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MUZEUL NAȚIONAL AL UNIRII ALBA IULIA
510010 ALBA IULIA
Str. Mihai Viteazul, 12-14
Tel. 0258/813300

Mailing address:
MUZEUL NAȚIONAL AL UNIRII ALBA IULIA
RO – 510010 ALBA IULIA
12-14, Mihai Viteazul St.
Tel. (+40) (258) 813300

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COMMEMORATION

TELEAC – 70 YEARS FROM THE FIRST DISCOVERY. *MACEDONIAN BRONZES* FROM THE RESEARCH IN 2010-2011

Nikolaus BOROFFKA
Eurasien-Abteilung, Deutsches Archäologisches Institut Berlin
Horia Ion CIUGUDEAN
Muzeul Naţional al Unirii Alba Iulia
Svend HANSEN
Eurasien-Abteilung, Deutsches Archäologisches Institut Berlin

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Schlüsselworte: Rumänien, Teleac, Hallstatt Periode, Basarabi Kultur, Makedonische Bronzen, Fernkontakte

Introduction

The results and materials presented here were achieved during archaeological research of the summer schools 2010 and 2011 in the frame of the Research Training Network „Forging Identities", financed by the European Union[1]. The site of Teleac, com. Ciugud, Alba county, in Romania was chosen as one of the most important large (ca. 30 hectares inside the rampart) fortified sites of the Late Bronze Age to Early Iron Age in south-eastern Central Europe. The site had been discovered 70 years ago in 1953 and scientific excavations had already been carried out in 1959-1960, 1978-1987 and 2007 and have again been

[1] Participants in 2010 were (in alphabetical order of family name): Ole Aslaksen, Nikolaus Boroffka (field director), Horia Ciugudean (field director), Vanessa Guyot, Svend Hansen (project management), Flemming Højlund, Stojan Ivanov (geophysics), Zsófia Kölcze, Maikel Kuijpers, Sascha Mauel, József Nagy, Dalia Pokutta, Samantha Reiter, Nicole Taylor, Heide Wrobel Nørgaard, Michael Ullrich (topography), Helle Vandkilde (project management), Peter Zidarov (geophysics) and visiting lecturers were Marius-Mihai Ciută, Magda and Gheorghe Lazarovici as well as Liviu Marta. In 2011 the participants were: Ole Aslaksen, Nikolaus Boroffka (field director), Horia Ciugudean (field director), Vanessa Guyot, Svend Hansen (project management), Christian Horn, Stojan Ivanov (geophysics), Sascha Mauel, Bianka Nessel, Dalia Pokutta, Samantha Reiter, Nicole Taylor, Claes Uhnér, Michael Ullrich (topography), Tilman Vachta, Peter Zidarov with his family (geophysics). The results were very briefly presented in Boroffka, Ciugudean 2012.
The translation of the German and Romanian summaries, including the figure legends, was done by R. Boroffka.

continued since 2016, so that a large amount of information was available[2]. The aim of the work was for the students and fellows in the project to gain practical and theoretical experience in the archaeology of a specific region, including traditional and modern archaeological work, surveying, lectures and excursions to archaeological and cultural sites in the wider region. Some of the methods applied at Teleac were non-invasive geophysics[3], digital total station topography and a metal detector survey of the northern part of the site (Grușet Plateau and the lower slopes of Vârful Jidovaru)[4], while excavations at two locations were carried out in standard manner. The trench of 2010 had a size of 2 x 2 m, and was placed in the region of a geomagnetic anomaly, between the old trenches S4 and S47 towards the northern rampart (**Fig. 1**). It was not excavated to any significant depth, due to weather conditions and time limitations. The trench of 2011 was located on the western slope of the Vârful Jidovaru, had 10 x 10 m size and was placed in the region of a specific find concentration from the metal detector survey.

Here only a few of the survey finds, together with the results from the trench from 2011 on the lower slope of the Vârful Jidovaru, which reached the sterile soil only in a small part (**Fig. 1; 6-7**) are presented. The main focus is on the context and the objects, which probably were originally part of a hoard.

Methods

The survey by metal detector[5] was carried out on the Grușet Plateau inside the northern rampart, outside the presumed northern gateway, and on the lower northwestern slope of the Vârful Jidovaru (**Fig. 1-2**). The application of metal detectors in archaeology has been variously and controversially discussed, but is mostly considered as a modern and useful technology when practiced by professional scientists with proper documentation[6]. It has proved very useful in

[2] The most important publications for the older excavations are Horedt *et alii* 1962; Mitrofan 1967; Vasiliev *et alii* 1991; Ciugudean 2012. The more recent work has been published in some preliminary reports: Uhnér *et alii* 2017; Uhnér *et alii* 2018; Uhnér *et alii* 2019.

[3] See also Uhnér *et alii* 2019.

[4] The excavation permits (Research permit № 44/2010 and Detector permit № 25/2010 and the research permit for 2011) were issued by the Ministerul Culturii și Patrimoniului Național and specifically allowed the use of a metal detector, conform with the laws of Romania applicable at the time.

[5] The instruments used were a XP-Goldmaxx Power and a GPP German Professional Pinpointer SN 0063.

[6] See especially the contributions in the *Topical Issue on Aspects of Non-professional Metal Detecting in Europe* in Open Archaeology 2.1, 2016 (https://www.degruyter.com/view/j/opar.2016.2.issue-1/issue-files/opar.2016.2.issue-1.xml - last accessed April 24th 2019). A recently observed positive effect of using metal detectors in archaeological aims on former soldiers with Post Traumatic Stress Disorder (PTSD) or individuals

the research on Bronze Age and Early Iron fortified sites in Hungary and significantly contributes to a new understanding of the period and the quantity and variety of metal objects in circulation[7]. In the 2010-2011 campaigns at Teleac a team surveyed the designated area, which was selected due to the reduced agricultural work previously done there. Finds identified up to a maximum depth of 15 cm under the surface were marked. Although the detector could filter ferrous and non-ferrous metals, this function was not applied, since bronze and iron objects were known from the older excavations. The marked finds were preliminarily sighted in the field, and those considered as possibly of archaeological interest were then registered with the digital total station directly onto the topographic plan. A fairly large number of objects were not documented in this way, since these were considered as obviously modern, including, for example, pieces of wire, shotgun cartridges, bullets, tin cans, coins, electric parts, cigarette foils, and broken instruments from the older excavation teams (**Fig. 3**). They were collected anyhow, and checked again at the base. Inevitably this led, in a few cases, to misidentifications, so that some objects, which are probably prehistoric, were not mapped. On the other hand, a number of objects which may be modern were documented. Most of the metal objects determined as archaeologically significant may be typologically dated to the Late Bronze Age and Iron Age (Hallstatt A-C), the Latène and Roman Periods (both not identified during previous research) and to Early Medieval time.

Survey finds

Two bronze beads were recovered with the metal detector. One of them is biconical in shape (№ 37, **Fig. 4,1**) and was found in the area where later the trench 2011 was placed. Although at first glance this might seem quite a simple form, a closer look shows that biconical beads, made from various materials, may be more important culturally and/or chronologically. Among the amber finds from Romania, the rather squat biconical beads appear to be especially typical for the early Hallstatt period[8], as has also been observed for Hungary[9], and may even be valid in such distant (from Teleac) regions as Denmark[10]. The same shape, made from gold, is also found in hoards of the Early Hallstatt time,

with other psychiatric problems (Dobat 2019) may be another future application which can profit both the individuals involved and professional archaeology.

[7] For example, Szabó 2009; Szabó 2010; Szabó 2012; Szabó 2016.

[8] Boroffka 2001, p. 399; Boroffka 2002, p. 151-153.

[9] Sprincz, Beck 1981, p. 478-479 table 2, p. 482-483, group IX.

[10] Becker 1954, p. 244-245.

such as Hinova[11]. Bronze examples are documented in much rarer cases and from Romania we known only a few examples from hoard II of Gușterița, which is again dated to the Early Hallstatt period (A1)[12]. While these analogies all belong to the Early Hallstatt period, and would fit well with the known dating of the early layers at Teleac site, a look to the south and southwest cautions us of hasty conclusions on chronology or cultural attribution. Squat and elongated biconical bronze beads are frequent and typical components of the so named Macedonian (or Paeonian/Paionian) Bronzes, which are concentrated in eastern Albania (Lake Ohrid region), northern Greece (Thessaly & Macedonia) and northern Macedonia (former Yugoslavia). The bead from Teleac would best fit into Group C according to the classification of J. Bouzek[13]. They are dated mostly to times corresponding to the Hallstatt C and D periods, or the Geometric Period (and perhaps later) in the terminology for Greece, although some southern finds may even date back to the Submycenaean Period (corresponding to the Early Hallstatt finds mentioned above)[14]. Here, examples from the sanctuary at Pherai in Thessaly[15], the burials at Tsaousítsas (Τσαουσίτσας, also transcribed as Chauchitsa or Čaušica) in Greek Macedonia[16] and Dedeli in the Republic of North Macedonia[17] may be specifically mentioned. The second bead found on the Grușet plateau during the metal detector survey at Teleac has a

[11] Davidescu 1981, p. 16, type XIII, 15, fig. 11,4 (the type XII has a similar outline but a rectangular cross-section); Davidescu, Vulpe 2010, p. 20, № 13 *Spindle whorl-shaped beads*, p. 48 fig. 28,43-46 (the former type XII is described on p. 20 as „12 *Rhombic beads*").

[12] Petrescu-Dîmboviţa 1977, p. 96 (described as biconical spindle whorl), 254, pl. 160,17, p. 96, 254, pl. 160,18 (described as three biconical beads preserved in the National Museum Budapest and two lost ones); Petrescu-Dîmboviţa 1978, p. 121, pl. 117, 346 (described as biconical spindle whorl), p. 121, pl. 117, 345 (described as biconical bead [sic!] and two lost ones).

[13] Bouzek 1973, p. 105-106, 95, fig. 29, p. 99, fig. 30; Bouzek 1987, p. 91-92, fig. 7. See also Kilian 1975b, p. 115-116 and pl. 97.

[14] Without discussing the *Macedonian Bronzes* in detail here, generally see (selected publications, each with extensive further literature): Гарашанин 1959; Pingel 1970; Bouzek 1973; Васић 1973; Bouzek 1974 (the bead found in Tumulus XXXV at Gogoșu, mentioned by Bouzek 1974, p. 299, is made from yellow glass and thus has nothing to do with the discussed bronzes: Berciu, Comșa 1956, p. 432, p. 427, fig. 151,4); Kilian 1975a; Kilian 1975b, p. 99-101, p. 110-116; Vasić 1977; Pingel 1980; Bouzek 1982; Митревски 1991a; Вукмановић, Радојчић 1995; Видески 2003; Bouzek 2006; Mitrevski 2007; David 2017.

[15] Kilian 1975a, p. 173, pl. 75, 34-52.

[16] Casson 1921, p. 10 (№ 1), p. 11 (№ 6 & 10), p. 12 (№ 13 & Slab Grave), p. 15, p. 9, Fig. 10; Casson 1925, p. 4 (Grave 1), p. 8 (Grave 8), p. 9 (Graves 9, 10 and 13), p. 11 (Grave 13), p. 12, (Grave 17), p. 14 (Graves 21 and 22), p. 25, Pl. 2g.

[17] Митревски 1991b, p. 17-38 (Graves 1, 4, 13, 20, 22, 25, 27, 37, 51, 52, 53, 55, 58, 63, 71, 76, 81 and 91), pl. 1, Grave 1,4; Grave 4,11; 3, Grave 13,7; 5, Grave 20, 17; 6, Grave 22, 9; 7, Grave 25,7; 8, Grave 27, 6; 10, Grave 37, 16; 13, Grave 51,10; 14, Grave 52, 4 & Grave 53, 11; 15, Grave 55,10; 16, Grave 58, 8 & Grave 63, 21; 18, Grave 71, 2; 19, Grave 76, 8: 20, Grave 81, 9; 22, Grave 91, 10.

tubular basic body and three transverse ribs, flattened on one side (№ 73, **Fig. 4,2**). Perhaps from Romania a distantly similar object is part of a hoard said to have been found in the surroundings of Suceava. The hoard has been dated to the period Hallstatt A and the object was described as a manchette, perhaps connected to wagon fittings[18]. However, the object from around Suceava is rather squatter and appears thinner walled than the bead from Teleac. Pieces better comparable to the slender and strongly profiled massive bead from Teleac are again well known among the Macedonian Bronzes far to the south. They correspond well to Group I in the classification of J. Bouzek[19], and are also present in the Enodia sanctuary at Pherai[20]. As mentioned above they are dated mainly to times corresponding to the Hallstatt C and D periods, or the Geometric and following periods in the terminology for Greece.

Disturbed hoard

A group of bronze and iron artefacts discovered during the survey was concentrated on the lower slope of the Vârful Jidovaru (№ 9-11, 13-16, 19, 23-25, 27, X2) so that in 2011 a trench of 10 x 10 m was placed in this area. Together with several objects found in the excavation (№ 61-63, 82), it may be presumed that these objects originally formed a hoard, which was disturbed by modern agricultural activity. Very probably the following objects were part of this destroyed hoard: four iron knives (№ 14, **Fig. 5,4**, № 15, **Fig. 5,1**, № 16, **Fig. 5,3**, № 63, **Fig. 5,2**), one small iron object with rectangular cross-section of unclear function (№ 19, **Fig. 5,5**), two iron trunnion axes (*Ärmchenbeile*), of differing types - one with small horn-like extensions pointing upwards (№ 13, **Fig. 5,6**) and a smaller one with a widened ledge with drooping shoulders (№ 9, **Fig. 5,7**), two iron socketed axes, one of which is fragmentary and has an upward pointed socket (№ X2, **Fig. 5,8**), while the other is almost complete and shows a straight socket mouth and a clear smithing seam on one broad side and a ledge on one of the narrow sides (№ 11, **Fig. 5,9**), one massive iron wedge (№ 25, **Fig. 5,10**), a small rounded copper alloy applique with turned back ends (№ 82, **Fig. 4,3**) a copper alloy applique with an ear on the back and a double-pointed shape interspersed by round spacers at the front (№ 10, **Fig. 4,5**), a simple bracelet with D-shaped cross-section and without ornament (№ 23, **Fig. 4,6**), a flat bracelet with longitudinal ribs (№ 24, **Fig. 4,4**), two fragments of a

[18] Hänsel 2000, p. 113, № 14, p. 112, fig. 3,6, p. 116, fig. 9; Hänsel 2005, p. 289, № 14, p. 288, fig. 3,6, p. 292, fig. 9.
[19] Bouzek 1973, p. 117-118, especially p. 113, fig. 36,6.8-10.13 (Kozani, Potidaea, „Yugoslavia"); Bouzek 1987, p. 94-95, fig. 9,4. See also Kilian 1975b, pl. 27,15 (Valanida).
[20] Kilian 1975a, pl. 77,28-29 (without discussion in the text), another example from the hoard of Valandina (near Elassona, Thessaly) is also illustrated.

phalera with pendant on the central knob (№ 61-62, **Fig. 4,7**) and an asymmetrical ring-pendant (№ 27, **Fig. 4,8**).

