

# DISSERTATIONES ARCHAEOLOGICAE

ex Instituto Archaeologico Universitatis de Rolando Eötvös nominatae



Ser. 3. No. 6. | 2018

DISSERTATIONES ARCHAEOLOGICAE  
ex Instituto Archaeologico  
Universitatis de Rolando Eötvös nominatae  
*Ser. 3. No. 6.*



Budapest 2018

Dissertationes Archaeologicae ex Instituto Archaeologico  
Universitatis de Rolando Eötvös nominatae  
*Ser. 3. No. 6.*

Editor-in-chief:  
DÁVID BARTUS

Editorial board:  
LÁSZLÓ BARTOSIEWICZ  
LÁSZLÓ BORHY  
ZOLTÁN CZAJLIK  
ISTVÁN FELD  
GÁBOR KALLA  
PÁL RACZKY  
MIKLÓS SZABÓ  
TIVADAR VIDA

Technical editor:  
GÁBOR VÁCZI

Proofreading:  
ZSÓFIA KONDÉ  
SZILVIA BARTUS-SZÖLLŐSI

Aviable online at <http://dissarch.elte.hu>  
Contact: [dissarch@btk.elte.hu](mailto:dissarch@btk.elte.hu)

**PKP**  
PUBLIC  
KNOWLEDGE  
PROJECT

© Eötvös Loránd University, Institute of Archaeological Sciences  
Layout and cover design: Gábor Váczi

Budapest 2018

# CONTENTS

Zsolt MESTER 9

---

*In memoriam Jacques Tixier (1925–2018)*

## ARTICLES

Katalin SEBŐK 13

---

*On the possibilities of interpreting Neolithic pottery – Az újkőkori kerámia értelmezési lehetőségeiről*

András FÜZESI – Pál RACZKY 43

---

*Öcsöd-Kováshalom. Potscape of a Late Neolithic site in the Tisza region*

Katalin SEBŐK – Norbert FARAGÓ 147

---

*Theory into practice: basic connections and stylistic affiliations of the Late Neolithic settlement at Pusztataskony-Ledence 1*

Eszter SOLNAY 179

---

*Early Copper Age Graves from Polgár-Nagy-Kasziba*

László GUCSI – Nóra SZABÓ 217

---

*Examination and possible interpretations of a Middle Bronze Age structured deposition*

Kristóf FÜLÖP 287

---

*Why is it so rare and random to find pyre sites? Two cremation experiments to understand the characteristics of pyre sites and their investigational possibilities*

Gábor János TARBAY 313

---

*“Looted Warriors” from Eastern Europe*

Péter MOGYORÓS 361

---

*Pre-Scythian burial in Tiszakürt*

Szilvia JOHÁCZI 371

---

*A New Method in the Attribution? Attempts of the Employment of Geometric Morphometrics in the Attribution of Late Archaic Attic Lekythoi*



Anita BENES	419
<hr/>	
<i>The Roman aqueduct of Brigetio</i>	
Lajos JUHÁSZ	441
<hr/>	
<i>A republican plated denarius from Aquincum</i>	
Barbara HAJDU	445
<hr/>	
<i>Terra sigillata from the territory of the civil town of Brigetio</i>	
Krisztina HOPPÁL – István VIDA – Shinatria ADHITYATAMA – LU Yahui	461
<hr/>	
<i>‘All that glitters is not Roman’. Roman coins discovered in East Java, Indonesia. A study on new data with an overview on other coins discovered beyond India</i>	
<b>FIELD REPORTS</b>	
Zsolt MESTER – Ferenc CSERPÁK – Norbert FARAGÓ	493
<hr/>	
<i>Preliminary report on the excavation at Andornaktálya-Marinka in 2018</i>	
Kristóf FÜLÖP – Denisa M. LÖNHARDT – Nóra SZABÓ – Gábor VÁCZI	499
<hr/>	
<i>Preliminary report on the excavation of the site Tizsakürt-Zsilke-tanya</i>	
Bence SIMON – Szilvia JOHÁCZI – Zita KIS	515
<hr/>	
<i>Short report on a rescue excavation of a prehistoric and Árpáadian Age site near Tura (Pest County, Hungary)</i>	
Zoltán CZAJLIK – Katalin NOVINSZKI-GROMA – László RUPNIK – András BÖDŐCS – et al.	527
<hr/>	
<i>Archaeological investigations on the Süttő plateau in 2018</i>	
Dávid BARTUS – László BORHY – Szilvia JOHÁCZI – Emese SZÁMADÓ	541
<hr/>	
<i>Short report on the excavations in the legionary fortress of Brigetio (2017–2018)</i>	
Bence SIMON – Szilvia JOHÁCZI	549
<hr/>	
<i>Short report on the rescue excavations in the Roman Age Barbaricum near Abony (Pest County, Hungary)</i>	
Szabolcs Balázs NAGY	557
<hr/>	
<i>Recent excavations at the medieval castle of Bánd</i>	

## THESIS ABSTRACTS

Rita JENEY

573

---

*Lost Collection from a Lost River: Interpreting Sir Aurel Stein's "Sarasvatī Tour" in the History of South Asian Archaeology*

István VIDA

591

---

*The Chronology of the Marcomannic-Sarmatian wars. The Danubian wars of Marcus Aurelius in the light of numismatics*

Zsófia MASEK

597

---

*Settlement History of the Middle Tisza Region in the 4<sup>th</sup>–6<sup>th</sup> centuries AD. According to the Evaluation of the Material from Rákóczifalva-Bagi-földek 5–8–8A sites*

Alpár DOBOS

621

---

*Transformations of the human communities in the eastern part of the Carpathian Basin between the middle of the 5<sup>th</sup> and 7<sup>th</sup> century. Row-grave cemeteries in Transylvania, Partium and Banat*

# “Looted Warriors” from Eastern Europe

JÁNOS GÁBOR TARBAY

Hungarian National Museum  
Department of Archaeology, Prehistoric Collection

tarbay.gabor@mnm.hu

---

## Abstract

*The study discusses and calls attention to assemblages that are recent victims of illicit metal detecting in Eastern Europe. The first one is a Ha B1 sword hoard, allegedly from Mátészalka (Hungary, Szabolcs-Szatmár-Bereg County). The assemblage was looted in 2017. In less than a year, two of the finds have entered the British antiquities market and they were sold under fake provenance. The second find could have been a late Period V (Ha B3) elite burial. The looted assemblage has appeared on the domongol.org metal detectorist blog, and it is allegedly originating from “Ternopil Oblast” (Ukraine). It contains a bell helmet with solar barge decoration and a fragment of a unique Hajdúböszörmény-type situla, the parallels of which relate this find to the Rivoli (Italy) burial and the metallurgical sphere of the Early Iron Age.*

---

## Introduction

At the end of the Late Bronze Age (LBA) and the beginning of the Early Iron Age (EIA), Eastern Europe had a significant cultural heritage. At this time, the mobility and interactions of the local elite resulted in the supra-regional distribution of technologies, ideologies, styles, the best manifestations of which are prestige goods like metal vessels and weapons. It is not surprising that an “Eastern object” like a conical-shaped strainer has appeared on the other side of the continent (Kostræde<sup>1</sup>), or that an “Italian object” like the crested helmet from Zavadynsti<sup>2</sup> was found in Ukraine. Within the territory of Eastern Europe, the elite network is even more connected. Therefore, it is almost impossible to tell of which modern country an illegally found object can be originated from. Site names provided by informers and metal detectorists could be imprecise or deliberately falsified. The possibility should not be ruled out that metal detectorist teams cross the borders of Eastern European countries.<sup>3</sup> Thus an object allegedly found in one country may actually originate from another. For instance, it is not hard to “prove”, based on its close parallels,<sup>4</sup> that the situla found in “Obišovce” could have been found in Northeastern Hungary. In fact, the blunt typological analysis will not help here because in most cases these artefacts have parallels in several modern countries. The situla with spoke-wheel shaped solar-barge, which was sold on the Christie’s some years ago<sup>5</sup> could have been found in Poland<sup>6</sup> but in Denmark<sup>7</sup> as well. Considering the lack of context and the artefacts’ supra-regional distribution, these are obviously no more than antiquarian speculations.

1 LINDGREN 1938, 80–82, Fig. 6; THRANE 1966, 198–200, Fig. 24a.

2 HENCKEN 1971, 122–123, Fig. 93.

3 V. SZABÓ 2013, 395.

4 Hajdúböszörmény and Nyírlugos (PATAY 1990, Taf. 30.57, Taf. 32.61).

5 TARBAY 2014, Fig. 43.4a–c.

6 GEDL 2001, Taf. 11.37.

7 THRANE 1966, Fig. 19.

The original find spot and context of the objects remain a mystery forever. Over the past decades, there has been an increase in the number of studies dealing with looted LBA and EIA Eastern European artefacts. No wonder, as each year thousands of objects are sold illicitly within the borders of the European Union, especially in wealthy western countries like Austria, Germany, Great Britain, Switzerland and the Netherlands etc. Not much can be done as long as there is a demand for these valuable objects. Several Slovakian studies called attention to the complete looting of the Obišovce settlement.<sup>8</sup> Recently Vojislav M. Filipović and Rastko Vasić reported the desperate situation in Serbia, calling it rightly as “illicit antiquities plague”.<sup>9</sup> Prominent are Gábor V. Szabó’s works, thanks to which researchers have learned about numerous illegally found LBA artefacts and assemblages from Hungary, Serbia and Slovakia.<sup>10</sup> Examples could be further listed, but perhaps the situation is best illustrated by looking at Marianne Mödlinger’s recent monograph and see how many Eastern European helmets have no provenance.<sup>11</sup>

I believe that calling attention to looted artefacts is an essential task, especially when it is possible to acquire information on their context. This could lead to success like in the case

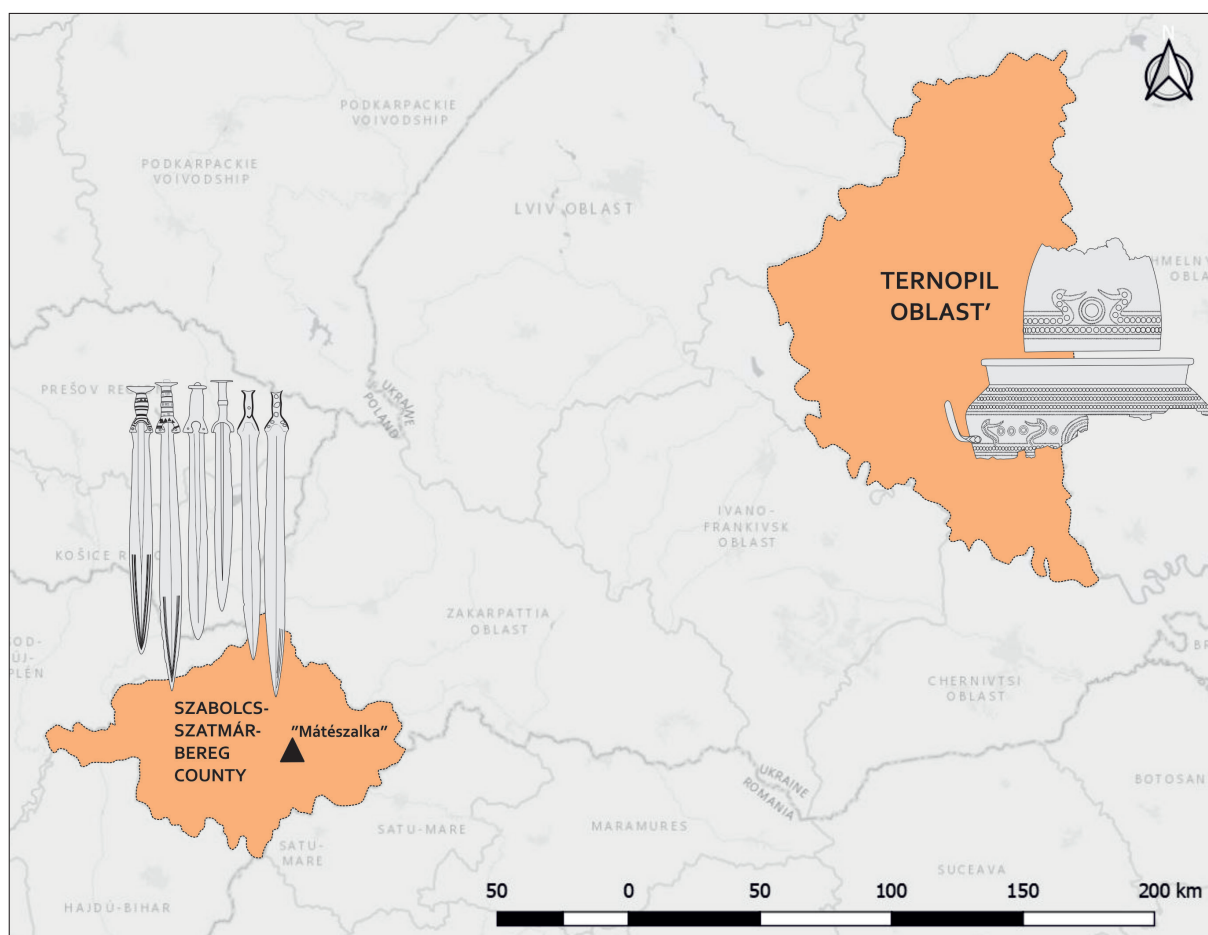


Fig. 1. Alleged provenance of the findings: “Mátészalka” (Hungary, Szabolcs-Szatmár-Bereg County) and “Ternopil Oblast” (Ukraine).

8 BARTÍK 2007; BARTÍK 2009; VELIČIK 2015.

9 FILIPOVIĆ – VASIĆ 2017.

10 V. SZABÓ 2009a; V. SZABÓ 2013.

11 MÖDLINGER 2017.

of the 2<sup>nd</sup> situla from Hajdúböszörmény. In 2009, Gábor V. Szabó called attention to a unique bronze vessel from Hungary (“Mikepércs”), which has showed up in a metal detectorist forum.<sup>12</sup> In 2013, colleagues of the Hajdúsági Museum located the real provenance of the find: Hajdúböszörmény-Csege-halom. As a result, the Hungarian National Bureau of Investigation has finally started to investigate. The valuable object has been seized and the metal detectorist who intended to sell it to Germany was arrested. After years of investigation, finally, the 2<sup>nd</sup> situla from Hajdúböszörmény-Csege-halom is where it belongs, in a public collection.<sup>13</sup>

In this study, two assemblages will be discussed, one from “Mátészalka” (Hungary, Szabolcs-Szatmár-Bereg County) and another from “Ternopil Oblast” (Ukraine) (*Fig. 1*). Both are “lost treasures”,<sup>14</sup> about the provenance of which I could only obtain indirect information. What is certain is that they were found and most likely sold by illegal metal detectorists operating in Eastern Europe. My aim is to call attention to the possible provenance and historical significance of these assemblages; in hope that in the near future, similarly to the 2<sup>nd</sup> Hajdúböszörmény situla, this analysis will provide strong arguments for claiming them back from the illicit antiquities market.

### The sword hoard from “Mátészalka”

In April 2017, several pictures of a LBA sword hoard came to my possession from a source requesting anonymity (*Fig. 2, Fig. 13–14*). I could only learn from my informer that the objects were found together by a metal detectorist, in the vicinity of “Mátészalka” (Hungary, Szabolcs-Szatmár-Bereg County).<sup>15</sup> At that time, the detectorist was selling these valuable artefacts on the illicit antiquities market for private collectors. Being afraid of the metal detectorist’s retaliation, the informer did not dare to testify in court or provide detailed information about the find. As a consequence, it was not possible to take an appropriate legal action. The swords were sold, and not long after, some appeared in British auctions.

The hoard consists of six intact artefacts, three metal hilted swords (*Fig. 2.1–3*), one solid-hilted short sword (*Fig. 2.4*) and two flange-hilted swords (*Fig. 2.5–6*). Weapon hoards like “Mátészalka” are parts of a deposition pattern called “reine Schwerthorte”, a phenomenon characteristic between the Br D and Ha B1 periods in the Northeastern Carpathian Basin.<sup>16</sup> The appearance of these assemblages concentrate in the territory of Slovakia, Eastern Hungary, Transylvania and Transcarpathia.<sup>17</sup> The deposition of these hoards show clear patterns regarding the selection of types, fragmentation and placing of the objects. It is a hoarding practice, related primarily to local warriors or a warrior band, which has existed for a long time, regardless of the cultural changes in this region.<sup>18</sup> The Carpathian sword hoards have their counterparts in other territories of Europe, and as Tudor Soroceanu has pointed out, they are part of a chronologically and geographically widespread ritual practice primarily related to swords.<sup>19</sup>

12 V. SZABÓ 2009a.

13 V. SZABÓ – BÁLINT 2013.

14 V. SZABÓ 2013, 798.

15 So far a Br D ring hoard (MOZSOLICS 1973, 156; KEMENCZEI 1984, 125, 268, Taf. LVIII.d.1–8) and a Prejmer-type sword is known from this area (KEMENCZEI 1991, 15, Taf. 5.22).

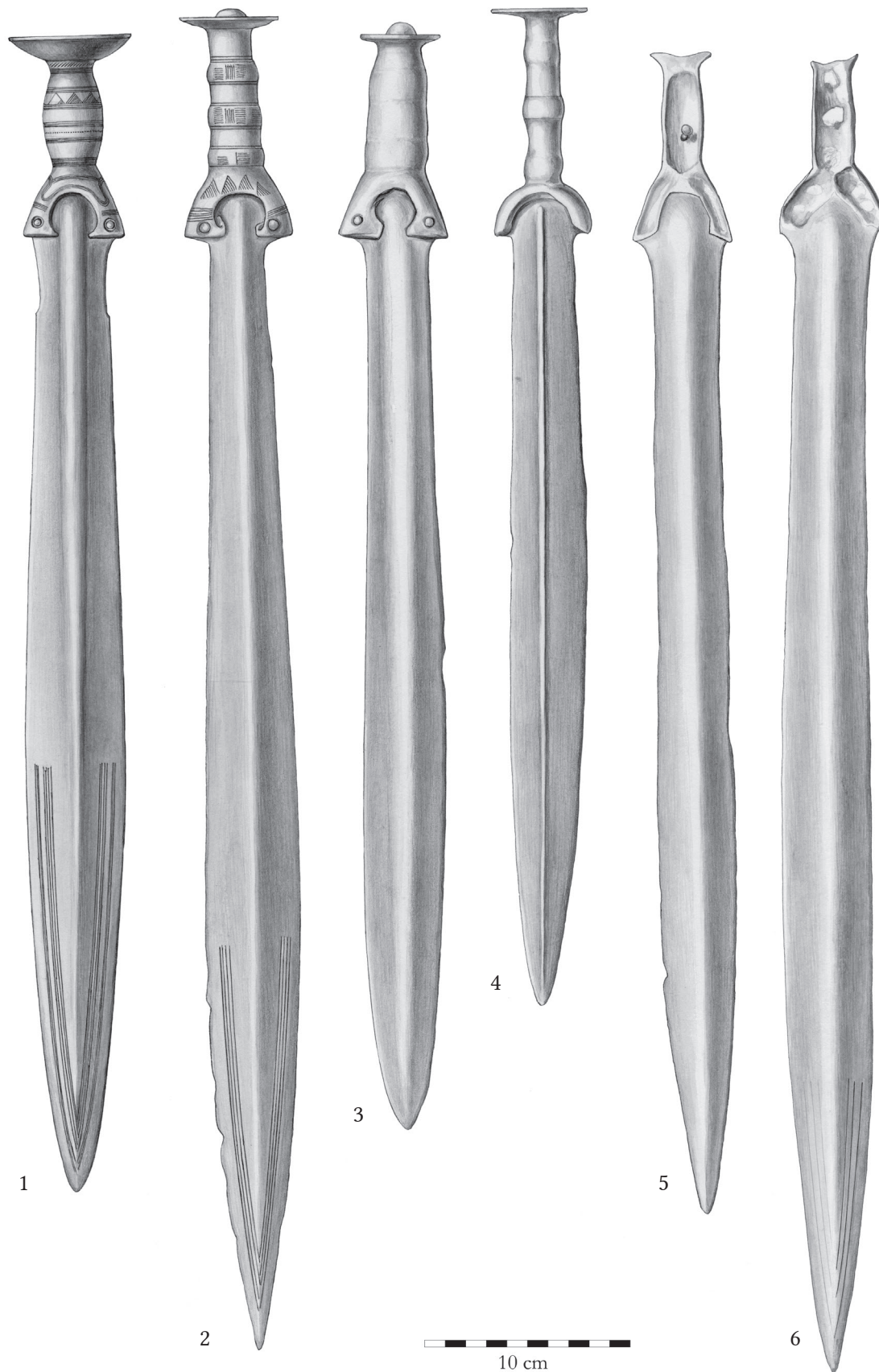
16 MOZSOLICS 1985, 11–17; VACHTA 2008, 48–64, Abb. 30.

17 MOZSOLICS 1985, 11–17; VACHTA 2008, 48–64.

18 VACHTA 2008, 48–64, Abb. 36–38; SOROCEANU 2011b, 244–258, Figs 5–6, Fig. 10, Figs 12–13, Fig. 15.

19 VACHTA 2008, 50–51, Abb. 30; SOROCEANU 2011a; SOROCEANU 2011b, 244–248, Fig. 10.





Т 2013

Fig. 2. Reconstruction of the sword hoard originating allegedly from “Mátészalka” (Hungary, Szabolcs-Szatmár-Bereg County) (Drawings: A. M. Tarbay 2018).

In case of the “Mátészalka” hoard, the scientific loss is great. Even if the objects were ever recovered from the illicit antiquities market, several key information would be already lost. The find’s exact topographical position in the prehistoric landscape and its relations to settlements as well as the placing of the finds are completely unknown. The typological analysis may also be incomplete, as only three swords can be evaluated securely due to the quality of the available images. The artefact called here No. 1 is a metal-hilted sword with a cup-shaped pommel (*Schalenknaufschwert*) (Fig. 2.1).<sup>20</sup> Its hilt is covered with incised bundles of lines, dots, cross-hatched triangles and a stylized solar-barge. The leaf-shaped blade has an emphasized midrib, which is decorated with incised grooves (Fig. 2.1, Fig. 3.2). This object belong to a rare sword type that has appeared in the literature under different names.<sup>21</sup> In Hungary, similar weapons are known from Tibor Kemenczei’s V-type.<sup>22</sup> Best parallels for the No. 1 sword are the stray find from Herencsény (Nógrád County) (Fig. 3.4)<sup>23</sup> and a sword from the eponymous Hajdúböszörmény-Csege-halom hoard (Hajdú-Bihar County) (Fig. 3.3).<sup>24</sup> A Marvila-type sword’s hilt from Ștoboru (Romania, Sălaj County) can also be linked to the discussed artefact (Fig. 3.2). This small weapon hoard from Transylvania was dated to the Ha A2–B1 by Tibor Bader.<sup>25</sup> A sword from Spišska Belá (Slovakia, Prešov Region), classified as Königsdorf-type Spišska Belá-variant, has similar hilt and decorations (Fig. 3.5).<sup>26</sup> Mária Novotná outlined two options for the chronological position of this marshland hoard: 1. The Spišska Belá find can be dated to the “beginning of the Ha A2”, based on the two additional swords in the hoard (Illertissen-type: Ha A1/A2, sword with three-ribbed hilt: Ha A1–Ha B1). 2. It was deposited in the Ha B1, according to the chronological position of the sword with cup-shaped pommel and other assemblages from this area.<sup>27</sup> Regarding the time of the deposition, I have to agree with the latter. Bronze Age swords are high-quality weapons that are likely to be held in high esteem by their owners. The reason for the deposition of old-style swords in a Ha B1 hoard like Spišska Belá may stem from the fact that these weapons were inherited or some have been used until the very end of their biography.

