
THE MEDIEVAL SPEAR-, LANCE OR JAVELIN HEADS FROM THE NATIONAL MUSEUM OF ROMANIAN HISTORY (BUCHAREST) AND THEIR ASSESSMENT

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REZUMAT:

Articolul propune, pe baza analogiilor, o tipologie și o cronologie pentru 18 vârfuri medievale de sulită sau lance din Muzeul Național de Istorie a României din București (România). Vârfurile discutate ale hamperelor de aruncare sau înfigere sunt păstrate în depozitul de piese medievale al Departamentului de Arheologie din muzeu. Pentru aproximativ 61,1% dintre aceste vârfuri lipsesc orice informații despre contextele lor arheologice. Restul provin, cel mai probabil, de pe teritoriul actual al României. Cu excepția a două vârfuri incomplete, cu fragmente din lamele lor, ansamblul de piese analizat poate fi împărțit în șapte categorii sau grupuri. Prima categorie o constituie vârfurile de împingere ale căror tuburi de înmănușare sunt mai largi decât lamele lor. Vârfurile celorlalte șase grupuri au lamele mai largi decât tuburile lor de înmănușare. Piese analizate pot fi datate în Evul Mediu (secolele VI-XVI), deși folosirea unora dintre ele ar fi putut să fi precedat sau depășit Evul Mediu (putând fi datate, de asemenea, în preistorie, perioada romană, epoca migrațiilor și perioada modernă). O piesă nu poate fi datată.

ABSTRACT:

The referred article mostly classifies and subsequently embeds 18 medieval spear-, lance or javelin heads from the National Museum of Romanian History in Bucharest (Romania) in typology and chronology following the possible analogies. The discussed heads of throwing or thrusting pole arms are deposited in the medieval part of the depository concerning the Department of Archaeology of the aforementioned museum. Up to 61.1% of these heads is deficient of any information about their archaeological contexts. The rest most likely originated in the territory of present-day Romania. Except from two incomplete heads with fragments of their blades the examined assemblage can be divided into 7 categories or groups. The first category belongs to the thrusting heads/spikes whose sockets are wider than their blades. Heads of the remaining 6 groups have got blades wider than their sockets. The examined assemblage could be dated to the Middle Ages (the 6th – 16th centuries), then the usage of some of them might have also anteceded or exceeded the Middle Ages (to Prehistory, the Roman Period, Great Migration Period, and Modern Period), or it is not possible to date them (1 pc).

CUVINTE CHEIE: Evul Mediu, hampe de aruncare sau înfigere, Muzeul Național de Istorie a României, București, România

KEYWORDS: The Middle Ages, Throwing or Thrusting Pole Arms, the National Museum of Romanian History, Bucharest, Romania

I. Introduction

The referred heads of spears, lances or javelins have been identified during research of melee weapons and caltrops¹ conducted in the medieval part of depository of the Department of Archaeology² of the National Museum of Romanian History in Bucharest (hereafter the MNIR in Bucharest)³. The aforementioned research has been carried out since the year 2018 by the authors of this article.

There is a total number of 18 iron exemplars of the studied weapons (Table 1). Only three exemplars out of the whole were discovered in a particular place within some cadastral territory and at the same time we know their archaeological context. As many as 11 heads out of 18 (61.1%) originate from an unknown place of discovery.

¹ So far 101 exemplars of melee weapons and caltrops altogether.

² “Secția Arheologie” in Romanian.

³ “Muzeul Național de Istorie a României, București” in Romanian.

Table 1 – Medieval throwing or thrusting pole arms from the National Museum of Romanian History in Bucharest (Romania). * - incomplete part of the head and therefore its incomplete measurement as well (authors: Martin Husár and Silviu Ion Oța).

Con-secutive nos.	Inventory nos. in the MNIR	Site	Archaeological/find context	Illustration	Literature	Measurements of the spear-, lance or javelin heads (cm)							Weight of the spear-, lance or javelin heads (kg)	Suggested dating according to the authors of the article
						Total length	Length of the blade	Maximal width of the blade	Thickness of the blade in the place of its maximal width	Section plan measurements of the neck	Outer section plan measurements of the socket	Inner section plan measurements of the socket		
1	-	Cladova (Arad County, Romania)	workshop no. 3, earthen fort	Fig. 8/6	Oța et al. 2015, 123, 128, 131-134, Pl. 3/1	*14.2	*2.5	-	-	0.9 x 0.9	1.8 x 1.1	0.9 x 0.7	-	first half of the 13th century
2	C 3632	unknown	unknown	Fig. 8/1	unpublished	38.0	25.4	4.5	0.73	1.1 x 1.05	1.9 x 2.1	1.8 x 1.9	0.12697	Iron Age - 7th century AD
3	16118	Gogoșu (Mehedinți County, Romania)	unknown	Fig. 5/1	unpublished	33.6	19.0	3.8	0.95	1.25 x 1.4	1.8 x 1.7	1.8 x 1.7	0.27318	Iron Age - 11th - 13th centuries AD/ Modern Period
4	32782	unknown	unknown	Fig. 8/5	unpublished	*12.7	*3	*4.0	0.6	1.45 x 1.15	1.9 x 1.8	1.6 x 1.5	0.06786	-
5	37094	unknown	unknown	Fig. 6	unpublished	41.0	32.0	6.85	0.75	2 x 1.6	3.85 x 4.1	3.2 x 3.1	0.633	14th - 15th century
6	47473	unknown	unknown	Fig. 4/3	unpublished	53.4	42.9	5.4	2.3	3.35 x 2.65	4.45 x 3.6	3.65 x 3.1	1.37314	end of the 8th century - 9th century
7	69471	Dra-gosloveni (Vrancea County, Romania)	hoard	Fig. 8/3	Comșa and Constantinescu 1969, 432-436, Fig. 5/6; Husár and Oța 2020, 229-243	*18	*8.5	*2.6	1.2	1.7 x 1.65	2.4	2.1	0.19711	10th century
8	69622	Bâta Doamnei (Neamț County, Romania)	fortified settlement	Fig. 2/4	Scorpan 1965, 446, Fig. 5/5; Sófalvi 2021, Fig. 10: 5	27.5	12.5	2	0.5	1.5 x 0.85	3.5 x 3	2.9 x 2.5	0.2011	the second half of the 12th century - the middle of the 13th century

Con- sec- utive nos.	Inven- tory nos. in the MNIR	Site	Archaeo- logical/find context	Illus- tration	Literature	Measurements of the spear-, lance or javelin heads (cm)							Weight of the spear-, lance or javelin heads (kg)	Suggested dating according to the authors of the article
						Total length	Length of the blade	Max- imal width of the blade	Thickness of the blade in the place of its maximal width	Section plan meas- urements of the neck	Outer section plan mea- surements of the socket	Inner sec- tion plan meas- urements of the socket		
9	69890	Teiuș (Alba County, Romania)	unknown	Fig. 2/1	unpublished	21	10.5	1.2	0.6	1.2 x 1.1	2.2	1.8	0.1193	last third of the 6th century - turn of the 7th and 8th century
10	69891	Teiuș (Alba County, Romania)	unknown	Fig. 2/2	unpublished	26.2	13.4	1.6	1.05	1.15 x 1.3	1.95 x 1.95	1.65 x 1.7	0.15529	second half of the 7th century - 8th century
11	72053	Baia (Suceava County, Romania)	unknown	Fig. 9/1	unpublished	30.5	20	4.5	0.75	1.9 x 1.8	3.1 x 2.6	2.7 x 2.2	0.2804	14th - 16th centuries
12	75678	unknown	unknown	Fig. 5/2	unpublished	33.9	23	4.6	0.6	1.5 x 1.4	2.25 x 2.15	2 x 1.9	0.26922	5th century BC - 13th century AD
13	75679	unknown	unknown	Fig. 9/2	unpublished	38.5	24	5	0.6	2 x 1.1	4.1 x 4	3.8 x 3.7	0.40278	14th - 16th centuries
14	106136	unknown	unknown	Fig. 2/3	unpublished	20.5	12.5	1.9	1	1.3 x 1.4	2.2	1.8	0.11485	last third of the 6th century - 13th century
15	106137	unknown	unknown	Fig. 8/4	unpublished	15.5	9	2.75	0.7	1.1 x 0.9	2.4 x 2.4	-	0.07375	(9th - 10th centu- ries? -) 15th century
16	317504	unknown	unknown	Fig. 2/5	unpublished	12.9	6.25	1.6	0.65	1.2 x 0.9	2.2 x 2.2	1.7 x 1.55	0.05585	second half of the 7th century - 11th (/15th) century
17	343112	unknown	unknown	Fig. 4/1	unpublished	34.5	11.1	2.3	0.8	1.35 x 1.35	1.9 x 1.9	1.55 x 1.75	0.18071	3rd - 5th (/11th) centuries
18	344418	unknown	unknown	Fig. 8/2	unpublished	25.9	20.8	3.95	0.7	1.6 x 1.1	2 x 2	1.5 x 1.5	0.14502	Iron Age - 14th - 15th centuries

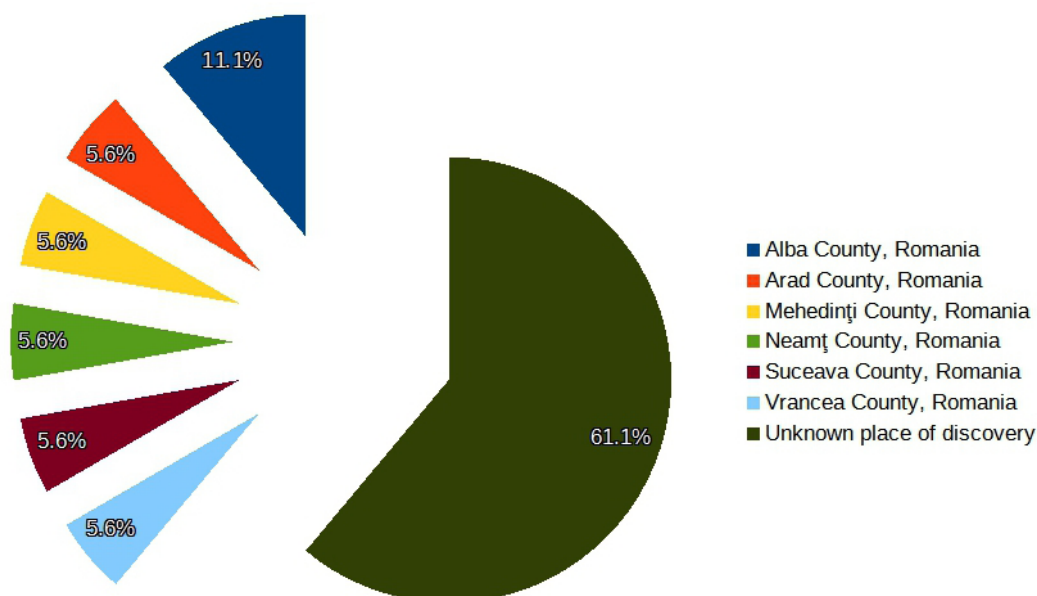


Fig. 1 – Provenance of the medieval throwing or thrusting pole arms from the National Museum of Romanian History in Bucharest (Romania; authors: Martin Husár and Silviu Ion Oța).

Heads the throwing or thrusting pole arms, which can be related to a particular archaeological site or cadastral territory (7 pcs; 38.9%), come exclusively from the territory of present-day Romania. We can factually speak about two of their pieces from Transylvania and Romanian Moldova and about one their specimen each from Crișana, Oltenia, and Bukovina (Fig. 1).

So far the topic of the aforementioned heads from the MNIR in Bucharest has not complexly and completely been processed. Only three heads from the discussed assemblage were published. And also these publications were not primarily connected with spears, lances or javelins, but with two settlement sites and one hoard. It concerns the workshop no. 3⁴ from the earthen fort of Cladova in the Arad County (Romanian Crișana), fortified settlement of Bâta Doamnei in the Neamț County (Romanian Moldova) and the hoard of Dragosloveni in the Vrancea County (Romanian Moldova). Unfortunately, there is just a socket of a spear-, lance or javelin head from the above mentioned workshop⁵. Nonetheless, we can observe that the workshop no. 3 can be dated back to the first half of the 13th century following the find of a coin unearthed here, which was minted during the reign of Bernard II (1202 – 1256), the Duke of Carinthia⁶. Then the duration of the fortified settlement of Bâta Doamnei might be limited by the second half of the 12th century and the middle of the 13th century⁷. Finally, the hoard of Dragosloveni could have been deposited in the 10th century⁸ considering its content⁹. The two aforementioned settlement archaeological sites belonged to the territory of the Hungarian Kingdom and the remaining hoard of Dragosloveni was placed underground in the Duchy of Wallachia.

⁴ On the basis of the remnants of material culture we can state that this dwelling could also have been inhabited by a woman and it can be related to a smithy (Oța et al. 2015, 131-133).

⁵ The whole fragment is 14.2 cm long (Fig. 8/6). Only a small part of the blade's foot remained joined to the entire socket of this head. The same situation exists in regard to the spear-, lance or javelin head with inventory number 32782 from the MNIR in Bucharest (Fig. 8/5). It has almost got a complete socket, but its blade is represented only by an incomplete foot (3 cm long). This 12.7 cm long fragment of the head without detailed circumstances of discovery was transferred to the MNIR from the Bucharest Municipality Museum in 1973 (Information from the Museum Register of the MNIR). In the following text we will not further deal with the aforementioned two broken pieces of heads of throwing or thrusting pole arms. They have not got sufficient informative value in the typological and chronological respects.

⁶ Oța et al. 2015, 123, 125, 128, 131-135, Pl. 3/1.

⁷ Except this head of a spear, lance, or javelin, some other weapons, a horse harness, tools, pottery, etc. were found there. The Hungarian silver bracteate of King Béla IV (1235 – 1270) was most likely found upon this settlement as well. It might have been minted during the beginning of his reign when he also ruled as the Duke of Transylvania. (Aleksić 2007, 41; Mătașă et al. 1960, 346-347; Pinter 2007, 89-90; RAN – Bâta Doamnei 2021; Scorpan 1965, 441, 446-447, 451-453, Fig. 8; Söfalvi 2021, 33-36, Fig. 13).

⁸ Comșa and Constantinescu 1969, 432-436; Husár and Oța 2020, 233, 235.

⁹ Parts of agricultural and blacksmithing tools, a horse harness, horse riding gear, weapons and fragments of pottery (Comșa and Constantinescu 1969, 425-436, Fig. 1-6).