The entire group of metal finds attributed to a destroyed hoard here can be connected to a shallow depression identified roughly in the centre of the 10 x 10 m trench of 2011, which was conventionally named *feature E* (**Fig. 6-7**). The shallow pit, of roughly 1 m diameter and 0.2-0.3 m depth, contained some of the metal objects mentioned above (№ 61-63), with only one other object lying slightly to the south in the ploughed vegetal topsoil layer (№ 82)[21], as well as the fragments of eight vessels (**Fig. 7; 9,5-9; 10,2-4**), most of which had been broken *in situ* and could largely be restored. The top of the shallow pit and the vessels had been disturbed by modern agricultural activity, which most probably explains that some parts of vessels are missing and the scatter of metal objects. From the disturbed cultural layer around *feature E* three fragments (one bowl [**Fig. 8,6**] and two biconical vessels with wide rims turned outwards [**Fig. 8,9; 9,1**]) show stamped/incised decorations characteristic of the Basarabi culture[22]. Open bowls with simple curved profiles, sometimes with channelling on the rim (**Fig. 8,4-5; 9,5-6**), coming from the cultural layer in the 2011 trench and from *feature E*, were previously found throughout the stratigraphic sequence at Teleac and are common to both the earlier Gáva culture, and the later Basarabi culture[23]. The fragments of biconical pots without stamped/incised decoration of Basarabi style often bear channelling, which can be horizontal around the conical neck (**Fig. 8,11**) and oblique (**Fig. 8,10**) or vertical (**Fig. 8,12; 10,3**) on the belly. One vessel had a swollen neck bearing channelled hanging garlands (**Fig. 8,10**), while another shows hanging garlands on the belly (**Fig. 9,4**). One vessel of similar shape was undecorated (**Fig. 9,7**). Such vessels are again found throughout the stratigraphic sequence at Teleac and are also common to both the

[21] The biconical bead (№ 37) found by metal detector nearby can also be attributed to the hoard, if the analogies among the Macedonian Bronzes and the late date are accepted.

[22] For the Basarabi culture see generally Vulpe 1965; Vulpe 1986; Gumă 1993, p. 208-235, pl. 60-103; Ciocea Safta 1996; Ciugudean 1997, p. 135-161, p. 169-200, fig. 3-34; Ursuţiu 2002; Borș *et alii* 2013; Borș *et alii* 2017 to cite just a few important studies, with focus on Romania, each with further bibliography. For neighbouring Serbia see especially Stojić 1986 and Popović, Vukmanović 1998. We also draw attention to the fact that in settlements of the Basarabi culture only a very small percentage of the pottery appears decorated in this style, usually being much over-represented in publications due to subjective selection of the more *beautiful* pottery: At Teleac Vasiliev *et alii* 1991, p. 121 this was mentioned as less than 0.2%, and for Feudvar near Mošorin Roeder 1997, p. 602 states that out of around 50.000 sherds from the Basarabi-layers, only around 1% bore decoration in this style. The situation is quite different in burials, where the percentage of pottery decorated in the specific style is significantly higher judging from publications, although no precise statistics have been published.

[23] Vasiliev *et alii* 1991, p. 84, type IVa, 230, fig. 34 (Ciugudean, with bibliography and analogies going back even to the Bronze Age, and up to the Late Hallstatt Ferigile group). For the chronology of Late Bronze Age and Early Iron Age pottery, see also Boroffka, Boroffka 2020.

Gáva and the Basarabi culture[24]. Another such vessel (**Fig. 10,1**), whose rim had been destroyed by agricultural works, was found together with a grinding stone, labelled as *feature F*, in the top layer of the south-eastern corner of the 2011 trench (**Fig. 6**). Two one-handled cups were found, one from the cultural layer and one from *feature E*. Both had bodies oval or kidney-shaped in plan, the one from the cultural layer with a handle below the rim (**Fig. 8,3**), while the one from *feature E* (**Fig. 10,4**) had a massive handle rising above the rim and with a sharp crest at the top. They have been classified as type VIc and are known from layers II and III in the Teleac sequence[25]. Two vessels from coarse paste with knobs on the belly (**Fig. 8,13** – from the cultural layer) or below the rim (**Fig. 9,7** – from *feature E*) are not characteristic for a specific phase at Teleac. Two large deep bowls with very wide flaring rims and concentric channelling on the interior rim, both from *feature E*, appear in levels II and III at Teleac, with an apparent higher frequency in the later period[26]. Among materials from more recently published settlements of the Basarabi culture from Transylvania and the Banat the shape is present at Gornea – *Căunița de Jos-Cetate*[27], Berzasca – *Ogaşul Odului*[28], Valea Timişului – *Rovină*[29], Moldova Veche – *Ostrov Grobila*[30], Bernadea[31] and Tărtaria - *Podu Tărtăriei Vest*[32], while outside Transylvania it is also known rarely in funerary contexts, e.g. in Basarabi[33], Balta Verde[34], Blejeşti[35] or Vajuga – Pesak[36]. Overall, *feature E*, and the destroyed hoard, can thus be placed to the time of the last period of cultural

[24] *Ibidem*, p. 80-83, types I-II, p. 225, fig. 29,2.4.6, p. 226, fig. 30,1, p. 227, fig. 31,13, p. 228, fig. 32,1-10, p. 237, fig. 41,7 (Ciugudean, with bibliography and analogies).
[25] *Ibidem*, p. 88-89, type VIc, 2235 fig. 39 (Ciugudean, with bibliography and analogies from the Gáva culture up to the Late Hallstatt Scythian burials from Transylvania).
[26] *Ibidem*, p. 86, type IVd, p. 227, fig. 31,7 (layer III), p. 232, fig. 36,1.5 (chance find and layer II), p. 232, fig. 36,6 (house 19, layer III) (Ciugudean, with bibliography and analogies from the Gáva, Basarabi and Ferigile cultures).
[27] Gumă 1993, pl. 65,7.
[28] *Ibidem*, pl. 78,5 (decorated in Basarabi style).
[29] *Ibidem*, pl. 88,4.8; 89,10; 91,9; 93,1.5 (mostly decorated in the Basarabi style).
[30] *Ibidem*, pl. 97,1 (decorated in Basarabi style).
[31] Ursuțiu 2002, pl. 3,2 (interior channelled decoration); 37,5 (undecorated); 67,1-2 (channelled decoration and Basarabi style); 68,1-2 (channelled decoration and undecorated); 72,1-2 (channelled decoration); 75,3-4 (undecorated and channelled ornament); 76,1-4 (channelled decoration); 79,1 (channelled decoration).
[32] Borș *et alii* 2017, pl. 32 (decorated in Basarabi style); 44,2 (decorated in Basarabi style).
[33] Vulpe 1986, p. 74, fig. 3,7 (with rib decoration).
[34] *Ibidem*, p. 75, fig. 4,4 (with Basarabi decoration).
[35] *Ibidem*, p. 84, fig. 13,12 (with Basarabi decoration).
[36] Popović, Vukmanović 1998, pl. 8,8 (decorated in Basarabi style); 30,11 (decorated in Basarabi style).

layers at Teleac[37], i.e. the Basarabi chronological horizon, indifferently whether an actual settlement of the Basarabi culture is presumed, or only the presence of pottery decorated in the Basarabi style, together with the dominant ceramics of Gáva tradition[38]. This time corresponds to the periods Hallstatt B3 and C, now datable roughly to the (late?) 9th and 8th century BC, and continuing into the beginning of the 7th century BC[39].

The destroyed hoard was connected to the deposition of vessels (*feature E*) above and thus most probably also belongs to this period and cultural context. While several of the metal objects from the presumed hoard are not specific either culturally or chronologically (the iron knives[40], the small unidentified object, the simple bracelet and the bracelet fragment with longitudinal ribs, the applique from thin bronze sheet), other pieces can be identified quite well. Iron socketed axes, or rather their fragments, were already found during the older excavations at Teleac. They belong to the filling of a house from layer II (i.e. after its actual use) and to contexts of layer III and were dated to the Hallstatt B3 and C periods[41]. Analogies from Cipău, Coldău, Tărtăria, Turnișor and Vințu de Jos (hoard II)[42], all dated to the Hallstatt C period, were already mentioned by Vasiliev et al., as well as the example from Lăpuș, which is considered much older (Hallstatt A or even Bronze Age D)[43]. A comprehensive overview of early iron socketed axes in south-eastern Europe and their Late Bronze Age precursors

[37] The later metal finds discussed above, of the Latène and Medieval periods, have not been identified in cultural layers at Teleac.

[38] Vasiliev *et alii* 1991, p. 121-122 discussed the lack of many typical Basarabi ornaments and the problem of the newly arrived Basarbi culture coexisting with that local tradition („ea [Basarabi] s-a aflat în asociație cu ceramica locală tradițională. ... Chiar și coabitarea sau evoluția în paralel cu noii veniți nu presupune reproducerea obligatorie a tuturor elementelor ceramicii Basarabi în cadrul unor așezări hallstattiene preexistente.").

[39] E.g. Vulpe 1965, p. 117-124 (with absolute dating to the mid-8th – late 7th century BC); Metzner-Nebelsick 1992; Popović, Vukmanović 1998, p. 38 (with absolute dating to the early or mid-8th – late 7th century BC); Borș 2015, p. 58 (with absolute dating to the 9th – 7th century BC).

[40] See Pare 2017 for a recent discussion of early iron knives, for Romania specifically p. 63.

[41] Vasiliev *et alii* 1991, p. 44-45, p. 212, fig. 16,2-4.

[42] Popa, Berciu 1964; Popa, Berciu 1965; Petrescu-Dîmboviţa 1977, p. 164, p. 368-369, pl. 391-393. Hoard I from Vințu de Jos is only mentioned and still unpublished (Rusu 1963, p. 199, 210, № 17; Rusu 1967, p. 88 footnote 14 - Rusu is the first to number the hoards I and II from this locality), while hoard III has been fully published (Aldea, Ciugudean 1987; Aldea, Ciugudean 1995). All three hoards are dated to the period Hallstatt C.

[43] *Ibidem*, p. 93, № 24, p. 89, fig. 1,5 (Vințu de Jos II); Popa, Berciu 1965, p. 59, № 24, p. 53, fig. 1,24, p. 54, pl. 1,6 (Vințu de Jos II); Rusu 1974, p. 341, p. 352, fig. 1,1 (Lăpuș); László 1975, p. 21, № 11 (Lăpuș), p. 22, № 17 (Teleac); László 1977, p. 55, № 12 (Lăpuș), p. 56, № 23 (Coldău), p. 56, № 18 (Teleac), p. 62 (Turnișor and Vințu de Jos II); Boroffka 1987, p. 67, № 10 (Coldău), p. 67, № 18 (Lăpuș), p. 70, № 29 (Teleac); Boroffka 1991, p. 8, № 12 (Coldău), p. 10, № 21 (Lăpuș), p. 12, № 37 (Teleac); Vasiliev *et alii* 1991, p. 45-46 and p. 126-128; Ursuțiu 2002, p. 59-60, p. 98-99, № 67, pl. 130,3 (Tărtăria).

was published by B. Wanzek[44], which also included that from the Aljudovo hoard, recently connected to the Basarabi culture[45]. More iron socketed axes from the Hallstatt C period have since been published, e.g. from hoard II at Tărtăria[46] and the Miroč hoard[47], both of which have also been connected to the Basarabi culture/period. One of the new fragments from Teleac shows a curved socket rim, very similar to the examples from the Vinţu de Jos II hoard, the older find from Tărtăria and the new finds from Tărtăria (hoard II), and reminding of earlier bronze socketed axes well known in Transylvania. The other new find from Teleac has a straight socket rim, more like those from Coldău or Lăpuş, but to our knowledge the ledge on one of the narrow sides has no analogies. The massive iron wedge, apparently forged from one piece with folding towards the centre of one broad side, does not have good contemporaneous parallels we know of. However, a massive iron chisel is part of the Vinţu de Jos II[48] and the object from Teleac thus fits well into the general picture of heavy iron tools of the Hallstatt B3-C period. Four iron trunnion axes (Ärmchenbeile) had previously been found at Teleac, so that the two new ones complete the picture. The trunnion axes found earlier all had short arms sticking out from the sides at more or less right angles (one preserved the mushroom-shaped chafe, one appears to be straight at the end, while the other two are damaged), while the two new ones belong to two different variants. One has short arms pointing upwards at a steep angle and a narrower hafting part (№ 13, **Fig. 5,6**), and can be integrated into Group II type 1 after Wesse[49]. It finds a good analogy in Gradina na Bosut, where it is dated to the Period Hallstatt B3-C, contemporaneous to the Basarbai culture[50], as well as in Omarčevo in Bulgaria[51], and far to the west in the hoard from Cerro de Castellón near Campotéjar in Spain[52]. The other is a slender axe with shoulders sloping downwards (№ 9, **Fig. 5,7**), also classified to Group II type 1 after Wesse[53]. This example, with sloping shoulders, finds a good analogy in the very early one from Insula Banului, dated roughly to the Hallstatt A-B period[54]. Further good parallels have been published from the

[44] Wanzek 1989.
[45] Jevtić 2015, p. 10, 16, pl. 1,2.
[46] *Ibidem*, p. 11, p. 18, pl. 3,2.
[47] Borş *et alii* 2013, p. 25 (feature 122), pl. 40,3-4; p. 52,1; Borş 2015.
[48] Popa, Berciu 1964, p. 93, № 23, p. 89, fig. 1,4; Popa, Berciu 1965, p. 59, № 23, p. 53, fig. 1,22, p. 54, pl. 1,4.
[49] Wesse 1990, p. 75-76, pl. 23,174.223.
[50] Jevtić 2015, p. 10, p. 16, pl. 1,1a1.
[51] Wesse 1990, p. 202, № 174, pl. 23,174 (single find).
[52] *Ibidem*, p. 207, № 223, pl. 23,223.
[53] *Ibidem*, p. 75-76, pl. 23,144.170-171.193.
[54] Morintz, Roman 1969, p. 417, p. 401, fig. 7,12; Hänsel 1976, p. 151-159 (vol. 1), pl. 67,9 (vol. 2); László 1975, p. 21, № 10; László 1977, p. 55, № 11; Boroffka 1987, p. 67, № 17, p. 66, fig.

hoards of Rujište in Serbia[55] and Krivodol in northwestern Bulgaria[56], both datable to the Hallstatt B3-C periods. An example far to the east may be mentioned from the western Russian fortified site of Marica, in the oblast Kursk, which belongs to the Scythian cultural sphere and is dated to the 6th – 5th century BC[57]. A similar trunnion axe has more recently been published from Tărtăria, hoard II, connected to the Basarabi culture and dated to the Hallstatt B3-C period[58].