The No. 2 sword can be associated with the Liptov-type that is frequent between the Ha A1 and Ha B1 periods in the Northeastern Carpathian Basin. Most of these swords were found in the territory of Slovakia and Northeastern Hungary. Some are known from Romania, Ukraine, the north of the Balkans, and also in the territory of the Czech Republic, Southern Germany, Austria, Italy, Denmark and Poland.<sup>28</sup> The No. 2 sword’s hilt has three ribs, covered

20 According to the description of the auction house that sold the object, the length of No. 1 sword is 22 inch (55.88 cm). Retrieved from [https://www.1stdibs.com/furniture/decorative-objects/sculptures/mounted-objects/european-bronze-age-sword-1200-bc/id-f\\_8667883/?modal=contact-dealer&userComesFromAmp=true](https://www.1stdibs.com/furniture/decorative-objects/sculptures/mounted-objects/european-bronze-age-sword-1200-bc/id-f_8667883/?modal=contact-dealer&userComesFromAmp=true) (28. 12. 2018, 08:30).

21 A fine summary of this type has been provided recently by Bence Soós (Soós 2015, 127–129, Appendix 1).

22 See KEMENCZEI 1991, Taf. 54.237–238, Taf. 56; Soós 2015, 127–129, Appendix 1.

23 KUBINYI 1861, 88–89, IV. tábla 10; HAMPEL 1886a, XXV. tábla 3; KEMENCZEI 1991, 57, Taf. 56.243, Taf. 57.243; STOCKHAMMER 2004, 307.

24 KEMENCZEI 1991, 57, Taf. 56.242, Taf. 57.242; STOCKHAMMER 2004, 307.

25 PETRESCU-DÎMBOVIȚA 1977, 124, Pl. 292.11; RUSU et al. 1977, R64.1–1a; BADER 1991, 130, 148–149, Taf. 44.351, Taf. 45.351; STOCKHAMMER 2004, 265. Philipp W. Stockhammer dated the find to the Ha B1 (STOCKHAMMER 2004, 263).

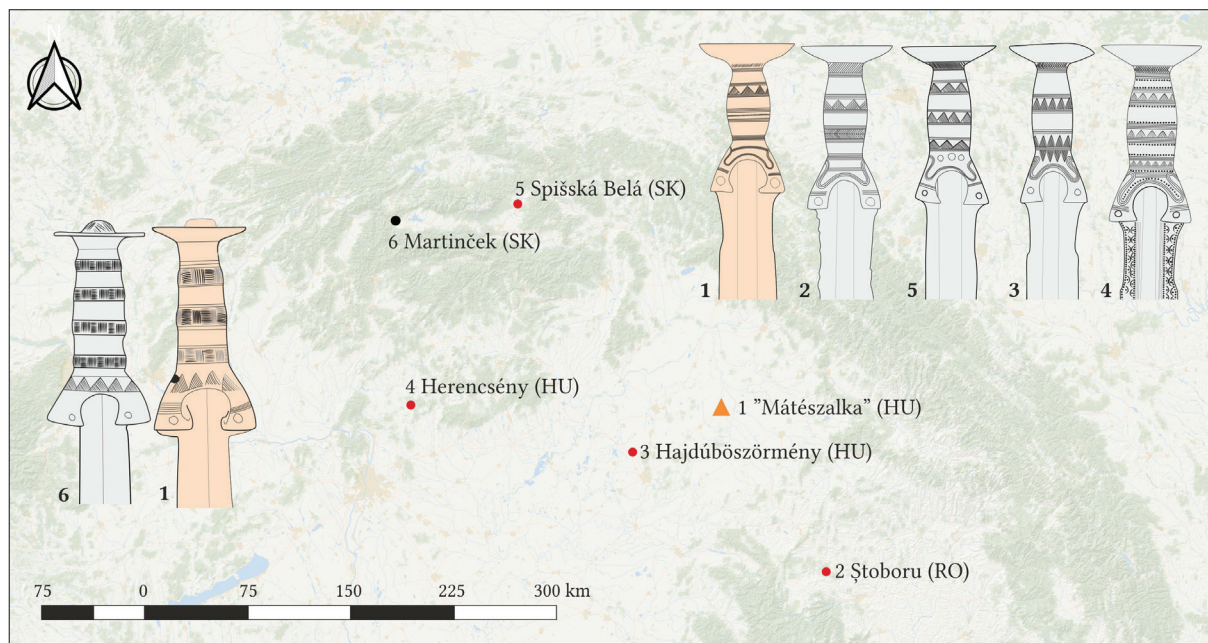
26 KOVALČÍK 1966, Obr. 193; NOVOTNÁ 1970, Abb. 15.3a; STOCKHAMMER 2004, 280; NOVOTNÁ 2014, 80, Taf. 27.124.

27 KOVALČÍK 1966, 186–187; STOCKHAMMER 2004, 280; NOVOTNÁ 2014, 44, 72, 82, Taf. 8.39, Taf. 24.111.

28 HRALA 1954; MÜLLER-KARPE 1961, 25–27, Taf. 94; KRÄMER 1985, 29; BADER 1991, 133, Taf. 68a; HARDING 1995, 77; VON QUILLFELDT 1995, 173–181, Taf. 125B–126A; STOCKHAMMER 2004, 180–183, Karte 28–29;



with dense incised lines. Between the hilt's shoulders a pattern is visible, which consists of cross-hatched triangles and bundles of lines (*Fig. 2.2*). The triangles were incised superficially and in a position uncharacteristic of the Liptov-type. To my best knowledge, there is only one sword, which has comparable decoration. This specimen has four-ribbed hilt and it was found in Martinček (Slovakia, Žilina Region).<sup>29</sup> This weapon hoard consists of at least 13 swords,<sup>30</sup> and based on the chronological position of the Ragály- and Illertissen-types it was dated to the Ha A1 (*Fig. 3.6*).<sup>31</sup>



*Fig. 3.* Close parallels of the typologically identifiable swords from the “Mátészalka” hoard (sketches after: NOVOTNÁ 1970, Abb. 15.3b; NOVOTNÁ 2014, Taf. 10.47; KEMENCZEI 1991, Taf. 57.242–243; BADER 1991, Taf. 44.351).

The last well-identifiable sword (No. 4)<sup>32</sup> is a short, solid-hilted weapon (*Fig. 2.4*). It belongs to Tibor Bader’s Prejmer-type. This group consists of morphologically diverse, solid-hilted short swords, which were found mostly in weapon hoards in Hajdú-Bihar and Szabolcs-Szatmár-Bereg Counties. A handful of specimens are also known from the territory of Slovakia, Romania and even from Germany. The oldest specimens belong to Ha A1 hoards. The youngest ones tend to combine with swords with cup-shaped pommels in Ha B1 assemblages.<sup>33</sup> The hilt of the No. 4 sword has one emphasized rib and two less visible ones. The blade ends in a disc-shaped pommel, and the shoulders are strongly arched. The blade has a midrib, and its edges are parallel, only its lower third has a leaf-shaped form. Among the Prejmer-type

NOVOTNÁ 2014, 62–63; WINIKER 2015, 56.

29 MÜLLER-KARPE 1961; STOCKHAMMER 2004, 279–280; NOVOTNÁ 2014, 53, Taf. 10.47.

30 See KUBINYI 1890; NOVOTNÁ 2014, 34.

31 NOVOTNÁ 2014, 34, 36, 44–45, 51, 53, 55, 58–59, 63, 89, Taf. 5.25, Taf. 6.29, Taf. 7.36–38, Taf. 8.40, Taf. 10.47, Taf. 12.57–58, Taf. 16.73, Taf. 20.92, Taf. 32.142–143. Other datings have been discussed by Philipp Stockhammer (See STOCKHAMMER 2004, 279).

32 According to the description of the auction house that sold the object, the length of the No. 4 sword is 56 cm and its weight is 647 g. Retrieved from <https://www.sixbid.com/browse.html?auction=5089&category=157344&lot=4239138> (28. 12. 2018, 09:49)

33 MOZSOLICS 1972, 198; BADER 1991, 137, List 1, Fig. 3; KEMENCZEI 1991, 14–16, 18–19, 43–44; STOCKHAMMER 2004, 86, 183, Liste 43–44, Karte 30, Fig. 3; NOVOTNÁ 2014, 115–116; TARBAY 2016a, Fig. 2, List 1.

swords, this object has no exact parallel. In terms of its form, this sword is similar to the sword found in the Ha A1 hoard from Recsk-Andezitbánya (Hungary, Heves County) (Fig. 3.7). Its shoulders, terminals and the shape of the blade are similar. The two objects differ only in their size and the number of the hilt ribs.<sup>34</sup>

The exact type of the No. 3 sword cannot be determined due to the low quality of the available photographs (Fig. 2.3). It is a metal-hilted sword with a short leaf-shaped blade. The hilt is wide, its pommel is disc-shaped. No decoration can be observed on the photographs, and the two ribs that we can see on the reconstruction are also blurred (Fig. 2.3). The possibility should not be excluded that the patterns and ribs are blurred due to abrasion.<sup>35</sup> The last two swords (Nos. 5–6) are flange-hilted ones, but the details of their hilts and blades are barely visible (Fig. 2.5–6). I believe their analysis would be misleading in the absence of these details. Therefore, the reconstruction given here should be revised in the future.

It seems that the Liptov-type sword (No. 2) has Ha A relations and the Prejmer-type (No. 4) also share similarities with an older find. However, the parallels of the sword with cup-shaped pommel (No. 1) relate the deposition of this find to the Ha B1. This chronological position is not at all surprising if we consider that this hoard is part of a long-term hoarding practice. In sum, the “Mátészalka” find is the seventeenth sword hoard<sup>36</sup> from the territory of Hungary, which is, unfortunately, lost for the research. Based on the relative chronological position of the three identifiable specimens, the assemblage could have been deposited in the Hajdúböszörmény horizon (Ha B1). The typological character of these finds also refer to the possibility that this hoard may have contained archaic weapons from the former period.

## Situla and helmet from “Ternopil Oblast”

In 28 October 2016, several pictures of a situla and a unique helmet were uploaded to the Russian-speaking domongol.org metal detectorist blog by a user called “UFO” (Fig. 15–22). According to the blog entry, the two objects were found together in “Ternopil Oblast”, Western Ukraine (Fig. 1, Fig. 22).<sup>37</sup> No additional information were given about the context of these finds. On the uploaded images a small human rib-like object is also visible (Fig. 19.1, Fig. 20.1), which raise the possibility that these objects might have been part of a burial. The looted find from “Ternopil Oblast” consists of two unique objects: a Hajdúböszörmény-type situla (Fig. 4–5) and a helmet with solar barge motif (Fig. 9). The alleged provenance of these objects is puzzling. Although metal vessels and a few helmets are known from the territory of Ukraine,<sup>38</sup> they are more characteristic of the Carpathian Basin. If such finds appeared on the Western auction markets without exact provenance, one might associate them with the Eastern Carpathians or with Central Italy. It is also quite interesting that “Ternopil Oblast” has become a “source” of significant metal finds. Marianne Mödinger has recently published an illegally found

34 MOZSOLICS 1972, 195–196, 4. kép 1; MOZSOLICS 1985, 180; KEMENCZEI 1991, 15, Taf. 6.23; STOCKHAMMER 2004, 296.

35 VON QUILLFELDT 1995, 21; KRISTIANSEN 2002, 330, Fig. 7; TARBAY 2016b, 8–10. kép.

36 VACHTA 2008, 55, Abb. 36.

37 Retrieved from <http://domongol.org/viewtopic.php?f=10&t=26981> (15. 04. 2017, 09:51). In 2018, the link became inactive. See screenshots of the blog entry on Fig 22.

38 See HENCKEN 1971, 122–123, Fig. 93; GEDL 2001, 63–64; KOBAL’ 2000, 27–28; КОБАЛЬ 2006; БАНДРІВСЬКИЙ et al. 2014; КЛЮЧКО – КОЗЫМЕНКО 2017, 234–235; MÖDLINGER 2017, 56, 128, 136.

helmet from this area, which has been sold at the Violyty.<sup>39</sup> Several metal finds were published as “Ternopil Oblast” in the catalogue of Viktor Ivanovich Klochko and Anatolij Vasil’evich Kozymenko.<sup>40</sup> Therefore, the alleged provenance seem to be uncertain. If these objects indeed have been found in Western Ukraine, it could mean that they are one of the most outstanding finds of similar character from this region. At the same time, it cannot be ruled out that these artefacts were looted in the Carpathian Basin, perhaps in Transcarpathia or in its adjacent territories like Eastern Slovakia, South-Eastern Poland, Northeastern Hungary or Transylvania. As I have already mentioned, this is a question that might never be answered precisely because of the lack of context and the supra-regional character of vessels and armours.

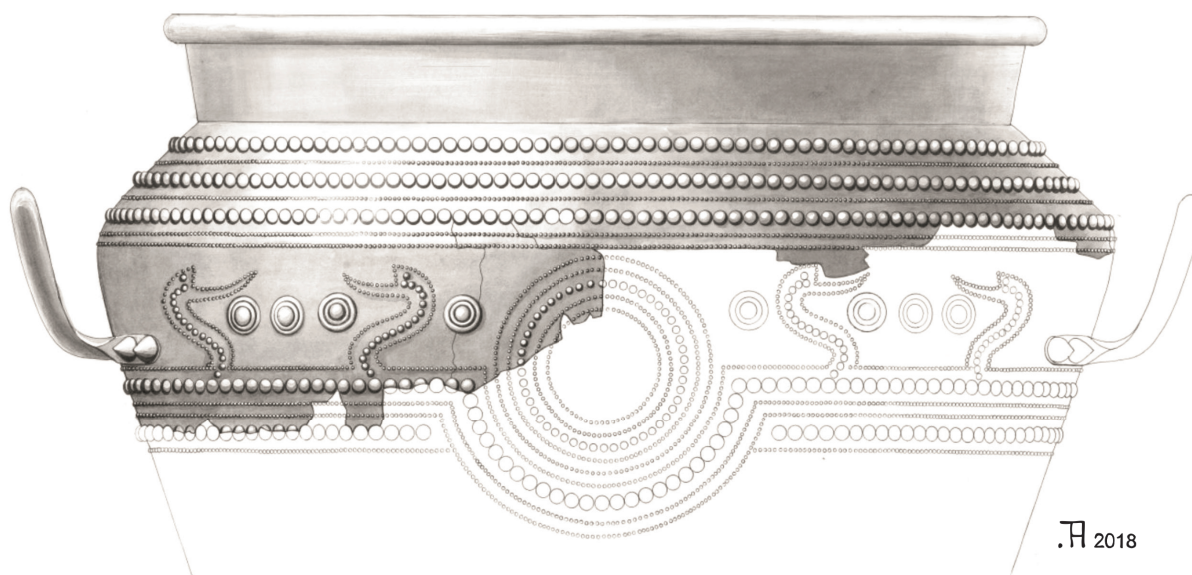


Fig. 4. Reconstruction of the situlae from “Ternopil Oblast” after the photographs uploaded to the domongol.org metal detectorists’ blog. Retrieved from <http://domongol.org/viewtopic.php?f=10&t=26981> (15. 04. 2017, 09:52). (Drawing: A. M. Tarbay 2018).

Both objects are significant, because they belong to the transitional era of the Eastern European LBA and EIA. Undoubtedly, the Hajdúböszörmény-type situla is the most important find that deserves a special attention here (Fig. 4–5). A detailed analysis of these vessels has been provided by Gero von Merhart, whose fundamental study marked the beginning of a new phase in the research of European metal vessels.<sup>41</sup> His work was completed by seminal studies, in which the current typo-chronology of this vessel type was developed.<sup>42</sup> It is generally accepted that the deposition of Hajdúböszörmény-type situlae is in the Ha B1 (late Period IV) in the territory of Eastern Europe.<sup>43</sup> Here, they appeared as individual finds or as part of hoards that often combined with weapons and vessels and in some cases also with jewellery or tools.<sup>44</sup> These situlae seem to be absent in the Northeastern Carpathian Basin during the

39 MÖDLINGER 2017, 56, Pl. 5.38.

40 КЛОЧКО – КОЗЫМЕНКО 2017, 176, 183–184, 186, 188–189, 231, 233–235.

41 VON MERHART 1952, 1–3, 33–35, 70.

42 THRANE 1966, 184–192; PATAY 1969b; PATAY 1990, 40–43; JANKOVITS 1996; GEDL 2001, 32–34; SOROCEANU 2005, 176–188; MARTIN 2009, 99–102; V. SZABÓ 2009a.

43 ÅBERG 1935, 90; LINDGREN 1938, 78; THRANE 1966, 191; PATAY 1990, 42; MARTIN 2009, 100–101; V. SZABÓ 2009a, 285.

44 SOROCEANU 2008, 182; MARTIN 2009, 100; V. SZABÓ – BÁLINT 2017, 17–19.



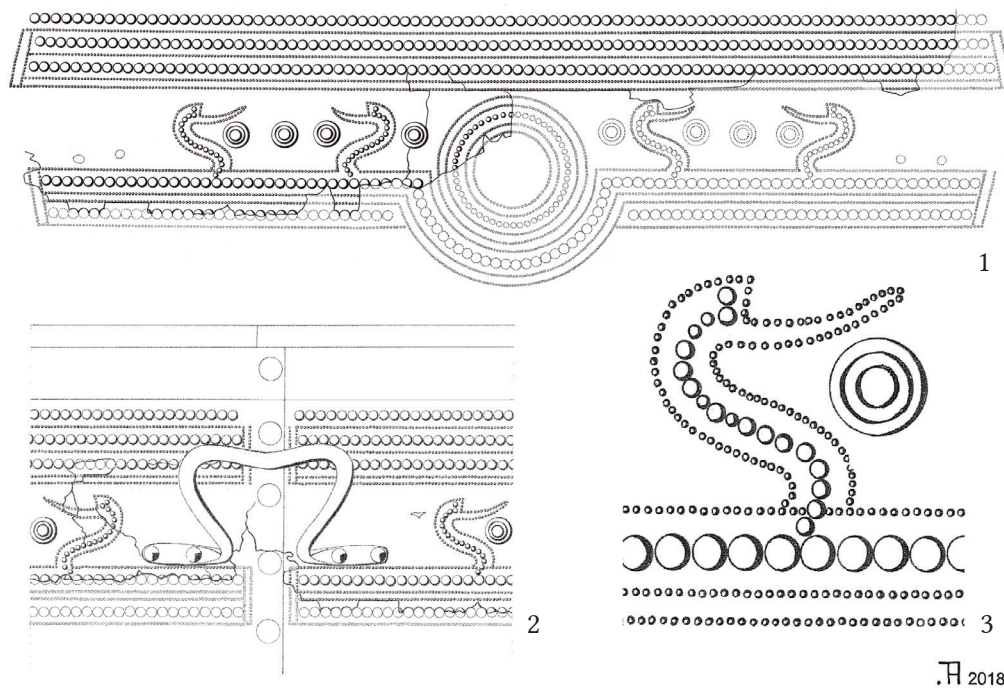


Fig. 5. Reconstruction of the decoration and details of the situla from “Ternopil Oblast”: 1 – solar barge, 2 – side view of the vessel, 3 – bird head with circular ribs pattern (Drawings: A. M. Tarbay 2018).

EIA, and at that time we can find them in lavish Western European elite burials.<sup>45</sup> The distribution of these metal vessels concentrates in the north-eastern part of the Carpathian Basin, especially in the Hungarian Hajdúság and Nyírség. They also appear in Western Hungary, and specimens are known from Slovakia, Romania, Poland, the Czech Republic, Germany, Denmark, Bosnia and Herzegovina, Italy, Switzerland and last but not least in Western Ukraine (Appendix, List 1.1–1.2) (Fig. 6).<sup>46</sup> The spread of these prestigious vessels did not happen over one period. Many scholars have suggested that the manufacturing and deposition of different LBA style situlae, including the Hajdúböszörmény-type, have continued in the EIA (Ha B2–B3, Ha C–D).<sup>47</sup> As we shall see, if the situla from “Ternopil Oblast” had been excavated by archaeologist, it would play an important role in this question.

The “North Hungarian origin” of the Hajdúböszörmény-type situlae was proposed by Vere Gordon Childe in 1926<sup>48</sup> and later by Pál Patay,<sup>49</sup> which is a concept that has been followed by several researchers.<sup>50</sup> Pál Patay argued that the first workshops specialized on the manufacturing of Hajdúböszörmény-type situlae could have been located in the Northeast-

45 PATAY 1990, 42; JANKOVITS 1996, 308; MOZSOLICS 2000, 23–25; MARTIN 2009, 101.

46 VON MERHART 1952, 70, Karte 6; FOLTINY 1955, 108; VON MERHART 1969, 327–330, Karte 6; PATAY 1969a, 5. ábra; MENDELEŤ 1974, Abb. 4; SOROCEANU – LAKÓ 1981, 149, Fig. 12; PATAY 1990, 40–43, Taf. 78B; NOVOTNÁ 1991, 58–60, Taf. 11.54; JACOB 1995, 103–104, Taf. 58B; GEDL 2001, 33; CHAUME 2004, 80; KÖNIG 2004, 120–121, 184–191, Taf. 48.253; SOROCEANU 2008, 184–185; MARTIN 2009, 99–102, Taf. 57B; V. SZABÓ 2009a, 286–289, 9. kép; MOLDEŇA 2015, Ryc. 1; MIHOVIĆ 2013, Fig. 89; VELLAČIK 2015; TERŽAN et al. 2016, 483–484, Fig. 143; V. SZABÓ – BÁLINT 2017, 6. kép.

47 LINDGREN 1938, 78; VON MERHART 1952, 33; VON MERHART 1969, 329–330; BIETTI SESTIERI 1976; PRÜSSING 1991, 52–54; JANKOVITS 1996, 308; JANKOVITS 1999, 112; BORGNA 1999, 157; SOROCEANU 2005; SOROCEANU 2008, 184; MARTIN 2009, 101; EGG – KRÄMER 2016, 87–106.