Scientific literature, which have been published in Romania and dealt with weapons, have not primarily covered medieval throwing or thrusting pole arms. These arms, besides other arms, helms, horse riding gear, and a horse harness of the population of the Avar Khaganate (the 7th – 8th centuries) in Transylvania, were treated in the one of the latest publications of Romanian archaeologist Călin Cosma¹⁰. In this monograph he looked at the heads of the throwing or thrusting pole arms from a typological-chronological point of view. Typological and chronological analysis of the referred weapons used by the Gepids, in addition to other arms and armour from the early phase of the Avar Khaganate Period in Transylvania, was made by Romanian archaeologist Alpár Dobos in his study¹¹.

Significant literature on arms (including spears, lances or javelins) and armour of the 15th – 18th centuries, which is displayed or deposited in Romanian museums, was published by Cristian M. Vlădescu¹² on his own¹³ or in a collective including him as well¹⁴. Parts of spears, lances or javelins were also issued, along with other (quite long) pole arms from the 14th – 18th centuries, in the catalogue regarding the weapons collection of the Brukenthal National Museum in Sibiu¹⁵.

Other authors from the Romanian milieu treated medieval throwing or thrusting pole arms only marginally and not completely and systematically. For instance, the head from the hoard of Dragosloveni was mentioned in the study on tools and weapons from the early medieval hoards from the territory of present-day Romania¹⁶. Zeno Karl Pinter, last but not least, investigated the head of the discussed arms from Vâjâietoarea (Vrancea County, Romania), to the south of the Carpathians, which might have been connected with the fight of the Teutonic Order against the Cumans in the 13th century¹⁷.

Lastly, Martin Husár recently published a preliminary study in Slovakia regarding the examined assemblage of heads of the throwing or thrusting pole arms from the MNIR¹⁸.

In the subsequent text we take a look at the typological-chronological anchoring of the examined heads (after shape classification) and their wider context on the basis of stratigraphy and their analogies, in particular from Central and Southeastern Europe. The investigated assemblage might be divided into several groups or categories, which can be further and more precisely subdivided upon certain specifics of the particular heads. Firstly, the five spikes/thrusting heads belong to the first group. Their sockets are wider than their blades or approximately in the same width. The following groups of the heads have got blades that are wider than their sockets. The second group consists of one javelin head with two backward barbs. The next category comprises only one thrusting head with flat wings. The contents of the fourth group are three heads with a blade in the form of a willow leaf, although the tip of one of this heads is considerably thickened and protruded. Next, an exemplar with round extended edges in the lower part of its blade is in the fifth category, a head with a blade in the form of a poplar leaf belongs to the sixth group and four heads with triangular blades are in the seventh category. In the end, the remaining two heads of throwing or thrusting pole arms are at our disposal. They are mostly composed of their sockets with unspecified fragments of blades above their necks. As we mentioned before we will not further deal with these two broken exemplars of spear-, lance or javelin heads.

2. Spikes/thrusting heads

This group is made up of five spikes/thrusting heads whose blades are approximately same or narrower than their sockets (Fig. 2-3). Their inventory numbers in the MNIR are: 69622, 69890, 69891, 106136 and 317504. Two of them¹⁹, which come from an unknown archaeological context in the cadastral territory of the present-day Transylvanian town of Teiuș in County Alba, have got more or less the hexagonal form of its blades from the front (Fig. 2/1-2). They are 21 and 26.2 cm in length. Their blades, whose cross-sections are rhombic, are almost as long as sockets of the discussed heads. We can add one more head to them. It has got inventory number 106136 in the MNIR. It is 20.5 cm long spike whose blade is slightly longer than its socket. This blade is triangular or irregularly hexagonal and is tapering to its tip (Fig. 2/3). The cross-section of this blade is lenticular. The socket of the head

¹⁰ Cosma 2020.

¹¹ Dobos 2015, 57-88.

¹² He most precisely knew the situation in his home institution – in the “King Ferdinand I” National Military Museum (Muzeul Militar Național “Regele Ferdinand I”) in Bucharest.

¹³ Vlădescu 1968, 77-112; Vlădescu 1973, 58-86; Vlădescu 1974-1975, 151-180.

¹⁴ Vlădescu et al. 1973.

¹⁵ Nițoi 2007, 32-43.

¹⁶ Canache and Curta 1994, 202, Fig. 1/29.

¹⁷ Pinter 2014, 13-14, Abb. 7/1-2.

¹⁸ Husár 2021.

¹⁹ Inventory numbers 69890 and 69891 in the MNIR.

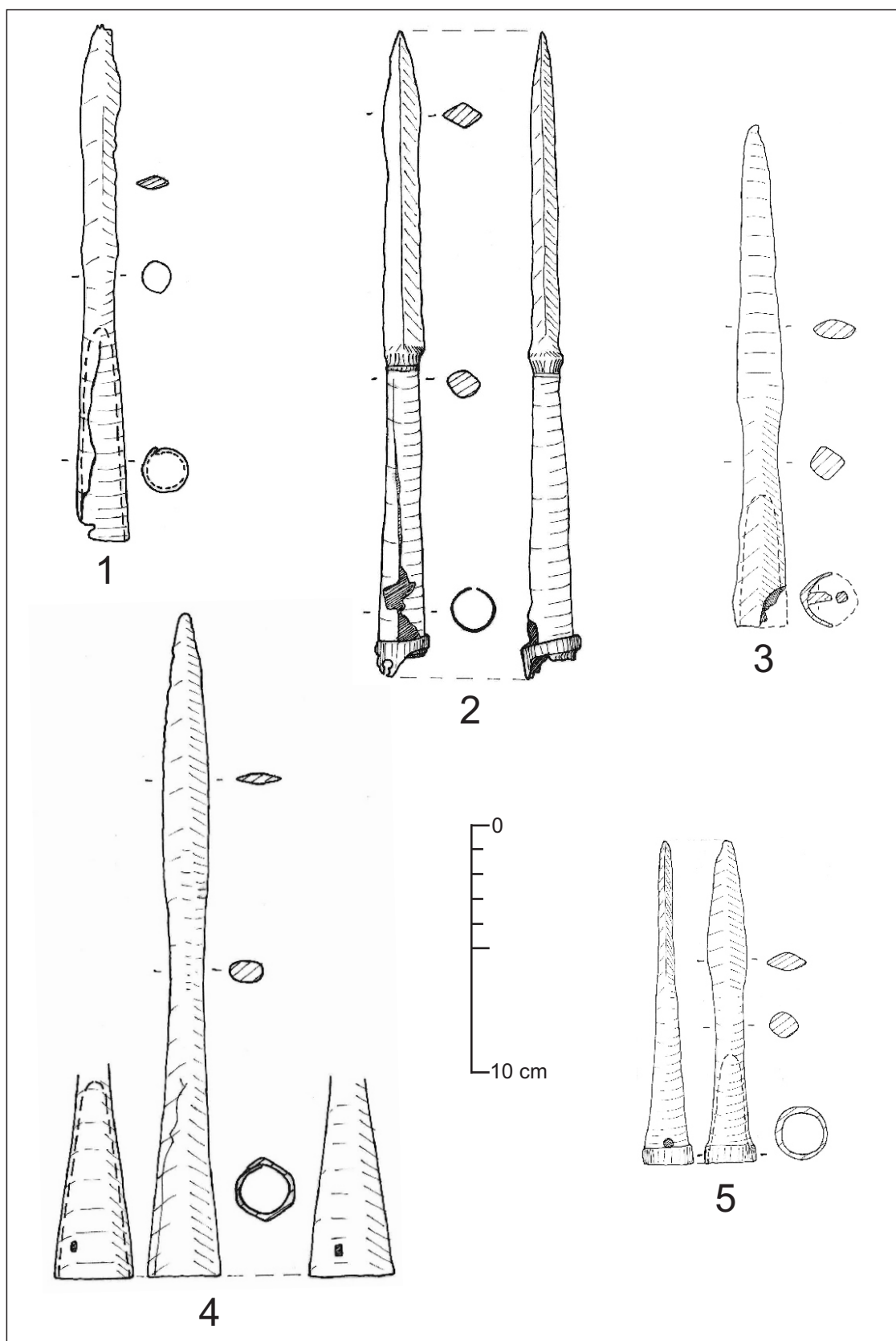


Fig. 2 – Medieval spikes/thrusting heads from the National Museum of Romanian History in Bucharest (Romania). 1. Teiuș (Alba County, Romania; inventory no. 69890). 2. Teiuș (Alba County, Romania; inventory no. 69891). 3. Unknown site (inventory no. 106136). 4. Bâta Doamnei (Neamț County, Romania; inventory no. 69622). 5. Unknown site (inventory no. 317504). All iron. 1-5 – drawings by Geogiana Ducman. Scale: all to scale.

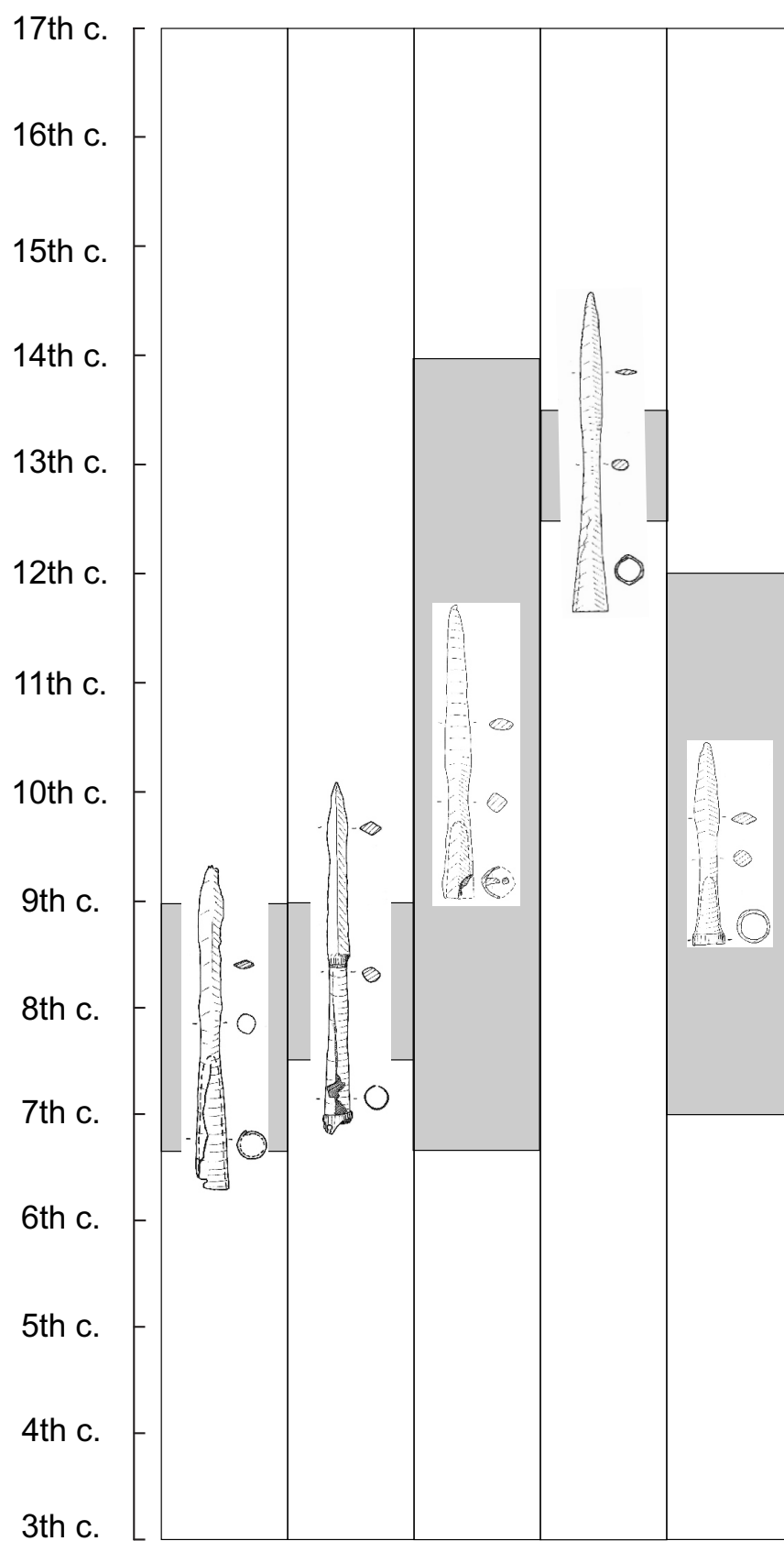


Fig. 3 – Chronological categorisation of medieval spikes/thrusting heads from the National Museum of Romanian History in Bucharest (Romania; author: Martin Husár). Not to scale.

with inventory number 106136 was formerly angular²⁰. Unfortunately, the discussed head come from an unknown context, as most of the examined heads of throwing or thrusting pole arms.

The three aforementioned spikes should be in a broad sense classified as heads of throwing or thrusting pole arms, whose blades are hexagonal and narrower than their sockets or approximately in the same width. These heads can be identified with type 1A of Călin Cosma, type P.I.B of Gergely Csiky, or variant AAa of Martin Husár – one of the authors of this article. Călin Cosma, who has examined the territory of Transylvania in the time of the Avar Khaganate, dated the aforementioned type 1A²¹ to the period of the years 630 – 800²². Gergely Csiky classified his type P.I.B.²³ into the whole time span of the Avar Khaganate and according to him this type was most common form during that time^{24,25}. The discussed form of the heads could have been applied in the Carpathian Basin from the last third of the 6th century to the 10th – 11th centuries on the basis of Martin Husár's research regarding pole arms of the Early Middle Ages there²⁶, however, it should be noted that these parts of weapons had been used in Europe at least between the 2nd century BC and 13th – 14th centuries AD²⁷.

The details of the first two above mentioned heads with inventory numbers 69890 and 69891 allow us to refine their dating in some ways. The exemplar with inventory number 69890 (Fig. 2/1) is the simplest one of this couple. Almost identical heads of throwing or thrusting pole arms we can note in the so called equestrian, infantry or horse graves of Hungarian Pannonia or the Transylvanian Basin. In Hungarian Pannonia three heads of this kind from three sites can approximately be dateable between the last third of the 6th century and the last third of the 7th century²⁸. Five spikes, which might have been produced between the last third of the 6th century and the 810s or 820s, have been found in the territory of the Transylvanian Basin²⁹. Similar heads are known from the milieu of the Saltovo-Mayaki culture, namely at the Новогригорьевка site in the Rostov Oblast (the Russian Federation). A. B. Комар and O. B. Сухобоков dated this form at the turn of the 7th and 8th centuries there³⁰.