Three of the bronze objects from the destroyed hoard find interesting analogies. The applique or buckle with two long narrow pointed-oval bars and three central flat round knobs (№ 10, **Fig. 4,5**) appears to be a rare object. The inventory of burial 17 of the Eastern Platform at Vajuga-Pesak, near the Danube Iron Gates, includes a buckle with three pointed bars and a transversal hoop-like ear on the back[59]. Although the round knobs between the bars are not present on the Vajuga example and there are three elongated bars instead of two (at Teleac), the overall shape is quite comparable. The Vajuga cemetery belongs to the Basarabi culture and is dated to a period between the first half of the 8th to the middle of the 7th century BC by the authors of the excavation[60]. A small buckle with three round knobs and two interspersed bars, but with round endings has been published from Donja Dolina, which is, except for the round endings of the transversal bars, also quite similar to the one from Teleac. At Donja Dolina the buckle is dated to phase IIc, thought of as corresponding to the Latène A period, or between 500-360 BC[61]. However, this specific buckle is a chance find from the area of the cemetery at Donja Dolina, so that it could actually be attributed to any of the periods represented there (Hallstatt B-Latène D). A few finds of appliques, described as *boat-shaped*, also show a similar pointed oval face. They have been found in Dalj and from an undetermined site in Hungary (*Ungarn*)[62].

4,7; Wesse 1990, p. 202, № 180, pl. 23,180; Boroffka 1991, p. 9-10, № 20, 33, fig. 4,9; Wesse 1990, p. 166-168 had generally dated the Group II, type 1 axes to the long period between the 10th and the 6th century BC.

[55] Vasić 1977, p. 65, pl. 11,17-18.21; Wesse 1990, p. 200, № 143-151, pl. 23,144.

[56] Wesse 1990, p. 201, № 167-173, pl. 23,170-171.

[57] Вознесенская, Хомутова 1979, p. 180, p. 181, fig. 1 top; Wesse 1990, p. 203, № 191-193, pl. 23,193.

[58] Borș 2015, p. 63, fig. 19 lower left.

[59] Popović, Vukmanović 1998, p. 26, № 10, p. 78-79, № 10, p. 84, fig. 63 (Eastern platform, grave 17), p. 140, pl. 18,31.

[60] See the brief discussion above, which allows for a beginning date of the Basarbi culture in the later 9th century BC.

[61] Marić 1964, p. 40-43, pl. 15,12.

[62] Metzner-Nebelsick 2002, p. 347, p. 305, fig. 140, S, 5a, p. 678, pl. 102,13 (description), pl. 102,13 (Dalj), p. 695, pl. 114,8-9 (description), pl. 114,8-9 („Ungarn"). Double or two-sided appliques with pointed-oval faces from the hoard of Biharugra (formerly Ugra) may also be

The most likely dating for the Teleac buckle is thus the Hallstatt B3-C period, with an attribution to the Basarabi culture.

The fragmentary *phalera* has a complex structure, with the central knob ending in four petals and the ear on the reverse being cast into an opening in the presumably round disc (№ 61-62, **Fig. 4,7**). Almost nothing of the actual disc is preserved, so that any wheel-like or openwork decorations, which may have existed, remain unknown to us. A pendant (broken) with a cross bar and ending in a curved comb-like shape was fixed on the front of the phalera by the central knob. A comparable *phalera* is part of hoard II from Vinţu de Jos – it is disc-shaped with *au repoussé* decoration on the round disc and a central cage-like knob (with ear on the reverse), containing a mobile ball and thus functioning as a rattle or bell[63]. No additional pendant was present in this case. Recently a perfectly analogous phalera has also been found in Tărtăria (hoard II), where it is dated to the Hallstatt (B3-)C period and connected to the Basarabi culture[64].

Very good parallels for the phalera from Vinţu de Jos II have been published from Holirady, where they were found with objects of *Thraco-Cimmerian* type and were dated generally to the Hallstatt period (Ha B-C)[65]. Similar phalerae are also known as far to the northwest in the hoard of Černotin in Moravia[66], where they are connected to objects of the „Thraco-Cimmerian" circle. To the west comparabile objects occur in Hungary as a pair known from Bogács[67] and a find from an unknown locality (*Ungarn*)[68], as well as in the Syrmian hoard from Adaševici[69], and in the Serbian hoard from Rožanci.[70] All these finds are also connected to the mentioned period and cultural environment. Small comb-shaped pendants, very similar to the one on the phalera at Teleac, have been published from the Glasinac region at

mentioned in this context (Gallus, Horváth 1939, p. 18-20, № 4, especially p. 20, pl. 15,10; p. 19, pl. 18, B 5; Kemenczei 2005, p. 115, p. 131-132, B 6, pl. 15,78-80).

[63] Popa, Berciu 1964, p. 90, № 16, p. 89, fig. 1,2; Popa, Berciu 1965, p. 58, № 16, p. 53 fig.1,5, p. 54, pl. 1,2. The symbolism of the rattle´s sound is not followed in this article - see, for example, Pomberger 2017.

[64] Borș *et alii* 2013, p. 31, pl. 51,2 top middle, pl. 53, bottom middle; Borș 2015, p. 56, p. 63, fig. 16 top middle; p. 64, fig. 20, bottom middle.

[65] Żurowski 1949, p. 163, № 24, p. 203, № 2, p. 237, pl. 38,3, p. 238, pl. 39,3.

[66] Podborský 1970, p. 145-146, pl. 53,4; 76,4a-b. For the connection to the „Thraco-Cimmerian" circle see p. 147-172.

[67] Kemenczei 2005, p. 117, p. 132, B 7, pl. 16, B 1-2.

[68] *Ibidem*, p. 117, p. 144, C 62, pl. 51,4. The *phalerae* in the hoard from Biharugra (formerly Ugra) (Gallus, Horváth 1939, p. 18-20, № 4, pl. 12-19; Kemenczei 2005, p. 115, p. 131-132, B 6, pl. 13, C 1-23; 14; 15; 16, A 84-98), which are sometimes mentioned as analogies, are in fact simpler conical buttons or discs, without specially shaped knobs at the front or other attachments.

[69] Vinski 1955, pl. 1,3.

[70] Vasić 1977, p. 65, pl. 3,11.

Sokolačkopolje, Tumulus III[71], Rusanoviči, Tumulus XVIII[72] and Rusanoviči, Tumulus LXXXVI[73]. None of these mounds have been attributed to any of the Glasinac phases and some may contain material from several periods. It may be mentioned, that in the Glasinac region an asymetrical ring-pendant of the Ghidici type (see below) is also present in Plješivica, Mound I, layer III, which has also not been attributed to a specific phase[74]. Phalerae with high central knob at the front, constructed in the same way as the one from Teleac, are also known from Tsaousítsas (Τσαουσίτσας, also transcribed as Chauchitsa or Čaušica) graves 18[75], 19[76] and 20[77]. The burials from Tsaousítsas have, in the frame of the Macedonian Bronzes, largely been attributed to the early phase, dated to the early 8th century BC[78], or roughly corresponding to the Hallstatt C period. Slightly older phases have been proposed by Kilian, who attributed burials 18 and 19 from Tsaousítsas to this?! phase Chauchitsa IB, corresponding to the Macedonian Iron Age I B 3 and Vergina IIIC (late), roughly contemporaneous to Hallstatt B3[79].

The asymmetrical ring-pendant is widely spread in the Balkans, having analogies in Romania in the hoards from Ghidici[80], Hunia/Maglavit[81] and the find from Desa[82], all dated to the Hallstatt C period. A typologically early expression of such pendants is found in one of the burials from Basarabi[83], eponymous site of the culture by the same name. On occasion of publishing the hoard from Ghidici, A. Oancea compiled a number of the finds, mostly hoards,

[71] Fiala 1895, p. 25, fig. 64 (found, among others, together with arched fibulae and spectacle fibulae).
[72] *Idem* 1897, p. 5, fig. 1 (together with bronze knobbed fibulae, boat-shaped fibulae, arched fibulae with two spirals, bronze fibulae with openwork foot, double-axe pendants, various bronze appliques and iron knives).
[73] *Idem* 1896, p. 20-21, fig. 43 (found, among others, with a ring-headed pin, bronze appliques and fragments of iron knives and lances).
[74] Benac 1956, p. 18, p. 54, pl. 22,19. See also Benac, Čović 1957 for periodisation and chronology.
[75] Casson 1925, p. 12, fig. 4, pl. 1c (described as *shield-centre*).
[76] *Ibidem*, p. 12-13, fig. 5, pl. 1a (described as *shield-centre*).
[77] *Ibidem*, p. 20, pl. 1b (described as *shield-centre*).
[78] Bouzek 2006, p. 99.
[79] Kilian 1975b, p. 70-88 and pl. 101-102.
[80] Oancea 1972.
[81] Stoica, Cioană 1975.
[82] Berciu 1939a, p. 326-327, fig. 221, 4-5; Berciu 1939b, p. 176-177, fig. 221, 4-5.
[83] Dumitrescu 1968, p. 198, p. 216, fig. 23,7, 217 (The pendant is most probably from Tumulus VII, Grave 4, inventory b, where the text clearly describes the ring-pendant, however no reference to the illustration is given, and in the discussion of objects further on there is no mention which grave this particular object came from).

from Bulgaria, Hungary, Romania and Yugoslavia[84]. It may be remarked that he could identify no such pendants from Transylvania, except for an example reputedly from Moigrad[85] - Teleac is the first such pendant found in Transylvania during professional scientific research. Besides the eponymous site, ring-pendants of the Ghidici type have been found in Basarabi culture contexts at Gornea – *Pod Păzăriște*[86]. They are also part of the Zemun find[87], the hoard from Rujište[88], and have been found together with pottery of the Basarabi style in Zlot Cave[89], so that they can securely be connected to this culture.

Bouzek considered the ring pendants together with *Thracian Bronzes*, stressing that his list was far from exhaustive[90]. His passing comment that „... *none are in close association with the Macedonian bronzes*." is today no longer valid[91], since pendants of the Ghidici type and Macedonian bronze come together spectacularly in the closed finds of grave 15 at Marvinci - Lisičin Dol (so-named *Priestess burial*) or in burial 12 at Bučinci[92]. To the south the distribution does not appear to go beyond the Enodia sanctuary at Pherai and the

[84] Oancea 1972, p. 540-544, p. 545, fig. 1 – on account of this hoard the pendant shape is often described as *type Ghidici*. Kemenczei (2005, p. 86, p. 141, C 20, pl. 47 F, 4-6) mentions such pendants in Hungary only from Szeged – Öthalom and dates them to the 8th and early 7th century BC (See also Gallus, Horváth 1939, p. 37, pl. 48,9-11).

[85] The provenance *Moigrad* for older finds, especially from the antiquities market, needs to be viewed with reservation, since this localisation was often given due to the very well-known sites of Moigrad and Roman Porolissum, in order to lend authenticity to fakes or to achieve higher prices for objects from elsewhere (mentioned discreetly by Horedt 1977, p. 7 for other finds, and very clearly by Prohászka 2016, p. 6 for Moigrad hoard I, which is in fact from Pusta, some 35 km NW of Moigrad – we are grateful to Tudor Soroceanu for indicating this publication). Nestor (1935, p. 25 footnote*) had correctly placed the origin of a socketed axe reputedly from Moigrad to the east, probably as far as Siberia. It is remarkable that the *Siberian* socketed axe was not illustrated by Nestor and does not in fact appear on the original photograph of Mihaly Händler, published by Prohászka (Prohászka 2016, p. 3, fig. 2). In spite of this, it was included in a more recent photograph of the entire hoard (Stech 1997, p. 168 lower middle). On the sad history of early research at Porolissum see Gudea 1989, p. 20-24, p. 33-37).

[86] Gumă 1993, pl. 62, 10; Vulpe 1986, p. 78, fig. 7,17.

[87] Јевтић 1994, p. 80-82, pl. 1,7-10.

[88] Vasić 1977, p. 65, pl. 11,8-16.

[89] *Ibidem*, p. 70, pl. 20, 1-3 (pottery), 12 (pendant).

[90] Bouzek 1974, p. 319-323, fig. 18,8-14 and p. 292, fig. 6,5 for a rough distribution map. See also Kilian 1975b, p. 109 and pl. 91.

[91] Bouzek 1974, p. 321. Although later he was aware of the new finds, including grave 15 at Marvinci - Lisičin Dol, Bouzek (2006) does not take up the discussion again on the connection between *Macedonian* and *Thracian* bronzes.

[92] Митревски 1997 (Marvinci); Mitrevski 2007, p. 566, fig. 3 (Marvinci), p. 570-572, fig. 10-11 (Bučinci).

Athena Itonia sanctuary in Philia, both in Thessaly[93]. These three bronze objects thus confirm the connection of the destroyed hoard with the Basarabi period (Hallstatt B3-C) and underline southern and southwestern connections as far away as Macedonia, specifically to the region of the Axios/Vardar valley.

In view of these analogies pointing south and the fact that the biconical bead (№ 37, **Fig. 4,1**) at Teleac was found by metal detector at a very shallow depth in the area of the destroyed hoard, itself again with possible analogies in the south, it may also have also belonged to the hoard[94].

Closing remarks

The combination of controlled metal detector survey and classical archaeological excavation led to the identification of a hoard of the Hallstatt B3-C period (Basarabi Culture) on the lower slopes of Vârful Jidovaru. Although the hoard was disturbed by modern agricultural activity and many aspects of the precise context remain uncertain for this reason, it is highly likely to be connected to *feature E* from the excavation. This accepted, the hoard of bronze and iron objects stood in relation to an intentionally deposited vessel group, presumably containing consumables such as foods and/or drinks. The group of vessels from *feature E* and the immediate surrounding shows elements of both the Gáva culture and typical decorations of the later Basarabi culture, allowing a date to the Hallstatt B3-C period and indicating at least some degree of cultural continuity. The metal objects from the hoard include tools and jewellery (apparently no weapons and no raw material) and fit well into the repertoire known from the period and the cultural environment. At the same time, they also enhance our knowledge of the repertoire of types in use during this period (two new trunnion axe types for Teleac, iron socketed axe with lateral ledge, massive iron wedge). Furthermore, some of the bronze objects from the hoard (buckle-applique, *phalera*, probably the biconical bead) and the isolated bead with triple ribs from the Grușet Plateau indicate cultural contacts to the south and southwest, as far as Macedonia and northern or even central Greece, which had previously not been evident. Reviewing the analogies, in fact hoard II from Vinţu de Jos not only contains typical Macedonian Bronzes, but indeed an almost complete chain and phalera set of *Macedonian* type (**Fig. 11,**

[93] Kilian 1973, especially pl. 88; Kilian 1975a, p. 174-175, pl. 78,75-78, 79,1-2 (Kilian mentions one more example from Dodona, situated to the west from Pherai); Kilian-Dirlmeier 1979, p. 6-9, pl. 1; 2,24-26; Kilian-Dirlmeier 2002, p. 274, list 32; p. 59, fig. 6 (map), pl. 59,905-914.

