Craivii, Chellenitsya I) and Germanic (Dolineni, the Poienesti-Lucăseuca culture) settings¹⁹⁵. In these two latter cultural environments, bucket pendants emerged most likely following contacts with the north-Pontic world and by no means via the Sarmatians. Once with the 1st century AD, the number of bucket pendants increases significantly in the late Scythian, Sarmatian and Geto-Dacian environments, yet also in the cemeteries of the towns and settlements from the north-Pontic area. Still in this period they start to be recorded in the Przeworsk culture area, which at the time extended to the current territory of Slovakia.

For the Sarmatian milieu north and north-west Pontic is noted that the great majority of bucket pendants come from graves dated to the chronological interval comprised between mid 1st century D – early/first decades of the 2nd century AD (stages B1b-B2a). Also, such artefacts are rarely found in graves from the second half of the 2nd century AD – first half of the 3rd century AD, yet are also missing in the second stage of the Late Sarmatian Period (the second half of the 3rd century – 4th century AD). Last but not least, it must be mentioned that the golden specimens from the Sarmatae milieu of the north and north-west of the Black Sea are, except for the item in T 17 Gr 1 at Vysochino VII, from graves dated between mid 1st century AD and early/first decades of the 2nd century AD.

The entry and settlement of the Sarmatae in the Great Hungarian Plain led to emergence of these artefacts in this space too, as confirmed by the presence of the golden, bronze and iron bucket pendants in graves from the group of early Sarmatae antiquities in this region. If one keeps in mind these facts, it may be emphasized that the custom of wearing these pendants by women and children was carried to the Great Hungarian Plain in the second half of the 1st century AD by the first groups of Sarmatae settling this region¹⁹⁶, which they would in fact inhabit for approximately four centuries.

Today, subsequent to recent bucket pendant finds, yet also the analyses of the Sarmatae funerary features from the Great Hungarian Plain where such artefacts were discovered, it may be argued with certainty that in the Sarmatae milieu of this geographical area, bucket pendants were used to a larger or smaller extent on the entire duration of their inhabitancy there¹⁹⁷.

Lastly, we wish to mention that the massive use of bucket pendants in the 2nd – 4th century AD¹⁹⁸ in various cultural environments from the area comprised between the north of the Black Sea and Central Europe indicates that during this chronological span they became “supranational” artefacts, being produced and used by various populations from this geographical area, even though in Germanic setting or closely connected to it their use prevails¹⁹⁹.

¹⁹² Since earliest bucket pendants are in gold, some decorated in the filigree technique, yet also with other decoration elements, one may assume that these served as prototypes for bronze and iron made pendants.

¹⁹³ Abramova 1993, 91, Fig. 29/55-58; Gushchina and Zasetskaya 1994, 61, cat. no. 315, Pl. 33/315; Marčenko and Limberis 2008, 350, cat. no. 52, Pl. 80/8.

¹⁹⁴ Gushchina and Zasetskaya 1994, 68, cat. no. 417, 2, Pl. 45/417, 2. These are golden made and provided with attachment handle decorated with granules.

¹⁹⁵ In the Germanic environment, earliest bucket-shaped pendants, yet which have a much different shape, come from Magdalensberg (Austria) and date to the Late La Tène (Deimel 1987, Pl. 107/12, 15; Beilke-Voigt 1998, 59-60, Fig. 68-69).

¹⁹⁶ Cf. Ishtvanovich and Kul'char 2017, 56-57; Bârcă 2018, 44. Once with the 2nd century AD, the silver bucket pendants increase in numbers with the Sarmatae of the Great Hungarian Plain.

¹⁹⁷ Cf. Ishtvanovich and Kul'char 2017, 57; Bârcă 2018, 44.

¹⁹⁸ For the use of the bucket pendants until early the Migrations period (stage D1) see Harhoiu 1997, 150, 185, cat. no. 68.2 (Pietroasele, M1b (?)), Pl. LXXVII A/15.

¹⁹⁹ Cf. Beilke-Voigt 1998, Fig. 76.