The thrusting head with inventory number 69891 from the MNIR (Fig. 2/2) is, besides the aforementioned same features with the specimen under inventory number 69890, fitted with a relatively narrow plastic ring in the place of its neck and then with a wider plastic ring at the mouth of its socket. The latter plastic ring has also got one projection with an opening for a rivet or nail. The closest analogies for this head should be searched in the territory of the Carpathian Basin, particularly in its northwestern part. It regards two heads from the following graves within two cemeteries of the Avar Period. The strikingly identical head to this one is a head from (equestrian) grave 34 of the Bernolákovo cemetery (Slovakia)³¹. It also owns a relatively narrow plastic ring in the place of its neck as well as a quite wider plastic ring at the mouth of its socket, which is provided with a perforated projection too. The measurements of this head and the examined one from the MNIR in Bucharest are almost completely identical. Regarding the assessment of a full belt hardware set from grave 34 of the Bernolákovo cemetery we can date this burial context between the years 750 and 780³². We register a thrusting head with plastic rings in the place of its neck and socket's mouth, although without a projection, from (equestrian) grave 781 of the cemetery of Bratislava, Devínska Nová Ves-Tehelňa³³. The whole cemetery at the site Tehelňa might approximately be dated between the second half of the 7th century and the 8th century³⁴.

Another relevant point in the matter of the dating of the examined heads with inventory numbers 69890 and 69891 from the MNIR in Bucharest is that both of them come from the cadastral territory of the town of Teiuș. In

²⁰ The neck of the same head is rhombic in cross-section.

²¹ Călin Cosma named this type as the „Leaf-shaped blade“ in English (Cosma 2020, 37).

²² Cosma 2020, 37, Map 10; Tab. 12; 19; Pl. 8-10.

²³ This Hungarian archaeologist designated them as the “Simple Reed-shaped Blades” (Csiky 2015, 80). He categorised heads with the identically long sockets and blades as variant P.I.B/3, which was used during the whole period of the Avar Khaganate with its significant popularity in the Early Avar Period (87.81% of the exemplars; Csiky 2015, 87-96, Fig. 25-27). In his monograph Gergely Csiky (2015) concerned the pole arms and edged weapons of the Avar Khaganate in the Carpathian Basin.

²⁴ Most of the assembled exemplars might belong to the Early Avar Period (79.53% of the exemplars).

²⁵ Csiky 2015, 80-96, Fig. 4.

²⁶ Husár 2014, 16-22, obr. 3/AAa; tab. I-X; XI/1.

²⁷ Husár 2014, 43, 46-48; Husár 2016, 103.

²⁸ Husár 2014, 17-19, tab. IV/3; V/8; VI/13.

²⁹ Cosma 2020, 148-149, Pl. 8/3-5; 9/4; Husár 2014, 16, tab. I/7.

³⁰ Komar and Sukhobokov 2000, Fig. 3/49.

³¹ Husár 2014, 16, tab. I/9; Kraskovská 1962, 433, tab. VII/19.

³² Zábojník 1995, Tabelle III.

³³ Eisner 1952, 164, tab. 110/5; Husár 2014, 17, tab. II/6.

³⁴ Zábojník 2009, 81.

the cadastral territory of Teiuș, and site Cetățuie (fortress) in particular, the cemetery from the Avar Period³⁵ was identified in the first half of the 20th century. The discussed two heads from Teiuș could have belonged right to the Avar Period settlement found there. At least 60 graves were discovered at the referred cemetery, whereas the archaeological research also revealed other graves that, however, had already been destroyed³⁶. The general dating of this cemetery can be proposed for the period between the years 650/670 and 710/720.³⁷

The close parallels to the head with inventory number 106136 from the MNIR in Bucharest (Fig. 2/3) can be seen in the subsequent thrusting heads from Europe, although they have not got an angular socket in the same way as the examined exemplar. The nearest analogies in shape are spikes from the territory of present-day Hungary (Pannonia and the Tisza region), whose ratio of the width of a blade to the width of a socket can be related to the discussed head with inventory number 106136. Graves, in which they were found and which, *inter alia*, fell into the so called horse, infantry and equestrian graves, should only be dated to the Early Avar Period³⁸. A clear parallel to the examined head also seems to be one head unearthed in the Giant Mountains (Krkonoše in Czech) during the 19th century. Even though Polish archaeologist Lech Marek dated this specimen to the 14th – 15th centuries, he failed to provide the source of its dating³⁹. A socket under this kind of a blade rather started to widen in the later centuries. That is proved by two out of three analogies discovered in the territory of high medieval Rus' and Volga-Kama Bulgaria. All of them have probably got rhombic blades in cross-section, unlike the blade of the referred head that is massively lenticular in cross-section. These exemplars might be dated in Rus' to the 10th century⁴⁰ and in Volga-Kama Bulgaria to the 11th – 13th centuries⁴¹.

While we are on the subject of the aforementioned three thrusting heads, it is worth also mentioning that their Avar Period analogies in funeral contexts found in the Carpathian Basin come from all main kinds of graves – the so called equestrian, infantry and horse graves. Nonetheless, analogies (from the same territory and time) for the decorated head with inventory number 69891 were placed only into the so called equestrian graves⁴².

The remaining two spikes with inventory numbers 69622 and 317504 from the MNIR in Bucharest are 27.5 and 12.9 cm long. They are characterised by sockets that are wider and longer than their blades (Fig. 2/4-5). Their blades are in the form of a willow leaf and the cross-sections of these blades are rhombic with rounded ends. The mouth of the socket belonging to the head with inventory number 317504 is circular in cross-section from the inner side and circular from the outer side with one part that is angular (Fig. 2/5). Also the socket of the head with inventory number 69622 is angular, but in this case in total (Fig. 2/4). The mouth of this socket is specifically hexagonal in cross-section from the inner and outer side. We do not know about the place of discovery of the head with inventory number 317504, but, as we have noted above, the head with inventory 69622 comes from the fortified settlement of Bâta Doamnei (Neamț county). This site can be dateable on the ground of its archaeological context from the second half of the 12th century to the middle of the 13th century⁴³.

Both of these heads might be classified into Martin Husár's type AB of the heads of throwing and thrusting pole arms from the Carpathian Basin during the Early Middle Ages⁴⁴. This type comprises exemplars with blades that have got an elliptical shape from the front and they are narrower than sockets as well. In the studied territory we register this type between the last quarter of the 6th century and 8th century, whereas most of its specimens were made in the second half of the 7th century and the first half of the 8th century⁴⁵. Unfortunately, analogies in shape that are at our disposal for the two aforementioned thrusting heads, unlike them, miss an angular socket. Within the Carpathian Basin the head found as a stray find at the cemetery of Virt (Slovakia)⁴⁶ can be regarded as the closest parallel to the head from Bâta Doamnei. The Virt cemetery might be dated back to the second half of the 7th century and the first half of the 8th century⁴⁷. In the same way, the exemplar from (equestrian) grave 99 from the

³⁵ Alongside a settlement probably from the same period, then there were cemeteries from the Bronze Age and Hallstatt Period too (RAN – Teiuș-Cetățuie 2021).

³⁶ Cosma 2017, 79-89; Szentpéteri (ed.) 2002, 374.

³⁷ Cosma 2017, 79; Cosma 2020, 92-93, Tab. 19.

³⁸ Husár 2014, 16-19, tab. III/4; IV/8-9; VI/2.

³⁹ Marek 2008, 92, 303, Rys. 130: b.

⁴⁰ It regards a find from barrow 9 at the site of Šestovicy in the Chernihiv Oblast (Ukraine; Kirpičnikov 1966, 76, Katalog – 186, Tabl. IV/10).

⁴¹ Izmajlov 2008, 49, Fig. 4 on page 49; Shpakovsky and Nicolle 2013, 24, Fig. 11 on page 24.

⁴² This information originates from research results of Martin Husár that have not been published yet.

⁴³ Mătasă et al. 1960, 346-347; RAN – Bâta Doamnei. 2021; Scorpan 1965, 441, 446-447, 451-453, Fig. 8; Söfalvi 2021, 33-36, Fig. 13.

⁴⁴ Husár 2014, 24-25, tab. XII; XIII/1.

⁴⁵ Husár 2014, 25, obr. 2/AB.

⁴⁶ Husár 2014, 25, tab. XII/13.

⁴⁷ Zábojník 1995, Tabelle III; Zábojník 2009, 119.

cemetery of Košice-Šebastovce⁴⁸ could be taken into consideration, which is dateable between the years 750 and 780⁴⁹ on the basis of the burying progress analysis at the above mentioned cemetery. This thrusting head is also fitted with a (consolidating) plastic ring at the mouth of its socket, as it is by the examined head with inventory number 317505 from the MNIR in Bucharest. In terms of the ratio of the length of a blade to the length of a socket, the spike from (equestrian) grave 19 from the cemetery of Nagyvenyim-Munkácsy utca – Fűzfá utca appears to be an analogy for the examined head⁵⁰. Grave goods from this grave point us to the Middle and Late Avar Period⁵¹. By contrast, the head from the aforementioned grave 19 lacks a plastic ring at the mouth of its socket.

Outside the Carpathian Basin the earliest parallels to the last examined heads from the MNIR, which have got elliptical blades from the front that are narrower and shorter than their sockets, come from the territory of present-day Lithuania⁵². They form a part of spikes of variant ID, which was defined there by Lithuanian archaeologist Vitautas Kazakyavichyus who dated this variant in the 6th – 8th centuries⁵³. An analogical thrusting head was discovered in grave 33 at the cemetery of Novi Pazar in Bulgaria too. It could belong to the 8th – 9th centuries⁵⁴. Such heads were also found in the milieu of the Saltovo-Mayaki culture in Eastern Europe some time in the middle or end of the 9th century⁵⁵. One specimen with an elliptical blade from the front, which is narrower and shorter than its socket, might be identified among the heads of Jan Petersen's type E from Eastern Prussia⁵⁶. Even so, Jan Petersen's type E is generally reserved for heads with blades that are wider and longer than their sockets. The above mentioned specimen originates in the cemetery of Viehof and following the dating of entire Jan Petersen's type E in Eastern Prussia we can date it back between the late 9th century and the 10th – 11th centuries⁵⁷. The next parallel is a thrusting head from one barrow at the Zaslaue/Zaslav' site, which belongs to the 10th – 11th centuries⁵⁸. In the Subcarpathian duchy of Poland two analogical exemplars were found as unstratified finds. An aquatic find from the River San near Radymno and a stray find from Sanok-Olchowce are concerned. Both of them can be related to the 11th century⁵⁹. A similar specimen was probably uncovered as a stray find in Siedlątków (Łódź duchy in Poland), whereas it was dated by Marian Głosek to about the year 1380⁶⁰. In 12th century this kind of spikes was also used by the Cumans in Eastern Europe⁶¹, but their sockets were considerably wider than those of the discussed exemplars from the MNIR. Quite wide sockets in contrast to elliptical blades can be observed at least in the subsequent cases: a thrusting head found as a stray find in Wąsosz in the Lower Silesian Duchy of Poland⁶² and a thrusting head from the collections of the City of Prague Museum (the Czech Republic)⁶³.

It seems that parallels from funeral contexts for spikes with inventory numbers 69622 and 317504 from the MNIR were in the Carpathian Basin of the Avar Period restricted to the so called horse and equestrian graves⁶⁴.

3. Javelin head with two barbs

The next group in shape is represented only by one 34.5 cm long javelin head with two backward curved barbs⁶⁵, which are concavely bending back from the lancet shaped blade with a rhombic cross-section to the relatively long angular neck of the head (Fig. 4/1). This neck is 17 cm long. The angular socket, which is most probably octagonal in cross-section at its mouth, measures only 5.5 cm. The archaeological context of the discussed head has been unknown yet and it is registered by inventory number 343112 at the MNIR in Bucharest.

It might be noted in general that the investigated head belongs to the group of javelin heads with two backward curved barbs and a socket, which can be associated in the Carpathian Basin with the period between the 8th century

⁴⁸ Husár 2014, 24, tab. XII/4.

⁴⁹ Zábojník 1995, Tabelle III.

⁵⁰ Szűcsi 2015, 19-20, 26, 29; XX. t. 1.

⁵¹ Szűcsi 2015, XIX. t.; XX t. 1-2.

⁵² Kazakyavichyus 1988, 32-36, 143, Fig. 10: 1-2, 4-5, 10.

⁵³ Kazakyavichyus 1988, 32-36, 143, Fig. 10, 12.

⁵⁴ Yotov 2004, katalog, Tablo XLV: 537.

⁵⁵ Pletneva 1967, 158, Ris. 43: 4; Pletneva (ed.) 1981, 148, Ris. 36: 30.

⁵⁶ Goßler 2014, 190-191, Abb. 6/2.

⁵⁷ Goßler 2014, 190.

⁵⁸ Plavinski 2013, 34, 47, Fig. on page 47; Plavinskij 2014, 65, Fig. 8: 5.

⁵⁹ Strzyż 2006, tabela VIII, Ryc. 13/9-10.

⁶⁰ Głosek 1990, 135, 502, Rys. 26.

⁶¹ Pletneva (ed.) 1981, 260, Fig. 83/2.

⁶² It was dated to the 14th – 15th centuries (Marek 2008, 92, 303, Rys. 130/c).

⁶³ It was related to the 15th century [Wagner et al. 1956, Tab. 23 (část V.)].

⁶⁴ This information come from research results of Martin Husár that have not been issued yet.

⁶⁵ The barbs are 2.6 and 2.65 cm in length and triangular in cross-section.