48 CHILDE 1926, 132.

49 PATAY 1969a, 21; PATAY 1972, 268; PATAY 1990, 42–43; PATAY 1996, 408–409.

50 LINDGREN 1938, 78; ÅBERG 1935, 86–87; JACOB 1995, 103; MARTIN 2009, 101; V. SZABÓ – BÁLINT 2017, 14.

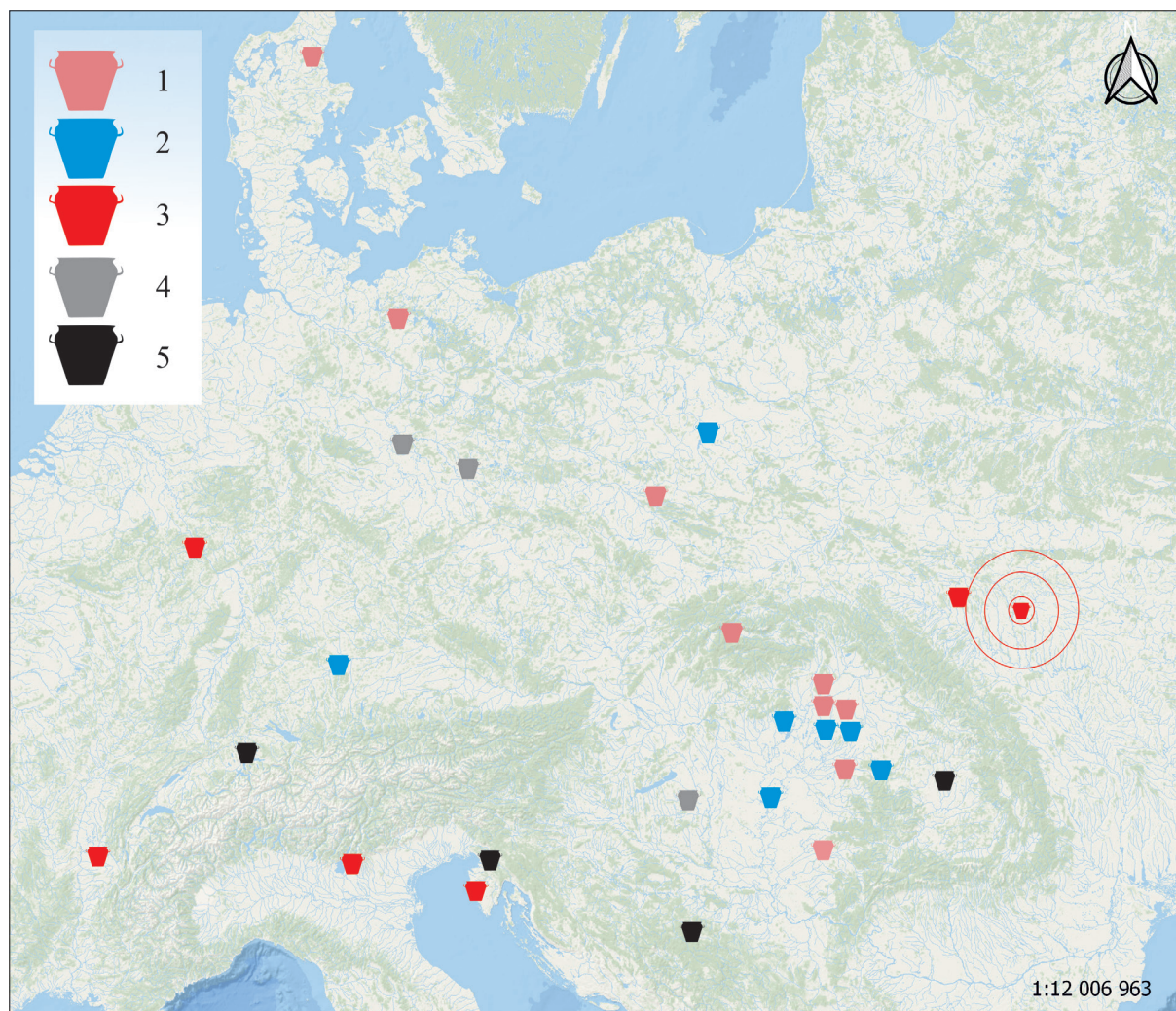


Fig. 6. Distribution of Hajdúböszörmény-type situlae and their uncertain fragments in Europe. 1 – Undatable Hajdúböszörmény-type situlae, 2 – Hajdúböszörmény-type situlae deposited in the Ha B1, 3 – Hajdúböszörmény-type situlae deposited later than the Ha B1, 4 – Uncertain fragments, 5 – Uncertain fragments deposited later than the Ha B1 (*Appendix, List 1.1–1.2*).

ern part of the Great Hungarian Plain, more precisely the Nyírség.<sup>51</sup> These products were distributed from this area via gift-exchange between the elite, resulting their imitation in different parts of Europe. According to him, some situlae were made in the Carpathian Basin, like Granzin, while certain specimens are products of a workshop outside the Carpathians (e.g. Biernacice, Siem, Lúčky).<sup>52</sup> Based on the overwhelming quantity of advanced Hajdúböszörmény-style metal products in the EIA Central Italy, this area could have been one of the regions, which certainly adopted and further developed this unique style.<sup>53</sup> In any case, this question cannot be decided based on solely stylistic arguments. It is a task for the future to identify workshops and identical products by the aid of metallurgical analyses and fine comparison of the objects.<sup>54</sup>

51 PATAY 1969a, 21; PATAY 1972, 268; PATAY 1990, 42–43; PATAY 1996, 408–409. A workshop located in Northeastern Hungary was also theorized by Gunnar Lindgren (LINDGREN 1938, 78).

52 PATAY 1969a, 21; PATAY 1972, 268; PATAY 1990, 42–43; PATAY 1996, 408–409.

53 JOCKENHÖVEL 1974; JANKOVITS 1996, 308; JANKOVITS 1999, 112; IAIA 2004, 308, Fig. 1a; IAIA 2005, 220–237.

54 See ANGYAL et al. 2017; SZABÓ 2017.



In the following, Hajdúböszörmény-type situlae are going to be outlined the chronological position of which seem to be younger than the Ha B1. Situlae and uncertain fragments that have been deposited after the Ha B1 appear in the Balkans, Caput Adriae, Western Alpine Region and West Germany. If we accept the late deposition of the Nedilys’ka hoard (see below), West Ukraine also belongs to this pattern. From the Eastern Carpathian Basin only two uncertain fragments are known: Buza and Biharugra. The distribution of Ha B1 situlae concentrate in the Northeastern Carpathian “core area”, and two of them appear in Poland and Southern Germany (Fig. 6, Appendix, List 1.1–1.2). There are several scenarios that could have caused this distribution pattern. A recently found specimen from Octendung (Germany, Rhineland-Palatine State) has a “classic”<sup>55</sup> Ha B1 solar barge motif. The other artefacts in this hoard (e.g. the Riedlingen-type sword: Ha B3,<sup>56</sup> the Ockstadt-type bomb-headed pin: Ha B3,<sup>57</sup> the Bad Homburg-type winged axes: Ha B2–Ha B3<sup>58</sup>), however, argue for a late Ha B3 deposition.<sup>59</sup> The hoard found in Nedilys’ka (Ukraine, Lviv Oblast’) is long known.<sup>60</sup> It is very likely that this find has a long chronological interval similar to the Peggau (Austria, Styria State) assemblage.<sup>61</sup> Its oldest, Periode III (Br D–Ha A1) objects are a crescent-shaped pendant and a cast ribbed ring.<sup>62</sup> There are a handful of finds in this hoard that are characteristic of the late Period IV (ca. Ha B1).<sup>63</sup> The youngest, Period V (Ha B2–Ha B3) finds are represented by bronze and iron objects.<sup>64</sup> A detailed future analysis is required for determining the exact chronological position of the Nedilys’ka find. However, the possibility should be raised that the content of the hoard was accumulated for a long period of time before it has been finally deposited in the Period V.<sup>65</sup> In these cases, the situlae are not necessarily younger (Ha B2–Ha B3) products. As ethnographic examples suggest, elit-related objects could have very specific and surprisingly long biographies.<sup>66</sup> Situlae are valuable objects that could have been kept, gifted and used until the very end of their biography, when they were finally placed in hoards or graves. The repaired Hajdúböszörmény-type situla from the Picugi burial site is another example for this phenomenon. Research raised the possibility that this objects was in fact a LBA situla used for a long period of time, and deposited along with grave goods characteristic between the 9<sup>th</sup>–8<sup>th</sup> centuries BC.<sup>67</sup> Repair marks on metal vessels, especially situlae are not unique.<sup>68</sup> These marks were observed on the Sényő situla (Hungary, Szabolcs-Szatmár-Bereg County),<sup>69</sup> and also on an Obišovce-type vessel from the

55 See IAIA 2004, Fig. 2.1.

56 VON QUILLFELDT 1995, 212–213, Taf. 76.222A; VON BERG 2017, Abb. 1.

57 KUBACH 1977, 505–508, Taf. 80.1297; VON BERG 2017, 151, Abb. 1.

58 KIBBERT 1984, 83–114, Tab. 7; PÁSZTHORY – MAYER 1998, 137–142; VON BERG 2017, Abb. 1.

59 VON BERG 2017.

60 SULIMIRSKI 1937; ŽUROWSKI 1949, 168–169; PATAY 1970; GEDL 2001, 63–64.

61 See WEIHS 2004, 94–97, 133–134.

62 GEDL 2001, 63–64, Taf. 79.C38, C41.

63 E.g. Hajdúböszörmény-type situla, Jenišovice-type cup, B1-type cauldron, socketed axes with beaked mouth, Vadena-type knives, rings with tapering terminals and rhomboid cross-section, tanged sickle. See PATAY 1970; GEDL 2001, 62–64, Taf. 74–75, Taf. 76.C3, Taf. 77C6, Taf. 78.C12–14, 17, Taf. 79.C27, C29, C32, Taf. 80.C46–56.

64 E.g. Advanced Debrecen-type axes, pseudo-openwork bronze object, iron rings, anvil and axe. See GEDL 2001, 63–64, Taf. 78.C15–16, Taf. 79.C44, Taf. 80.C60–64.

65 METZNER-NEBELSICK 2002, 72–73, Abb. 17.

66 See GOSDEN – MARSHALL 1999, 169–172.

67 BORGNA 1999, 157, Anm. 34; TERŽAN 2016, 396.

68 See GOGALTÂN 1993.

69 PATAY 1990, 11, Taf. 33.62.

antiquities market.<sup>70</sup> The most repairs were identified on the northernmost found *situlae* from Siem (Denmark, Nordjylland). Although it is not possible to determine the exact time of deposition of this two *situlae* due to the lack of additional finds, vessels covered with such repairs could have a particularly long biographies.<sup>71</sup> A complex life-circle has been proposed by Tudor Soroceanu for the Kurd-type *situla* from Brâncovenesti (Romania, Mureş County). The vessel has been repaired and modified several times, and it was deposited ca. in the Ha B3–Ha C as a completely changed object.<sup>72</sup> The deposition of *situlae* fragments also provide an interesting data. In case of the handle fragments from Zürich-Wollishofen-Haumesser (Switzerland, Zürich), Margarita Primas suggested a pre-monetary explanation. According to her, the fragments of metal vessels could have also circulated as “primitive money” before their deposition or re-casting.<sup>73</sup> The *situla* in the Nedilys’ka hoard is also fragmented, which could argue for a similar treatment of the vessel. This find is not the only example for the late deposition of Hajdúböszörmény-style vessel parts in Eastern Europe. As first Sándor Gallus, later Emil Vogt and Carola Metzner-Nebelsick have pointed out, the metal sheet discs from the Biharugra (Hungary, Békés County) hoard can be identified as *situla* parts, which have been cutted out from a vessel or a semi-finished metal sheet.<sup>74</sup> This treatment of a valuable metal sheet object has its analogue from the Br D and Ha A1 periods, when some funnel-shape pendants were made of bronze belts’ parts. These secondarily used jewelry were randomly cut out from the original, elaborately decorated objects (e.g. Orbán Balázs Cave).<sup>75</sup> A thick, undecorated, cut-out metal sheet disc is also known from the first Zsáka hoard (deposited in Ha A2–Ha B1).<sup>76</sup> The Biharugra fragments indeed could represent a symbolic breakage with local tradition, as Carola Metzner-Nebelsick has suggested lately.<sup>77</sup> However, this kind of treatment, let it be its cause ritual or secondary use, has its antecedents in the LBA Carpathians hoards.

The last two examples fall into another category, since these Hajdúböszörmény-type *situlae* slightly differ from the “standard” pieces.<sup>78</sup> The stylised solar barge motives on the Rivoli *situla*, which can be typologically described as circular ribs (*Kreisrippenornament*), were made by patterned punches (Fig. 7.2). This decoration appears on numerous European prestige objects between the Br D–Ha A and Ha B3,<sup>79</sup> but its combination with the Hajdúböszörmény-style solar barge is clearly a later development. This raises the possibility that

70 WIRTH 2006a, Fig. 9.

71 THRANE 1966, 184–192, Fig. 16–19.

72 SOROCEANU 2005, 458–459, Abb. 10–11; SOROCEANU 2008, 167–168, 173–174.

73 PRIMAS 1990, 85–87.

74 GALLUS – HORVÁTH 1939, 91, 130; VOGT 1950, 225, Anm. 39; METZNER-NEBELSICK 2002, 470–474, 790, Abb. 210.1–2, Taf. 136.13; KEMENCZEI 2005, 63, 131–132, Tab. 1, Taf. 15.72–74; METZNER-NEBELSICK 2010, 133, Anm. 47, Fig. 2.6–8. As fragments, it is hard to classify them exactly. The technique and style of the bird head is clearly late (Ha B2–Ha B3), an identical one can be seen on the vessel from Przęsławice (GEDL 2001, Taf. 14.40, Taf. 15; METZNER-NEBELSICK 2002, 473, Anm. 806). Similar combination of elements (square, bird head, sun disc) can only be observed on one Obišovce-type *situla* that has been sold on the antiquities market (V. SZABÓ 2009a, 285, 3. kép; WIRTH 2010, 504–507, Abb. 4, 6–8; V. SZABÓ – BÁLINT 2017, 14–15, 7. kép).

75 EMÓDI 2006, 33, 6, 8. ábra; TARBAY 2015, 92.

76 V. SZABÓ 2011, Taf. 8.3.

77 METZNER-NEBELSICK 2010, 133, Anm. 47.

78 JANKOVITS 1996, 308.

79 According to Albrecht Jockenhövel, the earliest finds with this decoration are known from the Early Bronze Age (JOCKENHÖVEL 2003, 110).



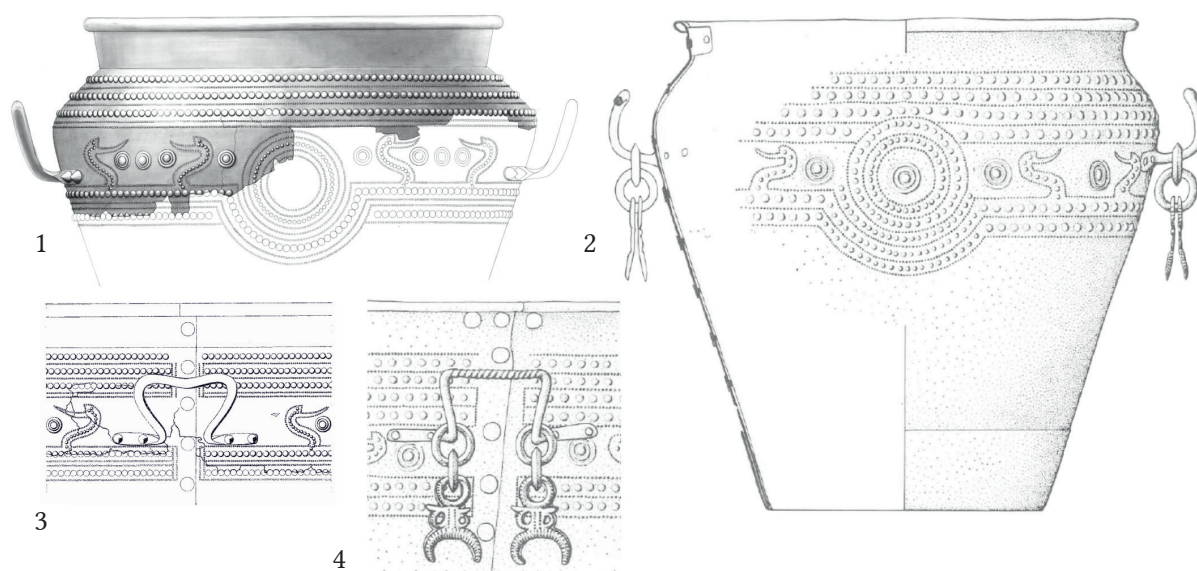


Fig. 7. Comparison of the situla from “Ternopil Oblast” and the situla from Rivoli. 1: The situla from “Ternopil Oblast”, 2: The situla from Rivoli (BIETTI SESTIERI 1976, Fig. 13.1), 3: Side view of the situla from “Ternopil Oblast”, 4: Side view of the situla from Rivoli (BIETTI SESTIERI 1976, Fig. 13.1).

this situla was also made later, and it cannot be interpreted as an “archaic” Ha B1 specimen.<sup>80</sup> The Rivoli vessel has been found along with several artefacts (e.g. iron spear, bimetall sword, two fibulae, ribbed cist, pin, ceramic pots etc.). Unfortunately, the context of these finds is not entirely certain. The Rivoli assemblage was reconstructed by Anna Maria Bietti Sestieri, who relied on Stefano de’ Stefani’s 1885 work.<sup>81</sup> According to her, the situla from Rivoli could have belonged to a collective burial, consisting of ca. four graves (two male and two female). The chronological position of these finds can be dated between the 8<sup>th</sup> and 7<sup>th</sup> centuries BC. The bronze vessel contained ashes and coal referring to the possibility that it had functioned as an urn similarly to the situla from Unterglauheim. Anna Maria Bietti Sestieri has argued that the situla had been a part of a male burial along with a Verucchio-type bimetall sword, an iron spearhead, and a Rivoli Veronese-type bronze pin, which she dated to the end of the 8<sup>th</sup> and beginning of the 7<sup>th</sup> centuries BC.<sup>82</sup> The chronological position of this situla was discussed by several authors who assigned this uncertain burial to different periods, all correlating with the EIA.<sup>83</sup> The second vessel was excavated in 1987, in the territory of Eastern France, from the burial mound of Saint-Romain-de-Jalionas (Auvergne-Rhône-Alpes Region). In the chamber only a few remains of the body have been found. The grave goods, a massive gold ring, a pin, a torques, an iron knife and a sword represented an elite male clothing and weaponry. The Hajdúböszörmény-type situla and a smaller bronze vessel inside fit well to

80 JOCKENHÖVEL 1974, 42–43, Abb. 7; JOCKENHÖVEL 2003, 110–112, Abb. 5; ARMBRUSTER 2003, 74–75, Fig. 15a–b; NESSEL 2009, 38–40, 43–45.

81 DE’ STEFANI 1885; MONTELIUS 1895a, 264.

82 OBERDONAU-KREISE 1836, 12–14; MONTELIUS 1895a, 264–265; MONTELIUS 1895b, Pl. 48.1–2, 5, 10; GHIRARDINI 1897, 31–34, Fig. 7a–b; MÜLLER-KARPE 1961, 83, Taf. 62.2; CARANCINI 1975, 265–266, Tav. 60.2002; BIETTI SESTIERI 1976, 103–107, Fig. 13.1; MENGHIN – SCHAUER 1983, 88–90; WIRTH 2003, 136–137. The dating of the burial relies on the chronological position of the “Verucchio-type” bimetall sword (MÜLLER-KARPE 1961, 83–84; PERONI 1970, 110–111, No. 296).

83 MÜLLER-KARPE 1961, 83–84, Taf. 62.2, Taf. 103; JANKOVITS 1996, 308; IAIA 2005, Fig. 87A; TERŽAN 2016, 359–360.

this exclusive context. Stéphane Verger concluded that the burial can be dated between the 9<sup>th</sup> and the 8<sup>th</sup> centuries BC. Bruno Chaume related this burial to the Bronze Final IIIb (Ha B3).<sup>84</sup> The Saint-Romain-de-Jalionas situla has no circular ribs, but the overall design of its decoration derives from the LBA Hajdúböszörmény-type.<sup>85</sup> Surprisingly, the closest parallel of the Saint-Romain-de-Jalionas situla was found in Remetea Mare (Romania, Timiș County), which, apart from two dots, has an almost similar decoration. It is unfortunate that due to the lack of additional finds, this situla cannot be dated precisely.<sup>86</sup>

This situla from “Ternopil Oblast” is the Eastern European counterpart of the Rivoli find (Fig. 4, Fig. 5, Fig. 7). It has all formal characteristics of a LBA Hajdúböszörmény-type situla,<sup>87</sup> but its decoration has advanced features. The vessel’s remaining upper part consists of two overlapping metal sheets, hammered together by flattened rivets. It is equipped with cast and hammered handles and conical-headed rivets (Fig. 7.3–4).<sup>88</sup> Its rim is folded on a wire, and the body of the vessel is decorated with embossed dots. The main motif is a solar barge,<sup>89</sup> in the case of which the small stylized suns between the bird heads are circular ribs made by patterned punches.<sup>90</sup>

According to Albrecht Jockenhövel, the combination of the Hajdúböszörmény-style solar barge and the circular ribs can be seen on EIA metal-sheet objects, especially on bronze amphora-shaped vessels.<sup>91</sup> A find with similar combination is known from the Przęsławice hoard (Poland, Grójec County) that has been dated to end of the Period V (Ha B3). This assemblage was found in 1896, and it contained three drinking horns along with a bronze amphora-shaped vessel decorated with solar barge and circular rib patterns.<sup>92</sup> Another example is the amphora-shaped vessel from Gevelinghausen (Germany, Lower Saxony State). This vessel was found in an elite female burial. Here the solar barges and circular ribs appeared on the upper part and the belly of the vessel. Both are very similar to the patterns of the situla from “Ternopil Oblast”.<sup>93</sup> The Gevelinghausen find was dated to the 8<sup>th</sup> century BC, based on its stylistic similarities with the finds from EIA Central Italy.<sup>94</sup> A simpler version of this pattern combination can be seen on the B2a-type cauldron from Rossin (Germany, Mecklenburg-Vorpommern State). Unfortunately, as a stray find, this vessel has no datable value.<sup>95</sup> A unique metal fragment, identified as a helmet or a situla, is known from Škocjan (Slovenia, Divača Municipality). It is decorated with a Hajdúböszörmény-style solar barge and concentric ribs.<sup>96</sup>

84 VERGER 1990, 55–57, Fig. 3; CHAUME 2004, 80.

85 VERGER 1990, Fig. 3.

86 MENDELEȚ 1974, Abb. 1, Abb. 3; SOROCEANU 2008, Taf. 40A–42A; HEGYI 2014, Fig. a–b.

87 VON MERHART 1969, 327–330.

88 VON MERHART 1969, 329.

89 VON MERHART 1952, 40–41; JOCKENHÖVEL 1974, 42–43.

90 JOCKENHÖVEL 1974; ARMBRUSTER 2003, 74–75, Fig. 15a–b; NESSEL 2009, 43–45; ILON 2015, 47–59.

91 JOCKENHÖVEL 1974, 44; JOCKENHÖVEL 2003, 111; WIRTH 2006b, 554–555.

92 MONTELIUS 1902, 7–8, Fig. 4; CONWENTZ 1905, Taf. 52.1; LA BAUME 1920, 37–38, Abb. 51; SPROCKHOFF 1930, 92–93, Taf. 37b; VON MERHART 1952, 71, Taf. 24.7; SPROCKHOFF 1956, 52; JOCKENHÖVEL 1974, 25–29; GEDL 1996, 380, Abb. 10; GEDL 2001, 35–36, Taf. 14.40, Taf. 15.

93 GÜNTER 1974; JOCKENHÖVEL 1974; JACOB 1995, 112–113, Taf. 62.357.

94 JOCKENHÖVEL 1974, 46–47.

95 LINDENSCHMIT 1877, N<sup>o</sup> 2, Taf. 3.2, 2b; MONTELIUS 1902, 16–17, Fig. 14; SPROCKHOFF 1930, 100–101, Taf. 30b; VON MERHART 1952, 64, Taf. 3.5; JOCKENHÖVEL 1974, 40–42; IAIA 2005, Fig. 93c; MARTIN 2009, 92–94, Taf. 37.130.