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Fig. 1. Pandantine-căldărushă. **1.** Hunedoara Timișană, mormântul 9; **2.** Hunedoara Timișană, mormântul 13 (după Bârcă 2014); **3.** Zîrnești, T 1 M 5 (după Rikman 1975); **4-5.** Bădragii Vechi, T 7 M 4 (după Bârcă 2006); **6.** Kazanskaya, T 3 (după Gushchina și Zasetskaya 1994); **7.** Zaprud'e (după Simonenko 2008); **8-10.** Chertovitsk

I, T 2/41 M 1 (după Medvedev 1990); **11-13.** Vysochino VII, T 17 M 1 (după Bespalyj 1990); **14.** Chertovitsk, II T 11 M 1 (după Medvedev 1990); **15.** Ust'-Kamenka, T 5 M 1 (după Simonenko 2008); **16.** Semnul tamga de pe pandantivul din T 19 M 1 de la Karshinskij (după Mordvintseva și Trejster 2007). **1-5.** Fier; **7-10, 14-15.** Bronz; **12-13.** Argint; **6, 11.** Aur.

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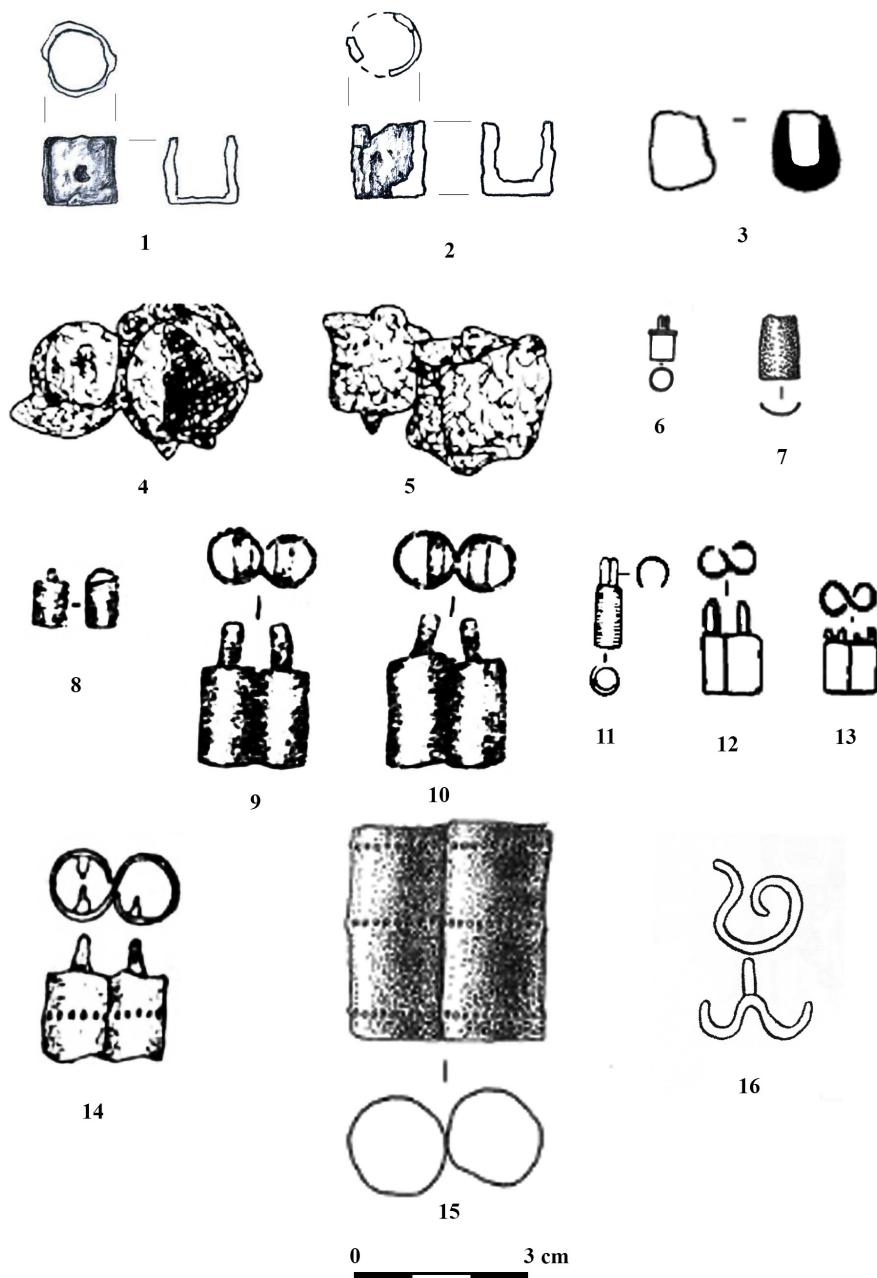