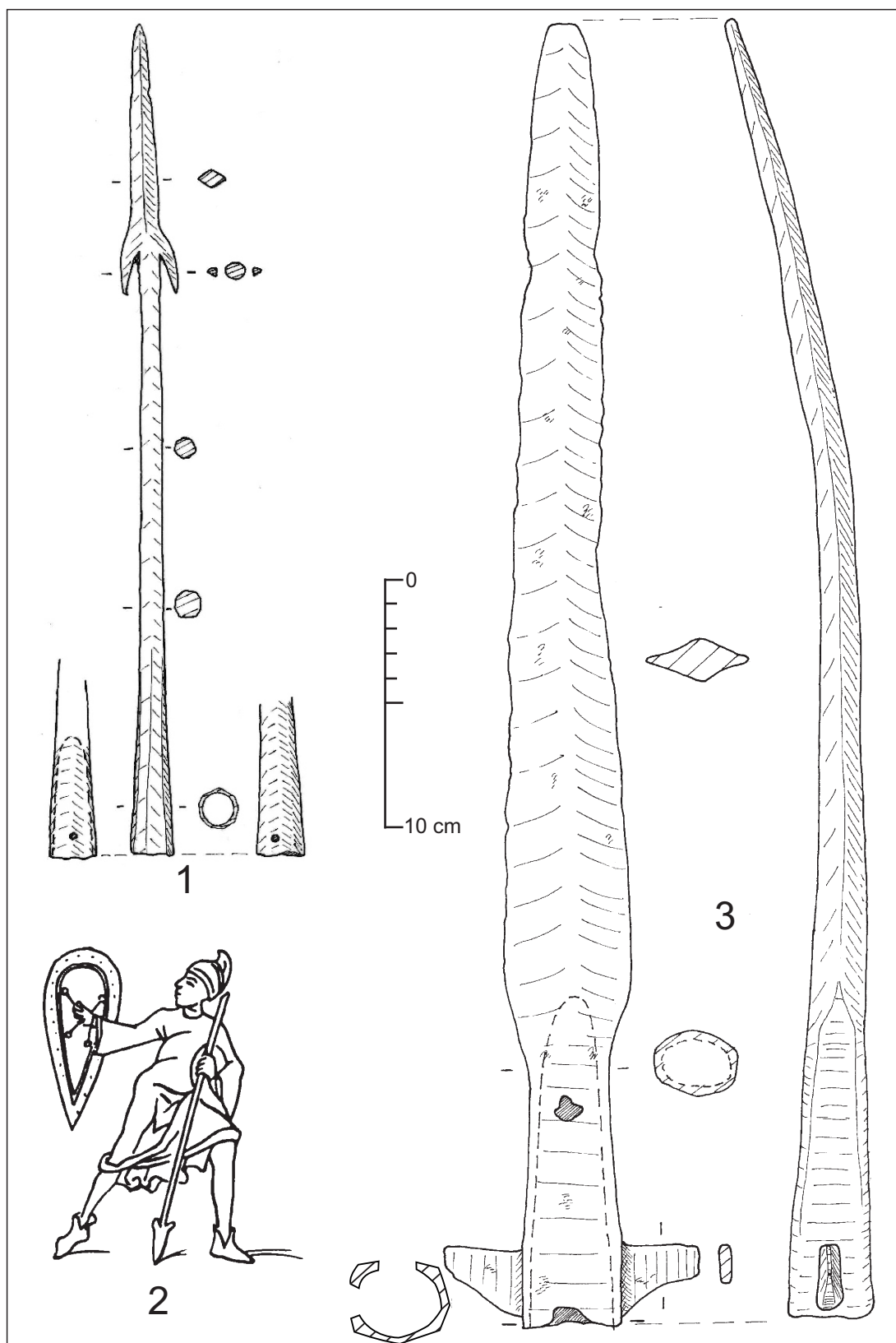


Fig. 4 – Medieval heads of throwing or thrusting pole arms from the National Museum of Romanian History in Bucharest (Romania) and their analogies. 1. Unknown site (inventory no. 343112). 2. Bible from the Library of Cardinal Mazarin in Paris, light infantryman with a javelin and shield (after Boeheim 1890, 307, Fig. 355). 3. Unknown site (inventory no. 47473). 1, 3 – iron. 1 – drawing by Georgiana Ducman. 3 – drawing by Georgiana Ducman supplemented by Martin Husár's drawing. Scale: 1, 3. Not to scale: 2.

and the 10th – 11th centuries⁶⁶. In Europe, iron javelin heads with backward curved barbs of various forms had been used at least from the 4th – 3rd century BC or the era of the Roman Republic to the 14th – 15th centuries AD⁶⁷.

The earliest closest analogies for the examined javelin head can be related to the time of Late Antiquity in Europe. Some of the significant parallels to the javelin head with inventory number 343112 was already unearthed in Roman towns and forts from the territory of present-day Slovenia between the 3rd century and the first half of the 5th century. 9 javelin heads⁶⁸ with the same blades, necks, concavely bent backward curved barbs, and in one case also with an angular socket, are concerned⁶⁹. The late antique tradition of these heads is also supported by the following archaeological finds. They are from the territory of present-day Germany during the Late Roman Iron Age⁷⁰, whereas exemplars whose sockets are octagonal in cross-section are not missed too⁷¹. Specimens with non-angular sockets can also be found at Roman sites Catterick and Carvoran in England, which might be dateable to the period of the Dominate⁷². It is certainly true for the javelin head from the Nydam Marsh (present-day Denmark) as well – the site famous for offering finds. This particular head from Nydam was dated to the 4th century⁷³. The javelin head found as a stray find from site Mława in Poland has got for sure the triangular cross-sections of its backward curved barbs. It is also observed in the case of the discussed head with inventory number 343112 from the MNIR. This specimen from the milieu of the Wielbark culture in the territory of Poland was affiliated with the period between the second half of the 3rd century and the early 4th century⁷⁴. The probable continuity of the blade of this form, then concavely backward curved barbs, and relatively long neck until the end of the Early Middle Ages can be indicated by the find of a javelin head from the territory of Volga-Kama Bulgaria in the 10th – 11th centuries⁷⁵. The possibility of the continuation of such heads during the Middle Ages might be proved by an illustration from one early medieval Bible that is deposited in the Library of Cardinal Mazarin in Paris. A light infantryman with a javelin and shield is depicted there. Despite this illustration was dated at the turn of the 9th and 10th centuries (Fig. 4/2)⁷⁶, the referred infantryman holds a kite shield what might rather point to the end of the 10th century or safely the course of the 11th century. At the time such shields appeared in the iconography of Byzantium, Western Europe, Georgia, or the Islamic world⁷⁷.

The subsequent analogies of the javelin heads with backward curved barbs from Antiquity and the Early Middle Ages regard exemplars that are practically identical to the discussed head, but with a difference that they have got convexly bent out barbs and not always an angular socket. Such javelin head with a non-angular socket originates from the Ruseni settlement in Moldavia, which can be dated between the 2nd and 4th centuries⁷⁸, or other ones of the same kind from particular sites in Lithuania through type VII. This type was defined by Vitautas Kazakyavichyus and he connected it with the middle and the second half of the first millennium AD⁷⁹. The angular variants of the discussed heads are known from Estonia and Swedish Gotland. In Estonia such head with an hexagonal cross-section of its socket's mouth comes from barrow 9 in Suure-Rysna, which was erected in the milieu of the Long Barrow Culture⁸⁰. This culture lasted circa between the 5th and 7th centuries. Another javelin head is as much as 51 cm long and was found in the hoard of Gudingsåkrarna at Gotland⁸¹. The referred hoard could be related to the Viking Age (circa 800 – circa 1099)⁸².

4. Lance head with flat wings

The investigated lance head with flat wings (Fig. 4/3; inventory number 47473) was received to the MNIR without known circumstances of its discovery and was listed here as a 16th century item. It could have come from the

⁶⁶ They are classified within Martin Husár's type DA (Husár 2014, 67-70, obr. 3; tab. XLIX/3-5).

⁶⁷ Husár 2014, 68-70; Husár 2016, 105-107; Husár 2017, 118-120.

⁶⁸ Istenič 2015, 201-203, Fig. 174, 179, 182, 185.

⁶⁹ Istenič 2015, Fig. 182.

⁷⁰ Bemmman 2007, 80, Fig. 12.

⁷¹ Bemmman 2007, Fig. 12/3.

⁷² Bishop and Coulston 2006, Fig. 127/4, 15.

⁷³ Ellehaug 1948, 70, Fig. 24.

⁷⁴ Kokowski 1993, 337, Fig. 5/c; Nefedkin 2008, 149, Fig. 3.

⁷⁵ Shpakovsky and Nicolle 2013, 24, Fig. 4 on page 24.

⁷⁶ Boenheim 1890, 307, Fig. 355; Sijarić 2014, 211, Il. 147.

⁷⁷ Grotowski 2010, 232, footnotes nos. 402-406 on pages 232-233.

⁷⁸ Kazanskij 2016, 76, 1: 5; Rikman 1975, Tablitsa III, Fig. 20/17.

⁷⁹ Kazakyavichyus 1988, 55-57, 143, Fig. 22/1, 2, 6.

⁸⁰ Kazanski 2007, 240-241, Fig. 4/1-2.

⁸¹ Thunmark-Nylén 1998, Taf. 305/1; Thunmark-Nylén 2006a, 304.

⁸² Bjärke s. a.

Carpathian Basin, because the MNIR received it from the Brukenthal National Museum (Sibiu) in 1973⁸³. It is as much as 53.4 cm long and 42.9 cm from this length forms its blade, which is rhombic in cross-section. This blade is narrower and longer than the socket of the head. The neck and the mouth of the socket are octagonal in cross-section. The flat wings of the discussed specimen are quite short and just reach a maximum height of 3.3 cm from the mouth of the socket. Their total span is 10.6 cm and their thickness is 0.3-0.9 cm.

Regarding the analysis of its shapes it might be classed as type III of Herbert Westphal, who examined Carolingian heads with flat wings from the territory of present-day Germany. The above mentioned researcher dated the aforementioned type from the end the 8th century to the second half of the 9th century⁸⁴. Sockets of such heads have got circular, hexagonal and rectangular cross-sections⁸⁵. Specimens of Westphal's type III were also unearthed in the Carpathian Basin. We would like to add at this point that these complexes, except for stray and aquatic finds, concern graves and hoards as well. It regards grave 84 from the cemetery of Sopron- Sopronkőhida, a probable hoard from the site of Nitra-Na Palánke, grave from Nitra-Dolné Krškany and uncertain grave from Rábakecöl⁸⁶. The first two archaeological complexes were dated to the 9th century, the third one to the second half of the 9th century and the last one very broadly, to the 9th – 11th centuries. A little bit further to the west of the Carpathian Basin, i.e. in the river basin of the River Kamp in Lower Austria, another example of the lance head with flat wings of Westphal's type III was identified there⁸⁷. It was deposited in one grave from present-day Thunau am Kamp and it could be dateable to the late 9th century or the end of this century⁸⁸.

5. Spear-, lance or javelin heads with elliptical blades/blades in the form of a willow leaf

In the examined assemblage three heads with blades were identified that are wider and longer than their sockets and are elliptical from the front or in the form of a willow leaf⁸⁹. Their inventory numbers in the MNIR are 16118, 37094 and 75678 (Fig. 5-7). All their parts and features are not mutually compatible and therefore they should be assessed independently. 33.6 cm long exemplar with inventory number 16118 in the MNIR (Fig. 5/1) originates from the unknown site in the cadastral territory of the village of Gogoșu⁹⁰ in the Mehedinți County, which is situated at the western periphery of Romanian Oltenia. This head has got a blade with two raised rounded ribs on its both sides (and in their middle). They are actually the continuation of the almost cylindrical socket, which tapers in the direction of the blade. At its mouth the socket is circular in cross-section. Furthermore, the remnants of inlay can be seen on the socket, what was most likely made of silver. The referred inlay was done in two or three lines that formerly obliquely run around the socket, as it is seen in its lower half.

Analogies for the blade of this head can be found in Europe and the borderland between this continent and Asia from the Bronze Age to the Late Middle Ages or even to the Modern Period⁹¹. In the Carpathian Basin we register heads with such blades as well. It is concerning grave 131 from the cemetery of Košice-Šebastovce⁹², which might belong to the years 720 – 750, and eventually stray finds from Ácseszér and Ercsi in Hungary that were dated to the Arpadian Age (the 10th – 13th centuries) by László Kovács⁹³.

If we take only the closest parallels to the discussed head into account, which have also got their cylindrical sockets and relatively narrow blades (with two double-sided raised rounded ribs in the middle of blades) that are longer than their sockets, we have to deal with several specimens from the Moravian museums (the Czech Republic) and the fort of Bistra Mureșului in Transylvanian Mureș County. Three heads that have got, like the examined head, decorated sockets are deposited in the collections of the Comenius Museum in Přerov (the Czech Republic). The sockets of these heads were not inlaid as the head from the MNIR, but two or six peripheral grooves as well as two peripheral ribs were applied.⁹⁴ Their analogies allow to date them to the 11th – 13th centuries, but it seems that it is not even ruled out their production already during Late prehistory⁹⁵. Two heads of throwing or thrusting pole

⁸³ Information from the Museum register of the MNIR.

⁸⁴ Westphal 2002, 258-259, Kat. Nr. 3.2.10.; 3.2.13; Abb. 3.2.10.; 3.2.13a, 3.2.13b; Textfigur 6: III; Westphal 2004, 59, Abb. 19.

⁸⁵ Westphal 2002, 258.

⁸⁶ Husár 2014, 33, 35, tab. XXI/1; XXII/3, 4; XXIV/4.

⁸⁷ Perhaps we should even count on Westphal's type V in this case. This type can approximately be dated in the territory of present-day Germany to the Late Carolingian and Ottonian Periods (Szameit 2005, 154).

⁸⁸ Szameit 2005, 155, Abb. 8: Typ III.

⁸⁹ These blades have their maximal width in the middle of their lengths.

⁹⁰ Information from the Museum register of the MNIR.

⁹¹ For instance: Gedl 2009, Taf. 60/57, 451; Sijarić 2014, 185; Žákovský 2011, 126-127.

⁹² Budinský-Krička and Točík 1991, 32, tab. XVIII: 28; Husár 2014, 42, tab. XXXVII/10.

⁹³ Kovács 1970, 84-86, 6. Ábra/6-7.

⁹⁴ Žákovský and Schenk 2017, 36, 96-97, catalogue nos. 106-108, Fig. on pages 96-97.

⁹⁵ Žákovský and Schenk 2017, 36.