96 SZOMBATHY 1912, 151–153, Fig. 103.104; VON MERHART 1941, 20, Abb. 8.2; JOCKENHÖVEL 1974, 44, Fig. 92c; GUŠTIN 1979, T. A.104; IAIA 2005, Fig. 90; BORGNA 2016, 127; BORGNA et al. 2016, 563, 692, Tav. 17.11–12;

The pattern resembles to the situlae from the Northeastern Carpathians, as well as to the 8<sup>th</sup> century BC Central Italian metal products. Based on its stylistic arguments, Biba Teržan dated this fragment to the Ha B2–Ha B3.<sup>97</sup>

Metalworks similar to the situla from “Ternopil Oblast” concentrated in the territory of the EIA Central Italy. The most important one is the already mentioned Hajdúböszörmény-type situla from Rivoli. Apart from minor differences, the two metal vessels are almost alike. The find from “Ternopil Oblast” has one less row of dots and more circular ribs between the bird heads. The handles of the Rivoli situla are decorated with torsion and equipped with chained solar-barge pendants. According to the published illustrations, the handles were attached to the body by four flattened rivets. In contrast, the situla from “Ternopil Oblast” has standard Carpathian-type handles that were attached to the body by conical-headed rivets (*Fig. 7.3–4*).<sup>98</sup> In addition to the Rivoli vessel, there are a handful of Italian situlae the decoration of which preserved the Hajdúböszörmény style, but their shape and construction clearly relate them to the EIA. Some of these are even decorated with the combination of solar barge and circular ribs: e.g. Capodimonte-Bisenzio–Tomba Olmo Bello 8.<sup>99</sup> In two cases the solar barges are doubled: Este–Tomba Capodaglio and Tomba Ricovero (*Fig. 8.c*).<sup>100</sup> In addition to the situlae, there are several amphora-shaped bronze vessels (*biconici*) that are decorated with a Hajdúböszörmény style solar barge and circular ribs.<sup>101</sup> Among these finds, the bronze amphora-shaped vessel from Veio Quattro Fontanili Tomba AA1 (Rome-Isola Farnese) (ca. 770–760 BC) has the most similar decoration to the “Ternopil Oblast” find.<sup>102</sup> The decoration combination - the bird head facing towards the sun disc (circular ribs) - appears on almost every elite-related artefacts in Central Italy like bronze metal bowls,<sup>103</sup> crested-and<sup>104</sup> cap helmets,<sup>105</sup> B2a-type cauldron,<sup>106</sup> and it can be seen even on the wall of the enigmatic metal hut urn from Vulci, necropolis dell’Osteria (*Fig. 8.a–c*).<sup>107</sup> This group of

MÖDLINGER 2017, 136, Fig. 2.28.3.

97 HENCKEN 1971, 121–122; BORGNA 2016, 125–128; TERŽAN 2016, 437–438.

98 GHIRARDINI 1897, 31–34, Fig. 7a–b; VON MERHART 1952, 70, Taf. 20.5, Taf. 23.5; MÜLLER-KARPE 1961, 83–84; JOCKENHÖVEL 1974, 44; BIETTI SESTIERI 1976, 104, 107–108, Fig. 13.1; JANKOVITS 1996, 308; IAIA 2005, 129–131, 216, Fig. 87A.

99 IAIA 2004, 312; IAIA 2005, 237, No. 22, Fig. 92b.

100 GHIRARDINI 1897, Fig. 4a–b; GHIRARDINI 1901, Fig. 2, Tav. XXVII.a–b; RANDALL-MACIVER 1927, 18, Fig. 6; KOSSACK 1954, 113, 121, List I, No. 12, Taf. 9.4; VON MERHART 1952, 70, Taf. 21.6, Taf. 23.2–3; FOGOLARI 1988, 84, Fig. 106–107; JANKOVITS 1996, 308; IAIA 2005, 230, Fig. 91.c–d. Combination of the double solar barge with concentric ribs is visible on ribbed cist’s lid, like the one from Bologna-Monteveglio (GERHARD 1843, 13–14, Taf. I.4, 6; KOSSACK 1954, 113, 121, List I, No. 25; IAIA 2005, 229–230, Fig. 91b) or on belts: Bologna Tomba Benacci 543 (GHIRARDINI 1897, 25–26, Fig. 5; HENCKEN 1968, 109, Fig. 42.e; IAIA 2005, 229–230, Fig. 91a). Abstracted double solar barges are present on situlae from Hallstatt and Kleinklein, as well as on other EIA metal sheet products (See PRÜSSING 1991, 50, 57, Taf. 19.104, Taf. 25.127; WIRTH 2006b, 557–558; EGG – KRÄMER 2013, 175–183, Abb. 70, Taf. 21–22, Taf. 26–27).

101 Como–Ca’Morta, Orvieto, “Tarquinia”, Tarquinia-Arcatelle, Veio-Quattro Fontanili M9B and AA1, “Vulci or Bisenzio” (HENCKEN 1968, 235, Pl. 124; IAIA 2005, 151–188, Fig. 51.20, Fig. 56.1–2, Fig. 57.3–4, Fig. 58.6, Fig. 58.5, Fig. 62.27, Fig. 64.28; PUTZ 2007, 290, Taf. 89.1).

102 JOCKENHÖVEL 1974, 22, 26, Abb. 4; IAIA 2005, 163–169, Fig. 62.27; 2007, 268. Ursula Putz cited other datings: ca. 760 BC, 800–730/720 BC and 750–725 BC (PUTZ 2007, 227, Taf. 23.30).

103 Sorbo di Cerveteri Grave No. 199, Servizi di Novilara Grave No. 83 (IAIA 2005, 206, Fig. 84a–b).

104 “Vulci”, Tarquinia-Arcatelle (HENCKEN 1968, 232, Pl. 93; IAIA 2005, 92, Fig. 28.37; BIETTI SESTIERI – MACNAMARA 2007, 205, Pl. 179.811, Pl. 180.811).

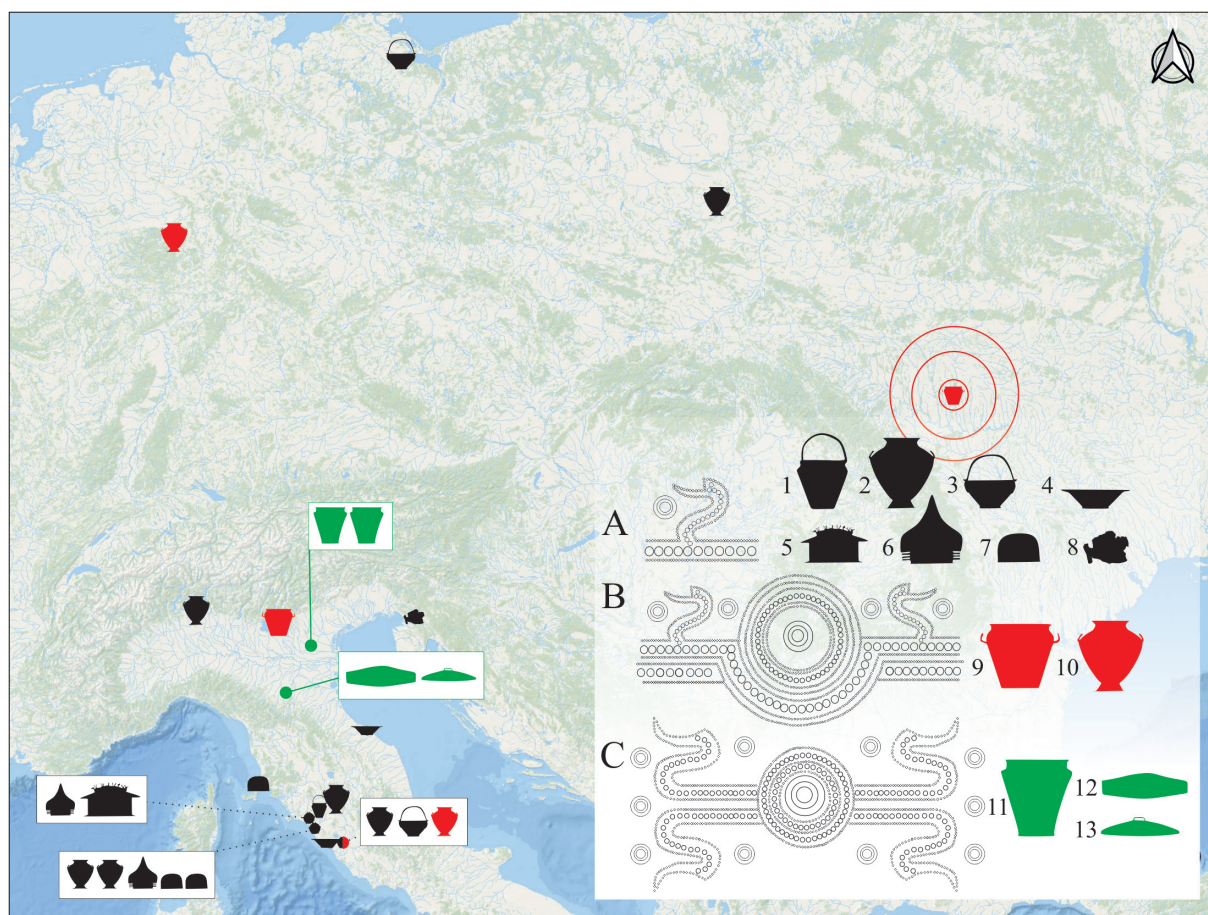
105 Populonia-Poggio del Molino o del Telegrafo, “Louvre”, Tarquinia M8, Tarquinia Impiccato Tomba 2 (HENCKEN 1968, 235, Fig. 23, Pl. 121–122; IAIA 2005, 59, Fig. 10.14–15, Fig. 11.16; PUTZ 2007, 222, Taf. 16.1–2).

106 Veio-Valle La Fata Grave 23 (IAIA 2005, 236–237, Appendice 1, No. 25, Fig. 93a).

107 BURANELLI 1986, 7, Fig. 5–7; IAIA 2005, 230–231, 237, No. 27, Fig. 92a.



late Hajdúböszörmény-style artefacts have been recently re-analysed in depth by Cristiano Iaia.<sup>108</sup> According to him, they are products of a local EIA (ca. 930–740 BC) metal workshop dealing with an advanced version of the Hajdúböszörmény style. It is particularly interesting that compared to the LBA Carpathian finds, these objects are often part of lavish burials. The situla and amphora-shaped vessel with solar barge functioned as urns and were frequently combined with helmets, weapons and other prestige goods, which phenomenon is analogous with most of the LBA Carpathian hoards, including this vessel.<sup>109</sup> Despite the apparent similarities, the situla from “Ternopil Oblast” can only be associated with the Rivoli situla. Based on some stylistic similarities it can also be related to the amphora-shaped vessel from the



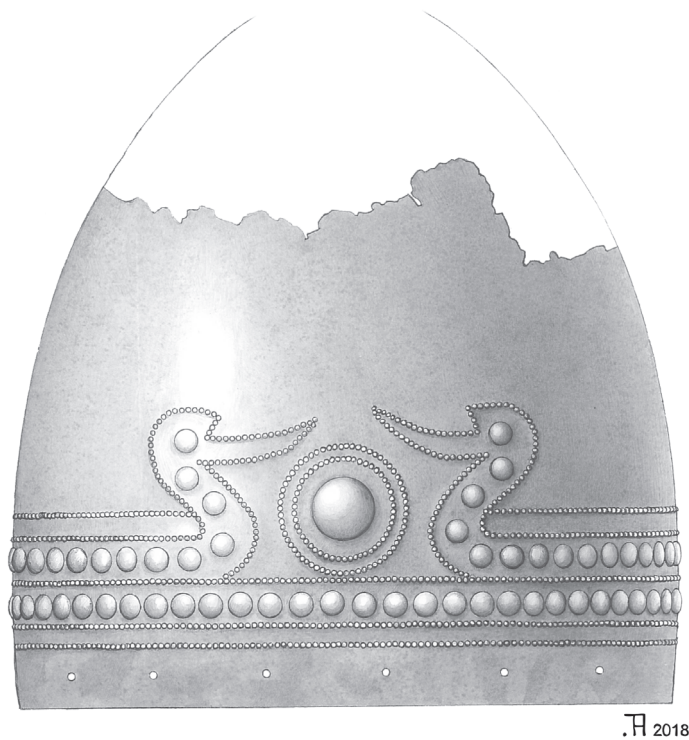
*Fig. 8.* Distribution of metal sheet objects decorated with solar barge/bird heads and circular ribs. *A:* bird head with circular ribs. 1 – situla (Bisenzio), 2 – amphora-shaped vessel (Przęsławice), 3 – cauldron (Rossin, Veio-Valle La Fata 23), 4 – metal bowl (Sorbo di Cerveteri 199, Servici di Novilara 83.), 5 – hut urn (Vulci-dell’Osteria), 6 – crested helmet (“Vulci”, Tarquinia-Arcatelle), 7 – cap helmet (“Louvre”, Populonia-Poggio del Molino o del Telegrafo, Tarquinia M8, Tarquinia Impiccato 2), 8 – fragment (Škocjan); *B:* Hajdúböszörmény style solar barge and circular ribs. 9 – situla (Rivoli), 10 – amphora-shaped vessel (Gevelinghausen, Veio AA1); *C:* Double solar-barge with circular ribs. 11 – situla (Este-Capodaglio, Este-Casa di Ricovero), 12 – belt (Bologna-Benacci 543), 13 – cist’s lid (Bologna-Monteveglio) (BIETTI SESTIERI 1976, 104, 107–108; JACOB 1995, 112–113; GEDL 2001, 35–36; IAIA 2004; IAIA 2005, 59, 92, 206, 229–237, Appendice 1; BIETTI SESTIERI – MACNAMARA 2007, 205; MARTIN 2009, 92–94; BORGNA 2016, 127).

108 See IAIA 2004; IAIA 2005.

109 JOCKENHÖVEL 1974; BIETTI SESTIERI 1976, 107–108; IAIA 2004, 307–309, Appendice, Fig. 1a; IAIA 2007; PUTZ 2007, 105–106; SOROCEANU 2008, 182; VACHTA 2008, 108–109, Abb. 85.

Veio Quattro Fontanili AA1 burial (*Fig. 8.b*). Both finds slightly differ from the local metal products, and share typological similarities with earlier Central European metal finds.<sup>110</sup>

Providing precise chronological position for an uncertain find like the situla from “Ternopil Oblast” would be bold. Its close parallel (Rivoli) has no secure context, and it has been dated differently. Details of the handles also relate this find to the Carpathian LBA metallurgical tradition. Based on the parallels of the decoration, it is possible to associate this situla with the 8<sup>th</sup> century BC, ca. the end of Period V (Ha B3). The significance of the vessel from “Ternopil Oblast” is that it represents an advanced Hajdúböszörmény-style in a region and a period we would be less likely to expect. The scientific loss is immeasurable. If this find had a secure context, it would argue for the existence of Eastern European metal workshops in the EIA, which existed parallelly for some time with the one in Central Italy. This question will be briefly addressed at the end of the analysis.



*Fig. 9.* Reconstruction of the helmet from “Ternopil Oblast” (Drawing: A. M. Tarbay 2018).

The helmet allegedly found along with the situla has an elongated bell shape, which resembles the LBA bell helmets. Its edges are perforated and seem to be hammered.<sup>111</sup> Its body is covered with dots forming a solar barge. It is a unique feature that distinguishes this helmet from its undecorated LBA counterparts. The lower part of the pattern consists of three parallel lines of dots made by repoussé and one line made by embossing. The solar barge is separated from the lower pattern, and it consists of two bird heads facing towards a stylised sun (*Fig. 9*). According to the only known image, this decoration is symmetric on the backside (*Fig. 14.1*). Thus the complete motif consists of two bird-headed barges and two stylised suns (*Fig. 10*).

Similar helmets are unknown both in Western Ukraine and in the Carpathian Basin. In this region only a certain element of this pattern has parallels. The “separated solar barge” (*Fig. 10*) appears primarily on bronze vessels. The closest find to “Ternopil Oblast” is the B1-type cauldron from Kunysivtsi (Ukraine, Ivano-Frankivsk Oblast). This object is part of a unique Periode V (Ha B2–Ha B3) hoard consisting of five cauldrons that were put into one another.<sup>112</sup> A more stylized solar barge can be seen on the cauldron from Mezökövesd (Hungary,

<sup>110</sup> IAIA 2005, 216, 227–229; IAIA 2007, 268–269.

<sup>111</sup> MÖDLINGER 2013; MÖDLINGER 2017, 57–68.

<sup>112</sup> PRZYBYŚLAWSKI 1892, 34–36, Fig. 4, 4a; SULIMIRSKI 1937, Tabl. VII.4a; ŻUROWSKI 1949, 167, No. 43, Tab. XXX.7; PATAY 1969b, Taf. XLIX.2; ANGELI 1962, 308, Taf. 1–2; GEDL 2001, 62–63, Taf. 70B.2; КОБАЛЬ 2006, 92–94, 97, Рис. 1.4.



Borsod-Abúj-Zemplén County). This is an emblematic hoard made up of a personal set of one helmet, two armspirals, two cauldrons, and a situla, which have been deposited into a ceramic pot. The assemblage is earlier than the Kunysivtsi hoard, and it can be dated to the Ha B1.<sup>113</sup> The “separated solar barge” also appears on some Hajdúböszörmény and Obišovce-type situ-lae: Biernacice,<sup>114</sup> “Lúčky”,<sup>115</sup> and “Obišovce”.<sup>116</sup> The Biernacice situla was part of a deposited banquet set consisting of 8 additional metal cups. This find has been associated with the end of Period IV (Ha B1) by the local research.<sup>117</sup> The “Obišovce” vessel is originating from the antiquities market, therefore we cannot rely on its chronological position or composition. The “Lúčky” find’s context and provenance is also uncertain, which has been discussed by Mária

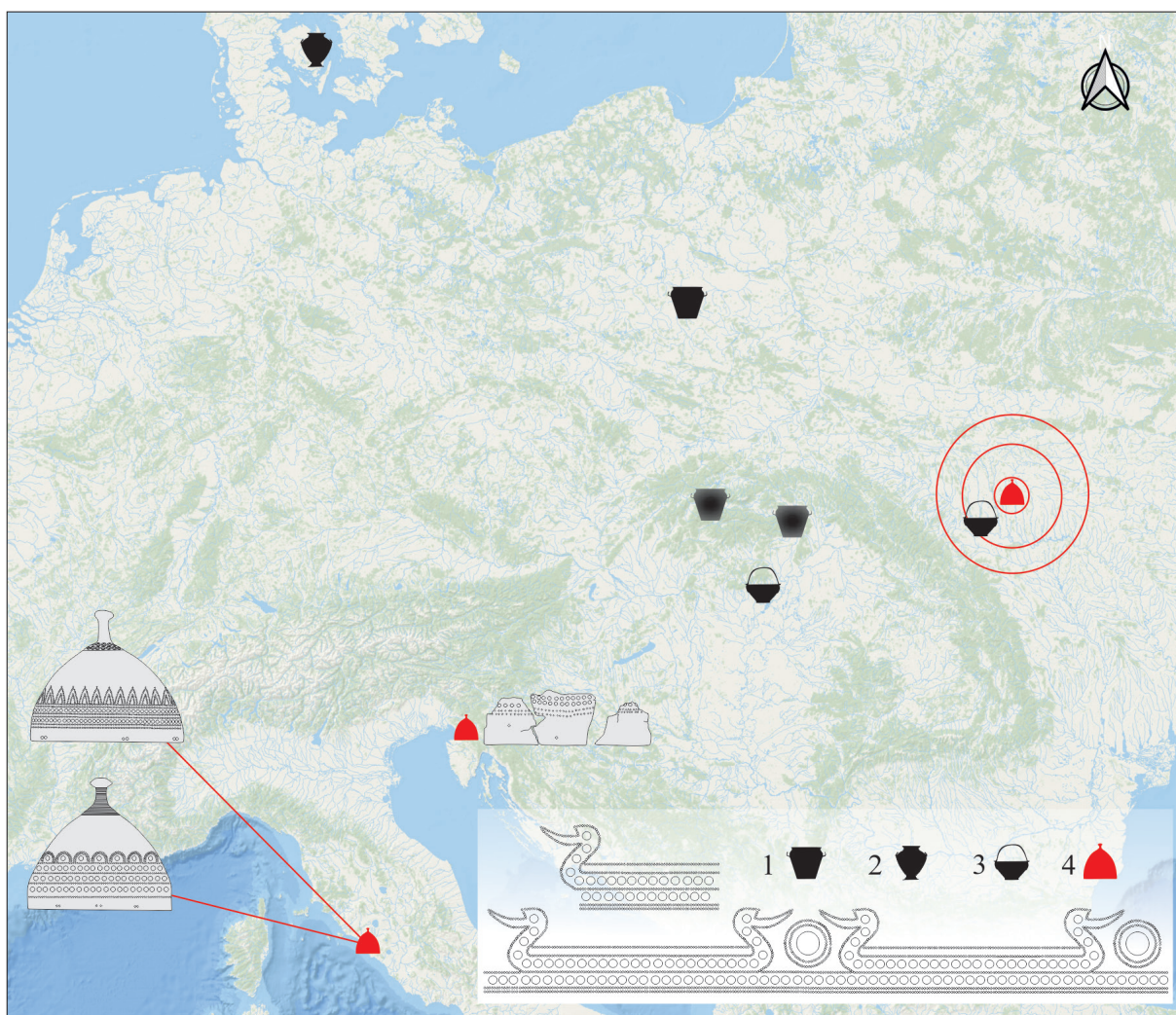


Fig. 10. Distribution of the stylistic parallels of the helmet from “Ternopil Oblast”. 1 – situlae (Bier-nacice, “Lúčky”, “Obišovce”), 2 – amphora-shaped vessel (Mariesminde), 3 – cauldron (Kunysivtsi, Mezőkövesd), 4 – helmet (Tarquinia RC 232, RC 254, Škocjan) (PATAY 1990, 23; NOVOTNÁ 1991, 58; THRANE 1966, 192–197; GEDL 2001, 33, 62–63; IAIA 2005, 50, 55, Fig. 5.5, Fig. 8.11; WIRTH 2010; BORGNA et al. 2016, Tav. 54.6–7).

113 PATAY 1969b, 171–173, Abb. 4–7, Taf. XLIII.1; PATAY 1990, 23, Taf. 14.19; MOZSOLICS 2000, 55–56, Taf. 51.3a–c.

114 GEDL 2001, Taf. 11.37.

115 NOVOTNÁ 1991, Taf. 11.54.

116 WIRTH 2010, Abb. 4, Abb. 6.

117 GEDL 2001, 17, 33.

Novotná in depth.<sup>118</sup> The “separated solar barge” is also present on the amphora-shaped vessel from Mariesminde (Denmark), which was deposited in a marsh near Lavindsgaard along with 11 gold vessels inside. The find has been dated to Period IV (Ha A2–Ha B1) by Henrik Thrane.<sup>119</sup>

As I have already mentioned, decorated cap and bell helmets are not characteristic in Eastern Europe. These objects are considered to be products of the EIA Central Italy and its adjacent areas (*Fig. 10*).<sup>120</sup> These decorated specimens can be found among Cristiano Iaia’s San Canziano–Tarquinia Group, which includes cap helmets with knobs from Italy and Slovenia: Škocjan,<sup>121</sup> Tarquinia RC 232 (Bronzo Finale/Primo Ferro 1),<sup>122</sup> Tarquinia RC 254 (middle of Primo Ferro 1),<sup>123</sup> and an unprovenanced one.<sup>124</sup> An elaborate pattern is also present on an individual helmet from Tarquinia RC 291 (Primo Ferro 1).<sup>125</sup> The design and technique of these helmets are similar to the “Ternopil Oblast” find. Regarding their shape, they also resemble to the undecorated Carpathian bell helmets, but they clearly belong to an independent group. It is unfortunate that their context is insufficient for precise relative chronology. The oldest find is most likely the one from Tarquinia RC 232, which has been dated between the LBA and EIA (Bronzo Finale–Primo Ferro 1), while the rest of the helmets have been generally associated with the beginning of the EIA (Primo Ferro 1).<sup>126</sup> Here, the solar barge motif is only present on completely different helmets like cap helmets without socket or crested helmets. These show an advanced style, and some were even combined with concentric ribs.<sup>127</sup>

Briefly, the helmet from “Ternopil Oblast” has strong Eastern European LBA character regarding its shape and the design of the solar barge. As a decorated specimen, however, it follows an EIA trend similarly to the so-called “San Canziano–Tarquinia Group”. In the absence of a context and the knob, it is not possible to date this find precisely. It could have been a later representative of the Carpathian bell helmets in Period V (Ha B2–Ha B3).