[94] Although another bead with three ribs (№ 73, **Fig. 4,24**) most probably dates to this period and analogies point to the same southern connection, it was found far from the destroyed hoard on the Grușet plateau.

middle)[95], very similar to the one worn by the *Priestess* in grave 15 at Marvinci - Lisičin Dol (**Fig. 11, left**), even though the characteristic pyxis pendant appears to be missing. Pyxis pendants with bird protomes[96], such as the one at the end of the chain in Marvinci - Lisičin Dol, very frequent among the Macedonian Bronzes, have not, so far, been found in Transylvania. These pendants have long been thought to have magical meaning[97] and the one worn by the „Priestess" at Marvinci - Lisičin Dol appears to have contained some kind of psychoactive substance, probably opium[98], underlining the ritual and/or medical power of the buried individual. The connection between high status personalities, presumably with ritual power, between Macedonia and Transylvania is thus much more important, and perhaps direct, than previously recognised. In Teleac only few individual parts of such a set have been found (beads, ring-pendant, *phalera* - **Fig. 11, right**), but they probably do show intense long distance contacts of high status individuals far to the south[99]. This fact also has major significance for the establishment of early iron metallurgical technology, for which Hansen has recently again drawn attention to the contexts and the revised chronology in Greece[100]. Other directions of cultural contacts, one to the east, possibly as far as

[95] Popa, Berciu 1964; Popa, Berciu 1965; Petrescu-Dîmboviţa 1977, p. 164, p. 368-369, pl. 391-393. The upper pendant has, in all cited publications, been described as fragmentary horsegear, but is certainly the top end of the chain set, as documented by the context in grave 15 from Marvinci - Lisičin Dol. Although Soroceanu, Medeleţ (1999) variously referred to analogies among the *Macedonian Bronzes* when discussing the chain from Moldova Veche, they could at that time not remark the exact parallels for the chain from Vinţu de Jos II. Indeed their late dating of the Moldova Veche chain is confirmed by the discussion here, and that chain could perhaps even be thought of as a not fully understood copy of the Macedonian prototypes. Other chains typical of the *Macedonian Bronzes*, but much more fragmentary than the example from Vinţu de Jos II, have been published from Kisterenye in northern Hungary (Kemenczei 2005, p. 87, p. 139, C 9, pl. 43, J 1-2) and from *Lower Austria* (Gallus, Horváth 1939, p. 87, pl. 6,3).

[96] Bouzek 1973, p. 24-37.

[97] *Ibidem*, p. 24; Mitrevski 2007, especially p. 566-569.

[98] Митревски 1997, p. 82, 88; Bouzek 2006, p. 107. The sounds produced by some of the objects mentioned in the present article may have had additional symbolic significance - see, for example, Pomberger 2017. A completely different interpretation of the Marvinci burial is offered by N. Chausidis (Чаусидис 2017), who interprets the small curved pendants from the top of the chain as symbolic cheek-pieces and proposes: „*... the following semiotic relations: a girl/mare + equipment for riding = a harnessed mare/wife, i.e. the use of these objects as symbols of a "wild woman" who is transferred from the sphere of "natural"to the sphere of "cultural" through the act of marriage, becoming a "tamed/a domesticated wife". Within the same relationship the following paradigm is proposed (husband = ruler: wife = subject)*".

[99] Such contacts, but only to southwestern Romania, had already been proposed by Kilian 1975b, p. 89.

[100] Hansen 2019. For discussions and data concerning the chronology of the Early Iron Age in Greece see, for example, Wardle *et alii* 2007; D´Onofrio 2011; Toffolo *et alii* 2013; Gimatzidis 2014; Wardle *et alii* 2014; Facorellis 2017. See also Pappa 2012 with a view from western

the Caucasus[101], and another further to the west and southwest (Italy)[102], have not been followed in detail here. However, we may cite the repeatedly expressed idea of a Caucasian inspiration for the Macedonian Bronzes[103], and it is also Hansen, who has drawn renewed attention to the bimetallic dagger of Caucasian type from Pănade, not very far east of Teleac, as well as to the *fin-shaped chape (Flossenortband)* in grave 169 at Brno-Obřany much further west, which he convincingly dates to the 10th century BC[104]. While that grave contains an early iron lance, the *fin-shaped chape* finds numerous analogies in the Caucasus. Transylvania, and specifically the fortified site at Teleac, appears to have played a central and pivotal role at various times, especially in the Early Iron Age, and presumably in different ways. One significant aspect of this was an important mediatory position in a very wide-flung network of cultural, technological and spiritual connections spanning western Eurasia from the Caucasus to Greece.

Catalogue of the metal objects from the 2010-2011 campaigns discussed in this study, in order of numbering:

Object № 9. Winged axe with narrow blade. The blade is slightly broadened to the cutting edge, which is widened and blunt due to hammering. The wings are roughly at the base of the upper quarter of the axe and are formed by the widening of the body and sharp angular, almost horizontal ledges. The hafting section above the wings is narrower than the blade and slightly tapering to the slightly rounded chafe. The top is slightly deformed due to hammering.

Mediterranean Spain, with indications, in spite of uncertainties, for an early dating of Greek Geometric pottery.

[101] The *phalerae* from Holirady (Żurowski 1949, p. 163, № 24, p. 203, № 2, p. 237, pl. 38,3, p. 238, pl. 39,3), mentioned above as close analogies for *phalera* from Vinţu de Jos II, may indicate the general direction of such contacts between Transylvania and the steppe landscapes to the east. In the Caucasus phalerae with bird-cage knobs, often, but not always, with animal figurines have long been known from the Kazbek find (Bayern 1885, p. 41-56, especially pl. III, 2-3.7.9 [as Stepan-Zminda, commented critically in Tallgren 1930]; Tallgren 1930, p. 143-144, № 120-151, p. 167, p. 139, fig. 55-57, p. 144, fig. 62-63 [with the best illustrations]; Gallus, Horváth 1939, p. 73, pl. 80-81 [limited selection]; წითლანაძე 1976, especially pl. 18-20). T. Soroceanu and F. Medeleţ have discussed Caucasian connection of other objects from Romania, especially the bronze animal figurine from Moldova Veche (Soroceanu, Medeleţ 1999, especially p. 201-205, with extensive further literature). See also Metzner-Nebelsick 2002, who does not, however, follow the connections to the Macedonian Bronzes or the ring pendants of Ghidici type in any detail.

[102] Soroceanu, Medeleţ 1999, especially p. 201, footnote 96. Connections between the „Macedonian Bronzes" and southern Italy have also been discussed, for example, by Pingel 1980 and Bouzek 2000.

[103] Gergova 1980; Bouzek 1983; Bouzek, Ondřejová 1991; Bouzek 2006, p. 99; Bouzek 2012.

[104] Hansen 2019, p. 211, p. 213, fig. 12-13.

The entire axe has a flat rectangular cross-section. Length 12.3 cm, maximum width (wings) 3.2 cm, maximum thickness 0.9 cm. Iron, 127.50 g. **Fig. 5,7**.

Object № 10. Applique with two long narrow pointed-oval bars and three central flat round knobs between and beside them, which all have plane-convex cross-sections. The back has an ear for fixing, which is placed to one side of the object, transverse to the two pointed-oval ornaments. The ear at the back also bears the trace of the casting cone. Length (pointed ovals) 4.2 cm, width (round knobs) 3.5 cm, thickness (with ear) 1.3 cm. Bronze, 8.81 g. **Fig. 4,5**.

Object № 11. Socketed axe with lateral ledge. The blade is broadened to the cutting edge and has a rectangular cross-section with rounded edges. Roughly in the middle of one side there is an abrupt ledge, above which the axe is slightly narrower. The upper part is a socket, which was hammered into an oval shape with a seam visible on one broad side. The hafting socket has the shape of an inverted truncated cone and ends just above the ledge. Preserved length 10.7 cm, maximum width at the blade 4.5 cm, thickness at the blade 1.2 cm, diameter of the socket 2.9 x 2.4. Iron, 241.77 g. **Fig. 5,9**.

Object № 13. Winged axe with broad blade. The blade is slightly broadened to the cutting edge. The wings are roughly at the base of the upper third of the axe and directed slightly upwards. The hafting section above the wings is narrower than the blade and the top is slightly deformed due to hammering. The entire axe has a flat rectangular cross-section. Length 15.3 cm, maximum width (wings) 4.8 cm, thickness 0.6 cm. Iron, 204.94 g. **Fig. 5,6**.

Object № 14. Knife with convex back. The cutting edge is almost straight and has an abrupt angular ledge to the hafting tongue. The cross-section of the blade is wedge-shaped, that of the broken handle rectangular. Preserved length 8.4 cm, maximum width 1.5 cm, maximum thickness 0.3 cm. Iron, 9.18 g. **Fig. 5,4**.

Object № 15. Undetermined object (knife?). Longish, slightly triangular strip with flat wedge-shaped cross-section. One end is much narrower than the other. The entire object is bent and broken diagonally in the middle. Preserved length 12.1 cm, maximum width 2.9 cm, maximum thickness 0.25 cm. Iron, 262.1 g. ***Fig. 5,1***.

Object № 16. Fragment of a knife with straight back. The cutting edge appears to have been straight and has a concave ledge to the hafting spike. The

cross-section of the blade is wedge-shaped, that of the broken handle rectangular with the end of the spike round in cross-section. Preserved length 5.2 cm, maximum width 1.0 cm, maximum thickness 0.25 cm. Iron, 2.61 g. **Fig. 5,3**.

Object № 19. Undetermined object. Longish amorphous lump with roughly rectangular cross-section. Preserved length 2.9 cm, maximum width 0.8 cm, maximum thickness 0.4 cm. Iron, 4.97 g. **Fig. 5,5**.

Object № 23. Fragment of a bracelet. Straight edged, curved bar with D-shaped cross-section. One end tapers to a rounded point. The break shows a casting bubble in the section. Preserved length 5.4 cm, width 0.8 cm, maximum thickness 0.5 cm. Bronze, 10.27 g. **Fig. 4,6**.

Object № 24. Fragment of a bracelet. Straight edged, slightly curved strip with two parallel grooves/central rib. Cross-section rectangular (with grooves). Preserved length 1.7 cm, width 1.0 cm, thickness 0.2 cm. Bronze, 1.37 g. **Fig. 4,4**.

Object № 25. Massive axe-shaped wedge. The blade is slightly broadened to the cutting edge. Both broad sides show a shallow groove. The chafe is slightly broadened due to hammering. The cross-section is rounded rectangular at the top, and hour-glass-shaped on the blade. Length 9.4 cm, maximum width (blade and chafe) 3.8 cm, maximum thickness 2.7 cm. Iron, >300 g. **Fig. 5,10**.

Object № 27. Pendant. A large ring with circular exterior contour and offset inner opening. A long shaft shows nine slightly diagonal ribs, imitating a wound cord. The top has a small swelling with central hole. The cross-section of the object is flat on the underside and roof-shaped to convex on the front side, with the thickest part at the small upper suspension hole. The ring-shaped lower part is slightly bent. Length 8.1 cm, maximum width 5.0 cm, maximum thickness 0.3 cm. Bronze, 12.37 g. **Fig. 4,8**.

Object № 37. Biconical bead with round cross-section. Length 1.6 cm, diameter 1.5 cm. Bronze, 10.20 g. **Fig. 4,1**.

Object № 61. Phalera fragment with pendant. Larger, very fragmentary backward disc. Cast into a central opening is an ear on the back, and a mushroom-shaped knob on the front, which ends on top with four-leafed petals and a central bulge. The mushroom-shaped knob also holds the ring of a pendant, which continues on one side with a cross-bar, rounded at the ends, and

is then broken off. Part of a continuation is Object № 62. Diameter of central upper rosette 2.0 cm, maximum thickness with ear 1.6 cm, preserved length of pendant 3.2 cm. Bronze, 30 g. **Fig. 4,7 (top)**.

Object № 62. Pendant fragment (part of Object № 61). Curved fragment of a pendant, with one central channelled groove, a central bar and on either side shorter hanging prolongations ending in rounded swellings. Maximum dimensions 3.6 x 1.9 x 0.3 cm. Bronze, 3 g. **Fig. 4,7 (bottom)**.

Object № 63. Small, very corroded knife with short blade and narrow tongue-handle. The blade has a wedge-shaped cross-section while the handle has a rectangular one (rounded by corrosion). The tip of the blade is slightly rounded. Preserved length 5.2 cm, maximum width 1.1 cm, maximum thickness 0.4 cm. Iron, 3 g. **Fig. 5,2**.

Object № 73. Spool-shaped bead. A cylindrical body with round section bears three transverse rib-like wings, flattened on one side. Maximum length 2.0 cm, maximum width 2.2 cm, maximum thickness 1.7 cm. Bronze, 20 g. **Fig. 4,2**.

Object № 82. Applique. Rhomboid applique with pointed ends bent backwards. Very thin metal sheet. Preserved length 1.0 cm, greatest width 0.8 cm, thickness >0.05 cm. Bronze, >1 g. **Fig. 4,3**.

Object № X2. Fragment of a socketed axe. Rhomboid fragment from the socket of an axe, with upwards pointed narrow edge. Corroded and curved in plan. Preserved length 6.0 cm, greatest width 3.4 cm, greatest thickness 0.4 cm. Iron, 27 g. **Fig. 5,8**.

TELEAC – LA 70 DE ANI DE LA PRIMA DESCOPERIRE. *BRONZURI MACEDONENE* DIN CERCETĂRILE ANILOR 2010-2011

REZUMAT

Situl de la Teleac a fost descoperit în urmă cu 70 de ani și cercetat științific în 1959-1960, 1978-1987, 2007; ultimele cercetări au început în 2016.

Aici este prezentată o selecție a rezultatelor cercetărilor Școlii Europene de Vară 2010-2011. Accentul este pus pe un grup de obiecte rezultate în urma prospecțiunii cu detectorul de metale, precum și pe săpătura unei concentrări de obiecte identificate în acest proces. Cel mai probabil, este vorba de un depozit care a fost puternic deranjat de lucrările agricole.

Depozitul includea mai multe obiecte din bronz (bijuterii: mărgele, catarame, pandantive, falere) și obiecte din fier (unelte: cuțite, topoare, securi) și nu conținea deci nici o armă. Într-o suprafață cercetată în 2011, a fost identificat contextul inițial al depozitului deranjat care conținea și câteva vase complete. Ceramica indică forme de tradiție Gáva, dar, pe baza unor piese cu decor caracteristic, acestea pot fi atribuite culturii Basarabi. Astfel, depozitul poate fi datat în perioada Hallstatt B3-C.