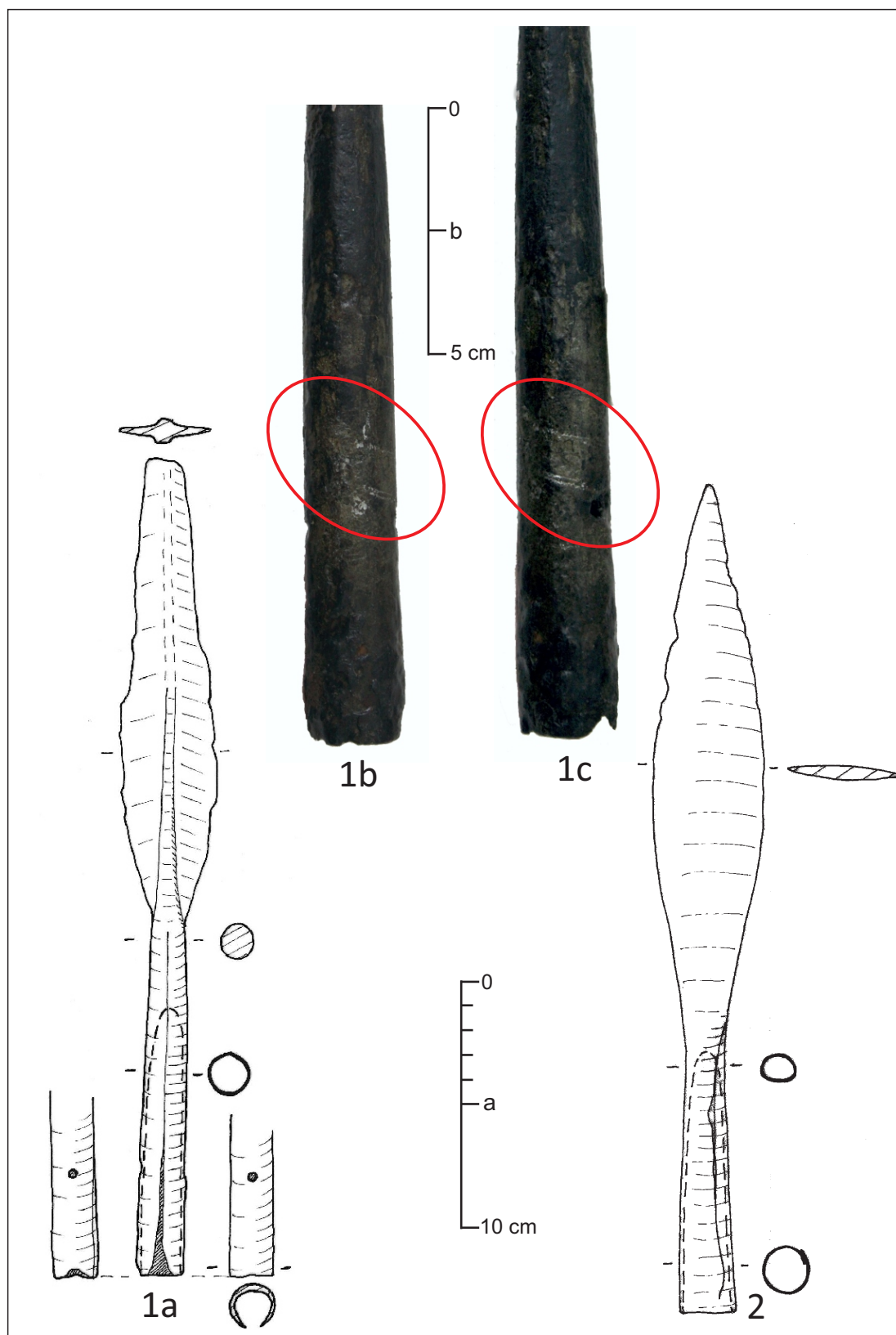


Fig. 5 – Medieval spear-, lance or javelin heads with elliptical blades/blades in the form of a willow leaf from the National Museum of Romanian History in Bucharest (Romania). 1. Gogoșu (Mehedinți County, Romania; inventory no. 16118). 2. Unknown site (inventory no. 75678). 1 – iron, non-ferrous metal (silver?). 2 – iron. 1a, 2 – drawings by Geogiana Ducman. 1b-c – photographs by Martin Husár with emphasis on the inlay of the socket. Scale: a – 1a, 2; b – 1b-c.

arms from two stray finds discovered in Myslejovice, which are kept at the Hunting and Forestry Museum in Úsov (Moravia, the Czech Republic), have got blades fitted with two double-sided raised ribs in the middle of them⁹⁶. However, one of these heads is closer in shape to the head with inventory number 16118 from the MNIR. Peter Žákovský connected them with the 11th – 13th centuries on the basis of their analogies, but he did not even exclude the continual usage of such forms in Europe, India, and the East until the course of the 17th – 19th centuries⁹⁷. We should consider in this matter three settlement finds from the fort of Bistra Mureșului⁹⁸ too. According to the localised archaeological finds this fortified settlement is dateable to the 14th – 15th centuries⁹⁹. The two specimens¹⁰⁰ out of the three, having all central double-sided ribs on their blades, are close analogies for the discussed head with inventory number 16118 from the MNIR.

The head of a throwing or thrusting pole arm with inventory number 75678 was transferred from the “Pamfil Albu” Ethnographic Museum of Lupșa (Alba County, Transylvania, Romania) to the MNIR in 1975¹⁰¹ (Fig. 5/2). It is 33.9 cm long and noted for its simple structure. Its elliptical blade is lenticular in cross-section and its maximum width is in the middle of its length. The socket of this head is slightly conical and the cross-section at its mouth is circular. In general, it can be noted that iron heads with simple blades in the form of a willow leaf had started to be used in Europe since the 5th century BC and we could still track them in the 13th century AD¹⁰². Such heads were present in the Carpathian Basin throughout the entire time span of the Early Middle Ages. Martin Husár classified them into his variant BCa¹⁰³. Călin Cosma listed them as type 2A2 in Avar Period Transylvania and he restricted them to the time span between the middle of the 7th century and the year 800¹⁰⁴. It is equally clear that also heads with blades in the form of a willow leaf, which had been longer than their sockets¹⁰⁵, as it is in the case of the referred head, had been used in the iron versions at least from the (late) 5th century BC to the 13th century AD. It can be proved by several examples of discovered heads¹⁰⁶ and by iconographical sources¹⁰⁷ from Europe and the former territory of the Byzantine Empire.

The last head of a thrusting pole arm, whose blade is in the form of a willow leaf, is the specimen with inventory number 37094 from the MNIR in Bucharest (Fig. 6/1). It was brought to the MNIR from the Peleş National Museum in 1973¹⁰⁸. This museum is situated in the Prahova County in Wallachia, immediately behind the border with Transylvania. The referred head is 41 cm long, whereas 32 cm from its length is made up by an elliptical blade. In the lower part or at the base of the blade (at least on its one side) the punched decoration in the form of a zig zag pattern can be observed (Fig. 6/1c). The head's blade, which is rhombic in cross-section, is terminated by a 3.5 long thickened tip. The cross-section of the tip is rectangular. The socket of the head is fitted with a distinct plastic ring (1.65-1.75 cm high) at its mouth. The mouth of the socket is hexagonal in cross-section from the inner as well as outer sides. Under a rectangular opening¹⁰⁹ in the socket serving for the attachment of a pole to a socket two rows of flat triangles were punched. From the other side of the socket's plastic ring a P-shaped iron rod is emerging. It runs to the base of the blade, which it only touches, but is not connected to (Fig. 6/1b). On the outer side of the aforementioned P-shaped rod we can see notches that could have been somehow decorated. In spite of the conservation of the discussed head, the presence of the substance of a green colour (Fig. 6/1b-c) might give evidence of that. Probably a non-ferrous metal was applied there.

The closest analogy for the head with inventory number 37094 from the MNIR is an exemplar displayed at the King Ferdinand I National Military Museum in Bucharest. The exemplar has not been unpublished yet and it is deposited at Pavilion A, Exhibitions of ancient, medieval and modern military history. Likewise this head, the referred head from the MNIR has got a thickened tip, elliptical blade and structured iron rod in the form of the letter P that runs from the socket's mouth to the blade's base. Even though we cannot prove this fact for sure, the

⁹⁶ Žákovský 2011, 126-127, obr. 19/a-b.

⁹⁷ Žákovský 2011, 126-127.

⁹⁸ Parallels to the heads from Bistra Mureșului were related to the 12th – 15th centuries by Zsolt Györfi (Györfi 2014-2015, 119). Györfi 2014-2015, 133-134.

¹⁰⁰ Györfi 2014-2015, 133-134, Fig. 3/2-3.

¹⁰¹ Information from the Museum register of the MNIR.

¹⁰² Husár 2014, 43, 46-48; Husár 2016, 103.

¹⁰³ Husár 2014, 40-48, obr. 3/BCa; tab. XXIX-XXXVII; XXXVIII/1-7, 10.

¹⁰⁴ Cosma 2020, 41-42, Map 14; Tab. 12; 19; Pl. 12/4.

¹⁰⁵ The sockets preserved their conical character as well.

¹⁰⁶ For example: Abramova 1995, 169, 173, Fig. 7, 21; Jørgensen 1999, 129, Abb 112/L6; Keresztes 2015, 470, 1. Kép. 1-4; Panikars'kij 2015, 41, 43, Fig. 2/40, 42; Sankiewicz and Wyrwa (eds.) 2018, 194-195, 202-205, Cat. No. 47, 56, 58; Wilke 2018, 63-65, 82-85.

¹⁰⁷ For instance: D'Amato 2013, 76-78, Fig. 13-17; Hoffmeyer 1966, Fig. 19/16.

¹⁰⁸ Information from the Museum register of the MNIR.

¹⁰⁹ It is still over the above mentioned plastic ring.

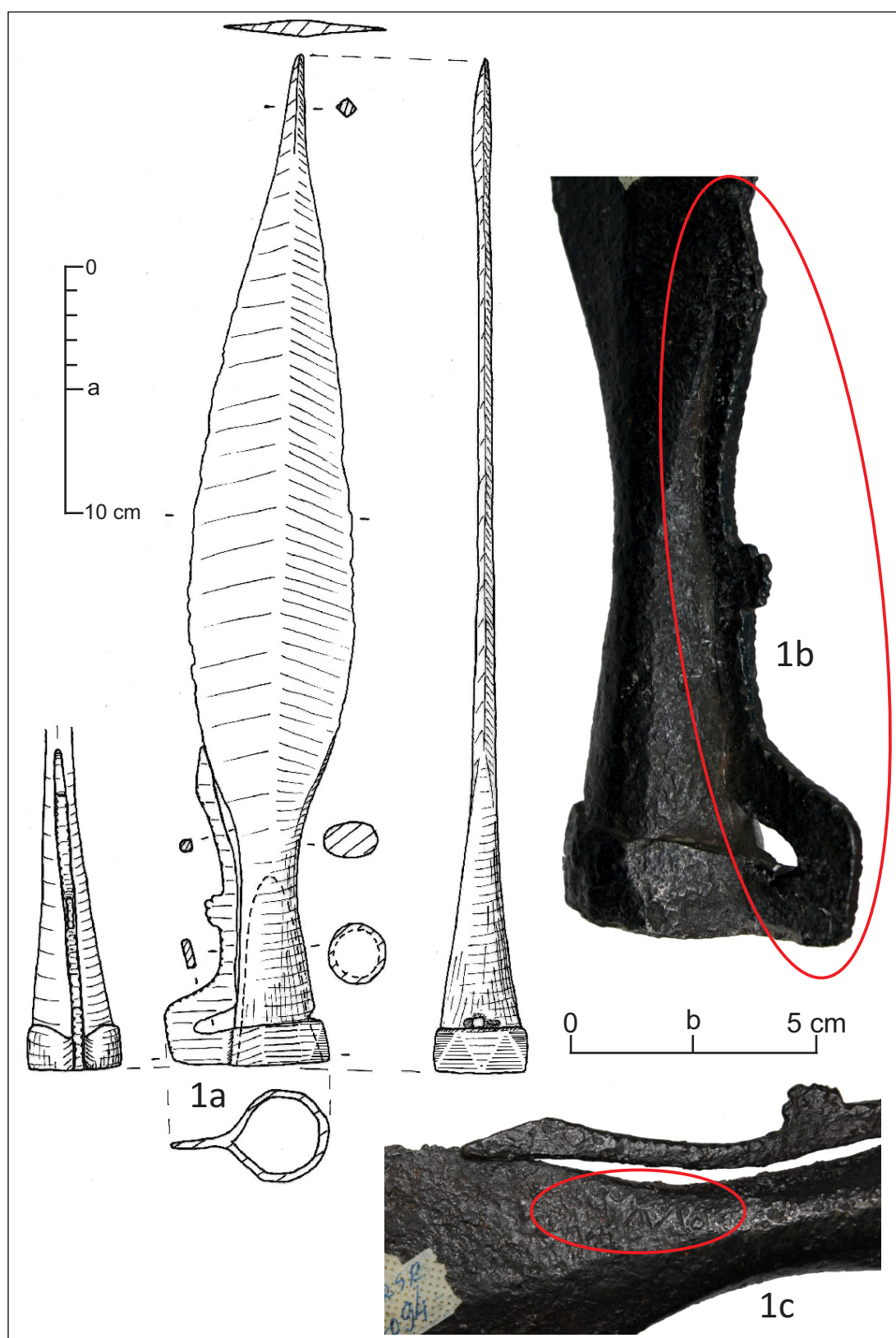


Fig. 6 – Medieval head of a thrusting pole arm from an unknown site – inventory number 37094 from the National Museum of Romanian History in Bucharest (Romania). 1a. Drawing of the entire head. 1b-c. Details of the decoration of the lower part of the head's blade and the sectioned P-shaped iron rod. 1a-c – iron, non-ferrous metal? 1a – drawing by Georgiana Ducman supplemented by Martin Husár's drawing. 1b-c – photographs by Martin Husár with emphasis on the decoration of head's blade and socket. Scale: a – 1a; b – 1b-c.

above mentioned head without any additional information can be dated to the first half of the 15th century, as it is implicit from the accompanying text regarding the particular exhibition of the King Ferdinand I National Military Museum in Bucharest.

Other partly analogical heads in the matter of the head with inventory number 37094 are only related to its some specific features. One of them is also a head of thrusting pole arm with a triangular blade and three distinct peripheral ribs under it, which is registered under inventory number M 3622 at the Brukenthal National Museum in Sibiu (Romanian Transylvania). It is fitted with a variously structured rod in the form of a lightning bolt sign that is attached to the mouth of its socket and reaches the base of its blade as well. Romanian archaeologist Anca Nițoi¹¹⁰ connected this head with the 14th century. Petr Žákovský and Zdeněk Schenk¹¹¹ in relation to the evaluation of medieval and early modern weapons from the Přerov region stated that a thickened tip was generally a part of various swords, combat axes and halberds mainly in the 14th – 15th centuries. A spear- or lance head with a thickened tip, which comes out of archaeological context and is deposited at the very collections of the Comenius Museum in Přerov, was dated with reserve to the 13th – 15th centuries by the above mentioned couple of researchers¹¹². Nonetheless, we know some specimens with thickened tips concerning thrusting heads of pole arms of various shapes from the Roman Period¹¹³, Early Middle Ages¹¹⁴, and Early Modern Period¹¹⁵ too.

¹¹⁰ Nițoi 2007, 38, Fig. concerning inventory number M 3622.