Fig. 1. Bucket-shaped pendants. 1. Hunedoara Timișană, grave 9;
 2. Hunedoara Timișană, grave 13 (after Bârcă 2014);
 3. Zîrnești, T 1 G 5 (after Rikman 1975);
 4-5. Bădragii Vechi, T 7 G 4 (after Bârcă 2006);
 6. Kazanskaya, T 3 (after Gushchina and Zasetskaya 1994);
 7. Zaprud'e (after Simonenko 2008);
 8-10. Chertovitsk I, T 2/4I G 1 (after Medvedev 1990);
 11-13. Výsochino VII, T 17 G 1 (after Bespalyj 1990);
 14. Chertovitsk, II T 11 G 1 (after Medvedev 1990);
 15. Ust'-Kamenka, T 5 G 1 (after Simonenko 2008);
 16. The tamga on the pendant of T 19 G 1 at Karshinskij (after Mordvintseva and Trejster 2007).
 1-5. Iron; 7-10, 14-15. Bronze; 12-13. Silver; 6, 11. Gold.

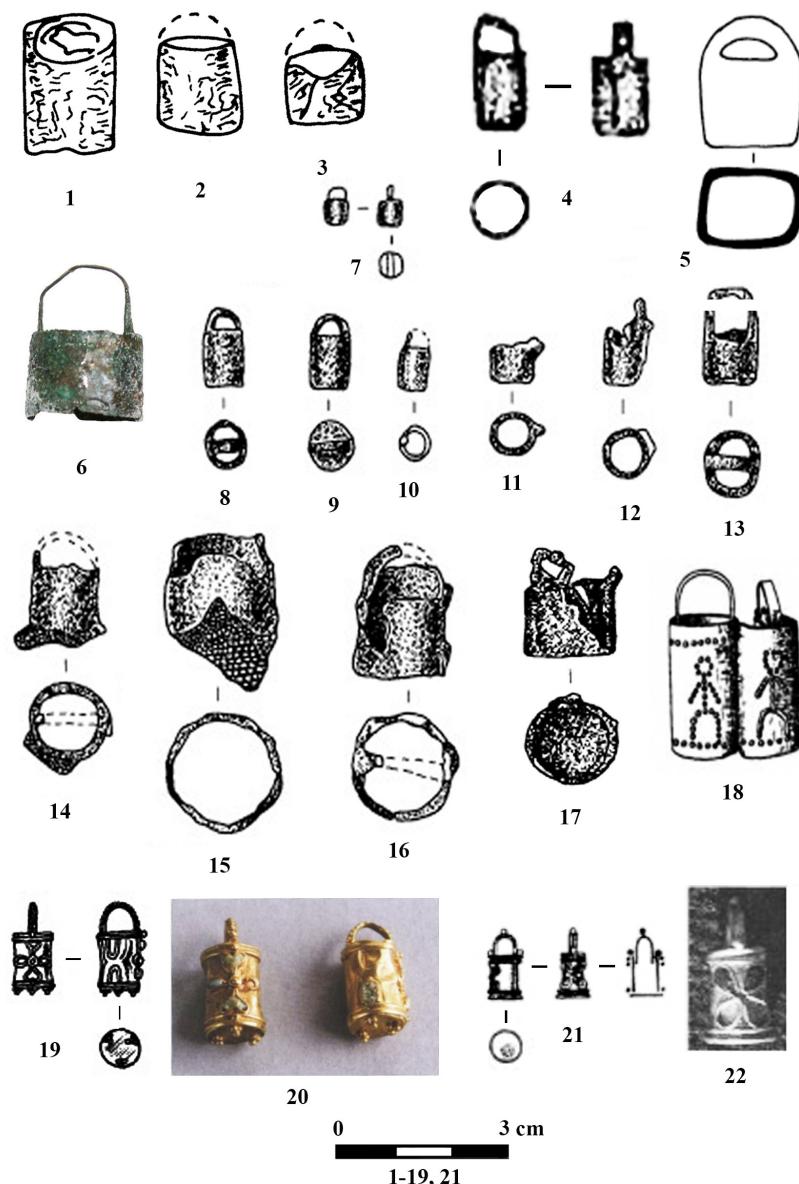


Fig. 2. Bucket-shaped pendants from Sarmatian graves in the north and north-west Pontic area.

- 1-3. Kholmskoe, T 4 (after Gudkova and Fokeev 1984);
 4. Podojma, T 3 G 3 (after Bubulich and Khakheu 2002);
 5. Lencovitsy T 1 G 2 (after Bârcă 2006);
 6. Medeleni, grave 3 (after Vornic, Bubulici and Popovici 2016);
 - 7-16. Pisarevka, T 1 G 8;
 17. Chuguno-Krepinka, T 2 G 1;
 18. Lipovets (after Simonenko 2008);
 - 19-20. Mikhajlovka, T 3 G 3 (after Simonenko 2008 (19), Istvánovits and Kulcsár 2017 (20));