Based on the analysis of the finds, it is clear that a significant assemblage has been lost. In my opinion, these finds can be roughly dated to Period V (Ha B2–Ha B3), based on parallels, stylistic and technological arguments, and their relations to the local Eastern European material. The time of their burial could have been the 8<sup>th</sup> centuries BC (ca. Ha B3). Both finds show an advanced style compared to the securely dated Ha B1 artefacts. Therefore, it is unlikely that they were used for a long period of time before their deposition, as I have referred to this possibility in the case of the late-dated Hajdúböszörmény-type situlae. In fact, these artefacts can be interpreted as a direct continuation of an advanced LBA metallurgical workshop, which has emerged on the territory of the Gáva pottery style, in the Northeastern Carpathian Basin around the Ha B1. The existence of “old fashion” elite representation at the threshold

118 NOVOTNÁ 1970, 103–104.

119 THRANE 1966, 192–197, Fig. 21–22.

120 BORGNA 1999, 159–162; IAIA 2005, 44–63; BORGNA 2016, 125, Fig. 43; TERŽAN 2016, 343; MÖDLINGER 2017, 83–87.

121 HENCKEN 1971, 48–50, Fig. 26.e; BORGNA 1999, Fig. 5; IAIA 2005, 50, Fig. 5.4; BORGNA et al. 2016, Tav. 54.6–7.

122 MONTELIUS 1910, Pl. 278.2a–b; HENCKEN 1968, 49, 232, Fig. 18, Pl. 92; HENCKEN 1971, 45–48, Fig. 23.a–b; IAIA 2005, 50, Fig. 5.5; MÖDLINGER 2017, Fig. 2.13.2.

123 HENCKEN 1968, 232, Pl. 91; IAIA 2005, 55, Fig. 8.11; MÖDLINGER 2017, Fig. 2.13.3.

124 HENCKEN 1971, 47–48, Fig. 24–25; IAIA 2005, 50–51, Fig. 6.6; MÖDLINGER 2017, Fig. 2.13.5.

125 GHIRARDINI 1881, 342, Tav. V.23; MONTELIUS 1910, Pl. 277.1; VON MERHART 1941, 12, Abb. 2.3; HENCKEN 1968, 232, Pl. 90; IAIA 2005, 51, Fig. 7.8a–b; MÖDLINGER 2017, Fig. 2.13.4.

126 HENCKEN 1971, 43–50; IAIA 2005, 47–55; MÖDLINGER 2017, 83–89.

127 HENCKEN 1971, 78–91, 120–145, Fig. 60, 66; IAIA 2005, 57–94; MÖDLINGER 2017, 89–90, 126–136.



of the Iron Age in West Ukraine or in the Northeastern Carpathian Basin is a phenomenon, which suited well to the recent historical concepts on this period. As many have pointed out, the Gáva style is continuous in the EIA, based on surviving elements of the pottery and the chronological character of the LBA settlements.<sup>128</sup> The presence of high-quality Hajdúböszörmény-style metalworks (amphora-shaped vessels, situlae, cauldron etc.) in Eastern Europe raises the possibility that the elite who maintained these workshops still existed at that time, as did their supra-regional networks. If the find spot was reliable and the two objects originated from “Ternopil Oblast” – which we could also doubt – it would mean that these are examples of an elite network directed towards the East, a particularly important direction at that time. Although I raised the possibility that the “Ternopil Oblast” find was a burial, this is quite uncertain due to the destruction of the context. It is more secure that the two objects belonged together, because a similar combination of situla with helmet can be observed among the Carpathian finds.<sup>129</sup> This is not a coincidence, and it can be most likely interpreted as a personal set of an elite warrior, which is reminiscent of the lavish Central Italian burials, where advanced Hajdúböszörmény-style metal vessels are also combined with helmets.<sup>130</sup>

### Eastern hobby, Western business or vice versa

We can only speculate where the finds from “Ternopil Oblast” can be. It would not be surprising at all if these valuable artefacts were already sold on an auction site like the Viology. At the same time, they may also appear on a Western European or even an American auction. I have already called attention to a situla with spoke wheel-shaped solar barge from the Christie’s (Great Britain).<sup>131</sup> In 2014, it also appeared in the Artemis Gallery (USA).<sup>132</sup> In the same year, another Hajdúböszörmény-type situla was sold here, which allegedly originated from the “Mathias Komor and William-Froenlich collections (Late 1960’s)”. Its value was estimated between \$50,000 and \$70,000 (*Fig. 11*).<sup>133</sup> This vessel is reminiscent of the situla from Tiszanagyfalu,<sup>134</sup> and a close parallel of the situla fragments from Nedilys’ka,<sup>135</sup> confirming the correctness of Pál Patay’s 1970 reconstruction.<sup>136</sup>

In light of these huge sums, it is not surprising that illicit metal detecting and smuggling of archeological artefacts is flourishing in Eastern Europe. One of the many countries dealing with this problem is Ukraine, where the current political situation has worsened the case ever further. This is an undeniable fact that has countless examples uploaded daily on Ukrainian and Russian online auctions and metal detectorists forums. One of the most shameful things to see as a Hungarian is that there is even a private Facebook group for selling Eastern Carpathian archaeological finds (“*Numizmatika, bonisztika, militária, és a többi!!!*”), which is operated by Transcarpathian Hungarians and Ukrainians. The hopelessness of the situation can be

128 METZNER-NEBELSICK 2010, 138; V. SZABÓ 2017, 256–261, 278.

129 VACHTA 2008, 108–109, Abb. 85.

130 IAIA 2007.

131 TARBAY 2014, Fig. 43.4a–e.

132 Retrieved from <https://www.the-saleroom.com/en-gb/auction-catalogues/artemis-gallery-ancient-art/catalogue-id-srartem10000/lot-740d8b1a-f83e-4ea1-94e7-a3f70064d3ec> (10. 01. 2019, 9:25).

133 Retrieved from [www.liveauctioneers.com/item/27124538\\_superb-large-hallstadt-bronze-situla](http://www.liveauctioneers.com/item/27124538_superb-large-hallstadt-bronze-situla) (10. 01. 2019, 10:05).

134 PATAY 1990, Taf. 34.64.

135 GEDL 2001, Taf. 77.C6.

136 PATAY 1970.

well-illustrated by Youtube videos that have been made by Ukrainian detectorists posing with their finds or proudly showing how they are looting the sites. As a Carpathian researcher, these videos and uploads showing the looting of objects that could have come from Eastern Slovakia, Southern Poland, Northeastern Hungary or Romania are particularly distressing. The two objects allegedly found in “Ternopil Oblast” fall into this category. “Eastern Europe” is a world without consequences, which is perhaps best illustrated by another example. In 17 December 2017, a Youtube user under the name of Yuriy Karbovsky has uploaded a video<sup>137</sup> on the finding of a Debrecen-type socketed axe (Ha A2–Ha B1), which is particularly characteristic of the Carpathian Basin. The video has been shared as a “Success Story” by the official site of the Minelab Electronics Pty Ltd.,<sup>138</sup> which is one of the main metal detector distributors today (*Fig. 23*).

When informers are too afraid to talk, and rich Western collectors and greedy auction houses offer unrealistically high prizes for archaeological objects, there is no other option than monitoring the metal detectorists’ forums and the antiquities market. Our “Success Story” is the second situla from Hajdúböszörmény, which has shown that there is still hope. In the case of the hoard from “Mátészalka”, the situation is much more complicated because the finds have already left Hungary and entered the British antiquities market. Since there is practically no border control within the European Union, smuggling of these artefacts to Great Britain could not have been a hard task. Already in 10 September 2018, one of the swords (No. 3) has appeared on the Antiquities&Coins auction of the TimeLineAuctions (London). It was sold as the “property of a Suffolk gentleman; acquired before 2000”. It is a completely fake provenance and it also proves well how auction houses whitewash illicitly found archaeological objects from Eastern Europe. There can be no doubt that the two swords are one and the same. Their shape, fine typological marks, damages and even the corroded surface on their blades are completely identical (*See Fig. 2.3, Fig. 12.7, Fig. 13*). The object’s sold price is unknown, it has been estimated between £1,800 and £2,400,<sup>139</sup> which is equivalent to ca. 640,79693–854,39591 HUF or €1998.08–€2664.11 at the current exchange rate. This is roughly three or four times more than the average monthly net income in Hungary in 2018, which could explain why local illegal metal detectorists are so motivated. We do not have to go too far to find the other sword (No. 1). It has been also sold in London, in the auction of the 1stdibs. The provenance of the object is again an obvious fake: “from a European private collection, acquired in the 1980s”.<sup>140</sup> The identification of the artefact does not require detailed explanation, as the sword sold in the auction perfectly matches with the No. 1 sword from “Mátészalka” (*Fig. 2.1, Fig. 12.1–6, Fig. 13, Fig. 14.1*). The sold price of the artefact is unknown as the auction has already been closed and all information was removed from the site. Although the other four swords (Nos. 2, 4–6) are currently not on display in the antiquities market, we can assume that they have also been smuggled to Great Britain. The conclusions of this study are not positive. The finds from “Mátészalka” and “Ternopil Oblast” are recent victims of the illicit antiquities trade,

137 Retrieved from [www.youtube.com/watch?v=mK07ZTCWzT8](https://www.youtube.com/watch?v=mK07ZTCWzT8) (02. 01. 2019, 13:55).

138 Retrieved from <https://www.minelab.com/eur/go-minelabbing/success-stories/bronze-celt?f=Years%2CCategories%2C57178%2C89259%2C53318%2CFotm&fYears=2017%2C2009> (02. 01. 2019, 13:59).

139 Retrieved from <https://www.sixbid.com/browse.html?auction=5089&category=157344&lot=4239138> (28. 12. 2018, 9:49).

140 Retrieved from [https://www.1stdibs.com/furniture/decorative-objects/sculptures/mounted-objects/european-bronze-age-sword-1200-bc/id-f\\_8667883/?modal=contact-dealer&userComesFromAmp=true](https://www.1stdibs.com/furniture/decorative-objects/sculptures/mounted-objects/european-bronze-age-sword-1200-bc/id-f_8667883/?modal=contact-dealer&userComesFromAmp=true) (28. 12. 2018, 10:08).

and they demonstrate well what is happening in Eastern Europe right now. In simple terms, high quality, valuable assemblages are looted by local and foreign illegal metal detectorists, who sold them to private collectors and to Western European auction houses. As a second step, the objects from these assemblages are scattered in the antiquities market and being sold under falsified provenance one by one. As a result, the most important finds that could play a key role in the interpretation of European prehistory are slowly disappearing and transforming into storyless aesthetic objects, hidden away in the cabinets of rich collectors.

## Acknowledgements

The writing of this study was supported by the OTKA Research Fund grant No. 112427. I am grateful to Anna Mária Tarbay for the reconstructions of the “Mátészalka” and “Ternopil Oblast” finds, in absence of which this article would not be complete. I am also indebted to Professor Wojciech Blajer, who called my attention to the new situla from Namysłów.

## Appendix

### List 1.1. Hajdúböszörmény-type situlae<sup>141</sup>

After VON MERHART 1952, 70, Karte 6; VON MERHART 1969, 377–378; PATAY 1969, 175, Tab. 1; MENDELEŤ 1975, 52–53; JACOB 1995, 224–225; JANKOVITS 1996, Abb. 10; V. SZABÓ 2009a, 9. kép; TERŽAN et al. 2016, 483–484; V. SZABÓ – BÁLINT 2017, 6. kép.

1. Biernacice (Poland, Łódź Voivodeship) bronze vessel hoard (end of Period IV/Ha B1): VON MERHART 1952, 70, Taf. 20.1–1a; KOSTRZEWSKI 1955, 108, Ryc. 265; WIKLAK 1972, 108, Tab. IV.1; GEDL 2001, 17, 33, Taf. 11.37.<sup>142</sup>
2. “Eastern Slovakia” (Slovakia) Moravian archaeological collection, stray find: PODBORSKÝ 2012, 205–206.
3. Granzin (Germany, Mecklenburg-Vorpommern State) bronze vessel hoard: MONTELIUS 1902, 11, Fig. 9; BELTZ 1882, 288–292, Taf. VI.11; BELTZ 1910, Taf. 43.89; ADAMA VAN SCHELTEMA 1923, 134–135, Taf. XIV.2; SPROCKHOFF 1930, 89, Taf. 29a; VON MERHART 1952, 70, Taf. 20.2; SPROCKHOFF 1956, 244; PATAY 1972; HUNDT 1997, 60, Nr. 104, Taf. 38.1–2, Taf. 39.1; MARTIN 2009, 99, Taf. 38.134, Taf. 39.134, Taf. 40.135, Taf. 41.135.
4. Hajdúböszörmény-Csege-halom (Hungary, Hajdú-Bihar County) hoard, 3 situlae/2 situlae and a conical-shaped strainer (Ha B1): HAMPEL 1877, Pl. XII; HAMPEL 1878, 74–75, Pl. LXV. Fig. 3; HAMPEL 1886a, LXV. tábla 3; HAMPEL 1892, 49–58; MONTELIUS 1902, 11–12, Fig. 11; ÅBERG 1935, Abb. 162; VON MERHART 1952, 70, Taf. 20.6; PATAY 1969b, 175–181, Taf. XLVI.2; KEMENCZEI 1984, 172–173, Taf. CXCVIa.1; PATAY 1990, 41, Taf. 30.57–59; MOZSOLICS 1984, 89, 91, Abb. 1.4; MOZSOLICS 2000, 43–47, Taf. 30.4; V. SZABÓ 2015, 166–167, III.123; V. SZABÓ – BÁLINT 2017, 9. kép, 10. kép; SZABÓ 2017, 45–49, 1. kép, 3. kép 2, 9. kép.
5. “Lúčky” (Slovakia, Žilina Region) uncertain hoard: VON MERHART 1952, 70; NOVOTNÁ 1970, 63, 103–104, Abb. 19; NOVOTNÁ 1991, 47, 58, Taf. 11.54.<sup>143</sup>
6. “Obišovce”/Unprovenanced (Slovakia) looted hoard/stray find: VELIAČIK 2015, 155, Obr. 1–2.

141 The lists include bibliographic references on studies dealing with certain Hajdúböszörmény-type and Obišovce-type situlae. They are incomplete as some foreign studies are inaccessible in Hungary. Therefore they should be supplemented in the future.

142 For further literature see (GEDL 2001, 17).

143 For further literature see (NOVOTNÁ 1970, 104).

7. Mezőkövesd (Hungary, Hajdú-Bihar County) hoard (Ha B1): PATAY 1969b, 168–171, Abb. 2–3, Taf. XLI–XLII; KEMENCZEI 1984, 149; PATAY 1990, 41, Taf. 31.60; MOZSOLICS 2000, 55–56, Taf. 51.a–b.
8. Namysłów (Poland, Opole Voivodeship) individual find with a socketed axe in its vicinity: MOLENDÁ 2015, 141–142, Ryc 2–4, 7–8.
9. Nedilys’ka (Niedzieliska/Niediliška) (Ukraine, Lviv Oblast) hoard (Periode III–V, time of deposition: Period V): SULIMIRSKI 1937, 264, 277, Tabl. III.7; ŻUROWSKI 1949, 168–169; PATAY 1969a, 14, 3. kép; 1970; GEDL 2001, 63–64, Taf. 77.C6; БАНДРІВСЬКИЙ et al. 2014, 248, 252, Рyc. 15.
10. Nyírlugos-Szenyvespuszta (Hungary, Szabolcs-Szatmár-Bereg County) hoard (Ha B1): ZOLTAI 1915, 127; ZOLTAI 1926, 131, Fig. 3; CHILDE 1929, 375, Fig. 212; VON MERHART 1952, 70, Taf. 20.7; JÓSA – KEMENCZEI 1965, 23, 36, XLV. tábla 25; PATAY 1969b, 175–178, Taf. XLVII.1; KEMENCZEI 1984, 179, Taf. CCXVc.25; PATAY 1990, 41, Taf. 32.61; MOZSOLICS 2000, 62–63, Taf. 68.11; V. SZABÓ 2015, 176, III.145.
11. Picugi/Picuge [Pizzughi] (Croatia, Istria County) stray find from cemetery (9<sup>th</sup>–8<sup>th</sup> centuries BC): MLADIN 1974, 46, 49, 51, 75, 117, T. XXIV.2, T. XXV.1, T. LXII; MIHOVIĆ 2013, 155–157, Fig. 87–88.<sup>144</sup>
12. Remetea Mare<sup>145</sup> (Romania, Timiș County) Gáva pottery style settlement, pit: MENDELEȚ 1974, 95–97, Abb. 1–3; MENDELEȚ 1975, 49–52, Fig. 1–4; GUMĂ 1993, 256, No. 49, 261, 294, No. 122, Pl. XXXVII.B; SOROCEANU 2008, 179–180, Abb. 27a–d, Taf. 40A–42A; HEGYI 2014, 41, Fig. a–b.
13. Rivoli Veronese (Italy, Verona Province) “graves” (800–750 BC; Ha B2/B3<sup>146</sup>): DE STEFANI 1885; MONTELIUS 1895a, 265–266; MONTELIUS 1895b, Pl. 48.10; GHIRARDINI 1897, 31–34, Fig. 7a–b; GHIRARDINI 1901, 200, Fig. 3a–b; MONTELIUS 1902, 74, Fig. 78; VON MERHART 1952, 70, Taf. 20.5, Taf. 23.5; BIETTI SESTIERI 1976, 104–105, 108, Fig. 13.1; IAIA 2005, 227, 237–238, Fig. 87A, Fig. 88c.
14. Saint-Romain-de-Jalionas (France, Auvergne-Rhône-Alpes Region) grave (9<sup>th</sup>–8<sup>th</sup> centuries BC): VERGER 1990, 55–59, Fig. 3.
15. Sâg/Sîg (Romania, Sălaj County) hoard (Ha B1): SOROCEANU – LAKÓ 1981, 145–146, Fig. 1–4; PETRESCU-DÎMBOVIȚA 1977, 134, Pl. 320.1–2, 5–6; SOROCEANU 2008, 180, Taf. 43–44, Abb. 28a–b.
16. Sényő-Dajkahegy (Hungary, Szabolcs-Szatmár-Bereg County) individual find: JÓSA 1902, 277–278, III. tábla; GALLUS – HORVÁTH 1939, 92, Taf. XVII.5; VON MERHART 1952, 70, Taf. 20.8; JÓSA – KEMENCZEI 1965, 26, LXIV. tábla; PATAY 1969b, Taf. XLVII.2; PATAY 1990, 41, Taf. 33.62; MOZSOLICS 2000, 73–74, Taf. 90.1.
17. Siem (Denmark, Nordjylland) metal vessel hoard from marshland: UNDSÆT 1882, 358, Taf. XXIX. Fig. 2; MONTELIUS 1902, 9–10, Fig. 8; BROHOLM 1933, 231; LINDGREN 1938, 77, Fig. 4; BRØNDSTED 1939, 191, Fig. 177a; BROHOLM 1949, 245–246, Pl. 65.3; VON MERHART 1952, 70, Taf. 20.3; THRANE 1966, 184–192, Fig. 16–19; KRISTIANSEN 2016, Siem.
18. Szentes-Nagyhegy III (Hungary, Csongrád County) hoard (Ha B1): VON MERHART 1952, 70; CSALLÁNY 1939, 62, II. tábla 1–8; KEMENCZEI 1984, 184; PATAY 1990, 41–42, Taf. 34.63; MOZSOLICS 2000, 77–78, Taf. 95.3.
19. Tiszanagyfalu I (Hungary, Szabolcs-Szatmár-Bereg County) hoard: CIMELIOTHECA 1825, 146, No. 8; HAMPEL 1886b, 23–24; HAMPEL 1892, 95; PATAY 1969a; PATAY 1969b, Taf. XLVIII.1; KEMENCZEI 1984, 188; MOZSOLICS 1985, 193; PATAY 1970, 174–176, Abb. 2–3; PATAY 1990, 42, Taf. 34.64; MOZSO-

144 For further literature see (TERŽAN et al. 2016, 483–484, List of site for Fig. 143, No. 25).

145 For further articles related to the site Remetea Mare see (SOROCEANU 2008, 180).

146 Hermann Müller-Karpe has emphasized the insecure context and assigned the sword to the Ha B3 (MÜLLER-KARPE 1961, 83–84, Taf. 62.2, Taf. 103). Katalin Jankovits determined the Rivoli grave as a Paleo-Venet burial from the 8<sup>th</sup>–7<sup>th</sup> centuries BC (JANKOVITS 1996, 308). Cristiano Iaia dated the object between ca. 800 and 750 BC (IAIA 2005, Fig. 87A). Biba Teržan dated the find to the prima età del Ferro IB–IIA (Ha B2/3) (TERŽAN 2016, 359–360).

LICS 2000, 86–87, Taf. 111.1.

20. “Tolcsva-Várhegy” (Hungary, Borsod-Abaúj-Zemplén County) looted hoard (Ha B1): V. SZABÓ 2013, 798–801, Fig. 3–6.
21. “Ternopil Oblast” (Ukraine) looted “grave”.
22. Ochtendung (Germany, Rhineland-Palatine State) hoard (Period V): VON BERG 2004, 58; VON BERG 2017, 147–151, Abb. 1–3.
23. Oradea [Nagyvárad] (Romania, Bihor County) stray find: JELENTÉS MAGYAR NEMZETI MÚZEUM 1912, 4. ábra; ROSKA 1942, 198–199, Nr. 88; VON MERHART 1952, 70, Taf. 20.4; PATAY 1969b, Taf. XLVIII.2; MOZSOLICS 2000, 62, Taf. 67.1; SOROCEANU 2008, 180–181, Taf. 45.129, Abb. 29a–d.
24. Unterglauheim [Unter-Glauheim] (Germany, Bavaria State) grave (Ha B1<sup>147</sup>): OBERDONAU-KREISE 1836, 12–14, Tab. VI; LINDENSCHMIT 1889, Taf. XLII.13; MONTELIUS 1902, 11, Fig. 10; BEHRENS 1916, 27, Abb. 9.3; VOGT 1950, Abb. 3.3; VON MERHART 1952, 70, Abb. 3; MÜLLER-KARPE 1958, 30–31, Abb. 14; MÜLLER-KARPE 1959, 293, Taf. 169.3, 3a; MENGHIN – SCHAUER 1983, 88–90, Abb. 38.13e; JOCKENHÖVEL 1994, Abb. 77; JACOB 1995, 83, 103–104, 124, Taf. 50.312; SPRINGER et al. 2003, 289–290; WIRTH 2003, 133–137; WIRTH 2006a, Fig. 1–2; WIRTH 2010, Abb. 9–10.
25. Unprovenanced: TARBAY 2014, 225, Fig. 43.4a–e.
26. Unprovenanced, Artemis Gallery 2014: Retrieved from [www.liveauctioneers.com/item/27124538\\_superb-large-hallstadt-bronze-situla](http://www.liveauctioneers.com/item/27124538_superb-large-hallstadt-bronze-situla) (10. 01. 2019, 10:05) (Fig. 11).