¹¹¹ Žákovský and Schenk 2017, 36.

¹¹² Žákovský and Schenk 2017, 36, 97, catalogue no. 111, Fig. on page 97.

¹¹³ For example, it regards a find from Bavarian Künzing in present-day Germany, which was in the former territory of the Roman Empire and is dateable to the 3rd century AD (Bishop and Coulston 2006, 152, Fig. 93/14).

¹¹⁴ We may give the following examples: a specimen from grave 225 at the cemetery of Košice-Šebastovce, which can be dated between the years 750 and 780 (Husár 2014, 59, Tab. XLVI/9) and specimens of type II according to the typology of Andrzej Nadolski (1954, 54, Tablica XX/1-3), which he dated in the territory of present-day Poland to the 11th century.

¹¹⁵ As examples we can mention a thrusting head with inventory number 509 from the Regional museum in Chojnów in present-day Poland or a thrusting head from the collections of the King Ferdinand I National Military Museum in Bucharest. The first one was dated to the 16th – 17th centuries (Marek 2008, 350, ryc. 177a) and the latter one to the 17th century (Vlădescu 1968, Fig. 34; Vlădescu et al. 1973, text regarding Pl. 66, Pl. 66).

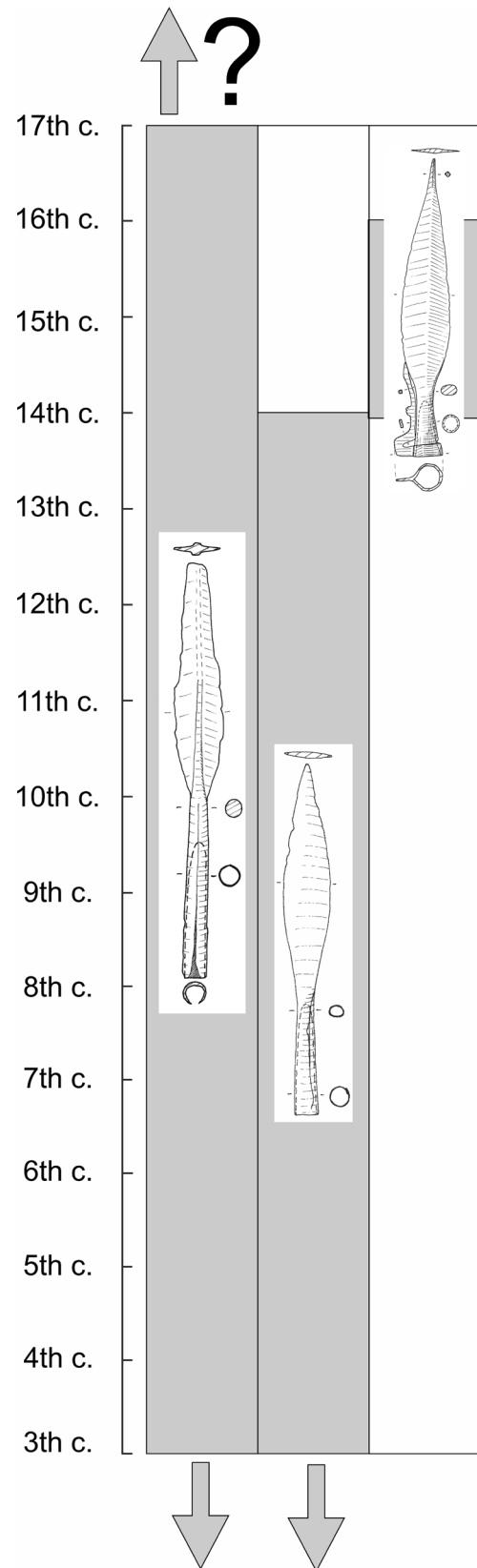


Fig. 7 – Chronological categorisation of medieval spear-, lance or javelin heads with elliptical blades/ blades in the form of a willow leaf from the National Museum of Romanian History in Bucharest (Romania; author: Martin Husár). Not to scale.

6. Spear-, lance or javelin head with round extended edges in the lower part of its blade

An iron head registered by inventory number C 3632 at the MNIR in Bucharest is the only one representative of this category. It is a 38 cm long specimen with round extended edges in the lower part of its blade (Fig. 8/1). This specimen was brought to the MNIR from the Library of the Romanian Academy in Bucharest¹¹⁶. The maximum width of its blade is in its lower third, where the round edges of the blade are widened. The blade is longer and wider than the head's socket, which is conically tapering towards the neck of the head. The socket could formerly have continued at least to the lower half of the blade of the referred head. Therefore there are double-sided risen ribs on the blade. The head – especially its blade – is corroded and its former shape was only replenished by restoration. We can just assume that this process reflected the former shape of the discussed head. The cross-sections of the neck and the mouth of the socket are circular.

On the basis of our research, the heads with round extended edges in the lower parts of their blades and with risen ribs on these blades had been made in bronze in Europe since the 15th century BC. Their iron variants appeared there in the 8th century BC¹¹⁷. Heads with such blades were designated as the heads of the type Hellmitzheim¹¹⁸ on the ground of finds from the Migration Period in the territory of the German federated state of Baden-Württemberg. The type Hellmitzheim can be dated in entire South Germany to the Middle Merovingian period (520/530 – 610/620)¹¹⁹. Besides the territory of the Germans in Late Antiquity and the beginning of the Early Middle Ages¹²⁰ the heads with such shaped blades and central risen ribs were also used in the territory of the Roman Empire¹²¹ or the area of the Sântana de Mureș-Černjachov culture before the year 378¹²². Iconographical evidence about the referred head of a thrusting or throwing pole arm might be the head of a lance, spear or javelin, which is held, alongside a shield, by *magister utriusque militiae Stilicho* (395 – 408). It is carved on an ivory diptych kept at the cathedral in Monza¹²³.

7. Spear-, lance or javelin head with a blade in the form of a poplar leaf

The head of a throwing or thrusting pole arm with inventory number 344418 from the MNIR in Bucharest is 25.9 cm long (Fig. 8/2). A simple blade in the form of a poplar leaf, which is longer and wider than its quite short socket (5.1 cm), characterises this head and the discussed group. The blade of the head is lenticular in cross-section, whereas its neck and socket are quadrangular in cross-section.

Lances, spears or javelins, which were terminated at their one end by heads with a blade in the form of poplar leaf, might have been produced in bronze in Europe since the Bronze Age and in iron since the Iron Age too. We can register them even up to the 13th century¹²⁴ or minimally in the territory of the Western, South and East Slavs even until the 14th – 15th centuries¹²⁵. Heads with a quite long blade in the form of a poplar leaf (lenticular in cross-section) as well as with a quite short socket already appeared in the Bronze Age. It is proved by finds from Swedish Gotland that can be dated there to the Proto-Roman Iron Age (850/750 – 15/1 BC)¹²⁶. During the Early Principate Period (from Roman Emperor Augustus to Emperor Hadrian) they were also used by the Roman

¹¹⁶ Information from the Museum register of the MNIR.

¹¹⁷ Husár 2014, 65.

¹¹⁸ The central risen ribs continue up to the middle of the blade's length regarding this type.

¹¹⁹ Friedrich 2016, 118, 293, Abb. 59/2.3.

¹²⁰ They were in operation in their territory within present-day Germany, Denmark, Sweden, Great Britain, and the Carpathian Basin in the time span between the 3rd and the 7th (/8th) centuries (Husár 2014, 65). In the Carpathian Basin specimens from the graves of the Lombards and Gepids are concerned. In the former case, there are, for example, heads from graves 78 and 145 from the cemetery of Bratislava-Rusovce that could be dated to the 6th century, but probably also to the turn of the 6th and 7th centuries (Schmidtová and Ruttkay 2008, 396, Abb. 10/1-2; Schmidtová et al. 2009; Schmidtová and Ruttkay 2012a, 296; Schmidtová and Ruttkay 2012b, obr. 514). From the Gepidic milieu we can give the following example: a head from grave 14 at the cemetery of Fântânele (Bistrița-Năsăud County in Transylvania; Dobos 2015, 66-67, Fig. 3/13). This grave was related to the second half of the 6th century on the ground of the presence of the type Hellmitzheim there (Dobos and Opreanu 2012, 44, 58). The whole cemetery of Fântânele might be dateable to the last decades of the 6th century and the beginning/first half of the 7th century (Dobos and Opreanu 2012, 58). Martin Husár defined his variant BFb for the early medieval Carpathian Basin right after the discussed head from Fântânele (Husár 2014, 65, obr. 3: Bfb, tab. XLVIII/12).

¹²¹ E.g. a find from Osterbrücken (the 3rd century; Bishop and Coulston 2006, 152, Fig. 93/12) in Germany or another one from the hillfort of Sekulitsa-Gradishte (the 5th – 6th centuries; Husár 2016, 101, 104-105, Table 1; Pl. II: 7; Husár 2017, 118, tab. 2/6, Tabela 1; Nikolovski 2014, 50).

¹²² Gudea 2015, 12-13, Taf. 10/5; 16/b2.

¹²³ Gudea 2015, Taf. 6; Nees 2002, 74, Fig. 44.

¹²⁴ Husár 2014, 54-56; Husár 2016, 109.

¹²⁵ Sijarić 2014, 181.

¹²⁶ Klimscha et al. 2012, 354, Abb. 6.

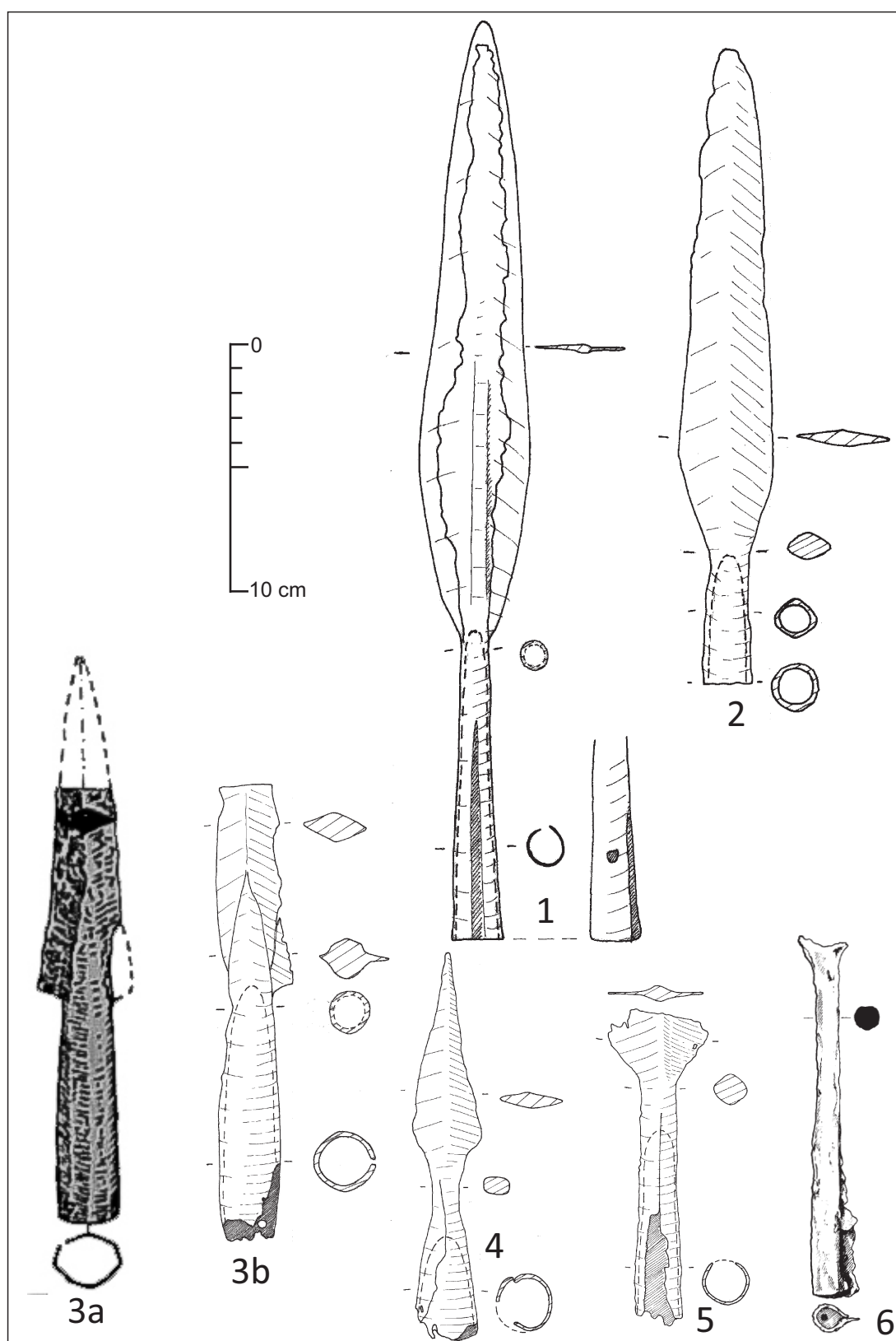


Fig. 8 – Medieval heads of throwing or thrusting pole arms from the National Museum of Romanian History in Bucharest (Romania). 1. Unknown site (inventory no. C 3632). 2. Unknown site (inventory no. 344418). 3. Dragosloveni (Vrancea County, Romania; inventory no. 69471). 4. Unknown site (inventory no. 106137). 5. Unknown site (inventory no. 32782). 6. Cladova (Arad County, Romania; without inventory number). All iron. 1-2, 3b, 4-5 – drawings by Geogiana Ducman. 3a – drawing after Comșa and Constantinescu 1969, Fig 5/6. 6 – drawing after Oța et al. 2015, Pl. 3/1. Scale: all to scale.

army, as it is confirmed by finds from German Rheingönheim and Scottish Newstead¹²⁷. Martin Husár, one of the author of this article, categorised the heads with a blade in the form of a poplar leaf with sockets of various lengths within the early medieval Carpathian Basin to his variant BDa. They were adopted during the entire period assessed by Martin Husár there, i.e. from the last third of the 6th century to the 10th – 11th centuries¹²⁸. The examined kind of heads of throwing or thrusting pole arms were used during the High and Late Middle Ages too, as we mentioned that before. As examples can serve the subsequent specimens or iconographical representations. The 12th century can be represented in regard to the heads with a blade in the form of a poplar leaf, which is longer than its socket, by one important iconographical source – the Illustrated Chronicle of Ioannes Skylitzes in Madrid¹²⁹. Czech archaeologist Petr Žákovský identified a head of the discussed kind of spear-, lance or javelin heads in the collection of the Castle of Boleradice (the Czech Republic). Furthermore, the socket of this head is slightly quadrangular in cross-section. Petr Žákovský dated this head to the 12th – 15th centuries, following its parallels from Central Europe¹³⁰. In connection with the discussed kind of heads, type Ib from the territory of medieval Bosnia and Herzegovina was singled out by Mirsad Sijarić. It concerns the similar exemplars as we treated above and he dated them, according to their analogies, between the 9th century and the beginning of the second half of the 15th century¹³¹. The head with a blade in the form of a poplar leaf and with dimensions of the referred head from the MNIR might also have occurred in material culture of the Lower Volga region in the 13th – 14th centuries¹³².