De un interes deosebit sunt câteva elemente de port (mărgele, pandantive, falere), care găsesc bune analogii printre bronzurile macedonene. Din această perspectivă, se propune o nouă clasificare a depozitului descoperit la Vințu de Jos II, care conținea, de asemenea, un ansamblu de tipul bronzurilor macedonene. Sunt abordate legăturile la mare distanță, până în Caucaz spre est și Italia. O legătură între Caucaz și bronzurile macedonene a fost menționată în mai multe rânduri, deși traseul conexiunii nu era clar. Transilvania (Teleac, Vințu de Jos II) ar putea fi văzută, eventual, ca o punte între cele două regiuni.

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Bibliography:

Aldea, Ciugudean 1987 – I. A. Aldea, H. Ciugudean, Depozitul hallstattian Vinţu de Jos III, *Apulum*, 24, 1987, p. 79-89

Aldea, Ciugudean 1995 – I. A. Aldea, H. Ciugudean, Der dritte hallstattzeitliche Depotfund von Vinţu de Jos, Kr. Alba, Rumänien, in: T. Soroceanu (ed.), *Bronzefunde aus Rumänien,* Prähistorische Archäologie in Südösteuropa 10, Berlin, 1995, p. 213-223

Bălan *et alii* 2015 – G. Bălan, R. Burlacu-Timofte, R. Ota, T. Muntean, M. Râza, O. Oarga, D. Anghel, Raport preliminar cu privire la săpăturile arheologice preventive întreprinse la Gâmbaș – sit 2, *Apulum*, 52/1, 2015, p. 133-179

Bayern 1885 – *Friedrich Bayern´s Untersuchungen über die ältesten Gräber- und Schatzfunde in Kaukasien, herausgegeben und mit einem Vorwort versehen von Rud. Virchow*, *Zeitschrift für Ethnologie*, 17, 1885, Supplement, Berlin, 1885

Becker 1954 – C. J. Becker, A segmented faience bead from Jutland with notes on amber beads from Bronze Age Denmark, *Acta Archaeologica (København)*, 25, 1954, p. 241-252

Benac 1956 – A. Benac, B. Čović, *Glasinac 1. Bronzano doba*. Katalog Prehistoriske Zbirke Zemaljskog Muzeja u Sarajevu 1, Sarajavo, 1956

Benac, Čović 1957 – A. Benac, B. Čović, *Glasinac 2. Željezno doba*, Katalog Prehistoriske Zbirke - Zemaljskog Muzeja u Sarajevu 2, Sarajavo, 1957

Berciu 1939 – D. Berciu, Arheologia preistorică a Olteniei (urmare şi sfârşit), *Arhivele Olteniei*, 18.104-106, 1939, p. 245-390

Berciu 1939b – D. Berciu, *Arheologia preistorică a Olteniei*, Craiova, 1939

Berciu, Comşa 1956 – D. Berciu, E. Comşa, Săpăturile arheologice de la Balta Verde şi Gogoşu (1949 şi 1950), *Materiale şi Cercetări Arheologice*, 2, 1956, 251-489

Boroffka 1987 – N. G. O. Boroffka, Folosirea fierului în România de la începuturi pînă în secolul al VIII-lea î.e.n, *Apulum*, 24, 1987, p. 55-77

Boroffka 1991 – N. G. O. Boroffka, *Die Verwendung von Eisen in Rumänien von den Anfängen bis in das 8. Jahrhundert v. Chr. Bemerkungen*, Berlin, 1991

Boroffka 2001 – N. Boroffka, Bemerkungen zu einigen Bernsteinfunden aus Rumänien, *Archäologisches Korrespondenzblatt*, 31, 2001, p. 395-409

Boroffka 2002 – N. Boroffka, Observaţii asupra descoperirilor preistorice de chihlimbar din România, *Apulum*, 39, 2002 (2003), p. 145-168

Boroffka, Boroffka 2020 – N. Boroffka, R. Boroffka, Prähistorische Siedlungsbefunde und Bestattungen, in: R. Harhoiu, N. Boroffka, R. Boroffka, E. Gáll, A. Ioniță, D. Spânu, *Schäßburg – Weinberg / Sighișoara – Dealul Viilor II. Archäologische Grabungen bei der Fundstelle „Gräberfeld“*. Archaeologica Romanica VI, Târgoviște, 2020, p. 51-83

Boroffka, Ciugudean 2012 – N. Boroffka, H. Ciugudean, Teleac, Kreis Alba (Rumänien), *Sommerschule »Forging Identities«*, Deutsches Archäologisches Institut Jahresbericht 2011. *Archäologischer Anzeiger 2012/1*, *Beiheft*, p. 346-348

Borș 2015 – C. Borș, Depozitele de bronzuri Tărtăria I și Tărtăria II, in: H. Ciugudean, G. Bălan, *Artizanii epocii bronzului. Descoperiri recente de depozite de bronzuri în Transilvania*, Alba Iulia, 2015, p. 51-64

Borș *et alii* 2013 – C. Borș, L. Irimuș, V. Rumega, S. Bobrotă, C. Rișcuța, Un nou sit de tip Basarabi. Raport preliminar asupra cercetărilor arheologice preventive la Tărtăria – Podu Tătăriei Vest (Campania 2012), *Cercetări Arheologice*, 20, 2013, p. 9-102

Borș *et alii* 2017 – C. Borș, L. Rumega-Irimuș, V. Rumega-Irimuș, Cercetări arheologice sistematice în cuprinsul sitului hallstattian Tărtăria – Podu Tătăriei Vest. Raport preliminar al campaniilor 2016-2017, *Cercetări Arheologice*, 24, 2017, p. 17-82

Bouzek 1973 – J. Bouzek, *Graeco-Macedonian Bronzes (Analysis and chronology)*. *Acta Universitatis Carolinae. Philosophica et Historica. Monographia* 49, 1973, Praha, 1974

Bouzek 1974 – J. Bouzek, Macedonian Bronzes. Their origins, distribution and relation to other cultural groups of the Early Iron Age, *Památky Archeologické*, 65.2, 1974, p. 278-341

Bouzek 1982 – J. Bouzek, Addenda to Macedonian Bronzes, *Eirene*, 18, 1982, p. 35-59

Bouzek 1983 – J. Bouzek, Caucasus and Europe and the Cimmerian problem, *Sborník Národního Muzea v Praze, Řada A Historie*, 37.4, 1983, p. 177-232

Bouzek 1987 – J. Bouzek, Macedonian and Thessalian bronzes; Macedonian beads, *Graecolatina Pragensia (Acta Universitatis Carolinae – Philologica 1)*, 11, 1987, p. 77-101

Bouzek 2000 – J. Bouzek, Makedonische Bronzen in Italien, in: F. Krinzinger (ed.), *Akten des Symposiums Die Ägäis und das westliche Mittelmeer. Beziehungen und Wechselwirkungen 8. Bis 5. Jh. v. Chr., Wien, 24. Bis 27. März 1999*. Österreichische Akademie der Wissenschaften, Philosophisch-Historische Klasse, Denkschriften 288. Archäologische Forschungen 4. Wien, 2000, p. 363-369

Bouzek 2006 – J. Bouzek, Macedonian Bronzes – 30 years later, *Folia Archaeologica Balcanica*, 1, 2006, p. 97-109

Bouzek 2012 – J. Bouzek, Central Europe and Caucasus in the Early Iron Age, in: W. Blajer (ed.), *Peregrinationes archaeologicae in Asia et Europa Joanni Chochorowski dedicatae*, Kraków, 2012, p. 537-547

Bouzek, Ondřejová 1991 – J. Bouzek, I. Ondřejová, La tradition caucasienne, hallstattienne et cimmérienne dans l´orfèvrerie archaïque, *Thracia Pontica* 4 (Qutrième Symposium International Thracia Pontica IV, Sozopol, 6-12 octobre 1988), Sofia, 1991, p. 51-58

Casson 1921 – S. Casson, Excavations in Macedonia, *The Annual of the British School at Athens*, 24, 1919-1920; 1920-1921 (1921), p. 1-33, Pl. 1

Casson 1925 – S. Casson, Excavations in Macedonia – II, *The Annual of the British School at Athens*, 26, 1923-1924, 1924-1925 (1925), p. 1-29

Ciocea Safta 1996 – E. Cicoea Safta, Necropola tumulară de pe Ostrovu Mare, *Studii și Cercetări de Istorie Veche și Arheologie*, 47, 1996, p. 159-190

Ciugudean 1997 – H. Ciugudean, *Cercetări privind epoca bronzului şi prima vârstă a fierului în Transilvania*. Bibliotheca Musei Apulensis 7, Alba Iulia, 1997

Ciugudean 2012 – H. Ciugudean, The chronology of the Gáva culture in Transylvania, in: W. Blajer (ed.), *Peregrinationes archaeologicae in Asia et Europa Joanni Chochorowski dedicatae*, Kraków, 2012, p. 107-121

David 2017 – W. David, Makedonische Bronzen 8.-6. Jh. v. Chr., in: W. David (ed.), *Das goldene Antlitz des unbekannten Makedonenkönigs. Makedonen und Kelten am Ohrid-See – ein Zusammenprall der Kulturen?* Schriften des Kelten Römer Museums Manching 8, Manching, 2017, p. 8-13

Davidescu 1981 – M. Davidescu, Un tezaur de podoabe tracice descoperit la Hinova-Mehedinţi, *Thraco-Dacica*, 2, 1981, p. 7-22

Davidescu, Vulpe 2010 – M. Davidescu, A. Vulpe, The urnfield in Hinova, Mehedinți county (Roumania), *Dacia*, N.S., 54, 2010, p. 5-54

Dobat *et alii* 2019 – A. S. Dobat, S. O. Wood, B. Søndergaard Jensen, S. Schmidt, A. Dobat, "I now look forward to the future, by finding things from our past…" Exploring the potential of metal detector archaeology as a source of well-being and happiness for British Armed Forces veterans with mental health impairments. 50-year-old male war veteran and survey participant, suffering from PTSD and depression, on the effect of metal detecting, *International Journal of Heritage Studies*, 2019. https://doi.org/10.1080/13527258.2019.1639069 (last accessed 2019-08-11)

D´Onofrio 2011 – A. M. D´Onofrio, Athenian burials with weapons: The Athenian warrior graves revisited, in: A. Mazarakis Ainian (ed.), *The "Dark Ages" revisited. Acts of an international symposium in memory of William D. E. Coulson, University of Thessaly, Volos, 14-17 June 2007*, Volos, 2011, p. 645-673

Dumitrescu 1968 – V. Dumitrescu, La nécropole tumulaire du Premier Âge du fer de Basarabi (Dép. De Dolj, Olténie), *Dacia*, N.S., 12, 1968, p. 177-260

Facorellis 2017 – Y. Facorellis, Radiocarbon dating of the Early Iron Age Greece: An overview, in: A. Mazarakis Ainian, A. Alexandridou, X. Charalambidou (eds.), *Regiona stories towards a new perception of the Early Greek World.* Acts of an international symposium in honour of professor Jan Bouzek, Volos 18-21 June 2015, Volos, 2017, p. 747-776

Fiala 1895 – F. Fiala, Die Ergebnisse der Untersuchung prähistorischer Grabhügel auf dem Glasinac im Jahre 1893, *Wissenschaftliche Mittheilungen aus Bosnien und der Hercegowina*, 3, 1895, p. 3-38

Fiala 1896 – F. Fiala, Die Ergebnisse der Untersuchung prähistorischer Grabhügel auf dem Glasinac im Jahre 1894, *Wissenschaftliche Mittheilungen aus Bosnien und der Hercegowina*, 4, 1896, p. 3-32

Fiala 1897 – F. Fiala, Die Ergebnisse der Untersuchung prähistorischer Grabhügel auf dem Glasinac im Jahre 1895, *Wissenschaftliche Mittheilungen aus Bosnien und der Hercegowina*, 5, 1897, p. 3-38

Gallus, Horváth 1939 – S. Gallus, T. Horváth, *Un peuple cavalier préscythique en Hongrie. Trouvailles archéologiques du premier âge du fer et leurs relations avec l'Eurasie / A legrégibb lovasnép Magyarországon: a korai vaskorból*

való régészeti hagyatéka és euráziai kapcsolatai. Dissertationes Pannonicae ex Instituto Numismatico et Archaeologico Universitatis de Petro Pázmány Nominatae Budapestinensis Provenientes, Series II, 9, Texte / Szöveg & Planches / Táblák, Budapest, 1939

Gergova 1980 – D. Gergova, Contributions to the problem of Thraco-Caucasian relations in the Early Iron Age, *Pulpudeva*, 3 (Semaines Philippopolitaines de l´histoire et de la culture Thrace 3, Plovdiv, 4-19 octobre 1978, Sofia, 1980, p. 296-304

Gimatzidis 2014 – S. Gimatzidis, Does time stand still in the Aegean? Early Iron Age chronology at Kastanas revisited, In: E. Stefani, N. Merousis, A. Dimoula (eds.), *A century of research in Prehistoric Macedonia 1912-2012. International conference proceedings*, Archaeological Museum of Thessaloniki, 22-24 November 2012, Thessaloniki, 2014, p. 303-312

Gudea 1989 – N. Gudea, *Porolissum. Un complex arheologic daco-roman la marginea de nord a Imperiului Roman. Volumul I (Cercetări și descoperiri arheologice pînă în anul 1977)*, *Acta Musei Porolissensis*, 13, 1989, p. 3-1178

Gumă 1993 – M. Gumă, *Civilizația primei epoci a fierului în sud-vestul României*, Bibliotheca Thracologica 4, București, 1993

Hänsel 1976 – B. Hänsel, *Beiträge zur regionalen und chronologischen Gliederung der älteren Hallstattzeit an der unteren Donau*. Beiträge zur Ur- und Frühgeschichtlichen Arch. des Mittelmeer-Kulturraumes 16-17 (Bonn 1976)

Hänsel 2000 – A. Hänsel, Ein bronzezeitlicher Hortfund aus der Gegend von Suceava, Rumänien, *Acta Praehistorica et Archaeologica*, 32, 2000, p. 109-121

Hänsel 2005 – A. Hänsel, Un depozit de bronzuri din ținutul Sucevei, in: T. Soroceanu (ed.), *Bronzefunde aus Rumänien 2. Beiträge zur Veröffentlichung und Deutung bronze- und älterhallstattzeitlicher Metallfunde in europäischem Zusammenhang/Descoperiri de bronzuri din România 2. Contribuţii la publicarea şi interpretarea descoperirlor de metal din epoca bronzului şi prima vârstă a fierului în contextul european*. Biblioteca Muzeului Bistriţa 11, Bistriţa, Cluj-Napoca, 2005, p. 285-299

Hansen 2019 – S. Hansen, The Hillfort of Teleac and Early Iron in southern Europe, in: S. Hansen, R. Krause (eds.), *Bronze Age Fortresses in Europe.* Proceedings of the Second International LOEWE Conference, 9-13 October 2017 in Alba Julia. Universitätsforschungen zur Prähistorischen Archäologie 339, Bonn, 2019, p. 201-225

Horedt 1977 – K. Horedt, Der Goldfund von Moigrad, *Germania*, 55, 1977, p. 7-20

Horedt *et alii* 1962 – K. Horedt, I. Berciu, A. Popa, Săpăturile de la Teleac (r. Alba), *Materiale și Cercetări Arheologice*, 8, 1962, p. 353-358

Jevtić 2015 – M. Jevtić, Basarabi and Ferigile finds on the border between the Carpathian Basin and Central Balkans. Contribution to Early Iron Age chronology, in: S. Berecki (ed.), *Iron Age chronology in the Carpathian Basin.* Proceedings of the International Colloquium from Târgu Mureș, 8-10 October 2015, Târgu Mureș, 2016, p. 9-18

Kemenczei 2005 – T. Kemenczei, *Funde ostkarpatenländischen Typs im Karpatenbecken*, Prähistorische Bronzefunde XX.10, Stuttgart, 2005.