### List 1.2. Uncertain fragments<sup>148</sup>

1. Bokavić [Tuzla-Lukovac] (Bosnia and Hercegovina, Tuzla Canton) hoard (Ha B1–Ha B2): ČOVIĆ 1955, 96, 100, Tab. II.15a–b; MARIJANOVIĆ 1988, 107, No. 07.39 (Lukavac); KÖNIG 2004, 184–191, Taf. 48.253.
2. Buza (Romania, Cluj County) hoard, situla<sup>149</sup> or amphora-shaped vessel<sup>150</sup> (Ha B1–Ha B2): SOROCEANU – BUDA 1978, 100, Abb. 1, Abb. 1, 1A; SOROCEANU 2008, 191–193, Abb. 31, Taf. 48.135, Taf. 75B.135, Taf. C.a.135.
3. Elsterwerda I (Germany, Brandenburg State) hoard, situla/Žatec-type cist<sup>151</sup> (Ha A2): SPROCKHOFF 1937, 8; SPROCKHOFF 1950, 142–143; AGDE 1939, 170; VON BRUNN 1968, 317–318, Nr. 57; CLAUSING 1996, 427, Abb. 4.28–29; MARTIN 2009, 99, Taf. 41.133.
4. Keszőhidegkút (Hungary, Tolna County) hoard (Ha A–Ha B1<sup>152</sup>): TOMPA 1937, 108; MOZSOLICS 1985, 135–137; PATAY 1990, 84, Taf. 70.166.
5. Osternienburg (Germany, Saxony-Anhalt State) Mound 2/Grave II (1925) (Ha A2): SPROCKHOFF 1930, 90, Taf. 11; MARTIN 2009, 99–100, Taf. 41.136.
6. Poland, stray find: GEDL 2001, 34, Taf. 11.38.

147 According to Christina Jacob, the find could have been deposited later than the Ha B1: „Die Ähnlichkeit der Beckenattaschen mit Handhaben aus einem Fund von Welby (s.o.) verleitet zu der Überlegung, daß der Fund von Unterglauheim später in die Erde gelangte, als es anhand des Bronzeimers (Nr. 312) bisher angenommen wurde.” (JACOB 1995, 103–104, 222–223, 408–409). Here, I follow the dating provided by Stefan Wirth (See WIRTH 2003, 136).

148 The list includes Hajdúböszörmény-style metal sheet fragments and handles. These could also belong to amphora-shaped bronze vessels, conical-shaped strainers, Žatec-type cist or decorated helmets.

149 See BORGNA 1999, 157, Fig. 3.2; TERŽAN et al. 2016, 483, No. 12, Anm. 11.

150 SOROCEANU 2008, 191–193.

151 Based on Christof Clausing’s analysis, I believe that this fragment could be a Žatec-type cist. This identification requires the personal study of the objects in the future.

152 Amália Mozsolics has assigned the hoard to the Kurd horizon (Ha A1) but the presence of a Hajdúböszörmény-style metal sheet fragment suggests a later Ha B1 deposition (MOZSOLICS 1985, 137).



7. Zürich-Wollishofen-Haumesser (Switzerland, Zürich's 2<sup>nd</sup> District) lake-dwelling (Ha A–Ha B3): HEIERLI 1886, 20, 22, Taf. IV.31; VOGT 1950, 224–225, Taf. XXVI.3; VON MERHART 1952, 70; PRIMAS 1990, 85–87, Abb. 10; JENNINGS 2013, 57–58, 81, 157, 209, 219.
8. Škocjan-Mušja jama (Slovenia, Divača Municipality) cave (site: 12<sup>th</sup>/11<sup>th</sup>–8<sup>th</sup>/7<sup>th</sup> centuries BC; fragment: Ha B2–Ha B3): SZOMBATHY 1912, 151–153, Fig. 104; VON MERHART 1941, 20, Abb. 8.2; HENCKEN 1971, 121–122; JOCKENHÖVEL 1974, 44, Fig. 92c; GUŠTIN 1979, T. A.104; IAlA 2005, Fig. 90; BORGNA 2016, 125–128; BORGNA et al. 2016, 563, 692, Tav. 17.11, Tav. 71.12; MÖDLINGER 2017, 136, Fig. 2.28.3; TERŽAN 2016, 437–438.

**List 1.3. Obišovce-type situlae**

1. Hajdúböszörmény-Csege-halom II (Hungary, Hajdú-Bihar County) individual find: V. SZABÓ 2009a, 281–283, 2–3. kép; V. SZABÓ 2013, 801–803, Fig. 7; ANGYAL et al. 2017; BORBÍRÓ et al. 2017; SZABÓ 2017, 49–53, 2–3.1. kép; V. SZABÓ – BÁLINT 2017, 1–5. kép.
2. “Obišovce”/“Altenfließ” (Slovakia/Germany) looted hoard: STUDENÍKOVÁ 1999, 177; BARTÍK 2007; STUDENÍKOVÁ 2007; V. SZABÓ 2009a, 285, 3. kép; V. SZABÓ 2009b, 130, 1. kép; WIRTH 2010, 504–507, Abb. 4, 6–8; V. SZABÓ – BÁLINT 2017, 14–15, 7. kép.
3. Pócspetri (Hungary, Szabolcs-Szatmár-Bereg County) individual hoard from the edge of a Gáva pottery style settlement (Ha A2–Ha B1): KALLI 2012, 167, 8. tábla, 9. tábla 2; KALLI 2017, 181, 184–187, 3. kép, 8–9. kép.

**List 1.4. Uncertain fragments**

1. Biharugra (Hungary, Békés County) uncertain hoard: GALLUS – HORVÁTH 1939, 91, 130; VOGT 1950, 225, Anm. 39; METZNER-NEBELSICK 2002, 470–474, Abb. 210.1–2, Taf. 136.13; METZNER-NEBELSICK 2010, 133, Anm. 47; KEMENCZEI 2005, 63, 131–132, Tab. 1, Taf. 15.72–74.

**References**

ÅBERG, N. 1935: *Bronzezeitliche und früheisenzeitliche Chronologie 5*. Stockholm.

ADAMA VAN SCHELTEMA, F. 1923: *Die altnordische Kunst. Grundprobleme Vorhistorischer Kunstentwicklung*. Berlin.

AGDE, H. 1939: *Bronzezeitlichen Kulturgruppen im mittleren Elbegebiet*. Leipzig.

ANGELI, W. 1962: Ein Hortfund von fünf Bronzebecken aus Galizien. *Annalen des Naturhistorischen Museums in Wien* 65, 307–311.

ANGYAL, A. – BÁLINT, M. – CSEDREKI, L. – FURU, E. – KERTÉSZ, ZS. – PAPP, E. – SZIKSZAI, Z. – SZOBOSZLAI, Z. 2017: A második hajdúböszörményi szitula elemanalitikai vizsgálata (Element analytical investigation of the second Hajdúböszörmény szitula). In: V. SZABÓ, G. – BÁLINT, M. – VÁCZI, G. – LŐRINCZY, G. (szerk.): *A második hajdúböszörményi szitula és kapcsolattrendszere (The second situla of Hajdúböszörmény and its relations)*. *Studia Oppidorum Haidonica* 13. Budapest–Hajdúböszörmény, 69–77.

ARMBRUSTER, B. R. 2003: Edelmetallgefäße der Bronzezeit – eine technologische Betrachtung. In: GERMANISCHES NATIONALMUSEUM, NÜRNBERG (Hrsg.): *Gold und Kult der Bronzezeit*. Ausstellungskatalog. Nürnberg, 65–85.

BADER, T. 1991: *Die Schwerter in Rumänien*. Prähistorische Bronzefunde IV/8. Stuttgart.

БАНДРІВСЬКИЙ, М. – КРУШЕЛЬНИЦЬКА, Л. – БЛИК, М. 2014: Нововідкритий “скарб” з базиївки в контексті визначення етнокультурної приналежності “скарбів” неділиського типу у верхньому придністров’ї (Newly discovered “hoard” from Bazyuyivka in the context of definition of ethno-cultural belonging of “hoards” of Nedilysko type in Upper Dnister region). *Матеріали і дослідження з археології Прикарпаття і Волині* 18, 245–261.

BARTÍK, J. 2007: Predmety z doby bronzovej zo súkromnej zbierky (Bronzezeitliche Gegenstände aus einer Privatsammlung). *Zborník Slovenského Národného múzea – Archeológia* 17, 15–34.

- BARTÍK, J. 2009: Bronzezeitliche Gegenstände aus seiner Privatsammlung II. *Zborník Slovenského Národného Múzea* 103 – *Archeológia* 19, 37–52.
- BEHRENS, G. 1916: *Bronzezeit Süddeutschlands*. Kataloge des Römisch-Germanischen Zentralmuseums zu Mainz 6. Mainz.
- BELTZ, R. 1882: III. Moorfund von Granzin. *Jahrbücher des Vereins für Mecklenburgische Geschichte und Altertumskunde* 47, 288–292.
- BELTZ, R. 1910: *Die vorgeschichtlichen Altertümer des Grossherzogtums Mecklenburg-Schwerin*. Berlin.
- VON BERG, A. 2004: Hort im Acker. *Archäologie in Deutschland*, 58.
- VON BERG, A. 2017: Ein späturnenfelderzeitlicher Bronzehort von Karmelenberg bei Ochtendung. In: GENERALDIREKTION KULTURELLES ERBE RHEINLAND-PFALZ DIREKTION LANDESARCHÄOLOGIE (Hrsg.): *vorZEITEN 70 Jahre Landesarchäologie Rheinland-Pfalz*. Regensburg, 148–151.
- BIETTI SESTIERI, A. M. 1976: Rivoli Veronese. In: ASPES, A. (red.): *3000 anni fa a Verona: dalla fine dell'età del bronzo all'arrivo dei Romani nel territorio Veronese*. Verona, 103–110.
- BIETTI SESTIERI, A. M. – MACNAMARA, E. 2007: *Prehistoric Metal Artefacts from Italy (3500–720 BC) in the British Museum*. British Museum Research Publication 159. London.
- BORBÍRÓ, M. – DOBÓ, B. – VIDOVICS, T. 2017: A második hajdúböszörményi bronz szitula restaurálása (Restoration of the second bronze situla of Hajdúböszörmény). In: V. SZABÓ, G. – BÁLINT, M. – VÁCZI, G. – LŐRINCZY, G. (szerk.): *A második hajdúböszörményi szitula és kapcsolattrendszere (The second situla of Hajdúböszörmény and its relations)*. *Studia Oppidorum Haidonica* 13. Budapest–Hajdúböszörmény, 79–85.
- BORGNA, E. 1999: The North Adriatic regions between Europe and the Aegean World (12<sup>th</sup>–8<sup>th</sup> BC.): Social strategies and symbols of power in the long-distance exchange. In: KILIAN-DIRLMEIER, I. – EGG, M. (Hrsg.): *Eliten der Bronzezeit: Ergebnisse zweier Kolloquien in Mainz und Athen*. 2. Monographien des Römisch-Germanischen Zentralmuseums 43/2. Mainz, 151–183.
- BORGNA, E. 2016: Čelade-Elmi. In: TERŽAN, B. – BORGNA, E. – TURK, P. (eds.): *Depo iz mušje jame pri Škocjanu na Krasu (Il ripostiglio dalla grotto delle mosche presso San Canziano del Carso)*. Depojske najdbe bronaste in železne dobe na Slovenskem III. *Catalogi et Monographiae* 42. Ljubljana, 119–140.
- BORGNA, E. – TERŽAN, B. – TURK, P. – GIRELLI, D. – MAGGI, P. 2016: Katalog najdbe (Catalogo degli oggetti). In: TERŽAN, B. – BORGNA, E. – TURK, P. (eds.): *Depo iz mušje jame pri Škocjanu na Krasu (Il ripostiglio dalla grotto delle mosche presso San Canziano del Carso)*. Depojske najdbe bronaste in železne dobe na Slovenskem III. *Catalogi et Monographiae* 42. Ljubljana, 527–764.
- BROHOLM, H. C. 1933: Studier over den yngre Bronzealder i Danmark med særligt Henblik paa Gravfundene. *Aarbøger for nordisk oldkyndighed og historie* III/23, 1–352.
- BROHOLM, H. C. 1949: *Danmarks bronzealder første bind samlede fund fra den ældre bronzealder* 4. København.
- BRØNDSTED, J. 1939: *Danmarks Oldtid 2. Bronzealderen*. København.
- VON BRUNN, W. A. 1968: *Mitteldeutsche Hortfunde der jüngeren Bronzezeit. Text&Tafeln*. Römisch-Germanische Forschungen 29. Berlin.
- BURANELLI, F. 1986: The Bronze Hut Urn in the Metropolitan Museum of Art. *Metropolitan Museum Journal* 21, 5–12.
- CARANCINI, G. L. 1975: *Die Nadeln in Italien (Gli spilloni nell'Italia continentale)*. Prähistorische Bronzefunde XIII/2. München.
- CHAUME, B. 2004: La place de la France orientale dans le réseau des échanges à longues distances du Bronze final au Hallstatt final. *Schriften des Bernischen Historischen Museums* 5, 79–106.
- CHILDE, V. G. 1926: Note. *Man* 26, 131–132.
- CHILDE, V. G. 1929: *The Danube in Prehistory*. Oxford.



- CIMELIOTHECA 1825: *Cimeliotheca Musei nationalis hngarici: sive Catalogvs historico-criticvs antiqvitatum, raritatum, et pretiosorum cum bibliotheca antiqvaria, et nvmaria eiusdem institvti*. Buda.
- CLAUSING, CH. 1996: Urnenfelderzeitliche Vorläufer Eisenzeitlicher Rippenzisten? *Archäologisches Korrespondenzblatt* 26, 413–431.
- CONWENTZ, H. 1905: *Das Westpreussische Provinzial-Museum 1880–1905*. Danzig.
- ČOVIĆ, B. 1955: Preistoriski depo iz Lukavca (Das Depot von Lukavac). *Glasnik Zemaljskog Muzeja u Sarajevu (Bulletin du Musée de la République Populaire de Bosne et Herzégovine a Sarajevo)*. Nova Serija, Sveska 10 *Arheologija*, 91–106.
- CSALLÁNY, G. 1939: A szentes–nagyhegyi kora-vaskori bronzlelet (Frühallstattzeitlicher Hortfund von Szentes-Nagyhegy). *Folia Archaeologica* 1–2, 58–67.
- EGG, M. – KRÄMER, D. 2016: *Die hallstattzeitlichen Fürstengräber von Kleinklein in der Steiermark: die beiden Hartnermichelkogel und der Pommerkogel*. Monographien des Römisch-Germanischen Zentralmuseums 125. Mainz.
- EMŐDI, J. 2006: Bronzleletek a homoródalmási Orbán Balázs-barlangból (Două depozite de bronzuri din peștea ORBÁN Balázs din Cheie Vârghișului [Peștea Mare de la Merești]). *Acta* 2, 31–48.
- FILIPOVIĆ, V. M. – VASIĆ, R. 2017: Illicit Antiquities Plague in Serbia (Нелегална трговина антиквитетима у Србији). *Journal of Serbian Archaeological Society* 33, 335–347.
- FOGOLARI, G. 1988: La Cultura. In: FOGOLARI, G. – PROSDOCIMI, A. L. – GAMBA, M. – MARINETTI, A. (eds.): *I veneti antichi. Lingua e cultura*. Padova, 13–220.
- FOLTINY, S. 1955: *Zur Chronologie der Bronzezeit des Karpatenbeckens*. Antiquitas Abhandlungen aus dem Gebiete der Vor und Frühgeschichte 2. Bonn.
- GALLUS, S. – HORVÁTH, T. 1939: *A legrégibb lovasnép Magyarországon. A korai vaskorból való régészeti hagyatéka és euráziai kapcsolatai (Un peuple cavalier préscythique en Hongrie. Trouvailles archéologiques du premier âge du fer et leurs relations avec l’Eurasie)*. Dissertationes Pannonicae II/9. Budapest.
- GEDL, M. 1996: Jungbronzezeitliche bronzene Trinkhörner aus Nordpolen. In: KOVÁCS, T. (Hrsg.): *Studien zur Metallindustrie im Karpatenbecken und den benachbarten Regionen. Festschrift für Amália Mozsolics zum 85. Geburtstag*. Budapest, 379–395.
- GEDL, M. 2001: *Die Bronzegefäße in Polen*. Prähistorische Bronzefunde II/15. Stuttgart.
- GERHARD, E. 1843: *Etruskische Spiegel*. Berlin.
- GHIRARDINI, G. 1881: Corneto-Tarquini. *Notizie degli scavi di antichità communicate alla Reale Accademia dei Lincei*, 342–371.
- GHIRARDINI, G. 1897: La situla italica primitiva. *Studia specialmente en Este. Parte Seconda. L’Ornamentazione Geometrica. Monumenti Antichi* 7, 5–200.
- GHIRARDINI, G. 1901: Nuova situla atestina con ornate geometriei. *Bullettino di Paletnologia Italiana* 3/7, 192–215.
- GOGÂLTAN, F. 1993: Vases de bronze réparés (Ha A–B). *Ephemeris Napocensis* 3, 7–23.
- GOSDEN, C. – MARSHALL, Y. 1999: The cultural biography of objects. *World Archaeology* 31/2, 169–178.
- GUMĂ, M. 1993: *Civilizația primei epoci a fierului în sud-vestul României*. Bibliotheca Thracologica 4. București.
- GUŠTIN, M. 1979: *Notranjska z začetkom železne dobe na severnem jadraniu (Zu den Anfängen der Eisenzeit an der nördlichen Adria)*. Katalogi in Monografije – Catalogi et Monographiae 17. Ljubljana.
- GÜNTER, L. 1974: Anhang 2. Anthropologische Untersuchung des Leichenbrandes von Gevelinghausen. *Germania* 52, 51–54.
- HAMPEL, J. 1878: *Trouvailles de l’âge de bronze*. In: MUSÉE NATIONAL HONGROIS (ed.): *Congrès International d’Anthropologie et d’archéologie préhistoriques. Compte-Rendu de la huitième session*

- à Budapest 1876. Volume 2. Budapest.
- HAMPEL, J. 1877: *Antiquités Préhistoriques de la Hongrie*. Esztergom.
- HAMPEL, J. 1886a: *A bronzkor emlékei Magyarhonban. I. Rész: Képes Atlasz*. Budapest.
- HAMPEL, J. 1886b: *Trouvailles de l'Âge de Bronze en Hongrie*. Budapest.
- HAMPEL, J. 1892: *A bronzkor emlékei Magyarhonban. II. Rész: A leletek statisztikája*. Budapest.
- HARDING, A. F. 1995: *Die Schwerter im ehemaligen Jugoslawien*. Prähistorische Bronzefunde IV/14. Stuttgart.
- HEIERLI, J. 1886: Der Pfahlbau Wollishofen. *Mitteilung der Antiquarischen Gesellschaft in Zürich* XXII/1, 1–32.
- HEGYI, A. 2014: Considerații generale asupra unor elemente ale simbolisticii solare de pe situla descoperită la Remetea Mare, jud. Timiș. In: EDITURA ARGONAUT (ed.): *Imaginea în istorie. Tipologii în societatea de ieri și de azi. Lucrările Conferinței Naționale, Cluj-Napoca, 19-20 aprilie 2013*. Cluj-Napoca, 33–41.
- HENCKEN, H. 1968: *Tarquinius and Etruscan Origins*. London.
- HENCKEN, H. 1971: *The Earliest European Helmets. Bronze Age and Early Iron Age*. Cambridge.
- HUNDT, H.-J. 1997: *Die jüngere Bronzezeit in Mecklenburg*. Beiträge zur Ur- und Frühgeschichte Mecklenburg-Vorpommerns 31. Lübstorf.
- HRALA, J. 1954: Ze současné problematiky evropského pravěku. *Archeologické rozhledy* VI/2, 215–226.
- IAIA, C. 2004: Lo stile della “barca solare ornitomorfa” nella toreutica Italiana della prima Età del Ferro. *Preistoria e Protostoria in Etruria. Atti del Sesto Incontro di Studi* 1, 307–318.
- IAIA, C. 2005: *Produzioni toreutiche della prima età del Ferro in Italia Centro-Settentrionale. Stili decorativi, circolazione, signifacto*. Biblioteca di Studi Etruschi 40. Pisa/Roma.
- IAIA, C. 2007: Prima del ‘simposio’: Vasi in bronzo e contest sociale dell’Etruria meridionale protostorica. *Revista d’Arqueologia de Ponent* 16–17, 261–270.
- ILON, G. 2015: *The Golden Treasure from Szent Vid in Velem. The Costume of a High-Ranking Lady of the Late Bronze Age in the Light of New Studies*. Archaeolingua – Series Minor 36. Budapest.
- JACOB, CH. 1995: *Metallgefäße der Bronze- und Hallstattzeit in Nordwest-, West- und Süddeutschland*. Prähistorische Bronzefunde II/9. Stuttgart.
- JANKOVITS, K. 1996: Beiträge zu der Situla und Bronzefanne mit Handgriff in Nordostitalien in der Spätbronzezeit. In: KOVÁCS, T. (Hrsg.): *Studien zur Metallindustrie im Karpatenbecken und den benachbarten Regionen. Festschrift für Amália Mozsolics 85. Geburtstag*. Budapest, 303–322.
- JANKOVITS, K. 1999: Ergebnisse über die Entwicklung und die Beziehungen der norditalienischen und ungarischen Situlen (Kurd, Hosszúpályi und Hajdúböszörmény). In: JEREM, E. – POROSZLAI, I. (eds.): *Archaeology of the Bronze and Iron Age. Experimental Archaeology. Environmental Archaeology. Archaeological Parks. Proceedings of the International Archaeological Conference Százhalombatta, 3–7 October 1996*. Budapest, 101–116.
- JELENTÉS MAGYAR NEMZETI MÚZEUM 1912: *Jelentés a Magyar Nemzeti Múzeum 1911. évi állapotáról*. Budapest.
- JENNINGS, B. 2013: *Travelling Objects: Changing Values. Trade, exchange, and cultural influences for the decline of the lake-dwelling tradition in the northern Circum-Alpine region during the Late Bronze Age*. Inauguraldissertation zur Erlangung der Würde eines Doktors der philosophie vorgelegt der Philosophisch-Naturwissenschaftlichen Fakultät der Universität Basel. Basel.
- JOCKENHÖVEL, A. 1974: Eine Bronzeamphore des 8. Jahrhunderts v. Chr. von Gevelinghausen, Kr. Meschede (Sauerland). *Germania* 52, 18–51.
- JOCKENHÖVEL, A. 1994: Geschlagen aus Blech – Frühe Bronzegefäße. In: JOCKENHÖVEL, A. – KUBACH, W. (Hrsg.): *Bronzezeit in Deutschland*. Hamburg, 81–83.
- JOCKENHÖVEL, A. 2003: Querverbindung in Handwerk und Symbolik zwischen Gold- und Bronze-