8. Spear-, lance or javelin heads with triangular blades

The content of the last group of examined heads are four spear-, lance or javelin heads with triangular blades, although they are not of same dimensions and not identical in every detail (Fig. 8/3-4; 9-10). Their inventory numbers in the MNIR in Bucharest are 69471, 72053, 75679, and 106137. All of them formerly had blades longer and wider than their sockets.

The head with inventory number 69471 (Fig. 8/3; 10) was a part of the hoard of Dragosloveni (Vrancea County, Romania). We have already mentioned the composition and dating (the 10th century) of this hoard in the introduction.¹³³ The blade's tip of the head from Dragosloveni is missing and the base of its blade, from which just one side is distinctive, was previously fitted with two relatively pointed angles. The upper part of the blade is rhombic in cross-section in the present¹³⁴. In the lower third of the blade there is a quite short double-sided projection of the socket in the form a conical tip. The cross-section of the head's neck is oval and the mouth of the socket might originally have been hexagonal in cross-section. The blade of this head was initially longer and wider than its socket. Nowadays, the fragment of the examined head is only 18 cm long.

Analogies for the exemplar with inventory number 69471 from the MNIR can be observed in the wide area of Europe during the advanced Early Middle Ages and then the High Middle Ages. German researcher Heribert Seitz identified such kind of heads of throwing or thrusting pole arms with his type H of the heads from the Migration Period and Viking Age in Europe. Type H was dated between the years 950 and 1050. Substantial evidence of the heads with triangular blades and conical tips of their sockets in these blades, which resemble the referred head, we can find in the territory inhabited by the Slavs, in the Byzantine Empire and Scandinavia. From the Slavic milieu finds from Poland are particularly worth mentioning. Andrzej Nadolski¹³⁵ classed these heads as his type III that was used in the 11th century. The head from the cemetery of Łubówko is specifically concerned here. It has got a socket that is inlaid by silver and copper, whereas Andrzej Nadolski assumed that it might represent a Scandinavian import in Poland¹³⁶. Also, a spear-, lance or javelin head, which was discovered as an aquatic find near a bridge in Lake Lednica, is similar in shape to the discussed exemplar with inventory number 69471 at the MNIR¹³⁷. This specimen was found in 1999 and a part of its ash tree (*Fraxinus* sp.) shaft is still preserved. Its dating can be derived from the dendrochronological dating of local bridges that were built in the year 963/969/965 and destroyed in the year 1038¹³⁸. The discussed form of the head was also well-known in Rus' what is testified by a

¹²⁷ Bishop and Coulston 2006, Fig. 38/10-11.

¹²⁸ Husár 2014, 52-56, obr. 3: BDa; tab. XL-XLIV.

¹²⁹ Types 11 and 16 of Ada Bruhn Hoffmeyer (1966, Fig. 19/11, 16) are concerned here.

¹³⁰ Žákovský 2015, 77-78, obr. 6.

¹³¹ Sijarić 2014, 176-181, T. XXXV/1-3; XXXVI/1-2; XXXVII/2.

¹³² Gorelik 2002, 66, Fig. 21 on page 66.

¹³³ Comşa and Constantinescu 1969, 432-436; Husár and Oța 2020, 233, 235.

¹³⁴ This fact formerly regarded the upper two thirds of its length.

¹³⁵ Nadolski 1954, 54, 180, 261, Tablica XXI/2.

¹³⁶ Nadolski 1954, 54.

¹³⁷ Sankiewicz and Wyrwa (eds.) 2018, 180-181, Cat. No. 33; Wilke 2018, Ryc. 17.

¹³⁸ Wilke 2018, 82-83.

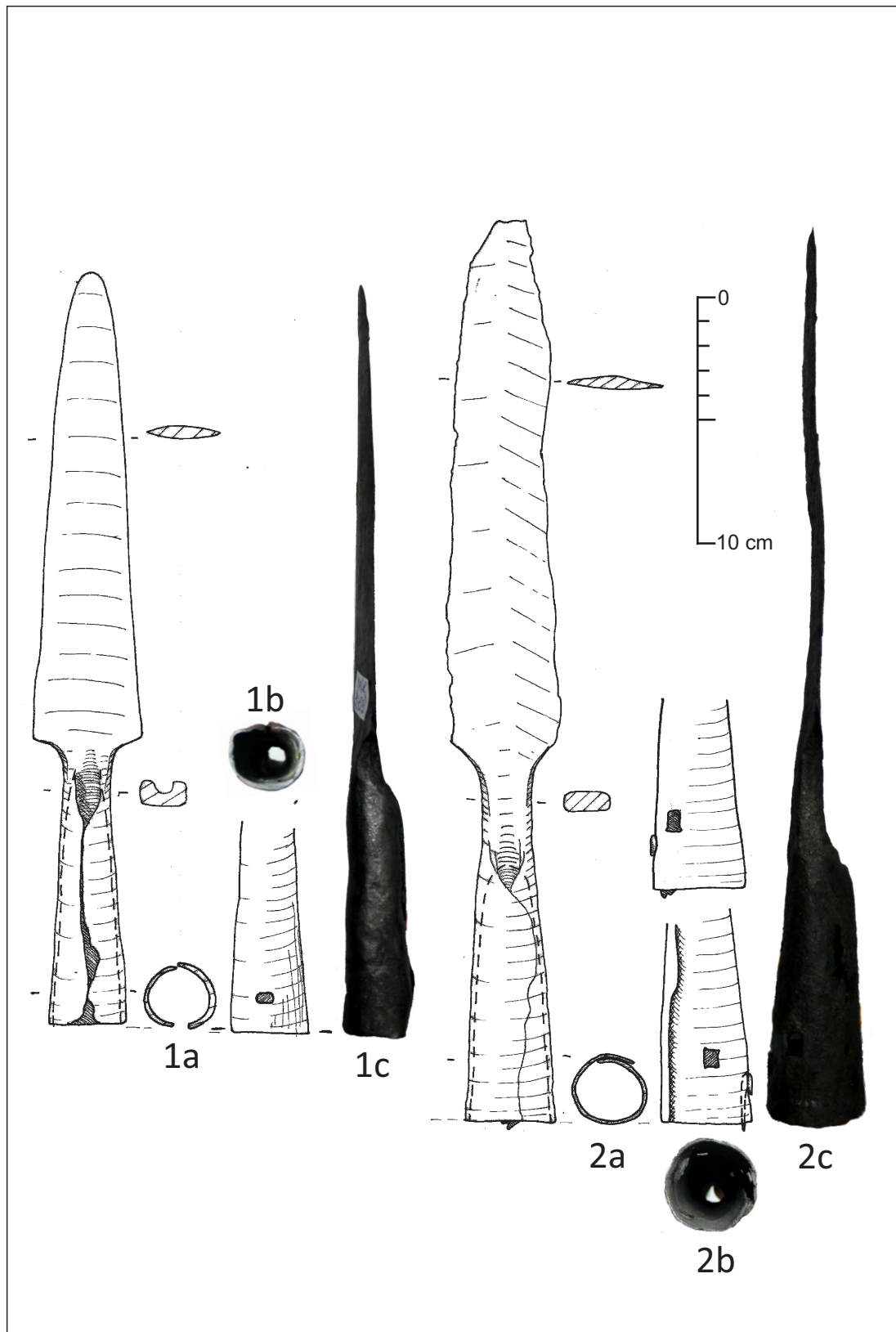


Fig. 9 – Medieval spear-, lance or javelin heads with triangular blades from the National Museum of Romanian History in Bucharest (Romania). 1. Baia (Suceava County, Romania; inventory no. 72053). 2. Unknown site (inventory no. 75679). All iron. 1a, 2a – drawings by Georgiana Ducman. 1b-c, 2b-c – photographs by Martin Husár. Scale: all to scale.

stray find from Bondari (Chernihiv Oblast, Ukraine) dated to the 11th century¹³⁹. In the Museum of Semberija in Bijeljina (Bosnia and Herzegovina) the exemplar of the referred form of a spear-, lance or javelin head is indexed under inventory number 3702¹⁴⁰. Its socket is angular, as it is in the case of the examined head with inventory number 69471 from the MNIR. The Bosnian specimen comes from Bijeljina-Batra and Mirsad Sijarić registered it in his type VII of heads from high and late medieval Bosnia and Herzegovina. Type VII might be dateable to 10th – 13th centuries following its European parallels from Scandinavia, Poland and Rus'¹⁴¹. In the milieu of the high medieval Byzantine Empire the usage of the discussed heads is proved by type 12 of heads of throwing or thrusting pole arms within the typology of Ada Bruhn Hoffmeyer, which was created on the basis of the analysis of the Illustrated Chronicle of Ioannes Skylitzes in Madrid (12th century)¹⁴². The Scandinavian finds of this kind of heads are well detected from Sweden and Norway. An analogical head in this matter was unearthed in Swedish Gotland as well¹⁴³. It was related to type G of Jan Petersen and type 2 of Lena Thunmark-Nylén. Type 2 of Thunmark-Nylén can be connected with the period between the year 990/1005 and circa the year 1200 in absolute dating¹⁴⁴. Minimally two such heads were found in Norway and classified as exemplars of type G of Jan Petersen. Type G might be dated to the 10th century (mainly its second half) and 11th century¹⁴⁵. Eventually, the aforementioned two heads from Norway can also be considered to be exemplars of type IX 1A of Bergljot Soldberg, which was produced between the years 950 and 1050¹⁴⁶.

The following spear-, lance or javelin head with a triangular blade from the MNIR is the specimen with inventory number 106137 (Fig. 8/4; 10). The blade of this 15.5 cm long head is longer and wider than its socket, although it may seem that the width of the blade and socket are equal. The blade's base has got slightly rounded angles. The cross-section of the blade is rhombic. The neck of the head is rectangular with rounded angles in cross-section and finally the mouth of the socket was formerly circular in cross-section. The socket is conical from the front and corroded most of all. An obvious parallel to this head we can find in one specimen from an unknown archaeological excavation in Suceava (Suceava County, Romania) that was dated by Cristian M. Vlădescu to the second half of the 15th century¹⁴⁷. If they are not simplification and stylisation, similar heads could be used in the Byzantine Empire during the 12th century, as they are depicted on pages of the Illustrated Chronicle of Ioannes Skylitzes in Madrid¹⁴⁸. A partial analogy for the head with inventory number 106137 might also be a head from the milieu of the Tukhtyat culture in Siberia that lasted here during the 9th – 10th centuries¹⁴⁹. However, this specimen, unlike the discussed one from the MNIR, has got a socket that is longer than its blade.

The last examined heads of the referred category of heads of throwing or thrusting pole arms with triangular blades are specimens with inventory numbers 72053 and 75679 (Fig. 9/1-2; 10). The first of them (inventory number 72053) was transferred to the MNIR from the Mihai Băcescu Water Museum of Fălticeni (Suceava County, Romanian Moldova) in 1975 and the latter one (inventory number 75679) was brought to the MNIR from the "Pamfil Albu" Ethnographic Museum of Lupșa (Alba County, Romanian Transylvania) in the same year. Moreover, the head with inventory number 72053 comes from the village of Baia in Suceava County (Romanian Moldova)¹⁵⁰. The rather narrow blades¹⁵¹ of these heads have got a quite short base with quite pointed angles. Cross-sections of these heads are more or less flat and lenticular. The heads' sockets are connected to the blades asymmetrically as it is seen in their profiles. The above mentioned sockets have got openings not just at their mouths, but also at their other (upper) ends. These sockets were made by the folding of the ends of wrought iron one over another. Then the sockets are perforated in their lower parts by one (inventory number 72053) or three (inventory number 75679) rectangular openings in order to be fastened to poles. The mouth of the socket belonging to the head of a pole arm from Baia (inventory number 72053) is slightly rectangular (with rounded angles) from the inner and outer sides. It seems that the mouth of the socket of the head with inventory number 75679 is slightly angular in cross-section from the inner and outer sides. The cross-section of the neck of the head from Baia is in the form of the flat letter U and the neck of the second examined head (inventory number 75679) is rectangular in cross-section.

¹³⁹ Kirpichnikov 1966, 84, katalog– 340, Tabl. VI/1.

¹⁴⁰ Sijarić 2014, 224-226, T. XLIX/2.

¹⁴¹ Sijarić 2014, 226.

¹⁴² Hoffmeyer 1966, Fig. 19/12.

¹⁴³ Thunmark-Nylén 1998, Taf. 248/4; Thunmark-Nylén 2006a, 302-303, 306.

¹⁴⁴ Thunmark-Nylén 2006a, 302-303, 306.

¹⁴⁵ Petersen 1919, 29, Fig. 18.

¹⁴⁶ Pedersen 2014a, 92, Fig. 4.7.: IX 1A (G).

¹⁴⁷ Vlădescu 1973, 58-59, Fig. 1/a.

¹⁴⁸ Types 2 or 6 of Ada Bruhn Hoffmeyer are involved there (Hoffmeyer 1966, Fig. 19/2, 6).

¹⁴⁹ Pletneva (ed.) 1981, 54, 56, 144, Ris. 33: 53.

¹⁵⁰ Information from the Museum register of the MNIR.

¹⁵¹ The blade of the head with inventory number 75679 is visibly damaged by corrosion.