Kilian 1973 – K. Kilian, Zur eisenzeitlichen Transhumanz in Nordgriechenland, *Archäologisches Korrespondenzblatt*, 3, 1973, p. 431-435

Kilian 1975a – K. Kilian, *Fibeln in Thessalien von der mykenischen bis zur archaischen Zeit*, Prähistorische Bronzefunde XIV.2, München, 1975.

Kilian 1975b – K. Kilian, Trachtzubehör der Eisenzeit zwischen Ägäis und Adria, *Praehistorische Zeitschrift*, 50, 1975, p. 9-140

Kilian-Dirlmeier 1979 – I. Kilian-Dirlmeier, *Anhänger in Griechenland von der mykenischen bis zur spätgeometrischen Zeit (Griechisches Festland, Ionische Inseln, dazu Albanien und Jugoislawisch Mazedonien*, Prähistorische Bronzefunde XI.2, München, 1979

Kilian-Dirlmeier 2002 – I. Kilian-Dirlmeier, *Kleinfunde aus dem Athena Itonia-Heiligtum bei Philia (Thessalien)*. Römisch-Germanisches Zentralmuseum, Forschungsinstitut für Vor- und Frühgeschichte, Monographien 48, Bonn, 2002

László 1975 – A. László, Începuturile metalurgiei fierului pe teritoriul României, *Studii şi Cercetări de Istorie Veche şi Arheologie*, 26, 1975, p. 17-39

László 1977 – A. László, Anfänge der Benutzung und der Bearbeitung des Eisens auf dem Gebiete Rumäniens, *Acta Archaeologica Academiae Scientiarum Hungaricae*, 29, 1977, p. 53-75

Marić 1964 – Z. Marić, Donja Dolina, *Glasnik Zemaljskog Muzeja u Sarajevu*, N.S., 19, 1964, p. 5-82

Metzner-Nebelsick 1992 – C. Metzner-Nebelsick, Gefäße mit basaraboider Ornamentik aus Frög, in: A. Lippert, K. Spindler (eds.), *Festschrift zum 50jährigen Bestehen des Institutes für Ur- und Frühgeschichte der Leopold-Franzens -Universität Innsbruck*, Universitätsforschungen zur Prähistorischen Archäologie 8, Bonn, 1992, p. 349-383

Metzner-Nebelsick 2002 – C. Metzner-Nebelsick, *Der „Thrako-Kimmerische" Formenkreis aus der Sicht der Urnenfelder- und Hallstattzeit im südöstlichen Pannonien*. Vorgeschichtliche Forschungen 23, Rahden/Westf., 2002

Mitrevski 2007 – D. Mitrevski, Pogrebuvanja na svešteničkite vo železno vreme vo Makedonija, in: M. Blečić, M. Črešnar, B. Hänsel, A. Hellmuth, E. Kaiser, C. Metzner-Nebelsick (eds.), *Scripta praehistorika in honorem Biba Teržan*, *Situla*, 44, Ljubljana, 2007, p. 563-582

Mitrofan 1967 – I. Mitrofan, Așezarea hallstattiană de la Teleac, *Acta Musei Napocensis*, 4, 1967, p. 431-438

Morintz, Roman 1969 – S. Morintz, P. Roman, Un nou grup hallstatian timpuriu în sud-vestul României – Insula Banului, *Studii și Cercetări de Istorie Veche*, 20, 3, 1969, p. 393-423

Nestor 1935 – I. Nestor, Ein Bronze-Depot aus Moigrad, Rumänien, *Praehistorische Zeitschrift*, 26, 1935, p. 23-57

Oancea 1972 – A. Oancea, Depozitul de bronzuri de la Ghidici, *Studii și Cercetări de Istorie Veche*, 23, 4, 1972, p. 537-552

Pappa 2012 – E. Pappa, Framing some aspects of the Early Iron Age 'Chronological Mess': Aegean synchronisms with the West and their significance for the Greek Geometric series, *Kubaba*, 3, 2012, p. 1-38

Pare 2017 – C. Pare, Frühes Eisen in Südeuropa: Die Ausbreitung einer technologischen Innovation am Übergang vom 2. zum 1. Jahrtausend v. Chr., in: E. Miroššayová, C. Pare, S. Stegmann-Rajtár (eds.), *Das nördliche Karpatenbecken in der Hallstattzeit. Wirtschaft, Handel und Kommunikation in früheisenzeitlichen Gesellschaften zwischen Ostalpen und Westpannonien*. Archaeolingua 38, Budapest, 2017, p. 11-116

Petrescu-Dîmboviţa 1977 – M. Petrescu-Dîmboviţa, *Depozitele de bronzuri din România*, Biblioteca de Arheologie 30, Bucureşti, 1977

Petrescu-Dîmboviţa 1978 – M. Petrescu-Dîmboviţa, *Die Sicheln in Rumänien. Mit Corpus der jung- und spätbronzezeitlichen Horte Rumäniens*, Prähistorische Bronzefunde XVIII.1, München, 1978

Pingel 1970 – V. Pingel, *Eisenzeitliche Gräber von Dedeli und Mravinca in Jugoslawisch-Makedonien*. Marburger Winckelmann-Programm 1970, Marburg/Lahn, 1971, p. 7-28

Pingel 1980 – V. Pingel, Balkanische« Bronzen der älteren Eisenzeit in Sizilien und Unteritalien, *Situla*, 20-21 (Zbornik posvečen Stanetu Gabrovcu ob šestdesetletnici), 1980, p. 165-175

Podborský 1970 – V. Podborský, *Mähren in der Spätbronzezeit und an der Schwelle zur Eisenzeit*, Spisy Univesity J. E. Purkyně v Brně, Filosofická Fakultá 142, Brno, 1970

Pomberger 2017 – B. M. Pomberger, Bronzebommeln und Schellen - eine klangliche Errungenschaft aus der Spätbronze- und frühen Eisenzeit, *Studia Archaeologica Brunensia*, 22.2, 2017, p. 15-34

Popa, Berciu 1964 – A. Popa, I. Berciu, Contribution à l´étude des dépôts d´objects hallstattiens, *Dacia*, N.S., 8, 1964, p. 87-100

Popa, Berciu 1965 – A. Popa, I. Berciu, Un depozit de obiecte hallstattienne de la Vinţu de Jos, *Apulum*, 5, 1965, p. 51-70

Popović, Vukmanović 1998 – P. Popović, M. Vukmanović, *Vajuga-Pesak. Early Iron Age cemetery*. Cahiers des Portes de Fer, Monographies 3, Belgrade, 1998 / P. Popović, M. Vukmanović, Vajuga-Pesak. *Nekropola starijeg gvozdenog doba*, Ђердапске свеске, Посебна издања 3, Beograd, 1998

Prohászka 2016 – P. Prohászka, Neue Erkenntnisse zur Entdeckungsgeschichte des urnenfelderzeitlichen Hortfundes „Moigrad I", *Acta Praehistorica et Archaeologica*, 48, 2016, p. 1-7

Roeder 1997 – M. Roeder, Zur Bedeutung der im Basarabi-Stil verzierten Keramik. Heiligtümer in der Hallstattzeit?, in: C. Becker, M.-L. Dunkelmann, C. Metzner-Nebelsick, H. Peter-Röcher, M. Roeder, B. Teržan (eds.), *Χρόνος. Beiträge zur prähistorischen Archäologie zwischen Nord- und Südosteuropa. Festschrift für Bernhard Hänsel*, Internationale Archäologie. Studia honoraria 1, Espelkamp, 1997, p. 601-618

Rusu 1963 – M. Rusu, Die Verbreitung der Bronzehorte in Transsilvanien vom Ende der Bronzezeit bis in die mittlere Hallstattzeit, *Dacia*, N.S., 7, 1963, p. 177-210

Rusu 1967 – M. Rusu, Depozitul de coliere de la Coldău, *Apulum*, 6, 1967, p. 85-100

Rusu 1974 – M. Rusu, Începuturile metalurgiei fierului în Transilvania, in: H. Daicoviciu (ed.), *In memoriam Constantin Daicoviciu*, Cluj, 1974, p. 349-360

Soroceanu, Medeleţ 1999 – T. Soroceanu, F. Medeleţ, Die bronzene Kette mit Anhängern von Moldova Veche, am Eisernen Tor, in: N. Boroffka, T. Soroceanu (eds.), *Transsilvanica. Archäologische Untersuchungen zur älteren Geschichte des südöstlichen Mitteleuropa. Gedenkschrift für Kurt Horedt*, Internationale Archäologie, Studia honoraria 7, Rahden/Westf., 1999, p. 181-213

Sprincz, Beck 1981 – E. Sprincz, C. W. Beck, Classification of the amber beads of the Hungarian Bronze Age, *Journal of Field Archaeology*, 8, 1981, p. 469-485

Stech 1997 – A. Stech, Mojgrád, Kom. Szilágy, Ungarn (Moigrad, Gem. Mirşid, Jud. Sălaj, Rumänien), in: A. Hänsel, B. Hänsel (eds.), *Gaben an die Götter. Schätze der Bronzezeit Europas*, Museum für Vor- und Frühgeschichte. Bestandskataloge 4, Berlin, 1997, p. 167-169

Stoica, Cioană 1975 – O. Stoica, V. Cioană, Un depozit de bronzuri descoperit la Maglavit, *Studii și Cercetări de Istorie Veche*, 26, 4, 1975, p. 561-565

Stojić 1986 – M. Stojić, *Gvozdeno doba u basenu Velike Morave*, Centar za arheološka istraživanja, Filozofskog fakulteta Beogradu 8, Beograd, Svetozarevo, 1986

Szabó 2009 – G. V. Szabó, Fémkeresô mûszeres kutatások kelet-magyarországi késô bronzkori és kora vaskori lelôhelyeken. Beszámoló az ELTE Régészettudományi Intézete által indított bronzkincskutató program 2009. évi eredményeirôl/Metal detection investigations at Eastern Hungarian Late Bronze Age and Early Iron Age sites. Report on the results of the bronze hoard exploration project of the Institute of Archaeology of ELTE in 2009, *Régészeti kutatások Magyarországon/Archaeological Investigations in Hungary*, 2009, p. 19-38

Szabó 2010 – G. V. Szabó, Spätbronzezeitliche Bronzehortfunde im Siedlungskontext – Neue Forschungsergebnisse aus Ostungarn, in: S. Berecki, R. E. Németh, B. Rezi (eds.), *Bronze Age rites and rituals in the Carpathian Basin. Proceedings of the International Colloquium from Târgu Mureș, 8-10 October 2010*, Bibliotheca Musei Marisiensis, Seria Archaeologica 4, Târgu Mureş, 2011, p. 335-356

Szabó 2012 – G. V. Szabó, *Késő bronzkori kincsek nyomában/In Search of Late Bronze Age treasures*, *Magyar Régészet Online Magazin/Hungarian Archaeology E-Journal* 2012 Tél/Winter (http://www.hungarianarchaeology.hu/ – last accessed 24th 2019)

Szabó 2016 – G. V. Szabó, Hortfunde und Siedlungen. Neue Fakten zum Kontext der spätbronzezeitlichen Deponierungen in Ungarn, in: S. Hansen, D. Neumann, T. Vachta (eds.), *Raum, Gabe und Erinnerung.Weihgaben und Heiligtümer in prähistorischen und antiken Gesellschaften*, Berlin Studies of the Ancient World 38, Berlin, 2016, p. 165-209

Tallgren 1930 – A. M. Tallgren, The Kazbek treasure, *Eurasia Septentrionalis Antiqua*, 5, 1930, p. 109-182

Toffolo *et alii* 2013 – M. B. Toffolo, A. Fantalkin, I. S. Lemos, R. C. S. Felsch, W.-D. Niemeier, G. D. R. Sanders, I. Finkelstein, E. Boaretto, Towards an absolute chronology for the Aegean Iron Age: New radiocarbon dates from Lefkandi, Kalapodi and Corinth, *PlosOne* 8.12, 2013, e83117

Uhnér *et alii* 2017 – C. Uhnér, S. Hansen, H. Ciugudean, G. Bălan, R. Burlacu-Timofte, Structura și demografia așezării de la Teleac: O fortificație din Transilvania de la sfârșitul epocii bronzului - începutul epocii fierului, in: H. Ciugudean, G. T. Rustoiu, R. Ota (eds.), *Ars Archaeologicae. Studii dedicate lui Nikolaus Boroffka la aniversarea a 60 de ani / Studies dedicated to Nikolaus Boroffka on his 60th birthday*, *Apulum*, 54/1, 2017, p. 211-245

Uhnér *et alii* 2018 – C. Uhnér, H. Ciugudean, G. Bălan, R. Burlacu-Timofte, S. Hansen, G. Rustoiu, Settlement structure and demography in Teleac: A Late Bronze Age – Early Iron Age hillfort in Transylvania, in: S. Hansen, R. Krause (eds.), *Bronzezeitliche Burgen zwischen Taunus und Karpaten. Beiträge der Ersten Internationalen LOEWE-Konferenz vom 7. bis 9. Dezember 2016 in Frankfurt/M.*, Universitätsforschungen zur Prähistorischen Archäologie 319, Bonn, 2018, p. 371-393

Uhnér *et alii* 2019 – C. Uhnér, H. Ciugudean, S. Hansen, F. Becker, G. Bălan, R. Burlacu-Timofte, The Teleac hillfort in southwestern Transylvania: the role of the settlement, war and the destruction of the fortification system, in: S. Hansen, R. Krause (eds.), *Bronze Age Fortresses in Europe. Proceedings oft he Second International LOEWE Conference, 9-13 October 2017 in Alba Julia*, Universitätsforschungen zur Prähistorischen Archäologie 339, Bonn, 2019, p. 177-200