 - 21-22. Tsvetna (after Simonenko 2008 (21), Mordvintseva and Trejster 2007 (22)).
- 19-22. Gold; 4, 6, 18. Bronze; 1-3, 5, 17. Iron.



Fig. 3. Bucket-shaped pendants from the Sarmatian grave in the barrow at Sokolova Mogila (1-5) and T 2 M 9 from Prăjeni-Tarnă (6-8)
 (1-5 - after Kovpanenko 1986;
 6-8 – after Ursulescu et al. 2021).
 1, 4. Gold; 6-8. Bronze; 2-3. Iron.



Fig. 4. Bucket-shaped pendants from Sarmatian graves of the Great Hungarian Plain.

1. Kiskörös-Csukás tó-Ráczkút, grave 6 (after Párducz 1941);
 2. Oroszáhi-tanyák, grave 11 (after Nagy 2005);
 3. Endrőd-Szujókereszt, grave 45 (after Vaday, Szőke 1983);
 4. Abony-Kisbalaton-dűlő, grave 36 (after Gulyás 2011);
 5. Füzesabony-Kastély dűlő I, grave 150 (after Farkas 2000);
 6. Átány (after Párducz 1941);
 7. Mezőcsát-Hörcsögös, grave 63;
 8. Mezőcsát-Hörcsögös, grave 1 from the settlement (after Vaday 1984);
 9. Hódmezővásárhely-Fehértó, grave 6 (after Ishtvanovich and Kul'char 2017);
 10. Tiszadob-Sziget, grave 11;
 11. Tiszadob-Sziget, grave 28 (after Istvánovits 1993);
 12. Tiszavasvári, Városföldje-Jegyző-tag, grave 7 (after Istvánovits 1990);
 13. Nyíregyháza-Felsősimá, grave 39 (after Istvánovits and Kulcsár 2017).
- 6, 13. Gold; 2, 12. Silver; 1, 3, 7-9. Bronze; 4-5, 10-11. Iron. Without scale.