Analogies¹⁵² for the two aforementioned heads might be identified with several specimens from Central Europe, specifically with finds without archaeological context, aquatic finds or objects of museum collections. They were very well known in the German milieu and local exemplars with noticeably strengthen blades prove that¹⁵³. One of them we can find in the armoury of the Old Town of Vienna. It is registered under inventory number 685 and deposited in the collections of the Museums of the City of Vienna. Its usage can be connected with the 15th century¹⁵⁴. Other two heads with the application of non-ferrous metals are stored in the Wawel royal castle in Cracow (Poland; inventory numbers 4509 and 4510), although their origins, according to Krzysztof J. Czyżewski, should lie in the German area at the beginning of the 16th century¹⁵⁵. In the territory of present-day Slovakia, the Czech Republic and Polish Silesia the similar heads of spears, lances, javelins or partisans were discovered. Among their features were: a distinct or less distinct strengthened blade, angular or non-angular socket, then the presence of decoration, marks and inscriptions or their absence. They were dated to the 14th – 16th centuries¹⁵⁶. The head of a pole arm, which was found in the River Obra near the town of Międzyrzecz in Western Poland

¹⁵² These analogies have got quite narrow blades with relatively short bases and pointed angles. In addition, they are fitted with somehow angular sockets. However, their blades, in contrast to the referred heads from the MNIR (inventory numbers 72053 and 75679), are axially symmetric with their sockets in profile.

¹⁵³ Ellehauge 1948, 82, Fig. 98.

¹⁵⁴ Waldman 2005, 126, Fig. 101.

¹⁵⁵ Czyżewski 2013, 251-257, Fig. on pages 252-253, 257.

¹⁵⁶ Marek 2008, 86, Ryc. 116-117; 120; 121/a; 124: a; Marek 2017, 243, Ryc. 35/a-b; Žákovský 2008, 473-482, obr. 1-5; Žákovský and Schenk 2017, 38, obr. 42.

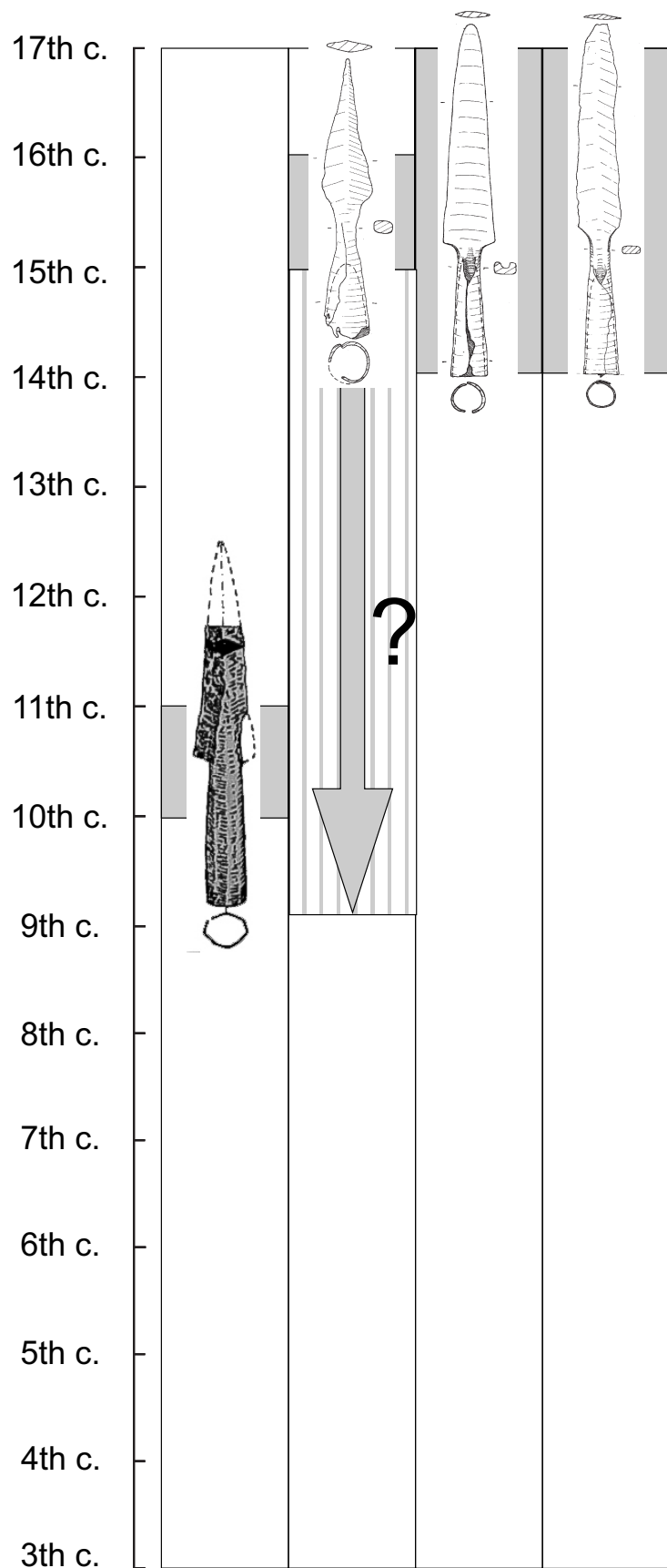


Fig. 10 – Chronological categorisation of medieval spear-, lance or javelin heads with triangular blades from the National Museum of Romanian History in Bucharest (Romania; author: Martin Husár). Not to scale.

(Lubusz Duchy), belongs to the same category of spear-, lance or javelin heads. The find was situated near the manor of Międzyrzecz. According to Arkadiusz Michalak this kind of a head could have been used in the 15th – 16th centuries, or could directly have been connected with the siege of Międzyrzecz by the Silesian troops in 1474¹⁵⁷. In regard to the discussed two heads from the MNIR (inventory numbers 72053 and 75679), this head from Poland is also equipped with an angular (hexagonal) socket and quadrangular or hexagonal openings in its lower part to be attached to a pole.

9. Conclusion

The authors of the article evaluated 18 heads of throwing or thrusting pole arms from the assemblage of 101 medieval melee weapons and caltrops from the MNIR in Bucharest concerning typology and chronology. Existing scientific literature in Romania has not completely been engaged in this assemblage yet.

The discussed heads were divided into 7 categories or groups pursuant to the shape of their blades, the ratio of the widths of their blades to the widths of their sockets, or the presence or absence of wings. At the same time the heads were assessed independently so that their other features were taken into consideration. Two heads, which has got only fragments of their blades, were excluded from this assessment. They are the specimen with inventory number 32782 and the specimen without any inventory number from Cladova in Romanian Crișana. The latter specimen can be related to the first half of the 13th century on the basis of the archaeological context of the workshop no. 3 from the earthen fort of Cladova.

The first category contains five thrusting heads/spikes whose blades are narrower than their sockets (inventory numbers 69622, 69890, 69891, 106136 and 317504 in the MNIR). Spikes with hexagonal blades from the front, which are almost as long as their sockets, have been indexed under inventory numbers 69890 and 69891 at the MNIR in Bucharest. We might date them to the Avar Period. The first of them (inventory number 69890) has got parallels within the Carpathian Arch and from the Black Sea steppes that are dateable from the last third of the 6th century to the turn of the 7th and 8th centuries. The specimen with inventory number 69891 could have been dated between the second half of the 7th century and the 8th century following its analogies from the northwestern part of the Carpathian Basin. Since both aforementioned heads were found in the cadastral territory of the Transylvanian town of Teiuș, their dating can also be influenced by the usage of the local cemetery from the time of the Avar Khaganate, namely between the years 650/670 and 710/720. The spike with triangular or irregularly tapering hexagonal blade (inventory number 106136), which is longer than its angular socket, has got the closest analogies in the territory of present-day Hungary during the Early Avar Period. It is possible that this form had also lasted in the territory of Central and Eastern Europe at least until the 13th century. The two remaining discussed thrusting heads with inventory numbers 69622 and 317504 from the MNIR have got elliptical blades that are shorter than their angular sockets. Their analogies from Central and Eastern Europe, although most likely without angular sockets, lead us to a conclusion that they can be dated between the second half of the 7th century and the 11th century. The spike with inventory number 69622 is an exception to this dating. It might be dated more precisely to the period from the second half of the 12th century to the middle of the 13th century, because it was unearthed in the Hungarian fortified settlement of Bâta Doamnei (Romanian Moldova). This exemplar attests the use of such thrusting heads in the Kingdom of Hungary or the Duchy of Moldavia in the referred period too.

The specimen of a javelin with two backward curved barbs, towards its quite long neck and short angular socket, has got inventory number 343112 in the examined assemblage from the MNIR. Its direct analogies originate from the territory of the Roman Empire and Barbaricum in the 3rd – 5th centuries. On the basis of one similar exemplar from Swedish Gotland or iconographical source from France we can assume the continuation of this kind of javelin heads after some transformation until the 10th – 11th centuries.

The head with inventory number 47473 from the MNIR is furnished with an angular socket with flat wings. Its blade, which is wider and longer than the aforementioned socket, is triangular in shape. The relevant parallels, not only with angular sockets, can be dated in the milieu of the Frankish Empire from the end of the 8th century to the course of the 9th century. In the Carpathian Basin they might have been used not before the course of the 9th century or its second half.

In the examined assemblage three heads of throwing or thrusting pole arms with elliptical blades/blades in the form of a willow leaf, which are wider and longer than their sockets (inventory numbers 16118, 37094 and 75678 in the MNIR), are present. The first of them (inventory number 16118) – the find of Gogoșu in Romanian Oltenia – has got a socket (with remnants of inlay and circular in cross-section) that deeply continues into the head's blade in the form of double-sided raised ribs. Similar heads in iron had been known in Europe and Asia already from the Iron

¹⁵⁷ Michalak 2018, 68-69, Ryc. 7.

Age to the Modern Period, although researchers usually relate them in Central Europe to the 11th – 13th centuries. Quite simple heads with elliptical blades and conical sockets, like the specimen with inventory number 75678 from the MNIR, could have been applied on poles at last in Europe and in the former Byzantine territory minimally from the late 5th century BC to the 13th century AD. The remaining head with an elliptical blade (inventory number 37094) is characterised by its relatively short and thickened blade's tip, punched zig-zag pattern in the lower part of the blade and angular socket with a structured iron rod in the form of the letter P. The rod is decorated by punched patterns and probably by a non-ferrous metal as well. Some analogies of certain features of this thrusting head we are able to date approximately to the 14th – 15th centuries. They are based on weapons from particular Romanian and Moravian (in the Czech Republic) museums and other weapons from Europe.

Inventory number C 3632 from the MNIR in Bucharest concerns a head with round extended edges in the lower part of its blade. In European area the above mentioned form can be dated broadly from the Iron Age to the 7th century AD.

The last but one group of spear-, lance or javelin heads of the examined assemblage consists, like the previous group, only of one head (inventory number 344418). This head has got a blade in the form of a poplar leaf that is noticeably longer and wider than its socket with quadrangular cross-section. Its European material and iconographical parallels speak about the probable long usage of this kind of heads from the Iron Age to the 14th – 15th centuries AD.

Four specimens with triangular blades, which are longer and wider than their sockets, belong to the last examined category of heads of throwing or thrusting pole arms from the MNIR in Bucharest (inventory numbers 69471, 72053, 75679 and 106137). Only the head with inventory number 106137 looks like its blade is equally wide as its socket. The head with a triangular blade and angular socket (inventory number 69471), which runs into the lower third of its blade by a conical tip, we can date to the 10th century because it is a part of the hoard of Dragosloveni. However, its material and iconographical analogies from the Byzantine Empire and Central, Northern and Eastern Europe enable to date it in these areas to the 10th – 13th centuries. The above mentioned head with inventory number 106137 can be, apart from its triangular blade, characterised also by the fact that the width of its blade and the width of its socket are almost identical. This head is difficult to date because it lacks enough relevant and stratigraphic analogies. Its parallels from Romania are connected with the second half of the 15th century. The Byzantine iconography and archaeological complexes from Siberia could prove its use even in the 9th – 12th centuries. The rest of the last group of spear-, lance or javelin heads with triangular blades is made up by two heads (inventory numbers 72053 – head from Baia in Romanian Moldova – and 75679). They have got quite short bases of their triangular blades fitted with relatively pointed angles. Their sockets are angular in cross-section and their blades are asymmetrically connected to these sockets. We are able to identify parallels to most of their features in Central Europe during the 14th – 16th centuries.

We may summarise the aforementioned facts in the following way. Almost 30% (27.8%) of the heads of throwing or thrusting pole arms within the examined assemblage, i.e. five specimens (Fig. 11), can be related to the period

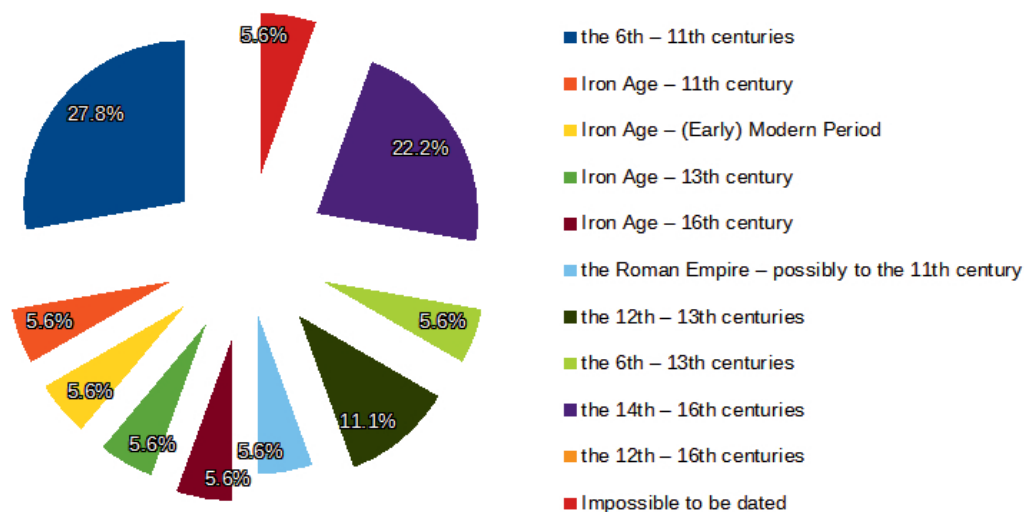


Fig. 11 – Dating of the medieval throwing or thrusting pole arms from the National Museum of Romanian History in Bucharest (Romania; authors: Martin Husár and Silviu Ion Oța).

of the Early Middle Ages (the 6th – 11th centuries). Other relatively numerous group comprises four specimens that could belong to the end of the examined period – to the Late Middle Ages (14th – 16th centuries). One specimen each we can assign to the High Middle Ages (12th – 13th centuries), the time span of the Early and High Middle Ages (the 6th – 13th centuries) and High and Late Middle Ages (the 12th – 16th centuries). In the examined assemblage five exemplars, whose dating can go beyond the Middle Ages, are also included. They could have been used during Prehistory, the Roman Period, Great Migration Period and Modern Period too. Last but not least, one specimen (inventory number 32782 from the MNIR) was found among the evaluated heads, which is not possible to be dated.

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