- toreutik. In: GERMANISCHES NATIONALMUSEUM, BÜRNBERG (Hrsg.): *Gold und Kult der Bronzezeit. Ausstellungskatalog*. Nürnberg, 107–118.
- JÓSA, A. 1902: A takta-kenézi bronzleletről. *Archaeologiai Értésítő* 22, 274–280.
- JÓSA, A. – KEMENCZEI, T. 1965: Bronzkori halmazleletek (Depotfunde aus der Bronzezeit). *A Jósa András Múzeum Évkönyve* 6–7, 19–45.
- KALLI, A. 2012: Késő bronzkori településrészlet Pócspetri határában (The Late Bronze Age Settlement in the Vicinity of Pócspetri). In: SZABÓ, Á. – MASEK, Zs. (szerk.): *ANTE VIAM STRATAM. A Magyar Nemzeti Múzeum megelőző feltárásai Kántorjánosi és Pócspetri határában az M3 autópálya nyírségi nyomvonalán*. Budapest, 159–178.
- KALLI, A. 2017: Egy újabb bronzszitula Pócspetri határából (A new bronze situla from the vicinity of Pócspetri). In: V. SZABÓ, G. – BÁLINT, M. – VÁCZI, G. – LŐRINCZY, G. (szerk.): *A második hajdúböszörményi szitula és kapcsolatrendszere (The second situla of Hajdúböszörmény and its relations)*. *Studia Oppidorum Haidonicalium* 13. Budapest–Hajdúböszörmény, 175–192.
- KEMENCZEI, T. 1984: *Die Spätbronzezeit Nordostungarns*. *Archaeologica Hungarica* 51. Budapest.
- KEMENCZEI, T. 1991: *Die Schwerter in Ungarn II (Vollgriffschwerter)*. *Prähistorische Bronzefunde* IV/9. Stuttgart.
- KEMENCZEI, T. 2005: *Funde ostkarpatenländischen Typs im Karpatenbecken*. *Prähistorische Bronzefunde* XX/10. Stuttgart.
- KIBBERT, K. 1984: *Die Äxte und Beile im mittleren Westdeutschland II*. *Prähistorische Bronzefunde* IX/13, Stuttgart.
- КЛОЧКО, В. И. – КОЗЫМЕНКО, А. В. 2017: *Древний металл Украины*. Киев.
- KRÄMER, W. 1985: *Die Vollgriffschwerter in Österreich und der Schweiz*. *Prähistorische Bronzefunde* IV/10. München.
- KRISTIANSEN, K. 2002: The Tale of the Sword – Swords and Swordfighters in Bronze Age Europe. *Oxford Journal of Archaeology* 21/4, 319–332.
- KRISTIANSEN, K. 2016: *En analyse af yngrebronzealders depotfund (Periode IV-V) i Danmark: kildekritik, kronologi og tolkning (A catalogue of Late Bronze Age (Period IV and V) Nordic Hoard Finds)*. Gothenburg.
- КОВАЛ', J. V. 2000: *Bronzezeitliche Depotfunde aus Transkarpatien (Ukraine)*. *Prähistorische Bronzefunde* XX/4. Stuttgart.
- КОВАЛЬ, Й. 2006: Бронзові казани у верхів'ї Дністра. *Матеріали і дослідження з археології Прикарпаття і Волині* 10, 92–99.
- KOSSACK, G. 1954: *Studien zum Symbolgut der Urnenfelder- und Hallstattzeit Mitteleuropas*. *Römisch-Germanische Forschung* 20. Berlin.
- KOSTRZEWSKI, J. 1955: *Wielkopolska w Pradziejach zmienione trzecie wydanie Wielkopolski w Czasach Przedhistorycznych*. Warszawa–Wrocław.
- KOVALČÍK, R. M. 1966: Depot mečov zo Spišskej Belej. A meče s čiaškovitou rukoväťou na Slovensku (Ein Schwerterdepot aus Spišská Belá und Schalenknaufschwerter aus der Slowakei). *Archeologické rozhledy* 18/6, 647–662.
- KÖNIG, P. 2004: *Spätbronzezeitliche Hortfunde aus Bosnien und der Herzegowina*. *Prähistorische Bronzefunde* XX/11. Stuttgart.
- KUBACH, W. 1977: *Die Nadeln in Hessen und Rheinhessen*. *Prähistorische Bronzefunde* XIII/3. München.
- KUBINYI, F. 1861: Magyarországon talált kő- és bronzkori régiségek. *Archaeologiai Közlemények* 2, 81–101.
- KUBINYI, F. 1890: A liptó-szent-mártoni kardleletről. *Archaeologiai Értésítő* 10, 357–359.
- LA BAUME, W. 1920: *Vorgeschichte von Westpreußen*. Danzig.
- LINDGREN, G. 1938: Om importen av ungerska bronskärl I nordisk bronsålder. In: *Kulturhistoriska Studier tillägnade Nils Åberg*. Stockholm, 61–85.

- LINDENSCHMIT, L. (ed.) 1877: *Die Alterthümer unserer heidnischen Vorzeit*. 3/7. Mainz.
- LINDENSCHMIT, L. 1889: *Das Römisch-Germanische Central-Museum in bildlichen darstellungen aus seinen sammlungen*. Mainz.
- MARIJANOVIĆ, B. 1988: 07.39 Lukavac (Bokavić). In: BASLER, D. – ČOVIĆ, B. – MILETIĆ, N. – PAŠKVALIN, V. (red.): *Arheološki Leksikon Bosne I Hercegovine* 2. Sarajevo, 107.
- MARTIN, J. 2009: *Die Bronzegefäße in Mecklenburg-Vorpommern, Brandenburg, Berlin, Sachsen-Anhalt, Thüringen und Sachsen*. Prähistorische Bronzefunde II/16. Stuttgart.
- MENDELEŢ, F. 1974: Die Bronzesitula von Remetea Mare (Kreis Timiș). *Dacia* 18, 95–102.
- MENDELEŢ, F. 1975: Situla de la Remetea Mare (Jud. Timiș). *Banatica* 3, 49–59.
- MENGHIN, W. – SCHAUER, P. 1983: *Der Goldkegel von Ezelsdorf. Kultgerät der späten Bronzezeit*. Stuttgart.
- VON MERHART, G. 1941: *Zu den ersten Metallhelmen Europas*. Bericht der Römisch-Germanischen Kommission 30, 4–42.
- VON MERHART, G. 1952: Studien über einige Gattungen von Bronzegefäßen. In: KLUMBACH, H. (ed.): *Festschrift des Römisch-Germanischen Zentralmuseums in Mainz zu Feier seines hundertjährigen Bestehens* II. Mainz, 1–71.
- VON MERHART, G. 1969: Studien über einige Gattungen von Bronzegefäßen. In: KOSSACK, G. (Hrsg.): *Hallstatt und Italien. Gesammelte Aufsätze zur Frühen Eisenzeit in Italien und Mitteleuropa*. Mainz, 280–379.
- METZNER-NEBELSICK, C. 2002: *Der „Thrako-Kimmerische“ Formenkreis aus der Sicht der Urnenfelder- und Hallstattzeit im südöstlichen Pannonien* 1–2. Rahden/Westf.
- METZNER-NEBELSICK, C. 2010: Aspects of mobility and migration in the Eastern Carpathian Basin and adjacent areas in the early Iron Age (10<sup>th</sup>–7<sup>th</sup> centuries BC). In: DZIĘGIELEWSKI, K. – PRZYBYŁA, M. S. – GAWLIK, A. (eds.): *Migration in Bronze and Early Iron Age Europe*. Prace Archeologiczne 63. Kraków 2010, 121–151.
- MIHOVILIĆ, K. 2013: *Histri u Istri. Željezno doba Istre (Gli istri in Istria. L'età del ferro in Istria – The Histri in Istria. The Iron Age in Istria)*. Monografije Katalozi 23 – Arheološki Muzej Istre. Pula.
- MOLEND, G. 2015: Unikatowe znalezisko situli typu Hajduböszörmény na terenie gminy Namysłów. *Opolski Informator Konserwatorski*, 141–147.
- MONTELIUS, O. 1895a: *La Civilisation Primitive en Italie depuis l'introduction des métaux. Première Partie Fibules et Italie Septentrionale. Texte*. Stockholm.
- MONTELIUS, O. 1895b: *La Civilisation Primitive en Italie depuis l'introduction des métaux. Première Partie Fibules et Italie Septentrionale. Planches 1–50*. Stockholm.
- MONTELIUS, O. 1902: Ett i Sverige funnet fornitaliskt bronskärl. Bidrag till vår kunskap om handelsförbindelserna mellan Skandinavien och länderna söder härom före vår tideräknings början. *Svenska Fornminnesföreningens Tidskrift* 11, 1–108.
- MONTELIUS, O. 1910: *La civilisations primitive en Italie depuis l'introduction des métaux. Planches 251–320*. Stockholm.
- MOZSOLICS, A. 1972: Újabb karleletek a Magyar Nemzeti Múzeumban II. – Bronzezeitliche Schwertfunde im Magyar Nemzeti Múzeum (Ungarisches Nationalmuseum) II. *Archaeologiai Értesítő* 99, 188–205.
- MOZSOLICS, A. 1973: *Bronze- und Goldfunde des Karpatenbeckens. Depotfundhorizonte von Forró und Ópályi*. Budapest.
- MOZSOLICS, A. 1984: Rekonstruktion des Depots von Hajdúböszörmény. *Praehistorische Zeitschrift* 59/1, 81–93.
- MOZSOLICS, A. 1985: *Bronzefunde aus Ungarn. Depotfundhorizonte von Aranyos, Kurd und Gyermely*. Budapest.
- MOZSOLICS, A. 2000: *Bronzefunde aus Ungarn. Depotfundhorizonte Hajdúböszörmény, Románd und Bükkzentlászóló*. Prähistorische Archäologie in Südosteuropa 17. Kiel.



- MÖDLINGER, M. 2013: Bronze Age bell helmets: new aspects on typology, chronology and manufacture. *Praehistorische Zeitschrift* 88, 152–179.
- MÖDLINGER, M. 2017: *Protecting the Body in War and Combat. Metal Body Armour in Bronze Age Europe*. Oriental and European Archaeology 6. Vienna.
- MÜLLER-KARPE, H. 1958: *Neues zur Urnenfelderkultur Bayerns*. Bayerische Vorgeschichtsblätter 23, 4–34.
- MÜLLER-KARPE, H. 1959: *Beiträge zur Chronologie der Urnenfelderzeit nördlich und südlich der Alpen. Text/Tafeln*. Römisch-Germanische Forschungen 22. Berlin.
- MÜLLER-KARPE, H. 1961: *Die Vollgriffschwerter der Urnenfelderzeit aus Bayern*. Münchner Beiträge zur Vor- und Frühgeschichte 6. München.
- NESSSEL, B. 2009: Bronzenes Spezialgerät. Ein Metallhandwerkerdepot im Berliner Museum für Vor- und Frühgeschichte. *Acta Praehistorica et Archaeologica* 41, 37–65.
- NOVOTNÁ, M. 1970: *Die Bronzehortfunde in der Slowakei. Spätbronzezeit*. Bratislava.
- NOVOTNÁ, M. 1991: *Die Bronzegefäße in der Slowakei*. Prähistorische Bronzefunde II/11. Stuttgart.
- NOVOTNÁ, M. 2014: *Die Vollgriffschwerter in der Slowakei*. Prähistorische Bronzefunde IV/18. Stuttgart.
- OVERDONAU-KREISE 1836: Beiträge für Kunst und Alterthum im Oberdonau-Kreise. *Jahres-Bericht des historischen Vereins im: Oberdonau-Kreise*. Zweite Abteilung, 1–30.
- PATAY, P. 1969a: Bronz szitula a Magyar Nemzeti Múzeum gyűjteményében – Bronzesitula aus der Sammlung des Ungarischen Nationalmuseums. *Folia Archaeologica* 20, 11–24.
- PATAY, P. 1969b: Der Bronzefund von Mezökövesd. *Acta Archaeologica Academiae Scientiarum Hungaricae* 21, 167–216.
- PATAY, P. 1970: Über ein Bronzegefäß des Fundes von Niedzieliska. *Acta Archaeologica Carpathica* 11/2, 171–185.
- PATAY, P. 1972: Bemerkungen zu dem Situlenpaar von Granzin Kreis Lübz. *Bodendenkmalpflege in Mecklenburg*, 265–272.
- PATAY, P. 1990: *Die Bronzegefäße in Ungarn*. Prähistorische Bronzefunde II/10. München.
- PATAY, P. 1996: Einige Worte über Bronzegefäße der Bronzezeit. In: Kovács, T. (Hrsg.): *Studien zur Metallindustrie im Karpatenbecken und den benachbarten Regionen. Festschrift für Amália Mozsolics 85. Geburtstag*. Budapest, 405–419.
- PÁSZTHORY, K. – MAYER, E. F. 1998: *Die Äxte und Beile in Bayern*. Prähistorische Bronzefunde IX/20. Stuttgart.
- PERONI, V. B. 1970: *Die Schwerter in Italien (La spade nell'Italia continentale)*. Prähistorische Bronzefunde IV/1. München.
- PETRESCU-DÎMBOVIȚA, M. 1977: *Depozitele de bronzuri din România (Les dépôts de bronzes de la Roumanie)*. Academia de științe sociale și politice a Republicii Socialiste România. Institutul de Istorie și Arheologie „A.D. Xenopol” Iași Biblioteca de Arheologie 30. București.
- PODOBORSKÝ, V. 2012: Der neue Fund eines Deichselwagens aus der Ostslowakei. In: BLAJER, W. (ed.): *Peregrinationes Archaeologicae in Asia et Europa Joanni Chochorowski Dedicatae*. Kraków 2012, 205–213.
- PRIMAS, M. 1990: Verkehr und Innovation (Traffici ed innovazione). *Archäologie der Schweiz* 13, 80–88.
- PRÜSSING, G. 1991: *Die Bronzegefäße in Österreich*. Prähistorische Bronzefunde II/5. Stuttgart.
- RUSU, M. – DÖRNER, E. – PINTEA, V. – BADER, T. 1977: *Bronzehortfunde aus Transsilvanien (Hallstatt A<sub>2</sub>-Ha B<sub>3</sub>)*. Inventaria Archaeologica Corpus des Ensembles Archéologiques – Rumänien. 10. București.
- PUTZ, U. 2007: Früheisezeitliche Prunkgräber in Ober- und Mittelitalien. *Regensburger Beiträge zur Prähistorischen Archäologie* 15. Regensburg.
- PRZYBYŚLAWSKI, W. 1892: Skarb bronzowy znaleziony na prawym brzegu Dniestru pod Uniżem. *Teka Konserwatorska* 1, 30–39.

- VON QUILLFELDT, I. 1995: *Die Vollgriffschwerter in Süddeutschland*. Prähistorische Bronzefunde IV/11. Stuttgart.
- RANDALL-MACIVER, D. 1927: *The Iron Age in Italy. A study of those aspects of the Early Civilization which are neither Villanovan nor Etruscan*. Oxford.
- ROSKA, M. 1942: *Erdély Régészeti Repertórium. I. Őskor (Thesaurus Antiquitatum Transsilvanicarum I. Praehistorica)*. Kolozsvár.
- SOROCEANU, T. 2005: Zur zeitlichen Heimat des Eimerpaares vom Kurd-Typ aus Brâncovenești, Siebenbürgen, Rumänien. In: SOROCEANU, T. (Hrsg.): *Bronzefunde aus Rumänien II. Beiträge zur Veröffentlichung und Deutung bronze- und älterhallstattzeitlicher Metallfunde in europäischem Zusammenhang (Descoperiri de bronzuri din România. Contribuții la publicarea și interpretarea descoperirilor de metal din epoca bronzului și din prima vârstă a fierului în context European)*. Bistrița–Cluj-Napoca, 429–476.
- SOROCEANU, T. 2008: *Die vorskythenzeitlichen Metallgefäße im Gebiet des heutigen Rumänien (Vasele de metal prescitate de pe actualul teritoriu al României)*. Bronzefunde aus Rumänien (Descoperiri de Bronzuri din România) 3. Biblioteca Muzeului Bistrița – Seria Historica 16. Cluj-Napoca.
- SOROCEANU, T. 2011a: „GLADIUS BARBARICO RITU HUMI FIGITUR NUDUS”. Schriftliches, Bildliches und Ethnologisches zur Bedeutung der Schwerter und der Schwertdeponierungen außerhalb des militärischen Verwendungsbereiches. *Tyragetia Arheologie Istorie Antică*. Serie Nouă 5 (20)/1, 39–116.
- SOROCEANU, T. 2011b: Le guerrier des Carpates à l'âge du Bronze. Particularités régionales et traits communs continentaux. In: BARAY, L. – HONEGGER, M. – DIAS-MEIRINHO, M.-H. (dir.): *L'armement et l'image du guerrier dans les sociétés anciens: de l'objet à la tombe. Actes du Table ronde internationale et interdisciplinaire Sens, CEREP, 4-5 juin 2009*. Dijon, 225–370.
- SOROCEANU, T. – BUDA, V. 1978: Der Bronzefasshort von Buza (Kr. Cluj). *Dacia* 22, 99–106.
- SOROCEANU, T. – LAKÓ, É. 1981: Depozitul de bronzuri de la Sîg (Jud. Sălaj) (Der Bronzedepotfund von Sîg, Kreis Sălaj). *Acta Musei Porolissensis* 5, 145–168.
- SOÓS, B. 2015: Egy talált tárgy leporolása – Egy csészés markolatú kard újraközlése (Blowing the dust off an *objet trouvé* – Republishing a *Schalenknauf*-type sword). *Ősrégészeti Levelek – Prehistoric Newsletters* 14, 126–133.
- SPRINGER, T. – BAUMEISTER, M. – GSCHAID, M. – GEBHARD, R. 2003: Katalog. In: GERMANISCHES NATIONALMUSEUM, BÜRNBERG (Hrsg.): *Gold und Kult der Bronzezeit*. Ausstellungskatalog. Nürnberg, 273–322.
- SPROCKHOFF, E. 1930: *Zur Handelsgeschichte der Germanischen Bronzezeit*. Vorgeschichtliche Forschungen 7. Berlin.
- SPROCKHOFF, E. 1937: *Jungbronzezeitliche Hortfunde Norddeutschland (Periode IV)*. Kataloge des Römisch-Germanischen Zentralmuseums zu Mainz 12. Mainz.
- SPROCKHOFF, E. 1950: Chronologische Skizze. In: BEHRENS, G. – WERNER, J. (Hrsg.): *Reinecke Festschrift zum 75. Geburtstag von Paul Reinecke am 25. September 1947*. Mainz, 133–149.
- SPROCKHOFF, E. 1956: *Jungbronzezeitliche Hortfunde der Südzone des nordischen Kreises (Periode V) 1*. Kataloge des Römisch-Germanischen Zentralmuseums zu Mainz 16. Mainz.
- DE' STEFANI, S. 1885: Sopra la scoperta di oggetti di alta antichità scavati à Rivoli Veronese. *Atti del Reale Istituto veneto di scienze, lettere ed arti* 6/3, 239–241.
- STOCKHAMMER, PH. 2004: *Zur Chronologie, Verbreitung und Interpretation urnenfelderzeitlicher Vollgriffschwerter*. Tübinger Text 5. Rahden/Westf.
- STUDENÍKOVÁ, E. 1999: Ein Bronzeimer vom Typ Kurd aus der Ostslowakei. In: JEREM, E. – POROSZLAI, I. (eds.): *Archaeology of the Bronze and Iron Age. Experimental Archaeology. Environmental Archaeology. Archaeological Parks. Proceedings of the International Archaeological Conference Százhalombatta, 3–7 October 1996*. Budapest, 177–185.

- STUDENÍKOVÁ, E. 2007: Bemerkungen zur Fundzusammensetzung des Hortes aus Obišovce. *Zborník Slovenského národného múzea 101 Archeológia* 17, 35–46.
- SULIMIRSKI, T. 1937: Brązowy skarb z Niedzielisk, pow. Przemysłany (Ein Bronzedepotfund aus Niedzieliska, Kr. Przemysłany, Südpolen). *Światowit* 17, 255–282.
- V. SZABÓ, G. 2009a: Egy hiányzó láncszem... Adatok egy új késő bronzkori szitulatípus kapcsolatrendszeréhez (Ein fehlendes Bindeglied... Daten zum Verbindungssystem eines neuen spätbronzezeitlichen Situlentyps). *Tisicum – A Jász-Nagykun-Szolnok megyei múzeumok évkönyve* 19, 281–294.
- V. SZABÓ, G. 2009b: Kincsek a föld alatt. Elrejtett bronzkori fémek nyomában. In: ANDERS, A. – SZABÓ, M. – RACZKY, P. (szerk.): *Régészeti Dimenziók. Tanulmányok az ELTE BTK Régészettudományi Intézetének tudományos műhelyéből. A 2008. évi Magyar Tudomány Ünnepe keretében elhangzott előadások*. Bibliotheca Archaeologica. Budapest. 123–138.
- V. SZABÓ, G. 2011: Spätbronzezeitliche Bronzehortfunde im Siedlungskontext – Neue Forschungsergebnisse aus Ostungarn. In: BERECKI, S. – NÉMETH, R. E. – REZI, B. (eds.): *Bronze Age Rites and Rituals in the Carpathian Basin. Proceedings of the International Colloquium from Târgu Mureş 8–10 October 2010*. Bibliotheca Musei Marisiensis Seria Archaeologica 4. Târgu Mureş, 335–356.
- V. SZABÓ, G. 2013: Late Bronze Age Stolen. New Data on the Illegal Acquisition and Trade of Bronze Age Artefacts in the Carpathian Basin. In: ANDERS, A. – KALLA, G. – KISS, V. – KULCSÁR, G. – V. SZABÓ, G. (eds.): *Moments in Time. Papers Presented to Pál Raczky on His 60<sup>th</sup> Birthday*. Ősrégészeti Tanulmányok – Prehistoric Studies 1. Budapest, 793–815.
- V. SZABÓ, G. 2015: Bronzkor: Az őskori fémművesség virágkora (Kr.e. 2800–2000). In: VÁGÓ, Á. – SZENTHE, G. (szerk.): *A Kárpát-medence ősi kincsei. A kőkortól a honfoglalásig*. Budapest, 105–183.
- V. SZABÓ, G. 2017: A Gáva-kerámiastílus kora. Az Alföld a hajdúböszörményi szitulák földbekerülésének időszakában (The age of the Gáva pottery style. The Great Hungarian Plain in the time of the burying of the Hajdúböszörmény situlae). In: V. SZABÓ, G. – BÁLINT, M. – VÁCZI, G. – LŐRINCZY, G. (szerk.): *A második hajdúböszörményi szitula és kapcsolatrendszere (The second situla of Hajdúböszörmény and its relations)*. Studia Oppidorum Haidonicalium 13. Budapest–Hajdúböszörmény, 231–278.
- V. SZABÓ, G. – BÁLINT, M. 2017: A második hajdúböszörményi szitula (The second situla of Hajdúböszörmény). In: V. SZABÓ, G. – BÁLINT, M. – VÁCZI, G. – LŐRINCZY, G. (szerk.): *A második hajdúböszörményi szitula és kapcsolatrendszere (The second situla of Hajdúböszörmény and its relations)*. Studia Oppidorum Haidonicalium 13. Budapest–Hajdúböszörmény, 9–44.
- SZABÓ, G. 2017: Hogyan készültek és mire használhatták a hajdúböszörményi kincseletek szituláit? (How were the Hajdúböszörmény hoards’ situlae made and what could they be used for?) In: V. SZABÓ, G. – BÁLINT, M. – VÁCZI, G. – LŐRINCZY, G. (szerk.): *A második hajdúböszörményi szitula és kapcsolatrendszere (The second situla of Hajdúböszörmény and its relations)*. Studia Oppidorum Haidonicalium 13. Budapest–Hajdúböszörmény, 45–68.
- SZOMBATHY, J. 1912: Altertumsfunde aus Höhlen bei St. Kanzian im österreichischen Küstenlande. *Mitteilungen der Prähistorischen Kommission der Akademie der Wissenschaften* 1912, 17–190.
- TARBAY, J. G. 2014: Late Bronze Age depot from the foothills of the Pilis Mountains. *Dissertationes Archaeologicae* 3/2, 179–297.
- TARBAY, J. G. 2015: A Late Bronze Age hoard and sickle-shaped pins from Fövenyes (Hungary, Veszprém County) (Késő bronzkori depó és sarló alakú tűk Fövenyesről [Magyarország, Veszprém m.]). *Ősrégészeti Levelek – Prehistoric Newsletters* 14, 84–118.
- TARBAY, J. G. 2016a: The Late Bronze Age “Scrap Hoard” from Nagydobsza. Part I. (Késő bronzkori “fémhulladék depó” Nagydobszáról. I. Rész). *Communications Archaeologicae Hungariae* 2016, 87–146.
- TARBAY, J. G. 2016b: Kopott markolatú kardok... A gyopárosfürdői késő bronzkori kardlelet a legújabb kutatások tükrében. *Mozaikok Orosháza és vidéke múltjából* 15, 3–25.