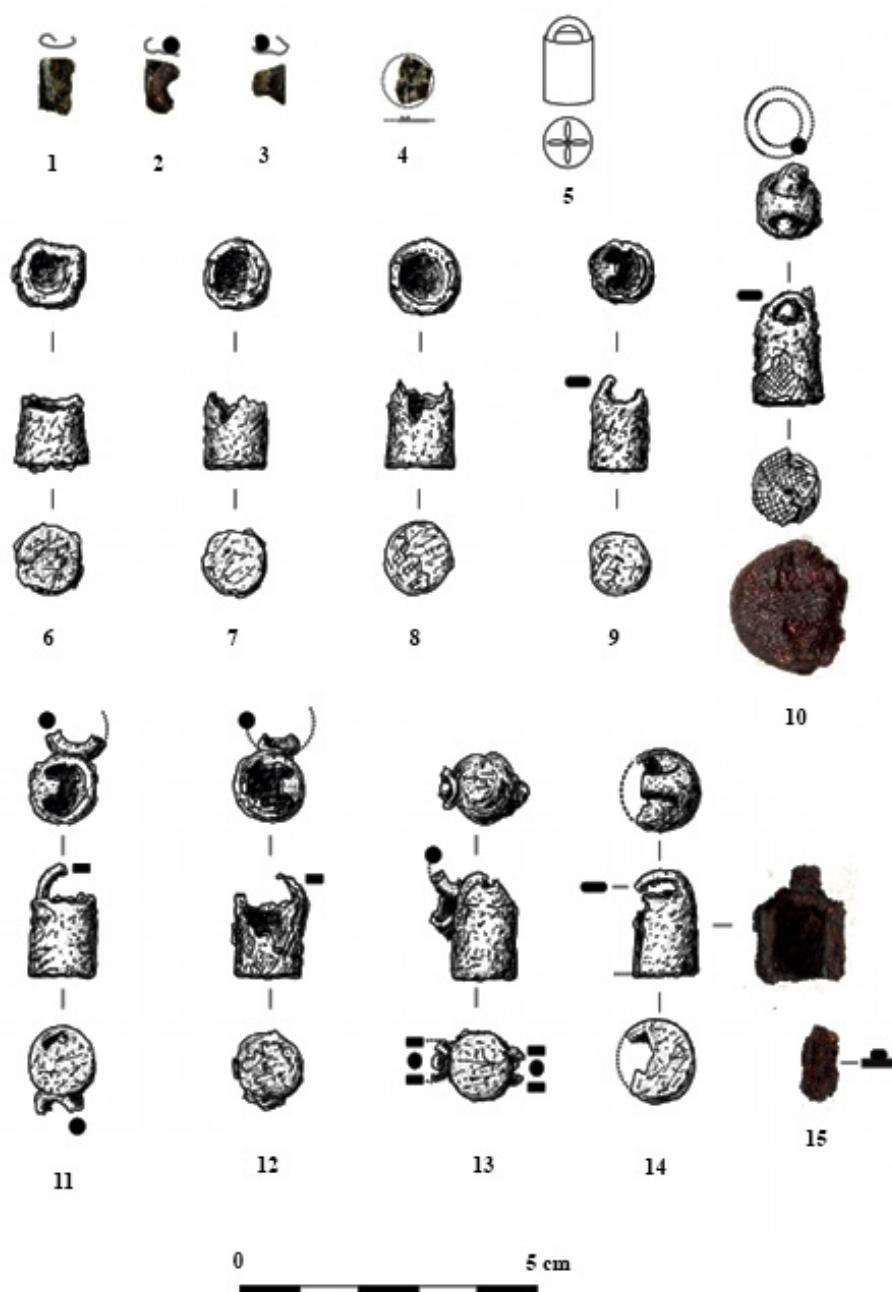


Fig. 5. Bucket-shaped pendants from the Sarmatian grave at Kálló.
1-4. Silver;
5. Reconstruction of the silver bucket-shaped pendant;
6-15. Iron (after Vaday 2016).