Ursuţiu 2002 – A. Ursuţiu, Etapa mijlocie a primei vârste a fierului în Transilvania (Cercetările de la Bernadea, com. Bahnea, jud. Mureş), in: N. Gudea, C. Cosma (eds.), *Interferenţe Etnice şi Culturale în mileniile I a.Chr.-I p.Chr./Ethnische und Kulturelle Interferenzen im 1. Jahrtausend v. Chr. -1. Jahrtausend n. Chr.* 5, Cluj-Napoca, 2002

Vasić 1977 – R. Vasić, *The chronology of the Early Iron Age in Serbia*, British Archaeological Reports, Supplementay Series 31, Oxford, 1977

Vasiliev *et alii* 1991 – V. Vasiliev, I. A. Aldea, H. Ciugudean, *Civilizaţia dacică timpurie în aria intracarpatică a României. Contribuţii arheologice: Aşezarea fortificată de la Teleac*, Cluj-Napoca, 1991

Vulpe 1965 – A. Vulpe, Zur mittleren Hallstattzeit in Rumänien (Die Basarabi-Kultur), *Dacia*, N.S., 9, 1965, p. 105-132

Vulpe 1986 – A. Vulpe, Zur Entstehung der geto-dakischen Zivilisation. Die Basarabikultur. I. Teil: Forschungsgeschichte; Definition; Fundstoff; Verbreitung, *Dacia*, N.S., 30, 1986, p. 49-90

Wanzek 1989 – B. Wanzek, Celturile hallstattiene din fier şi antecedentele lor în civilizaţia "Cîmpurilor de urne", *Apulum*, 25, 1989, p. 103-120

Wardle *et alii* 2007 – K. A. Wardle, M. Newton. P. I. Kuniholm, Troy VIIb$_2$ revistied. The date of the transition from Bronze to Iron Age in the Northern Aegean, in: H. Todorova, M. Stefanovich, G. Ivanov (eds.), *The Struma/Strymon River Valley in Prehistory. Proceedings oft he International Symposium Strymon Praehistoricus, Kjustendil – Blagoevgrad (Bulgaria), Serres – Amphipolis (Greece), 27.09 – 01.102004*, In the Steps of James Harvey Gaul 2, Sofia, 2007, p. 481-497

Wardle *et alii* 2014 – K. Wardle, T. Higham, Bernd Kromer, Dating the end of the Greek Bronze Age: A robust radiocarbon-based chronology from Assiros Toumba, *PlosOne* 9.9, 2014, e106672

Wesse 1990 – A. Wesse, *Die Ärmchenbeile der Alten Welt. Ein Beitrag zum Beginn der Eisenzeit im östlichen Mitteleuropa*, Universitätsforschungen zur Prähistorischen Archäologie 3, Bonn, 1990

Żurowski 1949 – K. Żurowski, Zabytki brązowe z młodszej epoki brązu i wczesnego okresu żelaza z dorzecza górnego Dniestru, *Przegląd Archeologiczny* 8.2, Rocznik, 25, 1949, p. 155-247

Васић 1973 – Р. Васић, *Културне групе старијег гвозденог доба у Југославији*, Археолошки Институт, посебна издања 12, Београд, 1973

Видески 2003 – З. Видески, *Македонски бронзи / Macedonian bronzes*, Скопје, 2003

Вознесенская, Хомутова 1979 – Г. А. Вознесенская, Л. С. Хомутова, Техника и технология кузнечного производства на городище Марица, *Советская археология*, 1979, № 4, p. 180-188

Вукмановић, Радојчић 1995 – М. Вукмановић, Н. Радојчић, *Каталог метала II. Народни Музе*, Београд, 1995

Гарашанин 1959 – Д. Гарашанин, Три прилога расветљавању проблематике металног доба наше земље, *Зборник Радова Народног Музеја*, 2, 1958 -1959 (1959), p. 15-43

Јевтић 1994 – М. Јевтић, *О металним налазима басараби културе у Србији*, in: Н. Тасић (ed.), *Културе гвозденог доба Југословетског Подунавља. Симрозијум, Сомбор 22-23. 03. 1993*. Балканолошкии Институт САНУ, Посебна издања 55, Београд, 1994, p. 77-85

Митревски 1991a – Д. Митревски, Прилог кон вреднувањето на долиновардарската-пајонска група на железното време, *Macedoniae Acta Archaeologica* 12, 1990-1991 (1991), p. 145-161

Митревски 1991b – Д. Митревски, *Дедели. Некропола од железното време во Долно Повардје*, Музј на Македонија, Посебно издание 3, Скопје, 1991

Митревски 1997 – Д. Митревски, Гробот на пајонската свештеничка од Марвинци - прилог кон вреднувањето на пајонската религија на железното време, *Macedoniae Acta Archaeologica*, 15, 1996-1997 (1999), p. 69-89

Чаусидис 2017 – Н. Чаусидис, Свештениичка од Марвинци“ или „впрегната сопруга“? За семиотиката на железнодобите псалии од кругот на „македонските бронзи, *Poznańskie Studia Slawistycne*, 13, 2017, p. 337-357

წითლანაძე 1976 – ღ. წითლანაძე, *ხვეის არქეოლოგიური ძეგლები (ყაზბეგის განძი)*, თბილისი, 1976

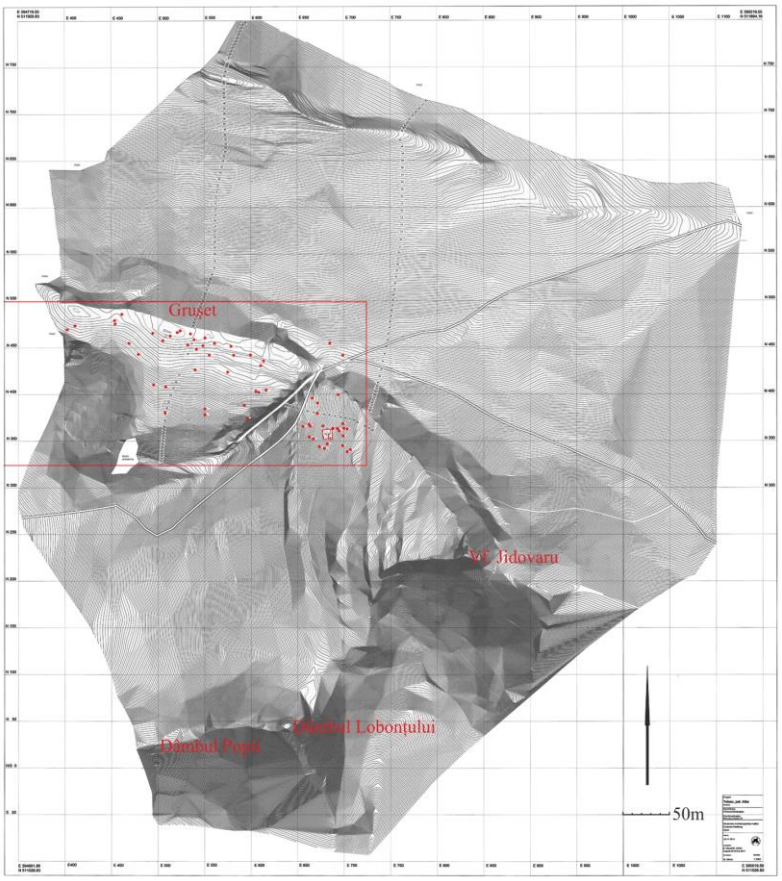
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Fig. 1

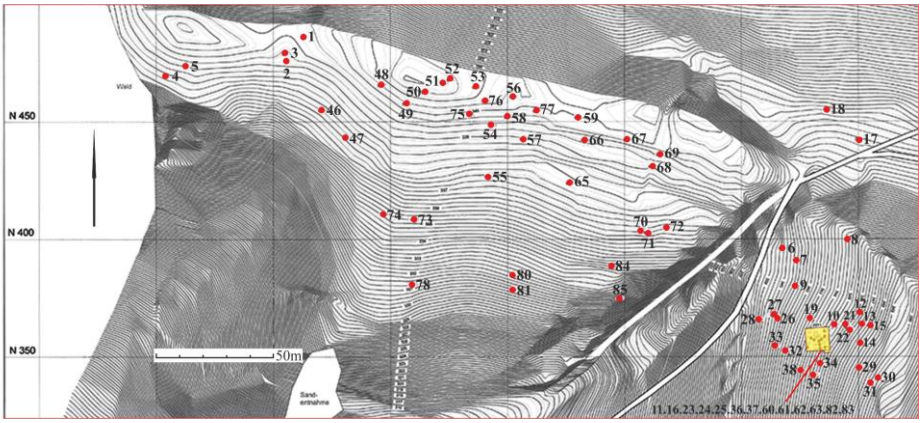
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Fig. 2

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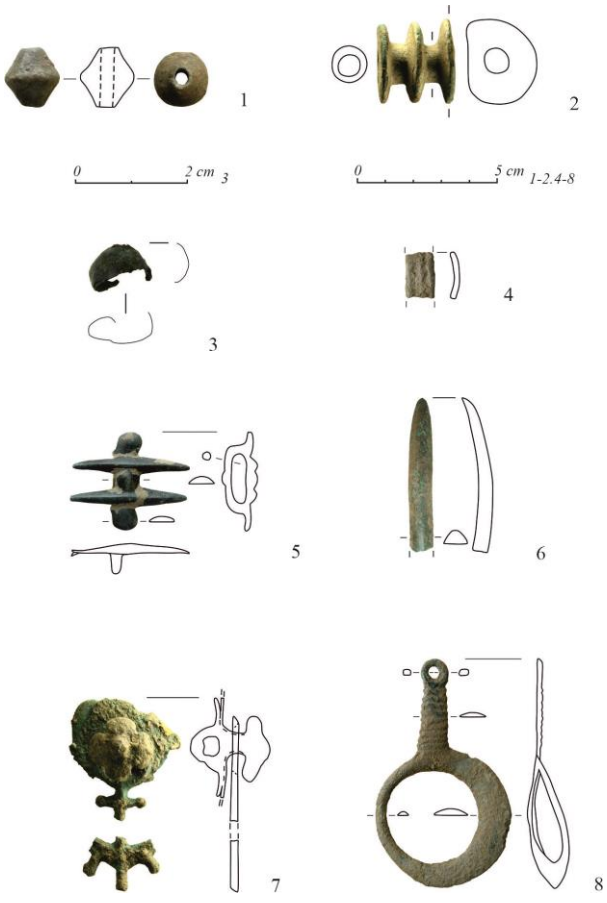

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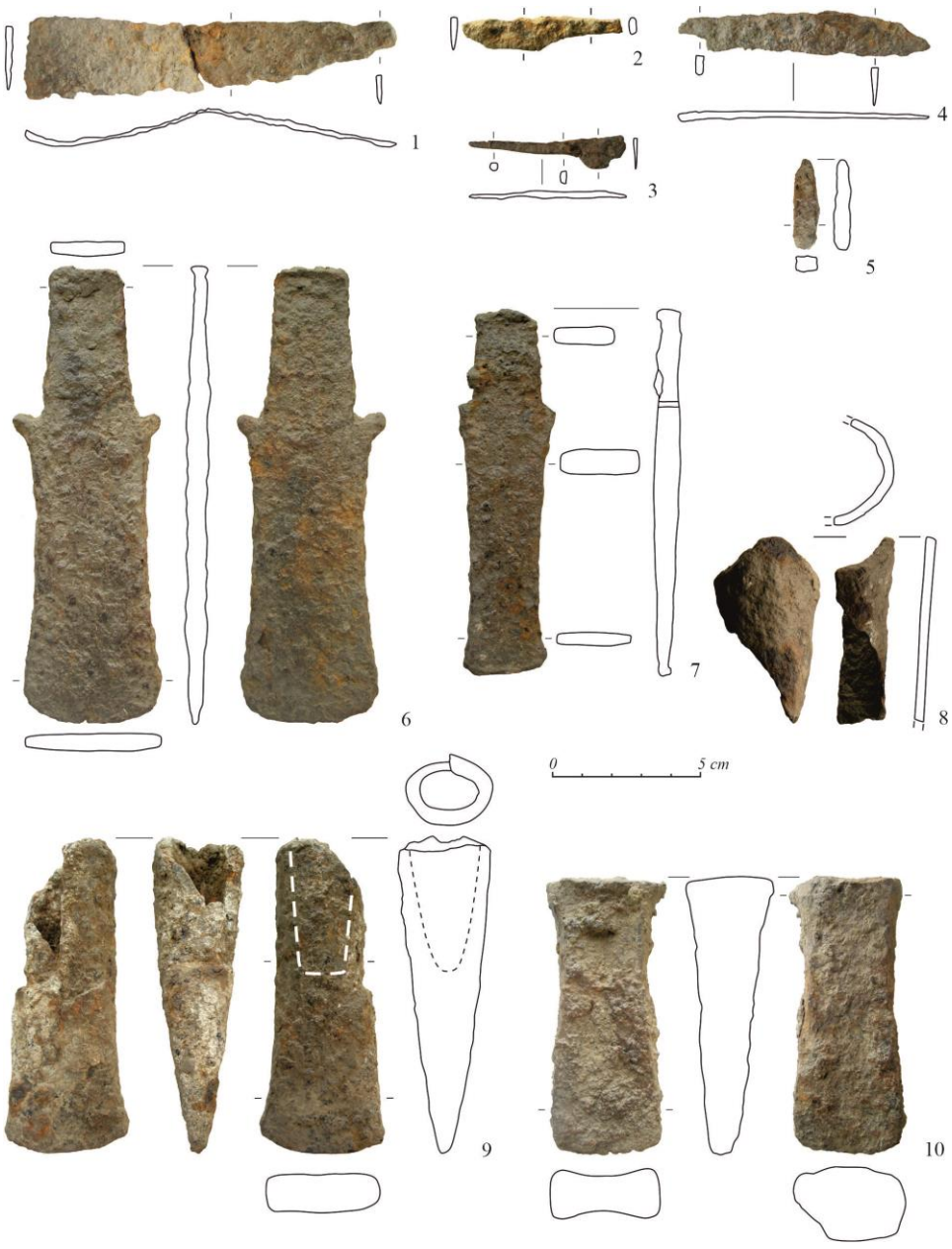