- TERŽAN, B. 2016: Škocjan – At the Meeting Point of Worlds. Summary and Conclusion. In: TERŽAN, B. – BORGNA, E. – TURK, P. (eds.): *Depo iz mušje jame pri Škocjanu na Krasu (Il ripostiglio dalla grotto delle mosche presso San Canziano del Carso). Depojske najdbe bronaste in železne dobe na Slovenskem III*. Catalogi et Monographiae 42, Ljubljana, 431–472.
- TERŽAN, B. – BORGNA, E. – TURK, P. (eds.) 2016: *Depo iz mušje jame pri Škocjanu na Krasu (Il ripostiglio dalla grotto delle mosche presso San Canziano del Carso). Depojske najdbe bronaste in železne dobe na Slovenskem III*. Catalogi et Monographiae 42, Ljubljana.
- THRANE, H. 1966: Dänische Funde fremder Bronzegefäße der Jüngerer Bronzezeit (Periode IV). *Acta Archaeologica* 36, 157–207.
- TOMPA, F. 1937: 25 Jahre Urgeschichtsforschung in Ungarn 1912–1936. *Bericht der Römisch-Germanischen Kommission* 24/25, 27–127.
- UNDSET, I. 1882: *Das erste Auftreten des Eisens in Nord-Europa*. Hamburg.
- VACHTA, E. T. 2008: *Studien zu den bronzezeitlichen Hortfunden des oberen Theissgebietes*. Universitätsforschungen zur prähistorischen Archäologie 159. Bonn.
- VELIAČIK, L. 2015: Dve pozoruhodné tepané bronzové nádoby (Zwei Bemerkenswerte Getriebene Bronzegefäße). *Zborník Slovenského Národného Múzea. Zborník na Pamiatku Jozefa Paulíka Štúdie – Gedenkschrift für Jozef Paulík Studien*. Supplementum 9, 155–165.
- VERGER, S. 1990: Du dépôt métallique a la tombe fastueuse. In: BOCQUET, A. (red.): *Les Premiers Princes Celtes (2000 à 750 ans avant J.-C.) Autor de la tombe de Saint-Romain-de-Jalionas (Isère)*. Grenoble, 53–71.
- VOGT, E. 1950: Der Beginn der Hallstattzeit in der Schweiz. *Jahrbuch der Schweizerischen Gesellschaft für Urgeschichte* 40, 209–231.
- WEIHS, A. 2004: *Der urnenfelderzeitliche Depotfund von Peggau (Steiermark)*. Universitätsforschungen zur prähistorischen Archäologie 114. Bonn.
- WIKLAK, H. 1972: Późniejsze stadia rozwojowe środkowopolskiej grupy kultury łużyckiej. *Prace i Materiały Muzeum Archeologicznego i Etnograficznego w Łodzi. Seria Archeologiczna* 19, 15–172.
- WINIKER, J. 2015: *Die bronzezeitlichen Vollgriffschwerter in Böhmen*. Prähistorische Bronzefunde IV/19. Stuttgart.
- WIRTH, S. 2003: Die Goldbecher von Unterglauheim. In: GERMANISCHES NATIONALMUSEUM, NÜRNBERG (Hrsg.): *Gold und Kult der Bronzezeit*. Ausstellungskatalog. Nürnberg, 133–141.
- WIRTH, S. 2006a: Le mystère de la Barque Solaire: Quelques considerations à propos des décors sur les situles de type Hajdúböszörmény et sur une situle inédite du Bronze Final. In: BARAY, L. (dir.): *Artisanats, sociétés et civilisations: hommage à Jean-Paul Thevenot: actes du colloque organisé par l'UMR 5594, Dijon et le Centre de Recherche et d'Etude du Patrimoine (CEREP), Sens, 2-3 avril 2003. Revue archéologique de l'Est. Supplément* 24. Dijon, 331–345.
- WIRTH, S. 2006b: Vogel-Sonnen-Barke. In: BECK, H. – GEUENICH, D. – STEUER, H. (dir.): *Reallexikon der Germanischen Altertumskunde* 32: *Vä – Vulgarrecht*. Berlin, 552–563.
- WIRTH, S. 2010: Sonnenbarke und zyklisches Weltbild – Überlegungen zum Verständnis der spätbronzezeitlichen Ikonographie in Mitteleuropa. In: MELLER, H. – BERTMENES, F. (Hrsg.): *Der Griff nach den Sternen. Wie Europas Eliten zu Macht und Reichtum kamen. Internationales Symposium im Halle (Saale) 16.-21. Februar 2005*. Tagungen des Landesmuseums für Vorgeschichte Halle (Saale) 5. Halle (Saale), 501–515.
- ZOLTAI, L. 1915: Debreczen Szab. Kir. Város Muzeuma. Az első tíz esztendő. *Archaeologiai Értesítő* 35, 115–134.
- ZOLTAI, L. 1926: Two Bronze Hoards from Hajdusamson, Near Debreczen. *Man* 26, 129–132.
- ŽUROWSKI, K. 1949: Zabytki brązowe z młodszej epoki brązu i wczesnego okresu żelaza z dorzecza górnego Dniestru (Objects de bronze du récent âge du bronze et du premier âge du fer du bassin du haut Dniester). *Prezgląd Archeologiczny* VIII/2, Rocznik 25, 155–247.





Fig. 11. A Hajdúböszörmény-type situla sold on the Artemis Gallery in 2014. Retrieved from [www.liveauctioneers.com/item/27124538\\_superb-large-hallstadt-bronze-situla](http://www.liveauctioneers.com/item/27124538_superb-large-hallstadt-bronze-situla) (10. 01. 2019, 10:05).

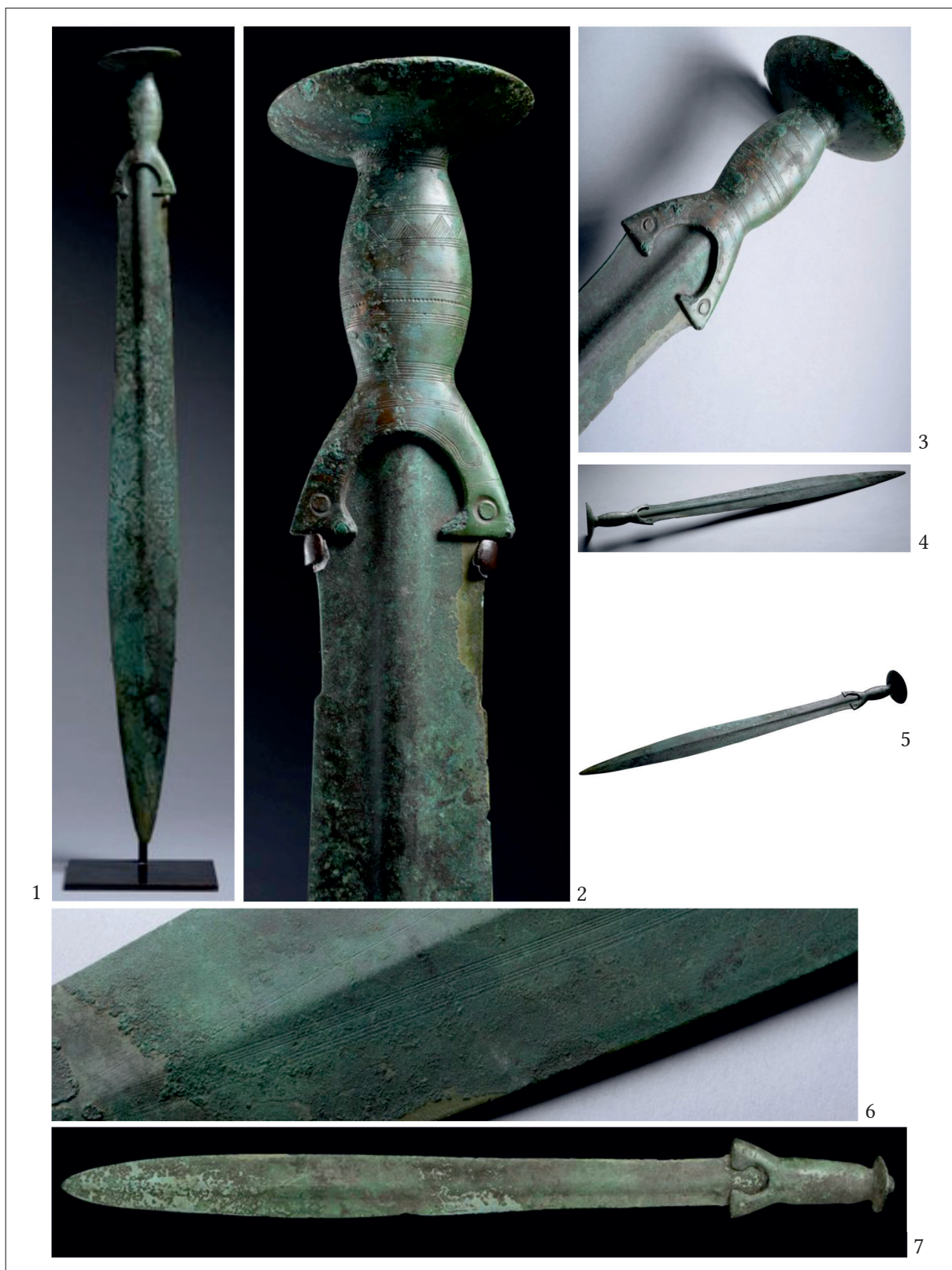
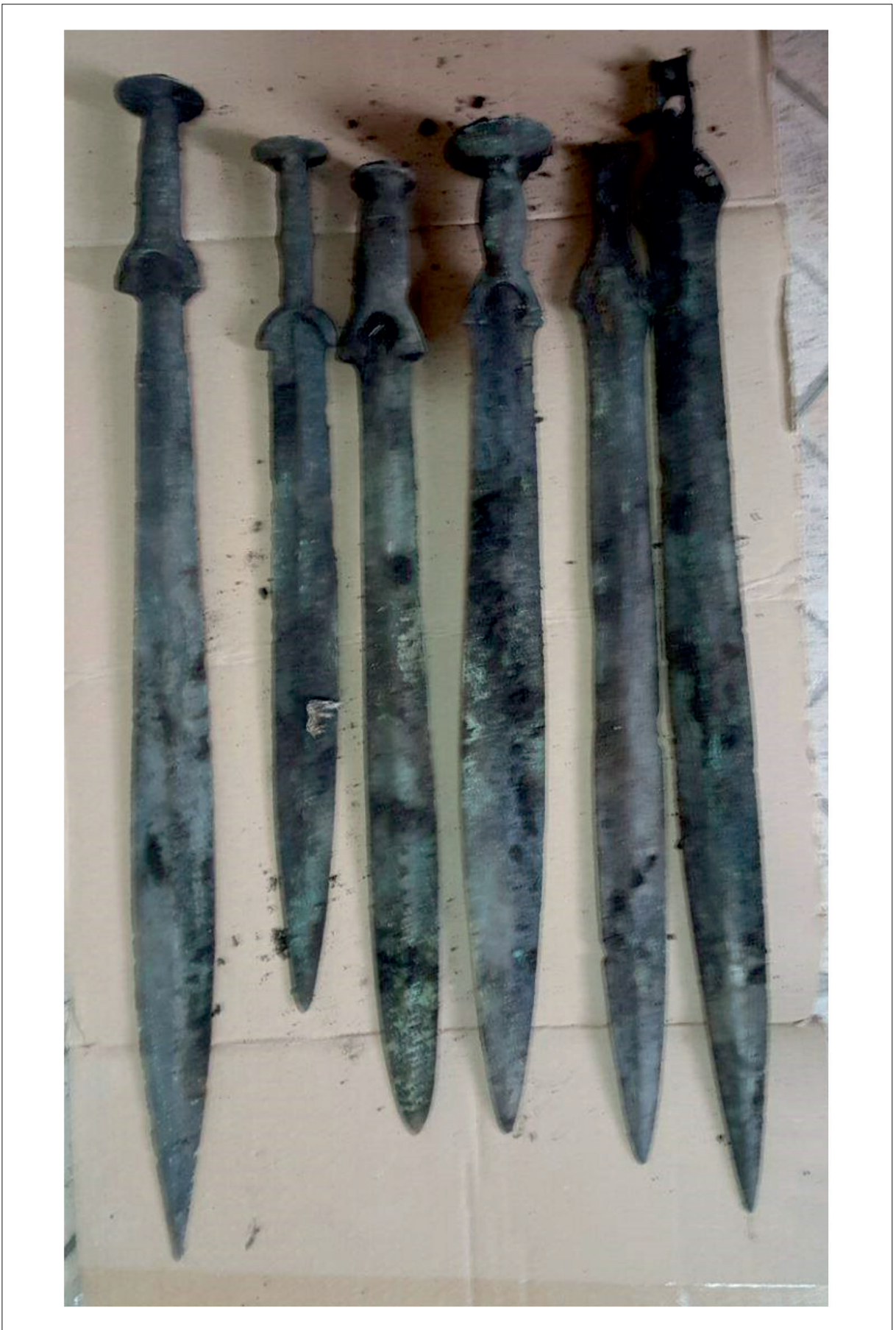


Fig. 12. Two swords from the “Mátészalka” (Hungary, Szabolcs-Szatmár-Bereg County) hoard sold on British auctions. 1–6 – No. 1 sword – 1stdibs (London). Retrieved from [https://www.1stdibs.com/furniture/decorative-objects/sculptures/mounted-objects/european-bronze-age-sword-1200-bc/id-f\\_8667883/?modal=contact-dealer&userComesFromAmp=true](https://www.1stdibs.com/furniture/decorative-objects/sculptures/mounted-objects/european-bronze-age-sword-1200-bc/id-f_8667883/?modal=contact-dealer&userComesFromAmp=true) (28. 12. 2018, 10:08), 7 – No. 3 sword – TimeLineAuctions (London), Antiquities&Coins. Retrieved from <https://www.sixbid.com/browse.html?auction=5089&category=157344&lot=4239138> (28. 12. 2018, 9:49).





*Fig. 13.* Sword hoard from “Mátészalka” (Hungary, Szabolcs-Szatmár-Bereg County).

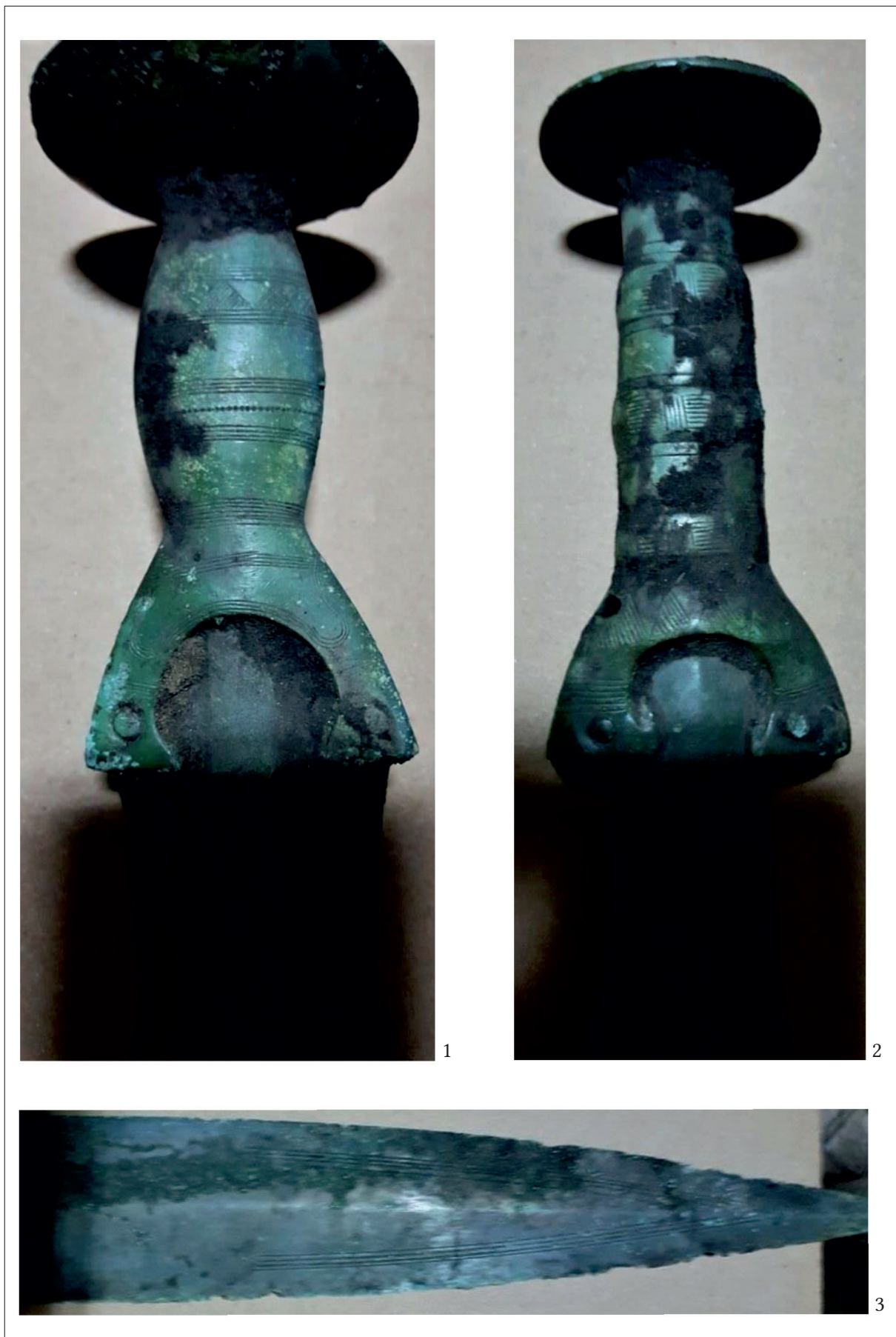


Fig. 14. Sword hoard from “Mátészalka” (Hungary, Szabolcs-Szatmár-Bereg County).





Fig. 15. Uploaded images of the finds from “Ternopil Oblast” (Ukraine). Retrieved from <http://domon-gol.org/viewtopic.php?f=10&t=26981> (15. 04. 2017, 09:51).





1



2

*Fig. 16.* Uploaded images of the finds from “Ternopil Oblast” (Ukraine). Retrieved from <http://domon-gol.org/viewtopic.php?f=10&t=26981> (15. 04. 2017, 09:51).



Fig. 17. Uploaded images of the finds from “Ternopil Oblast” (Ukraine). Retrieved from <http://domon-gol.org/viewtopic.php?f=10&t=26981> (15. 04. 2017, 09:51).





1



2



3



4

Fig. 18. Uploaded images of the finds from “Ternopil Oblast” (Ukraine). Retrieved from <http://domongol.org/viewtopic.php?f=10&t=26981> (15. 04. 2017, 09:52).





Fig. 19. Uploaded images of the finds from “Ternopil Oblast” (Ukraine). Retrieved from <http://domon-gol.org/viewtopic.php?f=10&t=26981> (15. 04. 2017, 09:52).





1



2



3

Fig. 20. Uploaded images of the finds from “Ternopil Oblast” (Ukraine). Retrieved from <http://domongol.org/viewtopic.php?f=10&t=26981> (15. 04. 2017, 09:54).





1




2

Fig. 21. Uploaded images of the finds from “Ternopil Oblast” (Ukraine). Retrieved from <http://domon-gol.org/viewtopic.php?f=10&t=26981> (15. 04. 2017, 09:54).


**Бронза**  
□ ufo 28 окт 2016, 22:08

Доброго дня!  
У кого какие мысли по идентификации ?



**Re: Бронза**  
□ ufo 29 окт 2016, 18:48


Найдено в Тернопольской области.  
Вот этот шлем с такими же узорами...



[Увеличить](#)

**Re: Бронза**  
□ ufo 29 окт 2016, 22:25

Благодарю Вас за ответ...  
Ну кое-кто говорит что сосуд со времени троянских войн  
Говорят другие 8-5 века до н.э.  
Ну два предмета явно одной культуры.



[Увеличить](#) [Увеличить](#)

**UFO**  
Homo habilis

Сообщений: 29  
Зарегистрирован: 25 фев 2014, 04:56  
Спасибо сказано: 17  
Спасибо получено: 1 раз в 1 сообщении





Fig. 22. The find from “Ternopil Oblast” (Ukraine) on the domongol.org blog. Retrieved from <http://domongol.org/viewtopic.php?f=10&t=26981> (15. 04. 2017, 09:55).



www.minelab.com/eur/go-minelabbing/success-stories/bronze-celt

címsorban látható szívet kiválasztva, vagy így [Könyvjelzők importálása most](#)



Recreation Gold Mining Countermine

Metal Detectors Accessories Go Minelabbing Knowledge Base Customer Care Where to Buy

Search Success Stories:

Search

RSS Feed

Archive

- All Years
- 2019
- 2018
- 2017
- 2016
- 2015
- 2014
- 2013
- 2012
- 2011
- 2010
- 2009

Categories

- All Categories
- Treasure Stories
- Gold Stories

Find Type

- All Find Types
- Beach Finds
- Coins
- Gold Nuggets
- Jewellery
- Military
- Relics
- Underwater

Metal Detector


- All Metal Detectors
- GPZ 7000
- GPX Series
- GP Series
- SD Series
- SDC 2300
- GOLD MONSTER 1000
- Eureka Gold-XT Series
- CTX 3030
- Excalibur Series
- E-TRAC
- Explorer Series
- Safari-Quattro MP
- Sovereign Series
- X-TERRA Series
- Musketeer Series
- GO-FIND Series

Region / Country

- All Regions / Countries
- Asia
- Australia & NZ
- Middle East & Africa
- Europe
- North America
- South & Central America
- United Kingdom
- Eastern Europe & Russia

Video

- Video Success Stories





Go Minelabbing >  
**2017**


**Bronze Celt**  
X-TERRA 705  
December 19, 2017 08:03am

**Video**  
Success Story

Nice to walk in the winter in the “autumn” forest. Let there be no snow, let it rain... it even adds a mystery. Rustle droplets and light fog, as if the portal is to the past. Elder forest is clogged by careless people, it complicates searching for interesting things lost a few days, years, centuries, or millennia ago. But pleasant bonuses are more interesting when unexpected. That's what happened this time. My X-TERRA 705 gave me a surprise. This is my first bronze Celtic, my oldest find, XI-VII centuries BC. I love it, a pleasant feeling of connection of epochs.

Yuriy - Ukraine



76 ember kedveli. Az ismerősaid közül te lehetsz az első.

Fig. 23. The “Ukrainian Success Story” on site of the Minelab Electronics Pty Ltd. Retrieved from <https://www.minelab.com/eur/go-minelabbing/success-stories/bronze-celt?f=Years%2CCategories%2C57178%2C89259%2C53318%2CFotm&fYears=2017%2C2009> (02. 01. 2019, 13:59).