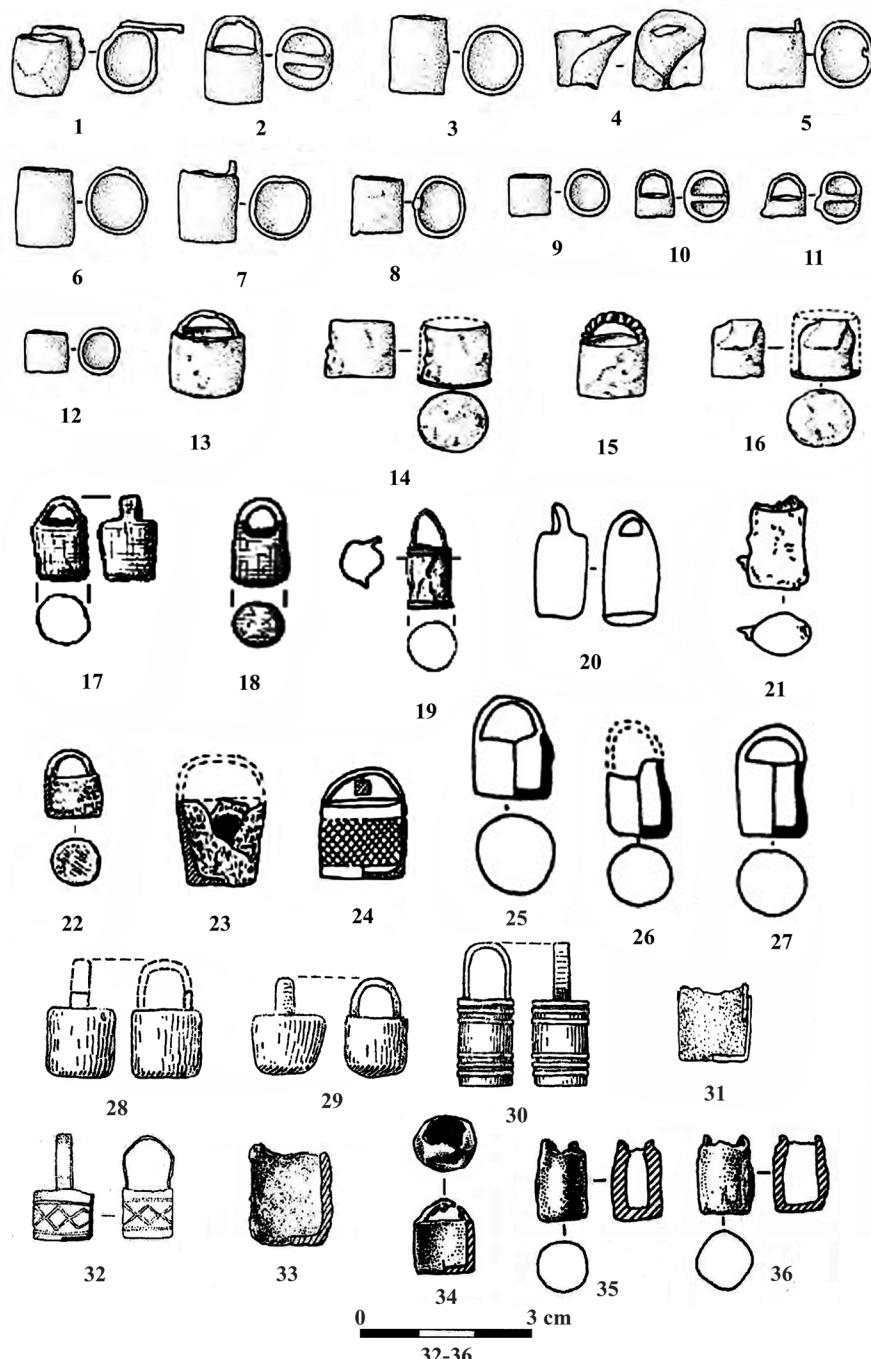


Fig. 6. Bucket-shaped pendants.

- 1-12. Zemplin, grave 22;
- 13-16. Zemplin, grave 48 (after Budinský-Krička and Lamiová-Schmiedlová 1990);
- 17. Chellenitsya I, grave 13;
- 18-19. Chellenitsya I (after Kotigoroshko 2015);
- 20-21. Popeşti (after Vulpe 1976); 2
- 2-23, 28-30. Ocnita (after Berciu 1981);
- 24. Mereşti (after Crişan 2000);
- 25-27. Brad (after Ursachi 1995);
- 31. Poiana, tumulus 4 (after Teodor 2005);
- 32-36. Hunedoara-Grădina Castelului (after Sîrbu et al. 2007).
- 19. Gold; 30, 32. Bronze; 1-18, 20-29, 31, 33-36. Iron. Without scale.