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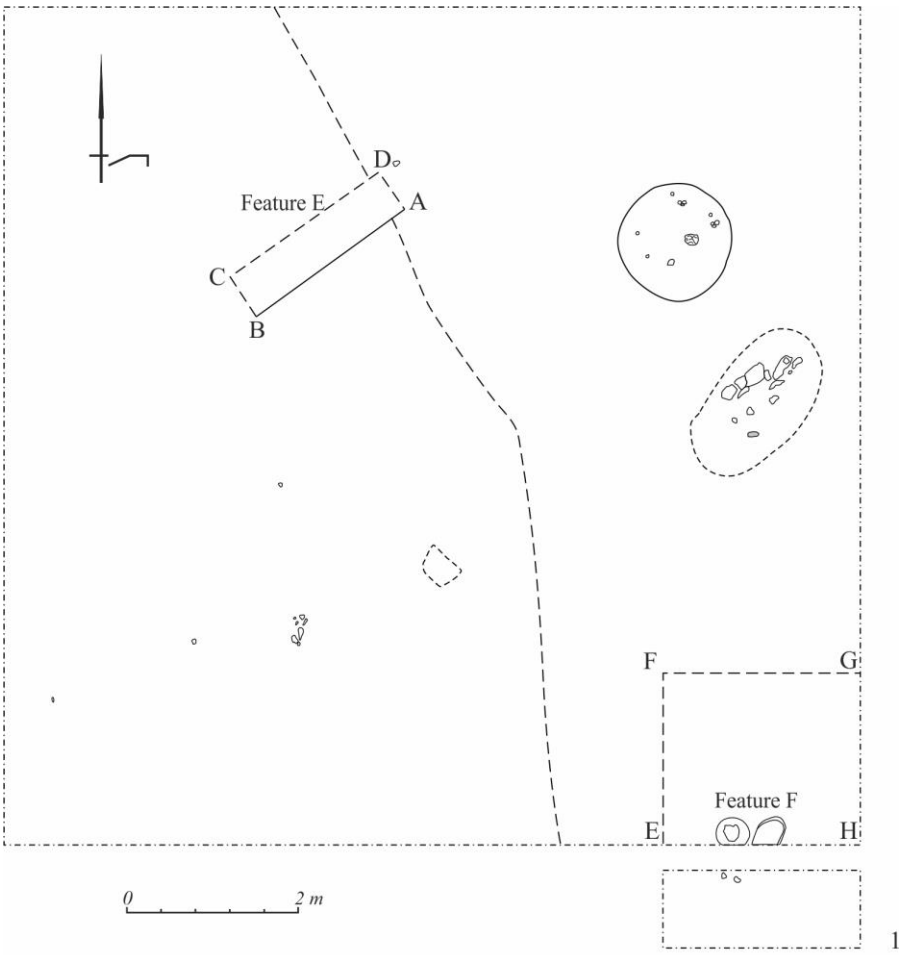

Fig. 6

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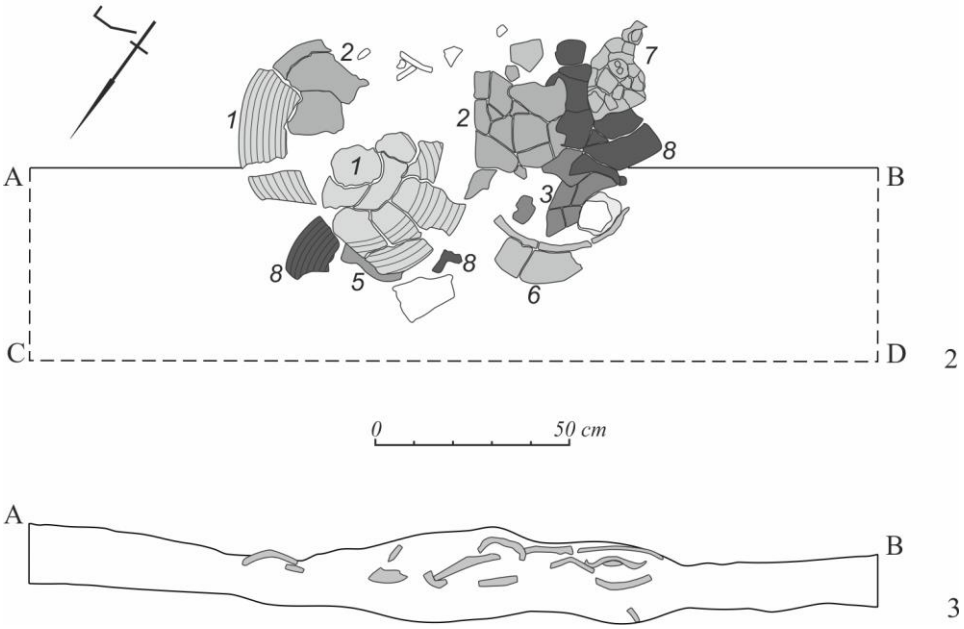

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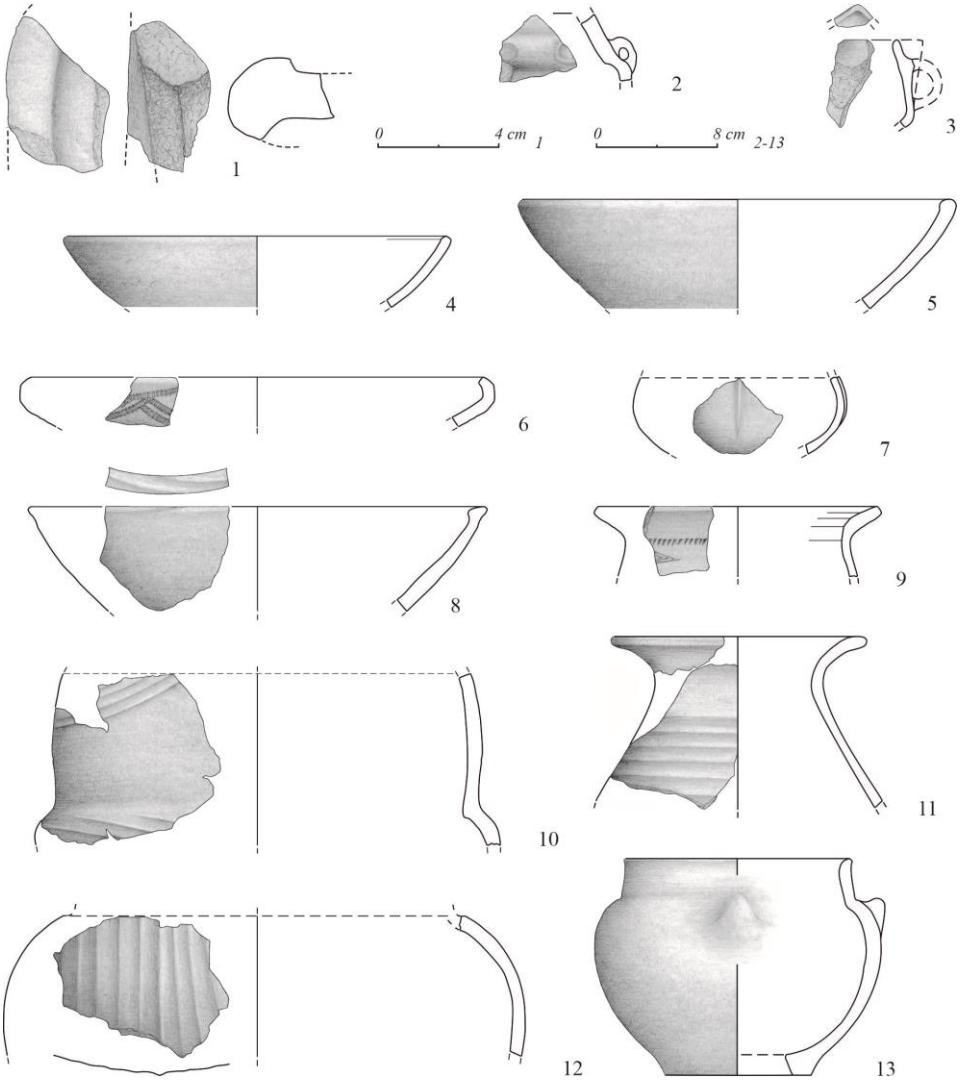
Fig. 7



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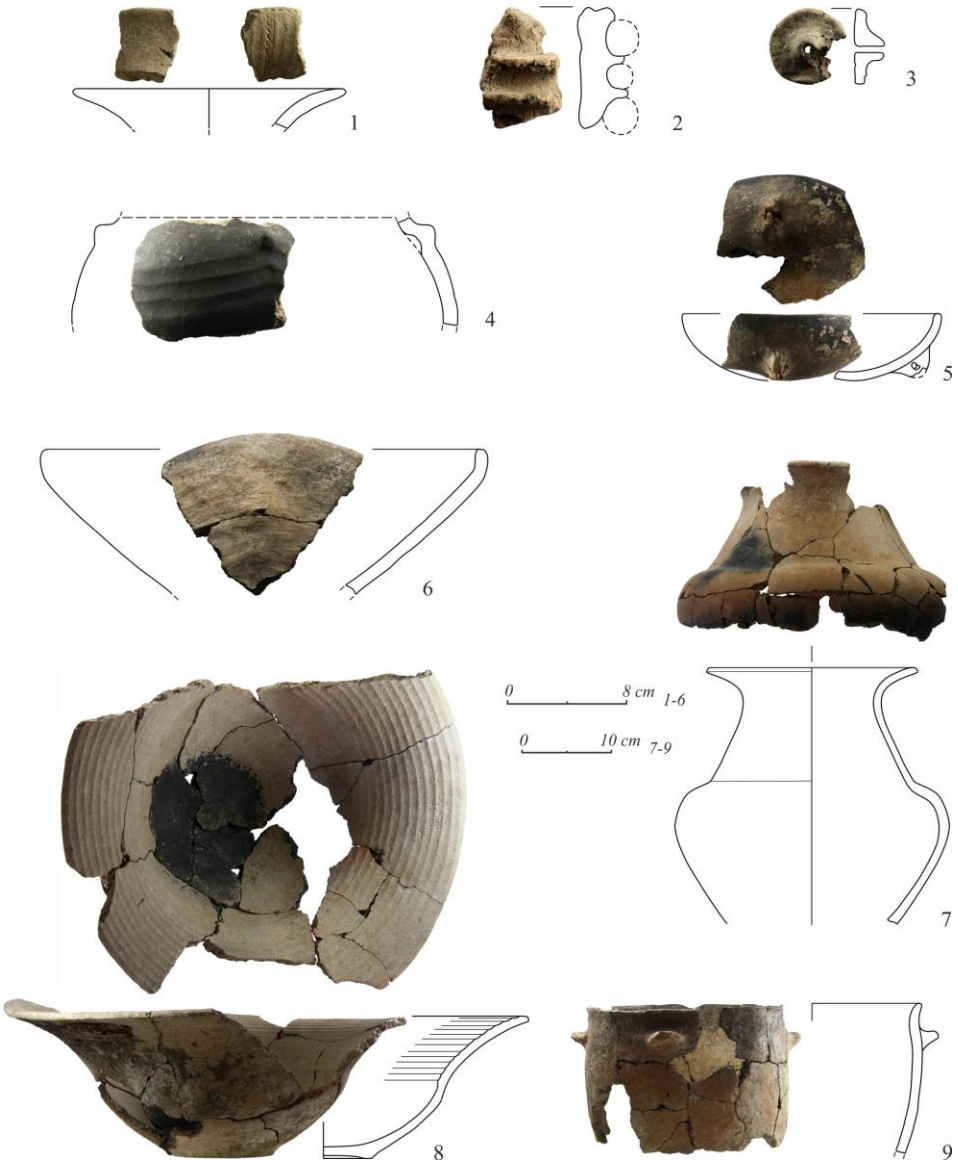

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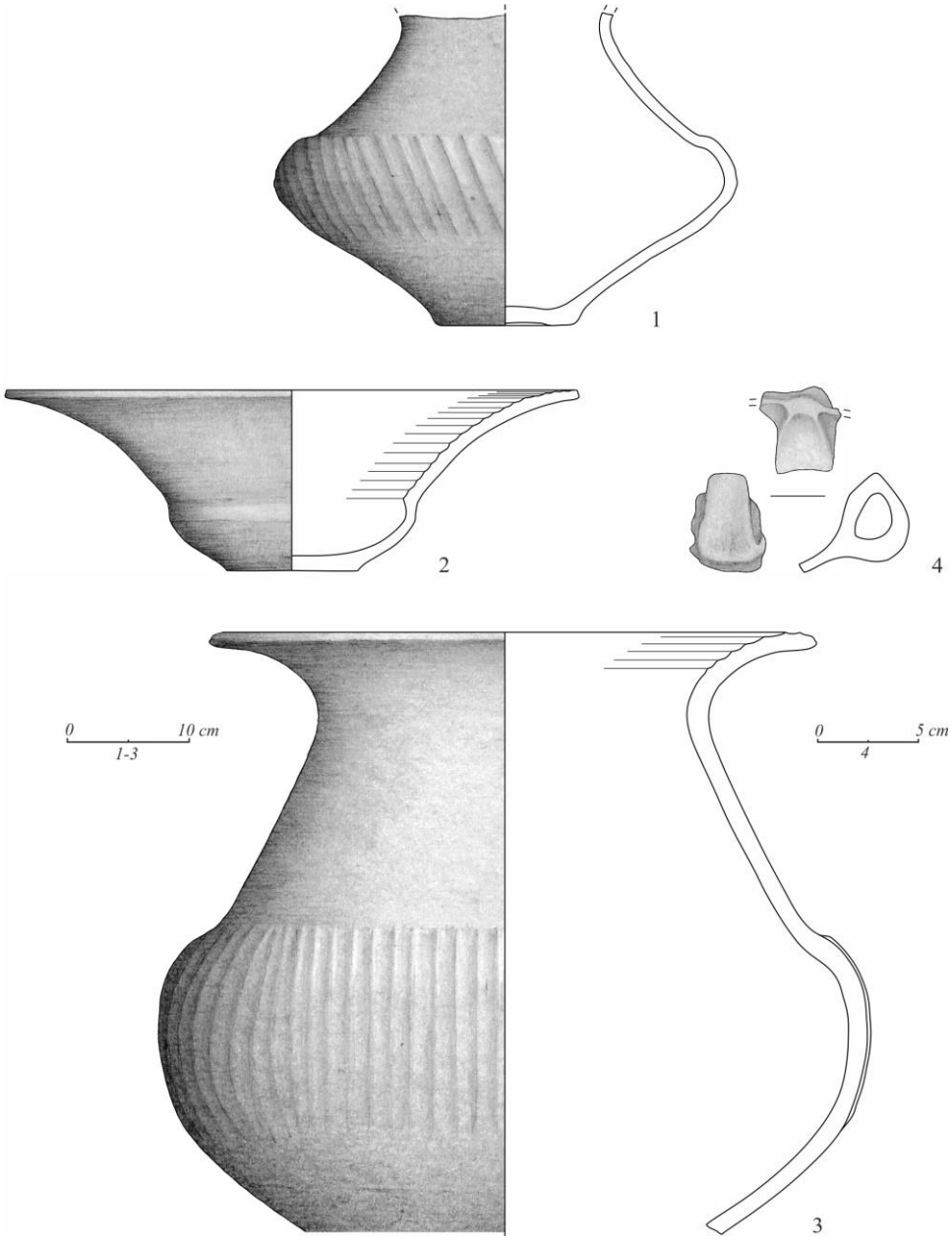

Fig. 10

Fig. 11