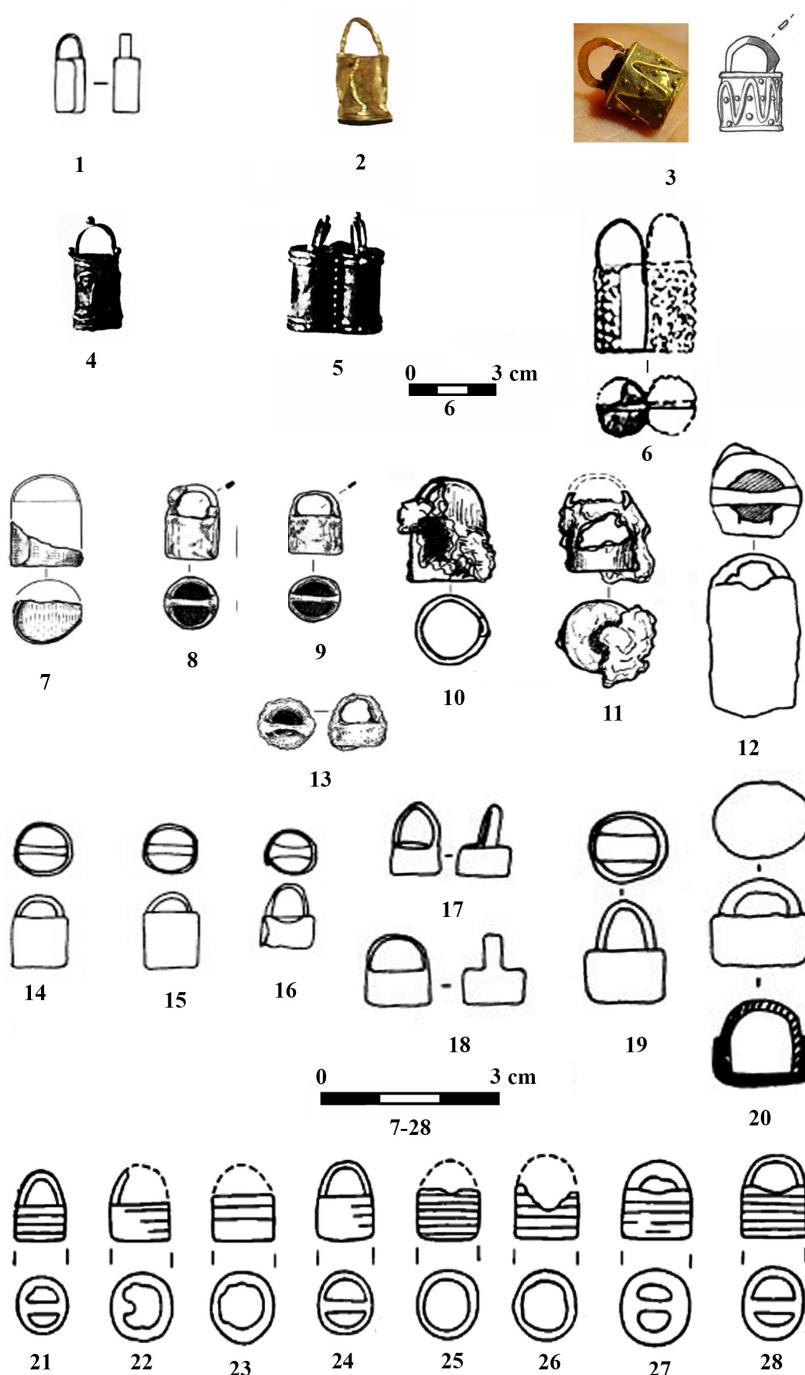


Fig. 7. Bucket-shaped pendants.

- 1, 7-13. Nejzats (after Stoyanova 2016);
- 2. Chellenitsya I (after Kotigoroshko 2015);
- 3. Suplacu de Barcău (after Gindale 2015);
- 4-5. Olbia (after Mordvintseva and Trejster 2007);
- 6. Ust'-Al'ma (after Puzdrovskij 2007);
- 14-16. Bucureşti-Militari (after Bichir 1984);
- 17-18. Poieneşti;
- 19-20. Pădureni (after Bichir 1973);
- 21-28. Solontsy (after Kotigoroshko 1987).

1-5. Gold; 6. Silver; 7-8. Iron. 1-5. Without scale.